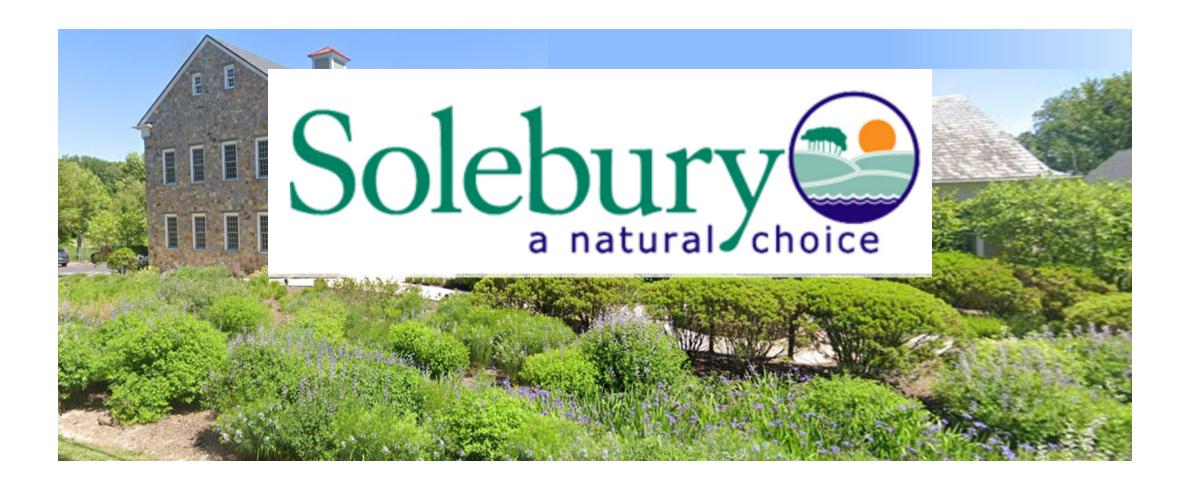
# WELCOME!



### SOLEBURY TOWNSHIP | 2024 Sustainability Forum



### TONIGHT'S AGENDA:

Arrival + Registration	
Solebury Township	John Francis, Township Supervisor EAC Liason
Environmental Advisory Council	EAC Members
- Deer Program	Eric Allen, EAC Chair
- Single Use Plastic Bag Ordinance	Christy Cheever, Township Supervisor
- Sustainability SubCommittee	SSC Members
Penn State University	Brandi Robinson, Energy and Sustainability Policy
Bucks County Planning Commission	Neale Dougherty, BC Sustainability Coordinator
NHS High School Environmental Initiatives	Environmental Club Students + Teachers
Why is Sustainability Important to You?	Shannon Pendleton, CPHC
Tables + Mingling + Questions	
Thank You + Stay Connected!	

### SOLEBURY TOWNSHIP | What is Sustainable Solebury?



#### SUSTAINABLE SOLEBURY

CI	ean	Ener	gy

Climate & Energy Forum 2022

**Electric Vehicle Incentives** 

Energy Transition Plan Infographic

**Energy Transition Plan Roadmap** 

**Environmental Advisory Council** 

Environmentally-Responsible Roadside Management (Messenger article)

**Erosion Sedimentation Control** 

**Land Preservation** 

**Native Plants** 

Recycling

Sealcoat

Sewage Management

Stormwater Management

Sustainability Subcommittee

Vegetation Management Permit Application

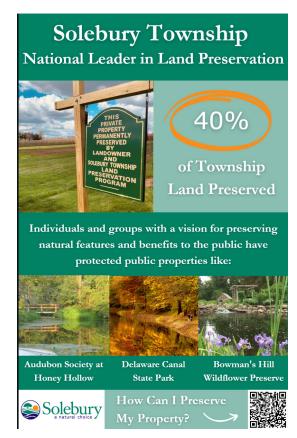
Water Issues & Information

**Connect with US!** 



### SOLEBURY TOWNSHIP | What has Solebury Township been up to?







After receiving a Bachelor of Science in Energy & Sustianbility Policy from Penn State's College of Earth and Mineral Sciences, Kate joined Solebury Township's administrative body in January 2023 as the Township's first-ever Sustainability & Administrative Specialist. This position was created in 2022 following the adoption of the Energy Transition Plan (ETP), and Kate tasked with facilitating the execution of ETP initiatives, as well as providing administrative support to the Environmental Advisory Council (EAC), the Sustainability Subcommittee (SSC), and assisting in the Township's day-to-day operations.

#### Solebury's Administrative Fleet Goes Electric!

Introducing our new 2023 Nissan Leaf! Back in June of this year, Solebury Township was selected to receive an award of \$2,000 through the PA DEP Alternative Fuels Incentives Grant Program (AFIG) to put towards the purchase of an EV. By replacing our old gasoline-powered Admin vehicle, this EV will assist the Township in becoming more fuel-efficient by contributing **zero** tailpipe emissions and saving around 300 gallons of fuel each year!







# **Environmental Advisory Council (EAC)**

Established in 2003, the Solebury EAC taps into the skills and volunteer energy of its residents. Consisting of seven members appointed by the local government, the EAC undertakes a variety of environmental projects and researches issues to advise officials to help inform decision-making regarding the environment.

#### **Our MISSION**

To advise our local governmental agencies, including the Planning Commission, Parks & Recreation Board and elected officials, on matters dealing with protection, conservation, management, promotion and use of natural resources, including air, land and water resources, located within the Township.

#### Members

Eric Allen	Chair
Tim Marsh	Vice Chair
Scott Blank	Member
Hope Blaythorne	Member
Philip Getty	Member
Jeanne Litwin	Member
Shannon Pendleton	Member
Barry Fetteroff	Associate Member

#### **Key Contacts**

John S. Francis	Supervisor Liaison
Kate Robeson-Grubb	EAC Administrator



Solebury Township's EAC serves at the approval of the Township Board of Supervisors.





# Ongoing Township Environmental Activities



- Established Environmental Advisory Council in 2004
- Established 40% of the Township as preserved open space
- USDA Deer Management Project sustainable reduction in Solebury's deer population throughout 2023. Roughly 30k lbs of harvested deer meat is donated annually to charity
- Expanding trail networks and park system
- Achieved Bird Town and Tree City designations based on conservation efforts
- Awarded Platinum-level Sustainable PA Community Certification
- Board of Supervisors passed a resolution to join the Sierra Club's Ready for 100 (RF100) campaign
- Adopted ordinance prohibiting single-use plastic bags by commercial establishments





# Sustainability & ETP Accomplishments



- ✓ Held a Climate & Energy Forum and adopted the Energy Transition Plan (ETP)
- Hired a Sustainability Specialist on staff
- Established Sustainability Subcommittee (SSC) under the EAC
- Partnering with PSU to forward sustainability initiatives: DEP LCAP and capstone projects
- Purchasing renewable electricity and installed high efficiency lighting for municipal operations
- Public Works Department migrated to electric hand tools "CLEAN AIR LAWN CARE"
- Conducted an energy audit of Township municipal complex to promote energy conservation
- Police patrol fleet contains 8 hybrid vehicles
- Purchased an electric vehicle for Township use and received AFIG program award (\$2000)



# SUPPORT YOUR LOCAL FOOD PANTRIES



# WE NEED YOUR HELP

Over 30,000 lbs of venison donated since **January 2021!!!** 

Contact Your USDA Wildlife Services Representative For More Information

Email: nathan.e.spence@usda.gov Phone: 215.589.0991









#### **RATIONALE:**

- Single-use plastic-bag waste can linger on land and in waterways for centuries, creating a serious long-term environmental problem that affects both land and water quality
- Due to the environmental hazards caused by single-use plastic, there is strong public support for the elimination of such products
- Opportunity to eliminate 100% of one category of single-use plastic waste

#### **HISTORY/BACKGROUND:**

- Planning for the ordinance began prior to the pandemic
- 2019 state moratorium on plastic bag bans (Phila, Narberth, West Chester, Lower Merion filed lawsuits)
- 2021 letters sent to Solebury Twp businesses and restaurants requesting voluntary compliance
- June 21, 2022- Solebury Township enacted Ordinance 2022-003, which bans the point-of-sale distribution of single-use plastic bags



#### **DETAILS OF Ordinance 2022-003**

- As of the effective date, commercial establishments within the Township prohibited from providing single-use plastic bags to customers at point-of-sale.
- Commercial establishments may make recyclable paper bags available to customers for a uniform charge of \$0.10 per recyclable paper bag.
- All monies collected for the sale of recyclable paper bags shall be retained by commercial establishments.
- Commercial establishments are required to post signage informing customers of the plastic bag prohibition and fee for recyclable paper bags.
- Commercial establishments are prohibited from providing single-use plastic straws and polystyrene containers to customers.



#### **AMENDMENTS**

- April 18, 2023- ordinance amended to include banning the use of single-use splash sticks (i.e.; Starbucks plastic drink stoppers)
- Proposed amendment (in-progress) -- single-use plastic utensils only to be provided to patrons upon request



#### Why Are Single-Use Bags Bad For The Environment? **FUN FACTS!**



#### **Plastic Bags**

- Are used, on average, for a whopping <u>12 minutes</u>
- Have a life expectancy of 1,000 years.
- Never *really* decompose. They only break down into smaller pieces of micro plastics.
- Kill about 100,000 marine animals every year. 🃁 🐠 🚑 🐋 🚗









### Paper Bags

- Create more waste in the production process compared to plastic bags.
- Take centuries to biodegrade in a landfill.

Guess how many plastic bags are used every year? 4,000,000,000

The most sustainable thing you can do is remember to bring your own bags







# Sustainability Subcommittee (SSC)

#### Our MISSION

To oversee and facilitate the implementation of the Township's Energy Transition Plan.

Our VISION

To improve Solebury Township's energy efficiency today, on behalf of our community's tomorrow.

#### **Our GOALS**

- Determine feasible solutions to transition community energy usage to 100% clean, renewable electricity by 2035, and 2050 for heat and transportation.
- Create a scope of work and services / requests for proposals, for community and township consideration.
- Propose Projects, Metrics, and Budgets related to ETP strategies and initiatives for internal review.
- Propose and facilitate Community Engagement and Educational activities to foster an inclusive decision-making process for all.

#### Members

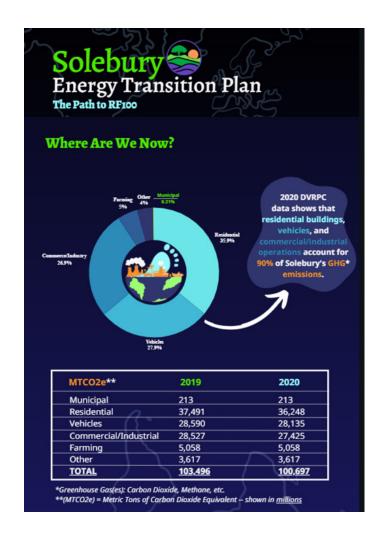
Shannon Pendleton	Member
Jeanne Litwin	Member
Tim Marsh	Member
Kate Robeson-Grubb	Township Administrator
John Francis	Supervisory Board Liaison





Solebury Township's EAC serves at the approval of the Township Board of Supervisors.

### SOLEBURY TOWNSHIP | SSC: Energy Transition Planning





#### **Energy Efficiency & Conservation**

Well-constructed energy efficiency policies alone could enable more than 40% of the emissions cuts needed to reach the Paris Accord climate goals while using existing technology.

Additionally, energy waste costs American businesses and households billions of dollars every year.

#### Electrification

Convert to 100% electricity for all energy needs, including electrification of heating systems and transportation. By retiring technologies that directly combust fossil fuels (natural gas, oil, coal), we can move toward RF100 clean energy goals and improve energy security.





#### **On-Site Solar Generation**

Maximize our ability to generate renewable electricity on-site using solar (or other sustainable) technology. The cost of solar photovoltaics (SPVs) has declined more than 70% since 2010, making it competitive with conventional electricity and installing solar systems in residential/commercial buildings financially viable.

#### Utility-Scale Renewable Energy

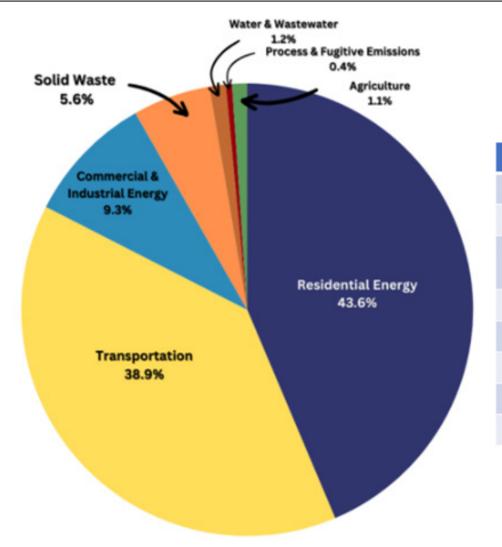
Solebury's municipal facilities already purchase its electricity from renewable sources, but this is only part of the need to ensure that renewable electricity is generated locally. As we move toward 100% electrification, electricity delivered by utility providers (i.e. PECO) must be generated from carbon-free, clean energy sources such as solar, small-scale hydroelectric power, and onshore/offshore wind.





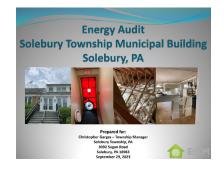
### SOLEBURY TOWNSHIP | Baseline Greenhouse Gas Emissions

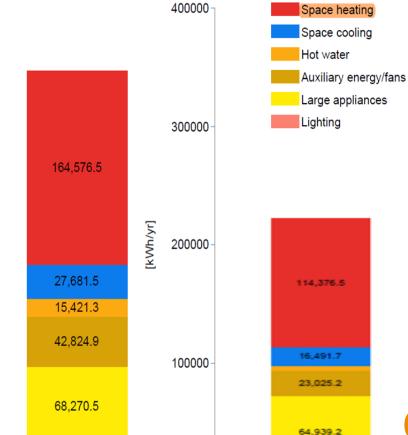
**2022:** 59,700 MTCO2e



Sector	MTCO2e
Residential Energy	26,048
Transportation	23,212
Commercial & Industrial Energy	5,523
Solid Waste	3,318
Agriculture	638
Water & Wastewater	699
Process & Fugitive Emissions	261
Total Emissions	59,699

### SOLEBURY TOWNSHIP | SSC: Township Building Case Study: Energy Audit





11,892.6



EXISTING 347,314 KwH/yr **OPTIMIZED:** 

230,423 KwH/yr

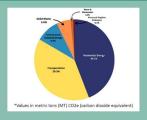


28,542.2

# Solebury Township Partnership with PSU



In 2024, Solebury Township's EAC began working with students from PSU's Energy and Sustainability Policy program (ESP). Students were able to gain real-world experience working with a local township to forward sustainability goals.



Two students assisted with updating Solebury's GHG emissions inventory for the township's Local Climate Action Plan (LCAP). Understanding where emissions are coming from is vital for reducing

One student worked with the EAC to increase public outreach for the township's Energy Transition Plan (ETP). To reach our sustainable future, we need to have a road map. Most importantly, we need to engage with our community members to make sure we're all on the right path!







### **Can I Recycle This?**

Recycling or Trash? We'll help you sort it out.



Visit the Solebury Township recycling webpage:



#### It's Never Been Easier to Buy an EV!

Big Change for 2024: Point of Sale Tax Credit

For the first time, dealerships can reduce the purchase price of qualifying EVs by up to \$7,500. No more waiting for tax season to get your EV savings!



#### Do you Qualify?

#### New EV income limits (AGI)

- Single and married filing separately: \$150.000
- Head of household: \$225,000
- Married filing jointly: \$300,000

#### Used EV income limits (AGI)

- Single and married filing separately: \$75,000
- Head of household: \$112,500
- Married filing jointly: \$150,000

#### What qualifies?

Sedans & passenger cars

Vans, SUVs, & Pickup trucks



MSRP \$55k or less



MSRP \$80k or less

See QR code for full list of requirements







Solebury

### SOLEBURY TOWNSHIP | Penn State University: LCAP PROGRAM

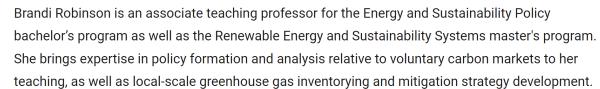


**Brandi Robinson** 

Associate Teaching Professor

Department of Energy and Mineral Engineering

#### **ABOUT:**



#### **RESEARCH PROJECTS:**

Robinson's research focuses on the efficacy of utilizing local policy mechanisms and structures of governance to address issues surrounding global climate change. Specifically, her interest is in understanding how to connect the causes and impacts of climate change with areas of existing concern and interest in local communities to build partnerships for meaningful change.

Currently, Robinson serves as chair of the Implementation Technical Advisory Group for the Centre Region's Climate Action and Adaptation Plan. The CAAP seeks to reduce region-wide emissions by 80% by 2050. Robinson also co-directs the Local Climate Action Program which partners undergraduate and graduate students with local government officials to complete greenhouse gas emissions inventorying and climate policy planning over two semesters.

#### AWARDS:

- College of Earth and Mineral Sciences Faculty Advising Award, 2013
- University Faculty Advising Award, 2018











Monthly global temperature compared with preindustrial levels

1940s-60s 1970s 1980s 1990s 2000s 2010s 2020s

+1.8°C

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"...we stay laser-focused on our North Star, and that is keeping 1.5 within reach." Sultan Ahmed Al-Jaber COP28 President

When we need to run."
Simon Stiell, Executive
Secretary UNFCCC





# LOCAL CLIMATE ACTION SUMMIT

Powered by Bloomberg Philanthropies









# History of the LCAP

- Started by PA Department of Environmental Protection Energy Programs Office
- Matched university faculty and students across PA with local government officials for individual projects
- Partnered with ICLEI Local Governments for Sustainability for training and software
- Fall: GHG Inventory and Report Spring: Draft Climate Action Plan





# **Penn State LCAP Communities**

2022-2023

- Bucks County
- Doylestown Borough
- Doylestown Township
- East Fallowfield Township
- Erie
- Lower Macungie Township
- Lower Merion Township
- Reading
- Scranton
- State College Borough
- Uwchlan Township
- Wormleysburg Township

2023-2024

- Centre County
- Churchill Borough
- Conshohocken Borough
- Dept of Conservation and Natural Resources
- Homestead, Borough
- Lower Macungie Township
- Mechanicsburg Township
- Palmer Township
- Solebury Township
- State College Borough

# Fall: Creating an Inventory



Establishing communication plans for each team



Collecting and analyzing data



Navigating the ClearPath learning curve



Presenting the inventory to the local government publicly

# Spring: Climate Planning



Creating a scope of work and deliverables to advance local climate action



Delegating pieces of that work to students



Presenting findings to the local government publicly



Engaging in weekly seminar series

# Energy and Sustainability Policy: Capstone

### **Michael Johnson**

 Supporting EAC's work on outreach for the implementation of the Energy Transition Plan



**Brandi Robinson** 

Associate Teaching Professor

Department of Energy and Mineral Engineering

# Thank you!



brobinson@psu.edu

# BUCKS COUNTY PLANNING COMMISSION







Neale Dougherty
Bucks County Director Of Sustainability
Bucks County Controller 2018 to 2022



Memorandum of Understanding for creating the

# Sustainable Energy Partnership of Southeast PA

# Sustainable Energy Partnership of Southeast PA





Since September 2020, bringing us together to explore new approaches to procure electricity and renewable energy for county operations, in order to achieve:

# **Partnership Goals**

- Meet renewable energy targets through access to large-scale renewables
- Access low, transparent, and stable electricity prices
- Ability to on-board additional parties such as municipalities, authorities, and schools

# Regional Momentum for Climate Action





# Fulfilling Ready for 100 Resolution (2/17/21 COMMISSIONERS 17a): 100% renewable electricity by 2035







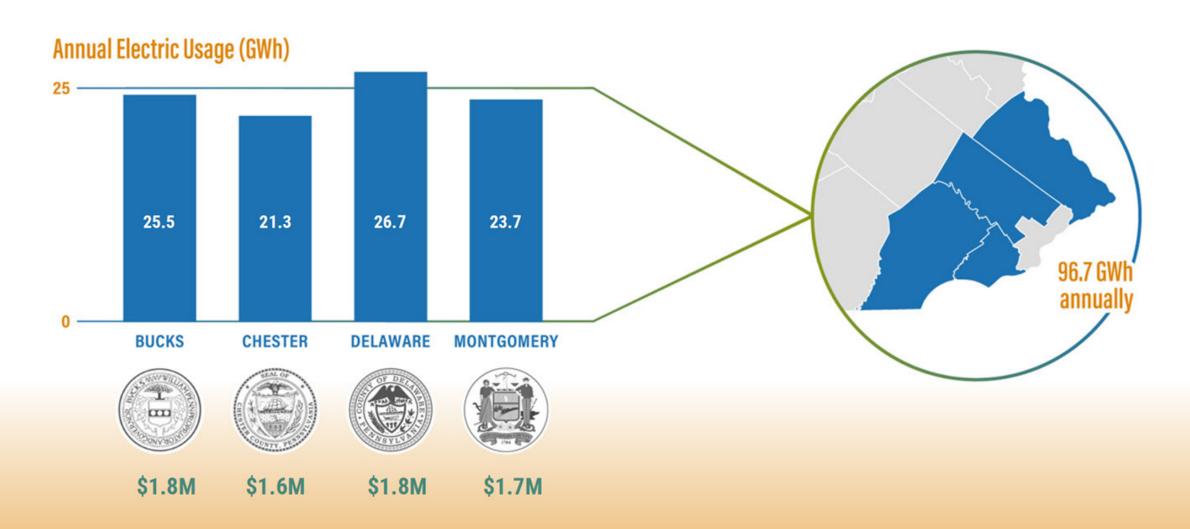




# **Current County Electricity Procurement**



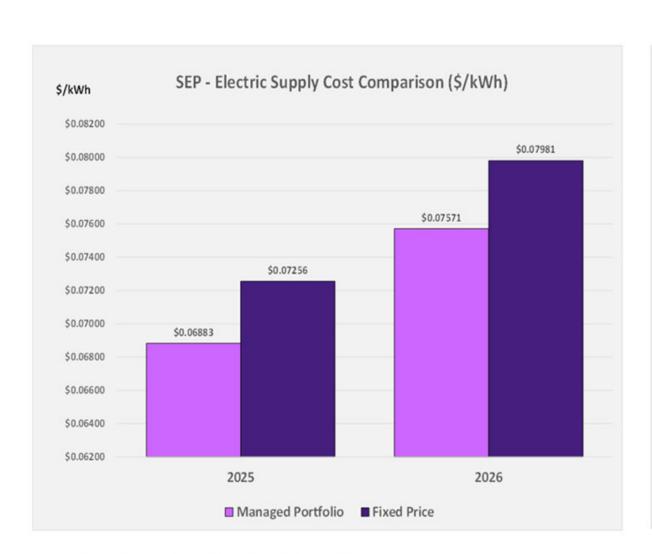


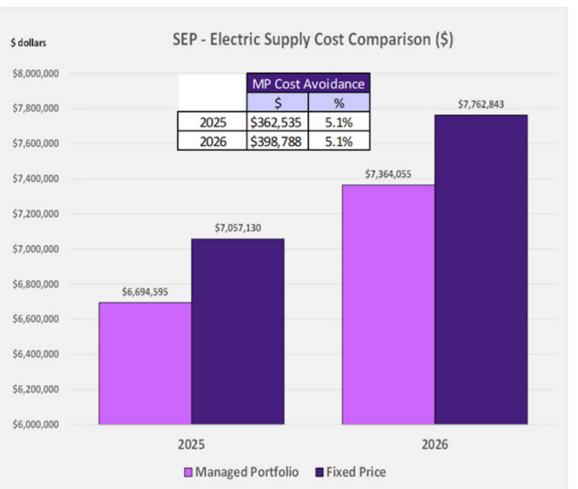


# **Electric Supply Cost Comparison**









# **Recommended Outcome**





The Partnership recommends that we pursue a **Self-Managed Portfolio** in PJM (subaccount). This is a more flexible, engaged, and transparent procurement strategy that will allow to meet our shared goals through proactive and collaborative action in energy markets.













Flexibility

Transparency

Cost-effective

**Expert Guided** 

Renewables Integration

Expand membership



# Question?

### **NHS Environmental Club**

OUR VISION: To educate NHS students on local and global environmental issues in an effort to help reduce our environmental impact as individuals and as a school community.



# 2022-23 Accomplishments



- 1) 2022 Climate + Energy Forum
  - presented our goals to the larger township
- 2) Campus + Community Clean-Ups
  - involved 70+ students in efforts
- 3) Volunteering w/ Community Orgs.



# 2022-23 Accomplishments Continued

- 1) Facilities Committee Membership
- 2) Earth Day & EV Festival
  - spread our message to the community
  - involved 20+ sponsors and20+ EVs
  - o raised **\$1500**+ for the club
- 3) Renewable Energy Plan
  - organized 4 years of energy data + presented it to facilities committee



# 2023-24 Accomplishments/Goals

### 1) Community Involvement

- Student Involvement
  - 130+ students involved this year!
- o Campus / Canal Clean-Ups
- o Earth Day and Electric Vehicle Festival
  - April 27th 10:00 AM-2:00 PM

### 2) District Outreach

- Volunteer Opportunities
- Connecting w/ Local Organizations
  - AWA, Township EAC, Exact Solar
- Fundraising
  - T-Shirt Sales, Lions Fest, etc.

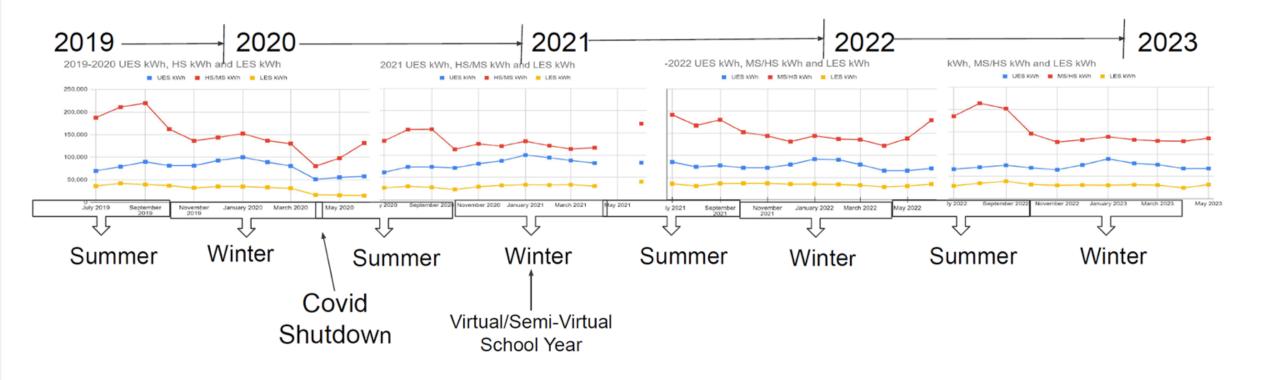


# 2023-24 Accomplishments/Goals Continued

### 3) Sustainability Plan

- Renewable Energy
- Reduced Waste
- Facilities Committee Membership\*

2019-2023 Sequenced
Compilation of Energy Data





# Earth Day & Electric Vehicle Festival 2024

SPONSOR AND VENDOR INFO:

CAR SHOW SIGN-UP INFO:





### **Contact Information**

Mrs. Lever - Co-Advisor

Mr. Mac - Co-Advisor

Sofia Tasoluk - Co-President

Rena Xu - Co-President

**Cadence Scott - Vice President** 

**Ila Pendleton - Secretary** 

Olivia Naranjo - Treasurer

clever@nhsd.org

lmacdonald@nhsd.org

tasoluksofia@nhsdlions.org

xurena@nhsdlions.org

scottcadence@nhsdlions.org

pendletonila@nhsdlions.org

naranjoolivia@nhsdlions.org



@nhsdenvironmentalclub



# THANK YOU, SPEAKERS!

Name	Group / Title / Topic
John Francis	Solebury Township BOS - EAC Liason - Solebury Environmental Leadership
EAC	Environmental Advisory Council / Sustainability Sub-Committee
- Eric Allen	Solebury Township EAC Chair - Deer Management Program
- Christy Cheever	Solebury Township BOS - Plastic Bag Ban
- SSC	Sustainability SubCommittee
Brandi Robinson	Penn State University - Energy and Sustainability Policy
Neale Dougherty	Bucks County Director of Sustainability
NHS Environmental Club	High School Initiatives



## **WE WANT TO HEAR FROM YOU!**

# Take a moment for the Community Poll ©

- ~ Share your ideas!
- ~ Sign up for news and events!





# **VISIT TONIGHT'S LOCAL ORGANIZATIONS!**

	Bird	Town	PA
--	------	------	----

Naturalizing New Hope / native plantings that help wildlife

Electric Buildings / Airtightness Game

Primrose Creek Watershed Assoc

Aquetong Watershed Assoc

EAC SSC / Sign Up + Suggestion Table

Bucks County Conservation District / Enviroscape Model

Deer Program

NHS Environmental Club

PECO / Home Energy Audits

Solebury Township Trails + Parks

Spring Creek Farm

Solebury Chief of Police

Bucks County Audubon Society / Tuckamony Farms

Visit with tonight's speakers and these sustainable groups!



# **LEARN MORE:** Helpful Links Handout!

Bird Town PA
Naturalizing New Hope / native plantings that help wildlife
Electric Buildings / Airtightness Game
Primrose Creek Watershed Assoc
Aquetong Watershed Assoc
EAC SSC / Sign Up + Suggestion Table
Bucks County Conservation District / Enviroscape Model

NHS Environmental Club
PECO / Home Energy Audits
Solebury Township Trails + Parks
Spring Creek Farm
Solebury Chief of Police
Bucks County Audubon Society / Tuckamony Farms



Helpful Links!

# **THANK YOU for coming!**