

March 29, 2023  
Lower Merion Township  
Sustainability Committee





**LOWER MERION**  
MONTGOMERY COUNTY, PENNSYLVANIA

*A First-Class  
Township*

## **Agenda item 1**

# **Township Sustainability Plan - DRAFT**

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Discuss the draft Township Sustainability Plan

# Background Information:

## Resolution 2019-18

**NOW THEREFORE, BE IT RESOLVED**, by the Board of Commissioners of Lower Merion Township to call upon the EAC to oversee a **community-wide sustainability planning process**.

- The process shall utilize research and input from as many stakeholders as possible to develop and issue a plan or series of plans or reports, including cost-benefit analyses to the extent feasible, that make recommendations for:
  - **reducing the Township's carbon footprint** as a steward of its own buildings, facilities, and vehicles, the exercise of its regulatory authority, and public education;
  - **reducing the carbon footprint of the Township's private** sector through identifying and encouraging private initiatives to use less and cleaner energy;
  - **mitigating and adapting to the effects of climate change on** the Township's infrastructure, including, without limitation, its buildings and facilities, roadways and underground pipes; and
  - **reducing and managing solid waste** in an environmentally sensitive manner.
- The plans shall:
  - set challenging but attainable goals with milestones for their attainment; and
  - where feasible and appropriate, establish a baseline, identify a mechanism to measure progress, and establish a process for verification.

## Resolution 2021-16

### **NOW, THEREFORE, BE IT RESOLVED THAT:**

The Township use reasonable effort, considering available, affordable technology, consistent with the PA Climate Action Plan goals to **reduce greenhouse gas emissions, to the maximum extent feasible, not later than 2045** through:

1. **More efficient use of energy** by Township operations.
2. Conversion of Township-owned and operated buildings, facilities, and equipment where possible to **electricity generated from non-fossil fuel energy sources** (as distinct from offsets or credits for purchasing carbon-free electricity distributed elsewhere) by 2035.
3. Conversion of the Township's **vehicle fleet where feasible to electric** or other zero/low emission vehicles by 2045.
4. Conversion of Township-owned and operated buildings and facilities equipped with heating, ventilation, and air-conditioning (**HVAC**) systems to be powered by **carbon-free energy** where feasible by 2045.
5. Utilize education, advocacy, and where legal the exercise of the Township's regulatory authority, in conjunction with market forces, actions by the federal government and the Commonwealth of Pennsylvania to **promote transition by the entire Lower Merion community**, including the Township's businesses, institutions, and residents, to carbon-free energy for:
  - a. electricity for powering buildings, facilities, and equipment by 2035
  - b. powering vehicles owned or leased by township occupants by 2045
  - c. powering HVAC systems by 2045

**BE IT FURTHER RESOLVED**, that the Township, in collaboration with the EAC and with the participation of the public, shall **formulate an Energy Transition Plan** as an element of a Sustainability Plan, consistent with the aforementioned goals, for consideration by the Board of Commissioners not later than one year from the date of this Resolution. The Energy Transition Plan shall include interim milestones for reaching the goals established in this Resolution and shall address whether the goals listed in this Resolution remain appropriate or should be adjusted.

**Element 1: DRAFT Lower Merion Township GHG Emission Reduction Plan 4.28.21**

# Background Information:

- Past Actions:
  - Renewable Energy Certificates for 100% of electricity use
  - \$3.7M Energy Savings Project
  - Green Roof at Ludington Library
  - Geothermal heating at Bala Cynwyd Library
  - Electric vehicle pilot & charger installation
  - Sustainable PA Gold Certification
  - SolSmart Bronze Certification
- Master Plans
- Everyday operations and SOPs
- Ongoing projects and partnerships



# Background Information:

- Township Roles:
  - Implement & enforce policies & regulations
  - Maintain and improve community infrastructure
  - Community Planning
  - Emergency services
- Township Responsibilities:
  - Roads, bridges & traffic signals
  - Municipal solid waste and recycling
  - Residential yard waste
  - Active & passive parks
  - Right-of-way trees
  - Township-owned buildings, vehicles & equipment
  - Stormwater infrastructure
  - Sanitary sewer infrastructure



# Background Information:

- Community Stakeholders:
  - Residents
  - Commuters
  - Public & private grade schools
  - Colleges & universities
  - Hospitals & institutions
  - Businesses & restaurants
- Township Influence:
  - Regulations
  - Policies
  - Practices
  - Education & Outreach
  - Incentives



# Draft Sustainability Plan

- Highlights key community issues and concerns
- Identifies high-impact, implementable solutions
- Tailors solutions to unique community challenges and opportunities
- Translates state, national and global goals into concrete actions and outcomes
- Identifies mechanisms to measure progress
- Proposes parties responsible for implementation
- Outlines a phased approach for implementation
- Sets priorities for implementation

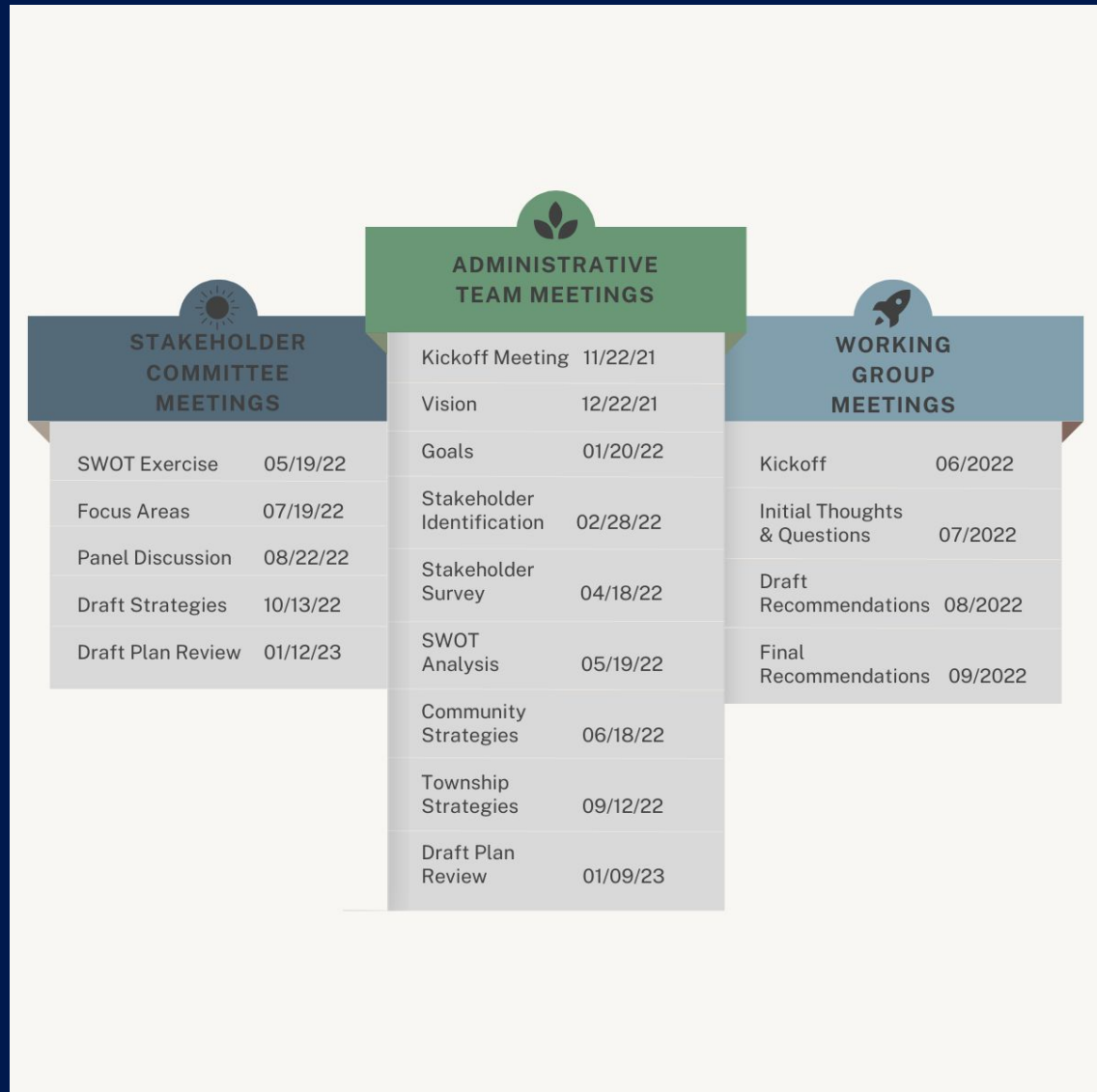


# Timeline

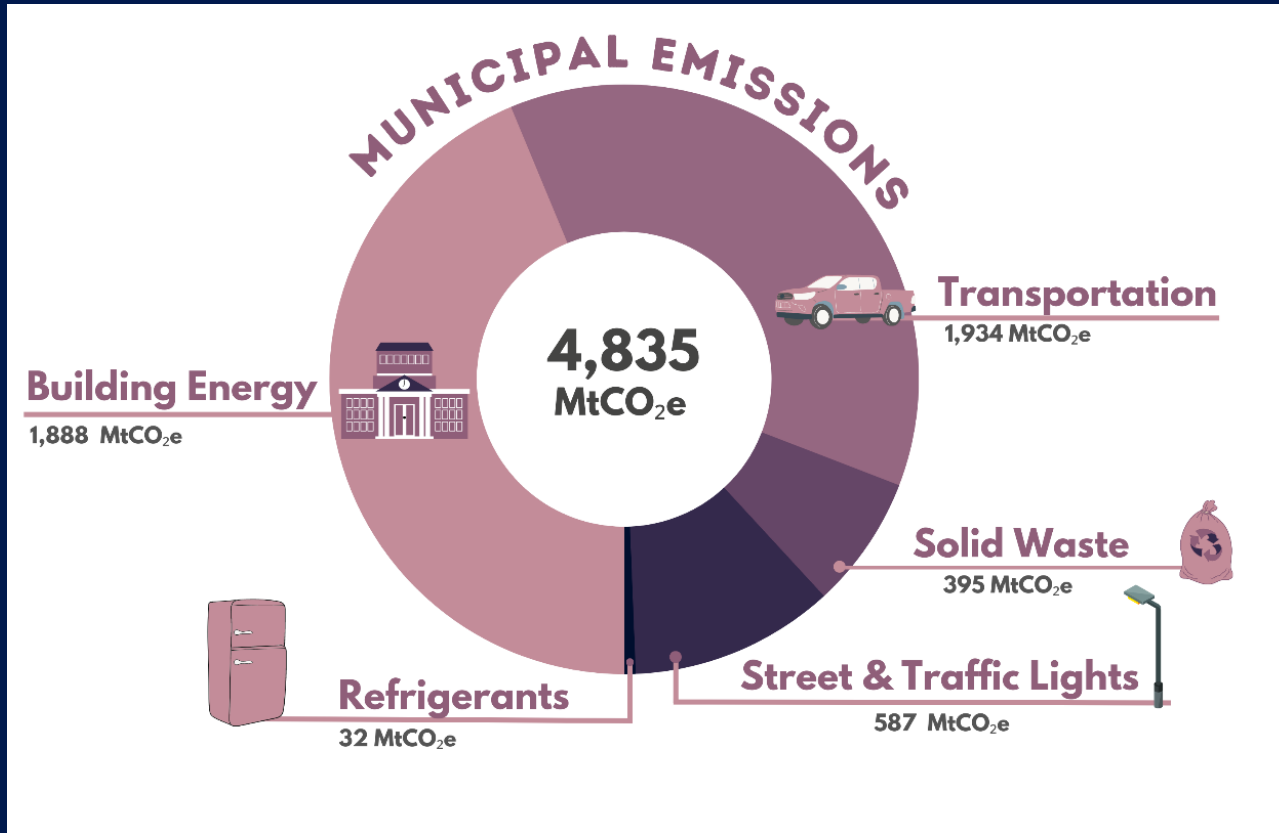


# Stakeholder Engagement

- Writing Team
- Administrative Team
- Stakeholder Committee
  - Commissioners
  - Staff
  - Residents
  - Organizations
  - Institutions
- 10 Working Groups
- SWOT Exercise
- Stakeholder Survey
- Civic Association Mtgs
- Public Survey
- Community Meeting



# Greenhouse Gas Emissions



## MUNICIPAL BUILDING ENERGY EMISSIONS

**78%**  
Electricity

**22%**  
Natural Gas

## MUNICIPAL VEHICLE EMISSIONS

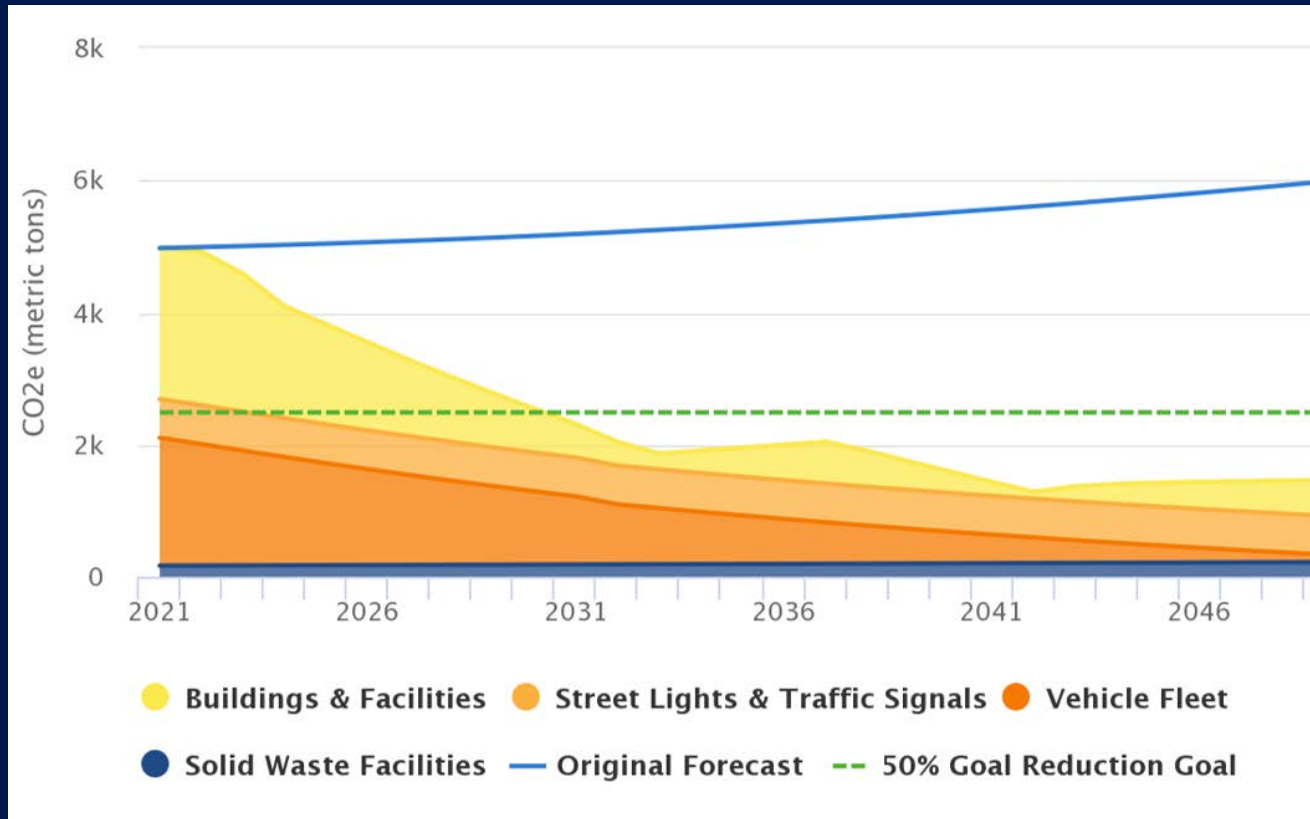
**52%**

**Diesel Vehicles**  
261,337 Vehicle Miles Traveled

**48%**

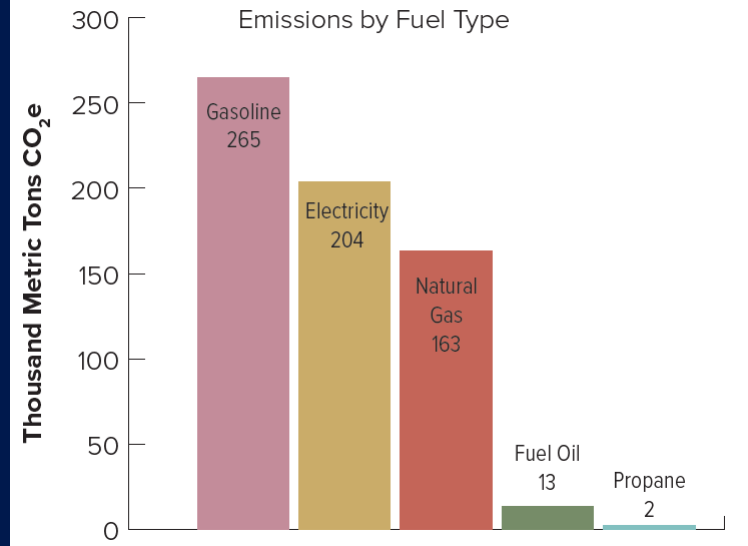
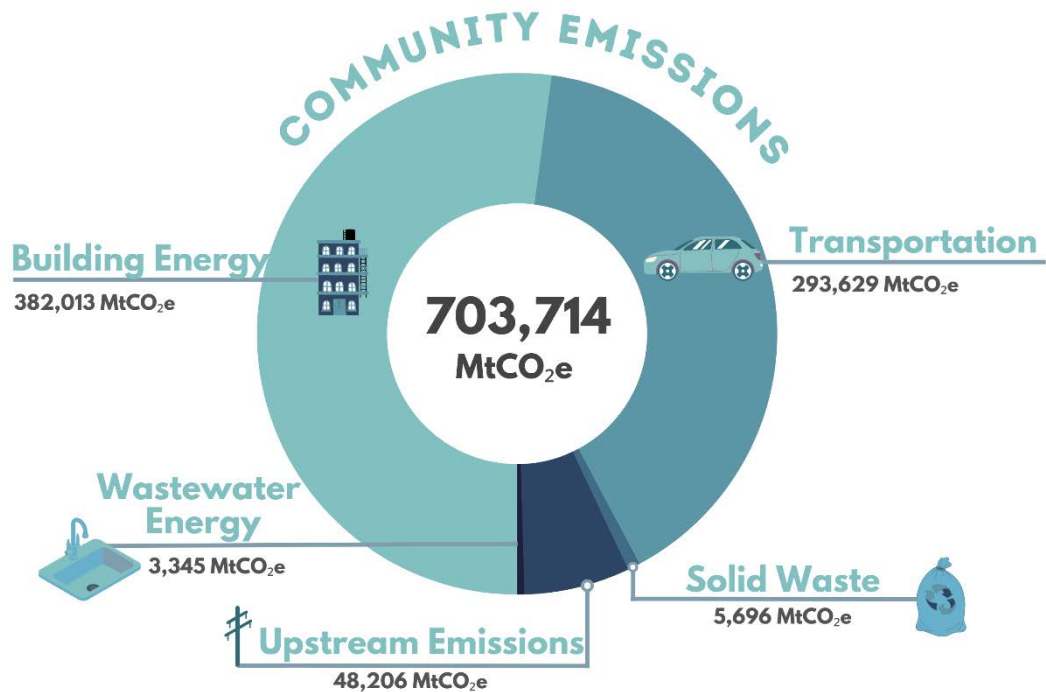
**Gasoline Vehicles**  
858,395 Vehicle Miles Traveled

# Greenhouse Gas Emissions



Reduction Strategy	Annual CO <sub>2</sub> e Avoided Metric Tons	Annual CO <sub>2</sub> e Avoided % Reduction
Carbon-Free Municipal Electricity	2300	43%
Municipal Fleet Transition	1649	28%
Carbon-Free Municipal Building Equipment	336	6%
Municipal Building Tune-Up, Retrofit, and Retro-commissioning	34	0.6%
Municipal Refrigerant Replacement	11	0.2%

# Greenhouse Gas Emissions



## COMMUNITY BUILDING ENERGY EMISSIONS

Electricity, Natural Gas, Heating Fuels

**58.4%**

Residential

**20%**

Commercial

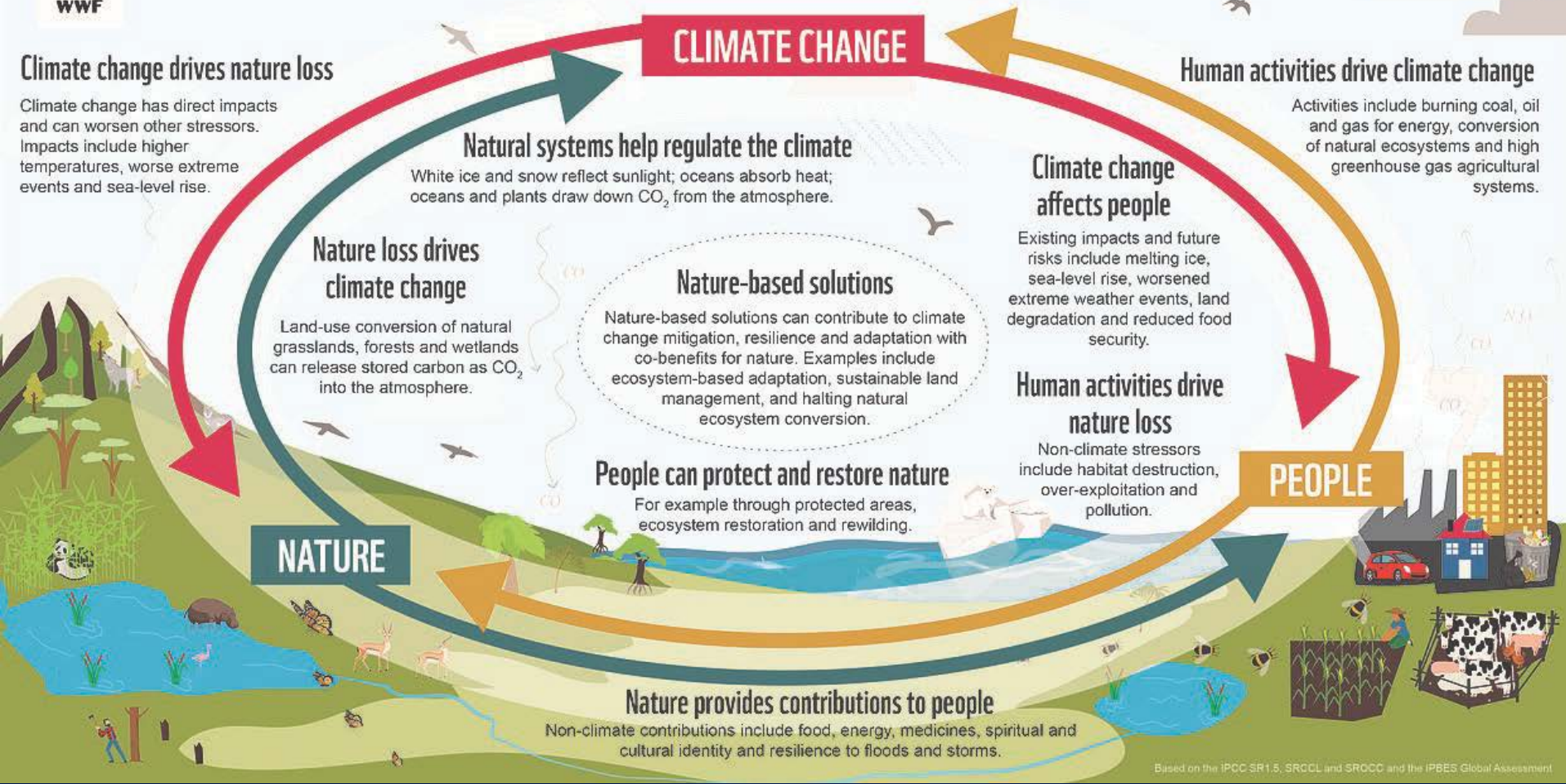
**21.6%**

Industrial

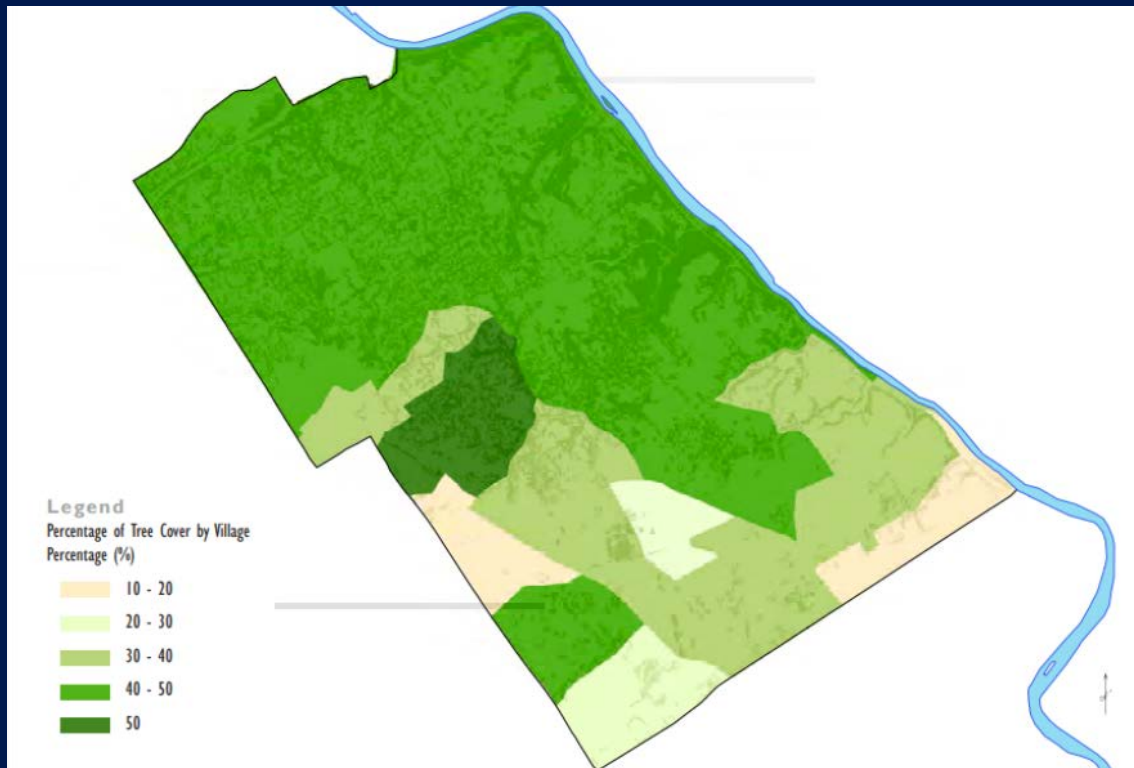
# Natural Resources & Biodiversity



## INTERACTIONS BETWEEN CLIMATE CHANGE, PEOPLE AND NATURE



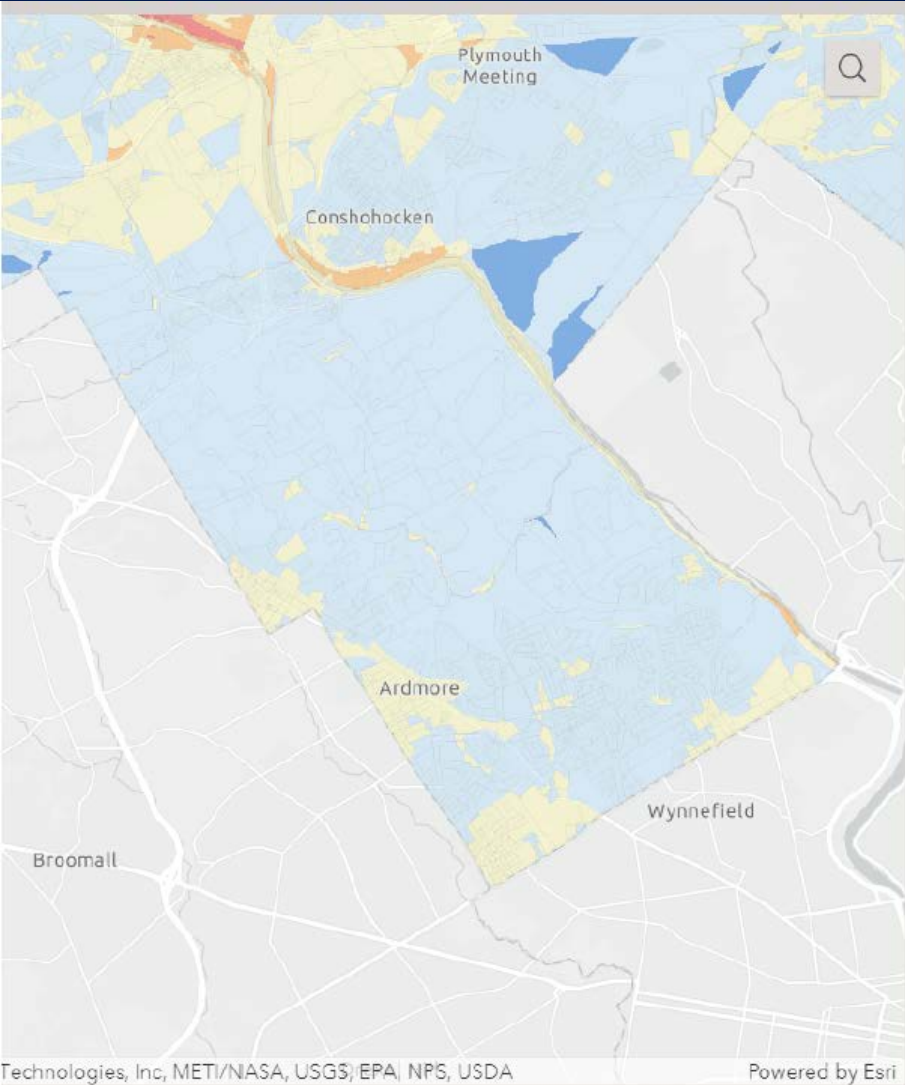
# Natural Resources & Biodiversity



2016 → 2022

- 3% decline in community tree cover
- 1.7% increase in grass/herbaceous cover
- 1.8% increase in impervious surfaces

# Climate Resilience



## Climate Change Risk Index 2021

### Climate Change Risk

- Well Above Average
- Above Average
- Average
- Below Average
- Well Below Average

Areas of Above Average Climate Change Risk

Areas of Average Climate Change Risk

Areas of Below Average Climate Change Risk

# Guiding Principles

Foundational principles are the core values that guide the sustainability plan vision, goals, strategies, and implementation

## Climate

Reduce our contribution to climate change by achieving net zero greenhouse gas emissions by 2050

## Resilience

Design and plan to attain sustainable, resilient communities and ecosystems

## Natural Resources

Protect and enhance our natural resources as critical infrastructure

## Waste

Minimize waste and maximize the reuse and repurposing of materials

## Engagement

Empower stakeholders with information and ways to stay engaged

## Equity

Proactively advance procedural, distributional, structural, and transgenerational equity

## Science

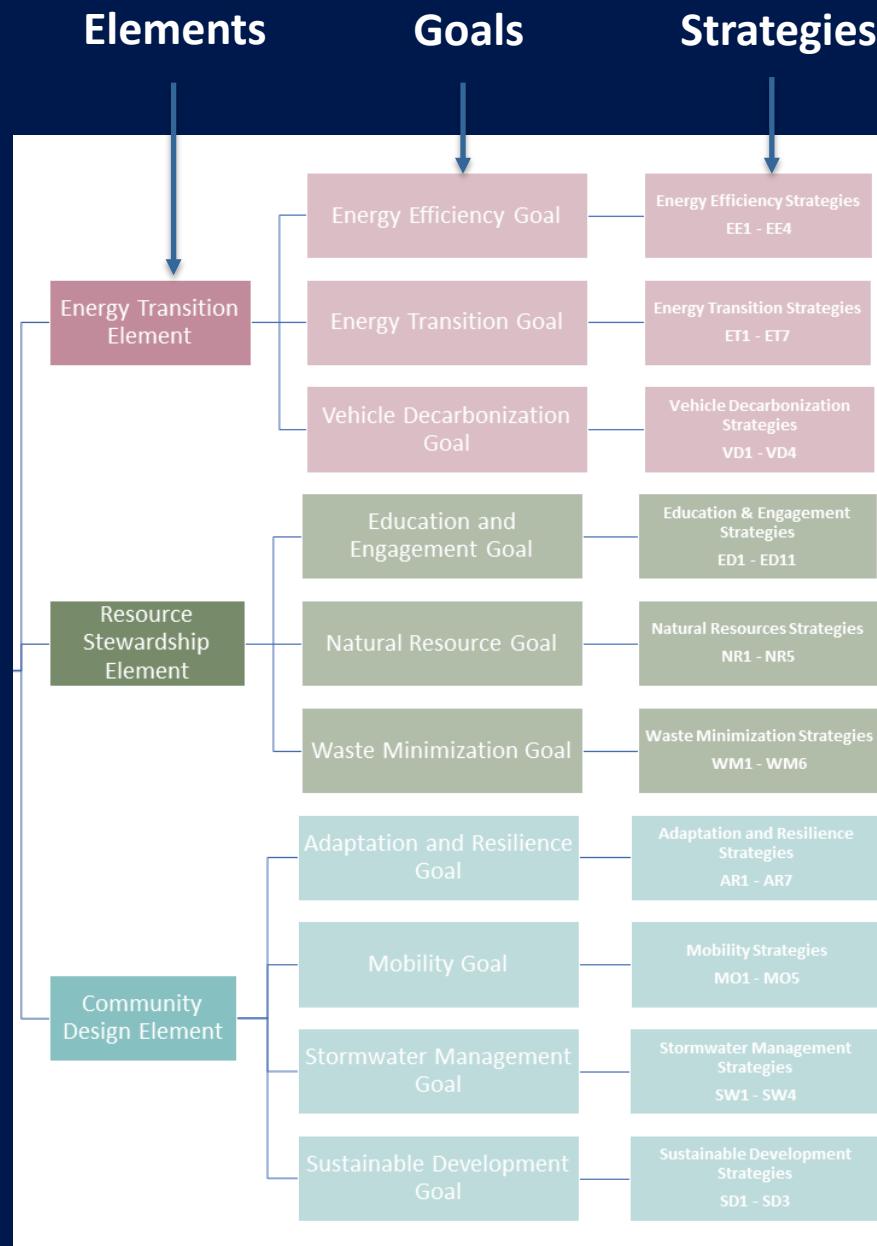
Implement measurable, high-impact sustainability strategies that are rooted in science

# Guiding Principles

Lower Merion embraces sustainability as a core value that drives our actions to protect the constitutional right of current and future generations to a clean, sustainable environment and acts to create a healthy, resilient, responsible, equitable and prosperous community for all.

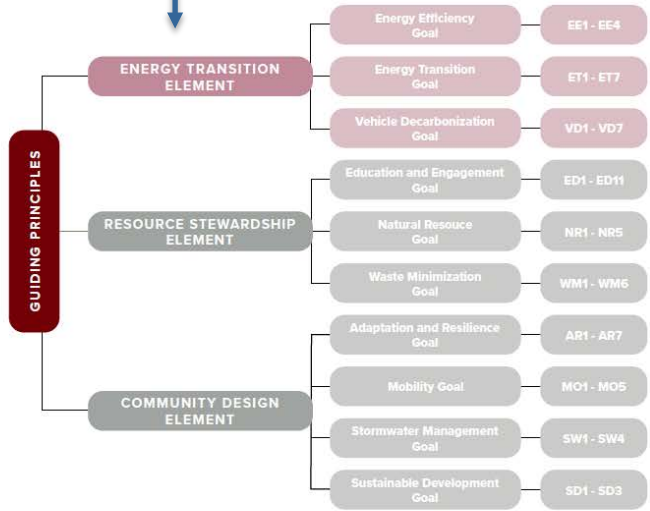
<b>Adaptation &amp; Resiliency</b>	Minimize risk to public health and property from manmade and natural hazards
<b>Education &amp; Engagement</b>	Through education and advocacy, engage all members of the Township community in the effort to realize the Township's sustainability goals.
<b>Energy Efficiency of Buildings and Facilities</b>	Maximize the energy efficiency in all new and existing buildings, public and private.
<b>Energy Transition</b>	Meet the targets for achieving the transition to non fossil fuel energy sources and reducing energy consumption established in Resolution 2021-16
<b>Mobility</b>	Establish a physical and cultural environment that supports and encourages safe, comfortable and efficient ways for pedestrians, bicyclists, and transit users.
<b>Natural Resource Management</b>	Manage the natural environment to improve the overall health, diversity and resilience of ecosystems, and to increase the ecosystem benefits provided to all.
<b>Stormwater Management</b>	Reduce flooding, increase water infiltration, and improve the quality of our waterways by utilizing and promoting nature-based stormwater strategies and best management practices.
<b>Sustainable Development</b>	Ensure that all land use, zoning, and development policies and regulations support the community's sustainability goals and are adequately enforced.
<b>Vehicle Decarbonization</b>	Decarbonize public vehicle fleets and promote decarbonization of private vehicles.
<b>Waste Minimization</b>	Minimize the generation and disposal of solid waste by reducing consumption, by maximizing reuse and recycling materials, and by maximizing composting of organic waste.

# Sustainability Plan Goals



# Sustainability Plan Organization

Element      Goals      Strategies



**ENERGY TRANSITION ELEMENT: PUT THE BRAKES ON CARBON POLLUTION**

The Energy Transition Element includes the groups of strategies aimed at achieving the Energy Efficiency, Energy Transition, and Vehicle Decarbonization goals. The strategies that make up the Energy Transition Element focus on reducing the Township's community greenhouse gas emissions by 63% below 2019 levels by 2030 and achieving net zero greenhouse gas emissions by 2050.

**Energy Efficiency of Buildings and Facilities**  
 Maximize the energy efficiency in all new and existing buildings, public and private.

**Energy Transition**  
 Meet the targets for achieving the transition to non-fossil fuel energy sources and reducing energy consumption established in Resolution 2021-16.

**Vehicle Decarbonization**  
 Decarbonize public vehicle fleets and promote decarbonization of private vehicles.


Element Description

Element Goals

# Goal

28 SUSTAINABILITY PLAN

Energy Transition Element Resource Stewardship Element Community Design Element



ENERGY TRANSITION

GOAL: MEET THE TARGETS FOR ACHIEVING THE TRANSITION TO NON-FOSSIL FUEL ENERGY SOURCES AND REDUCING ENERGY CONSUMPTION ESTABLISHED IN [RESOLUTION 2021-16](#):

- MORE EFFICIENT ENERGY USE
- CARBON-FREE ELECTRICITY BY 2035
- CARBON-FREE HVAC SYSTEMS BY 2045
- ZERO-EMISSION VEHICLES BY 2045
- FORMULATE AN ENERGY TRANSITION PLAN

Eliminating the use of fossil fuels such as petroleum and natural gas (carbon) and transitioning to carbon-free sources of energy to the maximum extent possible, as quickly as possible, is essential to reducing greenhouse gas emissions and avoiding the most catastrophic changes to the climate. This requires a rapid transition to heating and cooling equipment, building appliances, and maintenance equipment that are powered by carbon-free energy coupled with a rapid adoption of locally-sourced, renewable electricity. The Township Board of Commissioners, through passage of [Resolution 2021-16](#), acknowledged the need for municipal action to expedite this shift by setting a timeframe for its own transition and indicating it will use its powers and presence to support the private sector's transition in that same timetable. Passage of the Infrastructure Investment and Jobs Act (IIJA) in 2021 and Inflation Reduction Act (IRA) in 2022 offers enormous economic incentives for the government, citizens, institutions and businesses of Lower Merion to make the transition. Available financial tools for renewable energy procurement offer a means to stabilize the ever-rising costs of energy and improve financial stability for Township government and stakeholders. Strategies that promote and support maximum electrification and adoption of renewable energy throughout the Township also help to further Adaptation and Resiliency goals by reducing dependence on the local power grid and unstable fossil fuel markets. The Energy Transition strategies seek to systematically transition Township-owned heating and cooling systems, appliances, maintenance equipment, and electricity to carbon-free sources of energy; improve monitoring and minimize the release of potent greenhouse gas refrigerants; and facilitate and incentivize members of the community to do the same.

# Context

IMPLEMENTATION STRATEGIES 29

Energy Transition Element Resource Stewardship Element Community Design Element

**M** STRATEGIES FOR MUNICIPAL OPERATIONS:

- ET1 Carbon-Free Municipal Electricity**  
Develop and begin implementation of a plan to source the electricity used in Township-owned and operated buildings, facilities, and equipment from carbon-free, renewable energy produced on-site or locally; to the maximum extent possible by 2035.
- ET2 Carbon-Free Municipal Building and Maintenance Equipment**  
Develop and begin implementation of a plan to replace fossil-fuel burning building and maintenance equipment used in Township-owned and operated buildings and facilities with equipment that is powered by carbon-free energy where feasible by 2045.
- ET3 Municipal Refrigerant Management**  
Continue to manage refrigerants in Township facilities per Environmental Protection Agency regulations and seek to improve greenhouse gas refrigerant accounting, leak tracking and minimization, transition to lower Global Warming Potential refrigerants, and encourage staff continuing education.
- ET4 Dedicated Funding Mechanism**  
Assess the possibility of implementing a climate millage or comparable funding mechanism to support community scale greenhouse gas emissions reduction and climate adaptation projects.

**C** STRATEGIES FOR COMMUNITY-WIDE ADOPTION:

- ET5 Commercial Refrigerant Tracking**  
Establish a refrigerant tracking program for large commercial buildings and residential multifamily buildings aimed at reducing refrigerant leaks and transitioning to lower-Global Warming Potential refrigerants.
- ET6 Energy Transition Initiatives & Incentives**  
Design and implement a robust, ongoing program of education, initiatives and incentives to accelerate the electrification and transition to clean energy throughout the Township.
- ET7 Support Community-Scale Energy Distribution**  
Support community-scale energy distribution through District Energy Systems, Combined Heat and Power, microgrids, community solar, and community choice aggregation whenever possible.

Strategies for Municipal Operations

Strategies for Community-Wide Adoption

# Sustainability Plan Organization

# Co-benefits and equity impacts

## Potential Environmental Benefits

## Phased Implementation Timeline

### Strategy Description

### Rationale

### Performance Metrics

### Key Players

120 SUSTAINABILITY PLAN

Energy Transition Element | Resource Stewardship Element | Community Design Element

#### AR4 NATURE BASED CLIMATE SOLUTIONS

**Strategy:** Initiate and sustain a long-term campaign including public-private partnerships to promote and implement regenerative nature-based climate solutions throughout the community, with ongoing efforts to maintain and expand the nature-based solutions over time. Nature-based climate solutions are actions that use natural processes, ecosystems and living systems to help mitigate and adapt to climate change. These solutions can include a wide range of activities, such as reforestation and afforestation, soil management, green infrastructure, conservation and restoration of natural areas, and protecting existing mature trees and urban forests. This strategy may include identifying a suite of nature-based climate solutions to promote throughout the community, creating and distributing branded educational materials, facilitating workshops and training events, partnering with other organizations to implement nature-based climate solutions and educate the community offering incentives for participation, developing a registry of projects completed throughout the community, and organizing tours of the projects implemented. This may also include promoting urban agriculture as an adjacent initiative.

**Rationale:** Nature-based climate solutions play a role in helping communities and ecosystems adapt to the impacts of climate change by buffering against extreme weather events, restoring natural defenses, and enhancing the capacity to adapt to change. A long-term campaign will increase awareness and implementation of nature-based solutions throughout the community. This strategy can be implemented in conjunction with Natural Resources, Stormwater Management, and Education and Engagement strategies to further Township sustainability goals.

**Performance Metric:** Number of public and private nature-based solutions implemented in the Township and registered with the program.

**Key Players:**  
**Project Lead:** Sustainability Manager  
**Project Support:** Township Engineer, Public Works Department, Parks and Recreation Department, Township Arborist, Public Information Office  
**Project Partners:** Lower Merion Conservancy, Riverbend Environmental Education Center, Penn Environment, community-based organizations, business districts, businesses, Lower Merion School District, schools and universities, large institutions and landowners.

**Potential Environmental Benefits:** Removal and storage of carbon dioxide from the atmosphere through photosynthesis and soil carbon sequestration, increased wildlife habitat, improved biodiversity improved water quality, improved air quality, increased soil conservation, reduced heat island effects. Nature-based solutions are often integrated with other approaches, such as renewable energy and energy efficiency measures, to address climate change.

**Co-benefits and Equity Impacts:** Reduced vulnerability to the impacts of climate change, reduced flood risks, reduced economic impacts from extreme weather, improved public health, improved public safety, increased economic development, job creation, increased property values, increased community engagement, increased outdoor recreation, increased access to nature and green space. Equity can be improved by prioritizing education, outreach, and support in areas with high climate vulnerabilities, in low-income communities, and in communities of color.

**Potential Costs:** Staff time, engineering fees, design and construction of nature-based climate solutions, purchase of vegetation and soil management materials, training of staff and community members, hosting events, promotional materials, incentives.

**Potential Savings:** Reduced cost of managing stormwater, reduced costs of repairing damaged ecosystems, reduced cost of managing impacts from extreme weather events, reduced impact on grey infrastructure systems, reduced costs of maintenance of traditional gray infrastructure, reduced energy costs, increased productivity, increased efficiency.

121 IMPLEMENTATION STRATEGIES

Energy Transition Element | Resource Stewardship Element | Community Design Element

#### TIMELINE:

**Phase 1:**

- Research nature-based climate solutions (NBCS) programs that have been implemented in other municipalities
- Inventory existing NBCS on Township-owned properties
- Identify connections between NBCS and MS4 credits
- Identify connections between NBCS and Stormwater Fee credits
- Identify connections between NBCS and other sustainability plan strategies
- Identify opportunities for nature-based solutions on Township properties
- In conjunction with Education & Engagement strategies, develop a group of stakeholders to guide and support implementation of the program
- Identify top 3 nature-based solutions to be promoted through the program based on stakeholder input
- Research and identify grant and other external funding mechanisms to expedite the implementation of NBCS

**Phase 2:**

- Meet with the stakeholders group to discuss potential partnerships with Lower Merion School District and other large Township institutions, landowners, and community-based organizations
- Develop partnerships with other landowners and community-based organizations to implement NBCS and share information
- Update the inventory with information about known NBCS that exist on properties that are not owned by the Township
- Identify opportunities for nature-based solutions on Lower Merion School District, large institutions, and privately owned properties and reach out to property owners
- Identify incentives for participation in the program
- In conjunction with Education and Engagement strategies, develop a plan to advertise and educate about NBCS
- Develop branding and marketing materials for the program
- Develop a methodology to track or register NBCS that are installed as part of this initiative

**Phase 3:**

- Implement the program of education and engagement around NBCS
- Plan the first NBCS on Township property as part of the program including cost estimate and request for proposal (RFP)
- Encourage community partners to begin planning and installing NBCS on their properties
- In conjunction with Sustainable Development strategies, explore the zoning and the legal framework to allow nature based climate solutions in land disturbance permits, and build green stormwater management calculations into permitting requirements

**Phase 4:**

- Implement the first NBCS project on Township property as part of the initiative
- Support implementation of NBCS by community partners
- Gather stakeholder feedback

**Continuous:**

- Maintain and update the inventory/registry of NBCS on and off Township property
- Report the progress to the community
- Evaluate the success of the outreach and education program and make adjustments as needed
- Review the strategy to ensure it is meeting the objectives, and make any necessary revisions based on new data, changes in the Township's sustainability goals and strategies
- Through the Education and Engagement strategies, share regular communications about nature based climate solutions
- Provide education and engagement opportunities for stakeholders to engage with the program
- Continue to identify available grant funding for [measures]
- Encourage and review maintenance of NBCS

## Potential Costs Potential Savings

# Sustainability Plan Organization

## Energy Efficiency

- Municipal building tune-up
- Energy Savings Fund
- Residential Energy Efficiency
- Commercial Energy Benchmarking

## Energy Transition

- Carbon-Free Municipal Electricity
- Carbon-Free Municipal Building and Maintenance Equipment
- Municipal refrigerant management
- Dedicated Funding Mechanism
- Commercial Refrigerant Tracking
- Energy Transition Initiatives & Incentives
- Support Community-Scale Energy Distribution

## Vehicle Decarbonization

- Municipal EV Fleet
- Municipal EV Parking
- Community Vehicle Transition
- Reference and Data Resource

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Energy Transition Element

## Education & Engagement

- Branding & Outreach network
- Volunteer Coordination Program
- Sustainability Liaison and Site Leads
- Employee Engagement
- Multi-municipal Initiatives
- Advocacy for county, state, and federal programs
- Green Procurement Policy
- Annual Community Engagement Plan
- Annual Stakeholder Engagement Plan
- Green Enterprises Program
- Sustainable Workforce Development

## Natural Resources

- Community Forest Expansion
- Ecosystem Protection Program
- Natural Resources Inventory
- Promote Sustainable Land Management Practices
- Net Positive Impact

## Waste Minimization

- Minimum-Waste Facilities & Events
- Compost Program
- Waste Subscription Fees
- Minimize Single-Use Plastics
- Circular Economy Program
- Commercial Waste Reporting and Diversion

## Adaptation & Resilience

- Climate risk assessment
- Incorporate resiliency into infrastructure projects
- Reduce dependence on local power grid
- Nature Based Climate Solutions
- Resilience Hubs
- Communication network
- Climate risk mitigation program

## Mobility

- Complete Streets Policy
- Municipal Transportation Demand Management
- Community Transportation Demand Management
- Increase Multimodal Access
- Safe Routes to School

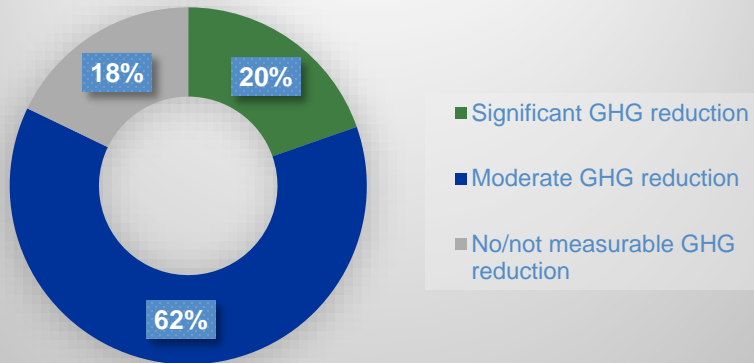
## Stormwater Mgmt

- Green Stormwater Infrastructure
- Stormwater Reduction Best Management Practices
- Stormwater Fee
- Public-Private Stormwater Projects

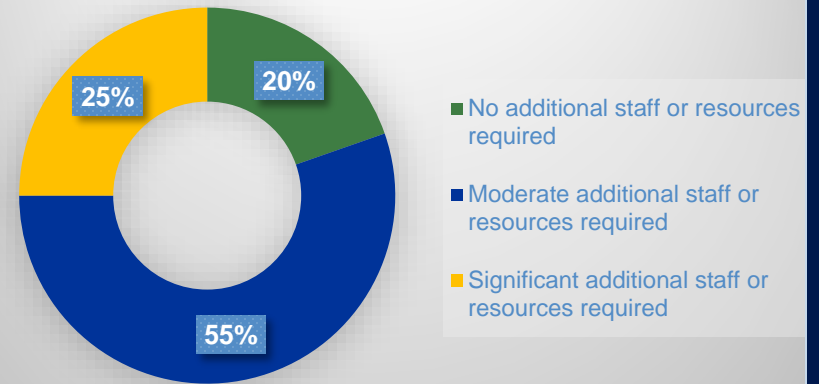
## Sustainable Development

- Comprehensive Code Audit & Update
- Eco-Districts
- Urban Agriculture, Plant-Rich Diets, and Food Rescue

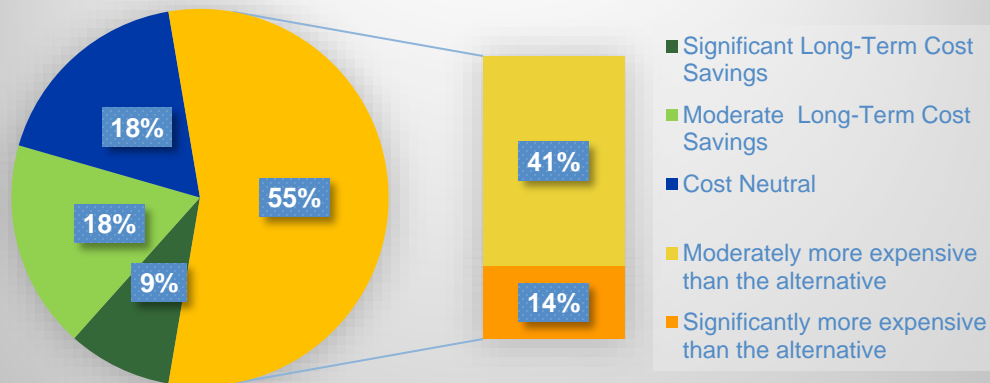
## Greenhouse Gas Emissions Reduction



## Ease of Implementation



## Cost Effectiveness



APPENDIX A - STRATEGY IMPLEMENTATION TABLE

STRATEGY	PLAN PAGE	TYPE OF ACTION REQUIRED Y=YES, N=NOT EXPECTED, P=POSSIBLY							INTERRELATED STRATEGIES	PROJECT LEAD	PRIORITY - 1,2,3	
		ORDINANCE	FUNDING	PLANNING	ADDITIONAL STAFFING	LAND DEVELOPMENT PROCESS	ENFORCEMENT	DIRECT BOARD OF COMMISSIONER ACTION				
Energy Transition Element												
EE1	Municipal Building Tune Up	20	N	Y	Y	N	N	N	N	EE2, EE4, ET1, VD1, VD2	Facilities Supervisor	2
EE2	Energy Savings Fund	22	N	Y	N	P	N	N	Y	EE1, EE3, ET1, ET2, ET3, ET4, VD1, VD2	Finance Department	1
EE3	Residential Energy Efficiency	24	N	Y	Y	N	P	N	Y	ET6, ED8, ED9	Sustainability Manager	1
EE4	Commercial Energy Benchmarking	26	P	Y	Y	P	Y	P	P	EE1, ET2, ET5, ET6, VD3, VD4, ED9, ED10	Building & Planning	2
ET1	Carbon-Free Municipal Electricity	30	N	Y	Y	N	N	N	P	EE1, EE2, ET2, ET6, ET7, VD1, VD2	Sustainability Manager	1
ET2	Carbon-Free Municipal Building and Maintenance Equipment	34	N	Y	Y	N	N	N	P	EE1, EE2, ET1, ET3, ET6, ET7	Sustainability Manager	2
ET3	Municipal Refrigerant Management	36	N	Y	N	N	N	N	N	ET2, ET5, ED3	Facilities Supervisor	3
ET4	Dedicated Funding Mechanism	38	P	P	Y	P	P	P	Y	ET6 & 7, VD3, ED11, NR1, WM2 & 5, AR4-6, MO4, SW3	Sustainability Manager	3
ET5	Commercial Refrigerant Tracking	40	P	Y	Y	P	P	P	P	EE4, ET6	Building & Planning	3
ET6	Energy Transition Initiatives & Incentives	42	P	Y	N	P	P	N	Y	EE3-4, ET1-7, VD3, ED2 & 8-11	Sustainability Manager	1
ET7	Support Community-Scale Energy Distribution	46	P	Y	Y	N	P	N	P	EE3-4, ET1, ET2, ET6	Sustainability Manager	3
VD1	Municipal EV Fleet	50	N	Y	Y	N	N	N	P	EE1, EE2, ET1, VD2	Fleet Supervisor	1
VD2	Municipal EV Parking	52	N	Y	Y	N	N	N	P	EE1, EE2, ET1, VD1	Fleet Supervisor	2
VD3	Community Fleet Transition	54	N	Y	Y	N	P	N	P	VD4, ET6, ED8, ED9, ED10	Sustainability Manager	1
VD4	Reference and Data Resource	56	N	N	N	N	N	N	N	VD3, ED8, ED9	Sustainability Manager	3

# Strategy Implementation

- Criteria:
  - Progress Towards Main Goal
  - Greenhouse Gas Reduction/Avoidance
  - Improves Equitable Outcomes
  - Cost
  - Supports other goals & overarching principles
  - Community Wellbeing Impact
  - Promotes Jobs / Economic Opportunities
  - Aligns with Comprehensive Plan
  - Ease of Implementation

- Highest alignment with stakeholder values
- Wide-ranging, significant impact on achieving Sustainability Plan Vision & Goals
- Minimal barriers to implementation
- Prerequisites for other strategies
- Begin allocating resources now
- Begin implementation in 1-2 years

Implementation Strategy	
AR1	Climate risk assessment
AR2	Incorporate resiliency into infrastructure projects
AR4	Nature Based Climate Solutions
ED5	Multi-municipal Initiatives
ED8	Annual Community Engagement Plan
ED9	Annual Stakeholder Engagement Plan
EE2	Energy Savings Fund
EE3	Residential Energy Efficiency
ET1	Carbon-Free Municipal Electricity
ET6	Energy Transition Initiatives & Incentives
MO4	Increase multimodal access
NR1	Community Forest Expansion
NR3	Natural Resources inventory
SD1	Comprehensive Code Audit and Update
SW3	Stormwater Fee
SW4	Public-Private Stormwater Projects
VD1	Municipal EV Fleet
VD3	Community Vehicle Transition
WM5	Circular Economy Program

Priority 1

- Benefits are narrower, come from subsequent actions, or are variable based on how strategy is implemented
- Require additional evaluation, planning, partnerships, or prerequisite actions
- Begin foundational preparation now
- Include in long-range resource allocation plans
- Begin implementation in 2-5 years

Implementation Strategy	
AR5	Resilience Hubs
AR3	Reduce dependence on local power grid
AR7	Climate risk mitigation program
ED1	Branding & Outreach network
ED2	Volunteer Coordination Program
ED3	Sustainability Liaison and Site Leads
ED10	Green Enterprises Program
EE1	Municipal building tune-up
EE4	Commercial Energy Benchmarking
ET2	Carbon-Free Municipal Building and Maintenance Equipment
MO1	Complete Streets Policy
MO3	Community TDM
MO5	Safe Routes to School
NR2	Ecosystem Protection Program
SD3	Promote Urban Agriculture, Plant-Rich Diets, and Food Rescue
SW1	Green Stormwater Infrastructure
SW2	Stormwater Reduction Best Management Practices
VD2	Municipal EV Parking
WM2	Compost Program

- Most narrow, variable, or hard-to-quantify benefits
- Barriers to implementation outside of Township control
- More effective after other actions are completed
- Begin implementation within 4-7 years
- Components may be addressed sooner

Implementation Strategy	
AR6	Communication network
ED4	Employee Engagement
ED6	Advocacy for county, state, and federal programs
ED7	Green Procurement Policy
ED11	Sustainable Workforce Development
ET3	Municipal Refrigerant Management
ET4	Dedicated Funding Mechanism
ET5	Commercial Refrigerant Tracking
ET7	Support Community-Scale Energy Distribution
MO2	Municipal TDM
NR4	Promote Sustainable Land Management Practices
NR5	Net Positive Impact
SD2	Eco-Districts
VD4	Reference and Data Resource
WM1	Minimum-Waste Facilities & Events
WM3	Waste Subscription Fees
WM4	Minimize Single-Use Plastics
AR6	Communication network
ED4	Employee Engagement

## Staff Recommendation:

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Staff recommends obtaining input from the Board of Commissioners, making any suggested revisions and then formally receiving the plan.

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Questions ?

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