

Community Energy Plan Grants: A Primer

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Presenters (in speaking order)

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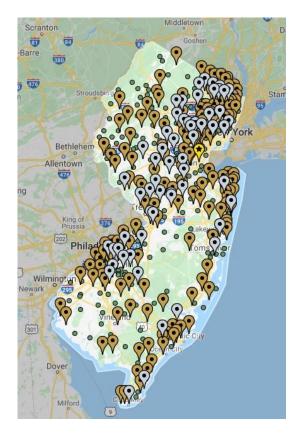
What is Sustainable Jersey?

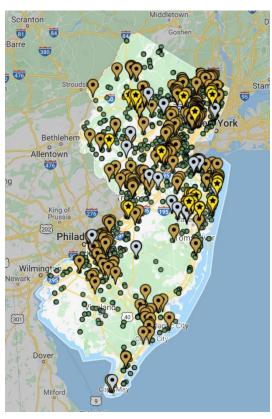
- Certification program for municipalities and schools
- Tools, resources, and guidance to help municipalities and schools become more sustainable
- Grants and funding for municipalities and schools
- Regional Hubs





Program Participants





Municipal Program

Schools Program

Municipal Program

- 460 (81%) participating
- 219 Certified
 - 155 Bronze
 - 64 Silver

Schools Program

- 374 (54%) of school districts
- 1025 schools participating
- 335 schools certified
 - 292 Bronze
 - 43 Silver



Municipal Energy Actions

	Energy Efficiency	Renewable Energy	Alternative Fuel Vehicles
Municipal Operations	 Energy Efficiency for Municipal Facilities Energy Tracking and Management 	 On-Site Geothermal System On-Site Solar System +10 pt storage/resilience + 5 pt solar thermal On-Site Wind System Buy Renewable Energy 	 Fleet Inventory Purchase Alternative Fuel Vehicles Meet Green Fleet Targets
Community Energy Use	 Energy Assistance Outreach Commercial Energy Efficiency Outreach Residential Energy Efficiency Outreach 	 Make Your Town Solar Friendly Municipally Supported Community Solar Community-Led Solar Initiatives Renewable Government Energy Aggregation (R-GEA) 	 Make Your Town Electric Vehicle (EV) Friendly Public EV Chargers Electric Vehicle Outreach



Gold Star in Energy

Municipal Operations

Municipal Buildings

- Energy efficiency
- Operations / equipment
- Green building policy

Municipal Fleet

- Fleet electrification
- Route optimization
- Telematics

GHG reductions

- 3.6% annually
- 10.8% over 3 years

Community Actions (two from each category)

Energy Efficiency

- Energy Assistance Outreach
- Commercial Energy Efficiency Outreach
- Residential Energy Efficiency Outreach

Renewable Energy

- Make Your Town Solar Friendly
- Municipally Supported Community Solar
- Community-Led Solar Initiatives

Transportation

- Make Your Town Electric Vehicle Friendly
- Public Electric Vehicle Chargers
- Flectric Vehicle Outreach

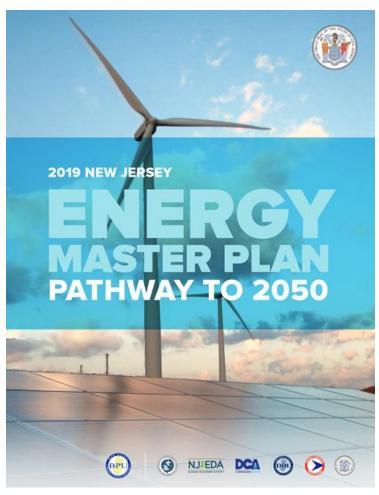
https://www.sustainablejersey.com/actions/gold-star-standards/





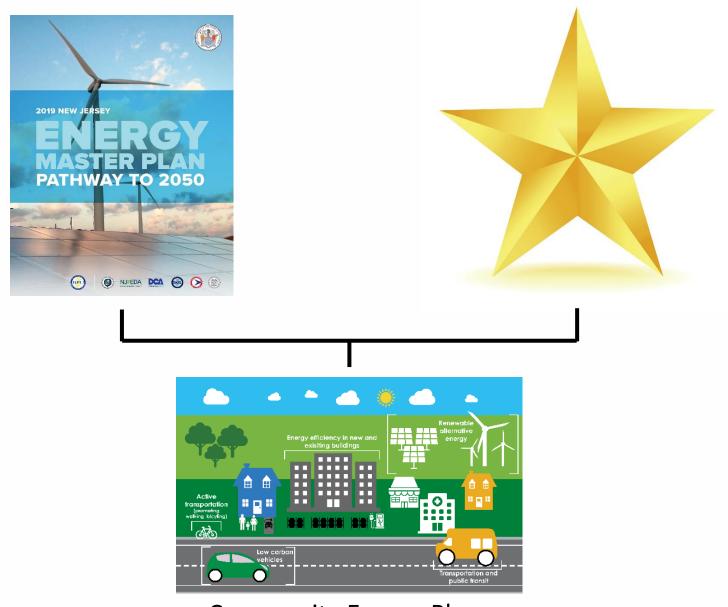


New Jersey Energy Master Plan



Strategies

- 1. Reduce Energy Consumption from Transportation
- 2. Accelerate Renewable Energy
- 3. Maximize Energy Efficiency and Conservation
- 4. Reduce Energy Consumption from Buildings
- 5. Modernize NJ's Energy System
- Support Community Energy Planning and Support Participation by Low- and Moderate-Income and Environmental Justice Communities
- 7. Expand the Clean Energy Innovation Economy



Community Energy Plans



What is a Community Energy Plan?

A tool for prioritizing community initiatives in:

- Energy efficiency
 - Commercial, industrial, government
 - Residential, multifamily

Transportation

- Passenger vehicles
- Government and business fleets
- Infrastructure

Renewable energy

- Zoning and permitting
- Outreach and education
- Renewable Government Energy Aggregation



Community Energy Planning . . .

. . . is a process that includes

- o municipal decision makers
- o community stakeholders
- community education and outreach

... helps organize to

- o reduce energy use
- o curtail greenhouse gas emissions
- o enhance energy resilience

... provides a timeline for

- o implementation of key initiatives
- o identification of funding sources



Community Energy Plan Grant Program



Community Energy Plan Grant

- Community-level action is essential to meet the Energy Master Plan goal of 100% clean energy by 2050. This program provides communities the opportunity to align local actions with EMP's goals.
- The Community Energy Plan Grant (CEPG) Program supports municipal action on climate change, with specific focus on energy resilience, renewable energy, and energy efficiency.
- The CEPG Program was redesigned to better prioritize low- and moderateincome and overburdened communities.
- All New Jersey municipalities are eligible for \$10,000, with overburdened municipalities eligible for larger grants and enhanced support.



Overburdened Municipalities

Overburdened Municipalities are eligible for additional support:

- Larger grant award of \$25,000 for community energy planning
- Outreach to identified Overburdened Municipalities to let them know about this grant opportunity
- Technical assistance to develop and submit applications for the CEP Grant
- Technical assistance in the creation of the Plan once the grant is awarded



Overburdened Municipalities Criteria

48 Overburdened Municipalities have been identified. To qualify, a municipality must meet both criteria below:

- The municipality has over 50% of its population living in an Overburdened Community (OBC) Census Block as defined by NJDEP pursuant to New Jersey's Environmental Justice Law, N.J.S.A. 13:1D-157.
- 2. The municipality meets one <u>or</u> both of the following criteria (either A or B):
 - a) Over 35% of the population is living under 200% of the poverty level according to US Census 2019 ACS data.
 - b) The municipality is categorized as "Distressed" according to NJDCA's based on their score using the New Jersey Department of Community Affairs Municipal Revitalization Index (MRI) score (a 50 or higher).



Overburdened Municipalities

Municipality	County	Municipality	County
Asbury Park City	Monmouth	Millville City	Cumberland
Atlantic City	Atlantic	New Brunswick City	Middlesex
Bridgeton City	Cumberland	Newark City	Essex
Buena Boro	Atlantic	North Wildwood City	Cape May
Camden City	Camden	Passaic City	Passaic
Cape May Point Boro	Cape May	Paterson City	Passaic
Chesilhurst Boro	Camden	Paulsboro Boro	Gloucester
City of Orange Twp	Essex	Penns Grove Boro	Salem
Clementon Boro	Camden	Perth Amboy City	Middlesex
Commercial Twp	Cumberland	Phillipsburg Town	Warren
East Newark Boro	Hudson	Plainfield City	Union
East Orange City	Essex	Pleasantville City	Atlantic
Egg Harbor City	Atlantic	Prospect Park Boro	Passaic
Elizabeth City	Union	Salem City	Salem
Fairfield Twp	Cumberland	Seaside Heights Boro	Ocean
Flemington Boro	Hunterdon	Trenton City	Mercer
Freehold Boro	Monmouth	Union City	Hudson
Harrison Town	Hudson	Victory Gardens Boro	Morris
Hi-nella Boro	Camden	Vineland City	Cumberland
Irvington Twp	Essex	West New York Town	Hudson
Lakewood Twp	Ocean	Wildwood City	Cape May
Lindenwold Boro	Camden	Woodbine Boro	Cape May
Long Branch City	Monmouth	Woodlynne Boro	Camden
Maurice River Twp	Cumberland	Wrightstown Boro	Burlington



CEP Grant Application

To apply, municipalities must complete the following:

- Review the list of high-impact strategies and select areas of interest
- 2. Provide a preliminary program budget
- 3. Submit a signed and dated municipal resolution documenting the governing body's approval of the application and commitment to implement the required community energy plan process must be included with the completed application form
- Must not have been awarded a community energy plan grant previously



Grant Requirements

Once funds are received, grantees must complete the following:

- 1. Based on the strategies identified in the application, the municipality must work to conduct an in-depth analysis of the EMP-based strategies for incorporation into its Plan
- 2. Conduct a public meeting to engage the community in the creation of the Plan
- 3. Finalize the Plan through formal adoption by the municipal governing body and submit a copy of the completed Plan to the Board
- 4. Reporting requirements for the grant are dependent on the amount awarded:
 - a) \$10,000 grant: submit one expenditure report at the end of the eighteen (18) month grant term
 - b) \$25,000 grant: submit both quarterly reports and a final report at the end of the eighteen (18) month grant term





Application Requirements

Appendix B: Required Atta	chments Checklist
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Note: Additional attachments not reflected here may be required and are identified throughout this application form.

Required Attachments for all Applications	Attached?
Completed Community Energy Plan Application Checklist (Appendix D)	□Yes □No
Preliminary Project Budget (Appendix E)	□Yes □No
Proof of Public Meeting and Municipal Resolution in support of grant application (Appendix F)	□Yes □No

https://njcleanenergy.com/cep

Community Energy Plan Application Checklist

Community Energy Plan Initiatives	Mark if interested
Strategy 1. Reduce Energy Consumption and Emissions from the Transportation Sector	
1.1 Adopt Supportive Zoning and Regulations for EV Charging Infrastructure	
Pass NJDCA's model ordinance specifying EV charging infrastructure as a permitted accessory use	
1.2 Train First Responders on EVs and EV Charging Infrastructure	
Require training on EVs and EV charging infrastructure for local first responders	
1.3 Train Non-Emergency Staff on EVs and EV Charging Infrastructure	
Initiate training on EVs and EV charging infrastructure for municipal code officials, etc.	
1.4 Purchase Alternative Fuel Vehicles	
Strategically replace gasoline/diesel municipal vehicles with EVs or other alternative fuel vehicles	
1.5 Improve Municipal Fleet Efficiency	
Replace older municipal vehicles with more efficient versions, downsize fleet, improve driver efficiency	
1.6 Install Public EV Charging Infrastructure	
Install public EV charging infrastructure with appropriate signage and safety/accessibility features	
1.7 Encourage Non-Municipal Fleets to Improve Efficiency	
Encourage fleet operators to improve fleet efficiency via electrification, downsizing, driver training	
1.8 Encourage Workplace EV Charging Infrastructure	
Encourage local businesses to install EV charging infrastructure; offer incentive such as "ribbon cutting"	
Other:	
Strategy 2: Accelerate Deployment of Renewable Energy and Distributed Energy Resources	
2.1 Adopt Supportive Zoning and Permitting for Private Solar	
Provide reasonable permitting standards and procedure for solar developers	
2.2 Post Solar Permitting Checklist	
Provide permitting checklist for solar developers on municipal website	
2.3 Adopt Zoning and Permitting for Community Solar	
Allow large-scale solar in some zoning districts; help community solar developers with permitting	
2.4 Train First Responders on Solar	
Require training on solar for local first responders	
2.5 Train Non-Emergency Staff on Solar	
Initiate training on solar for non-emergency municipal staff such as inspectors	
2.6 Install On-site Municipal Renewable Generation	
Host solar, wind, or geothermal project on municipal property	
2.7 Buy Renewable Electricity for Municipal Facilities	
Sign contract with third-party supplier to supply municipal facilities with renewable electricity	
2.8 Offer a Solar Employee Benefit Program	
Offer solar installation discount to municipal employees	
2.9 Institute a Community-wide Solar Purchasing Program	
Offer and promote solar installation discount to residents and/or businesses	
2.10 Implement Renewable Government Energy Aggregation (R-GEA) Procure third-party electricity supply for residents with high renewable content	

Strategy 3: Maximize Energy Efficiency and Conservation and Reduce Peak Demand	
3.1 Upgrade Energy Efficiency in Municipal Facilities	
Upgrade existing municipal facilities to be more energy efficient utilizing utility/NJCEP incentives	
3.2 Residential Energy Efficiency Outreach Campaign	
Host workshop, send letter to residents to learn about energy efficiency opportunities	
3.3 Commercial Energy Efficiency Outreach Campaign	
Host workshop, send letter to businesses to learn about energy efficiency opportunities	
3.4 Conduct Energy Efficiency Outreach to Large Energy Users	
Encourage large energy users in the community to improve energy efficiency in their facilities	
Other:	
Strategy 4: Reduce Energy Consumption and Emissions from the Building Sector	
4.1 Construct New Municipal Buildings as Model Green Buildings	
Encourage/require green building practices during construction of new municipal facilities	
4.2 Encourage Benchmarking and Commissioning for Existing Buildings	
Encourage large building owners to track energy usage, improve efficiency of current equipment	
4.3 Require Developers to Complete Green Development Checklist	
Require developers to submit completed Green Development Checklist with Site Plan Application	
4.4 Conduct Outreach Targeting New Construction in the Community	
Encourage developers to utilize NJCEP's New Construction Energy Efficiency incentive programs	
Other:	
Strategy 6: Support Community Energy Planning and Action with Emphasis on Encouraging and	
Supporting Participation by Low- and Moderate-Income/EJ Communities	
6.1 Make Community Energy Planning Inclusive	$\overline{}$
Ensure LMI residents are represented in energy planning processes	
6.2 Conduct Energy Efficiency Outreach to Low- and Moderate-Income Residents	
Offer education/outreach to encourage LMI residents to utilize energy efficiency programs	
6.3 Support Shared Mobility Programs	
Promote shared transportation networks that benefit LMI residents	
6.4 Support Low- and Moderate-Income Community Solar Subscriptions	
Ensure that local community solar projects reserve capacity for LMI residents	
6.5 Conduct Energy Efficiency Outreach to Community-Serving Institutions	
Encourage community-serving institutions to utilize state and utility energy efficiency programs	
Other:	
Strategy 7: Expand the Clean Energy Innovation Economy	
7.1 Adopt Energy Storage Policies	
Adopt standards for permitting battery energy storage systems	
7.2 Install an Energy Storage Project	
Install energy storage at municipal facilities; showcase project to the public	
7.3 Develop Local Microgrid	
7.3 Develop Local Microgrid	
7.4 Develop/Participate in a District Energy System	



CEPG Application Resolution

	[Municipality]
	RESOLUTION #
NJ CLEAN	RESOLUTION AUTHORIZING THE APPLICATION TO THE ENERGY PROGRAM COMMUNITY ENERGY PLANNING GRANT PROGRAM
	tainable community seeks to ensure that its environmental, economic and are balanced and mutually supportive; and
WHEREAS, [Mui generations; and	nicipality] strives to assure clean land, air and water for current and future
	Jersey's Energy Master Plan: Pathway to 2050 ("EMP") established that laction is necessary to achieve the state's goal of 100% clean energy by 2050;
	New Jersey Board of Public Utilities has created a Community Energy Plan Grant nicipalities to develop a community energy plan to meet the goals of the state's lan; and
	nicipality] is invested in developing a community energy plan to help the state of 100% clean energy by 2050; and
invest in renewa the state's Energ	Community Energy Plan Grant program will help [Municipality] to plan for and ible energy and to work towards a better environment for all residents by using by Master Plan (EMP) as a guide to develop sustainable strategies that increase aduction, reduce energy use, and cut emissions.
	e [Municipality's Governing Body] of [Municipality] has determined tha should apply for the aforementioned Community Energy Plan Gran
	unicipality] will commit to providing staff support for the duration of the rgy Planning process, including for gathering of relevant data and for convening lic meetings.
of New Jersey, a	IT RESOLVED, that [Municipality's Governing Body] of the [Municipality], State uthorizes the submission of the aforementioned application to the NJBPU rgy Plan Grant program.



After Receiving the Grant

- 1. Workplan Template
- 2. Financial report to BPU
- 3. Final Community Energy Plan
- 4. Adopt Plan by municipal resolution



Workplan Template

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https://www.sustainablejersey.com/resources/publications/energy-guidebooks/#c4479

2.7 Buy Renewable Electricity for Municipal Facilities
2.8 Offer a Solar Employee Benefit Program

2.9 Institute a Community-wide Solar Purchasing Program

1.2 Train First Responders on EVs and EVSE

IMPACT:	N/A
DIFFICULTY:	ell.
CHECK IF DOING:	

To further public confidence and maintain emergency preparedness, require training on electric vehicles and associated infrastructure for local first responders.



Measures of Success

- Training held for each relevant department
- · Policy established for ongoing training



Resources

- Sustainable Jersey's <u>Make Your Town Electric Vehicle</u>
 <u>Friendly</u> action
- NFPA's Alternative Fuel Vehicles Safety Training Program



Potential Stakeholders

- · Local fleet managers that handle EVs
- · Neighboring municipalities

2.8 Offer a Solar Employee Benefit Program

IMPACT: • • •
DIFFICULTY:
CHECK IF DOING:

Offer a collective solar purchasing program for municipal employees, promoted via existing employee communication network. This type of program utilizes scale and low customer acquisition costs to make installing solar more affordable for participating employees. Schools and municipalities can collaborate to form a larger pool of potential customers, even including student families in the offer.



Measures of Success

- 10% of employees get a quote through purchasing program
- 5% of employees participate in the program



Resources

- · Sustainable Jersey's Community-led Solar Initiatives action
- NREL's Solarize Guidebook



Potential Stakeholders

- Municipal employee associations
- · Public school district
- Local solar developer(s)
- Parent-teacher associations

3.1 Upgrade Energy Efficiency for Municipal Facilities

IMPACT:	• • •
DIFFICULTY:	-0
CHECK IF DO	ING:

Upgrade municipal facilities to be more energy efficient. New Jersey's Clean Energy Program and electric and natural gas utilities offers incentive programs that guide municipalities through the upgrade process, starting with free audits to establish the most effective measures to reduce energy use. Following implementation, showcase upgrades in energy efficiency outreach to local commercial entities.

Measures of Success

- Apply for <u>Local Government Energy Audit</u> or Engineered Solutions audit, if eligible
- · Realize 20% annual energy savings for one building
- Realize 20% annual energy savings across the municipal building portfolio



Resources

- NJ gas and electric utilities' commercial energy efficiency program websites
- Sustainable Jersey's <u>Energy Efficiency for Municipal Facilities</u> action



Potential Stakeholders

- · Public school district
- · Neighboring municipalities

6.2 Conduct Energy Efficiency Outreach to Low- and Moderate-Income Residents

IMPACT:	
DIFFICULTY:	all.
CHECK IF DOING:	

Promote state and utility energy efficiency programs for low- and moderate-income residents using community-serving institutions as messengers, using non-English promotional materials where appropriate, and emphasizing co-benefits of energy efficiency upgrades (health, safety, and comfort).



Measures of Success

- Hold an event specifically targeting LMI residents for energy efficiency programs
- 5% of eligible residents participate in income-qualifying state/utility energy efficiency programs



Resources

- · Utility residential energy efficiency program websites
- Sustainable Jersey's Energy Assistance Outreach action
- Sustainable Jersey's <u>Residential Energy Efficiency Outreach</u> action (see Resources section)



Potential Stakeholders

- Affordable housing owners/managers (public & private)
- Tenant's organizations
- Public school district
- Faith-based organizations

Municipality:

EMP Strategy:	Initiative:
Initiative lead:	Initiative start date: Priority for muni:
Anticipated initiative length:	Anticipated funding sources:
Departments involved:	Obstacles/Barriers:
Community notes (include current status, overall plan, etc.):	Next steps: (specific and tangible):
	PART 2: TEMPLATE 23

PART II: Template Example

1.2 Train First Responders on EV and EVSE **EMP Strategy:** 1: Transportation Initiative: Priority for muni: Initiative lead: Joe Smith, President of EMS Initiative start date: 3/2021 Medium Anticipated initiative length: Anticipated funding sources: N/A (no cost) Ongoing (annual) Departments involved: Obstacles/Barriers: Emergency Management Services No anticipated barriers

Community notes (include current status, overall plan, etc.):

- No current training is offered, planning to use free offering from National Fire Protection Association
- Will train new first responders annually

Police

Fire Department

Next steps: (specific and tangible):

- Joe Smith will register for access to NFPA training.
- 2. Joe Smith will send email to EMS with link to training and request for all current members to complete it.
- Joe Smith will schedule next training for same month next year.

7:Clean Energy Innovation 7.3 Develop Local Microgrid EMP Strategy: Initiative: Chief Innovation Officer Priority for muni: Initiative lead: 5/2022 Low Initiative start date: Sustainable Jersey Gardinier Grant **Anticipated funding sources:** Anticipated initiative length: 5 years

Departments involved:

- Procurement office
- Administration
- Department of Public Works

Obstacles/Barriers:

- High upfront cost
- Technology not widely known/understood

Community notes (include current status, overall plan, etc.):

- No past effort has been made to create a microgrid
- Feasibility studies required to determine exact location
- Potential locations include municipal complex area and downtown business district

Next steps: (specific and tangible):

- 1. Grant writer will apply for Sustainable Jersey Gardinier Grant to complete microgrid feasibility study.
- 2. Procurement office will hire consultant to complete the feasibility study.
- 3. Department of Public Works will facilitate the feasibility study.
- 4. Business administrator will use feasibility study results to reach out to potential microgrid partners and form a microgrid project team to determine next steps.





Sustainable Jersey Guide for Sustainable Energy Communities



municipal community solar policies counts towards completing the <u>Municipally</u>
<u>Supported Community Solar</u> action.

For those LMI/EJ residents who do have space with solar potential, municipalities can promote opportunities for affordable solar installation. Solar offers that have low upfront costs, low credit requirements, and long lease/billing timeframes are ideal for low- and moderate-income residents that lack capital to outright purchase and install PV solar. Municipalities can include these preferences in the RFP process for establishing the contractor partner of a Solarize campaign (Section 2.3). Alternatively, municipalities might hold educational programming about residential solar, hosting representatives from NJBPU, Sustainable Jersey, and/or the utilities.

6.4 Shared Mobility Programs

Shared transportation networks of cars, bikes, and even electric scooters are rapidly expanding into cities and towns across the country. Because many low- and moderateincome families cannot afford their own private and/or partnering directly with companies to launch a public-private program. Municipalities can encourage or require shared mobility programs to provide low-income membership options and docking stations or charging points in neighborhoods with LMI households or poor environmental quality. Municipalities may partner with neighboring municipalities to create a regional shared transportation network (e.g., Citi Bike).

6.4.2 Shared Electric Automobiles (Carsharing)

Carsharing is a self-service car rental system in which users rent cars for shorter periods of time than traditional car rentals, often by the hour. An all-electric carsharing fleet accessible to LMI/EJ communities can improve local air quality and provide affordable transportation. Municipalities can partner to launch a public-private electric carsharing program with docking sites in LMI/EJ neighborhoods. For important considerations for electric vehicle carsharing, such as minimizing insurance costs and optimal siting, see the Greenlining Institute's white paper Electric Carsharing in Underserved Communities.

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Sustainable Energy Communities Guide 2021

6.4.3 Electric Ride-Hailing

With the advent of ride-hailing smartphone apps, ride-hailing has become a convenient and widespread method of transportation. Because ride-hailing drivers generally put many miles on their vehicles, electric ride-hailing vehicles can mitigate a significant amount of GHG emissions

Municipalities can seek partnerships with companies in the ride-hailing industry to transition local ride-hailing vehicles to electric. To attract electric ride-hailing drivers, municipalities can offer public EV charging stations (Section 1.2) and specially-designated



Sustainable Energy Communities Guide

s Study: Collingswood Small ness Loan Program

Technology Highlight: Solar Thermal

Solar thermal systems harness sunlight to heat water, replacing conventional water heaters powered by natural gas or electricity. They are more cost-effective than electric water heating and less emissions-intensive than natural gas water heating. Solar water heating is even more efficient than photovoltaic solar, making it well suited for buildings with small roofs and significant hot water demand, such as multistory multifamily buildings (MassCEC, "Residential").

Highlighting these benefits, municipalities can promote solar thermal with a dedicated outreach effort or as part of a broader energy efficiency or renewable energy campaign.



Manchester, NJ. 2016. Sustainable Jersey Certification Report. sj-site-legacy-migrate.s3.amazonaws.com/m151913011.zip

Case Study: Collingswood Small Business Loan Program

While promoting energy efficiency to local businesses,
Sustainable Collingswood found that, even with the incentives
available from New Jersey's Clean Energy Program, local
businesses did not have the necessary capital funds to
implement energy efficiency upgrades. In response, the group
convinced the Borough to set up a loan fund in 2018 to help
businesses interested in making retrofits.

Collingswood invested \$50,000 in the revolving loan fund in cooperation with certified SBA microloan provider Cooperative Business Assistance Corporation. Businesses can borrow funds to help fill the gap in funding, then pay back the loan over time partially or entirely with their energy savings. The program has been widely advertised through email, snail mail, and presentations at events for local business leaders.



Collingswood, N.J. 2019. Sustainable Jersey Certification Report. sj-site-persistent-prod. s3.amazonaws.com/fileadmin/cicbase/documents/2019/11/22/15744527119472.pdf

https://www.sustainablejersey.com/resources/publications/energy-guidebooks/#c4478



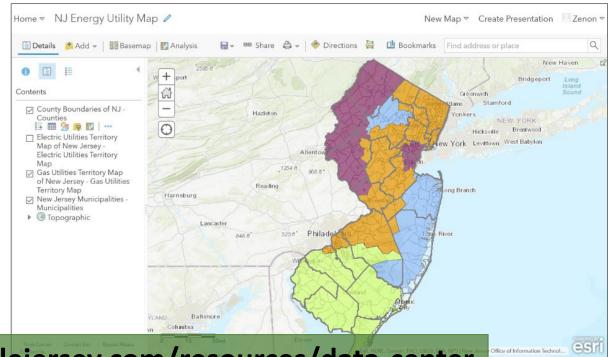
Appendix: EMP/SJ Actions Crosswalk

Section of New Jersey's Energy Master Plan	Local Gov't	Community Actions	Municipal Operations	Other Actions
2.1.9 Stakeholder engagement to explore rules to limit CO2 emissions from electric generating units				
2.2 Develop 7500 MW Offshore Wind	l Energy Ge	eneration by 2035		
2.3 Maximize Local (On-site or Remo	tely-Sited)) Solar Development a	and Distributed En	ergy Resources by
2.3.1 Continue to grow community solar	~	Community-Led Solar		
2.3.2 Transition to a successor solar incentive program		(Community-Led Solar (Community Solar) (MYTSF)		
2.3.3 Maximize solar rooftop and community solar development in urban/LMI communities	~	Community-Led Solar Community Solar		Environmental Justic in Planning/Zoning
2.3.4 Develop programs to increase the deployment of solar thermal tech	~	Community-Led Solar MYTSF		
2.3.5 Mandate non-wires solutions on state-funded projects	~	(All Gold actions)		
2.3.6 Develop mechanisms for achieving 600 MW of energy storage by 2021, 2000 MW by 2030	~		On-site Solar On-site Wind	
2.3.7 Maximize the use of source separated organic waste for energy production and encourage anaerobic digestion	~			Food Waste



Sustainable Jersey Data Center

- Community Profile Data
- Utility Energy Data by Municipality
- NJCEP Data
- More on the way!



www.sustainablejersey.com/resources/data-center



Utility Energy Data by Municipality

	А	В	С	D	Е	F	G	Н	I	J	K	L	М	N	0
1	2015-2020 Utility Energy Data by Municipality September 2021														
	Utility Acronyms: ACE - Atlantic City Electric ETG - Elizabethtown Gas JCPL - Jersey Central Power & Electric MEU - Municipal Electric Utility														
2	NJNG - New Jersey Natural Gas PSEG - Public Service Electric and Gas RECO - Rockland County Electric SJG - South Jersey Gas														
3	3 Data Acronyms: CWC - Combined with Commercial NDA - No Data Available														
4	Highlighted Data:	Data + CWC	Data + NDA	Data Issue											
5	* Further information	n found at th	e end of the ta	ıble											
6						Electric	(kWhrs)					Natural Ga	s (Therms)		
7	Municipality	County	Year 🖵	Utility 🖵	Residentia	Commerci	Industria 🗸	Street Light 🗸	Total 🔻	Utility 🖵	Residentia 🗸	Commerci	Industria	Street Light -	Total 🖵
3266	Westwood borough	Bergen	2015	PSEG	35,482,791	39,581,187	1,130,806	782,977	76,977,761	PSEG	3,649,841	2,103,813	164,771	NDA	5,918,425
3267	Westwood borough	Bergen	2016	PSEG	35,177,347	37,233,650	768,906	783,368	73,963,271	PSEG	3,367,374	1,931,233	45,616	NDA	5,344,222
3268	Westwood borough	Bergen	2017	PSEG	33,373,110	36,788,027	711,669	774,430	71,647,236	PSEG	3,386,470	2,060,689	8,855	NDA	5,456,015
3269	Westwood borough	Bergen	2018	PSEG	35,701,883	35,473,418	701,507	805,187	72,681,995	PSEG	3,695,364	2,144,992	55,888	NDA	5,896,245
3270		Bergen	2019	PSEG	33,838,700	35,890,599	624,923	846,902	71,201,124	PSEG	3,631,309	2,110,412	50,011	NDA	5,791,731
3271	Westwood borough	Bergen	2020	PSEG	35,063,892	32,816,537	757,821	847,101	69,485,351	PSEG	3,308,166	1,941,113	52,245	NDA	5,301,523
3272	Weymouth township	Atlantic	2015	ACE	18,859,029	3,571,737	31,080	56,113	22,517,959	SJG	346,308	16,795	NDA	NDA	363,103
3273	Weymouth township	Atlantic	2016	ACE	17,864,535	3,764,804	41,240	56,113	21,726,692	SJG	301,990	19,210	NDA	NDA	321,199
3274	Weymouth township	Atlantic	2017	ACE	16,971,106	3,604,410	NDA	56,113	20,631,629	SJG	325,296	21,348	NDA	NDA	346,644
3275	Weymouth township	Atlantic	2018	ACE	11,352,337	2,304,410	32,400	56,113	13,745,260	SJG	389,909	22,740	NDA	NDA	412,649
3276	Weymouth township	Atlantic	2019	ACE	10,916,380	2,165,056	34,160	56,115	13,171,711	SJG	366,461	24,439	NDA	NDA	390,900
3277	Weymouth township	Atlantic	2020	ACE	10,934,301	1,915,107	35,040	56,113	12,940,561	SJG	335,930	16,867	NDA	NDA	352,798
3278	Wharton borough	Morris	2015	JCPL	21,909,385	50,757,069	18,693,170	144,276	91,503,900	NJNG	1,464,531	4,037,030	CWC	NDA	5,501,561
3279	Wharton borough	Morris	2016	JCPL	NDA	NDA	NDA	NDA	NDA	NJNG	1,386,789	4,941,222	CWC	NDA	6,328,011
3280	Wharton borough	Morris	2017	JCPL	NDA	NDA	NDA	NDA	NDA	NJNG	1,360,641	4,854,721	CWC	NDA	6,215,362
3281	Wharton borough	Morris	2018	JCPL	21,864,586	38,405,059	26,648,571	143,424	87,061,640	NJNG	1,623,121	5,105,929	CWC	NDA	6,729,050
3282	Wharton borough	Morris	2019	JCPL	21,041,159	36,549,619	20,885,190	143,484	78,619,452	NJNG	1,735,651	5,008,877	CWC	NDA	6,744,528
3283	Wharton borough	Morris	2020	JCPL	21,473,134	33,714,419	13,268,380	143,484	68,599,417	NJNG	1,333,118	4,445,877	CWC	NDA	5,778,995
3284	White township	Warren	2015	JCPL	20,143,034	13,506,656	3,885,606	31,788	37,567,084	ETG	516,834	846,355	NDA	NDA	1,363,190
3285	White township	Warren	2016	JCPL	NDA	NDA	NDA	NDA	NDA	ETG	524,893	881,178	NDA	NDA	1,406,070
3286	White township	Warren	2017	JCPL	NDA	NDA	NDA	NDA	NDA	ETG	558,894	905,633	NDA	NDA	1,464,527
3287	White township	Warren	2018	JCPL	19,463,412	11,863,284	3,818,109	31,956	35,176,761	ETG	643,231	1,142,527	NDA	NDA	1,785,758
3288	White township	Warren	2019	JCPL	18,928,801	11,081,554	1,988,376	32,244	32,030,975	ETG	606,118	1,158,414	NDA	NDA	1,764,532
3289	White township	Warren	2020	JCPL	19,262,234	9,696,021	1,542,174	32,616	30,533,045	ETG	826,959	1,715,084	NDA	NDA	2,542,043
3290	Wildwood city	Cape May	2015	ACE	110,035,709	105,382,140	2,047,202	2,251,260	219,716,311	SJG	4,188,278	3,541,358	3,487	NDA	7,733,124
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NJCEP Local Gov't Projects

	А	В	С	D	E	F	G	Н	I .	J	М	N	0	Р	Q
1			ernm	ent Projects 2008-	2021									-	
				•											
	Note: NJCEP application data shows when the application was last updated; the date marked may not indicate precisely when work was completed.														
			•		work was com	pleted.									
2	Data is available through March 2021.														
											Annual	Lifetime	Savings	Annual Gas	Lifetime Gas
	Applic. Status Date	Year	Project	NJCEP Program	Invoiced Incentive	Applicant	Applicant	Premise Sq. Ft	Street Address	Municipality	Electric Savings	Electric Savings	Peak Demand	Savings	Savings
3	Julius Date	₩	Type	v	- Incentive	Ţ.	Type	Jq. rt		v .	(KWh)	(KWh)	(KW)	(Therms)	(Therms)
1225	3/27/2012	2012		Direct Install	\$35,958.06	Cherry Hill, Township of	Municipal		Cherry Hill DPW 1 Perina Blvd	Cherry Hill Township	122,696.27	1,840,444.12	23.67	0.00	0.00
1226	1/15/2020	2020	Audit	Local Government Energy Aud	\$4,107.15	Cherry Hill, Township of	Municipal	72,000	1100 Kings Highway North	Cherry Hill Township					
1227	7/20/2011	2011	Work	Direct Install	\$7,264.53	Chesilhurst, Borough of	Municipal	4,000	Municipal Building 201 Grant Ave	n Chesilhurst Borough	14,470.85	220,514.15	2.49	0.00	0.00
1228	7/20/2011	2011	Work	Direct Install	\$2,158.76	Chesilhurst, Borough of	Municipal	8,509	Community Center 511 Edwards A	ve Chesilhurst Borough	11,072.89	166,093.38	1.87	0.00	0.00
1229	4/5/2011	2011	Work	Direct Install	\$17,180.97	Chester Board of Education	School	58,082	Bragg Elementary School 250 Rt 2	4 Chester Township	22,110.55	344,918.26	7.00	3,509.99	63,179.99
1230	5/24/2011	2011	Work	Direct Install	\$31,918.68	Chester Board of Education	School	59,105	Dickerson Elementary School 250	R Chester Township	61,879.16	951,197.40	21.45	6,500.00	117,000.00
1231	10/10/2011	2011	Work	Direct Install	\$18,943.85	Chester Board of Education	School	73,532	Black River Middle School 133 No	rt Chester Township	33,186.07	497,791.19	7.20	2,014.99	30,224.99
1232	11/30/2017	2017	Work	C & I Retrofit	\$18,955.00	Chester Board of Education	School		Route 513 - North Rd.	Chester Township	79,801.00	1,197,024.00	31.59	0.00	0.00
1233	6/20/2018	2018	Work	C & I Retrofit	\$14,418.00	Chester Board of Education	School		250 Route 24	Chester Township	59,545.00	893,187.00	23.57	0.00	0.00
1234	3/1/2019	2019	Work	C & I Retrofit	\$14,740.00	Chester Board of Education	School	59,105	250 Rt. 24	Chester Township	50,554.00	758,324.00	20.01	0.00	0.00
1235	12/1/2011	2011	Work	Direct Install	\$50,000.00	Chester, Borough of	Municipal	25,000	Municipal Office Building 50 Nor	th Chester Borough	56,762.65	851,439.81	18.09	3,770.00	56,550.00
1236	3/28/2011	2011	Work	C & I New Construction	\$95,937.92	Chesterfield Township Board of Education	School		Chesterfield Twp BOE 30 Saddle V	/a Chesterfield Township	35,385.75	530,786.37	20.96	0.00	0.00
1237	8/25/2011	2011	Work	C & I New Construction	\$17,009.00	Chesterfield Township Board of Education	School		Chesterfield Twp BOE 30 Saddle V	/a Chesterfield Township	54,881.41	823,221.18	7.23		
1238	8/25/2011	2011	Work	C & I New Construction	\$300.00	Chesterfield Township Board of Education	School		Chesterfield Twp BOE 30 Saddle V	/a Chesterfield Township	0.00	0.00	0.00	945.15	17,012.78
1239	11/8/2011	2011	Work	C & I New Construction	\$4,000.23	Chesterfield Township Board of Education	School		Chesterfield Twp BOE 30 Saddle V	/a Chesterfield Township	14,089.95	211,349.30	8.34	0.00	0.00
1240	2/7/2019	2019	Audit	Local Government Energy Aud	\$5,569.78	Chesterfield Township School District	School	119,500	30 Saddle Way	Chesterfield Township					
1241	2/10/2021	2021	Work	C & I Retrofit	\$23,881.00	Chesterfield Township School District	School	119,500	30 Saddle Way	Chesterfield Township	199,027.00	2,985,409.00	50.59	-457.76	-6,866.44
1242	7/20/2011	2011	Work	Direct Install	\$2,396.88	Chesterfield, Township of	Municipal	17,229	Municipal Complex/Police Depart	tm Chesterfield Township	7,849.26	117,739.00	1.27	0.00	0.00
1243	12/16/2014	2014	Work	Direct Install	\$5,831.73	Cinnaminson Fire Co.	Fire Department		Cinnaminson Fire Co. 1900 Taylor	s Cinnaminson Township	16,133.62	242,004.31	3.12	0.00	0.00
1244	12/3/2013	2013	Work	Direct Install	\$27,127.04	Cinnaminson Fire Dept.	Fire Department	3,000	Cinnaminson Fire Department 17	25 Cinnaminson Township	53,221.18	798,317.75	12.18	138.00	2,070.00
1245	5/16/2013	2013	Work	C & I Retrofit	\$840.00	Cinnaminson Township Board of Education	School	28,000	Cinnaminson Twp BOE 2195 River	to Cinnaminson Township	2,575.41	38,631.16	1.01	0.00	0.00
1246	5/16/2013	2013		C & I Retrofit		Cinnaminson Township Board of Education	School	28,000	Cinnaminson Twp BOE 2195 River		2,375.07	35,626.08	0.58	0.00	0.00
4	Loc	al Govt N	JCEP Pro	jects Summary of Munic	cipal Projects	①				1					

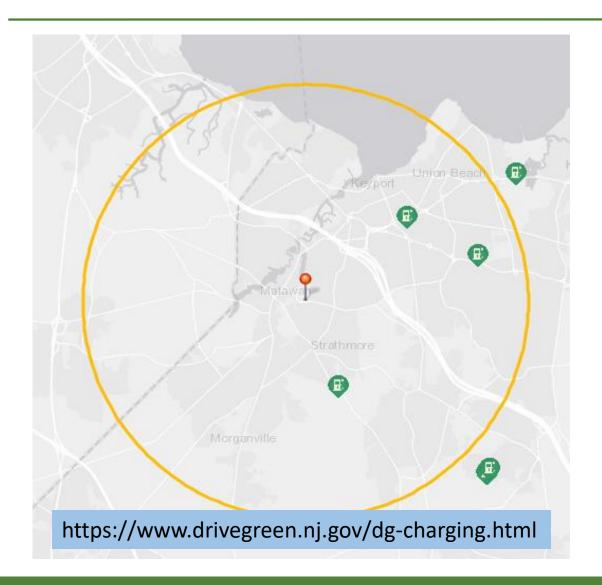


Municipal Operations Data

Municipal Buildings									
Name	Street Address	Year Built	Premise Sq. Ft	Source EUI (kBtu/ft²)	Most recent energy efficiency upgrades				
Community Center	651 Richland Ave	1954	4,253	154.8	NJCEP DI 2017				
DPW Building	147 Lenox Rd	1960	10,582	218.1	NJCEP DI 2018				
Senior Center	98 Main St	2019	2,500	75.0	NJCEP DI 2017				
Municipal Building	1 Gotham Sq	1978	22,000	94.2	NJCEP DI 2017				
Department of Parks & Recreation	30 Park Pl	1961	1,856	212.1	N/A				
Fire Headquarters	28 Oswald Rd	1965	6,250	196.7	NJCEP DI 2017				
Northside Firehouse	100 Northside Ave	1985	3,300	150.5	NJCEP DI 2017				



Public EV Charging Locator Map





Sample CEP – Red Wing CAWP

Vehicle travel makes up 32% of total emissions in Red Wing. Options to reduce emissions in vehicles are to improve vehicle efficiency, change the fuel type to zero carbon emissions, or decrease the amount of driving. It is recognized that many people will need to continue to drive in Red Wing and that emphasis should be placed on encouraging residents to purchase cleaner vehicles.



Initiative 1: Incorporate elements of electric vehicle-ready development into zoning ordinance

Description: Red Wing has already made strides in electric vehicle charging and EV upgrades to the municipal fleet. Additional ordinance updates can ensure that electric vehicles are accessible and available to Red Wing residents by creating EV-ready development standards. This can be done by incorporating such standards into the city's zoning ordinance.

Lead: Community Development / Advisory Planning Commission

Timeline: Fall 2020 — Spring 2021

Actions:

- Participate in City's Charging Ahead 2.0 in the Fall of 2020 to take advantage of forthcoming funds available for EV charging infrastructure as well as work on increasing EVs for city fleets and EV-ready standards for private development.
- Identify opportunity for electric vehicle sharing, charging infrastructure, and purchase options for residents with low-to-moderate incomes.

Initiative 2: Education and engagement

Description: Provide resources to businesses and residents that demonstrate the benefits of owning an electric vehicle. Ensure communication and materials tie back to the city's climate goals. These materials should be made available on the city's website as well as at community events and other venues, in English and Spanish. Host ride and drive events that allow people to experience electric vehicles.

Lead: Community Development / Sustainability Commission

Timeline: Spring 2021 — on-going

Actions:

- Establish an EV task force that will be responsible for education and engagement around making electric vehicles more accessible to all residents.
- Share events, promote success, and provide resources to residents and businesses on the city climate resource webpage, newsletters, social media, and other communication materials.
- Coordinate with local schools, delivery services, and others to promote electrification of heavy-duty vehicles, like school buses.



Although the electricity grid is increasingly becoming cleaner, additional renewable energy development can accelerate decarbonization and provide local economic benefits. Currently, the best opportunities for renewable energy in Red Wing are through on-site solar installations, community solar garden subscriptions, and green power purchase programs. To maximize the impact of renewable energy, energy efficiency strategies should be pursued concurrently.



Initiative 1: Expand access of renewable energy to households with low-to-moderate incomes to reduce energy burden

Description: There are multiple incentives available that are aimed at removing barriers for residents with low-to-moderate incomes interested in participating in clean energy. Increasing access to clean, affordable energy can help to reduce energy burden while contributing to a cleaner electric grid mix.

Lead: Community Development / Sustainability Commission

Timeline: Spring 2021 - 2023

Actions:

- Compile resources for low-to-moderate income financial incentives offered by Xcel Energy and share them on the city's climate webpage. Conduct outreach and engagement efforts with impacted communities.
- Partner with local organizations to conduct outreach and sign up residents with low-tomoderate incomes for clean energy programs including community solar subscriptions and rooftop solar. Ensure program materials are available in English and Spanish.
- Establish a fund that can be used to provide additional incentives for participation in clean energy to residents to with low-to-moderate incomes.

Initiative 2: Achieve 2.5 MW of solar capacity through on-site solar and/or CSG subscriptions

Description: Current on-site solar energy systems and community solar garden subscriptions amount to 18.9 MW of solar capacity. Residents and business owners should continue to increase their participation in renewable energy programs. The city should expand the Green Wing Energy challenge to grow renewable energy participation (either through CSG subscriptions or on-site solar installations) by 2.5 MW over the next 5 years. As stated above, the city should prioritize low-to-moderate income households in accessing increased solar energy capacity.

Lead: Community Development / Sustainability Commission

Timeline: Spring 2021 — 2023

Actions:

- Utilize the <u>Solar Deployment Strategy</u> model to identify programs and incentives that will
 maximize participation in on-site and community solar gardens.
- 2. Promote solar resources, opportunities, and updates on the city's climate resource webpage,

http://www.red-wing.org/1022/Climate-Action-Work-Plan

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Upcoming Energy Events

- Make Your Town EV Friendly: New Statewide Model EV Ordinance, New Sustainable Jersey Actions, New Funding
 - December 7, 2021, 1:00pm 2:30pm
- Creating a Community Energy Plan: Resources and Technical Assistance
 - January 12, 2022, 1:00pm 2:30pm
- Funding for Transitioning Fleets to EVs
 - January 26, 2022, 1:00pm − 2:30pm

www.sustainablejersey.com/nc/events





- Fund a project relating to Sustainable Jersey actions
- \$2,000, \$10,000, \$20,000
- Informational webinar Monday, December 13 at 1:00pm bit.ly/2022SJPSEGWebinar
- Application due Friday, February 11, 2022
- www.sustainablejersey.com/grants



Questions

Type them into the Questions section



Thank You!

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