



Maryland Greenhouse Gas and Carbon Mitigation Working Group

Meeting #8
March 19, 2008

Maryland Department of the Environment
Maryland Energy Administration
The Center for Climate Strategies

Welcome and Introductions

- Maryland Department of the Environment
- Maryland Energy Administration
- Other Maryland State Agencies
- Maryland Greenhouse Gas and Carbon Mitigation Working Group (MWG)
- Members of the Public
- Center for Climate Strategies

Agenda

- Introductions and Review of the Day's Agenda; Meeting Goals
- Update on Recent Climate Developments
 - MCCC process
 - Report Structure Concepts
 - Global Warming Solutions Act
- Review & Approve TWG Quantifications of Priority Policy Options
 - Ag, Forestry & Waste TWG
 - Energy Supply TWG
 - Cross-Cutting TWG
 - Residential, Commercial & Industrial TWG
 - Transportation & Land Use TWG
- Review any TWG changes to the Draft Maryland GHG Inventory and Forecast
- Date, Time and Agenda for Next Meeting
- Public Input and Announcements

March 19, 2008

www.mdclimatechange.us

3

Recent Developments

- Maryland Commission on Climate Change Process
 - Schedule
 - Report Structure Concepts
- Global Warming Solutions Act

March 19, 2008

www.mdclimatechange.us

4

Stepwise Planning Process

1. Develop inventory and forecast of emissions - Ongoing
2. Identify a full range of possible actions - Sept. 28
3. Identify initial priorities for analysis - Oct. 26
4. Develop straw proposals - Nov. 30
5. Quantify GHG reductions and costs/savings - Jan. 15
6. Evaluate externalities, feasibility issues - Feb. 21
7. Develop alternatives to address barriers
8. Aggregate results; approve consensus options - March 19
9. Iterate to final agreements - April
10. Finalize report and recommendations - April-May

March 19, 2008

www.mdclimatechange.us

5

Policy Option Template

- Policy Description (Concept)
- Policy Design (Goals, Timing, Coverage)
- Implementation Methods
- Related Programs and Policies (BAU)
- *Estimated GHG Reductions and Costs/Savings*
 - *Data Sources, Methods and Assumptions*
 - *Key Uncertainties*
- *Additional (non-GHG) Benefits and Costs, as Needed*
- *Feasibility Issues, if Needed*
- *Status Of Group Approval*
- Level of Group Support
- Barriers to Consensus, if any

March 19, 2008

www.mdclimatechange.us

6

Ag, Forestry, & Waste

1. Forest Management for Enhanced Carbon Sequestration
2. Managing Urban Trees and Forests for Greenhouse Gas Benefits
3. Afforestation, Reforestation and Restoration of Forests and Wetlands
4. Protection and Conservation of Agricultural Land, Coastal Wetlands and Forested Land
5. “Buy Local” Programs for Sustainable Agriculture, Wood and Wood Products
6. Expanded Use of Forest and Farm Feedstocks and By-Products for Energy Production
7. In-State Liquid Biofuels Production
8. Nutrient Trading with Carbon Benefits
9. Waste Management through Source Reduction & Advanced Recycling

March 19, 2008

www.mdclimatechange.us

7

Break



March 19, 2008

www.mdclimatechange.us

8

Energy Supply

1. Promotion of Renewable Energy Resources
2. Technology-Focused Initiatives for Electricity Supply
3. Cap-and-Trade
4. CCSR Incentives, Requirements and/or Enabling Policies
5. Clean Distributed Generation (Renewables and Combined Heat and Power)
6. Integrated Resource Planning
7. Renewable Portfolio Standard
8. Efficiency Improvements and Repowering Existing Plants
9. Carbon (GHG) Tax
10. Generation Performance Standard

March 19, 2008

www.mdclimatechange.us

9

Cross-Cutting Issues

1. GHG Inventories and Forecasting
2. GHG Reporting and Registry
3. Statewide GHG Reduction Goals and Targets *[Complete]*
4. State and Local Government GHG Emissions (Lead-by-Example)
5. Public Education and Outreach
6. Tax and Cap Policies
7. Review Institutional Capacity to Address Climate Change Issues Including Seeking Funding for Implementation of Climate Action Panel Recommendations
8. Participate in Regional, Multi-State and National GHG Reduction Efforts
9. Promote Economic Development Opportunities Associated with Reducing GHG Emissions in Maryland
10. Create Capacity to Address Climate Change Issues in an “After Peak Oil” Context
11. Evaluate Climate Change Policy Options to Determine Projected Public Health Risks, Costs, and Benefits

March 19, 2008

www.mdclimatechange.us

10

Residential, Commercial Industrial

1. Improved Building and Trade Codes and Beyond-Code Building Design and Construction in the Private Sector
2. Demand-Side Management (DSM)/Energy Efficiency Programs, Funds, or Goals for Electricity (Including Expansion of Existing Programs and Peak Load Reduction)
3. Low-cost Loans for Energy Efficiency
4. Improved Design, Construction, Appliances, and Lighting in New and Existing State and Local Government Buildings, Facilities and Operations: "Government Lead-by-Example"
5. Energy Efficiency and Environmental Impacts Awareness and Instruction
6. Promotion and Incentives for Improved Design and Construction (e.g., LEED, Green Buildings, or Minimum % Improvement Beyond Code) in the Private Sector

Residential, Commercial Industrial

7. More Stringent Appliance/Equipment Efficiency Standards (State-level, or Advocacy for Regional or Federal-level Standards)
8. Rate structures and Technologies to Promote Reduced GHG Emissions (Including Peak Pricing and Inverted Block Surcharge)
9. GHG or Carbon Tax
10. Energy Efficiency Resource Standard (EERS)
11. Promotion and Incentives for Energy Efficient Lighting

Transportation & Land Use

1. Carbon Fuel Tax Fund
2. Land Use and Location Efficiency
3. Transit
4. Low Greenhouse Gas Fuel Standard
5. Intercity Travel: Aviation, High Speed Rail, Bus and Freight
6. Pay-as-you-Drive Insurance
7. VMT Budgets
8. Bike and Pedestrian Infrastructure
9. Pricing Measures
10. Transportation Technologies
11. Evaluate the GHG Emissions Impacts of Major Projects

March 19, 2008

www.mdclimatechange.us

13

Preliminary Aggregation (incomplete; includes double-counting)

[Graph to be inserted]

March 19, 2008

www.mdclimatechange.us

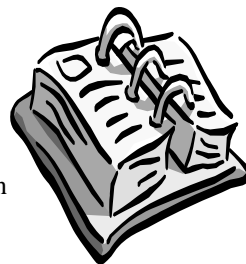
14

Next Steps

- TWGs
 - Finalize policy option templates and quantification approaches based on MWG review
 - Re-quantify GHG reductions and cost/savings of priority policy options, as needed
 - “Scrub” to eliminate intra-TWG and inter-TWG double-counting
 - Revisions to the draft inventory and forecast
- MWG
 - Review and approve final characterization and quantification of policy options
 - Review aggregation of “scrubbed” cumulative policy option results
 - Review and approve any proposed revisions to the inventory and forecast

Next MWG Meeting

- Date, Time, Location
 - April 22, 2008
 - Time: TBD
 - Location: MDE
- Agenda:
 - Approve characterization and quantification of policy options, as revised
 - Approve aggregation of quantified policy options
 - Approve modifications to the Maryland GHG emissions inventory and forecast, if any



Public Input, Announcements

March 19, 2008

www.mdclimatechange.us

17