## Maryland Commission on Climate Change Mitigation Working Group

April 25, 2016 from 12:00 – 2:00 Maryland Department of the Environment

In Attendance: Tad Aburn; Mike Powell; Stuart Clarke; Rebecca Ruggles; Arjun Makhijani; Ian Ullman; Drew Cobbs; Melanie Santiago-Mosier; Dan Engleberg; Tom Ballentine; Marissa Gillette; Michael Leslie; Colleen Turner; David Costello; Leigh Williams; Alice Kennedy; Chuck Fry; Gerrit Knapp; Brad Karbowsky; Jana Davis; Jim Strong; Mike Tidwell; Earl Lewis; Tom Dennison; R. Daniel Wallace; Kelly Ann Few; Dave Sewell; Mike Covanta; Frazier Blaylock;

On Phone: Matthew Fleming, Ben Hobbs; Anne Linder; Tom Weissinger; Pete Lawson

#### **Agenda Item #1: Welcome and Introductions**

Meeting was called to order at 12:00 pm. No amendments were made to the agenda. A brief discussion of the 40 by 30 goal and the charge to the Commission in the statute occurred. Key points below:

- MWG role is to keep MCCC on track for 2020 goal as well as 40 by 2030 goal
- Propose new issues
- MWG needs to work closely with Science & Tech Working Group (STWG)
- Request made for update from STWG on Methane emissions
- MDE looking into Methane mitigation issues

#### Agenda Item # 2: Update on GGRA Legislation – MWG Co-Chairs

- Thanks to all working participants, especially Ian Ullman and Senator Pinsky
- Legislation was bi-partisan with important support from Governor Hogan
- Balance amongst MCCC was key to success

# Agenda Item # 3: Enhanced Economic Analysis/Social Equity Issues Panel Presentation and Discussion - See attached materials.

Tad Aburn and Chris Hoagland – MDE

- 3 year schedule for tracking GHG emission progress AND economic progress
- RGGI and EJ issues related to emission leakage is also attributable to federal emission standards like BACT, MATS, Toxics, etc
- Baltimore City Sustainability Plan will include an analysis of policy decisions through a "equity lense"

#### Rebecca Rehr - Maryland Environmental Health Network

- Charge of the Maryland Environmental Health Network is to advise state government on EJ issues
- Focus of MWG partnership with MD Env. Health Network is to parse out issues related to climate change impacts that disproportionately affect certain groups

- Use health impact screening tools to quantify impact
- Need to identify which GGRA programs will benefit from health impact screening tools
- Outreach approach should include consulting with individuals in communities of interest
- EJ issues outside of the scope of MCCC need to be removed from priority list. Need to focus on GHGs.
- There are "win-win" programs like MDE efforts at the Port of Baltimore to reduce equipment emissions by electrifying trucks that will have positive economic, environmental, and vulnerable community specific benefits

#### Aniban Basu - Sage Policy Group

- Economic analysis of GGRA should be as transparent as possible
- Measurements are more important than ever
- Expanding GGRA regionally would be impactful
- Any negative impact on the economy will have disproportionately more significant impact on vulnerable communities
- Jobs analysis had to consider wage not just jobs
- Total measurements are so important
- MWG needs feedback from experts on which measurements need to be made

#### Paul Allen - MJ Bradley & Associates

- GHG Modeling Challenges
  - Modeling needs to focus on process
  - No opaque measurements
  - Clearly identified base case (and assumptions)
  - Policies need to be flexible, and realistic
  - "all models are wrong but can they illuminate key issues"
  - CPP easy to implement and affordable in RGGI states
  - MD trajectory to 2020 indicates meeting goal as well as trajectory to 2030 mostly due to large reductions in power sector (cheap Natural gas)
  - 2030-2040 reductions must come from transportation sector
  - Electrify Vehicles to meet goal but electricity has to come from low-carbon sources
  - PJM nuclear generations should be analyzed for sustainability
- Climate Change and Business
  - All investments in GHG mitigation have opportunity costs
  - Profit maximization will always be driver
  - Capital has to be used to protect investment (stakeholders expect fiduciary responsibility)
  - Energy is a global business
- Wicked Problems
  - GHG mitigation requires sympathy from a diverse group of stakeholders
  - Changing individual's behavior makes GHGs a wicked problem
  - Need to identify a solution before the problem truly comes into focus
  - Irrelevant barriers (like MD's contribution to CC vs. China's) need to be overcome to solve wicked problems

Gerritt Knapp - UMD National Center for Smart Growth (NCSG)

- Emission Modeling Center for Growth at UMD
- Gerritt provided a briefing on their modeling capabilities
- Includes a set of integrated modeling tools that evaluate development trends and their effects on GHG and criteria emissions
- Includes a variety of sources in the mobile, building, and power sectors
- Suite of models take a "what might happen" approach with existing data
- Fewer assumptions that other modeling approaches

#### See supplemental materials included in meeting packet. Also posted here: MCCC website

#### Agenda Item # 4: Discussion by MWG Members

- Autonomous Vehicles vs Electric Vehicles
- July 25th MWG meeting will cover ZEVs/Electric Vehicles
- What is the best way to guess where individuals will live?
  - Constraining local zoning?
- What is the complete set of metrics MWG should be consider to better track/measure?
- MOVES (Mobile model) is transparent
- Cost of inaction should be measured against profit maximization analysis
- Cost to the public are in the future (challenging to measure)
- Proposal: use multiple models, a realistic counter plan, and detailed modeling assumptions
- Perhaps both sides of the issues should be doing their own modeling?
- Spatial analysis is important
- Proposal: ask groups like those at Johns Hopkins to join STWG and work for free
- MWG was informed about Town Creek funding opportunity for outside resources

#### Agenda Item # 5: Update on Maryland Climate and Health Profile Status Report – DHMH

- MDE will provide written summary when report is available to public

### Agenda Item # 6: Next Steps/Action Items – MWG Co-Chairs, MDE

- Follow-up with panelists to identify better was to track/measure progress
- Proposal: more time available to discuss presentations at future MWG meetings
- Proposal: Steering Committee to re-evaluate priorities and goals

#### **Agenda Item #7: Public Comment**

- Georgetown Climate Coalition is currently working on
  - Climate Change Equity Issues
  - Case Studies looking at EJ and CC issues in other states
  - How adaptation impacts energy equity and environmental justice