

Climate Change Advisory Committee Meeting

Energy Programs Office
4/22/2026





Pennsylvania
Department of
Environmental Protection

This meeting will be recorded in its entirety for the purposes of drafting meeting minutes.

By participating in this meeting, you are consenting to the recording, retention, and use of this session.



Agenda

- Roll Call, Introduction
- Approval of December Minutes
- Public Comment
- Presentation – Overview
- Workshop – Status Report
- Break
- Workshop – 2027 CAP
- Workshop – 2027 CIA
- DEP Updates
- Meeting Wrap Up/Next Meeting
- New Business



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Public Comment (15 Min)

Vision for 2027 Climate Action Plan & Climate Impacts Assessment

JOSH SHAPIRO, GOVERNOR | JESSICA SHIRLEY, SECRETARY



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Our Priorities

We aim to shift the Act 70 work to be more accessible and relevant:

- Implementation over planning
- Deepen connections to PA citizens
- Utilization of community input
- Prioritization of key concerns
- Embedding adaptation



Upcoming EPO Climate Work

EPA CPRG Planning Grant Status Report

- Mid-2027
- Updates analysis in CCAP/2024 CAP
- Reports on implementation progress

2027 Climate Impacts Assessment

- Late-2027
- Key focus sectors & adaptation opportunities

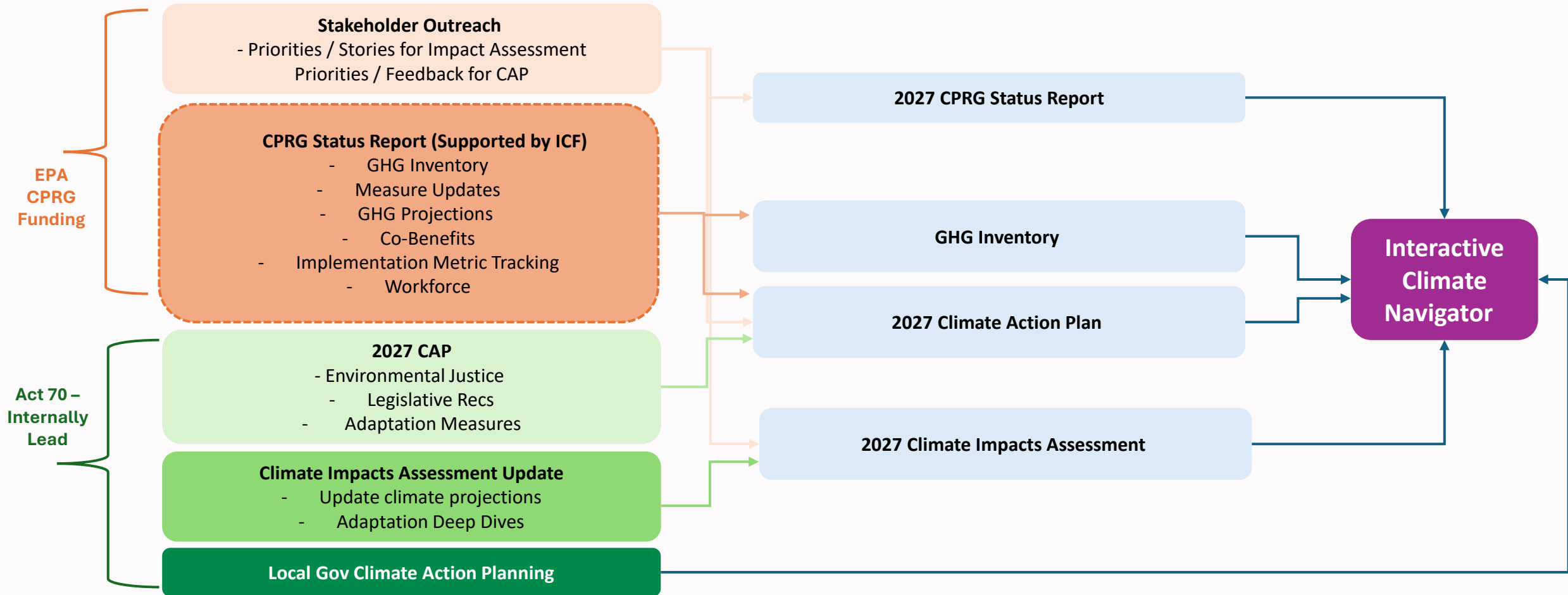
2027 Climate Action Plan

- Late-2027
- Builds on the Status Report & shifts focus to implementation
 - Embedded adaptation measures





Big Picture of 2026-2027 Climate Activities



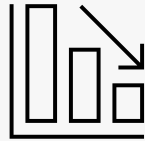


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Interactive Climate Navigator

I want to learn about...

Pennsylvania's Greenhouse Gas Emissions



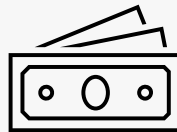
Impacts of Climate Change in Pennsylvania



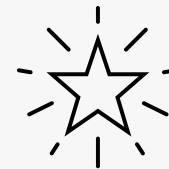
What We Can Do About Climate Change



Financial Incentives



Climate Action Success Stories



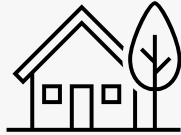


Interactive Climate Navigator

I want to learn about...

how to reduce my carbon footprint

Home Energy Efficiency

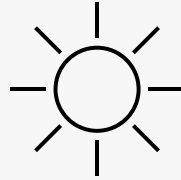


[Information from CAP on relevant measures and achievable GHG reductions, co-benefits.]

[Information on funding sources to implement measure]

[Success stories, examples of measure implementation]

Rooftop Solar

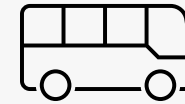


[Information from CAP on relevant measures and achievable GHG reductions, co-benefits.]

[Information on funding sources to implement measure]

[Success stories, examples of measure implementation]

Transportation Mode Shift



[Information from CAP on relevant measures and achievable GHG reductions, co-benefits.]

[Information on funding sources to implement measure]

[Success stories, examples of measure implementation]



Interactive Climate Navigator

I want to learn about...

how to make my farm more resilient to climate change

Climate Smart Natural and Agricultural Lands



[Information from CAP on relevant measures and achievable GHG reductions, co-benefits.]

[Information on funding sources to implement measure]

[Success stories, examples of measure implementation]

Adapting to Climate Change



[Information from CAP on relevant adaptation deep dive.]

[Information on funding sources to implement measure]

[Success stories, examples of measure implementation]

Clean Energy on Farms



[Information from CAP on relevant measures and achievable GHG reductions, co-benefits.]

[Information on funding sources to implement measure]

[Success stories, examples of measure implementation]



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Questions for CCAC

- Any immediate feedback on our proposed Interactive Climate Navigator?

CPRG Status Report

GHG Reduction Measures and Implementation Tracking Metrics (ICF Slides)





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**Break
(15 Min)**



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Act 70 Climate Action Plan 2027 Update

JOSH SHAPIRO, GOVERNOR | JESSICA SHIRLEY, SECRETARY



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CAP 2027

- Overall change to structure and focus
- Review of objectives & measures



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Moving from Sector to Objectives

- Cleaner Transportation
- Climate Smart Natural & Agricultural Lands
- Healthy & Resilient Communities
- Cleaner Energy
- More Efficient Buildings
- Decarbonization of Industry & Non-Energy Activities
- Cleaner Economy

We aim to shift from planning to implementation and increase the accessibility of this work to a broader audience.

We plan to integrate environmental justice, equity concerns, and public health impacts across all objectives.



Description:

- Transition to lower-carbon, reliable, and affordable electrical power and heat through policies, investments, and partnerships.

Adaptation Priorities

- Utility risk analysis
- Impact tracking of outages / equity analysis
- Evaluation of EJ impacts of energy transition

Cleaner Energy

2024 CAP / CCAP Measures

B5. Onsite Solar: Deploy onsite solar, distributed energy resources and battery systems in buildings,

F1. Operational Efficiency: Reduce methane emissions across oil and gas operations.

F2. Biomethane: Expand use and generation of biomethane fuels.

F3. Inactive and Marginal Wells: Reduce methane emissions from inactive and marginal conventional oil and gas wells.

P1. Net Zero Grid: Build a net zero carbon electricity grid.

P2. Distribution and Transmission Grids: Ensure that electricity grid is ready for electrification related to peak load impacts and reliability.

C1. Hydrogen Fuels: Expand use and generation of hydrogen fuels.

C2. Carbon Capture, Utilization, and Storage: Deploy and continue to pursue new carbon capture technologies for power and industrial systems.

Cleaner Transportation

Description:

- Accelerate transition to electric vehicles, alternative fuels, and greater fuel efficiency.
- Encourage multifamily zoning near transit stations.
- Build out fast charging along highway corridors.

2024 CAP / CCAP Measures

T1. Transit and Multimodal Improvements: Expand transit, transit-oriented design, and multimodal transportation.

T2. Light-Duty Vehicle Electrification: Deploy EV and associated infrastructure.

T3. Zero Carbon Medium- and Heavy-Duty Vehicles: Implement low-carbon fuels and deploy zero carbon medium- and heavy-duty vehicles and associated infrastructure.

Adaptation Priorities

- Enhanced emergency management for climate related events
- Strengthening infrastructure for climate related events
- Vulnerability assessments to protect communities and infrastructure

Decarbonization of Industry & Non-Energy Activities

Description:

- This would include waste sector, wastewater, well plugging, oil and gas operations, and carbon capture technologies.

2024 CAP / CCAP Measures

I1. Industrial Efficiency: Deploy electricity and gas efficiency in the industrial operations.

I2. Gas, Fuel, and Process Decarbonization: Electrify industrial uses, change processes, and deploy gas and fuel oil alternatives in industrial operations.

W1. Sustainable Organic Waste Management: Divert organic waste from landfills and incinerators.

W2. Sustainable Construction Waste Management: Support construction material salvage and reuse along with adaptive reuse of buildings.

Adaptation Priorities

- Local / regional incentives to implement resilient guidelines
- Climate resilient guidelines
- Agency coordination

More Efficient Buildings

Description:

- Reduce emissions by promoting conservation, efficiency, and lower-carbon design, materials, and fuels.
- Include previous adaptation strategy of climate resilient design guidelines.

2024 CAP / CCAP Measures

B1. Building Codes: Improve energy efficiency of new buildings and major retrofits through codes.

B2. Electricity Efficiency in Buildings: Deploy electricity efficiency in existing buildings.

B3. Gas Efficiency in Buildings: Deploy gas efficiency in existing buildings.

B4. Building Electrification: Deploy gas and fuel oil alternatives in existing buildings.

Adaptation Priorities

- Local / regional incentives to implement resilient guidelines
- Climate resilient guidelines
- Agency coordination

Climate Smart Natural & Agricultural Lands

Description:

- Manage forests, grasslands, and wetlands for increased carbon sequestration and storage.
- Enhance the ability of plants and animals, including crops, to adapt to the effects of climate change.
- Accelerate soil health and nitrogen and manure management practices that reduce emissions and enhance carbon storage, water quality, and habitat.

2024 CAP / CCAP Measures

- L1. Agriculture Best Practices:** Implement agriculture best practices for emissions reduction.
- L2. Agriculture Best Practices:** Implement agriculture best practices for carbon sequestration.
- L3. Land and Forest Management:** Increase natural sequestration in Pennsylvania's land and forests.

Adaptation Priorities

- Diversify crops and livestock
- BMP for Agricultural lands
- Enhanced workplace health & safety protections

Healthy & Resilient Communities

Description:

- Build capacity of communities to protect against / withstand effects of climate change.
- Expand / protect tree canopies, parks and other green spaces, and lakes, rivers, and wetlands that provide community resilience benefits.

Adaptation Priorities

- Evaluation of EJ and health impacts for communities
- Nature based solutions within communities
- Property risk disclosure and insurance coverage

Cleaner Economy

Description:

- Invest in research and development, innovation, and partnerships.
- Support workers to adapt and evolve their skills through inclusive strategies, ensuring family-sustaining jobs.

Adaptation Priorities

- Health and safety protections for workers
- Economic analysis for benefits of clean energy job and reduction of risk measures
- Plan for adaptation in commercial and residential development

Mapping Objectives to Measures

Measure Name	Objective Mapping
B5. Onsite Solar: Deploy onsite solar, distributed energy resources and battery systems in buildings,	Cleaner Energy
F1. Operational Efficiency: Reduce methane emissions across oil and gas operations.	Cleaner Energy
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T3. Zero Carbon Medium- and Heavy-Duty Vehicles: Implement low-carbon fuels and deploy zero carbon medium- and heavy-duty vehicles and associated infrastructure.	Cleaner Transportation
L1. Agriculture Best Practices: Implement agriculture best practices for emissions reduction.	Climate-Smart Natural and Agricultural Lands
L2. Agriculture Best Practices: Implement agriculture best practices for carbon sequestration.	Climate-Smart Natural and Agricultural Lands
L3. Land and Forest Management: Increase natural sequestration in Pennsylvania's land and forests.	Climate-Smart Natural and Agricultural Lands
I1. Industrial Efficiency: Deploy electricity and gas efficiency in the industrial operations.	Decarbonization of Industry and Non-Energy Activities
I2. Gas, Fuel, and Process Decarbonization: Electrify industrial uses, change processes, and deploy gas and fuel oil alternatives in industrial operations.	Decarbonization of Industry and Non-Energy Activities
W1. Sustainable Organic Waste Management: Divert organic waste from landfills and incinerators.	Decarbonization of Industry and Non-Energy Activities
W2. Sustainable Construction Waste Management: Support construction material salvage and reuse along with adaptive reuse of buildings.	Decarbonization of Industry and Non-Energy Activities
B1. Building Codes: Improve energy efficiency of new buildings and major retrofits through codes.	More Efficient Buildings
B2. Electricity Efficiency in Buildings: Deploy electricity efficiency in existing buildings.	More Efficient Buildings
B3. Gas Efficiency in Buildings: Deploy gas efficiency in existing buildings.	More Efficient Buildings
B4. Building Electrification: Deploy gas and fuel oil alternatives in existing buildings.	More Efficient Buildings



Mapping Objectives to Measures

Measure Name	Cleaner Energy	Cleaner Transportation	Climate Smart Ag & Forestry	More Efficient Buildings	Industrial & Non-Energy Decarbonization	Healthy & Resilient Communities	Cleaner Economy
A1. State Agency Coordination	X	X	X	X	X	X	X
A2. Local Adaptation Program						X	
A3. Nature-based Solutions			X			X	
A4. Utility Climate Risk Analysis	X						
A5. Enhanced Workplace Health and Safety Protections			X			X	X
A6. Evaluation of Equity Impacts	X	X	X	X	X	X	X
A7. Climate Resilient Design Guidelines				X			
A8. Enhanced Emergency Management						X	
A9. Property Risk Disclosure						X	
A10. Health Impacts Tracking	X	X	X	X	X	X	X



Questions for CCAC

1. Does this reorganization help to make this work more relevant and accessible?
 - a) Grouping mitigation and adaptation strategies into “Objectives”
 - b) EJ will be woven throughout each area, as will public health. Thoughts on this organization?
 - c) Move a portion of previous items into appendices, such as previous PA agency climate work, history of climate action planning, etc.
2. Are there measures missing that we need to consider?
3. Are there any 2024 measures that should be omitted from 2027 CAP?
4. What is needed to make our measures more *actionable*?

2027 CIA Working Session

JOSH SHAPIRO, GOVERNOR | JESSICA SHIRLEY, SECRETARY



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Focus Areas for the CIA

We heard from the CCAC Subcommittee in the fall that these were topics we should focus on:

- Flooding
 - Public Health
 - Agriculture
 - Energy
- Within these topics are there places we should dive deeper on?
 - Should we add any focus areas?



Proposed TA Scope

- Review of current scientific knowledge base
 - Updated Climate Impacts Projections
 - Increasing Temperature
 - Increasing Precipitation
 - *(We aim for this data to be available at a local / county level)*
 - Expansion Adaptation Strategies in Focus Areas
- Are there ways to present or share this projection data that we should consider?
 - Are there any new impacts we should model?
 - Which adaptation strategies do you think we should prioritize for expansion?

2027 CIA: Proposed Outputs



Climate Impacts in PA “Primer”:
Short (30 pages) overall report that compiles key information from 2024 on overall climate impacts, modeling, and risks.

Goal: Distill latest key science information in a condensed report

Audience: Researchers, Educators, Interested Citizens



Adaptation Strategy Deep Dives:
8-10 page briefs on key issues that would dive into the practical impacts / guidance for this section.

Goal: Outline key impacts and adaptation actions

Audience: Stakeholders in the impacted sector (level/state level)



Regional Impacts Snapshot :
4-5 slide / infographic on key impacts for each of different regions (downscaled projections), key risks, examples of recent impacts/adaptation solutions

Goal: Provide relevant and compelling info on local climate impacts / adaptation opportunities

Audience: Average Citizen, Local Gov, Educators



Questions for CCAC

1. Do these shifts in format help to make this work more relevant and accessible?
 - a) What else should we add or shift?
2. Does the suggested format change feel like useful tools for residents to use?
3. Are there key impacts we are missing that we need to consider?
4. Within the focus areas for impacts, there places we should dive deeper on?
5. Which adaptation strategies do you think we should prioritization for expansion?
6. Do you know of other organizations doing work in this area that we should partner with?



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DEP Updates – Public Outreach

Date	Location	Date	Location
6-Apr	Harrisburg	18-May	Scranton
7-Apr	York	19-May	Philadelphia
14-Apr	State College	20-May	Towanda
27-Apr	Reading	1-Jun	St. Mary's
28-Apr	Lebanon	2-Jun	Bradford
4-May	Gettysburg	3-Jun	Oil City
5-May	Wilkes-Barre	4-Jun	Brookville
6-May	Lehighton	6-Jun	Pittsburgh
11-May	Allentown	8-Jun	Indiana
16-May	Williamsport	9-Jun	Altoona

Register here: <https://forms.office.com/g/nHrhTVS6Xi>



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Meeting Wrap-Up

Please provide any written feedback on the materials presented today no later than **Friday, May 1** to Lindsay at lbyron@pa.gov.

2026 Meeting Planning

Upcoming Meetings:

- ~~Thursday, February 19th, 2026~~
- ~~Wednesday, April 22nd, 2026~~
- **Reschedule: Tuesday, June 23rd, 2026—July 21, 2026:** GHG Inventory, BAU Projections, Act 70 CAP/CIA/Navigator progress
- ~~Tuesday, August 25th, 2026—Cancel~~
- Thursday, October 29th, 2026: GHG reduction measure modeling, co-benefits, workforce, etc. Act 70 CAP/CIA/Navigator progress
- ~~Tuesday, December 15th, 2026—Cancel~~
- Feb. 2027 (Date TBD): Draft Final Status Report, Act 70 CAP/CIA/Navigator progress



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