

**CLIMATE CHANGE ADVISORY COMMITTEE
MEETING MINUTES
February 20, 2024
9 a.m. – 12 p.m.
Rachel Carson State Office Building,
and via Teams**

MEMBERS/ALTERNATES PRESENT:

In-Person:

Chairperson Steve Krug
Adam Walters (for Rick Siger)
Greg Czarnecki (for Cindy Dunn)
Joe Sherrick (for Chair Stephen M. DeFrank)
Laura Edinger (for Elizabeth Marx)
Pat Henderson

Online:

Chris Sandvig
Marc Mondor
Lindsay Baxter
Jarret Gibbons
Jason Kelso
Jennifer Greenberg
Perry Stambaugh
Zachery Smith
Flora Cardoni
Ben Sanchez

MEMBERS ABSENT: Paul Morris, Sara Innamorato, Daryl Metcalfe, Terry Bossert, Kimberly Kipin-McDonald

PA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) STAFF:

In-Person: Lindsay Byron, Kelsey Irvine, Kerry Campbell, Laura Rigge, David Althoff, Christopher Nafe, Colleen Unroe, Max Schultz, **Online:** Maria Solomidou

INVITED GUESTS: Adam Agalloco, Cassandra Bhat, Martha Hart, Alec Bernstein, Bansari Saha, Maria Scheller, Peter Narbaitz, Fiona Wissell, Sam Pournazeri, Zeyu Hu, Kenneth James Davis, Alex Da Silva

MEMBERS OF THE PUBLIC: In-person: Dan Mayer **Online:** Rev. Jeffery Thomas, Chris Davies, Brian Smiley, Adam Cirucci, Evan Endres, Glendon King, Robert Gottlieb, Grant Gulibon, Jacob Wills, John Walliser, Joseph Cullen, Josie Gaskey, Robert Nicholas, Nick Manning, Sarah Potter, Rachel Gleason, Robert Routh, Todd Eachus, Nick Troutman

MEETING: The February 20, 2024, meeting of the Climate Change Advisory Committee (CCAC or Committee) was called to order at 9:08 a.m. by Mr. Krug. With 11 of 21 seated members present at the start of the meeting; a quorum was established.

MINUTES: The December 19, 2023, CCAC meeting minutes were presented to the Committee for approval. A motion to approve the minutes was made by Mr. Henderson and seconded by Mr. Sherrick. Ms. Marx had requested edits via email, and Ms. Byron confirmed that these changes would be

incorporated. A motioned to approve the comments with suggested edits was carried by a voice vote and passed.

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

2024 Climate Impacts Assessment & Climate Action Plan

Ms. Byron shared a summary of the feedback received from committee members on the Climate Impacts Assessment (CIA) and Climate Action Plan (CAP) drafts presented during the December meeting. Ms. Byron noted that there was some substantial and constructive feedback shared by committee members and she emphasized that DEP appreciates their feedback to make them a better product.

Mr. Agalloco provided an overview of the content ICF would review during the meeting and highlighted the upcoming opportunities for committee feedback in future drafts. Mr. Bernstein provided an overview of changes to the CIA, highlighting the inclusion of a new executive summary section and a few content updates. Mr. Bernstein then reviewed the key findings from the CIA analysis.

Ms. Edinger, on behalf of Ms. Marx, posed a question about the overall risk scores for flooding related to low-income and environmental justice communities, particularly given the recent flooding events in Southeast Pennsylvania and the disproportionate impacts on communities with less resilient housing stock. Mr. Bernstein confirmed that these hazards were reviewed with an EJ lens and there is additional discussion in the report that highlights these concerns, but the overall framing looks at hazards from a statewide snapshot.

Mr. Henderson inquired about the differences between the Pennsylvania DEP's definition of environmental justice compared to various federal definitions and how they were incorporated in the report. Mr. Bernstein confirmed that the DEP's definition of EJ was included in the analysis for the CIA and Ms. Bhat elaborated that ICF included the DEP's definition within the geospatial analysis to help understand the impacts on environmental justice communities, but also took a broader approach to focus more holistically on equity impacts from climate changes within the discussion of the report.

Mr. Krug offered a comment for clarification on the top three impacts: increasing temperature, heavy precipitation, and heat waves. He inquired how wildfires are included in the impacts analyzed. Mr. Bernstein confirmed these three are the top risks and the increased wildfire risk is included in the discussion in the increased temperatures section.

Ms. Hart shared an overview of the updates to the CAP since the last report, highlighting the equity and environmental justice sections added throughout the report. Additionally, she shared that this draft includes adaptation opportunities, legislative recommendations, and implementation considerations. A sample equity and environmental justice framing for each strategy and section was shared in response to feedback from CCAC members. Next, Ms. Hart reviewed the updated modeling included in the report. Mr. Agalloco clarified that the Reference BAU does include RGGI, IRA, and BIL whereas the Baseline BAU does not. He then reviewed the strategies included in the CAP and the associated emission reductions. He highlighted the significant opportunities in the power generation, transportation, and industrial sectors. Mr. Agalloco noted this modeling is still in refinement and there may be changes in the next draft. He presented the approach that guided the energy rate analyses, including modeling for both the electricity rate and gas rate modeling and he noted that this is not included in the climate action plan

but will be included in supplemental materials. Mr. Agalloco provided further detail on how the inputs from this analysis feed into the REMI PI+ model to inform the economic analysis from the rate increases and shared the output from the 2021 report as a sample for the types of analysis to expect in the next iteration of the report.

Ms. Edinger inquired about the assumptions for the gas modeling and whether they include hydrogen generation and infrastructure upgrades, as well as how rate structure changes are included in this modeling. Mr. Narbaitz responded that this analysis is done at a higher level, whereas more detailed models would be done in partnership with gas companies to narrow in specific pricing and costs. Ms. Edinger asked about the expected decline in the gas customer base and Mr. Agalloco confirmed that this is the case, but there would be associated increases in the electricity demand. She posed an additional question about the REMI model inclusion of distributional impacts across the income demographics. Mr. Bansari explained current output from REMI is limited for this type of analysis, but they can layer in additional analysis to help better understand impacts on different income demographics. He clarified that the outputs of this model will be at the state level, rather than a more local level of granularity.

Mr. Sherrick inquired about which specific strategies in the CAP apply to the electricity analysis and if transmission and infrastructure upgrades are included. Mr. Agalloco confirmed it captured more than the net zero strategy and Ms. Scheller confirmed that they were able to model in some assumptions to help capture the costs for the transmission and infrastructure cost.

Ms. Edinger commented that the current BAU for residential does not capture recent gas cost price fluctuations. Mr. Agalloco confirmed that historical trends are not a flat line, but they are modeled that way to demonstrate overall trends and may not reflect day-to-day reality.

Mr. Krug reflected that the current reference BAU includes IJJA/IRA programs and policies that are political in nature and may be at risk of potential claw-backs, which would necessitate additional measures on the state side to make up for that gap. Mr. Agalloco confirmed that a gap within the projections would need to be filled in the absence of those policies and the strategies in the CAP are in addition to current federal policies and programs. Mr. Krug inquired about the REMI modeling included in the presentation. Ms. Hart clarified that the modeling presented was from the 2021 CAP, but ICF expects the forthcoming updated modeling to follow similar trends.

Mr. Bernstein provided an overview of the process to identify and prioritize adaptation strategies. He then reviewed the list of prioritized GHG reduction and adaptation strategies that will be included in the CAP. Ms. Hart provided an overview of the process used to develop the legislative recommendations included in the CAP, and Mr. Agalloco reviewed the recommendations.

Ms. Edinger inquired if these legislative recommendations would be analyzed to review impacts on low-income and environmental justice communities. Mr. Agalloco responded that these legislative recommendations were not analyzed at a more detailed level, but instead drew from the analysis within the GHG reduction strategies. Ms. Edinger posed a follow-up question about how net benefits are defined and if there are potential net negatives to potential communities as trade-offs. Mr. Agalloco explained that these recommendations are framed at a higher level rather than a detailed cost/benefit analysis. Mr. Althoff shared that the intent with these legislative recommendations is to solicit feedback from the committee and compare them to other legislation introduced in PA and surrounding states, but the goal in

this effort is not to provide detailed legislation or analysis, rather it is to compare and frame potential areas of legislative impact.

Mr. Sandvig inquired if there were additional legislative recommendations planned given the lack of recommendations in the transportation sector. He stressed that it is critical to consider policies in this area, especially given the reliance on fossil fuels for the transportation systems in the Commonwealth. Ms. Byron confirmed that committee members should share feedback on these recommendations and there are opportunities for future iteration. Mr. Sandvig cautioned from his prior experience that there are potential pitfalls with strictly market-based solutions for reducing transportation emissions.

Mr. Henderson asked for clarification of the definition of net zero within the report. Ms. Byron confirmed net zero is defined the point of generation, rather than lifecycle emissions. Ms. Hart added that there is a discussion of embodied carbon in the report. Mr. Henderson also commented on the chart around AEPS requirements and reflected that surrounding states are net-importers of energy compared to Pennsylvania's net-exporter profile. ICF acknowledged at the outset of the discussion that the legislative recommendations were prepared by the Department. Acknowledging this, Mr. Henderson directed several questions regarding the legislative recommendations to Department staff. Mr. Henderson also inquired about the lack of specificity in the recommendations and expressed a desire for more specificity within these recommendations to help inform legislative recommendations, particularly for hydrogen and CCUS, given Pennsylvania's role as a leader in hydrogen implementation and noted existing proposed legislation in Pennsylvania to help inform this added specificity. Mr. Althoff expressed gratitude for these comments and further requested feedback from the committee on the level of detail to provide and as well as other examples from other jurisdictions that can help make these recommendations more effective. from other jurisdictions that can help make these recommendations more effective.

Mr. Sherrick offered a clarification around the recommendations for community solar that there needs to be a legislative mandate for net metering to enable community solar, but there does not need to be a separate tariff. Ms. Baxter offered her support to help refine the language for this specific recommendation. Mr. Agalloco welcomed further feedback from the committee to help refine this specific recommendation.

Mr. Gibbons asked if the current AEPS legislative proposal included any changes for Tier 2. Mr. Althoff confirmed that this current recommendation does not consider other changes for Tier 2 at this time and encouraged members to provide feedback for modifications of Tier 2 resources to be included in the recommendation.

Mr. Krug provided a comment on the inclusion of the municipal planning code update to be included as an adaptation strategy and legislative recommendation. He believes that many of the adaptation actions outlined in the plan could be accomplished by a municipal planning code update.

Public Comment

Rev. Jeff Thomas provided comments on the importance of highlighting the impacts of climate change on maternal health and morbidity, specifically on African Americans.

Mr. Christopher Davies provided comments on the CAP including reflections on the need to include more local-level action and citizen engagement within the plan.

2023 GHG Inventory Update

Ms. Irvine provided a brief discussion on the updates to the 2023 Greenhouse Gas Inventory. EPO worked with ICF to revise the methodology for the inventory to include new data sources and align the inventory with current best practices. The updates to the methodology included a revision of the Global Warming Potential (GWPs) from AR4 to AR5, the inclusion of new data sources from the EPA US Inventory of Emissions and Sinks, and the incorporation of updates to the State Inventory Tool (SIT) released in June 2023. The updated methodology resulted in a slight increase in emissions (approx. 5%) over the time series but did not change overall trends significantly. The new version of the report is available on DEP's website.

PA Climate Network

Mr. Nafe provided an overview of the PA Climate Network. He briefly reviewed the history and current status of the network, and shared that an RFI was issued on December 13th, 2023 to solicit information from organizations that will inform governance and long-term management of the network. This RFI closes on February 29th, 2024. Mr. Althoff reflected that the PA Climate Network shares many of the same adaptation goals outlined in the CAP, like A.1- State Agency Coordination and A.2- Local Adaptation Program, and he hopes that this organization can support mitigation and adaptation actions within Pennsylvania.

DEP Updates

Shared Energy Manager

Mr. Nafe shared that DEP has launched a new iteration of the program in January and twenty local governments have been selected to join the program. Wilson Engineering has been selected as the contractor for this Shared Energy Manager program and has begun kick-off calls with the local governments to define goals for the program. Wilson Engineering and the local governments are prioritizing the development of shovel-ready projects and seeking grant funding to help move them toward implementation.

Climate Pollution Reduction Grant

Ms. Byron shared that we have onboarded a contractor to support this work, ICF, to develop the Priority Climate Action Plan (PCAP) and Comprehensive Climate Action Plan (CCAP). DEP has a draft of the PCAP that they intend to submit on March 1st to the EPA. The PCAP draws heavily on the work for the Act 70 CAP and incorporates feedback received from the committee. Additionally, DEP has been working on the development of an implementation grant application focused on industrial sector decarbonization for a program called RISE PA. An RFI to solicit feedback closed in late January and we received over 20 responses to inform program design. DEP intends to submit the application for implementation grants on April 1st.

Building Codes Implementation for Efficiency and Resilience

EPO received a competitive grant for \$3 Million to develop energy code technical training and building science training programs at career and technical high schools as well as community colleges across the Commonwealth of Pennsylvania. DOE and EPO held a kickoff meeting for the project on January 2,

2024. Work is underway to find pilot schools, develop RFPs, and identify technical advisory group participants.

State-Based Home Energy Efficiency Training for Residential Energy Contractors (TREC)

This is a formula grant (\$150 M) available for state energy offices with grants to develop and implement a state workforce energy program that focuses on energy efficiency, electrification, and clean energy improvements, including those covered under the Home Efficiency Rebate Program (HER) and the Home Electrification and Appliance Rebate Program (HEAR). PA's allocation is \$4,960,910 and is expected to receive this amount. The application was submitted on January 31, 2024. Up to \$40 M in competitive grants are to be made available at a later time.

Energy Auditor Training Grant Program

This grant provides competitive grants to eligible states to train individuals to conduct energy audits or surveys of commercial and residential buildings to build the clean energy workforce, save customers money on their energy bills, and reduce pollution from building energy use. The FOA was released on December 20, 2023. A concept paper is due March 28, 2024, and the full application is due June 28, 2024. EPO expects to apply for up to \$2 million in partnership with the Clean Energy Center and several other partners.

Outreach and Notable Events

- EPO held a workshop for the CPRG Local Government Workgroup on February 15th to preview the CPRG PCAP and discuss requirements for the implementation grant.
- The Pennsylvania Energy Development Authority (PEDA) Board of Directors quarterly meeting will occur on February 22nd.
- EPO will provide a presentation on the Local Climate Action Plan, Shared Energy Manager, and CAPstone programs at the Environmental Advisory Council (EAC) Network virtual conference held by WeConservePA on February 24th.

Next Meeting

Ms. Byron reminded committee members that the next meeting will be held on April 23, 2024.

New Business

No new business was discussed.

Adjournment

A motion to adjourn was made by Mr. Sherrick and seconded by Mr. Czarnecki. The motion carried, and the meeting was adjourned at 12:02 pm.