



Energy Programs Office

Climate Pollution Reduction Planning in Pennsylvania

APA PA 2024 Annual Meeting
October 15, 2024

Josh Shapiro, Governor

Jessica Shirley, Acting Secretary

DEP Climate Program

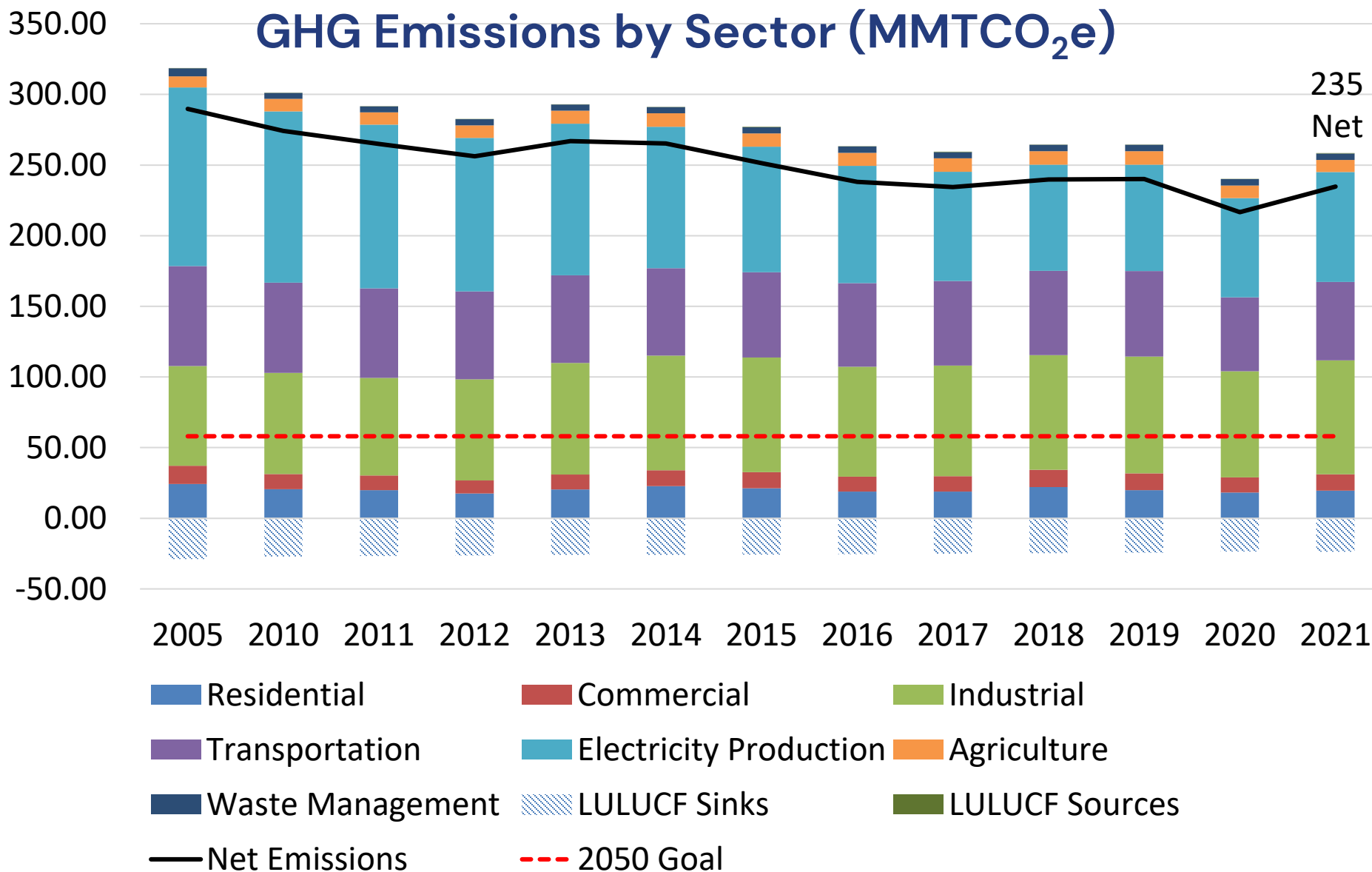
Pennsylvania Climate Change Act (Act 70 of 2008) Requires DEP to:

- Develop a [climate impacts assessment](#) (3 yrs.)
- Prepare and update a [climate action plan](#) (3 yrs.)
- Develop an [inventory of greenhouse gases](#) (GHGs) (update annually)
- Administer a [climate change advisory committee](#) (CCAC) (bimonthly)



Pennsylvania GHG Emissions 2005 - 2021

GHG Emissions by Sector (MMTCO₂e)

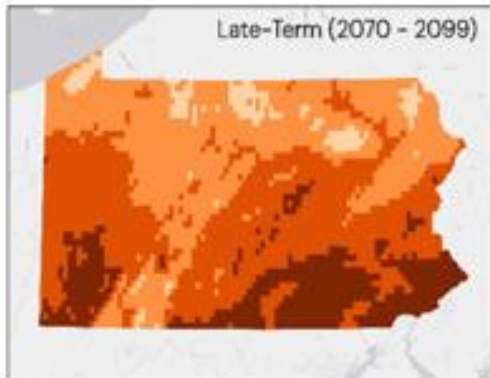
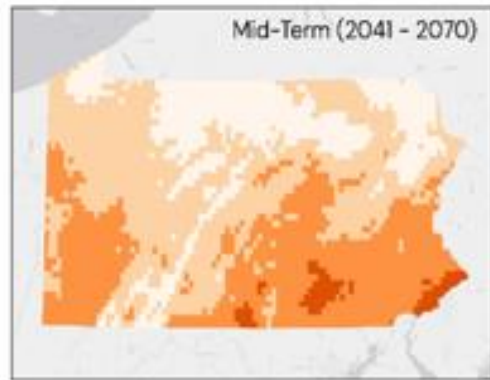


DRAFT 2024 PA Climate Impacts Assessment

Climate Projections – Rising temperatures

- The average annual temperature statewide is rising and is expected to increase by 6.7°F (3.7°C) by the end of the century from the historical baseline period (1971-2000).

- There will be more frequent and intense extreme heat events. For example, temperatures are expected to reach at least 90°F on 36 days per year, up from the 5 days during the historical baseline period.



Days per year with temperatures over 90°F



Pennsylvania
Department of Environmental Protection

DRAFT 2024 PA Climate Impacts Assessment

Climate Projections – Extreme precipitation

- Pennsylvania is expected to receive **more total average rainfall**, occurring in less frequent but heavier rain events.
- **Extreme rainfall events are projected to increase** in magnitude, frequency, and intensity, and **drought conditions are also expected to occur more often.**

Historical Baseline

Mid-Term (2041 – 2070)

Late-Term (2070 – 2099)

Number of days per Year with Very Heavy
(95th Percentile) Precipitation



Pennsylvania
Department of Environmental Protection

EPA Climate Pollution Reduction Grants

- Phase I: CPRG Planning Grants

- \$3M for States, \$1M for large metro areas
- Deliverables:
 - Priority Climate Action Plan (PCAP) – Submitted March 2024
 - Comprehensive Climate Action Plan (CCAP) – Due Dec. 2025
 - Status Report – Due 2027



- Phase II: CPRG Implementation Grants

- \$4.3B nationally, competitive grants for States, Tribes, Municipalities, Air Pollution Control Agencies
- Funding for projects that implement climate pollution reduction strategies **identified in PCAP**



CPRG Planning Grants

- State Government Level:
 - PA DEP Energy Programs Office and Bureau of Air Quality co-managing this funding opportunity for the Commonwealth
 - \$3M Funding received June 27, 2023
- 3 Metropolitan Statistical Areas (MSAs) in PA also received \$1M Planning Grants:
 - Pittsburgh MSA – **Southwestern Pennsylvania Commission (SPC)**
 - Philadelphia MSA – **Delaware Valley Regional Planning Commission (DVRPC)**
 - Allentown MSA – **Lehigh Valley Planning Commission (LVPC)**



EPA Climate Pollution Reduction Grants

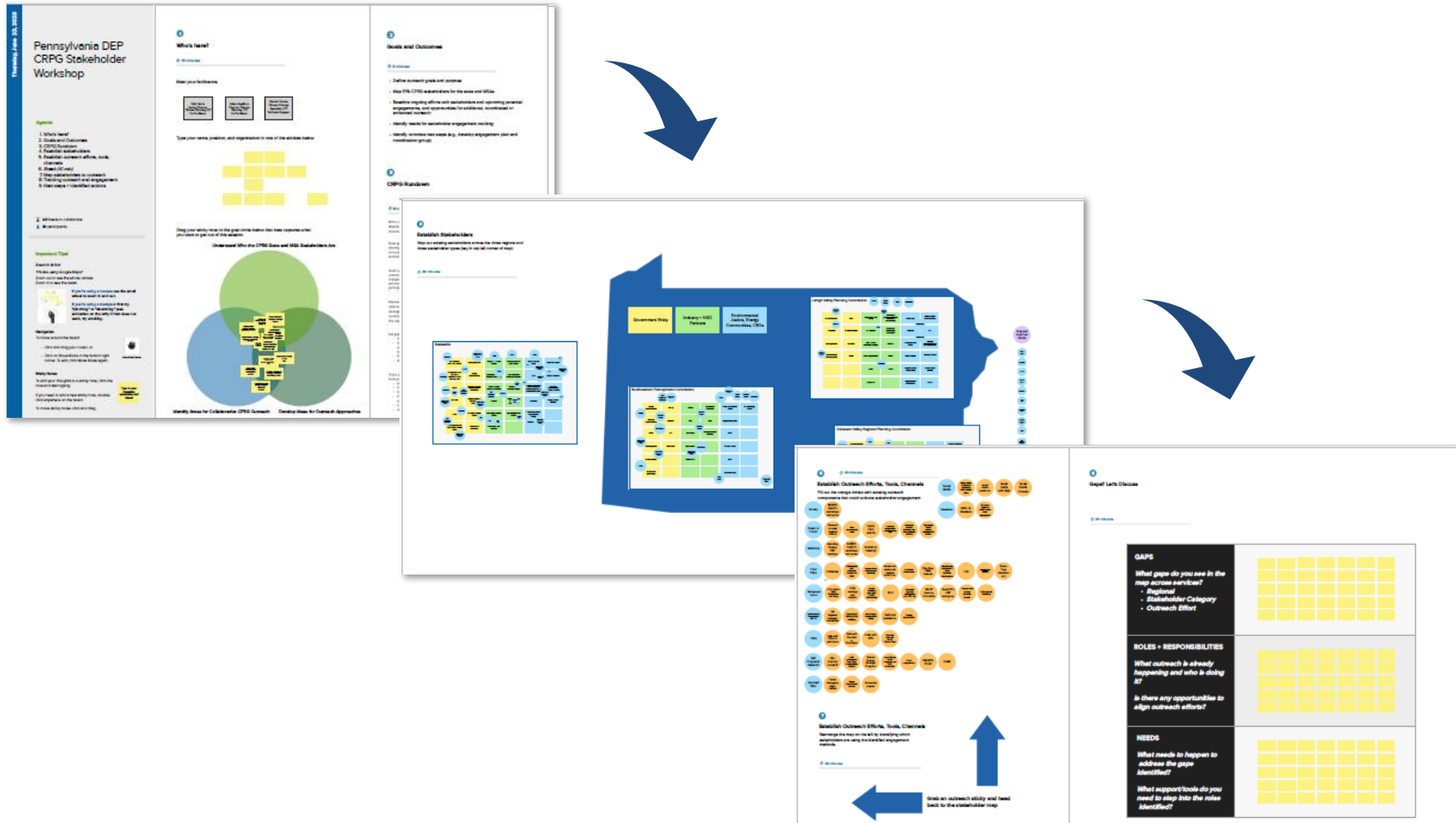
Required Elements of the PCAP, CCAP, and Status Report

★ Act 70 CAP requirements

Plan Element	Priority Climate Action Plan	Comprehensive Climate Action Plan	Status Report
GHG Inventory ★	Required	Required	Update Encouraged
GHG Emissions Projections ★	Not Required	Required	Update Encouraged
GHG Reduction Targets	Not Required	Required	Not Required
Quantified GHG Reduction Measures ★	Required (priority measures only)	Required (comprehensive)	Status and Updates Required
Benefits Analysis ★	Encouraged	Required	Required
Low Income/Disadvantaged Communities Benefits Analysis	Required	Required	Required
Review of Authority to Implement	Required	Required	Update Required
Intersection with Other Funding Availability	Encouraged	Required	Required
Workforce Planning Analysis	Encouraged	Required	Required
Next Steps/Future Budget and Staffing Needs	Not Required	Not Required	Required



Interested Parties Mapping



PCAP Outreach Conducted

PA DEP conducted outreach during Fall / Winter 2023 to inform PCAP development:

Intergovernmental and Intragovernmental:

- Cross-agency working group with over 25 PA agencies and departments
- Routine meetings/coordination with 3 MSA planning grant recipients (LVPC, DVRPC, and SPC) and Mid-Atlantic state representatives
- Virtual session with 51 local governments

Community Engagement:

- 4 workshops across the Commonwealth (Clairton, Williamsport, Hazelton, and Wysox) and one virtual session
- 177 individuals were reached (73 in-person attendees and 104 virtual attendees)



PCAP Outreach Conducted

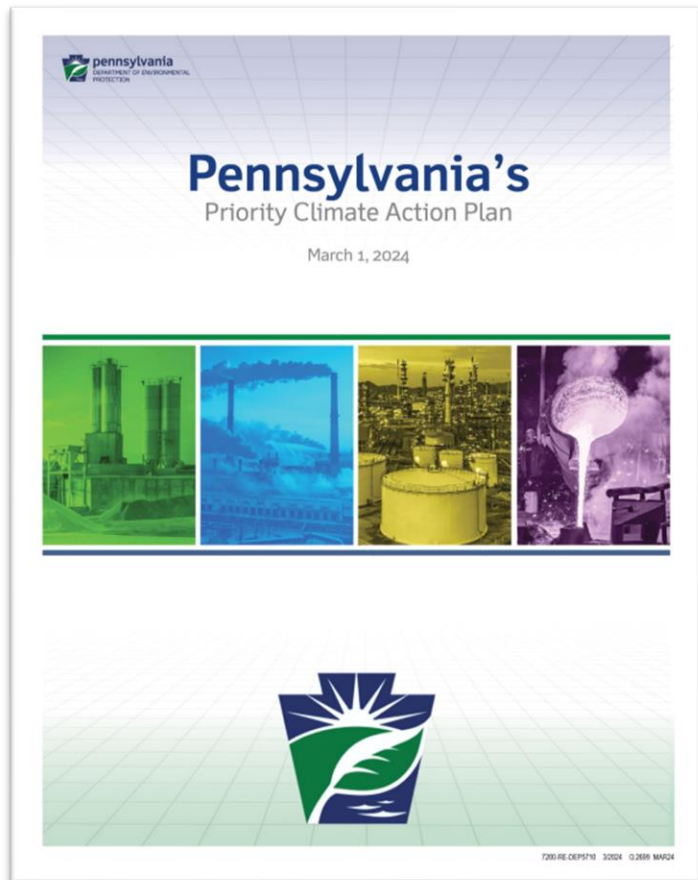
PA DEP conducted outreach during Fall / Winter 2023 to inform PCAP development:

Industrial Sector Outreach

- Virtual session with 53 industry, manufacturing, and utility sector representatives
- Request for Information (RFI) to gather feedback on potential program design for an Industrial Decarbonization program that DEP hopes to fund with a CPRG Implementation Grant



Pennsylvania's PCAP



Measure	Reductions 2025-2050 (MMT CO ₂ e)
Industrial Electrification, Efficiency, and Process Emissions	265.4
Low Carbon Fuels	284.1
On-Site Renewable Energy	15.4
Carbon Capture and Storage	28.2
Fugitive Emissions Reduction	87.8
Net-Zero Electricity Grid	534.0
Building Electrification and Efficiency	147.2
Electric and Alternative Fuel Vehicles	616.1
Public and Active Transportation	45.3



Upcoming Public Engagement

- Finalizing CCAP engagement plans with our consultant. Elements to include:
 1. (1) StoryMap
 2. (1) Virtual public workshop
 3. (8) In-person public workshops
 4. **(4) Virtual sector specific webinars**
 - **Industry and Labor have been identified as key sectors for continued outreach**
 5. (2) Virtual local government webinar
- Anticipate engaging with Industrial, Utility, NGO, etc. contacts already engaged during PCAP outreach, possibly identifying additional interested parties.





Energy Programs Office



Thank you!

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DEP Climate Website: www.dep.pa.gov/climate

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