




Item #5



Gold Book


State and Local Clean Air Measures

Presentation to: MWAQC
February 26, 2014



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Long History of Delivering Clean Air







"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

Air Pollution Control Act 1968



No Code Red Days 2005



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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

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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



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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



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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





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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







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2009 vs. 2014

2009 Gold Book	2014 Gold Book 
<ul style="list-style-type: none"> • Existing Programs • Existing but Available for Expansion • Potential Future Initiatives 	<ul style="list-style-type: none"> • 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


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Climate, Energy & Sustainability Plans

- State plans:
DC, Maryland & Virginia



- Regional plans:
MWWCOG GHG Reduction Targets
Jurisdictions' Climate Action Plans



- Energy Security & Assurance Plans



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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



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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



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Local Air Quality Initiatives

- Clean Air Partners Program
- Localities' Air Quality Programs
 - Low VOC Paints, Pesticides
 - Episodic Measures: Striping, Lawn Mowing, Refueling
 - Air Quality Awareness
- Cooperative Green Purchasing
- Public-Private Partnerships
 - Airports
 - Colleges & Universities



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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](#)



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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



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Transportation Demand Reduction

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



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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



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Community Initiatives

- Workforce Development & Training
- Urban Heat Island Mitigation
- Tree Canopy Management



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Behavioral Measures



- VOC measures
 - Low-VOC Paint & Pesticides
 - Gas Can Replacement Program
 - Refueling After Dusk
 - Striping & Pesticide Application Deferred
- Episodic Measures
 - Lawn Mowing Deferred
 - High Electricity Demand Day Initiative



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Additional Ideas

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



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Additional Ideas

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



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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



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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**



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For more information

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