

**CLIMATE CHANGE ADVISORY COMMITTEE  
MEETING MINUTES**

**November 1, 2016**

**10:00 a.m. – 3:00 p.m.**

**Conference Room 105**

**Rachel Carson State Office Building**

**MEMBERS/ALTERNATES PRESENT:**

Chairperson Steve Krug, Vice-Chairperson Terry Bossert, Sarah Nicholas, Joseph Sherrick, Paul Opiyo, Mark Hammond, George Ellis, Patrick Henderson, Gary Merritt, Michael Winek, John Lutz (alternate for Steve Winberg), and Richard Fox (alternate for Rep. Greg Vitali)

**MEMBERS/ALTERNATES ABSENT:**

Jim Warner, Ryan Bizzaro

**PROXY VOTING:**

None

**PA DEP AND COMMONWEALTH AGENCY STAFF:**

Frank Purtell (DEP), John Krueger (DEP), Jessica Shirley (DEP), Dennis Maloskey (DEP), Katherine Hetherington Cunfer (DEP), Mark Brojakowski (DEP), Ernie Szabo (PEMA), Ryan Emerson (DCED)

**MEMBERS OF THE PUBLIC:**

Rick Allan (Pugliese/Solar City), Evan Endres (The Nature Conservancy), Tamara Gagnolet (The Nature Conservancy), Mark Mondor (AIA Pennsylvania)

**REGULAR MEETING:**

The November 1, 2016, regular meeting of the Climate Change Advisory Committee (CCAC) was called to order at 10:03 a.m. by Chairperson Steve Krug. Roll call was taken and, with 9 of 11 seated members present at the start of the meeting, a quorum was established. Members, DEP staff and guests introduced themselves.

**MINUTES:**

The minutes for the September 13, 2016, CCAC meeting were presented to the committee by Mr. Krug for approval. A motion to accept the minutes was made by Mr. Henderson and was seconded. The motion carried by voice vote. Mr. Merritt abstained as he was not present for the September 13th meeting.

**MEETING SUMMARY: (This narrative provides a summary of the discussions that took place during the meeting. It is not a transcript of the proceedings.)**

**PA AGENCY PRESENTATIONS:**

Mr. Ryan Emerson, Director, CFA Programs Division, offered the CCAC a PowerPoint presentation on the CFA's Solar Market Report. The Solar Market Report provides an overview of the solar PV development in the commonwealth as of October 2016. The presentation highlighted: Solar

installation costs, solar PV development in PA, solar installation in PA, solar electric output, solar energy credits (SRECs), an electricity forecast, solar financing, models of solar ownership, the SREC return for CFA and solar energy programs. The presentation was followed by a question-and-answer session during which committee members were able to make comments and get specific information on the segments of the presentation. Mr. Emerson invited the committee members to contact him if they had any additional questions or comments not covered during the meeting presentation.

Mr. Frank Purtell, of DEP's climate program, provided a presentation he developed on the "biggest drivers" of Pennsylvania's greenhouse gas (GHG) emissions. The discussion focused on the CO<sub>2</sub>e emissions from fossil fuel burning in the Commonwealth. Highlighted were the Residential, Commercial, Transportation, Industrial and Electric Power Generation sectors. Each sector's CO<sub>2</sub>e emissions were broken down by fuel type and presented as individual sector emissions as well as an aggregate total by year. The annual aggregate totals allowed a view of the emission trends from 2000 through 2014. The individual sector emissions allowed for the identification of the Biggest Drivers of PA's CO<sub>2</sub>e emissions.

The conclusion drawn by the committee was that reduction strategies for the transportation sector need focus. Also, electric generation as a whole remains the largest driver of CO<sub>2</sub>e emissions, and energy efficiency strategies to reduce electric consumption should be part of the next Climate Change Action Plan Update.

#### OUTSIDE AGENCY PRESENTATIONS:

Ms. Jessica Grannis and Mr. Gabriel Pacyniak of the Georgetown Climate Center offered the CCAC PowerPoint presentations on Climate Change Adaptation Strategies and Climate Change Mitigation Strategies, respectively.

Ms. Grannis's presentation highlighted the role of the Georgetown Climate Center (GCC) in providing a database of resources to states and localities on climate and energy issues. The GCC also brings together academia and policymakers to improve climate policy. GCC is able to provide information of other states' development of legislation, regulations, transportation policy and adaptation policy.

The GCC supports the states by coordinating, planning and investing in the creation of working groups of key stakeholders and citizen advisory councils. The GCC can also establish research priorities and coordinate with academic researchers. Further, the GCC strives to ensure the resilience of state investments and to include climate change in all state plans.

The GCC supports local governing bodies by providing technical assistance with funding issues and mandates, including the use of state funding as a method to encourage local adaptation. GCC helps local entities in developing new funding streams to support local adaptation. GCC will identify ways to fund or finance private adaptation measures. GCC also can help local governments by expanding the scope of available data, tools and technical support provided to communities and by encouraging local adaptation planning.

Mr. Pacyniak's presentation highlighted GHG mitigation strategies primarily in the power generation and transportation sectors and offered an overview of recent state climate change mitigation actions

and goals. There are only 20 states that have set GHG emissions reductions goals. Pennsylvania is not one of the 20.

A major point in the presentation was the Transportation Climate Initiative. This is a regional collaboration of 11 Mid-Atlantic states and the District of Columbia that seeks to develop the clean energy economy and reduce oil dependence and GHG emissions from the transportation sector. It was launched in 2010. Transportation is the largest source of TCI regional GHG emissions. Existing federal and state policies will achieve significant reductions, but are not enough to put states on track to achieve emissions reduction goals. TCI feels that electrification in the transportation sector is a key strategy; however, more is needed. The adoption of zero-emission vehicle standards has been adopted by 10 states with a goal of 3.3 million zero-emission vehicles by 2025. Additional support such as purchase incentives and education are necessary to achieve this goal. Also, a build-up of a charging infrastructure is necessary. The GCC has partnered with many private and public entities to help achieve the promotion of zero-emission vehicles.

According to a recent GCC report, decarbonizing the electricity grid is also a benefit of electric vehicles assuming 75 percent renewables in generation and that NG combined cycle is on the margin. Combined policies can drive emissions reductions and generate economic benefits. The resulting emission reductions could help states achieve 2050 goals. The increased distribution of renewable energy, emerging storage solutions, interest in microgrids and the electrification of transportation could all mean dramatic changes to the electricity sector.

#### MEMBERSHIP UPDATE:

The CCAC now carries eight vacancies (four from Governor, one from Senate majority, two from Senate minority and one from the House minority). DEP continues to work on filling these vacancies.

The committee nominated and elected a Chairperson and Vice Chairperson at this meeting. A motion to open nominations for a Chairperson was made by Mr. Bossert and seconded. The motion carried by voice vote. Mr. Krug was nominated to serve again as Chairperson. A motion to close the nominations for Chairperson was made and seconded. The motion carried by voice vote. With no other candidates for Chairperson, Mr. Krug was elected by acclamation to serve as Chairperson of the committee with a term of office ending in November 2018.

A motion to open nominations for a Vice-Chairperson was made by Mr. Ellis and seconded. The motion carried by voice vote. Mr. Bossert was nominated to serve as Vice-Chairperson. A motion to close the nominations for Vice-Chairperson was made by Mr. Henderson and seconded. The motion carried by voice vote. With no other candidates for Vice-Chairperson, Mr. Bossert was elected by acclamation to serve as Vice-Chairperson with a term of office ending in November 2018.

#### DEVELOPMENT OF THE 2018 CLIMATE CHANGE ACTION PLAN UPDATE:

The final 2017 meeting dates were presented to the committee. The meeting dates were chosen based on the availability of Conference Room 105. The committee had no comments on the finalized dates.

The committee and the Department discussed the development of the next Update in terms of GHG mitigation and adaptation. It was generally agreed upon that the work plan concept used for the

development of previous Updates is in need of change and that more attention should be placed on adaptation strategies and methane control strategies as topics addressed in the 2018 Update. The Department and the Committee also believe that basing both mitigation and adaptation strategies on the information and data brought forth in the Pennsylvania Climate Change Impact Assessment is vital to the next edition of the Update.

The use of outside contractors for aid in the development of the next Update was once again discussed. Some areas that an outside contractor could assist with the 2018 Update are evaluating the success of previous work plans, proposing new ideas for future work plans, proposing new types of designs for future plans, evaluating similar demographic states for effective work plans, and evaluating adaptation plans. The Department agreed to look closer at the possibility of obtaining a consultant to develop the next Update along with performing the necessary economic analyses.

As requested by the committee and promised by the Department, Mr. Frank Purtell presented his analysis of the “Biggest Drivers and Strategies to Reduce Largest Impacts.” Frank’s analysis broke down CO<sub>2</sub> emissions by fuel type from Pennsylvania’s largest emitters; the residential sector, the commercial sector, the transportation sector, the electric power generation sector and the industrial sector. From the presentation the committee acknowledged that energy efficiency and the transportation sector are key areas on which to focus in the development of the next Update. The amount of CO<sub>2</sub> emissions generated from the transportation sector prompted the committee to agree that reduction strategies for this sector need work.

The committee and the Department continued discussion on the inclusion of adaptation in the 2018 Climate Change Action Plan Update. The Update could also highlight adaptation practices being instituted at the county and city levels within the Commonwealth and in other states. Members of the committee advised that the Department should reach out to other state agencies for ideas in the development of an adaptation plan. The committee also expressed concern that, unless the mitigation and adaptation analysis and recommendations occurred in parallel, the Update delivery schedule would not be met. The Department also stated that a final draft of the 2018 Climate Change Action Plan Update will need to be available for public review and comment by early 2018 to allow for the public comment period and any necessary revisions if the Oct. 9, 2018, deadline is to be met.

In addition, some committee members were concerned about the final review of the Update document after the public comment period. The committee also expressed a desire to review and comment on the public comment and response document. Ms. Shirley explained the Department’s policy on public response documents and advisory committees. Mr. Krueger explained that during the development process that updates may be made to the timeline if necessary.

**ADMINISTRATIVE ITEMS:**

The Department will continue to investigate the possibility of obtaining an outside contractor to assist in the development of the 2018 Update.

**PUBLIC COMMENT(S):**

Ms. Tamara Gagned of the Nature Conservancy PA offered a suggestion that the DEP look to the PA Department of Agriculture for additional strategies in the development of an adaptation plan for the 2018 Update.

**ADJOURNMENT:**

A motion to adjourn was made by Mr. Sherrick and seconded. The motion carried, and the meeting was adjourned at 2:35 p.m.