MEETING SUMMARY
MARYLAND CLIMATE CHANGE ADVISORY GROUP
Residential, Commercial and Industrial Technical Work Group
(RCI TWG)
Meeting #13, March 12, 2008

Attendance:
Technical Working Group: William Chandler, Brad Heavner, William Livingston, Mike Mallinoff, Matthias Ruth

Maryland State Department Representatives: Katy Perry, Jim Lewis

Center for Climate Strategies (CCS): Christopher James, Alice Napoleon, Kenji Takahashi, Jennifer Kallay

Public Attendees: Jeff King

Background documents:
(http://www.mdclimatechange.us/GHG_Residential_Commercial_Industrial.cfm)

- Meeting Notice and Agenda
- Meeting #12 Summary
- PowerPoint for Teleconference
- RCI Policy Option Document
- Quantification of GHG Reductions from the MD Energy Efficiency Standards Act of 2007

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.
2. CCS gave an overview of where the TWG is in the stepwise process:
    - The inventory and forecast was revised slightly to account for new Federal and state legislation.
    - GHG benefits and costs have also been revised slightly.
    - The last MWG meeting started to identify barriers that might impede implementation of the policy options.
    - CCS has begun to aggregate results.
    - The final report with recommendations is expected to be completed for the April MWG meeting.
    - The next MWG meeting will be held March 19th at MDE in Baltimore.

- Significant work remains to be completed for RCI-3 and RCI-8. To review the report, and discuss any remaining issues with the policy option document, the TWG will hold another call, #14, on April 8 from 10am to 12 noon.

3. The meeting notes for TWG call #12 were approved.
4. Policy options document overview: CCS provided an overview of what has changed in each policy option since call #12 and the last MWG meeting.
   RCI-1: costs from LEED are reflected in the latest numbers.
   RCI-2 and -10: benefits have changed slightly, since they are structured around the baseline, which was updated for actual data in 2004-2005.
   RCI-3: substantial edits have been made to reflect the discussion at the last MWG meeting. The policy now focuses on a revolving loan program.
   RCI-4: This policy has been revised to reflect the direction from the MWG to have a more aggressive ramp-up to LEED Gold and Platinum level standards.
   RCI-5: complete
   RCI-7: slight change to costs based on small correction to the avoided electricity costs
   RCI-8: one part, out of four, is still in progress. The AMI portions are done, but the TWG needs to discuss the potential savings. Inverted block rates are completed for the residential sector, but still need to do for the commercial sector
   RCI-10: No changes. Today we need to discuss how to address solar hot water heaters, per direction from MWG.
   RCI-11: No changes to the analysis, but made a slight tweak to the Additional Costs & Benefits section to reflect recent health studies.
5. Detailed discussion of individual policy options:

   RCI-1
   In response to a concern raised at the last MWG meeting, CCS added the reference to the Urban Land Institute study on a potential trend to smaller home sizes. The MWG also expressed some concern about residential costs being much higher than commercial. For data sources, the TWG inquired if there were additional references beyond the Gulf Coast study. CCS indicated that to date, this is the only study of its type that has been completed.

   On page 10, CCS noted that the residential housing construction costs seem high. Mike Mallinoff provided a link to www.iccsafe.org/cs/techservices for an additional reference.

   No objections from the TWG to moving this policy forward to the MWG.

   RCI-2
   There was a slight adjustment to baseline electricity sales for 2005, which affected the results of the policy.

   No objections from the TWG to moving this policy forward to the MWG.

RCI-3

Based on feedback from the MWG, the policy has been revised, and is now focused on a revolving loan fund concept. CCS requested input on the assumptions used, since these numbers were placeholders. Bill Chandler indicated that he had experience with private financing schemes. Bill thinks the state funds could be used as “first loss” to help guarantee the loan. Bill also referenced the International Finance Corporation (IFC) experience, where they leveraged $20 MM of public funds with $1 billion of private investments. Bill suggested that the public funding split of $10 MM for residential and $5 MM for commercial is about right, but that private funds should be leveraged to increase the overall size of the fund. The TWG and CCS also need to consider how this would intersect with RCI-2.

CCS will talk with Bill Chandler to focus the policy design and analysis.

No objections from the TWG to moving this policy forward to the MWG.

RCI-4

No objections from the TWG to moving this policy forward to the MWG.

RCI-7

Brad Heavner indicated he had some analysis relevant to RCI-7 on furnace replacement. He will provide this to CCS for inclusion in the narrative for that policy option.

CCS noted that the ASAP group periodically updates its list of appliances and standards. Appliances affected by the 2007 Federal energy act have been taken out. But, ASAP is likely to update its policies again, so the existing policy format, which relies on ASAP, is likely to have larger benefits than those currently reflected in the quantification results.

No objections from the TWG to moving this policy forward to the MWG.

RCI-8

This policy option has relatively small savings as compared to costs. The amount of the savings from smart meters is also difficult to assess, since only pilot scale projects of limited duration have been completed to date. CCS requested input on policy design; none was provided by the TWG. There were no objections to using a savings level of 0.5%.

For the inverted block surcharges, residential consumption has been broken into three groups per EIA data. CCS will do the same for commercial consumption.

No objections from the TWG to moving this policy forward to the MWG.

RCI-10

The TWG discussed how to address the solar hot water program design feature that was suggested by the MWG. The MWG expressed no preference as to whether the solar program fit better in RCI-2 or -10. Brad Heavner suggested a separate analysis to quantify the potential program benefits. CCS will not be able to analyze this given its late timing and the required deadlines for the final report to the MWG. Brad indicated that he would provide a narrative, including actual benefits and their magnitude, that would be part of the policy description, and a reference for its implementation.

No objections from the TWG to moving this policy forward to the MWG.

RCI-11

CCS added a paragraph to the Additional Benefits and Costs section to reflect recent public health research that identified a potential link between fluorescent light and cancer.

No objections from the TWG to moving this policy forward to the MWG.

6. **Cumulative policy analysis**
   The TWG asked about the type of criteria used to determine the amount of overlap. CCS indicated this is more of an art since we are not completing detailed macro or micro economic modeling. CCS indicated that it would use its professional experience to assess the potential degree of overlap that might occur.

7. **Adjustments to the inventory and forecast**
   Slides 7 and 8 of the powerpoint provided an analysis of the affects of the Federal EISA of 2007 and the MD EESA on Maryland's baseline. Much of the Maryland benefits have been subsumed by the recently enacted Federal legislation. ACEEE data were used to calculate these changes.

   No objections from the TWG to change the baseline to account for these recent legislative actions.

8. **Public input or announcements:** none

Next steps and agreements:

9. The next TWG call, #14, is scheduled for **<u>Tuesday, April 8, 2008, from 10:00 am to 12:00 noon EST</u>**.
10. For the April 8 TWG call, the agenda will include
    - Discussion of any remaining issues with the policy option document
    - Review of the draft report