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**MEETING SUMMARY**  
**MARYLAND CLIMATE CHANGE ADVISORY GROUP**  
**Residential, Commercial and Industrial Technical Work Group**  
**(RCI TWG)**

Meeting #9, January 3, 2008

**Attendance:**

*Technical Working Group:* Todd Chason, Brad Heavner, Julian Levy, William Livingston, Mike Mallinoff

*Maryland State Department Representatives:* Roger Thunell, Liz Entwisle, Jim Lewis, Jerry Hughes, Walt Auburn

*Center for Climate Strategies (CCS):* Christopher James, Alice Napoleon, Randy Strait

*Public Attendees:* none.

**Background documents:**

([http://www.mdclimatechange.us/GHG\\_Residential\\_Commercial\\_Industrial.cfm](http://www.mdclimatechange.us/GHG_Residential_Commercial_Industrial.cfm))

- Meeting Notice and Agenda
- PowerPoint for Teleconference

**Discussion items and key issues:**

1. CCS called the meeting to order, completed the roll call, and reviewed the agenda and plans for the call. At this meeting, Randy Strait will give the TWG an overview of the draft inventory & forecast (I&F), including the assumptions & data sources used.
2. Randy noted that the I&F document will be available for the MWG to review in the 2<sup>nd</sup> week of January. CCS wants feedback on potential improvements from the TWGs. It will be posted to the website, and Alice or Chris will send a notice to the TWG that the document is posted. For RCI, the most relevant sections are the appendices for RCI & industrial non-fuel emissions. The final version should be approved by the final MWG meeting on March 19.
3. The period for the I&F is from 1990 to the most recent year that data are available, now 2005 (although State Energy Data are not yet available for all fuels through 2005). The forecast spans from the latest year to 2020.
4. Randy noted that emphasis is on transparency, consistency, and significance (focus on areas that will have significant impact), and that there is a preference for Maryland or regional data, where available. Emissions from electricity generation are reported on a

consumption (what is consumed in state) and production basis (what is produced in state, regardless of where it is consumed). For the consumption basis, CCS builds an emissions profile for power imports. RCI direct fuel use emissions are reported on a consumption basis.

5. The I&F uses the Global Warming Potentials from the 2nd IPCC assessment.
6. Randy noted that the inventory & forecast is for diagnosis of GHG emissions and trends, not a baseline for modeling or compliance for individual options.
7. Net emissions = gross emissions – carbon sinks (applicable to agriculture/forestry). The inventory includes anthropogenic methane emissions, such as from animal waste and nitrogen added to the soil, but not from swamps or natural sources.
8. Preliminary results indicate that Maryland has had a 54% growth in emissions from 1990 – 2020.
9. Slide 14 shows a major decline in industrial fuel use from 1990-2005, consistent with an industrial plant closing. The decline in industrials may be responsible for the decline in per capita emissions in Maryland. Also, TWG members noted that there were large investments in energy efficiency from 1990-97—\$80-87 million—that probably created the dip; since deregulation, nothing has been done in the last 9 yrs. (Walt Auburn noted that a 2001 PSC report may have more information.)
10. It was asked whether CCS requests that utilities provide their projections. Randy said that we haven't yet in Maryland. It was noted that for its potential study, ACEEE is asking utilities for data—Bill Prindle or Bob Howatt (PSC) might have data.
11. For information on existing actions, Chris & Alice should talk to Donna Boisen (e.g., on LEED for government buildings).
12. It was asked which forecast is being used, and noted that Exeter's estimate of electricity growth is low, at .5% per year. PJM forecasts higher growth rates, greater than 1%, and utilities project somewhere in between the two but closer to the PJM projection.
13. Residential, commercial, & industrial direct fuel use
  - a. Randy described trends in each of the residential, commercial, & industrial sectors. CCS uses EIA data to allocate emissions from electricity generation to RCI sectors. Is demand driving emissions? Randy noted a strange trend in commercial and industrial from 1990–2000, which he discussed with EIA and thinks is due to a change in reporting. Julian Levy mentioned that the EastAlco plant shut down around 2005; the PSC report might have more detail.
  - b. Randy mentioned that in other states, CCS has normalized the regional forecast by regional employment, & weighted it by employment data for the state for commercial & industrial growth. However, in Maryland, CCS didn't have an employment forecast. Did CCS contact the Dept. of Business & Economic Development? A contact is needed.
14. Industrial processes
  - a. CCS identified 8 processes applicable to MD. There is substantial growth in cement & ODS substitutes.

- b. Utilities should have records on SF6.
  - c. Roger Thunell was asked for actual production data for aluminum production in the state, but the plant is offline. The owner keeps paying permit fees, even though the plant would practically have to be demolished to restart operations. No one knows of any other companies under that NAICS code. It was speculated that there is little chance of EastAlCo reopening, since aluminum costs depend on electricity costs.
  - d. ODS substitute growth reflects the national growth rate. Generally they are used in refrigeration equip, A/C, and fire extinguishers.
  - e. CCS used the technology adoption forecast electric distribution emissions, because according to the EPA a lot of companies are working to reduce emissions under an MOU stewardship program. EPA says that the forecast for technology adoption is closer to reality. Are utilities in MD participating in SF6 recovery?
15. A TWG member noted the considerable range in forecasts for electricity generation – can that be pulled into energy supply forecast? While the TWG knows the uncertainties, we are in a “sound-bite world.” Another TWG member noted that stating uncertainties & stating a range are very different—a range would undercut what we’re doing. Also, the MWG has decided on a periodic review on implementation of the policies; this should address that. Todd Chason will send the 2007 PSC supply adequacy report (p. 9).
16. In response to an email from a TWG member to Alice Napoleon before the meeting, Randy explained that the Emission Certification Reports do give fuel usage, which could theoretically be gathered but hasn’t been compiled in a central database. Also, non-regulated sources would not be covered.
17. RCI-9:
- a. Alice noted that the ES TWG’s GHG tax policy has a critical difference from the RCI one: the ES tax applies economy wide, while the RCI excludes RGGI-affected units. What does the RCI TWG want this policy to apply to? Can we reconcile the ES & RCI policies?
  - b. Some concern was expressed about supply adequacy and reliability if RGGI units are taxed. When the Governor signed the bill to join RGGI, the PSC asked if would cause reliability concerns—they found that the \$1-2 per ton cost estimate wouldn’t cause a reliability problem. The way RGGI may be implemented (100% auction), some suppliers are talking about curtailing generation. If they can’t pass on costs, there will be reliability issues. Companies have no degree of certainty for the cost of allowances for the first few years, 2009-2011, because there is no way to predict before January energy allocations. Any tax needs to be predicable—with known costs far enough ahead of time to plan for them.
  - c. It was suggested that the policy be very targeted, such as gas-guzzler car fees.
18. Public input or announcements: none

**Next steps and agreements:**

1. The next RCI TWG meeting will be held on **Friday, January 11, 2008, from 10:00 AM to 12:00 PM EST.** At that meeting, CCS will present the initial results of quantitative analysis of the costs and benefits of the policy options.