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



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



Local Measures: Voluntary & Important

Wet Scrubber Installed at the Morgantown Coal Plant - 2009

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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







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





Regional plans:

MWCOG GHG Reduction Targets Jurisdictions' Climate Action Plans

Energy Security & Assurance Plans











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
 Covers and & Private Building Requirement



Government & Private Building Requirements Building Codes, Green Leasing

DC Sustainable Energy Utility

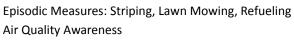






Local Air Quality Initiatives

- Clean Air Partners Program
- Localities' Air Quality Programs
 Low VOC Paints, Pesticides





Public-Private Partnerships
 Airports

Colleges & Universities





PARTNERS

DC-MD-VA





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)

1495 Express lanes, 195 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





Community Initiatives

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









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Behavioral Measures



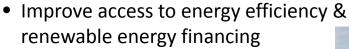
- VOC measures
 - Low-VOC Paint & Pesticides
 Gas Can Replacement Program
 Refueling After Dusk
 Striping & Pesticide Application Deferred
- Episodic Measures
 Lawn Mowing Deferred
 High Electricity Demand Day Initiative





Additional Ideas

- Microgrids
- Combined Heat & Power
- Waste-to-gas & Cogeneration



• 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







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**







For more information

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