

Warwick Regional Carbon Audit



**LITITZ BOROUGH, WARWICK & ELIZABETH
TOWNSHIPS AND
THE WARWICK SCHOOL DISTRICT**

AND INCLUDING

THE LITITZ LIBRARY & THE LITITZ RECCENTER

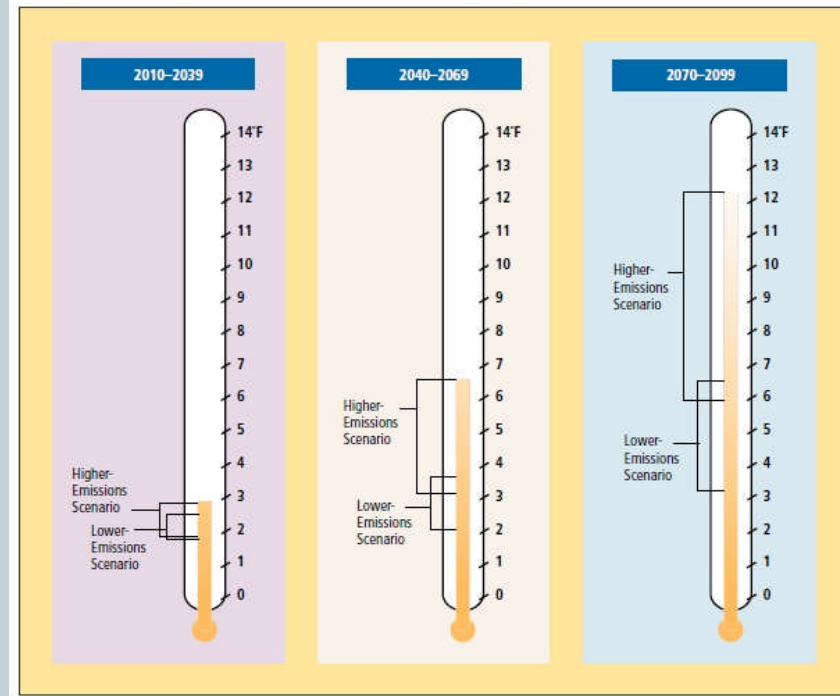
Every pound of CO₂ entering the atmosphere represents money that potentially could have stayed in the pockets of Warwick's taxpayers.

Warwick Regional Carbon Audit Overview

- Emissions = Money
- Construct carbon emissions baseline (2009-2010)*
- Forecast out to 2025
- Set emissions reduction target
- Craft Climate Action Plan (CAP)
- Implement CAP
- Monitor progress

*January 1, 2009 – December 31, 2010

FIGURE 1: Changes in Average Summer Temperature

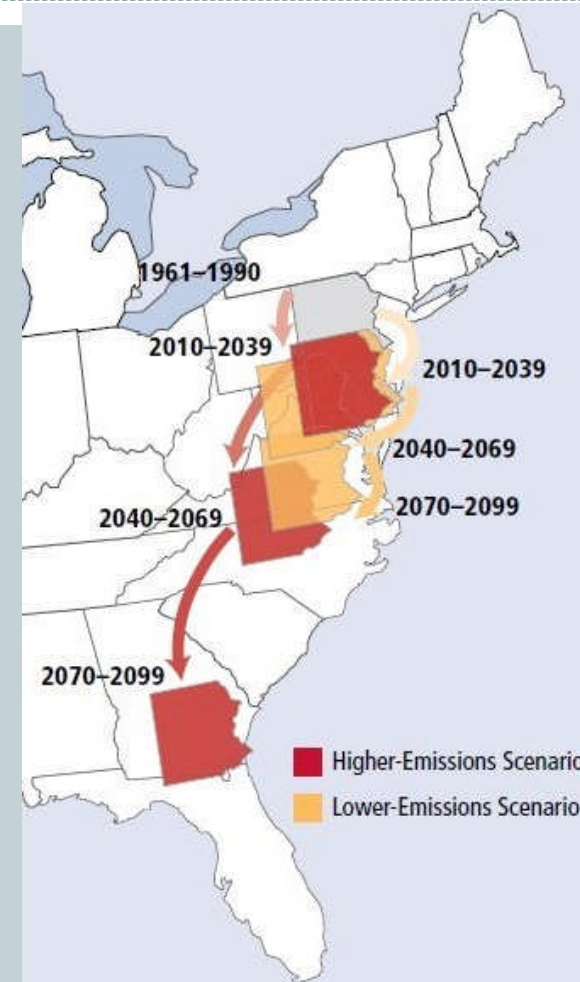


Expected change in average summer temperature for **low-emissions** and **high-emissions** scenarios.

Warwick Regional Carbon Audit Project Scope

- Emissions = Money
- Operational emissions:*
 - Lititz Borough
 - Warwick Township
 - Elizabeth Township
 - Warwick School District
 - Lititz Public Library
 - Lititz recCenter

*Some carbon audits are so-called “community inventories”, which include all emissions generated within the geographic boundaries of the region. This inventory will only include the emissions generated by the operations of the partners.

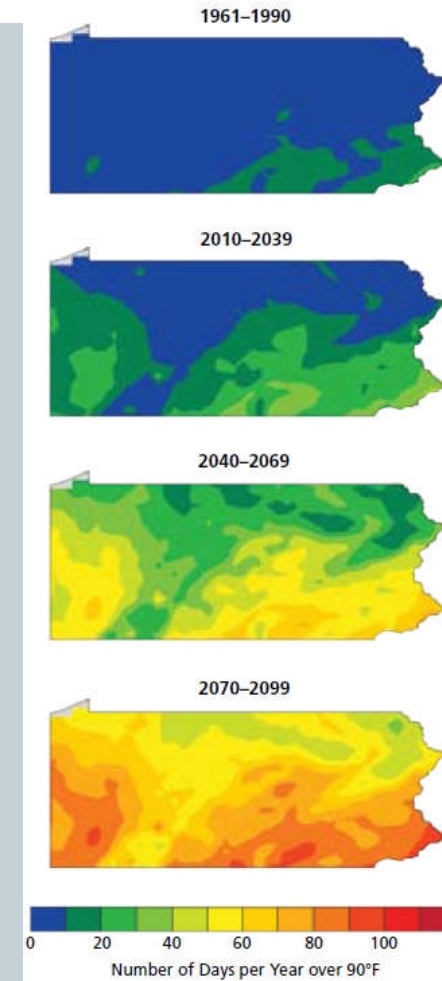


Under the higher-emissions, **business-as-usual** scenario, by century's end **Eastern PA will feel like Southern Georgia.**

Warwick Regional Carbon Audit

The Audit (aka Inventory): 2009-2010

- Emissions = Money
- Typical emissions generators:
 - Electricity consumption
 - Liquid fuels (gasoline, diesel, biodiesel)
 - Fertilizer use
 - Solid waste disposal
 - Refrigerant leaks
 - Etc.

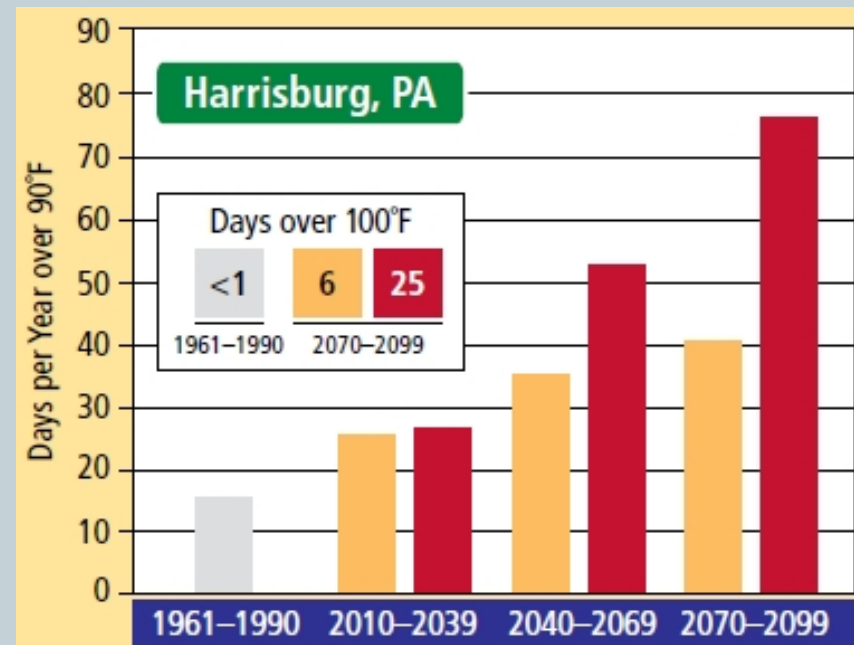


By century's end, the Lancaster area will transition from having between 0-20 days per year hotter than 90°F to 70-90 such days.

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Emissions Forecast to 2025

- Emissions = Money
- Emissions forecast, based on two-year carbon audit
- Audit + Forecast provide baseline against which to measure progress



Number of days over 90 and 100 °F for two different emissions scenarios. By century's end, Harrisburg will have over 70 days per year over 90°F (vs. 15-20 now), and around 25 days per year over 100°F (vs. an average of 1 now).

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Emissions Reductions Target

- Emissions = Money
- Public process
- To be supported by Boards / Council
- How low can we go?
 - Carbon neutral in 15 years?

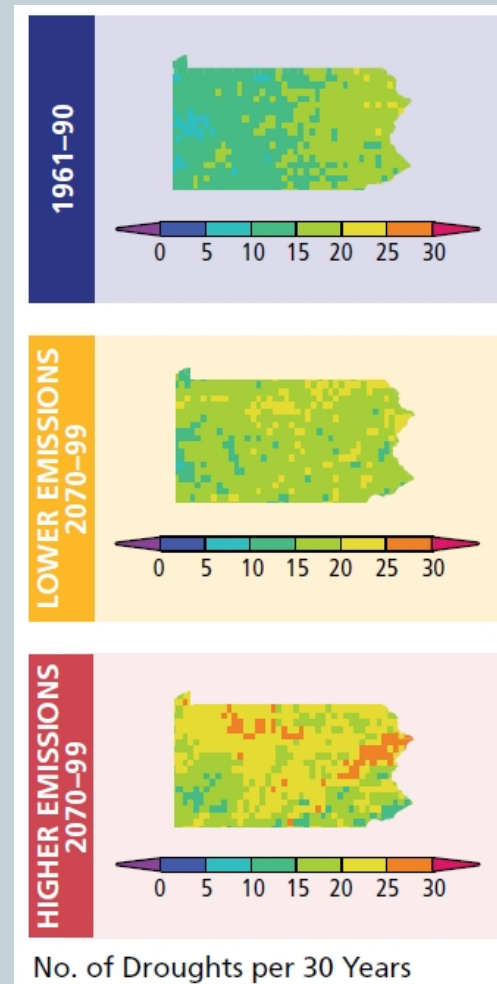
FIGURE 7: Added Pressure on the Dairy Industry



Pressure on the dairy industry by the end of the century. A decline of at least 15-20% is expected in the Lancaster area.

Warwick Regional Carbon Audit Climate Action Plan (CAP)

- Emissions = Money
- Where the rubber meets the road
- Specific actions
- Specific actors
- Timeline
- Financing
- Responsibility
- Public input
- Public education



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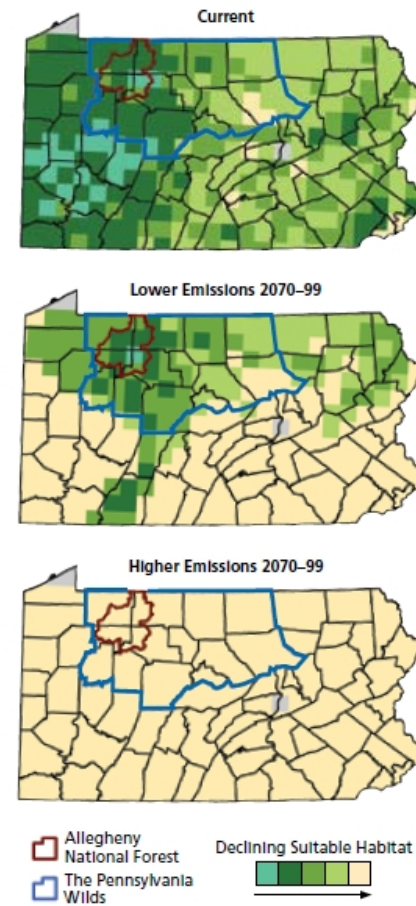
Implement the CAP

How can the Warwick Region reduce its operational emissions and its operational *costs*?*

- Energy efficiency
- Generate less waste
- Buy clean energy
- Carbon offsets (tree-planting, etc.)
- Teleconferencing vs. face-to-face meetings
- Get creative

**because emissions = money*

FIGURE 9: Changing Forest Habitat:
Black Cherry Trees

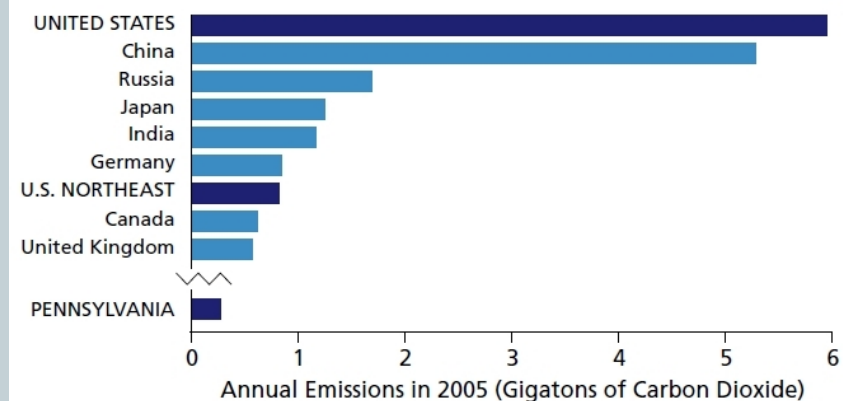


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Monitor Progress

- Ongoing monitoring is important to ensure progress is being made
- Annual or biannual carbon audits – relatively straightforward, once the first has been completed
- Also note the importance & value of past actions to preserve a healthy climate

FIGURE 13: 2005 Pennsylvania Emissions: Significant on a Global Scale



PA emissions are equal to half that of the UK, which has five times the population.

Questions? Comments?



Please direct questions and comments to Tony Robalik, Planner, Warwick Township & Lititz Borough
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