

Pennsylvania's Climate Action Plan: Community Climate Conversations

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Climate Change Disproportionately Impacts Vulnerable Pennsylvanians

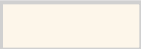




Location, income, housing, health, and other factors place low-income families, seniors, people of color, internally displaced climate refugees, and other vulnerable communities at greater risk from climate change.

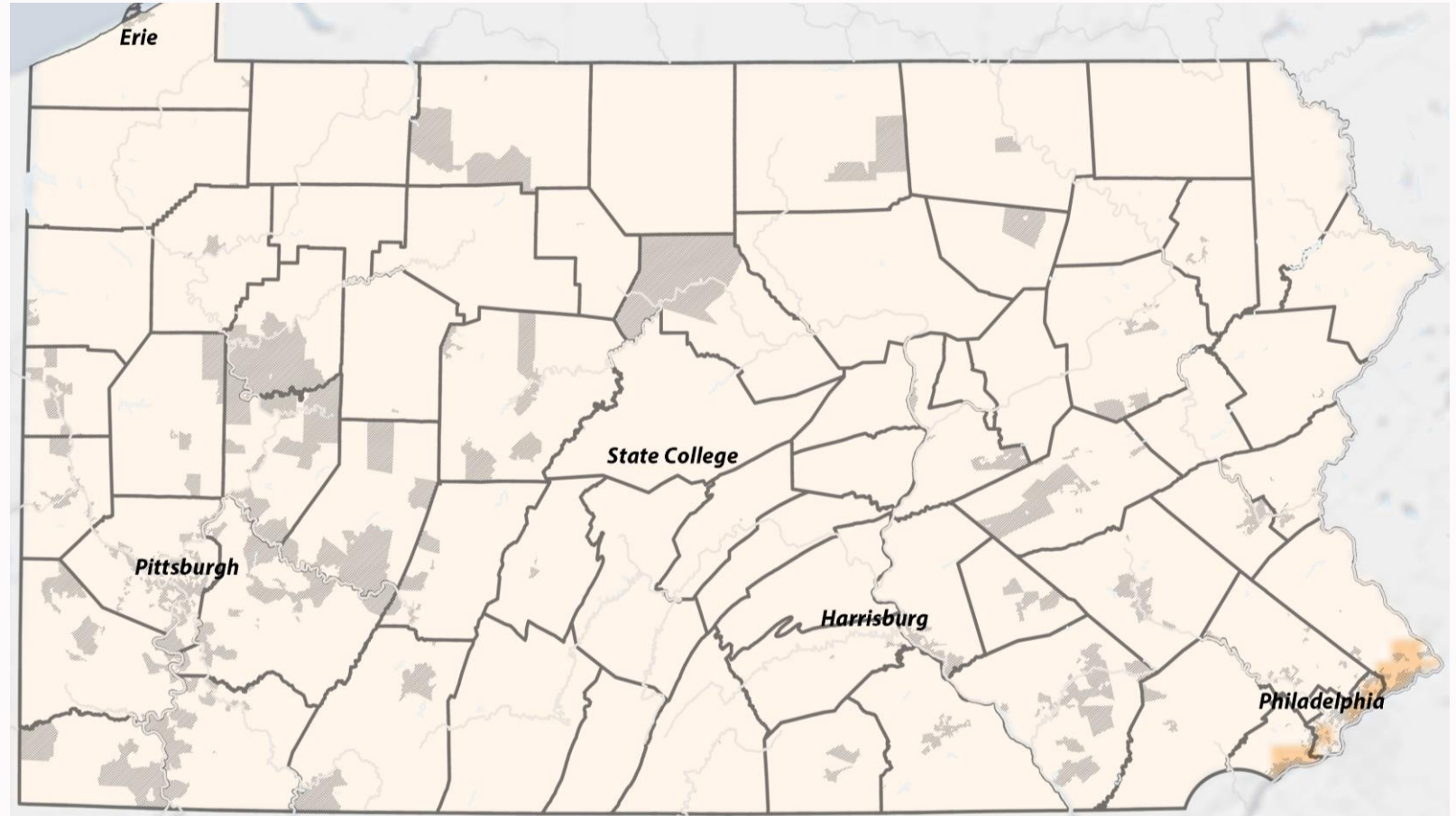


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Pennsylvania Impacts: Extreme Heat

Baseline: 1971 - 2000
Days per year with
temperatures over 90F

	<=22 days
	> 22 – 43 days
	> 43 – 65 days
	> 65 – 87 days
	> 87 - 112 days

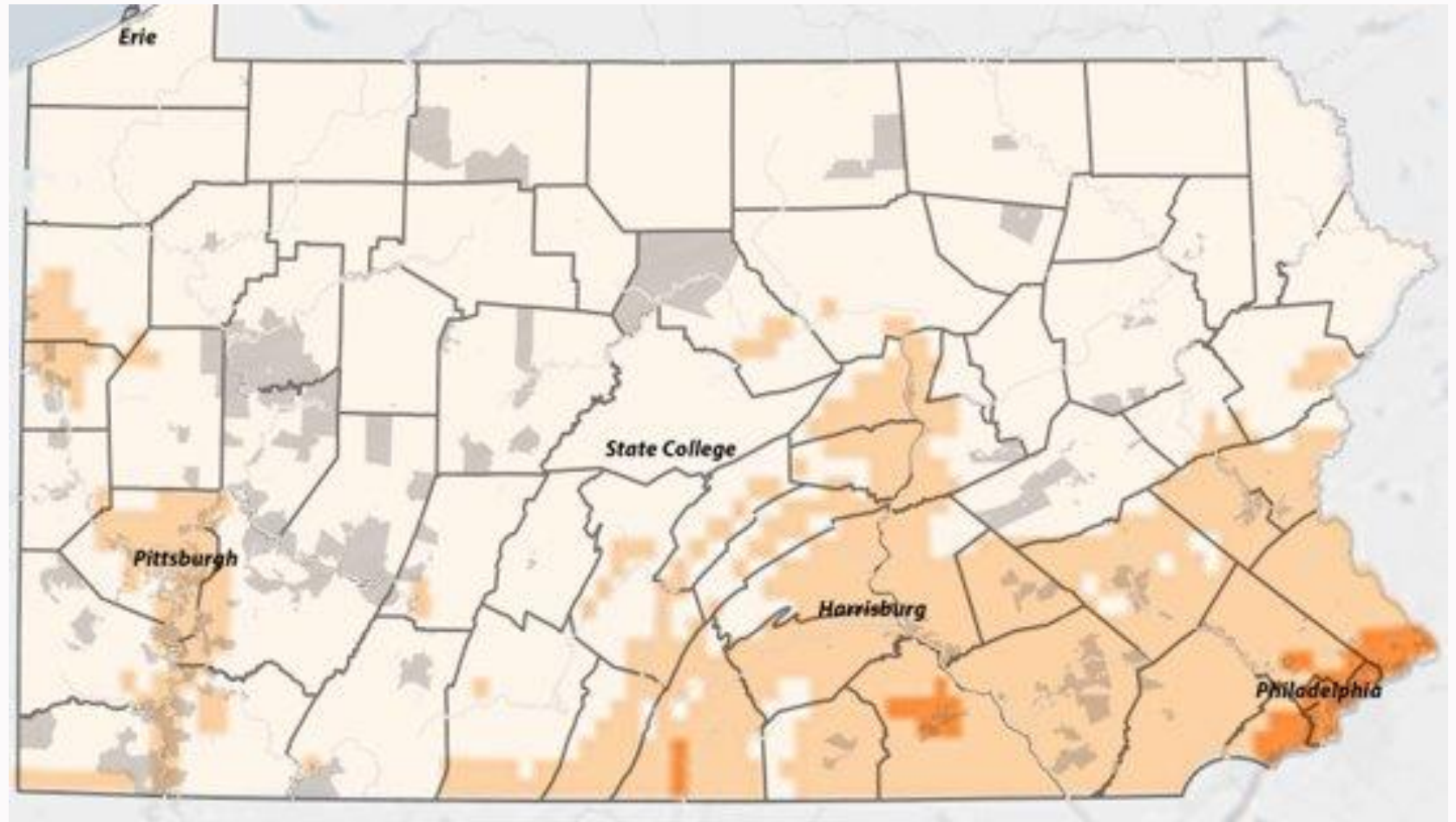
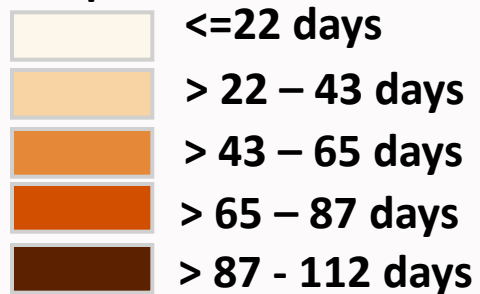




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Pennsylvania Impacts: Extreme Heat

Near-Term: 2016-2045
Days per year with
temperatures over 90F





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Pennsylvania Impacts: Extreme Heat



Forests, ecosystems
and wildlife



Human health



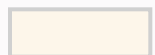
Agriculture



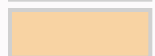
Other economic
activity

2041 - 2070

Days per year with
temperatures over 90F



<=22 days



> 22 – 43 days



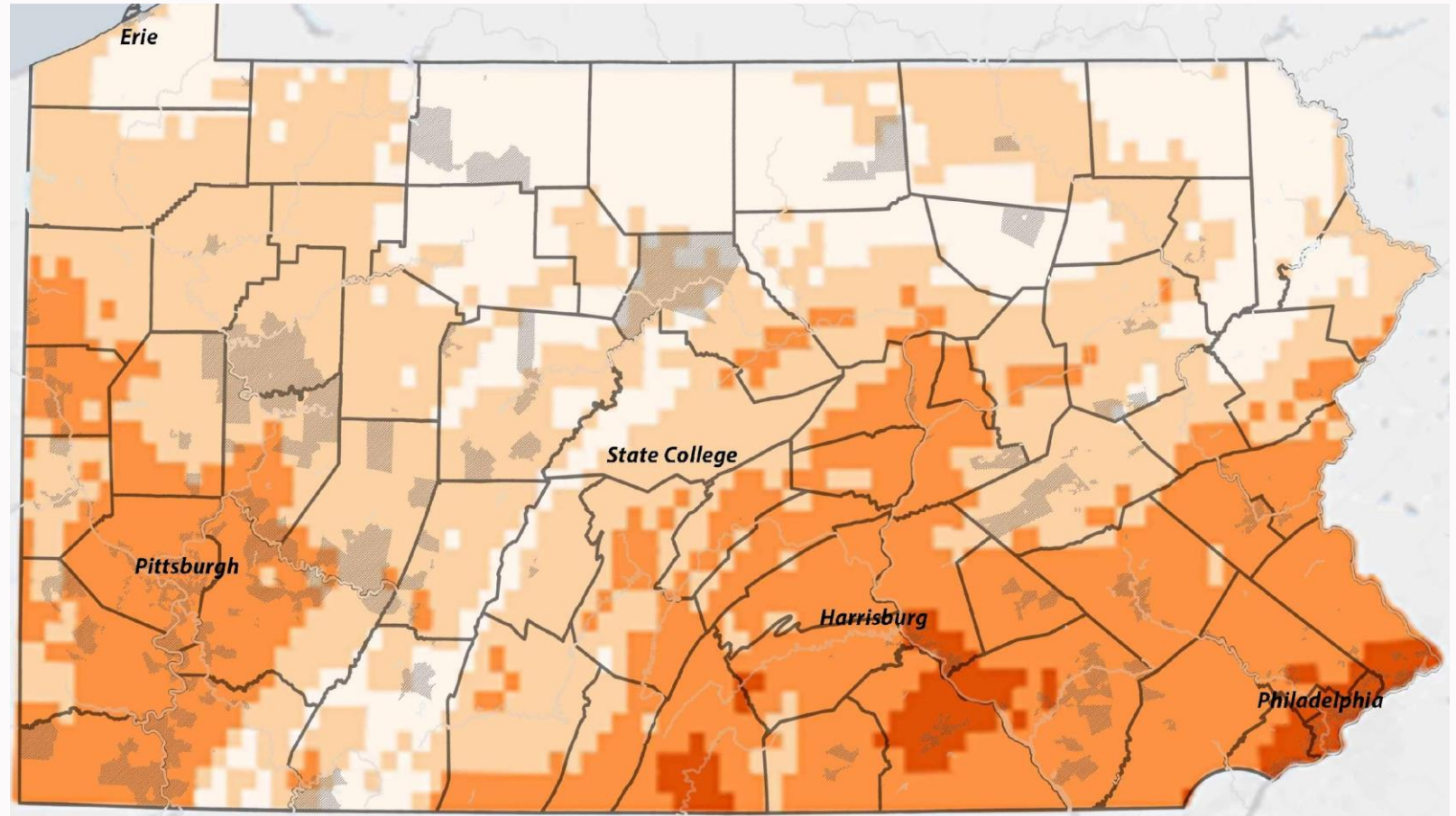
> 43 – 65 days



> 65 – 87 days



> 87 - 112 days

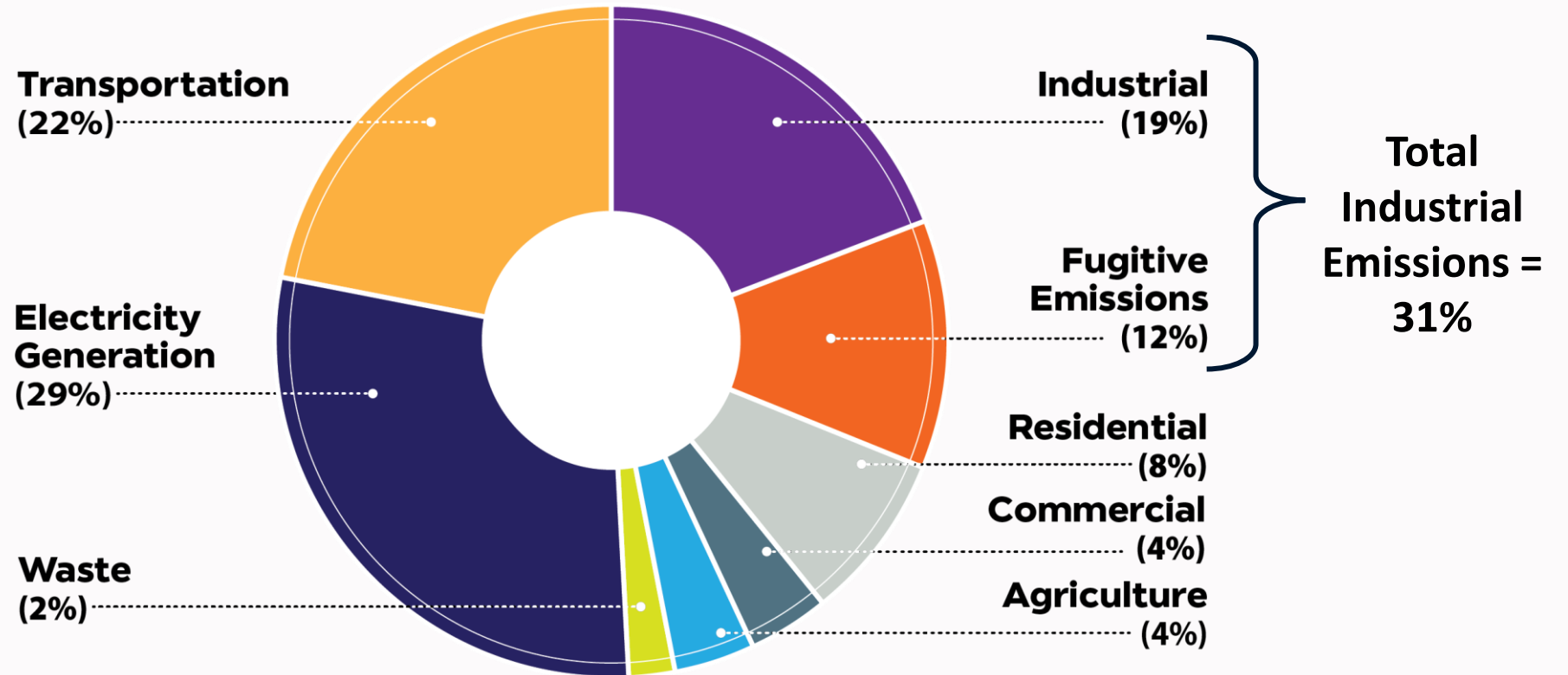




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GHG emissions: The “Why” of Climate Change

Greenhouse gas (GHG) emissions contribute to the changing climate





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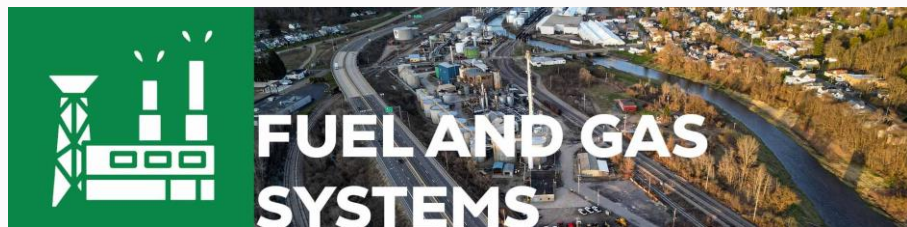
What can we do about climate change?





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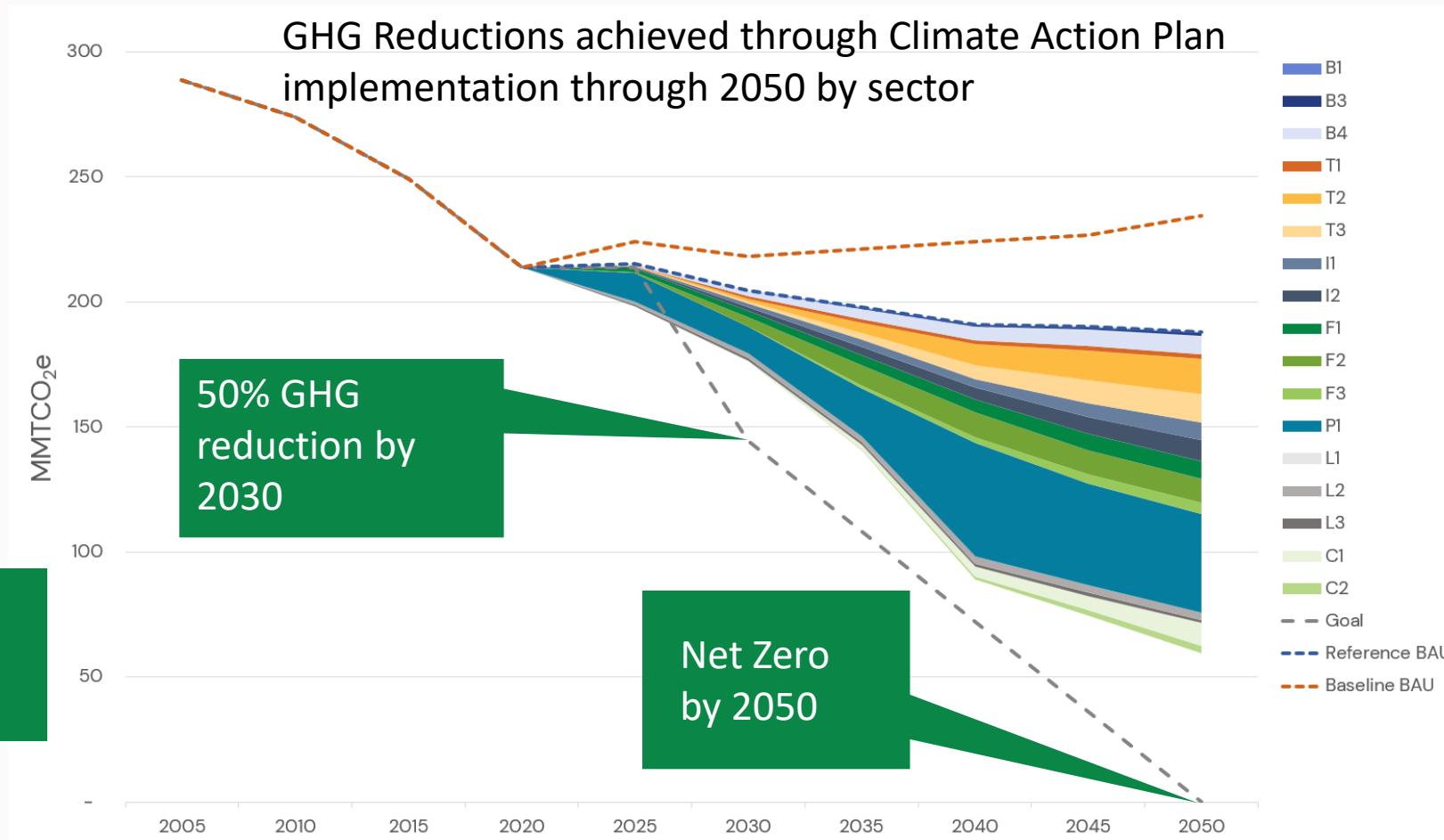
Pennsylvania Climate Action Plan





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Pennsylvania Climate Action Plan



Tracking Annual
GHG emissions
from 2005

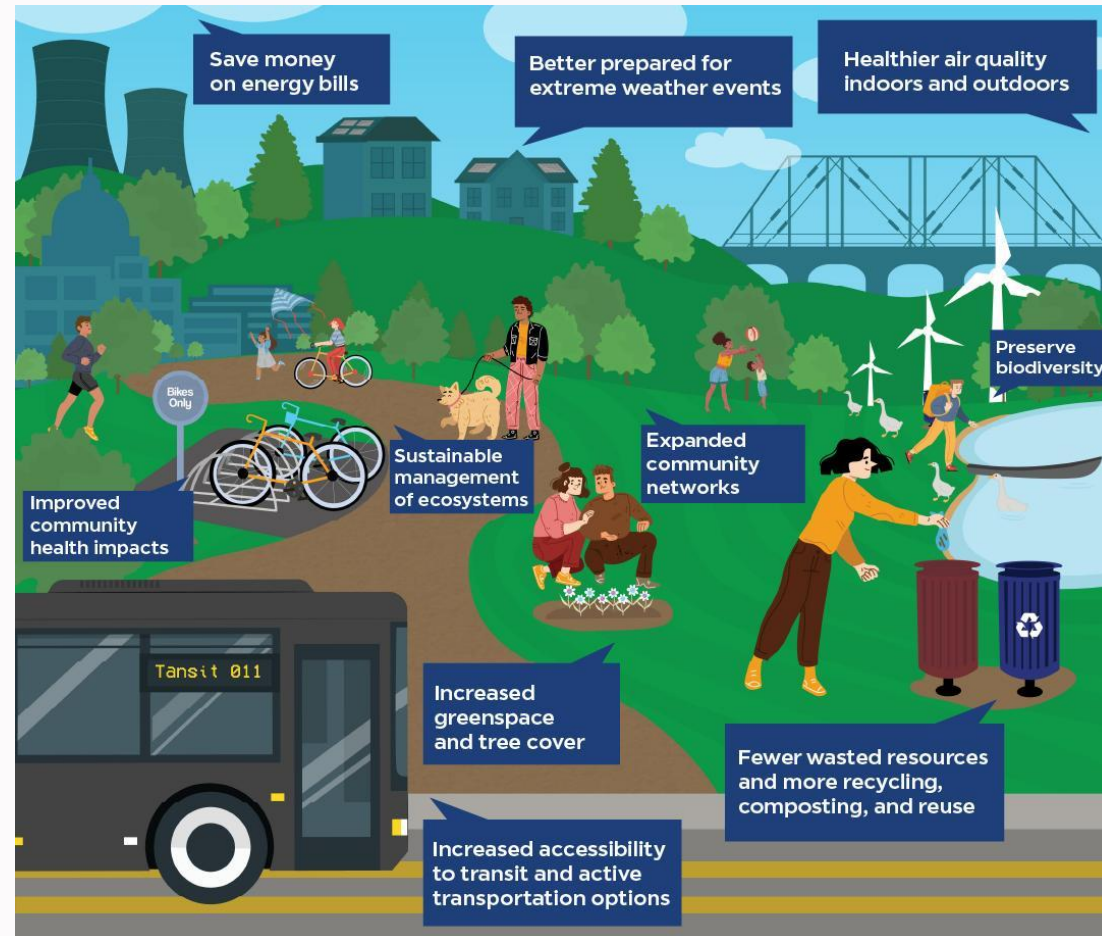
Net Zero
Emissions

Negating the
amount of
greenhouse gases
produced by
human activity by
reducing and
removing
emissions



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Our Vision for Pennsylvania





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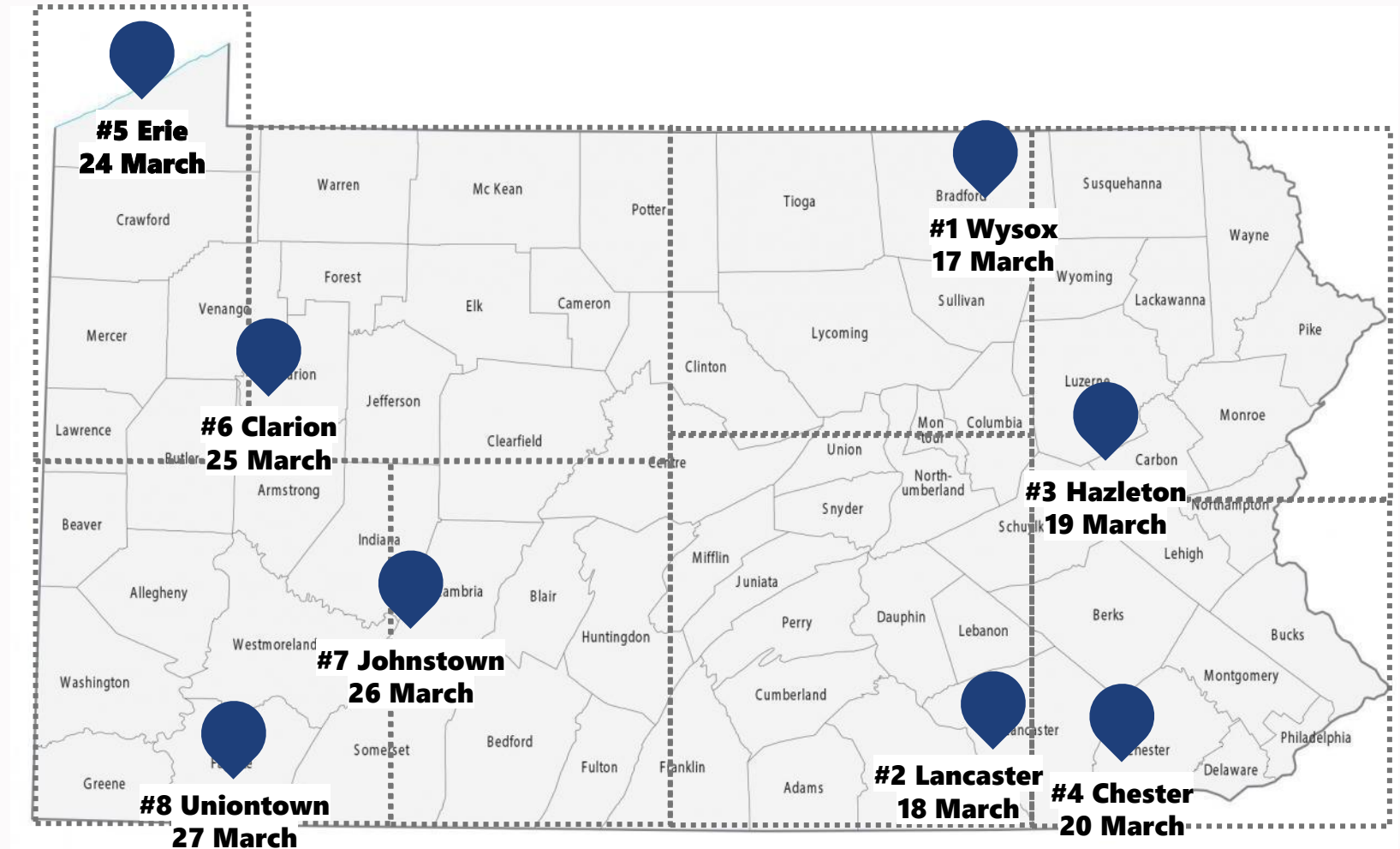
Workshop Purpose

- Inform the community about the PA Climate Action Plan
- Solicit feedback on the sectors and measures
- Understand how the measures will impact you and your community
- Provide relevant resources



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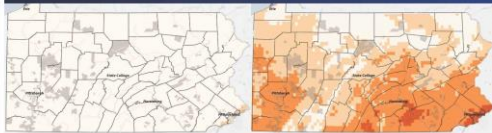
Workshop Locations





Climate Impacts & Benefits Station

CLIMATE IMPACTS: More Extreme Heat



Annual Days Over 90°F,
Baseline (1971-2000)



Annual Days Over 90°F,
Mid-Century (2041-2070)

Pennsylvania is getting hotter

Average annual temperature is expected to increase by 6.7°F by mid-century (2041-2070) and 10.4°F by end-of-century (2070-2100) from the 1971-2000 baseline average.

Pennsylvania is experiencing more heat waves

Days per year where temperatures reach at least 90°F are expected to increase from 5 days at baseline to 23-36 days by mid-century and 40-70 days by end-of-century. Some parts of the state could experience over 75 days per year over 90°F by mid-century.

What this means for PA:

Extreme heat events will become more severe and heat waves will increase in frequency.

There will be an increase in health and economic risks for vulnerable populations like low-income communities and elderly residents, who are subject to the urban heat island effect, and rural communities which face greater vulnerability due to limited resources and infrastructure.

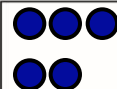
Heat waves will also cause stress to livestock, in addition to crops, and threaten agricultural workers' health and productivity, while increasing average temperatures will cause shifts in growing seasons.

Contact us: ra-epclimate@pa.gov
Learn more: <https://www.pa.gov/agencies/dep/residents/climate-change.html>

CLIMATE IMPACTS

Which hazards most impact you?

Increasing temperatures



Increasing rainfall



More flooding



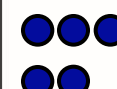
More extreme weather conditions



Increased likelihood of landslides

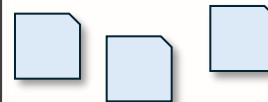


More heat waves



Other

Tell us more on a post-it note



Tell us more about your experiences on a post-it note!

BENEFITS

Which benefits are most important to you?

Healthier indoor air quality



Healthier outdoor air quality



More jobs



More workforce development opportunities



Increased resilience of the energy grid



Increased access to public transit



More and safer active transportation options (walking, biking, etc.)



Save money on energy bills



Improved access to information and funding to reduce the impacts of climate change



Fewer wasted resources and more recycling, composting, and reuse



Less noise disturbance



Better prepared for extreme weather events



Increased awareness of climate change



Expanded community networks



Increased green space and tree cover



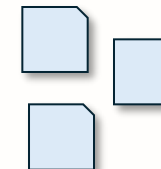
More affordable electric vehicles



Other

Tell us more on a post-it note

How can the Pennsylvania Climate Action Plan address your community's unique needs and concerns?





Sector Stations



LAND USE AND AGRICULTURE

This sector includes agricultural and undeveloped lands. Emissions are primarily produced by the digestion process in livestock, manure management, agricultural soil management, and fuel combustion from tractors and other machinery.

Measures can be deployed to reduce greenhouse gas emissions from the Land Use and Agriculture Sector are:

Implement agriculture best practices for greenhouse gas emissions reductions - Agricultural greenhouse gas emissions can be reduced through feed additives, manure management, and energy efficiency measures in agricultural management.

Implement agriculture best practices for carbon sequestration - Practices like cover cropping, rotational grazing, silvopasture, and organic and regenerative agricultural methods increase soil health and capacity for long-term carbon sequestration.

Optimize carbon sequestration through sustainable forest and land management - Reforestation, establishment of new forests, and extending forest harvest cycles can all increase carbon sequestration.

Benefits of Reducing Emissions from the Land Use and Agriculture Sector:

Provide resilience measures like reducing flood risk and storm impacts

Mitigate the effects of urban heat islands, reducing heat stress

Enabling diversification of farm income from added hardwood and improved livestock performance

Lower cost related to fuel needed for tilling machinery and reduced use of herbicides and pesticides

Reduced water pollution from agricultural runoff

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LAND USE & AGRICULTURE

How important are these strategies to you?

Very Important Important Not Important

How would these strategies impact you?

Positive Impact Negative Impact No Impact I Don't Know

Agriculture best practices

Implement agriculture best practices for emissions reduction



Agriculture best practices

Implement agriculture best practices for carbon sequestration



Land and forest management

Increase natural sequestration in Pennsylvania's land and forests



Feel free to expand upon your answer and describe how these strategies would impact you.

What important considerations are missing from the land use and agriculture section?



Get In Touch

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The Department of Environmental Protection's mission is to protect Pennsylvania's air, land and water resources and to provide for the health and safety of its residents and visitors, consistent with the rights and duties established under the Environmental Rights Amendment (Article 1, Section 27 of the Pennsylvania Constitution).