

**CLIMATE CHANGE ADVISORY COMMITTEE
MEETING MINUTES
February 22, 2022
9 a.m. – 12 p.m.
Rachel Carson State Office Building,
and via WebEx**

MEMBERS/ALTERNATES PRESENT:

Chairperson Steve Krug	Adam Walters (for Neil Weaver)
Vice-Chairperson Marc Mondor	Terry Bossert
Robert Graff	Kimberly Kipin-McDonald
Gary Merritt	Zachery Smith
Greg Czarnecki (for Cindy Dunn)	Stephen McCarter
Patrick Henderson	Jaret Gibbons
Lindsay Baxter	Jen Quinn (for Zakia Elliot)
Glendon King (in for Rep. Daryl Metcalfe)	Rep. Sara Innamorato
Paul Morris	Brian Smiley

MEMBERS ABSENT:

Luke Brubaker, Jim Felmler, Alissa Burger, Gladys Brown Dutrieuille

PA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) STAFF:

Kerry Campbell, Lindsay Byron, Dave Althoff, Christopher Nafe, Darek Jagiela, Andrew Hansrote, Robert Young, Colton Brown, Sarah Pinter, Robert Reiley

INVITED GUESTS:

Natasha Fackler, Roy Gothie, Dr. Julie Becker, Tim Evans

MEMBERS OF THE PUBLIC:

Lira Titta, Josephine Martin, Eli Brill, Emily Watts, Nate Wardle, Nick Troutman, Ruth McDermott-Levy, Matt Rucci, Kyle Tosato, Melissa Murof, Ken Zapinski, John Walliser, Kylie Cloonan, Robert Routh, Senator Carolyn Comitta.

MEETING: The Tuesday, February 22, 2022 meeting of the Climate Change Advisory Committee was called to order at 9:05am by Chairperson Steve Krug. With 17 of 21 seated members present at the start of the meeting a quorum was established.

MINUTES: The minutes of the December 14th, 2021 meeting were presented for approval. A motion to approve the minutes was made by Rob Graff and seconded by Jaret Gibbons. The motion to approve the minutes without edit carried by a voice vote and passed. Gary Merritt abstained as he was not present for the December 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.)

Chairman Krug opened the meeting by thanking Rob Graff for assisting with the meeting agenda, introduced new DEP Energy Programs Office (EPO) employee Christopher Nafe, and called for approval of the minutes from the December 14th CCAC meeting. The first group of presenters were introduced: Natasha Fackler with the Pennsylvania Department of Transportation (PennDOT), Colton Brown with the DEPEPO, and Roy Gothie also with PennDOT.

PA Clean Transportation with PennDOT and DEP/Pennsylvania's Active Transportation Plan

Colton Brown, EPO, opened the presentation with information on Pennsylvania's electric vehicle (EV) goals and commitments from industry, as well as planning efforts from PennDOT on their Active Transportation Plan. Mr. Brown discussed several benefits to EV use for consumers, such as operational costs, significantly reduced emissions, model choices of EVs and hybrids, and the different types of EV chargers that are available including AC level 1, AC level 2, and DC fast charging. Mr. Brown then passed the presentation off to Natasha Fackler of PennDOT. Ms. Fackler discussed resources available to Pennsylvania residents regarding EVs and EV chargers. She covered statistics regarding the number of EVs registered in the state of Pennsylvania, as well as completed and planned corridor development and deployment of EV charging infrastructure. She explained how the planned corridor development would result in EV chargers at least every 50 miles, supported with funding from the Bipartisan Infrastructure Law (BIL). Mr. Brown then discussed the Department's transportation-related programs such as the Drive Electric PA Coalition, Driving PA Forward, and Alternative Fuel Vehicle Rebate Program. Mr. Brown also discussed sales trends for EVs and forecasting and a study on electricity rate designs for EV charging. The Pennsylvania Electric Vehicle Roadmap was also presented and discussed. Mr. Brown then passed the presentation over to Roy Gothie from PennDOT to discuss the Pennsylvania Active Transportation Plan. The focus of Mr. Gothie's portion of the presentation was on multi-modal transportation and six themes within the Active Transportation Plan: enhance safety, provide transportation equity, connect walking and biking networks, leverage partnerships, improve public health, and increase economic mobility.

DISCUSSION:

Rob Graff asked if plug-in parallel hybrid vehicles are included in the definition of electric vehicles. Mr. Brown indicated that the question seemed to be regarding plug-in EV hybrids that were not capable of operating in electric mode which represented only a small portion of EVs and not a significant impact. Mr. Graff followed up by asking if this meant that these vehicles are not eligible for rebates in Pennsylvania. Mr. Brown indicated that depended on the definition of "electric vehicle" in the program and he would have to look up the definition. ***(DEP staff followed up via email with an answer to Mr. Graff's question: Hybrids that do not run in electric only mode are not eligible regardless of whether or not they are plug-in hybrids).*** Mr. Graff also asked to what extent are electric bicycles being included in the equity principle. Ms. Fackler advised that PennDOT wants to include them, but the principles were created with only typical car-type electric vehicles in the vehicle code.

Patrick Henderson asked if highways the best placement for EV infrastructure for a return on investment, indicating that deployment in dense population areas would eliminate more air pollution, and asked if there is any effort to look at usage data and consider redeployment in locations with greater demand. Mr. Brown responded that program scoring data does take this into account, but costs for initial installation cannot be recovered if stations are relocated. However, this is something that could be considered going forward if stations show little to no use.

Mr. Graff asked the presenters to discuss PennDOT's process of creating its mandated plan. Ms. Fackler first addressed the prior question from Mr. Henderson, indicating some usage data is used to determine

charger location. A State Plan must be created prior to the funding being made available by the Federal government. The Commonwealth's allotment of the Federal "formula funding" must focus on the alternative fuel corridors first, then on other public roads and facilities. Discretionary funding would not only be for EVs but all alternative fuels and port authorities, transit, other corridors, etc. This would be a resource for more densely populated areas PennDOT is considering across the State. Ms. Fackler advised that there is a consultant team on board that is helping with the fuel corridor work and building the State Plan along with staff at the agency, and a statewide taskforce which will perform public outreach. Mr. Graff asked Mr. Gothie if PennDOT would consider maintaining bike lanes on state roads. Mr. Gothie responded that highway roads and maintenance, curb to curb, is PennDOT's responsibility. PennDOT is not looking at changing the scope to include bike lanes currently. Brian Smiley had a question on bike lanes and Mr. Gothie responded that the state has a regular process on its publications, and they plan to evaluate the new American Association of State Highway and Transportation Officials (AASHTO) draft guidelines. A PennDOT staff member is on the committee to evaluate the guidelines and determine whether or not National guidelines can be implemented in the Commonwealth.

Vice Chairman Mondor asked about the role of federal funding. Ms. Fackler responded that without federal funding, much of PennDOT's planned work would not move forward, and that Plan trajectory would remain the same, but progress would be slower. Mr. Brown reiterated that the ramp up and build out of EV infrastructure is moving faster due to additional funding. Chairman Krug then asked about forecasting and funding alignment, specifically about infrastructure keeping up with market demand. Mr. Brown responded that most charging is occurring at residential homes, more EVs are being purchased, and prices dropping. Infrastructure is keeping pace with demand as a result. In terms of forecasting 10 years out, there are a lot of variables, however, there is a positive feedback loop leading to more EVs and more EV chargers.

Presentation: Climate Changes Health

Following the presentation and questions on transportation, Chairman Krug introduced Julie Becker MA, MPH, PhD, the founder of Women's Health and Environmental Network (WHEN) representing Physicians for Social Responsibility for her presentation. Dr. Becker discussed the human health impacts of climate change, infrastructure damage, resiliency, and adaptation. Factors such as exposure pathways and climate drivers pertaining to specific human health impacts like respiratory ailments, cardiovascular diseases, and mental health were explored. Dr. Becker went on to discuss large scale mitigation and adaptation solutions such as those identified in Project Drawdown including renewable energy, reduced food waste, and expanded EV infrastructure. She also advised about individual actions that can be taken to mitigate climate change health impacts such as consuming a plant-rich diet, increasing recycling and composting, using public transportation, and healthcare professionals communicating about climate change impacts on patient health.

DISCUSSION:

Vice-Chair Mondor commented that the most recent Pennsylvania Climate Action Plan addresses health impacts and costs, looking at a triple bottom line, and requested that any additional information Dr. Becker could provide in this area be sent to the CCAC. Rep. McCarter asked Dr. Becker if she saw a relationship between the response and impacts to COVID-19 and climate change. Dr. Becker responded that some of the same issues that occur due to climate change were also seen as a result of the pandemic such as social isolation, lack of access to services, and comorbidities. Dr. Becker emphasized the need to apply mitigation strategies related to climate change in regard to COVID, and vice versa.

PUBLIC COMMENT

There were no public comments provided at this meeting.

Presentation: Reducing the Need to Drive is a Win for Both Climate Change and Quality of Life

Tim Evans, Research Director of New Jersey Future, provided a presentation on reducing vehicle miles traveled (VMT). New Jersey Future is a land-use and planning organization whose work focuses on reducing VMT. Reducing VMT has potential to significantly reduce greenhouse gas emissions and help to achieve reduction goals set at both the State and Federal levels. Mr. Evans detailed the co-benefits beyond pollution reduction of changes that New Jersey Future proposes such as less congestion, less wear and tear on roads, more multi-modal transportation options and increased viability of public transportation. Such efforts attempt to encourage cities and municipalities to increase building density, to make walking easier and safer, and to improve connectivity. Social justice and equity benefits of this type of transition were also discussed, such as reclaiming car-oriented land for urban greenspace to benefit lower-income neighborhoods.

DISCUSSION:

Mr. Bossert commented that efforts he had seen on building density/walkability in the past largely failed and asked for any thoughts that Mr. Evans might have on how to make it work. Mr. Evans responded by indicating that millennials want to live in town where they can walk to things and that well-connected street networks and more dense areas are what the younger market wants. Mr. Bossert also commented that there is money out there for development of greenspace, but there isn't enough focus or money for redoing downtowns. Chairman Krug also commented he found it intriguing that building density can reduce vehicle miles traveled.

DCED and DEP Updates

DCED – Adam Walters

Adam Walters, representing Acting Secretary Weaver of DCED, provided a brief update on industrial sector decarbonization, specifically focusing on carbon capture, utilization, and storage (CCUS) and hydrogen. Mr. Walters advised that CCUS and hydrogen technologies are being explored as a method of reducing industrial sector emissions. Beyond interest from state agencies in these technologies, there is potential funding to accelerate deployment from the Infrastructure Law for the Transportation Infrastructure Action Plan released in October. DCED is working with Team PA Foundation to understand how to prepare for deployment of these funds. Much of the needed technology already exists, but is not currently available in the Commonwealth. Investing in this technology could produce jobs, reduce emissions, and spur further investments. Pennsylvania is competitively advantaged in this field, however several funding and economic challenges need to be addressed, and accommodating deployment and infrastructure needs will require further consideration. Mr. Walters also highlighted that this effort must be complemented with educational efforts to communicate the jobs, investment, and decarbonization opportunities these technologies offer. The Team PA Foundation is developing a blueprint document to explore opportunities.

DISCUSSION:

Mr. Bossert asked if the Commonwealth is considering seeking primacy for Class VI injection wells. Mr. Walters responded that this is a topic that comes up often, but that states do not have permitting primacy for Class VI injection wells, which is needed for storage of carbon in geologic formations. Mr. Walters stated that there were two co-sponsorship memoranda, from Representative Kail and Representative

Nelson, to address these issues. Mr. Bossert commented that other states, such as West Virginia, are moving in this direction. Chairman Krug asked if the hydrogen workgroup is a multi-agency effort. Mr. Walters said that DEP, DCNR, DCED are all included in the workgroup discussing CCUS and hydrogen. Input from state agencies as well as stakeholders is needed. Chairman Krug commented that a hydrogen workgroup would work well within the heritage of the Commonwealth's industrial infrastructure.

DEP EPO – Dave Althoff

Chairman Krug introduced Dave Althoff with DEP to provide an update on the state agencies related to the Bipartisan Infrastructure Law. Mr. Althoff advised that federal guidance for these funds is forthcoming, but some pieces have come out on EVs. Broadly, \$62 billion will be administered by the Department of Energy (DOE). The BIL is similar to the American Recovery and Reinvestment Act, with particular focus on investing in workers, access to energy efficiency, delivering reliable, clean, and affordable power, developing future technologies with normal requirements for federal funding. Programs under the BIL will be funded both directly through DOE and through state agencies, including DEP. Formula and competitive funding will be available for work on weatherization assistance (\$3.5B), grid resiliency (\$2.5B), EV charging (\$5B), clean hydrogen (\$8.5B), and CCUS (\$3.5B). There will be \$5 billion for states (PUC and local governments) for energy infrastructure and \$2.5 billion for grants to state, local, and public entities to install alternative fuel infrastructure, as well as funding for battery recycling. EPO will receive approximately \$27 million with \$18.5 for the State Energy Plan and \$4.7 million to support local governments and non-profits with programs such as Energy Efficiency and Conservation Block Grant (EECBG). EPO will focus on energy conservation and efficiency and advancing clean energy technologies through investment priorities from the Climate Action Plan. This will be a 5-year opportunity for fiscal years 2022-2026.

DISCUSSION:

Vice-Chairman Mondor commented that budget and staffing for the Department will be affected, and requested that the Committee hear future updates on this at a later time. Mr. Graff indicated that he has had discussions with EV charging companies, and there are challenges and limitations for permitting and grid connection. Mr. Graff stated that other states have streamlined this process and asked if this is something that the Department is considering. Mr. Althoff responded that EPO has not been engaged in this but seeks to identify barriers to EV charger deployment. Chairman Krug deferred to Lindsay Byron, EPO, for an update on climate outreach efforts. Ms. Byron provided a list of presentations that had been completed recently. Ms. Byron advised that during the next meeting we will be looking at agriculture, LULUCF GHG strategies, programs and tools for energy efficiency, and Luke Brubaker proposed the idea to have CCAC members tour Brubaker farms in Lancaster. Mr. Czarnecki suggested speakers from DCNR on the rural and urban forestry programs, riparian buffers, and lawn to meadow conversions. Mr. Graff indicated interest in hearing how climate change may affect agricultural production both in terms of livestock and crops. Vice-Chairman Mondor, Chairman Krug, and Mr. Smiley have a list of speakers they can provide. Mr. Graff also commented that the siting of buildings in a transit-oriented way should be considered with sustainable construction of buildings.

New Business/Next Steps

There was no additional new business on the agenda.

Adjournment

Vice Chair motioned to adjourn at approximately 11:39am and Mr. Graff seconded.