December 2020 Climate Change Advisory Committee Feedback Outcomes for the 2021 Impacts Assessment and 2021 Climate Action Plan

Materials Provided for Review	Committee Members Who Provided Feedback	# of Written Comments and Questions
Impacts Assessment Draft Final	7	Written – 39
Climate Action Plan Initial Draft	7	Written – 61
December 2020 Meeting Slides	2 written	Written – 12
	8 verbal	Verbal -~23

Example Outcomes

The outcomes listed below are not meant to be exhaustive of how all feedback as addressed, but is intended to summarize examples of feedback that substantively impacted the content of the Impacts Assessment and Climate Action Plan.

Impacts Assessment

- Feedback: Clarify and add information about how much climate change has already impacted Pennsylvania since the "baseline" period (1970-2000).
 - Resulting changes: Explained the extent of climate changes that the Commonwealth
 has experienced from 2000 to 2020. Added observed trends for increasing temperature,
 increasing annual precipitation, and changing drought conditions.
- Feedback: Discuss projected changes in snowfall.
 - Resulting changes: Added information on projected changes in snowfall to the section on projected changes in precipitation.
- Feedback: Ensure definition of impact considers positive and negative impacts.
 - Resulting changes: Revised definition of climate hazard (which was already correct in one place in the report) to remove mention of potential to cause harm.
- Feedback: Reconsider scoring for some hazard consequence category pairs.
 - Resulting changes: Several changes were made in the IA, which include:
 - Raised the rating for flooding's impact on built infrastructure
 - Increased the rating for the impact of cyclones on extra-tropical and tropical cyclones on recreation and tourism and forests, ecosystems, and wildlife
 - Clarified the score for the impact of sea level rise on the economy

Climate Action Plan

- Feedback: Requests for additional breakouts of the GHG inventory (e.g., subsectors and gases).
 - Resulting Changes: A number of changes were made in the CAP, which include:
 - The inventory graphics split energy supply fugitive emissions from other industrial emissions.
 - The GHG inventory report is referenced for additional information.

- Discussion is added in the GHG inventory to provide additional details about sector and subsector emissions (e.g., for oil and gas fugitive emissions and coal mining emissions, and other industrial emissions including quantified metrics).
- Discussion is added into the inventory section on what is covered by industrial and fugitive emissions sectors, including which market segments are included in the estimates)
- Where specific gases are addressed in the inventory (e.g., high global warming potential industrial process emissions or methane from oil and gas systems) this is noted. Each GHG reduction strategy also includes a note on which GHGs are reduced through the strategy.
- Feedback: The largest generating source has shifted from 2017, and this was not apparent in the GHG Inventory and BAU discussion.
 - Resulting Changes: The CAP now includes as sentence that reiterate the data are
 historical and have and will continue to change, leading in to a new section in the BAU
 discussion which shows and discussions how the generation mix changes over time.
 Discussion on historical changes about generation shifts and related emissions
 reductions were also clarified.
- Feedback: The nuclear phase out in the BAU does not seem reasonable.
 - Resulting Changes: DEP and the modeling team analyzed this further and provided additional detail in the CAP around what is driving the replacement of nuclear with natural gas.
- Feedback: The CAP should discuss and incorporate the impacts of COVID-19.
 - Resulting Changes: DEP and the modeling team have determined to not incorporate the impacts of COVID-19 in the modeling at this point in time given 1. The lack of robust data (e.g., COVID is not even a year in, we do not know how long it will last or the lasting impacts), and 2. The high level of uncertainty. The CAP has an expanded section on COVID-19 now though which discussions job impacts, health impacts, etc. as referenced and found in news and other studies. This CAP also references incorporating COVID-19 impacts in modeling for the 2024 CAP when data is more certain and robust.
- Feedback: Explain how a low carbon fuel standard is different than the Transportation and Climate Initiative.
 - TCI and LCFS are different programs LCFS is aimed directly at reducing the carbon content of transportation fuels, TCI is a cap and invest program. Both are separate programs that would operate differently. TCI isn't off the table for Pennsylvania at this point in time the Commonwealth is involved in the development, outreach, and engagement of the program. Because Pennsylvania is not acting on TCI in immediate also does not other options to address the emissions from the third largest sector in Pennsylvania and the largest in the region/nation are not being evaluated.