CLIMATE CHANGE ADVISORY COMMITTEE
MEETING MINUTES
December 4th, 2018
10:00 a.m. – 3:00 p.m.
Conference Room 105
Rachel Carson State Office Building

MEMBERS/ALTERNATES PRESENT:
Chairperson Steve Krug  Leda Lacomba
Vice-Chairperson Terry Bossert  Jaret Gibbons
Sara Nicholas  Robert Graff
Joseph Sherrick  Mark Hammond
Paul Opiyo  Patrick Henderson
Lindsay Baxter  Zachery Smith
Timothy Vickey  Representative Steve McCarter
Grant Gulibon

MEMBERS ABSENT:
Luke Brubaker  Gary Merritt
Marc Mondor  Alissa Burger
Zakia Elliott  James Felmlee

PA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) STAFF:
Jessica Shirley, Kerry Campbell, Allen Landis, Lindsay Byron, Christopher Noble, Libby Dodson, John Krueger, Dennis Maloskey, Keith Salador

INVITED GUESTS:  Bansari Saha (ICF Inc.) and Deb Harris (ICF Inc.).

MEMBERS OF THE PUBLIC:
Deb McCarter, David Hess, Bob Barkanic, Heidi Kunka, Nick Troutman, Lauren Barr, Evan Endres, Haden Rigo

MEETING:
The December 4th, 2018, meeting of the Climate Change Advisory Committee (CCAC) was called to order at 10:00 a.m. by Chairperson Steve Krug. With 12 of 18 appointed members present at the start of the meeting, a quorum was established.

MINUTES:
The minutes of the June 26th, 2018, CCAC meeting were presented to the committee by Steven Krug for approval. A motion to accept the minutes, with recommended changes, was made by Robert Graff while Terry Bossert seconded. The motion carried by a voice vote, and one abstain vote (Jaret Gibbons).
MEETING SUMMARY: (This narrative provides a summary of the discussions that took place during the meeting. It is not a transcript of the proceedings.)

**Elections**
Elections took place for the committee with nominations for Chairperson being opened since Steven Krug had termed out. Mark Hammond was nominated for Chair by Terry Bossert and it was seconded by Robert Graff. Mark Hammond accepted the nomination and after a voice vote the motion carried. Mark Hammond opened the floor for nominations for the Vice-Chair and Steve Krug was nominated by Robert Graff with the motion seconded by Terry Bossert. No other nominations were presented, and the motion carried with a voice vote.

**Membership Update**
Lindsay Byron, DEP, provided an update on the CCAC Membership, including reappointments of Steve Krug, Terry Bossert, Zakia Elliot, Patrick Henderson and Gary Merritt. New appointments include, Alissa Burger, James Felmlee and Jaret Gibbons.

**CCAC and Climate Action Plan (CAP) Overview and Timeline**
Lindsay Byron, DEP, gave an overview of the proposed timeline for review of the draft CAP. Discussion from the committee about the overview centered around whether the members should submit individual letters with their comments about the plan, or whether the committee should discuss and vote on the strategies that were included in the plan.

Jessica Shirley, DEP Policy Office, stated that the goal was to get away from formal votes on the strategies and bring the committees concerns in line with the way DEP receives advice from other advisory committees. Jessica Shirley encouraged individual letters from the members so that they could add additional substance and context to their thoughts on individual aspects of the plan.

Patrick Henderson stated that the proposed plan has significant policy implications and the committee should take the time to discuss and vote on the strategies presented.

Robert Graff agreed with the thought that providing individual letters helps provide nuance to the thoughts of the various members regarding their support or their concerns of the plan.

Discussion continued regarding the mechanism that the committee wanted to utilize regarding their thoughts and concerns about the proposed plan. Kerry Campbell stated to the committee that the bylaws allow for a letter to be submitted by the committee as a whole, as well as allowing for additional comments via individual letters from the members.

Rep McCarter spoke up about the possible audit that the PA Auditor General recently announced related to climate and how it is important to be transparent with how the committee works and how they feel about the plan. This includes the discussion about the plan and their comments and concerns as well as their consensus. Rep McCarter stated that in showing the process clearly it will lend greater credence to the adoption of the plan in the future. Jessica Shirley later outlined that the Auditor General is planning to put together a special report that looks at what the Commonwealth is doing regarding climate change. The AG is looking at the fiscal impact to the Commonwealth that have resulted from increased extreme weather events. The report is also focused on what the Commonwealth can do now to avoid the increased costs from climate change.
Draft CAP Overview – GHG, Energy and Economic Modeling Results
Deb Harris, & Bansari Saha, ICF Inc., presented the draft 2018 Climate Action Plan Update.

Details of the CAP focused on over 100 leadership actions that were identified to help the Commonwealth reduce greenhouse gas (GHG) emissions, and adapt to impacts from the changing climate.

GHG reduction strategies aim for a 26 percent reduction of net GHG emissions by 2025, from 2005 levels as well as an 80 percent reduction of net GHG emissions by 2050, from 2005 levels.

The CAP also focused on evaluating cost-effectiveness of the strategies.

ICF Inc. economist Bansari Saha presented the results of the modeling that was performed for the report. The results included impacts to employment with policy changes versus a business as usual approach. The presentation also detailed the modeled impact on the Gross State Product through 2050, change in disposable income per household through 2050 and the number of jobs created through 2050. All of the models were broken down by the strategies proposed in the CAP.

A number of key take away items of the CAP included:
- The suite of strategies recommended in the plan maximize GHG reductions and are cost effective for PA.
- Actions with large GHG reductions, economic benefits along with relatively low cost as well as low political barriers offer PA the best short-term solutions.
- The overall finding in the CAP emphasizes the need for more ambitious and quick climate action from all parties, including leadership, business and citizens.

Draft CAP Overview – Organization and Presentation of CAP
Deb Harris, & Bansari Saha, ICF Inc., presented an in-depth look at the organization and presented items in the CAP.

The overview ICF Inc. presented broke down the contents of the four sections of the CAP. For example, section one asks the question “why do we need a climate action plan?” and lays out the risks to infrastructure, governments and businesses that are related to the changing climate. It also outlines the effects on clean air, safe drinking water, sufficient food and shelter impacts climate change can have. It also reviews health impacts from climate change.

The overview also briefly showed what sectors and strategies are further detailed within the report. Also shown in the overview was the section that dives into emission reduction and adaptation opportunities, which contains the bulk of the info found in the CAP.

Finally, ICF Inc. stated that there will be two appendices, one detailing technical support for strategy and action modeling as well as another appendix detailing the comments from the CCAC.

Public Comment(s):
None.
Further Discussion:
Various members posed clarification questions to ICF regarding some parts of the CAP as well as asking the motives behind certain inclusions. Steve Krug asked if there was any detailed narrative included in the report that explained how the targets for the strategies were selected.

Mark Hammond expressed that he would like to see more information in the report that deals with Combined Heat and Power (CHP) as that is very important in PA.

Paul Opiyo asked whether information regarding the impact climate change has on the hunting culture of PA could or should be included. He also wondered how that could impact PA economically regarding tourism.

Robert Graff encouraged the report be edited in order to “sharpen the language” so that the message of the report comes across clearly. Sarah Nicholas offered some suggestions to assist in helping clear up the message of the report and explained that she will assist in providing additional suggestions.

Patrick Henderson asked about the percentage required to meet the proposed objective in the CAP for utilizing nuclear power. ICF stated that the plan was modeled to be able to continue to utilize Three Mile Island (TMI) as well as Beaver Valley, however there was no specific number specified. Patrick Henderson stated that there should be a number included within the report, and that it should be tailored for an industry and not just for two specific plants. Patrick Henderson also stated that he is not comfortable with the report and how it potentially implies the state is trying to get out of coal power.

Terry Bossert asked if there was a specific number in the report regarding the reduction of Vehicle Miles Traveled (VMT) and the impact a reduced number of miles would have. ICF staff responded that it’s not a very relatable metric for it is a very contextual metric that is sometimes difficult to quantify in a way that makes sense across the board. Terry Bossert also stated that the public needs to be aware of what individual actions should be taken to assist in reaching the goals of the report. Jessica Shirley stated that the plan does cover what actions leaders, individuals and business can take.

Lindsay Baxter expressed her desire to see a more detailed overview of CHP and questioned whether it even belongs in the CAP if it doesn’t provide emissions benefits.

Mark Hammond moved the discussion to encourage ICF to explain how they define cost-effectiveness within the report as well as the social cost of carbon as that is not a term the report has used before. ICF stated the cost-effectiveness considers the damage done from climate change impacts, as well as the costs to the economy. It takes into account the cost across all models and currently sits around ninety-five dollars per ton of carbon, that is the cost of the impacts that will be shared if nothing is done to combat climate change. Mark Hammond stressed that an explanation of the social cost as well as how the amount was decided on should be thoroughly explained within the report.

Patrick Henderson would like the report to do more “table setting” for people who are not overly familiar with the topics included in the report. Tweak the report a bit so that anyone can pick it up and read it and gain an understanding of what can and needs to be done to assist with the goals laid out. Patrick Henderson would also like to see more in the way of success stories or show where PA came from and where we are now. He stated that in some aspects PA is exceeding the Paris Agreement in
regard to power generation and carbon reduction. Those achievements should be lauded in the report. Patrick Henderson would also like to call attention to the fact that the report seems to go out of its way to ignore the increase in PA’s reliance on natural gas, which is better for emissions than other fossil resources, up from one percent and now around mid-thirty percent. He also had additional comments that he stated he will submit formally.

Rep McCarter commended the report for trying to strike a balance between the pain that will be felt by everyone due to the impacts of climate change as well as the gain that will happen by taking a measured approach to halting climate change. Rep McCarter also reiterated that it is the responsibility of the CCAC to point out pros and cons of certain actions. He finished by stating inaction does not give us a better future.

**Draft 2018 GHG Emission Inventory Presentation**

Lindsay Byron, DEP presented the Draft version of the 2018 GHG Emissions Inventory. The data was pulled from the state inventory tool that was released on April 13, 2018. The data for all eleven modules was pulled all the way through 2015.

Highlights of the presentation were:
- A continued trend of overall decreased emissions from 2000.
- Net emissions continue to decrease.
- The largest decrease since 2014 came from the electricity generation as well as the residential sector.

**Adjournment:**

A motion to adjourn was made by Patrick Henderson and seconded by Lindsay Baxter. The motion carried, and the meeting was adjourned at 2:26 p.m.

**ADMINISTRATIVE ITEMS:**