

Sustainable Jersey Small Grants Cycle for Energy Related Projects

September 19, 2017

Presented by: Samantha McGraw, Program Manager, Nancy Quirk, Energy Program Manager, Tony O'Donnell, Economist, and Kaitlyn Vollmer, Small Grants Coordinator



Presenters



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1. Overview of Cycle 2. Use of Funding & Example Projects 3. Eligibility Requirements 4. Application & Live Walk Through 5. Required Attachments 6. Evaluation Criteria 7. Reporting Requirements 8. Q&A









The Gardinier Environmental Fund is contributing \$150,000 to support a Sustainable Jersey Small Grants Program cycle for municipal governments and public school districts focused on energy conservation, efficiency and renewable energy

Available Funding



This 2017 Small Grants Cycle is underwritten by the Gardinier Environmental Fund:

- Two (2) \$30,000 grants
- Nine (9) \$10,000 grants

At least 50% of the available grant funding pool will be reserved for awards to certified municipalities and school districts with certified schools.

An applicant is only eligible to apply for and receive **one** grant. However, collaboration on a project between municipalities and schools is encouraged.

Use of Funding

Grant Project Categories



The grant can be used in combination with NJ Clean Energy Program Incentives **18 month implementation period**



Lighting Upgrade Projects are Ineligible!

Building Efficiency



Geothermal HOT

Cool roofs





Zero Net Energy goals



Building Efficiency Upgrades: Upgrades to municipal buildings to improve the efficiency of either thermal energy or electricity use. The grant can be used in combination with NJ CEP funds, typically the customer share of a Direct Install project. Typical building improvements include lighting, controls, envelope improvements, and capital upgrades to HVAC and related equipment.

Innovative Financing ideas

- **ESIPs**
- **PACE** programs



In addition to the initial step of an energy audit (LGEA cost is covered 100% by the NJ Clean Energy Program!!), keep in mind the numerous other incentives offered by the State of New Jersey and utility companies to help fund energy efficiency upgrades.

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PROGRAM	INCENTIVE LEVEL	TYPE OF EQUIPMENT
NJCEP Direct Install	 Existing facility (peak demand <200kW) Incentive pays 70% of cost of installed efficiency measures (equipment) Incentives paid directly to installer 	 Lighting (interior lighting) HVAC Refrigeration Motors/Variable Frequency Drives
NJCEP Lighting (interior and exterior building, parking lot, recreational area)	 Fixed incentive levels Pre-approval REQUIRED <u>SmartStart Buildings Application Forms</u> Must contact NJCEP 	 Pre-qualified list of lighting equipment Performance lighting (new fixtures) Prescriptive lighting (1-to-1 replacement of lighting fixtures) Lighting controls
NJCEP SmartStart Buildings	 Equipment incentives evaluated on a case-by-case basis Incentives based on type of equipment, efficiency, size, and end-use application <u>SmartStart Buildings Application Forms</u> Must contact NJCEP 	 Electric Chillers Gas Cooling / Gas Heating Electric Unitary HVAC Ground Source Heat Pumps Variable Frequency Drives Gas Water Heating Food Service Equipment
Utility Company Incentives (may complement NJCEP incentives)	 Offer on-bill repayment Offer 0% interest Incentives for local governments, local businesses, homeowners 	 Utility company incentives vary by service territory Links for utility incentives programs provided in Sustainable Jersey actions

Studies, Plans, & Engineering

Studies and Engineering: Initial work for advanced projects, particularly engineering and business planning initiatives for projects likely to advance into implementation.

Studies



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Somerset County Energy Council: Framework for Establishing a Somerset County Energy Savings Incentive Program

Final Report

March 17, 2015

Center for Building Knowledge New Jersey Institute of Technology Newark, N10/102 1982



Building Efficiency: White Roofs

White surfaces reflect heat

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• Reduce building energy use





www.epa.gov/heat-islands/compendium-strategies

Roofing accounts for 20% to 25% of land cover in urban areas



Building Efficiency: Green Roofs

Figure 4: Temperature Differences between a Green and Conventional Roof



On a typical day, the Chicago City Hall green roof measures almost 80°F (40°C) cooler than the neighboring conventional roof.

- Reduce urban heat island effect
- Reduce energy costs
- Increase building comfort
- Enhance stormwater management

Images: www.epa.gov/sites/production/files/2017-05/documents/reducing urban heat islands ch 3.pdf



Building Efficiency: Historic Buildings

- Older buildings were built to last!
- Buildings older than 1920 are MORE efficient than those built later in the 20th Century
- Built without modern heating and cooling, so they incorporate energy savings designs such as deep eaves, cross ventilation
- South-facing for solar gain

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- Old growth wood for windows can last for years and is more rot and warp resistant
- Requires specific expertise for energy retrofit



Renewable Energy: Solar Fire Stations

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- Solar Thermal for domestic hot water needs
- Solar plus storage / islanding for emergency operations
- Solar PV reduces energy costs
- Sustainable Jersey Actions
- On-Site Solar Action
- Storage and Islanding is an additional 10 points



raleighnc.gov/home/content/AdminServSustain/Articles/SolarThermal.html



www.ci.minneapolis.mn.us/sustainability/buildings-energy/sustainable-energy/sustainability_firestation1

Renewable Energy: Solar Powered Bus Stop Shelters



- Rechargeable battery pack
- Motion sensor night lighting

Images: www.handi-hut.com; inhabitat.com/solar-powered-bus-shelter-unveiled-in-san-francisco/

- LED safety lighting
- No utility wiring or construction disruption
- WiFi routers



Resilience: Solar + Storage



twitter.com/psegnews/status/716052526446022660

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- Solar canopy on parking lot
- Rooftop solar on school
- Battery Storage
- Community shelter and warming station

- Hopewell Valley Central High School
- PSE&G Solar 4 All Program/Solar Storage Pilot Project
- National recognition by SEIA/SEPA at Solar Power Expo

Electric Vehicle Charging Stations: "It Pays to Plug In"

- NJ DEP and NJ BPU grant program
- Workplace charging stations (public, private, educational, government)
 - Up to \$250 per Level 1 Charger
 - Up to \$5,000 per Level 2 Charger
- First come, first served
- Sustainable Jersey Actions
 - Public Charging Infrastructure
 - Make Your Town EV Friendly

drivegreen.nj.gov/programs.html

EV Friendly //programs.html

NOTE: Grant applicants may not be participating in PSE&G workplace charging program.



Electric Vehicle Charging Stations: Workplace Charging





pseg.com/info/media/newsreleases/ 2016/2016-07-27.jsp#.V8bhKnokavl

PSE&G Workplace Charging at TCNJ

- PSE&G provides charging equipment
- Organization pays:
 - Installation costs
 - Ongoing maintenance
 - Cost of electricity used



NJ Charging Challenge: Electrify Your Workplace



The New Jersey Department of Environmental Protection (NJDEP) wants to recognize the employers in New Jersey that are making their workplaces "*Electric Vehicle-Ready.*" By providing workplace charging for electric vehicles, these employers are becoming more sustainable and are helping to reduce emissions of air pollutants from cars, improve our environment and improve the bottom line for their employees that drive to work. All employers are invited to participate, whether private, government, educational or non-profit.

Apply by September 29, 2017!



Renewable Energy: Solar Parking Lot Canopy + EV Charging Station

Benefits

- Reduce urban heat island
- Keep vehicles cool in summer
- Protect vehicles from rain, snow
- Utilize unused space
- If building rooftop not suitable for solar
- Nearby to end user of energy
- Can be paired with EV chargers

Design Elements

- Significant construction project
- Experienced engineering / architectural partners
- High clearance
- Water, snow, ice management
- Vehicle protection piers



San Diego Zoo Solar Parking + EV Charging

Image: sdge.com/newsroom/press-releases/2013-10-13/costsavings-and-environmental-benefits-drive-growth-electric



Alternative Fuel Vehicles

- Code enforcement vehicles
- Police vehicle fleet
- Light and heavy duty trucks
- Bus fleet
- Options
 - Electric
 - Propane
 - Natural Gas

Alternative Fuel Vehicles

Electric, Propane, Natural Gas

Benefits

- Cleaner burning
- Air quality/health benefit
- Lower noise level
- Reduced maintenance costs
- Lower greenhouse gas emissions
- Sustainable Jersey Actions
 - Purchase AFV
 - Vehicle Conversions
 - Carbon Footprint



- Nation's largest fleet

 480,000 school buses in operation
- Largest form of mass transit
- Alternative fuel vehicles cost more than diesel
- Vehicle conversion
- Save 40-50% on fuel costs
- Sustainable Jersey Action
 - School Carbon Footprint

Alternative Fuel Vehicles

Electric, Propane School Buses

Healthier Air Reduced CO2 emissions Quieter Less expensive O&M



Images: afdc.energy.gov/uploads/publication/case-study-propane-school-bus-fleets.pdf and www.mlive.com/news/ann-arbor/index.ssf/2017/06/electric_school_bus.html

Fleet Route Optimization: Telematics

- Planning optimal routes maximizes efficiency
 - Reduces miles driven
 - Reduces stops at signals
 - Reduces time spent in traffic
 - Reduces number of vehicles needed for routes



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Images: sussex.nj.us/Cit-e-Access/webpage



For more information:

 U.S. Department of Energy Alternative Fuel Data Center

afdc.energy.gov/conserve/behavior_strategies.html

Eligibility Requirements



1. Be a New Jersey municipal government or school district.

2. Registered with Sustainable Jersey or Sustainable Jersey for Schools **AND** have an active **Green Team in accordance with program requirements**.

3. Proposed grant projects that would be eligible for funding or rebates available from the New Jersey Board of Public Utilities Clean Energy Program (NJCEP), regional utility company programs, or other state government incentive programs **must leverage these resources in addition to the Sustainable Jersey small grant as part of the overall project budget.**

4. Lighting upgrades are not eligible for funding

5. Joint municipal and school district projects are encouraged.





1. Applicants already awarded a \$10,000-or-more grant in previous **2017** Sustainable Jersey grant cycles are **NOT** eligible to apply.

2. Applicants awarded \$10,000-or-more Sustainable Jersey grant in cycles prior to 2017 must have **completed the grant project**, **submitted the final report and financial documentation**, and **received confirmation from Sustainable Jersey that the final report has been approved** to be eligible.

Year Grant Awarded	Amount	Grant Status	Eligible to Apply for Grant
	\$10,000-or-more	Open	No
2017		Closed +	No
2017	Under \$10,000	Open	Yes
		Closed +	Yes
	\$10,000-or-more	Open	No
2016 or earlier		Closed +	Yes
2016 of earlier	Under \$10,000	Open	Yes
		Closed +	Yes

Application

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Sustainable Jersey Small Grants Program for Energy Initiatives Funded by The Gardinier Environmental Fund

2017 Municipality and School District Grant Application Package

Announcement Date: Monday, August 21, 2017 Application Due Date: Tuesday, October 31, 2017 Link to Application: https://app.wizehive.com/apps/Gardinier2017

Questions regarding the Small Grants Program should be directed to: grants@SustainableJersey.com or 609-771-3189.

General questions regarding the Sustainable Jersey Municipal Program should be directed to: info@SustainableJersey.com or 609-771-2938.

General questions regarding the Sustainable Jersey Schools Program should be directed to: schools@SustainableJersey.com or 609-771-3427.

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The application information packet can be downloaded from the Grants and Resources Page of the Sustainable Jersey or Sustainable Jersey for Schools website.

Questions: Kaitlyn Vollmer 609-771-3189 grants@sustainablejersey.com



Online Application & Deadline

Online Application Deadline: Tuesday, October 31 at 11:59pm





Sustainable Jersey & Sustainable Jersey for Schools

2017 Gardinier \$10,000 and \$30,000 Grant Application

For more information about the Sustainable Jersey Small Grants Program cycle, <u>click here for the</u> information packet.

LOGIN:

Email		
Password		
(Login	Forgot Password?
SIGNUP		
Email		
Password		
Confirm Password		
	Signup	

There is one application for municipalities and schools. The online application is available here: https://app.wizehive.com/appform/login/Gardinier2017

We will review the online application later in this webinar.



Application Sections

Basic Municipal or School/District k	background information & contacts
--------------------------------------	-----------------------------------

Eligibility Screening				
1. Sustainable Jersey/Sustainable Jersey for Schools registration	3. Previous grant requirements			
2. Green team requirements				
Proposed Project				
1. Project title & description	4. Project impact			
2. Project team members & resumes	5. Budget narrative			
3. Action plan & timeline	6. Evaluation			
Attachments				
1. Green team documentation*	3. Detailed budget			
2. Grant authorization	4. Optional Information			

*Not required from Sustainable Jersey/Sustainable Jersey for Schools certified municipality or schools or districts with certified schools

Attachments: Green Team Documentation

- Have a green team that meets the action requirements.
- List of members.
- Summary of green team activities. If just formed, describe future plans.



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Applicants that have achieved Sustainable Jersey/Sustainable Jersey for Schools certification do not have to provide this information

Attachments: Grant Authorization

- Provide documentation that the municipality or district/school is authorized to apply for the grant.
- Examples: School Board resolution, letter from superintendent, B.A., or school principal

Resolution of Support from Local Governing Body Authorizing the Sustainable Jersey Grant Application

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Some municipalities have requested a sample of the resolution that must accompany their Sustainable Jersey Small Grants Program application. The purpose of the resolution is to affirm that the governing body approves of the proposed grant project/activities. A signed and certified resolution should be included with the grant application. Any standard resolution in support of applying for a grant will suffice. We do not require that you use this format.

SAMPLE RESOLUTION [Municipality] Resolution of Support Authorizing the Submission of a Sustainable Jersey for Schools Grant Application

Some school districts have requested a sample of the resolution that must accompany their Sustainable Jersey for Schools Small Grants Program application. The purpose of the resolution is to affirm that the Board of Education approves of the proposed grant project/activities. A signed and certified resolution should be uploaded through the online grant application. Any standard resolution in support of applying for a grant will suffice. We do not require that you use this format.

> SAMPLE RESOLUTION [Insert Name of School Board]

NOTE: This is NOT the same as the resolution to register with Sustainable Jersey/Sustainable Jersey for Schools



Attachments: Detailed Budget

A sample budget template is available for download on our website(s) and within the online grant application.

Eligible Expenses

• Staff stipends, consultant/contractor service fees, equipment, project supplies.

Ineligible Expenses

Facilities/administrative (overhead) costs





- If the proposed project is potentially eligible for NJCEP or utilitysponsored incentive programs, you must document communication with the relevant NJCEP and utility-sponsored incentive programs and receive confirmation that the project does or does not qualify for existing incentives.
- Availability of utility-sponsored incentive programs and how they relate to NJCEP programs varies by utility.

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 Confirmation of the dollar amount of the funding is not required, just the eligibility of the project. For example, an email communication between you and the relevant NJCEP program manager would suffice if it clearly states whether or not the project qualifies for existing incentives.

See Section J of the application packet for more information





Proposals are evaluated based on...



Impact of proposed project

Likelihood of success

Applicant capacity

Partnerships & leveraging



 Does the proposed project lead to a new best practice?

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 Clearly articulate in your project description.



TIP: Project Selection

- Identify all requirements associated with the project
- Consider community dynamics when crafting your proposal so it's successful
- Consult stakeholders before settling on a plan
- Understand your capacity



- What type of project is being undertaken?
- What are the expected outcomes?
- What is the importance of this project in meeting sustainability goals of the municipality, school district, etc.



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Evaluation Criteria: Likelihood of Success

The action plan should:

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- Clearly list the steps needed to complete the project
- Identify accurate estimates of the time needed to complete each step
- Be realistic and likely to be successfully accomplished
- The budget is realistic , includes only eligible and reasonable expenses, and leverages incentive funding (where applicable).

TIP: Action Plan & Timeline

- Consider administrative delays, such as the procurement process and plan time for paperwork
- Research the products you plan to use
- Set deadlines and adhere to them
- Try to plan for the unexpected always have a "plan B"
- Include plans for how the success of the project will be shared with the community
- Detailed budget consistent with budget narrative
- Include shipping costs



Demonstrate commitment to sustainable practices, leadership capacity through an active green team, and success at managing grant projects in accordance with program requirements





Evaluation Criteria: Partnerships & Leveraging

 Leverage additional external resources that may be available for project implementation



TIP: Building Your Team

 Include representation from stakeholder groups that will be involved/impacted by the implementation of the project.







Grant recipients will be announced:

Mid-December 2017

Fifty percent (50%) of the grant funds will be disbursed at the beginning of the grant period.

The remainder will be transmitted upon completion of the grant funded activities and acceptance of the recipient's final report.

Reporting Requirements

Nine-month Interim Report: September 30, 2018

• Project description.

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- Completed, delayed, and upcoming project milestones.
- Estimated project completion date.
- A list of project expenditures paid for by the grant funds to date.

Final Report: June 30, 2019

- Information about the project's completion including a summary, lessons learned, impact on the community and final expenses.
- At least TWO photographs along with documentation depicting the grant project and/or related activities are required. Documentation that the Gardinier Environmental Fund and Sustainable Jersey were acknowledged as the project funders in project promotional materials and project signage.

Grant reporting will be completed online. Reminders will be emailed to the primary project contact in advance of the reporting submission deadline.



Additional Tips



- Templates for required attachments can be found on the Sustainable Jersey Gardinier Grant Cycle page and Sustainable Jersey for Schools Gardinier Grant Cycle page
- Lighting upgrade projects are INELIGIBLE
- NJCEP and utility-or-state-sponsored incentive programs must be utilized if your project qualifies and communications confirming if they do/do not will need to be submitted as part of the grant application

Application Deadline:

Tuesday, October 31 at 11:59pm

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Sustainable Jersey Hub Events

Distilling Sustainability

Tuesday, October 3, 2017, 6:00pm – 8:00pm

Little Water Distillery, 807 Baltic Avenue Unit B, Atlantic City, NJ

Network with other green team members, professionals and individuals in the sustainability field in the Atlantic-Cape May region. There will be time to briefly share what your green team has been working on, recent successes or something you are excited about.

REGISTER



New Jersey Mayors' Climate Summit

Saturday, October 7, 2017, 9:00am – 12:00pm Somerset (Franklin Township) Municipal Building 495 Demott Lane, Somerset, NJ 08873 REGISTER

Mayors and community Leaders across New Jersey have taken up the challenge of addressing climate change and implementing the Paris Accord at a local level. It is vital for our mayors and communities to take a leading role in preserving our environment and protecting the public health of our citizens. The day will consist of three panel experts who will discuss a pathway forward to enable New Jersey to succeed in the battle against climate change.



Sustainable Jersey Annual Luncheon

Tuesday, November 14, 2017 12:00pm – 2:00pm The Crown Ballroom, Sheraton Atlantic City

Join us on November 14, 2017 in Atlantic City. The 2017 Sustainable Jersey municipal awards will be the pinnacle event of the year, bringing together over 300 local and regional government officials, green team members, industry professionals and sustainability leaders. It's a fantastic opportunity to re-connect, collaborate and celebrate your collective achievements!

Highlights:

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- Pre-Luncheon Networking Session (10:30am Noon)
- Luncheon (Noon 2:00pm)
- Recognition of the 2017 Sustainable Jersey Certified Communities
- Conveyance of Special Awards

