<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30</td>
<td>Welcome</td>
<td>Chester County Commissioners</td>
</tr>
<tr>
<td></td>
<td>Landscapes3 – Protect Goal</td>
<td>Brian N. O’Leary, Planning Commission</td>
</tr>
<tr>
<td></td>
<td>Why do we need a Climate Action Plan?</td>
<td>Jess Cadorette, EEAB Chair, Paul Spiegel, EEAB Vice-Chair</td>
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<tr>
<td>6:50</td>
<td>Climate Action Plan Overview</td>
<td>Carol Stauffer, Planning Commission</td>
</tr>
<tr>
<td></td>
<td>Plan Goal – Reduce Greenhouse Gas Emissions</td>
<td></td>
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<tr>
<td></td>
<td>Action Plan Highlights</td>
<td></td>
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<tr>
<td>7:15</td>
<td>Public Input – Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>7:50</td>
<td>Next Steps – Where do we go from here?</td>
<td>Jess Cadorette, EEAB Chair</td>
</tr>
<tr>
<td>8:00</td>
<td>Adjournment</td>
<td></td>
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CHESTER COUNTY COMMISSIONERS

Marian D. Moskowitz
Josh Maxwell
Michelle Kichline
In 2045...

Chester County abounds with healthy natural areas, robust farms, cherished historic sites, diverse housing, thriving businesses, quality education, accessible transportation, and vibrant communities for all.
Goals to Achieve the Vision

How We **PRESERVE**

How We **PROTECT**

How We **APPRECIATE**

How We **LIVE**

How We **PROSPER**

How We **CONNECT**
How We PROTECT

Protect and restore critical natural resources to ensure a resilient environment that supports healthy communities.
SUCCESS STORIES

Measuring Success

How we PROTECT

2019

During 2019, public and private organizations undertook various initiatives that helped to implement the Landscapes3 Protect Goal: “Protect and restore critical natural resources to ensure a resilient environment that supports healthy communities.” The following success stories highlight some of these efforts.

Chester County Clean Energy Tour highlights solar facilities throughout the County

In October 2019, Chester County’s Clean Energy Tour, featured “open-houses” for residents to explore local sustainable energy practices such as solar power, wind generation, energy efficiency, and green design. The tour was organized by Chester County Ready for 100, a group which supports local communities in the transition to 100% clean, renewable energy. This initiative helps to implement Landscapes3’s recommendation, “Promote benefits of natural resource protection.”

TreeVitalize Watersheds Program and Keystone 10-million Trees Partnership

In 2019, the County Conservation District facilitated the planting of nearly 1,900 trees and shrubs, through the TreeVitalize Watersheds Program and Keystone 10-million Trees Partnership. By working alongside landowners, tree buffers were planted by over 180 volunteers along stream corridors, adjacent upland areas, and "naturalized" stormwater basins. This initiative helps to

METRICS

Natural Resource Protection

How We PROTECT

METRIC 4

Ordinances with effective natural resource protection

<table>
<thead>
<tr>
<th>Resource</th>
<th>Base year 2018</th>
<th>Current year 2019</th>
<th>Difference between current year and base year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>212</td>
<td>217</td>
<td>5</td>
</tr>
<tr>
<td>Floodplains</td>
<td>55</td>
<td>55</td>
<td>0</td>
</tr>
<tr>
<td>Steep slopes</td>
<td>57</td>
<td>58</td>
<td>1</td>
</tr>
<tr>
<td>Woodlands</td>
<td>40</td>
<td>41</td>
<td>1</td>
</tr>
<tr>
<td>Wetlands</td>
<td>45</td>
<td>46</td>
<td>1</td>
</tr>
<tr>
<td>Riparian buffers</td>
<td>35</td>
<td>37</td>
<td>2</td>
</tr>
</tbody>
</table>

During the current year (2019), the ordinances of all 73 municipalities were reviewed to determine if they effectively addressed five specific resources: floodplains, steep slopes, woodlands, wetlands, and riparian buffers. A total of 365 provisions were examined, and 217 were found to provide effective protection for the specific resource being examined. This represents an increase of 5, relative to the base year.
SUCCESS STORIES

2020

Bryn Coed Preserve
Natural Lands announced the completion of a massive tree-planting at their Bryn Coed Preserve in Chester Springs, including 12,500 native species.

Crow’s Nest Preserve
Natural Lands added 91 acres to its Crow’s Nest Preserve in Warwick Township. The preserve’s trail network was then doubled by installing raised boardwalk marsh trails.

West Chester University
WCU received “Tree Campus USA” recognition.
SUCCESS STORIES

2020

Earth Day 50th Anniversary Celebration

50 Ways Your Community Can Protect Our Planet booklet released

Watersheds Education Program

Received state funding to educate children about the value of local watersheds and watershed protection

Hibernia Dam Rehabilitation Project completed
SUCCESS STORIES

2020

French and Pickering Creeks Conservation Trust

Opened its 500-acre Great Marsh Upland Preserve in East Nantmeal Township

Conservation District

Received funding from the National Fish and Wildlife Foundation to assist farmers in implementing or repairing green infrastructure

eTools

Natural Resource Protection; Water Conservation Practices; Floodplain Protection
WHY DO WE NEED A CLIMATE ACTION PLAN?

Jess Cadorette, EEAB Chair
Paul Spiegel, EEAB Vice-Chair

Environmental & Energy Advisory Board
Reduce the county’s contribution to global climate change and equitably improve the health and well-being of the community by: reducing greenhouse emissions through government leadership and collaboration, mitigating impacts of climate change through resiliency and planning, and transitioning to clean and sustainable energy generation.
WHO IS THE PLAN FOR?

County Government
Facilities & Operations

Community-wide Engagement
Municipalities, Residents, Businesses, Community & Advocacy Groups
# Updates the 2010 Greenhouse Gas Reduction Report

The County has undertaken many initiatives:

<table>
<thead>
<tr>
<th>Annual Energy Savings</th>
<th>Annual CO2 Emissions Avoided</th>
<th>Annual Water Usage Saved</th>
<th>Renewable Energy Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>$400,000 per year through GESA energy savings measures</td>
<td>2,007 tons = energy usage of 212 homes</td>
<td>18,000,000 gallons = 30 Olympic size swimming pools</td>
<td>Renewable Energy Credits for 100% of County facility electricity</td>
</tr>
</tbody>
</table>

Over $2,000,000 saved since 2016

Note: More details about County initiatives are found on pages 15-16 in the report
HOW HAS THE PLAN BEEN DEVELOPED TO DATE?

- **PaDEP Local Climate Action Plan Program**: Fall 2019 to Spring 2020
- **Environmental & Energy Advisory Board**: Spring 2020 to present
- **Review of County Actions by Implementing Departments**: Mid-2020
- **Public Input**: Early 2021

DVRPC Greenhouse Gas Emissions Inventory

Citizens, Businesses, CCEDC, CCATO, Municipal Managers, Conservancies, Utilities, County Departments
Reduce Greenhouse Gas Emissions in Chester County by 80% by 2050.

This County goal aligns with regional and state Climate Action Plan Reduction Goals.
WHAT ARE THE SOURCES OF CURRENT GREENHOUSE GAS EMISSIONS IN CHESTER COUNTY?

- Transportation Energy: 27%
- Commercial and Industrial Energy: 43%
- Residential Energy: 19%
- Industrial Process: 5%
- Agriculture: 3%
- Waste Management: 3%
- Fugitive Emissions: <1%
HOW DO WE PROPOSE TO REDUCE GREENHOUSE GAS EMISSIONS?

Objectives and Actions

Chester County Facilities & Operations Actions

Community-Wide Engagements Actions

Plan identifies potential impact, priority, timeframe, and primary implementer for each action.
BUILDINGS AND ENERGY
Other GHGs 38%

- Commercial, industrial, residential buildings (heating & electricity)
- Infrastructure such as wastewater treatment, water distribution

62%
OBJECTIVES

• Increase energy-management capabilities
• Increase building energy efficiency
• Incorporate sustainable design into county buildings
• Transition to renewable energy
BUILDINGS AND ENERGY

FACILITIES & OPERATIONS

ACTIONS (examples)

Energy Savings Measures
Continue to implement energy savings measures throughout county facilities.

Green Building Standards
Implement green building standards for new construction & major renovations (LEED Silver).

Renewable Electricity Procurement
Continue pursuing opportunities for procuring 100% of electricity from renewable sources.

Solar Potential
Analyze potential for on-site solar.
COMMUNITY-WIDE ENGAGEMENT

OBJECTIVES

• Promote Sustainable Energy, Energy Efficiency, and Communications

• Establish and support the Environmental and Energy Advisory Board
BUILDINGS AND ENERGY

COMMUNITY-WIDE ENGAGEMENT

ACTIONS (examples)

Renewable Energy Targets
Establish community-wide renewable energy targets (100% renewable electricity by 2050).

Alternate Energy Ordinances
Develop model ordinances that facilitate the use of alternate and emerging energy technologies.

Solar Application Approval Process
Streamline local application, permitting, and inspection process for solar facilities.

Vision Partnership Program
Use VPP to support municipal implementation of renewable energy planning and ordinances.

LED Streetlights
Support participation in the regional LED streetlight procurement program.
TRANSPORTATION AND LAND USE

GREENHOUSE GAS EMISSIONS

Transportation: 27%
- Cars
- Trucks
- Buses
- Trains
- Off-road vehicles (e.g. agricultural, industrial, construction equipment)

Other GHGs: 73%
OBJECTIVES

• Reduce employee commuter vehicle miles traveled
• Optimize the County fleet
• Encourage low/no carbon travel
TRANSPORTATION AND LAND USE

FACILITIES & OPERATIONS

ACTIONS (examples)

Remote Work
Establish policies for remote working and flex-time work schedules.

Facility Location Optimization
Locate future county facilities in proximity to employees and clients.

Electric Vehicle Potential
Examine electrification of county fleet and maintenance equipment.

Electric Charging Stations
Install electric vehicle charging stations at County facilities.
COMMUNITY-WIDE ENGAGEMENT

OBJECTIVES

• Encourage smart growth
• Promote efficient commuter and transit options
• Encourage no/low emissions travel and transportation strategies
TRANSPORTATION AND LAND USE

COMMUNITY-WIDE ENGAGEMENT

ACTIONS (examples)

Walkability
Promote walkable communities with convenient access to services and amenities.

Transit-Related Projects
Work with DVRPC and transit providers to support transit-related projects.

Smart Growth Ordinances
Provide ordinances that support Smart Growth and Transit-Oriented Development.

Traffic Congestion Management
Participate in multi-municipal traffic congestion management programs.

Sidewalk and Trail Network
Continue advancing the local and regional trail and sidewalk network.
WASTE MANAGEMENT
WASTE MANAGEMENT

GREENHOUSE GAS EMISSIONS

- Decomposition of landfilled waste

3%

Other GHGs 97%

Note: Waste hauling emissions falls under Transportation
OBJECTIVES

• Increase County Operations Waste Diversion
Waste Diversion Plan
Develop a solid waste management and waste diversion plan for County operations.

Recycling
Continue recycling training as part of employee orientation.
OBJECTIVES

• Increase county waste diversion and other best practices through partnerships and collaborations
WASTE MANAGEMENT

COMMUNITY-WIDE ENGAGEMENT

ACTIONS (examples)

Sustainable Waste Management Practices
Promote sustainable practices including source reduction, recycling, and home composting.

Construction Waste Management
Investigate a county-wide construction and demolition waste recycling and reuse program.

Building Preservation
Support historic preservation and adaptive reuse of buildings.
AGRICULTURE, FOOD, AND FORESTRY
AGRICULTURE, FOOD, AND FORESTRY

GREENHOUSE GAS EMISSIONS

- **Agriculture**: 3%
  - Ruminant livestock
  - Decomposition of manure
  - Fertilizer
  - Plant residue (Trees store and sequester carbon)

- **Other GHGs**: 97%
OBJECTIVES

• Manage County open spaces responsibly

• Continue to preserve additional County open space
Sustainable Land Management
Establish a sustainable landscape management plan for County lands.

Equipment Electrification
Electrify landscape maintenance equipment where feasible.

Reforestation
Investigate reforestation opportunities on County lands.
OBJECTIVES
• Grow and preserve open spaces and natural areas
• Support local food production and the agricultural community
Land Preservation
Continue to advance the protection of open space, farmland, woodlands, wetlands, and other natural areas.

Woodland Conservation
Support conservation of woodlands and reforest and improve declining or degraded woodlands.

Local Food System
Support local farmers and promote the local food system to residents and businesses.
CO-BENEFITS OF CLIMATE ACTION PLAN

+ **Improving Public Health**
  Improved air quality, reduce extreme heat events

+ **Saving Money and Reducing Risk**
  Reduced energy bills, transportation fuel savings, reduced flooding risks

+ **Enhancing Resource Security**
  Less strain on energy system, fewer service disruptions

+ **Creating Jobs**
  Clean energy jobs - design, manufacture, installation of energy efficient technologies

+ **Fostering Social Equity**
  Lower impact on disadvantaged communities (e.g., heat, flooding)
Key Performance Measures (examples)

**Buildings and Energy**
- Energy saving improvements and energy use reduction at County facilities

**Transportation and Land Use**
- Increase in trail, sidewalk, and bike lane mileage in the county
- Number of electric vehicle charging stations county-wide
- Percent of proposed residential units in Growth Areas

**Waste Management**
- Percent change in municipal solid waste per capita in the county

**Agriculture, Food, and Forestry**
- Percent increase in protected open space, farmland, and woodlands