



**pennsylvania**

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Energy Programs Office



# Supporting Municipal Engagement in DEP's Local Climate Action Program

Presentation for Community Watershed Organizations  
May 6, 2021

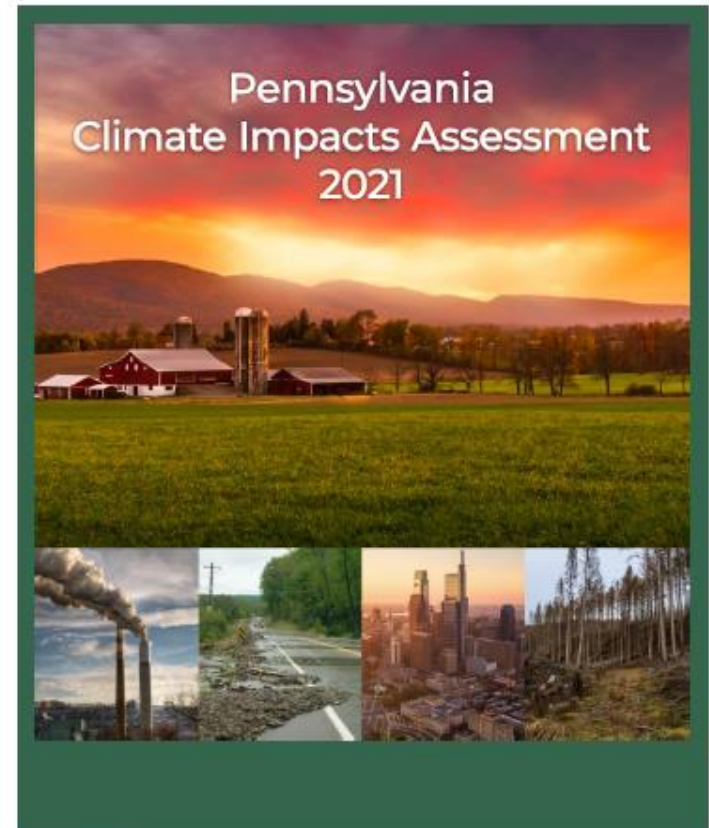
Tom Wolf, Governor

Patrick McDonnell, Secretary

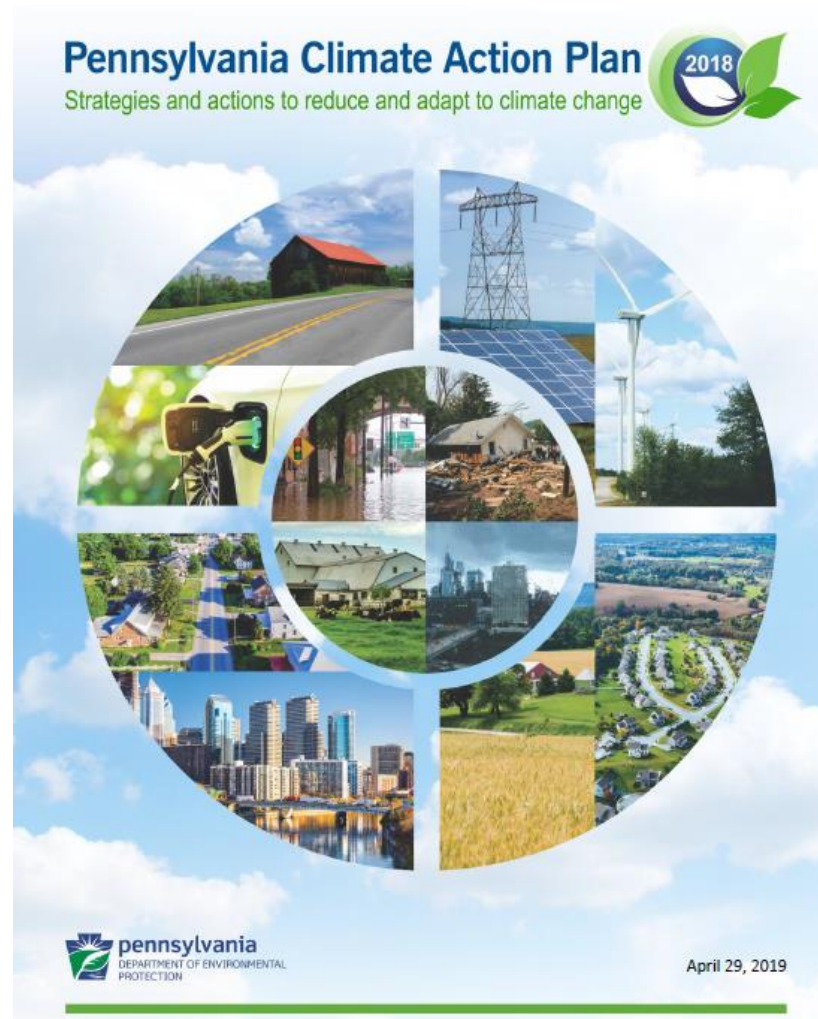
# Breaking News!

## Top priorities for adaptation:

- Reduce extreme heat risks to health
- Support ag, recreation, tourism, forests, wildlife & ecosystems in transition
- Reduce flood risks to infrastructure & communities
- Help low-income households cope with increased energy burden
- Enhance tropical storm & landslide risk mitigation

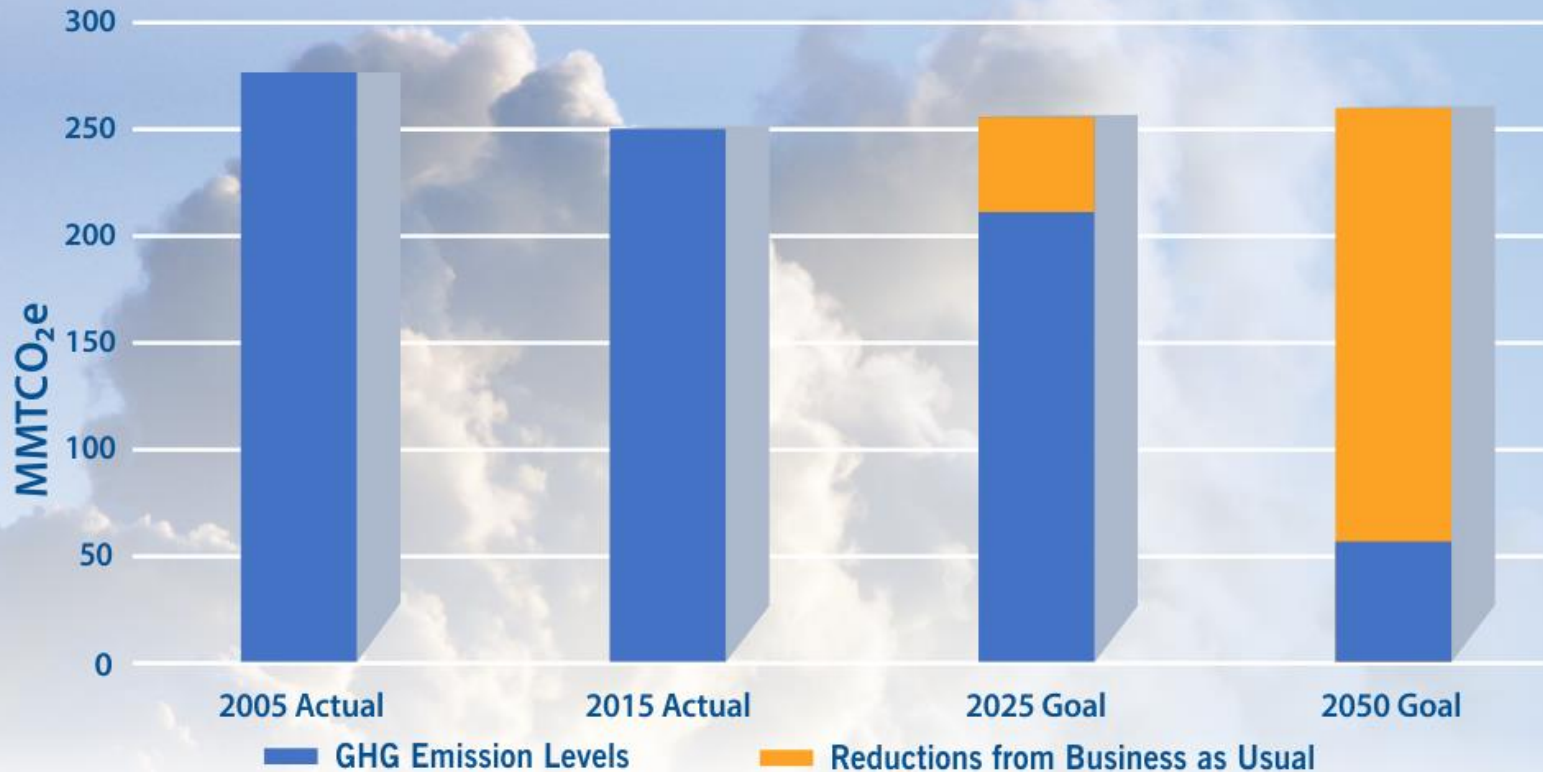


# 2018 PA Climate Action Plan



# Plan Targets

## Greenhouse Gas Reductions Needed to Meet 2025 and 2050 Goals



GHG = greenhouse gas; MMTCO<sub>2</sub>e = million metric tons of carbon dioxide equivalent

### Mitigation Targets:

- 26% reduction of net GHG emissions by 2025, from 2005 levels
- 80% reduction of net GHG emissions by 2050, from 2005 levels

# 19 Strategies

1. Increase end use **energy conservation & efficiency**
2. Implement **sustainable transportation** planning & practices
3. Develop, promote, & use **financing options to encourage energy efficiency**
4. Increase use of **clean, distributed electricity generation** resources
5. Create a diverse portfolio of **clean, utility-scale electricity generation**
6. **Reduce** upstream **impacts of fossil fuel energy** production
7. **Increase** production & use of **alternative fuels**
8. Use **agricultural best practices**
9. Provide resources & **technical assistance to farmers** to adapt
10. **Protect ecosystem resilience**, including forest systems where species will shift
11. Monitor, identify, & **address ecosystem vulnerabilities**
12. **Help the outdoor tourism industry** manage shifting climate patterns
13. Reduce & **use waste sent to landfills**
14. **Use stormwater best management practices**
15. **Promote integrated water resources management & water conservation**
16. Improve reliability & accessibility of **public information about climate-related health risks**
17. Bolster **emergency preparedness** and response
18. **Lead by example** in commonwealth & local government practices & assets
19. **Incorporate** historical & projected **climate conditions into siting & design** decisions for long-term infrastructure

# What Citizens Can Do

## What You Can Do to Promote Integrated Water Resources Management and Water Conservation

Pennsylvania citizens can support this strategy by taking the following actions:

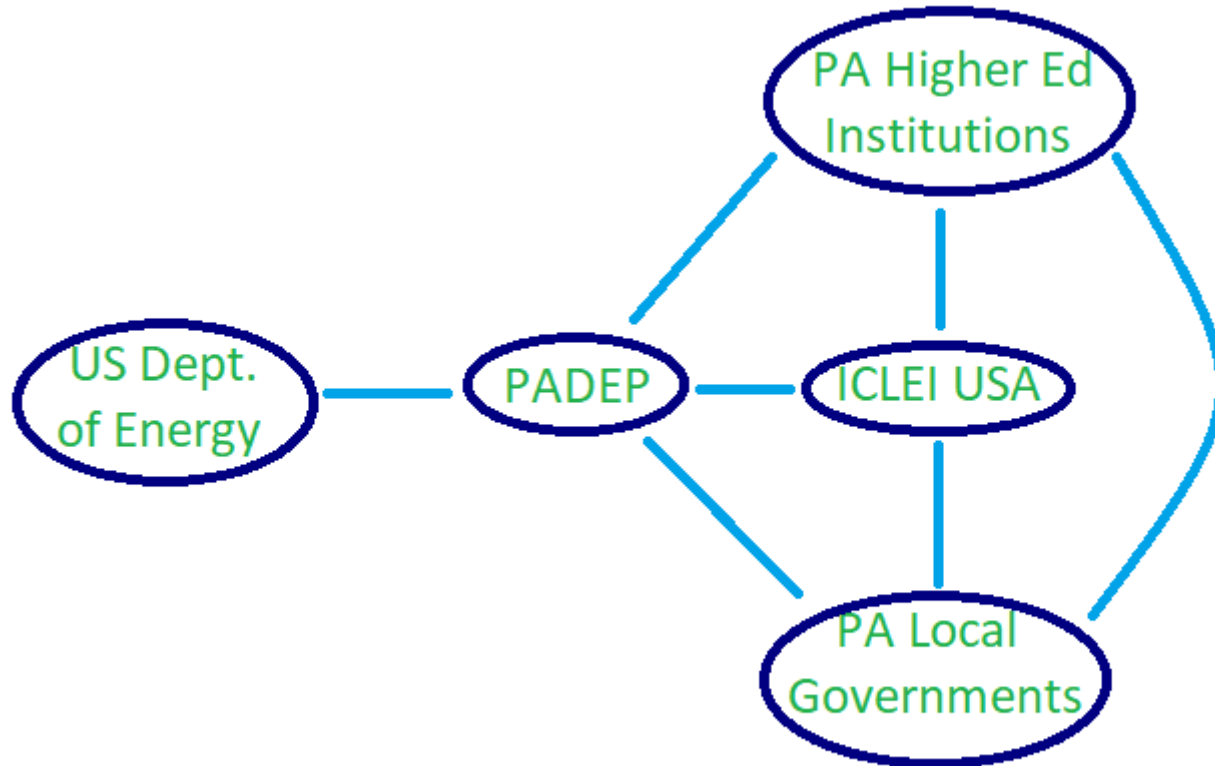
- ▶ Reduce household indoor water use by using water-efficient showerheads, faucets, and appliances (see EPA's WaterSense program for more information, available at <https://www.epa.gov/watersense>).
- ▶ Reduce outdoor water use, including by:
  - Plant native plants and drought-tolerant plants that don't require watering
  - Installing drip irrigation systems.
  - Setting sprinklers to keep the water on the landscape and off the pavement.
  - Managing sprinkler schedules to save water and money, updating schedules to align with the seasons.
  - Avoiding watering in the middle of the day when the sun will evaporate much of the water.
  - Contacting your local water utility to find out how much and when you should be watering outdoor plants.
- ▶ Set your pool water level several inches below the edge of the pool and plug the overflow line when the pool is in use or when adding water to avoid water loss from splashing.
- ▶ Use rain barrels or cisterns to harvest rainwater for irrigation and other outdoor water uses.

# Local Climate Action Program (LCAP)

- ICLEI Local Governments for Sustainability – USA hired as contractor
- College student matched with local government
- ICLEI trains student on ClearPath inventory tool (fall semester) and climate action planning (spring semester)
- Final result: 41 GHG inventories & 40 local climate action plans

[dep.pa.gov/LocalClimateActionProgram](http://dep.pa.gov/LocalClimateActionProgram)

# Local Climate Action Program (LCAP)





# LCAP Timeline

- August 2021 – 1<sup>st</sup> webinar for fall cohort (GHG inventories)
- November 2021 – final webinar for fall cohort
- December 2021/End of semester – inventories finalized in ClearPath
- January 2022 – 1<sup>st</sup> webinar for spring cohort (CAPs)
- April 2022 – final webinar for spring cohort
- June 2022 – draft CAPs finalized

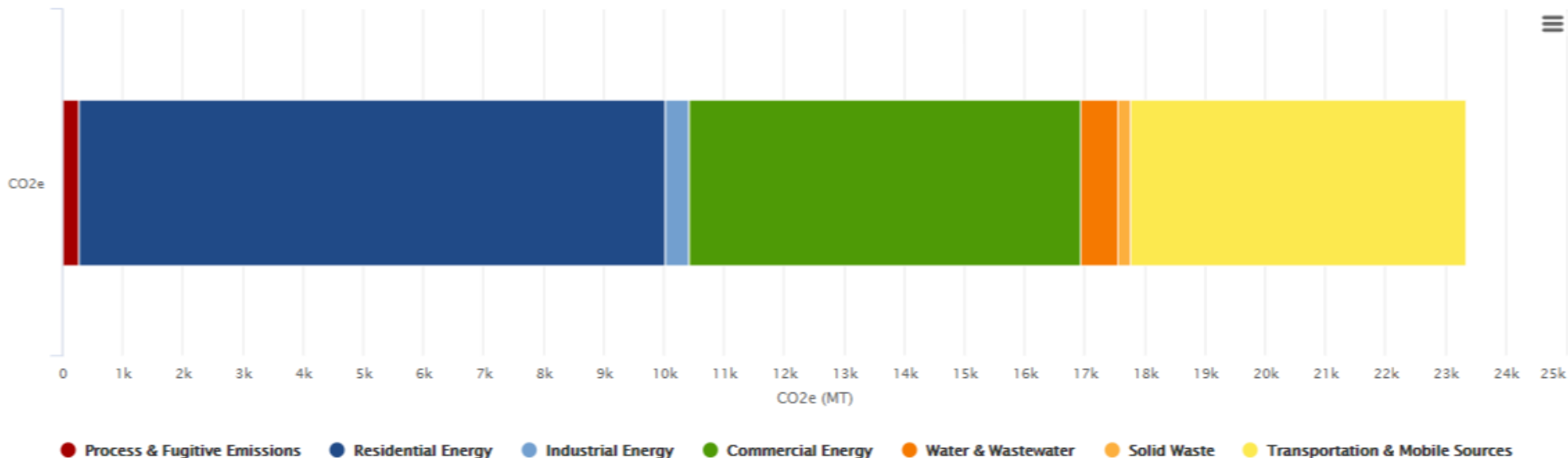
# Local GHG Inventory

## Inventory By Sector

# Bellefonte Borough

CO2e by sector for the selected inventory year.

Sector	CO2e
Transportation & Mobile Sources	5,570
Solid Waste	219
Water & Wastewater	617
Commercial Energy	6,507
Industrial Energy	404
Residential Energy	9,754
Process & Fugitive Emissions	261



# Climate Action Task Force

- Should be formed when you are close to finishing up your inventory
- Should meet at least once/month during climate action planning process
- Members can include: local government staff, EAC members, elected officials, residents, higher ed, businesses, EJ communities, and assigned student
- Helps to lead community engagement

# Local CAP Template

## [Jurisdiction] Climate Action Plan



### Local Actions and Policies to Reduce [Jurisdiction]'s Greenhouse Gas Emissions

Approved by [Local Authority]

[Date Approved]

[Reference to Public Record]











[Reference to Further Information]

Produced by [Name of Lead Department or Task Force]

Through partnership with ICLEI – Local Government for Sustainability (ICLEI)



# Selecting Actions

Objective	Supporting Actions	Benefits	Reduction Potential
TR1 - Reduce vehicle miles traveled by single-occupancy vehicles by XX% by XXXX	CB1, RB1		
TR2 - Electrify all municipal fleet and buses by 2050	CB1		
TR3 - Build electric vehicle accommodations into development requirements	WR1, WW1		
TR4 -	<input checked="" type="checkbox"/>		
	<input checked="" type="checkbox"/>		

# Selecting Actions

- **Use stormwater best management practices**
  - Explore ways to incorporate PA DEP's Stormwater Best Management Practices Manual as standard operating procedure
  - Provide incentives for the installation and use of gray water and rainwater harvesting and consider existing international guidelines for increased reclaimed, recycled, and gray water use for non-potable applications (e.g., irrigation, toilet flushing)
  - Promote green infrastructure by instituting laws, regulations, and local ordinances requiring implementation of green infrastructure with new development or substantial redevelopment
  - Reduce impervious surfaces by requiring installation of permeable surfaces, buffers, and vegetated filters for all transportation-related projects; developing and enforcing a stormwater retention standard for new development and redevelopment; and/or implementing a fee for impervious surfaces
- **Promote integrated water resources management and water conservation**
  - Assess the impact of climate change on critical water supply and wastewater infrastructure, and encourage the development of facility-specific **adaptation** plans
  - Include climate change projections and modeling results in water supply and water quality planning to enhance reliability, improve quality, and improve instream flows and fish passage

# Support for CAP Implementation

- Shared Energy Manager program created to assist 5 LCAP participants in implementing their CAP actions
  - Projects include: energy audits, fleet analysis, renewable energy feasibility studies, P.E. verification for Energy Star, energy management plans, energy benchmarking
- Assignment of Capstone students
- Discounted ICLEI membership

# What Role Can You Play?

- Recruit a local government to participate
- Lead or assist in leading a local government's efforts in LCAP
- Serve on the Climate Action Task Force for a participating local government
- Assist in developing a more detailed vulnerability assessment or adaptation plan



# Expectations for Local Governments

- The expected time commitment is as follows:  
GHG inventory- 120 hours (up to ~96 hrs can be allocated to student)  
Climate Action Plan- 190 hours (up to ~114 hrs can be allocated to student)
- You will keep the lines of communication open between ICLEI, your assigned student, and your municipality, as well as provide any data/information requested by your student in a timely manner
- You will be able to start the fall cohort during the 1st week in August, prior to your student being able to assist later that month & complete the cohort in the spring after your student departs

# LCAP Year 3 Recruitment Timeline

- May – Survey sent to all interested local governments
- June 30 – Survey due from all committed local governments
- July – Student matching
- Early August – 1<sup>st</sup> webinar for local governments
- Late August – 1<sup>st</sup> webinar with students

# Participating Academic Institutions

- Drexel University
- Temple University
- Muhlenberg College
- Moravian College
- Wilkes University
- Dickinson College
- Harrisburg University of Science & Technology
- Millersville University
- Lebanon Valley College
- Shippensburg University
- Bucknell University
- Penn State University
- Susquehanna University
- University of Pittsburgh
- Allegheny College

# Participating Local Governments 2019-2020

- Caln Township
- Narberth Borough
- Jermyn Borough
- Carlisle Borough
- Derry Township
- Armstrong Township
- Bellefonte Borough
- Indiana Borough
- Millvale Borough
- Etna Borough
- Sharpsburg Borough
- West Homestead Borough
- Borough of Munhall
- Elizabeth Township
- Borough of Forest Hills
- City of Reading
- City of York
- Chester County
- Erie County
- Centre Region Council of Governments

# Participating Local Governments 2020-2021

- Aliquippa City
- Beaver Falls
- Monaca Borough
- Ben Avon Borough
- Susquehanna Township
- Warwick Township (Lititz)
- Middletown Township (Bucks County)
- Abington Township
- Haverford Township
- Upper Darby Township
- Chadds Ford Township (Delaware County)
- City of Allentown
- City of Easton
- City of Harrisburg
- City of Lancaster
- City of Meadville
- City of Monessen
- City of Shamokin
- Cumberland County
- Montgomery County
- Consortium of Communities
- CONNECT



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If you know of a community  
interested in LCAP year 3,  
please contact:

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