

# Navigating the... SUSTAINABLE JERSE GRANTS PROGRAM

IG: Sustainable\_Jersey | Twitter: @SJ\_Program and @SJ\_Schools | FB: @SustainableJersey | LinkedIn: sustainable-jersey

# Agenda

- 1. Grants Program Overview
- 2. PSEG Foundation
- 3. Groundwork Elizabeth
- 4. Incredible Edible Merchantville
- 5. Sustainable Island Heights
- 6. Q&A



## **Sustainable Jersey**

### To achieve a better tomorrow, one community at a time.

- Empowers municipalities to build a better world for future generations with the tools, training, and financial incentives necessary to pursue critical sustainability initiatives
  - Free, voluntary sustainability certification program for NJ municipalities
  - Subject-specific guidance for over 150 sustainability topics
  - Technical Assistance programs
  - Annual Grants Program







of NJ public school districts registered with Sustainable Jersey for Schools

## SUSTAINABLE **COLLECTIVE** JERSEY **MPACT**





SUSTAINABLE

CERTIFIED

**SUSTAINABILITY ACTIONS COMPLETED** by both municipalities and schools





### ACTIONS FOR SUSTAINABLE COMMUNITIES

To become Sustainable Jersey Certified, municipalities must complete and document actions from this list.



Action	Stars	Points
ARTS & CREATIVE CULTURE		
Establish a Creative Team	_	10
Creative Assets Inventory	_	10
Creative Placemaking Plan	_	10
Municipal Commitments to Support Arts & Creative Culture	•	5 to 25
Utilizing Your Creative Assets		10 to 30

#### BROWNFIELDS

Brownfields Inventory & Prioritization	•	10 to 15
Brownfields Reuse Planning	•	5 to 15
Brownfields Marketing		10
Brownfields Assessment & Investigation	•	5 to 30

#### COMMUNITY PARTNERSHIP & OUTREACH

Green Team - MANDATORY	10 to 15
Community Education & Outreach	5 to 20
Green Challenges	10
Hold a Green Fair	10 to 20

#### **DIVERSITY & EQUITY**

Community Equity & Diversity Profile*	•	10 to 1
Diversity on Boards & Commissions*	•	10
Environmental Justice in Planning & Zoning	•	10
Lead Education & Outreach Programs	•	5 to 15

#### EMERGENCY MANAGEMENT & RESILIENCY

Extreme Temperature Event Plan	۲	10
Heat Island Assessment & Mitigation Plan	•	5 to 20
Community Wildfire Protection Plans	_	10
Firewise Community	_	5 to 15
Ready Set GO! Fire Company	_	5 to 15
Wildfire Safety Council	_	10
Emergency Communications Planning		15
Vulnerable Populations Identification for Emergencies		10

ENERGY Energy Efficiency for Municipal Facilities*		5 to 50
Energy Tracking & Management*		10 to 20
Buy Electricity from a Renewable Source		10
Municipal Onsite Solar System		5 to 45
Municipal Geothermal Energy System		10
Municipal Wind Energy System		10
Renewable Government Energy Aggregation	4	5 to 50
Commercial Energy Efficiency Outreach	4	10 to 20
Energy Assistance Outreach	4♥	10 to 20
Residential Energy Efficiency Outreach	4♥	10 to 20
Make Your Town Solar Friendly	4	15 to 30
Municipally Supported Community Solar	<b>4</b>	15 to 25
Solar Outreach	4	10 to 15
Wind Ordinance		10
Fleet Inventory*		10
Meet Target for Green Fleets		30
Purchase Alternative Fuel Vehicles		5 to 15
Electric Vehicle Community Outreach	4	10 to 15
Make Your Town Electric Vehicle Friendly	- 4♥	15
Public Electric Vehicle Charging Infrastructure	4♥	15

FOOD		
Farmland Preservation Plans	•	10
Community Food Pantry/Bank & Soup Kitchen		10 to 15
Community Gardens	•	10 to 20
Expanded Supplemental Food Programs		10 to 20
Promoting Safe Food Donation for Food Security	•	10
Buy Fresh By Local Programs	•	10
Farmers Markets	•	10 to 15

#### GREEN DESIGN

Green Building Policy/Resolution	5
Green Building Education	5
Green Building Training	5
Green Development Checklist	10
New Construction	20
Upgrade/Retrofit-Light Pollution	10
Upgrade/Retrofit-Water Conservation	10

#### HEALTH & WELLNESS

Anti-Idling Education & Enforcement Program	•	10
Best Practices for Local Boards of Health	•	5 to 10
Building Healthier Communities	•	5 to 25
Integrating Health Into Municipal Decision Making	•	10 to 25
Local Health Assessment & Action Plan	•	25 to 40
Safe Routes to School	•	10
Tobacco Free Community	•	5 to 25
Comprehensive Lead Strategy	•	10 to 15

Healthy Homes Inspection & Training	•	5 to 30
Lead and Housing Hazard Data-Sharing	•	10
Lead Blood Screening Campaign	•	5 to 20
Private Well Outreach & Testing	♥♦	10 to 25
Removing Lead in Drinking Water	44	10 to 40

#### INNOVATIVE COMMUNITY PROJECTS

Innovative Community Projects (up to 3)

Sustainable Land Use Pledge*	10
Build-Out Analysis	10
Bicycle and Pedestrian Audits	5 to 10
Bicycle and/or Pedestrian Improvement Projects	10 to 35
Bicycle and/or Pedestrian Plan	10
Community Design for All Ages	5 to 25
Complete and Green Streets for All Policy	10 to 30
Effective Parking Management	10
Green Infrastructure Planning	5 to 20
Green Infrastructure Implementation	10 to 20
Enhanced Stormwater Management Control Ordinance	6 5 to 35
Green Building & Environmental Sustainability Element	10
Smart Workplaces	5 to 10
Transit-Oriented Development Supportive Zoning	20

#### LOCAL ECONOMIES

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Tree Planting Programs

Green Business Recognition Program*		10 to 2	0
Green Jobs/Economic Development	•	10	
Buy Local Campaign		10	
Support Local Businesses		10	

#### NATURAL RESOURCES

latural Resources Inventory*	٠	20
nvironmental Commission		10
nvironmental Commission Site Plan Review		10
funicipal Water Story*	٠	20 to 25
pen Space Plans	44	10
Vater Conservation Education Program	٠	10
Vater Conservation Ordinance*	٠	20
Vildlife Interaction Plan		10
asement Inventory & Outreach		10
asement Inspections & Evaluations		15
Clustering Ordinance		10
nvironmental Assessment Ordinance		10
labitat Conservation Ordinance		10
ree Protection Ordinance		10
Community Forestry Management Plan & IJUCF Accreditation	₩.	10 to 20
ree Hazard Inventory		10
ree Maintenance Programs		10

10

#### **OPERATIONS & MAINTENANCE**

5 to 15
5 to 10
5 to 15

#### PUBLIC INFORMATION & ENGAGEMENT

Municipal Communications Strategy		10
Improve Public Engagement in Municipal Government	•	10 to 15
Improve Public Engagement in Planning and Zoning	•	10 to 15
Online Municipal Public Service Systems	•	10 to 15
Digitizing Public Information		10
Open Data Inventory & Management		10 to 15

#### SUSTAINABILITY & CLIMATE PLANNING

Municipal Carbon Footprint*	10
Climate Action Plan	10
Community Asset Mapping	10
Community Sustainability Plan	5 to 25

#### WASTE MANAGEMENT

Prescription Drug Safety & Disposal*	10
Recycling & Waste Reduction Education & Compliance*	15 to 20
Commercial & Institutional Recycling	10
Community Paper Shredding Day	5
Construction & Demolition Waste Recycling	5 to 15
Food Waste	10
Household Hazardous Waste	🛡 5 to 15
Non-Mandated Materials Recycling	5 to 60
Recycling Depot	10
Backyard Composting Program	5
EPA WasteWise Partner	5
Grass - Cut It and Leave It Program	5
Materials Reuse Program	10
Pay-As-You-Throw Program	10
Waste Audit of Municipal Buildings or Schools	10

# Participants Map Search



Use the Participating Municipalities & Approved Actions

(*sustainablejersey.com/certification/search-participating-municipalities-approved-actions*) page to find examples of documentation from certified towns and connect with municipal green teams

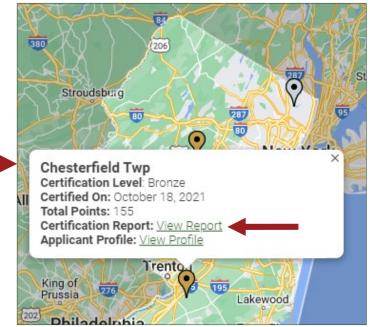
### Search by action

By Certified Action			
Animals in the Community			
Animals in the Community Education			
Companion Animal Management Pledge			
Companion Animal Management Plan			
Enhanced Licensing Compliance			
Pledge Supporting NJ Wildlife Action Plan			
✓ Wildlife Interaction Plan			

### View certified towns approved for that action

MUNICIPALITY	~	COUNTY	CERTIFICATION
Bernardsville Boro		Somerset	🔮 BRONZE
Cape May City		Саре Мау	
Chesterfield Twp		Burlington	🔮 BRONZE
East Brunswick Twp		Middlesex	
<u>Hillsborough Twp</u>		Somerset	
Oradell Boro		Bergen	
Princeton		Mercer	
Readington Twp		Hunterdon	
<u>Sea Bright Boro</u>		Monmouth	🔮 BRONZE

### View certification report for example documentation



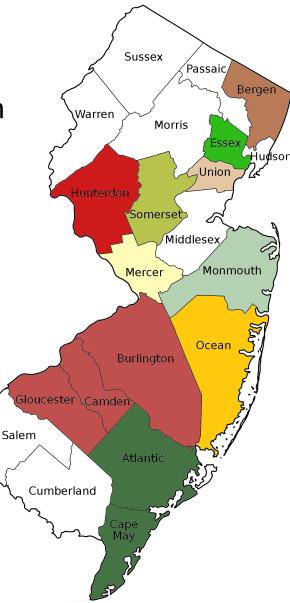
# **Regional Hubs**

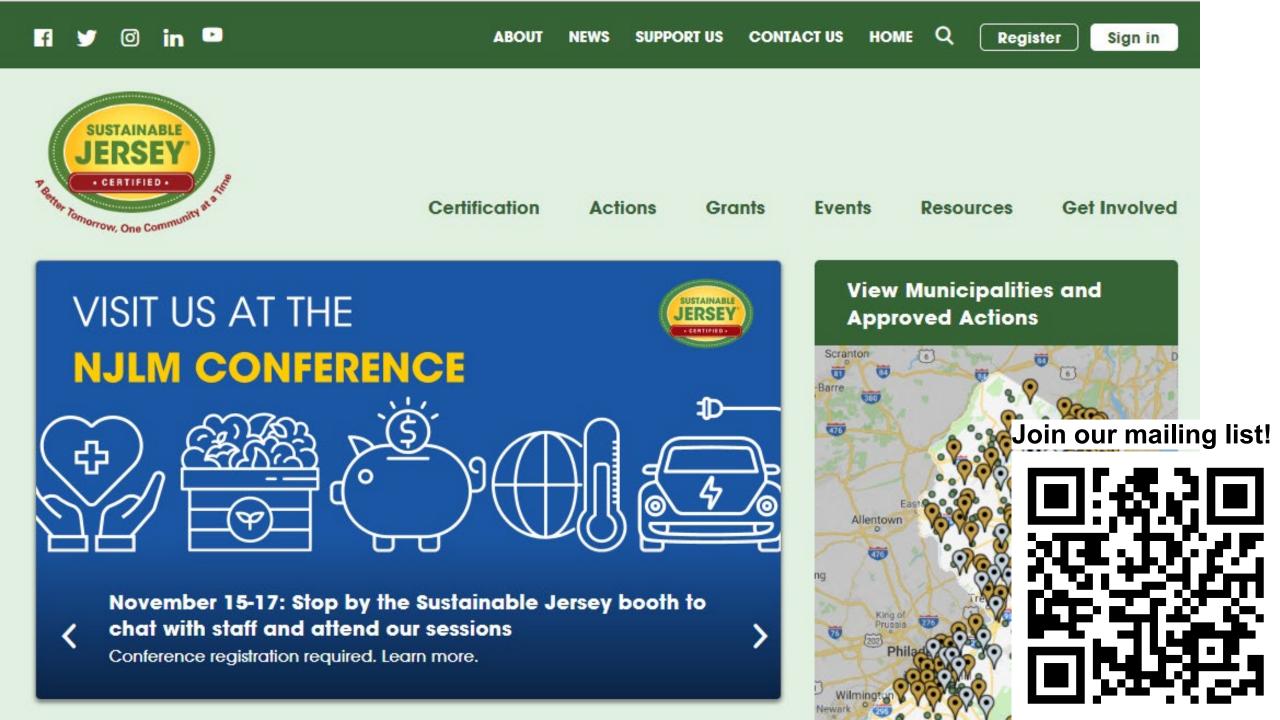
Ten hubs around the state to help green teams build capacity through training, best practices resources and networking. Learn more <u>sustainablejersey.com/get-involved/</u>

### **Benefits**

- Peer mentoring
- Project collaboration
- Online communication platform
- Network of Leaders
- Quarterly Events
- Help Peers Get Certified
- Technical assistance & administrative support from SJ







## Sustainable Jersey Grants Program

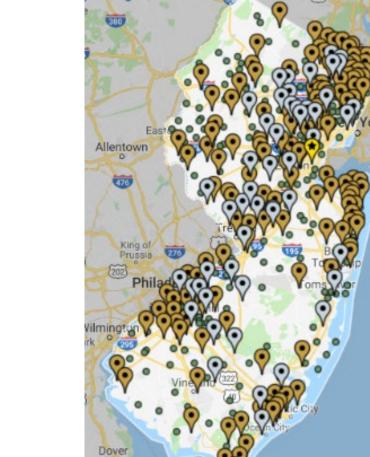
- Since 2009, over \$4.2 million awarded to participating municipalities for almost 600 projects
- 277 / 464 (59.69%) registered municipalities have received at least one grant
- 50% of all grant funding is reserved for certified municipalities





# Eligibility

- New Jersey municipality that is registered in Sustainable Jersey
  - Registration is free and easy
  - Municipalities need to pass a resolution to participate
- With an established green team
  - Must be formally established with municipally appointed members
  - Can designate an existing group or use your project team as a starting point



Community Partnership & Outreach

### Create Green Team



Required for all certification levels

COMPETITIVE FUNDING AVAILABLE

## **Participation Benefits**

- Non-recipients can request a debrief call to discuss how to improve the application
- Recipients are recognized at a grant
   announcement event
  - Get photo taken with program sponsors
  - Press release templates provided along with the photo following the event
  - Receive check for grant award
  - Enjoy refreshments and networking opportunity with peers





## **Participation Benefits**

- Awardees can gain good publicity for their municipality through
  - Ribbon cutting ceremonies
  - Social media posts
  - News articles
  - Representation on
     Sustainable Jersey
     conference session
     panels and webinars





### SUSTAINABLE JERSEY GRANTS PROGRAM



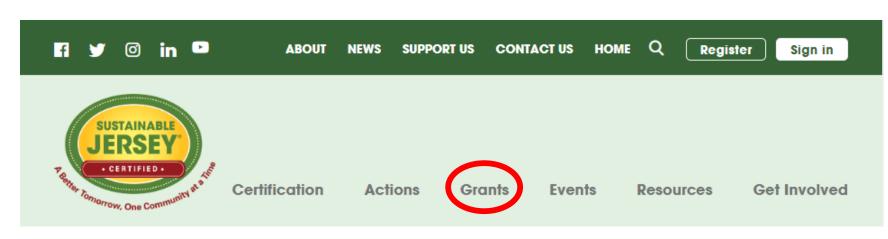
CYCLE SPONSOR	PROJECT TYPE	ELIGIBLE APPLICANTS	GRANT AMOUNTS	CYCLE LAUNCHED	FUNDING TO DATE
AN EXELON COMPANY	Env. Stew. and Resiliency	Munis in ACE Territory	\$2k, \$5k & \$10k	Late April	\$225,000
GARDINIER ENVIRONMENTAL FUND	Energy	Public Schools & Munis	\$10k and Larger	TBD	\$1,120,000
<b>PSEG</b> Foundation	General Sustainability	Public Schools Munis	\$2k & \$10k \$2k, \$10k & \$20k	Mid-Oct Mid-Nov	\$3,100,000

## **Grants Page**

- More information can be found at the Sustainable Jersey website under the Grants page
  - Current opportunities
  - Grant application information
  - Grant recipient information
  - Previous recipients and projects

Thinking about  $\sim$ **Applying for Grants?** Eligibility Use of Funding Application Tips Required Documentation Online Application

Portal Instructions



# **Standard Application Form**

### **Grant Proposal Sections**

- All Grant Applications Include:
  - Project Title and Brief Description
  - -Action Plan and Timeline
  - Budget Narrative
  - Detailed Project Budget

- Only Large Grant Applications Include:
- Project Team
- Community Engagement
- Project Impact and Evaluation

There are templates available to help you quickly and easily complete each section of the application, such as the action plan & timeline and budget sections.

## **Green Team Documentation**

- Currently certified municipalities **DO NOT** need to provide this information
- Otherwise, we need the following green team documentation:
  - List of green team members
  - Summary of green team activities
- If a green team was recently formed, you can submit your future plans in lieu of a summary of activities



## **Grant Authorization Doc**

- Upload a Board Resolution in support of the grant project and application
  - A template resolution can be found here
  - Must specify the specific SJ grants cycle you are applying in
  - Must be signed and dated
  - Can use the same resolution for grant applications within the same program year

This resolution is DIFFERENT than the resolution required to register in the Sustainable Jersey certification program OR to establish a green team.

## **Online Application Portal**



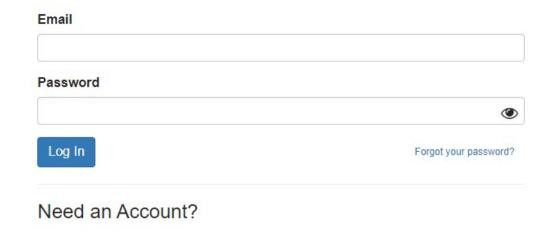
Sustainable Jersey Grants Program Account

This grant account can be used from year to year to submit applications to be considered for funding by the Sustainable Jersey Grants Program. A municipality should use one account to submit its grant applications with. Below is more information on how to utilize your grant account.

#### Cycle Specific Portals

Note that this portal is specific to the **PSEG grants**-by signing in to this portal with your grant account, you

### Sign In



Sign Up

# **Use of Funding**

- Funding must be used for projects that could earn the municipality points in the Sustainable Jersey program
- \$2,000 grants that can also be used to support the green team's certification efforts by funding annual initiatives and promotional materials
- Eligible expenses include everything except
  - Facilities/administrative (overhead) costs
  - Reimbursement of a project that has already been completed
- If you are not sure if your project is eligible, do not hesitate to contact us to find out

**NOTE: Some cycles have more specific requirements for funding usage** 



This site made possible by a grant from the PSEG Foundation

SAVE THE PLANET



#### FRANKLIN TOWNSHIP SENIOR CENTER **RAIN GARDEN IMPLEMENTATION PROJECT** 505 DEMOTT LN, FRANKLIN TOWNSHIP SOMERSET COUNTY, NEW JERSEY

#### PROJECT DESCRIPTION:

A BIOSWALE AND RAIN GARDEN ARE TO BE INSTALLED TO CAPTURE STORMWATER FROM THE BUILDING'S ROOFTOP (1,192 SF). THE BIOSWALE (115 SF) WILL CONVEY SOME OF THE STORWATER ALONG THE NORTH EAST SIDE OF THE BUILDING TO THE RAIN GARDEN (460 SF). THIS STORMWATER WILL BE PIPED UNDER THE SIDEWALK AND DISCHARGED INTO THE RAIN GARDEN. THE EXISTING CATCH BASIN WILL BE RAISED TO ALLOW STORMWATER TO BE CAPTURED IN THE

#### LIST OF DRAWINGS

SHEET NAME	TITLE
COVER	COVER SHEET
P-1	EXISTING CONDITIONS AND DEMOLITION PLAN
P-2	PROPOSED SITE PLAN
P-3	PLANTING PLAN
DT-1	RAIN GARDEN DETAILS
DT-2	BIOSWALE AND PLANTING DETAILS



	EXISTING DRAINAGE AREA
-	EDGE OF PAVEMENT
and a second	EXISTING CENTERLINE
	EXISTING FENCE
	EXISTING TREELINE
1	<ul> <li>EXISTING TREE/SHRUB</li> </ul>
	EXISTING BUILDING
*	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING CATCH BASIN
1	EXISTING CONTOURS
	EXISTING SPOT ELEVATIONS
Q	SPOT LEXANDAL CODES BL - BULLING LINE CB - OUTCHIMARN BP - EDGE CF PAVEMINT F - FENCE F - FENCE F - FENCE CB - UTILITY POLE
Ser 1	LIMIT OF WORK
7	PROPERTY LINES
- Barry	AREA TO BE DEPAVED
$\checkmark$	PROPOSED GREEN INFRASTRUCTURE
	PROPOSED POROUS ASPHALT
aline.	<ul> <li>PROPOSED TREE</li> </ul>
	PROPOSED TOP OF BERM
640	PROPOSED CONTOURS
2	+ CODE PROPOSED SPOT ELEVATIONS
	G - GRUND SHOT CORE C - CARLAND SHOT CH- SWALE CHANNEL TOB - TOP OF BERM TC - TOP OF CURB

PLAN REVISIONS

-

LEGEND:

#### GENERAL NOTES:

SURVEY CONDUCTED BY RUTGERS COOPERATIVE EXTENSION WATER RESOURCES PROGRAM. ALL ELEVATIONS ARE RELATIVE TO THE 100.00' BENCHMARK POINT. (OR ELEVATION DATA OBTAINED FROM [INSERT DATA SOURCE HERE, TYP NOAA DIGITAL COASTAL LIDAR]. ELEVATION ARE HEIGHT ABOVE MEAN SEALEVEL SET BY NAVD 198

LOCATION MAP (N.T.S):





### Harrington Park Bio-swale

What exactly is a bio-swale? Typically the term refers to vegetated parking lot drainage ditches, very similar to residential rain gardens. The swale captures storm water runoff, filters out litter and other pollutants, and allows the rain water to slowly infiltrate back into the ground. By selecting all native perennial plants, these gardens are typically very low maintenance and provide many types of pollinators with sustenance.



Bioswale rendering courtesy of Rutgers Water Resources Program Green Infrastructure Guidance Manual

This project was completed by the Washington Township Green Team in fall of 2020 after being awarded a \$2,000 grant through the Sustainable Jersey Grants Program funded by the PSEG Foundation. Special thanks go out to the Washington Township DPW and Hoffman's Supply as well for all of their assistance and support with the project.





Cactus Charly • Maple Leaf Diner • St. James's Gate Publick House • La Strada Nuova • Gian Marco Trattoria • Pita On Essex • Miti Miti • Ariyoshi for participating in

Thank you all for helping to advance sustainable take-out packaging options from the green teams of Maplewood, Millburn and South Orange, as well as Sustainable Jersey and the PSEG Foundation.







CITY OF LAMBERTVILLE ENVIRONMENTAL COMMISSION North Wildwood's SMOKE FREE UBLIC BEACHES & BOARDWALK

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### SUSTAINABLE BUSINESS FORUM

PREPARE FOR 2020















### **An Emerald Ash Borer (EAB) Information Session**

presents...

EWING TEAM an Maria

EWING EAB Partnership

Don't wait until it is too late to save your ash trees! Come to the Ewing Green Team's February meeting to learn from the experts about the EAB threat , how it will affect your property, options for managing your ash trees, and potential solutions.

#### Wed, Feb 22nd at 6:30 p.m.

**Ewing Senior and Community Center** 999 Lower Ferry Rd, Ewing EAB FACTS

The EAB is a non-native invasive pest that attacks our native ash trees. It will kill 99% of them. It has recently been discovered in NJ.



We make things work for you

For more information go to ewinggreenteam.org



### SUSTAINABLE JERSEY GRANTS PROGRAM



## New Funding Cycle Announced!

- \$200,000 is available to New Jersey municipalities participating in the Sustainable Jersey program
- \$2k, \$10k and \$20k grants for sustainability projects and green team support

Informational	Application	Award	Performance	Learn More & Apply
Webinar	Deadline	Notifications	Period	
1-2pm on Thursday, <b>December 8,</b> <b>2022</b>	By 11:59pm on Friday, <b>February 10,</b> <b>2023</b>	By <b>early April</b> 2023 with an event in <b>early</b> May 2023	<ul> <li>10k Grants:</li> <li>18 months</li> <li>2k Grants:</li> <li>12 months</li> </ul>	USTAINABE JEREBER



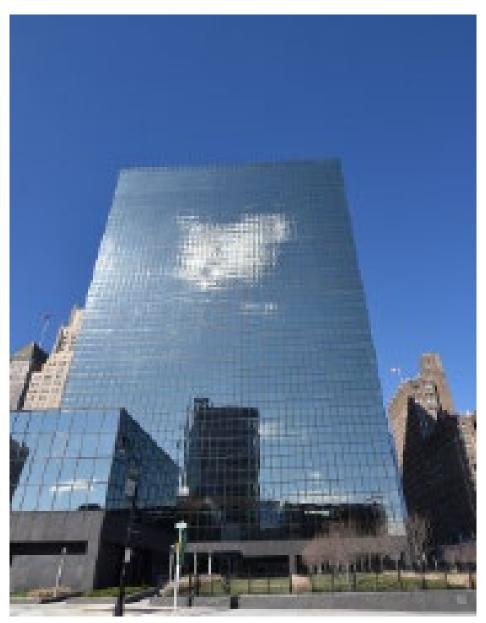


# Navigating the Sustainable Jersey Grants Program

Sustainable Jersey

Maria Spina Manager PSEG Foundation

November 15, 2022



### The PSEG Family of Companies

- PSEG
- PSE&G
- PSEG Power LLC
- PSEG Long Island

PSEG is a Fortune 500 company included in the S&P 500 Index and has been named to the <u>Dow Jones</u> <u>Sustainability Index for North America for 14</u> <u>consecutive years</u>.

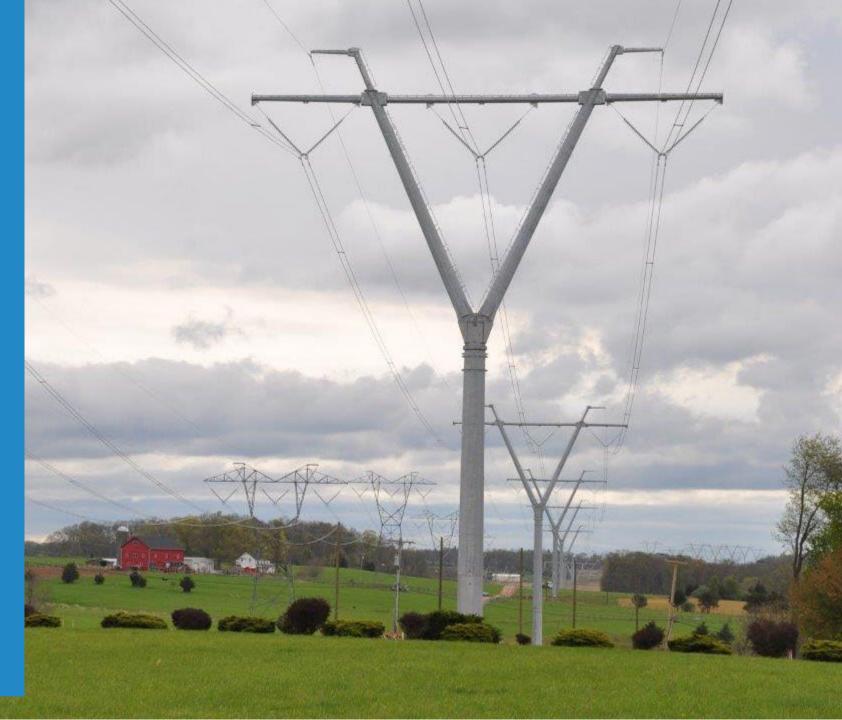
### PSEG'S VISION & MISSION

### **Our Vision**

Powering a future where people use less energy, and it's cleaner, safer and delivered more reliably than ever.

### **Our Mission**

Be a positive force in a changing world by providing an infrastructure to access safe, affordable, reliable and cleaner energy; Work toward a carbon-free economy; Empower the lives of our customers, our communities, our workforce and other stakeholders; Embrace diversity and inclusion, and promote equitable and ethical behavior.



### **PSEG Sustainability and ESG Summary**

### **PSEG Leadership**

- Joined the U.N.-backed Race to Zero and Business Ambition for 1.5°C campaigns
- PSE&G's Clean Energy Future programs approved to invest \$2B to decarbonize the NJ economy via Energy Efficiency, EV infrastructure, and AMI
- Accelerated PSEG's climate vision for Net Zero GHG emissions to 2030 for scopes 1 & 2
- PSEG will set and validate GHG emission targets for scopes 1, 2 and 3 using science-based targets by September 2023
- PSEG generating fleet is a Top 10 U.S. producer of carbon-free energy and is coal-free
- PSEG owns 25% of Ocean Wind 1, NJ's first Offshore Wind farm and has submitted proposed solutions into NJ's OSW transmission RFP
- ~\$1B of regulated solar investments
- PSEG 2021 Sustainability and Climate Report
- PSEG Diversity, Equity & Inclusion Report
- PSEG ESG Performance Report
- PSEG ESG Disclosures

### **Policies & Goals**

- PSEG is a vocal advocate for an economy-wide price on carbon and preservation of our existing carbon-free nuclear generating fleet
- Committed to rigorous oversight of political contributions and transparency in disclosure
- Diversity, Equity & Inclusion Commitment
- Human Rights Policy
- LGBTQ+ Inclusion Pledge
- PSEG's long-term ESG goals and business strategy are aligned with many of the U.N.'s SDGs as indicated by the colored boxes below

### BUSTAINABLE G ALS



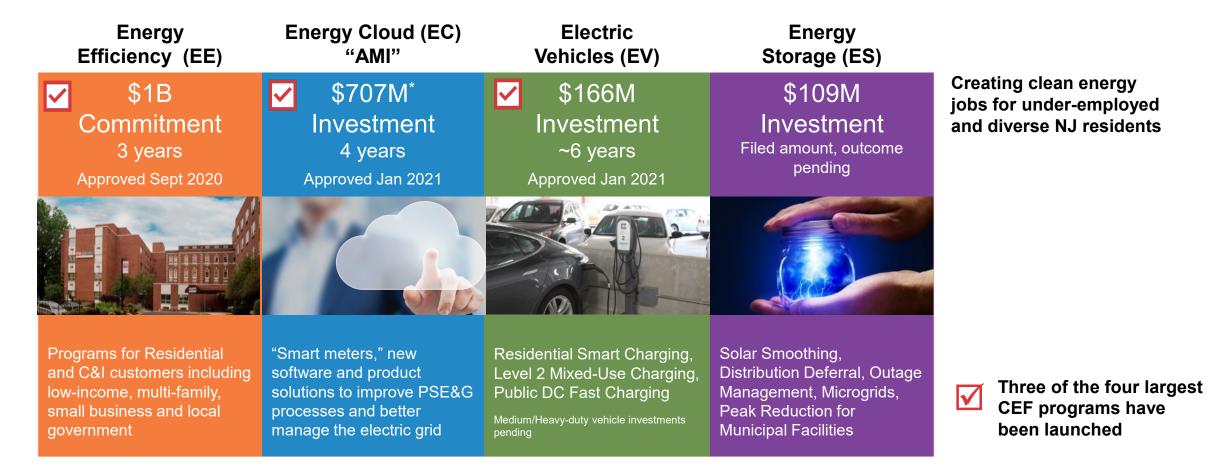
### **Recognition & Memberships**

- PSE&G won the 2022 EEI Edison Award, the electric utility industry's highest honor
- Named to the Dow Jones Sustainability Index North America for 14 years in a row
- Highest ranked Utility on Newsweek's 2022
   America's Most Responsible Companies
- PSE&G named a 2022 ENERGY STAR<sup>®</sup> Partner of the Year - Energy Efficiency Program Delivery; PSEG LI named for Sustained Excellence



PSE

### **Clean Energy Future programs focus on reducing customers' energy consumption**



PSEG \*CEF-EC/AMI Program is \$707M, additional rate base is ~\$600M given historical annual meter spend of ~\$30M.



### **Corporate Citizenship**

**Corporate Social Responsibility & PSEG Foundation** 





### PSEG Foundation & Corporate Social Responsibility

- May 2022 PSEG Ranked No. 1 Utility in 100 Best Corporate Citizens in 2022 (No. 8 Overall on the List)
- April 2022 PSEG Foundation announces new strategic pillars
- June 2022 PSEG Foundation's Neighborhood Partners Program
- March 2021 PSEG Foundation grants \$1 million to three HBCU's
- 2020 2021 PSEG Foundation committed \$2.5 million to support medical, social and economic needs of our communities
- CIANJ Companies That Care Award
- PSEG Foundation & PSEG volunteers KaBoom build (<u>https://www.youtube.com/watch?v=4Q6e2y9VJHE</u>)





### **PSEG Foundation & Sustainable Jersey**

- The PSEG Foundation underwrites funding to the Municipal Grants Program
- PSEG Foundation has provided \$2.9M in operating and small grants program funding for municipalities and schools
- Municipal small grants \$20k, \$10k, \$2k
- School small grants \$10k, \$2k
- 464 out of 565 NJ municipalities participate - 215 certified





### **Sample Projects**

- The PSEG Foundation's support has been integral to building the SJ program and providing critical community benefits.
- Enabling communities to implement local projects that collectively have a significant statewide impact.
- Promote Environmental Stewardship
- Sustain and strengthen communities
- Create the next generation of environmentally, sustainably, and energy focused informed and concerned citizens





"Incorporating Green Infrastructure Demonstration Projects into the Elizabeth MicroFarm and Environmental Center"

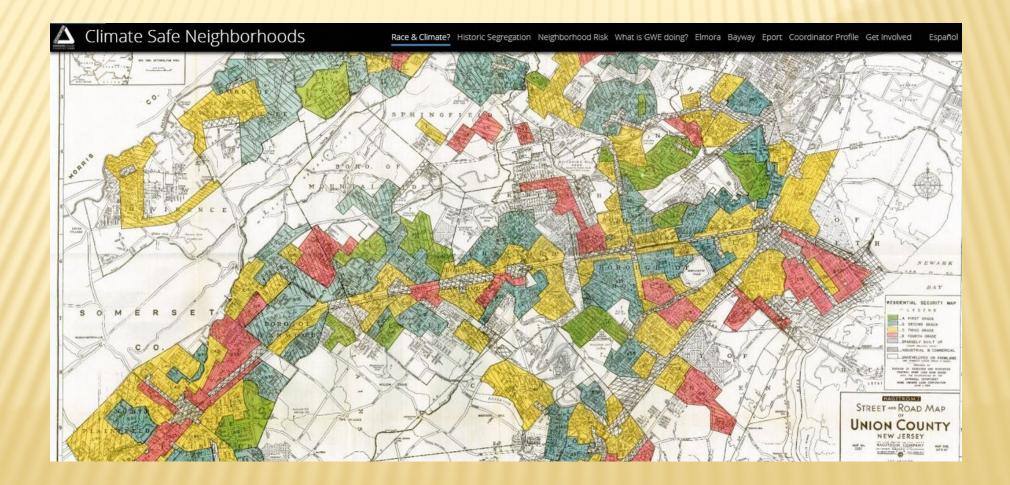
#### What is GROUNDWORK ELIZABETH





- Part of a network of 'Trusts' located in Underserved urban communities throughout country
- Goals are to foster healthy, greener, more sustainable and equitable communities.
  - PROGRAMS
- **\* Active Living & Healthy Communities**
- **\*** Climate Safe Elizabeth and Environmental Justice
- Youth Green Team & Environmental Advocacy
   Conservation and Restoration & Urban Waters & Trails
- **×** Green Infrastructure & Workforce Development

#### ELIZABETH, N.J.: URBAN COMMUNITY IN NEED REDLINING IN UNDERSERVED NEIGHBORHOODS



#### ELIZABETH, N.J. : URBAN COMMUNITY IN NEED

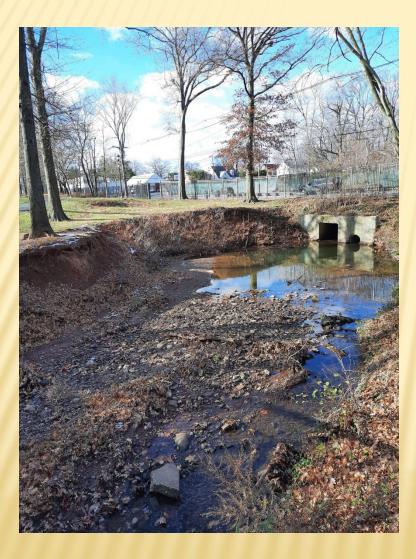
× Shortage of *environmental justice* in redlined neighborhoods which lead to:

More flooding events
Heat islands
Poor air quality



#### **× NEED MORE COMMUNITY INPUT and ENGAGEMENT**

#### **ISSUE: FLOODING AND WATER QUALITY**





- Trotters Branch restoration project and streambank maintenance to improve storm water runoff and water quality
- Water quality testing with an educational component taught by our partners at NJ Fish & Wildlife is a must for all our youth programs.
- Green Infrastructure projects include downspout planters and rain garden installations.







#### **ISSUE: AIR QUALITY AND HEAT ISLANDS**





- Air quality studies are a large part of Groundwork Elizabeth and the CSN program.
- Last year we did an air study with help from Rutgers with our partners in Jersey City & Newark simultaneously to map heat islands.
- Currently we are mapping air quality along the port and our Climate Safe Task Force, mostly Elizabeth youth will present findings to the community to advocate for policy change.





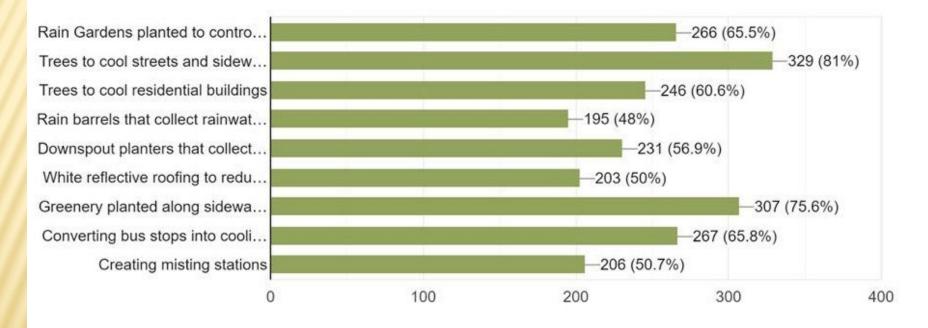




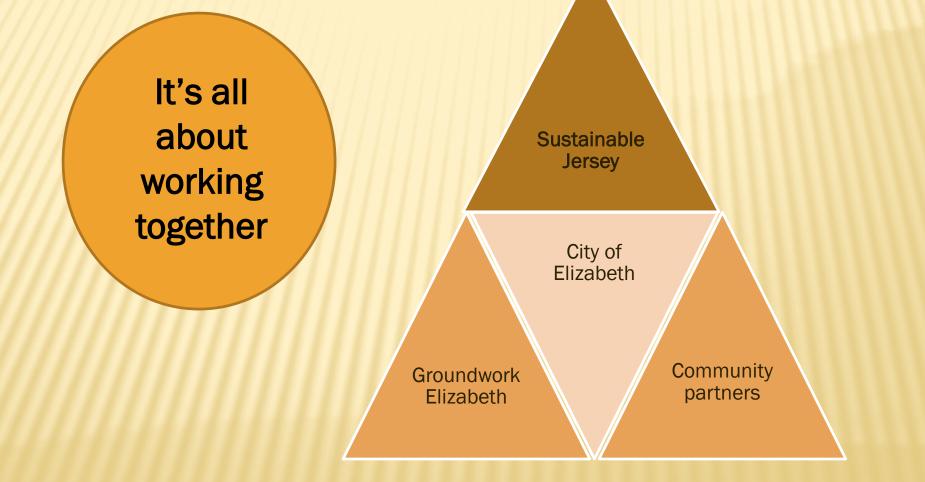


## **OUR COMMUNITY, WEIGHING IN....**

If the city were to build projects that could cool or dry your neighborhood, which of the following would you like to see? (check all that apply) 406 responses



## SO HOW DO WE MAKE AN IMPACT?



### WHO WERE OUR PARTNERS?



## WHAT DID WE DO FOR THE \$20,000 GRANT

- In partnership with local environmental non-profit, Groundwork Elizabeth, the City of Elizabeth implemented five (5) Green Infrastructure Demonstration Projects at the Groundwork Elizabeth MicroFarm
- 1. four rain barrels,
- 2. a 10' x 20" rain garden,
- 3. downspout planters, an appropriately sized 278 gallon cistern, and
- 4. a green roof.
- 5. Signage
- 6. Community and youth inclusion

## CISTERN





# **BAIN GARDEN**





# **GREEN ROOF**





# SIGNAGE

#### GROUNDWORK ELIZABETH MICROFARM





Micro farms are small-scale, high-yield, sustanaby-minded farms that are generally worked by hand rather than using large machaney and require far less land than the average commercial or family farm hybrially under five acres. Micro farms are often located in urban or suburban areas.

Initial growing space encourages micro senses to be creative about the crops they from and the ways in which they can recease produce yields often and crops. Despite statianability and assessmal crops. Despite their size, micro farms have the potential to produce an enormous amount of food per acre.

NOW UNDER CONSTRUCTION! GROUNDWORK ELIZABETH MICROFARM GREEN INFRASTRUCTURE DEMONSTRATION PROJECT

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 THIS PROJECT WAS MADE POSSIBLE

 BY A \$20,000 SUSTAINABLE JERSEY GRANT

 FUNDED BY THE PSEG FOUNDATION

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#### **MAYOR'S YOUTH COUNCIL**



The Mayor's Youth Council is a youth led initiative where the youth from Elizabeth meet monthly with Mayor Chris Bollwage to discuss their ideas for environmental changes within the city. Last year with the Mayor's help the Mayor's Youth Council has over 500 trees planted throughout the city. Lately the focus is on clean air and policy changes and a reduction in Pm 2.5 particulate matter.



#### YOUTH PARTICIPATION. OUR NEXT GENERATION



### YOUTH PARTICIPATION, OUR NEXT GENERATION



#### YOUTH PARTICIPATION, OUR NEXT GENERATION







## NOTES OF WHAT WE DID ...... WHY US?







- The Rain Garden was built adjacent to the Library parking lot and immediately relieved chronic flooding issues.
- Interpretive signage informed the MicroFarm visitors as they navigate the site and experienced the Green Infrastructure Demonstration projects.
- Visitors now understand the role of Green Infrastructure in stormwater management and how it reduces flooding and other important environmental, social, and economic benefits.

## ADDED BENEFITS





- The Groundwork Elizabeth Green Team (youth ages 14-24)received site specific training and facilitated the installations.
- \* A Guide to Stormwater Management for the Home, School or Office (brochure and door hang) were completed and were distributed to visitors and residents nearby to the Groundwork Elizabeth MicroFarm.

#### **NEXT STEPS TO CONTROLLING FLOODING: THE MICRO FOREST**

Groundwork Elizabeth in partnership with the NJ Conservation Foundation built the first MicroForest in NJ. We plan on building 3-4 more over the next year.







#### **URBAN MICRO FORESTS**

**CLIMATE CHANGE MITIGATION & BIODIVERSITY RESTORATION** 

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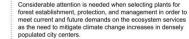
Around the world, there's a growing movement to create tiny forests in cities to improve their livability and help fight climate change. The idea is simple - take brownfield sites, amend the soil, plant them densely with a wide variety of native seedlings, and let them grow with minimal intervention. The result is complex ecosystems that grow quickly and are perfectly suited to local conditions. Micro forests do most of the things large forests do: absorb carbon from the air, soak up storm water, provide habitat for wildlife, cool the air in summer and they can also help muffle city noise. As the nation's most urbanized state, New Jersey has many places just perfect for tiny forests.

**URBAN MICRO FORESTS GRO** 



#### FOSTERING ECOSYSTEM SERVICES

Urban micro forests provide valuable ecosystem services such as air pollution removal, carbon storage, oxygen production, and stormwater runoff prevention. The species, size and distribution of the trees are significant factors that determine the present and future supply of ecosystem services.



#### FUNCTIONAL BENEFITS OF URBAN FORESTS

- Carbon Sequestration: Trees reduce the carbon in the atmosphere by sequestering it in new growth every year. The amount of carbon annually sequestered increases with the size, age, and health of the trees. Carbon storage has attracted significant attention due to climate change.
- Oxygen Production: Oxygen is needed by all humans and wildlife and is one of the most commonly cited benefits of urban trees.
- Climate Management: Urban vegetation provides direct and indirect benefits. While providing shade, trees also undergo the process of evapotranspiration which regulates heat and cools the air.
- Air Pollution Removal: Air quality is improved by reducing air temperature, directly removing pollutants from the air through tree leaves and offsetting carbon dioxide emissions (reducing energy consumption in buildings consequently reduces air pollutant emissions from the power sources).
- Stormwater Management: Surface stormwater runoff can cause concern in many urban areas as it can contribute to the pollution streams, wetlands, rivers, lakes, and oceans,
- Energy Savings: Trees reduce building energy use in warm months and allow warmth from sunlight in winter while protecting from wind.













