## **Maryland Commission on Climate Change**

### **Mitigation Working Group**

May 3, 2018 10:00AM - 12:00PM

### **Minutes**

Attendance: Ben Grumbles, Tad Aburn, Mike Powell, Stuart Clarke, Tom Weissinger, Ben Hobbs, Gerrit Knaap, Tamara Toles O'Laughlin, Arjun Makhijani, Lauren Burke (for Joe Uehlein), Drew Cobbs, Tom Ballentine, Lisa McNeilly, Tom Walz, Susan Payne, Chris Rice, Elliott Campbell, Colleen Turner, Colby Ferguson, Ann Bristow (speaker, Concerned Health Professionals), Ana Maria Rule (speaker, Johns Hopkins School of Public Health), Jack Lewnard (speaker, Chesapeake Utilities), Dean Foreman (speaker, API), Sam Gomberg (speaker, Union of Concerned Scientists), Brian Hug (MDE), John Fiastro (MEA), Ian Ullman (for Senator Pinsky), David Smedick (MD Sierra Club),Rachel Marks (DNR), Cheryl Arney (Climate-XChange and CCL), Taylor Smith-Hams (CCAN), Margie Brassil (for Dana Stein), David Costello (IEER), Barbara Christensen (Sierra Club, CCAN), Lauren Barchi (Solar United Neighbors), Ruth Alice White (HowardCo.ClimateAction.org), Donald Goldberg (Climate Law & Policy Project), Carl Benson (Climate Stewards of Greater Annapolis), Pam Kasemeyer (SMWPA), Catherine Menking (Towson - RESI), Kelly Canavan (AMP Creeks Council), Gary Greening (Michael Baker/MDOT), John Kumm (EA Science & Engineering), Yinka Bode-George (MdEHN), Rich Sweetser (DOE CHP TAP), Len Zuza (unaffiliated), Margaret Flowers (unaffiliated), Deborah Buelow (unaffiliated), Erick Thunell (MDE), Megan Ulrich (MDE), Lisa Nissley (MDE), Jess Herpel (MDE), Hannah Brubach (MDE), Luke Wisniewski (MDE), Christopher Beck (MDE), Joe Lutz (MDE)

On the Phone: Jana Davis, Anne Lindner, Mike Remsberg, Tom Dennison, Andrew Kreider (EPA R3), Mark Kresowik (MD Sierra Club), John Mosheim (GHG Engineering LLC)

**10:00AM** – Meeting called to order.

#### **#1: Introductions**

- Introductions were made around the room and on the phone; Brian introduced panel speakers and process.
- The MWG was also advised of discussion at the Commission level, which expressed a desire for less presentation and more discussion.
- Tad, regarding the upcoming panel discussion, noted that while NG may be considered a bridge fuel, it is part of a bridge with multiple pieces; there are air quality and carbon reduction benefits of NG.

### #2: Panel and Discussion: Natural Gas Fuel Conversion (all presentations are available online)

**Prudent Considerations for including Natural Gas in Climate Policy -** Sam Gomberg, Union of Concerned Scientists

### Q&A:

- Sam emphasized that we struggle with the question of how to accelerate while making careful, thoughtful
  decisions. We should use new technology, update the emissions inventory, and maximize the
  effectiveness of the current infrastructure (understanding its value). The valuation of battery technology is
  a part of this as well; and grid upgrades/changes to technology and protocols are also needed to increase
  its efficiency.
- Clarified barriers there has been local push back to solar/wind farm siting (communities/stakeholders need to find a more consistent approach); barriers to fuel switching, electrification of the vehicle fleet, and investments. Review of policy is needed to break down barriers.
- Large new NG investment is high risk, given the technology we have otherwise, and low reward.

### **Recommendations:**

Mike Powell noted that it will be important for the MWG to discuss whether we need NG as a bridge fuel.

## **The Criticality of Natural Gas** - Dean Foreman, American Petroleum Institute *Q&A*:

- Championed a review of NG including risk v benefit and cost v benefit. Consider cost-shifting at the utility level, which may occur as a result of various policy/investment decisions. Batteries are costly and the technology is not ready we need NG in the meantime.
- Regarding how NG can be reconciled with climate change, NG [displacing coal plants] has produced the largest benefit thus far, and land-use issues may hinder wind/solar.
- The "length of the bridge" depends on what reduction goal you are working back from; infrastructure
  upgrades needed to be carbon free in near future, but zero carbon by 2050 would be detrimental to the
  economy.
- Regarding whether Cove Point exports were supplanting coal, Dean stated that there has been a lot of
  investment in renewables around China; and there are other barriers, such as infrastructure and consumer
  preference.
- Regarding the main dictator of energy choices, Dean advised that shareholders have been demanding
  more diversified investments; certain companies have profit motives to promote renewables; renewables
  are expensive, often imported from China, and subject to tariffs; and political barriers exist.
- Suggestions for studies which have looked at monetizing the public health benefits of NG, and input regarding the Towson (RESI) modeling runs were requested of Dean.

### **Recommendations:**

- Drew Cobbs suggested that NG needs to be part of the equation moving forward; considering the benefits of where we're going and the related benefits.
- Ben Hobbs noted that he would be more apt to support this if industry were committed to the best available control technologies for methane [leakage, etc.]. It was suggested that many companies have already.

**Public Health Impacts of NGI: Maryland Snapshot of the Known and Unknown** - Professor Ana Maria Rule, Johns Hopkins Bloomberg School of Public Health and Dr. Ann Bristow, Concerned Health Professionals of Maryland *Q&A*:

- There are concerns regarding emissions of HAPs and methane, especially during blow downs. Additional
  attention should be paid to emergency situations, e.g. leak-detection, community alerts, blast zones, and
  evacuation routes.
- State parks are off-limits for wind farms but there are no restrictions for zoning in Garrett County; ocean wind is more efficient/ has greater potential (no reason to destroy forest cover).
- Regarding abandoned gas wells, there have been studies in PA which demonstrated a correlation with developmental issues (pre-birth), asthma exacerbations, and others. HIA would allow us to compare the risks from existing/abandoned wells v new development. Pipeline hazardous materials have increased in recent years.
- Clean Air Progress report shows MD is almost in attainment with all health-based standards. Beyond the
  State air toxics regulation (which limits VOC emissions, including methane, from existing and proposed
  NGI), is there something else needed? The speakers noted that there are several areas in which existing
  facilities can improve continued conversation is needed.

### **Recommendations:**

• Tamara Toles O'Laughlin supported the consideration of many different health issues, and Lisa McNeilly agreed, emphasizing equity considerations.

# **Recommendations for Maryland CHP Program -** Jack Lewnard, Chesapeake Utility *Q&A*:

• Improving the efficiency of electricity generation by capturing "waste" heat; also reduces water consumption. The importance of distinguishing NG fuel and infrastructure was emphasized; NGI can be used as a low cost and fast/easy way to distribute other zero carbon fuels.

Regarding the need for net metering, Jack advised that enabling the location to get credit for electrons
created beyond what they use enhances the economics of CHP; it tends not to be a huge subsidy (low
cost/MWh).

### **Recommendations:**

- Arjun supports increased efficiency and decreased emissions; we don't necessarily want huge new
  investments though, which should be included as a caveat in recommendations. We should also consider a
  path to replace NG.
- John Fiastro suggested focusing recommendations on (1) expanding the state goal for CHP and (2) expanding net metering carve-out. They will work to develop specific CHP number goals for consideration.

### **#3: New Business**

- June meeting (May 31st) Carbon Markets and Updates to the Healthy Soils Initiative will be discussed at the upcoming May 11th MWG Steering Committee call.
- Additionally on May 31st from 1-3pm there will be a meeting to discuss the 40 by 30 Plan modeling.
   Following up on discussion from the past few MWG meetings, it has been determined that we can budget one consensus model run scenario to the MWG. This meeting is not necessarily expected to end with a finalized modeling run.
- It was also determined that we will need to discuss the structure of MWG meetings going forward, to ensure ample time for discussion.

### **#4: Public Comment**

- Len Zuza: Support monitoring of air toxics in communities close to point sources, e.g. Dominion Cove Point. Focus should be on NAAQS and air toxics monitoring nearby; 24/7 fence-line monitoring allowing for real-time reporting and a residential alert system; and provide information quantified in ways that are comparable to epidemiology and health studies.
- Dr. Margaret Flowers (pediatrician): Regarding Dominion Cove Point, reiterated an appeal for fence-line
  monitoring. Additionally called for a quantitative risk assessment, noting her opinion that current
  reductions are not enough, and increased NGI is not going to get us where we need to go, but instead
  continues to but families at risk while Dominion profits. Concerns noted included decreased real-estate
  value, health impacts, and economic/job/school impact from increased sick days.
- David Smedick (Sierra Club): Proposed restructuring meetings, noting that the regular meeting time is not good for public comment. To Sam Gomberg, he noted that he would like to see more recommendations on the barriers to electrification, including the lack of incentive-based programs for conversion to electric home heating.
- Deborah Buelow (community member near proposed Dominion Charles Station compressor station): Opposed to the new compressor station for multiple reasons, including risks to the residential community. Supports fence-line monitor, which she feels is particularly important if the stacks are being built below the tree line (monitors should be in the breathing space).
- David Costello (IEER): Agrees with David Smedick regarding the meeting structure and public comment concerns. Noted his opinion that quantification of fugitive emissions should have more attention, and requested a recommendation from Sam Gomberg.
- Kelly Canavan (AMP Creeks Council; lives close to the proposed Dominion Charles Station): Expressed concerns regarding the interests of companies being favored over the health and safety of the community (including by state agencies). Stated that Dominion lied about having emergency plans, which did not exist, and refused to supply safety information to the board. Noted threats to safety and community include mental health impacts from stress, fire-fighters not being equipped to handle an incident, and some of those in what is considered the "sacrifice zone" not having the ability/option to move away.