

Creating a Sustainable Energy Community through Community Energy Planning

June 24, 2022

IG: Sustainable_Jersey | Twitter: @SJ_Program and @SJ_Schools | FB: @SustainableJersey | LinkedIn: sustainable-jersey

Panel Speakers (in order of presentation)

Lauren Griffith

Climate Fellow, Office of Clean Energy Equity New Jersey Board of Public Utilities

Nancy Quirk Energy Program Manager, Sustainable Jersey

Zenon Tech-Czarny Research & Project Specialist, Sustainable Jersey

Hogan Dwyer Research & Project Specialist, Sustainable Jersey

Agenda

- 1. NJBPU's Community Energy Plan Grant Program
- 2. What is a Community Energy Plan?
- 3. Why Create a Community Energy Plan?
- 4. Resources for Creating a Community Energy Plan
 - Data for Community Energy Planning
 - Sustainable Jersey Guide and Workplan Template
 - Model Community Energy Plan

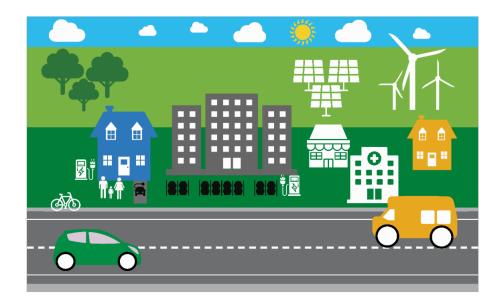


Community Energy Plan Grant Program



Community Energy Plan Grant (CEPG)

- 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 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 moderate- income and overburdened communities.
- All New Jersey municipalities are eligible for \$10,000, with overburdened municipalities eligible for larger grants and enhanced support.





Timeline

March 2019

BPU launches CEPG Program

June 2021

Board pauses Program for redesign

November 2021

Board opens application period for redesigned program

June 2022

Board announces 46 recipients of CEPG



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

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



Grant Requirements

Once funds are received, grantees must complete the following:

- Based on the strategies identified in the application, work to conduct an in-depth analysis of the EMP-based strategies using the Workplan Template to create the Community Energy 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 performance and expenditure report at the end of the eighteen (18) month grant term
 - b) \$25,000 grant: submit quarterly expenditure reports and a final performance and expenditure report at the end of the eighteen (18) month grant term







Community Energy Planning

The Township of Gotham's Community Energy Plan



What is a Community Energy Plan?

A tool for prioritizing community initiatives in:

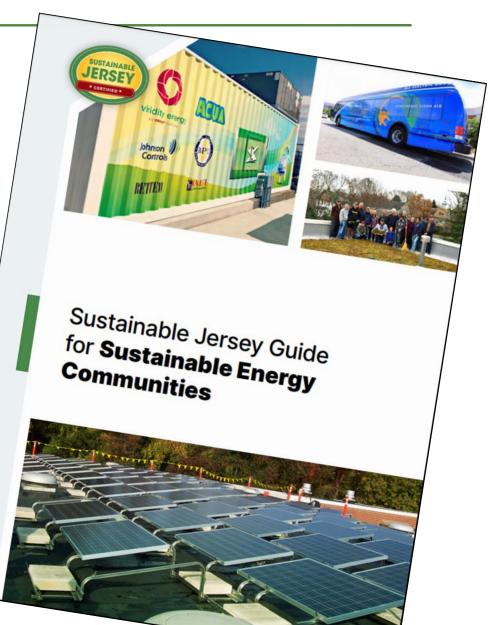
- Energy efficiency
 - Commercial, industrial, government
 - Residential, multifamily
- Transportation
 - Passenger vehicles
 - Government and business fleets
 - Infrastructure
- Renewable energy
 - Zoning and permitting
 - Outreach and education
 - Renewable Government Energy Aggregation

Community Energy Planning . . .

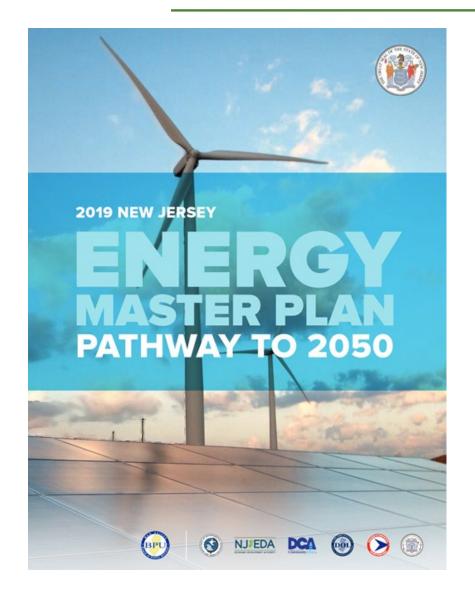
- ... is a process that includes
 - municipal decision makers
 - community stakeholders
 - community education and outreach
- ... helps organize to
 - reduce energy use
 - curtail greenhouse gas emissions
 - enhance energy resilience
- ... provides a timeline for
 - implementation of key initiatives
 - identification of funding sources

Why do a community energy plan?

- Improve quality of life
 - Lower utility costs
 - Reduce transportation emissions
 - Create local jobs
- Create a Sustainable Energy Community

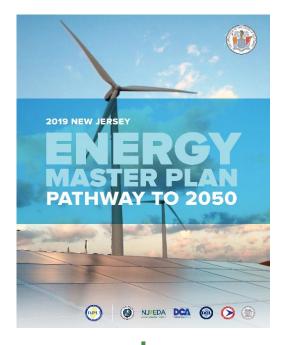


New Jersey Energy Master Plan (EMP)

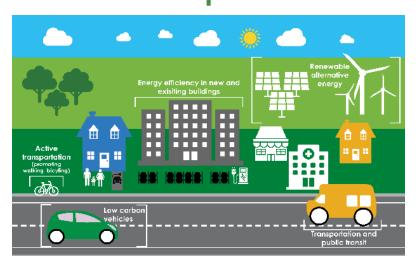


EMP Strategies

- 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
- 6. 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

Municipal Energy Actions

	Energy Efficiency	Renewable Energy	Alternative Fuel Vehicles
Municipal Operations	 Energy Efficiency for Municipal Facilities Energy Tracking and Management 	 On-Site Geothermal On-Site Solar +10 pt storage/resilience + 5 pt solar thermal On-Site Wind 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 Solar Outreach Renewable Government Energy Aggregation (R- GEA) 	 Make Your Town Electric Vehicle (EV) Friendly Public EV Chargers Electric Vehicle Outreach

Gold Star Standard in Energy

Municipal Operations

Municipal Buildings

- Energy efficiency
- Operations / equipment
- On-site renewable energy
- 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
- Solar Outreach

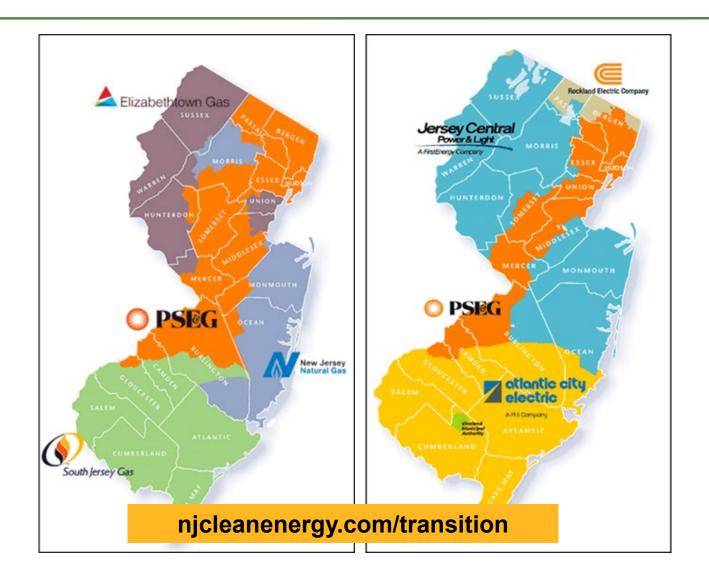
Transportation

- Make Your Town Electric Vehicle Friendly
- Public Electric Vehicle Chargers
- Electric Vehicle Community Outreach
- * EE Outreach actions temporarily suspended

		Press Room Library FAQs	Calendar Newsletters Contact Us Site
Cleanenergy program	njclear	nenergy.com/muni	Sea
НОМЕ	RESIDENTIAL	COMMERCIAL, INDUSTRIAL AND LOCAL GOVERNMENT	RENEWABLE ENERGY
COMMERCIAL, INDUSTRIAL & LOCAL GOVERNMENT	Home » Commercial & Industrial		Program Updates
V PROGRAMS	Local Governments, Schoo	ls and Non-Profits	New! School and Small Business Energy Efficiency Stimulus Program
EXISTING BUILDINGS ENERGY EFFICIENCY	Note: Select energy efficie buildings have transitioned		 Energy Efficiency Program Transition Update Other updates posted.
BENCHMARKING	To learn more about this transition and for page.		Program Literature
LARGE ENERGY USERS PROGRAM	and the strength of		
LOCAL GOVERNMENT ENERGY AUDIT			
UTILITY PROGRAMS	8		Program Applications and Brochures Download the lates
• NEW CONSTRUCTION ENERGY EFFICIENCY			Literature Download the lates program materials.
SINGLE MEASURE: SMARTSTART NEW CONSTRUCTION			Find a Trade Ally
MULTI MEASURE: CUSTOMER TAILORED			CT SK
COMPREHENSIVE: PAY FOR PERFORMANCE	energy and the environment - local govern Jersey's Clean Energy Program provides through a number of initiatives directed at	local government facilities. Take a leadership	Find a Select a contract for an energy efficient upgrad today!
	role in energy efficiency for your municipa	lity or school today! Learn more.	Local Govt and Schools
COMBINED HEAT AND POWER FUEL CELL	Do you want to see how yo compares to others like it?		
DER MICROGRID FEASIBILITY STUDIES	BENCHMARKING		

Utility Incentive Programs

- Incentives for
 - residents
 - businesses
 - schools and municipalities
 - nonprofit organizations
- Incentives vary by utility
- Contact your local natural gas / electric utilities



What's in a Community Energy Plan?

- 1. Introduction
- 2. Community Profile
- 3. Energy Related Data
- 4. Work Plan (Implementation Timeline)

Strategy 1: Transportation

Strategy 2: Renewable Energy and Distributed Energy Resources

Strategy 3: Energy Efficiency and Conservation

Strategy 4: Reduce Energy Consumption in Buildings

Strategy 6: Support Participation by LMI/EJ Communities

Strategy 7: Clean Energy Innovation Economy

Resources for Creating a Community Energy Plan

- Sustainable Jersey Data Center
- Sustainable Energy Communities
 Guide
- Community Energy Plan Workplan
 Template
- Model Community Energy Plan

Energy Guidebooks, Toolkits & Other
Publications
The Energy publications consist of guidebooks and other publications. Publications
are listed chronologically within each section with the most recent publications first. Navigate to the different data resources using the links below.
Energy Guidebooks & Toolkits
Sustainable Jersey Guide for Sustainable Energy Communities
 <u>Community Energy Plan Workplan Template</u> Community Solar Guidebook
<u>Community Solar Resource Page</u>
Energy Efficiency Outreach Toolkits
Alternative Fuel Vehicle Procurement Guide
Renewable Government Energy Aggregation:
Sustainable Jersey How-To-Guide

sustainablejersey.com/resources/publications/energy-guidebooks/



sustainablejersey.com/resources/data-center/

Certification Actions

Grants

Events Resources

s Get Involved

✓ Data Center

Sustainable Jersey Data Resources

State Data Resources

- > Publications
- > Green Team Resources
- > Presentations
- > Funding Database

Data Center

The Sustainable Jersey Data Center provides sustainability-related data and maps for Green Teams, municipal staff, and researchers. Select data is prepared by Sustainable Jersey, whereas others are links to external resources.

Sustainable Jersey Data Resources

View data files and interactive maps prepared by Sustainable Jersey.

View Resources

New Jersey State Data Resources

View links to external state resources such as New Jersey's Clean Energy Program and the New Jersey Department of Environmental Protection.

View Resources



Certification Actions Grants Events Resources Get Involved

✓ Data Center

Sustainable Jersey Data Resources

State Data Resources

> Publications

> Green Team Resources

> Presentations

> Funding Database

Sustainable Jersey Data Resources

The following resources are data files and interactive maps that Sustainable Jersey processes and prepares. Navigate to the different data resources using the links below.

Municipal Data

- <u>Community Data by Municipality</u>
- <u>Aggregated Community-Scale Utility Energy Data</u>
- Vehicle Miles Traveled (VMT)/On-Road Vehicle GHG Emissions Data
- Electric Vehicle (EV) Ownership Data
- <u>Community-Scale Greenhouse Gas (GHG) Emissions Data</u>
- Energy Efficiency Program Participation (2008-2021)
- NJCEP Local Government Projects 2008-2021

* Further explanation on Note	es sheet								Population C	haracteristics	
Municipality	County	Square Miles	Population	% White	% Black	% Asian, Pacific	% Other	% Hispanic or Latino	Households	Median Household	Percent of Population in
•			-	-	•	Islander 🖵	•	Origin* 🚽	-	Income 🚽	Poverty -
Aberdeen township	Monmouth	5.6	18,729	77%	9%	7%	7%	13%	7,822	\$108,132	2.9%
Absecon city	Atlantic	7.2	8,471	68%	12%	6%	14%	17%	3,109	\$69,293	9.2%
Alexandria township	Hunterdon	27.7	4,769	98%	0%	2%	0%	1%	1,766	\$127,234	4.4%
Allamuchy township	Warren	20.3	4,640	89%	7%	3%	1%	6%	2,195	\$109,212	1.9%
Allendale borough	Bergen	3.1	6,757	80%	1%	15%	4%	2%	2,235	\$157,958	2.5%
Allenhurst borough	Monmouth	0.3	492	87%	1%	2%	10%	5%	191	\$100,625	2.8%
Allentown borough	Monmouth	0.6	1,740	89%	7%	0%	4%	4%	676	\$100,769	2.8%
Alloway township	Salem	33.9	3,359	90%	5%	1%	4%	3%	1,203	\$86,583	3.1%
Alpha borough	Warren	1.7	2,141	91%	0%	1%	7%	8%	948	\$75,612	4.8%
Alpine borough	Bergen	6.4	1,459	61%	3%	32%	3%	7%	518	\$161,346	6.2%
Andover borough	Sussex	1.4	675	90%	2%	2%	6%	1%	261	\$64,844	3.6%
Andover township	Sussex	20.8	5,914	91%	2%	5%	2%	1%	2,076	\$113,947	4.9%
Asbury Park city	Monmouth	1.5	15,536	42%	42%	2%	13%	17%	7,185	\$53 <i>,</i> 655	22.5%
Atlantic City city	Atlantic	15.9	37,793	26%	32%	16%	26%	33%	15,775	\$29,526	35.2%
Atlantic Highlands borough	Monmouth	1.2	4,312	96%	0%	1%	3%	7%	1,829	\$103,712	3.6%
Audubon borough	Camden	1.5	8,656	92%	5%	0%	2%	3%	3,304	\$90,335	2.3%
Audubon Park borough	Camden	0.2	969	99%	0%	0%	1%	1%	540	\$46,855	8.8%
Avalon borough	Cape May	5.0	1,456	99%	0%	0%	0%	1%	744	\$120,000	3.6%
Avon-by-the-Sea borough	Monmouth	0.5	1,731	94%	1%	1%	4%	8%	876	\$89,615	8.9%
Barnegat Light borough	Ocean	1.3	461	86%	0%	13%	1%	1%	220	\$75,833	4.2%
Barnegat township	Ocean	40.3	23,155	90%	7%	1%	3%	5%	9,075	\$77,428	7.9%
Barrington borough	Camden	1.6	6,678	93%	3%	2%	2%	4%	2,979	\$78,708	5.0%
Bass River township	Burlington	78.3	1,225	86%	0%	1%	12%	9%	488	\$71,618	12.29
Bay Head borough	Ocean	0.7	1,050	94%	0%	1%	5%	3%	472	\$102,000	3.1%
Bavonne citv	Hudson	7.7		62%	10%	10%	18%	35%	24.784	\$69.511	12.4%

2020 Community Profile Data by Municipality

Data Included:

- Population Characteristics
- Number of Commercial and Industrial Properties
- General Housing
 Characteristics
 - Year Structure Built
 - Structure Type
 - Occupied Units
- Primary Heating Fuels
- Means of Transportation to Work

tility Acronyms: ACE								lity								
JNG - New Jersey Natu					nd County Electric	SJG - South Jersey	/ Gas									
ata Acronyms: CWC				ta Available												
ighlighted Data:	Data + CWC	Data + NDA	Data Issue													
Further information o	n Notes sheet															
lunicipality	County	Year	Utility	Residential Electricity 🔽	Commercial Electricity 🔻	Industrial Electricity 👻	Street Lightin Electricity	g Total Electricity	Utility	Residential Natural Gas 🖵	Comm Natura		Industria Natural Ga		et Lighting tural Gas	Total Natural
arlstadt borough	Bergen	2017	PSEG	16,003,467	337,546,105	48,518,861	602,026	402,670,459	PSEG	1,767,415	3,857	,967	2,372,14	7	NDA	7,997,529
arlstadt borough	Bergen	2018	PSEG	16,696,343	294,097,371	99,208,020	631,416	Municipality Allentown borou	ab Mannauth C		municipali	ty have				
rlstadt borough	Bergen	2019	PSEG	15,833,252	272,794,066	118,642,065	587,749	wunicipality Allentown borou	gn, Wonmouth Co	JI - Select	municipali	ty nere				
ırlstadt borough	Bergen	2020	PSEG	16,624,547	268,515,129	106,453,463	642,780	Row Labe 📲 Residential		Commercial	li li	ndustrial	Street Lighting			
arneys Point township	Salem	2015	ACE	21,788,842	30,763,872	3,870,753	310,737	2015	6,813	,249	5,353,789	229,908	216,072			
arneys Point township	Salem	2016	ACE	21,405,264	29,410,265	1,391,349	310,737	2016	6,715		5,197,437	237,658	206,511			
arneys Point township	Salem	2017	ACE	19,969,761	27,541,916	2,498,524	312,583	2017	6,478		5,045,898	261,792	185,440			
arneys Point township	Salem	2018	ACE	20,942,793	34,169,718	9,443,783	315,989	2018 2019	6,931 6,573		5,349,768 5,017,867	231,446 216,393	206,210 209,446			
rneys Point township	Salem	2019	ACE	20,477,912	33,609,789	1,921,136	324,171	2020	6,653		4,464,395	151,273	159,352			
rneys Point township	Salem	2020	ACE	20,422,729	31,609,673	4,346,225	329,080	Grand Total	40,165		30,429,154					
rteret borough	Middlesex	2015	PSEG	59,610,310	136,159,546	102,781,862	1,650,658	Municipality								
rteret borough	Middlesex	2016	PSEG	63,775,672	137,880,596	106,303,585	1,705,067	Residential Commercial Industria	Street Lighting							
rteret borough	Middlesex	2017	PSEG	62,317,207	145,485,992	105,198,586	1,731,457	Nesdender Commercial Industrie		_						
rteret borough	Middlesex	2018	PSEG	60,239,886	152,637,389	111,286,807	1,781,177	а м	Am	ount of Electi	ricity Purc	chased b	by Sector (kWh)		
rteret borough	Middlesex	2019	PSEG	56,895,792	146,390,665	116,301,221	1,770,179	-								
rteret borough	Middlesex	2020	PSEG	59,253,127	154,003,790	114,091,210	1,754,777	14,000,000								
dar Grove township	Essex	2015	PSEG	43,753,318	38,452,240	4,736,274	1,176,077	216,072	206,511		206,210					
dar Grove township	Essex	2016	PSEG	42,917 <mark>,</mark> 578	36,744,713	4,624,869	1,158,087	12,000,000 229,908	237,658	185,440 261,792	231,446		209,446 216,393	159,352		
dar Grove township	Essex	2017	PSEG	41,115,187	36 <mark>,</mark> 521,790	4,668,591	1,090,417	-		261,752			210,555	151,273		
dar Grove township	Essex	2018	PSEG	43,672,401	37,767,875	5,124,948	1,192,505	10,000,000							V	alues
dar Grove township	Essex	2019	PSEG	41,474,204	36,194,213	5,063,404	1,261,298	5, <mark>353,78</mark> 9	5,197,437		5 <mark>,349,76</mark>	8				Street Lighting
dar Grove township	Essex	2020	PSEG	44,207,263	33,320,789	4,742,969	1,212,322			5,045,898			5,017,867	4 <mark>,464,39</mark> 5		I Industrial
atham borough	Morris	2015	JCPL	30,330,190	25,112,130	438,381	345,618	8,000,000								Commercial
atham borough	Morris	2016	JCPL	NDA	NDA	NDA	NDA									Residential
Utility Ene	Morris ergy Data	2017 Electricity C	агt 2015 &	2020 Electr	олд icity Chart 2015-	2020 Natur	аl Gas Chart 2	6,000,000								
								- 4,000,000	6,715,178	6 478 881	6,931,89	8	6,573,025	6,653,337		
										0,470,001						

0

Year 💌

2015 2016 2017 2018

2019

2020

Vehicle Miles Traveled (VMT) Data

Metropolitan Planning Organization (MPO) Acronyms: DVRPC - Delaware Valley Regional Planning Commission NJTPA - North Jersey Transportation Planning Authority SJTPO - South Jersey Transportation Planning Authority

* Further information on Notes sheet

Further information on	Notes sheet																
Municipality Name	County _↓ ↑	MPO	Year •	Combination Long- Haul Truck	- Combination Short- Haul Truck	Intercity Bus	Light Commercial Trucks	Motor Home	Motorcycles	Passenger Cars		Refuse Truck	School Bus	Single Unit Long- Haul Truck	Single Unit Short- Haul Truck 🚽	Transit Bus	Total
perdeen township	Monmouth	NJTPA	2017	359,80	6 89,390	103,537	3,403,984	61,301	1,194,774	97,772,592	2 10,299,653	209,259	269,667	564,272	1,370,218	81,113	115,779,
osecon city	Atlantic	SJTPO	2015	7,905,90	4,656,190	2,079,886	18,100,759	423,259	2,712,737	145,895,464	4 157,124,508	1,097,312	1,819,131	3,184,744	8,560,602	939,373	354,499,8
exandria township	Hunterdon	NJTPA	2017	45,37	0 11,272	36,285	1,919,693	18,426	400,637	37,796,863	3 5,808,538	31,823	103,011	122,356	297,455	27,685	46,619,
amuchy township	Warren	NJTPA	2017	4,977,72	9 1,236,664	95,147	1,430,988	83,501	168,937	33,356,655	5 4,329,832	146,082	120,345	559,442	1,357,967	73,907	47,937,
endale borough	Bergen	NJTPA	2017	316,70	78,682	75,560	3,495,004	4,746	409,602	42,564,813	3 10,575,061	43,742	55,815	172,983	419,918	58,666	58,271,
enhurst borough	Monmouth	NJTPA	2017	4,41	4 1,097	3,259	137,914	841	32,738	2,900,25	7 417,295	2,871	8,489	7,741	18,798	2,553	3,538,
entown borough	Monmouth	NJTPA	2017	2,06	512	2,852	319,314	1,720	214,401	9,534,560	0 966,170	5,871	7,427	15,833	38,446	2,234	11,111,
loway township	Salem	SJTPO	2015	576,09	94,152	163,423	873,302	38,924	191,480	8,082,447	7 9,747,208	61,587	247,343	495,583	415,048	73,626	21,060,
pha borough	Warren	NJTPA	2017	3,935,29			682,995	63,819	44,725	17,280,979		105,013	71,749	406,010	985,535		26,721,
pine borough	Bergen	NJTPA	2017	551,24		23,613	508,100	4,736	42.030	11,934,465		43,650	17,442	172,617	,	,	
0	Sussex	NJTPA	2017	18,43	/	7,298	327,814	4,552	33,170	3,565,018		7,081	18,518	21,270			
0	Sussex	NJTPA	2017	157,69	, ,	55,861	2,750,257	40,245	517,767	37,054,81		62,612	141,738	188,057	,	· · ·	, ,
	Monmouth	NJTPA	2017	70,46			2,463,851	18,429	894,016	64,560,80	, ,	62,909	146,478	169,634		,	76,371,
	Atlantic	SJTPO	2017	5,735,63			13,131,864	307,069	1,968,055	105,845,245		796,085	1,319,756	2,310,490	,		257,185,
lantic Highlands borous		NJTPA	2013	38.10		, ,			328.561	21.521.17		32,713	43.350	88.212	, ,		
idubon borough	Camden	DVRPC	2017			10,044	843,771							00,212	214,204	13,035	25,715,
U	Camden	DVRPC	2015	29 Mu	unicipality			Absecon city,	Atlantic Cour	nty 🖵 < S	elect munici	pality nere					
		SJTPO	2015	126													
alon borough	Cape May			Val	lues					Mu	inicipality 🖓						
on-by-the-Sea borough		NJTPA	2017	Bu	ses (intercity, transit, &	school)			4,83	38,390 _{BL}	uses (intercity, transit	. Combination True	:ks (short & Lie	oht Trucks (commercial &	Motorc Passenge Sin	ale Unit Trucks (refu	se. short & lona
0 0 0	Ocean	NJTPA	2017	Cor	mbination Trucks (short	& long haul)			12,56	52,095						3	,
	Ocean	NJTPA	2017	753	ht Trucks (commercial &	k passenger)			175,22	25,267			VN	/IT Data by Ve	hicle Type		
rrington borough	Camden	DVRPC	2015	265	otorcycle					12,737							
	Burlington	DVRPC	2015	134	ssenger Car				145,89		200,000,000						
/ 0	Ocean	NJTPA	2017	4	igle Unit Trucks (refuse,	chort & long ha	ul) and Matarhama	c		15,346				175,225,267			
ayonne city	Hudson	NJTPA	2017	5,930 ⁵¹⁰	igle offic fracks (refuse,	Short & long ha		5	11,74	+3,340	180,000,000			1/3,223,28/			
ach Haven borough	Ocean	NJTPA	2017	5							4 5 9 9 9 9 9 9 9 9						
eachwood borough	Ocean	NJTPA	2017	117							160,000,000				14	6,895,464	
edminster township	Somerset	NJTPA	2017	10,970							1 40 000 000					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
elleville township	Essex	NJTPA	2017	3,608							140,000,000						
llmawr borough	Camden	DVRPC	2015	475							120,000,000						
lmar borough	Monmouth	NJTPA	2017	17							120,000,000						
lvidere town	Warren	NJTPA	2017	147							100.000.000						
rgenfield borough	Bergen	NJTPA	2017	521							100,000,000						
VMT Dat	a On-Road	d Vehicle G	6HG Emis	sions Sur							80,000,000						
	_										60.000.000						
											, ,						
											40,000,000						
											20,000,000		12,562,09	5		11,	,745,346
											0	4,838,390			2,712,737		
											0	Buses (intercity, transit, & school	Combinatio Trucks (shor		Motorcycle Pass		Unit Trucks se, short &

June 2022

Data Acronyms: CWC -	Combined with	Commercial	NDA - No Data	Available									
Highlighted Data:	Data + CWC	Data + NDA											
* Further information o	n Notes Sheets												
			Residential	Commercial	Industrial	Street Lighting	Residential	Commercial	Industrial	Street Lighting	Other Heating	On-Road	Total
Municipality 🗐	County 🗐	Year 🚽	Electricity 🔻	Electricity 🔽	Electricity	 Electricity 	Natural Ga: 🔻	Natural Ga: 🔻	Natural Ga: 🔻	Natural Ga: 🔻	Fuels 🔻	Vehicles	MTCO2e
Aberdeen township	Monmouth	2015	21,189	11,212	558	274	28,223	6,850	CWC	NDA	1,516	49,605	119,427
Absecon city	Atlantic	2015	16,368	19,364	NDA	168	8,840	18,884	NDA	NDA	1,247	164,679	229,551
Alexandria township	Hunterdon	2015	8,587	2,181	7	9	NDA	NDA	NDA	NDA	10,782	19,086	40,652
Allamuchy township	Warren	2015	7,507	2,488	318	59	7,584	262	NDA	NDA	2,955	18,071	39,244
Allendale borough	Bergen	2015	10,265	10,624	NDA	NDA	19,302	6,786	210	NDA	764	27,772	75,725
Allenhurst borough	Monmouth	2015	1,784	1,972	7	33	3,038	465	CWC	NDA	111	1,488	8,898
Allentown borough	Monmouth	2015	2,467	1,939	83	78	3,099	1,412	34	NDA	728	4,314	14,155
Alloway township	Salem	2015	4,661	1,214	NDA	27	944	NDA	NDA	NDA	9,975	9,783	26,604
Alpha borough	Warren	2015	3,004	6,187	749								
Alpine borough	Bergen	2015	7,594	NDA	NDA	Municipality	Aberdeen town	ship, Monmouth Cour	nt 🖵 < Select	municipality he	ere		
Andover borough	Sussex	2015	1,115	962	26					_			
Andover township	Sussex	2015	9,698	4,870	324	2015 MTCO2e by sector			Municipality ,	-			
Asbury Park city	Monmouth	2015	12,881	21,040	1,107	Residential Electricity Commercial Electricity			,189 Residenti C	Commerc Industri Stree	t Residentia Comn	nerci Industrial Str	eet Other C
Atlantic City city	Atlantic	2015	32,046	291,291	14	Industrial Electricity			558	Overall	2015 GHG Em	issions MT	CO2e
Atlantic Highlands bord	Monmouth	2015	6,909	4,039	42	Street Lighting Electricit	v		274	(B)	y Sector and E		
Audubon borough	Camden	2015	10,740	8,843	41	Residential Natural Gas		28	,223	(D	y Sector and L	neigy type)	
Audubon Park borough	Camden	2015	NDA	NDA	NDA	Commercial Natural Gas		6	,850				
Avalon borough	Cape May	2015	16,437	5,773	NDA .	Industrial Natural Gas			0				
Avon-by-the-Sea boroug	Monmouth	2015	3,306	1,203	53	Street Lighting Natural C	ias		0			Values	
Barnegat Light borough	Ocean	2015	NDA	NDA	NDA	Other Heating Fuels On-Road Vehicles			,516			Resi	dential Electricity
Barnegat township	Ocean	2015	35,803	10,821	173			45	,000		17.74%	Corr	mercial Electricity
Barrington borough	Camden	2015	8,433	7,434	77							≡ Indu	strial Electricity
Bass River township	Burlington	2015	2,412	1,297	1,817					41.54%	9.39%	Stre	et Lighting Electricity
Bay Head borough	Ocean	2015	3,372	1,212	2,040						9.39%	- 0.23% Resi	dential Natural Gas
Bayonne city	Hudson	2015	52,156	58,008	11,571								mercial Natural Gas
Beach Haven borough	Ocean	2015	19,804	6,017	11				\			- 0.47% Indu	istrial Natural Gas
Beachwood borough	Ocean	2015	13,805	2,553	81							Stre	et Lighting Natural Gas
Bedminster township	Somerset	2015	12,868	30,782	174					5 744	23.63%	Oth	er Heating Fuels
Belleville township	Essex	2015	30,925	27,496	1,913					5.7470		On-l	Road Vehicles
GHG Er	nissions Data	2015 GHC	G Emissions Cha	art Notes	+					1.27%			
		Long One	entres entre		U								



Sustainable Jersey Guide for **Sustainable Energy** Communities



How municipalities can help

1.1. Supportive Zoning for EV Infrastructure

Municipalities can facilitate adoption of electric vehicles (EVs) by reducing barriers to charging infrastructure installation. Municipalities should adopt the Model Statewide Municipal Electric. Vehicle Ordinance, which became effective in all municipalities in September 2021. The Model Statewide Ordinance established electric vehicle charging stations (EVSE) as a permitted accessory use and set requirements for Make-Ready and EVSE parking in new multifamily and mixed-use developments and parking lots. While those aspects of the Ordinance cannot be modified, the "Reasonable Standards" section of the Model Ordinance (which covers standards for accessibility, safety, signage, usage fees, and parking enforcement) is intended to be modified through the normal ordinance amendment process. Municipal boards should set these standards to ensure beneficial installation and use of EV charging infrastructure in the community.

Inspectors and zoning-related staff can be trained on EV infrastructure to help them enforce regulations and promote electric vehicles in their work. Popular training sources include the <u>Electric Vehicle Infrastructure</u> <u>Training Program</u> and <u>Department of Energy</u> <u>Clean Cities program</u>.

1.2. Public EV Charging Infrastructure

Public electric vehicle charging infrastructure is critical to encouraging widespread adoption of electric vehicles (EVs). Research has shown that charging availability is directly correlated with electric vehicle deployment (Howard et al.). EV chargers reduce "range anxiety," a concern of EV users that they will become stranded because of an empty battery. Public chargers can instill confidence in local residents and commuters about traveling locally in EVs, and even attract visitors or new residents who drive EVs.

Funding for electric vehicle charging infrastructure may be offered by state and federal programs. Currently, the New Jersey Department of Environmental Protection (NJDEP) offers grants for EV chargers through the <u>It PayS to Plug In</u> program. Electric utility companies also provide incentives for charging station installation, including upgrades to the infrastructure that connects charging stations to the grid (see <u>Section 1.2.2</u>).

Typically, municipalities promote the installation of public charging stations in one of three ways:

- Municipality owns and operates the EV infrastructure and deploys it on municipal property, typically a public parking lot or municipal street-side parking. The municipality may fund the project through its capital budget and recover costs by charging a fee for parking or providing other services (such as advertising). Fees for electric vehicle charging stations are generally recommended, even if utilization rates are low, as use (and corresponding electricity costs) of the charging stations will likely rise over time.
- Municipality works with a "sponsoring partner," which funds the purchase and installation of a charger on municipal property. The sponsoring partner may justify the costs as part of a public relations strategy, a customer acquisition/retention

Some utilities in New Jersey offer commissioning programs to commercial customers. Municipalities can participate in these programs themselves and/or promote these programs to eligible local entities. See the <u>local utilities' websites</u> for current offerings.

4.4 Energy Savings in New Construction

Implementing green design measures during construction can generate significant reductions in immediate and ongoing GHG emissions, often at a cheaper cost than retrofitting for energy efficiency at a later time. Green design can also add to a building's value, generating a rental and/or sale price premium, and create a better work environment, yielding greater productivity (IEA).

4.4.1 Ordinances and Outreach Targeting New Construction

A municipal Green Building Policy can encourage commercial and residential developers to use green design. For instance, these documents might suggest buildings be oriented for greatest solar potential and equipped with energy efficient HVAC systems. To ensure green design is considered, municipalities can adopt an ordinance requiring developers to submit a Green Development Checklist.

Municipalities can also promote NJCEP's programs for energy efficient new construction. The <u>Residential New Construction program</u> offers incentives and technical assistance to builders of new residential structures (and homes undergoing a complete rehabilitation) that achieve certifications such as ENERGY STAR and Zero Energy Ready (ZER). Independent third-party inspectors work with the builders to test the home's performance and verify high efficiency. For templates and recommendations for implementing these policies, see Sustainable Jersey's <u>Green Building Policy/Resolution</u> and <u>Create a Green Development Checklist</u> actions.

NJCEP's Commercial New Construction program consists of three programs with varying scope and potential for savings. The <u>SmartStart</u> <u>Buildings program</u> provides prescriptive and custom incentives for single energy efficiency measures. Developers can submit one application for several eligible measures via the <u>Custom Tailored Energy Efficiency Program</u> (<u>CTEEP</u>). For construction of buildings with 50,000+ square feet of planned conditioned space, NJCEP offers a comprehensive <u>Pay for</u> <u>Performance program</u>.

In messaging about energy-efficient building design, municipalities can explain the multilayered benefits of energy efficiency (see above), as well as the broader societal benefit of reducing air pollution, including greenhouse gases.

4.4.2 New Municipal Buildings as Model Green Buildings

Municipalities can reduce emissions from operations by building new municipal facilities to a high efficiency standard. A <u>Green Building</u> <u>Policy or Resolution</u> can specifically require green design for future municipal buildings, even specifying a minimum <u>LEED certification</u>, for example. To achieve high efficiency in new construction, municipalities often hire a professional with green building experience (e.g., from the <u>U.S. Green Building Council's</u> <u>Member Directory</u>) and instruct them to meet these standards. Incentives are available for specific energy efficiency measures via NJCEP's <u>Commercial New Construction program</u>. Municipal Tools for Encouraging Community Action: Engaging Financial Institutions FIGURE 20.

Municipal Tools for Encouraging Community Action: Engaging Financial Institutions

Building construction and purchases often involve third-party financial institutions such as banks and credit unions. Consequently, financial institutions can influence whether and how building owners pursue sustainable energy in buildings.

Municipalities can initiate dialogue with financial institutions to persuade them to support energy efficiency, renewable energy, etc. Those reaching out to these institutions can message that energy efficiency upgrades make businesses more solvent by generating savings in operational costs and justifying higher rent (IEA). The reliability of energy efficiency savings should make for an attractive opportunity for banks, credit unions, and community financial institutions. For more information, see the Institute for Market Transformation's report Energy Efficiency Finance For **Commercial Buildings: Insights** From Lenders.

4.5 Effective Energy Code Enforcement

State energy code requires that all buildings meet a baseline level of energy efficiency, but local government is responsible for enforcement of these requirements. Municipalities can provide continuing education and training for code enforcement officials to keep them up-to-date as state energy code changes. Hiring new positions in the code enforcement department can also help ensure enforcement and enable proactive outreach to developers and owners to improve the quality of applications for permits and encourage builders to go beyond energy code (like via NJCEP's New Construction programs). Research by the Lawrence Berkley National Laboratory found that the average energy code plan review takes 2.3 hours, followed by an average of 2.7 hours for the energy code inspection, for a total of 5 hours (Williams et al., pg. 16). Code enforcement agencies should have least enough capacity for that fundamental task, if not more, Code enforcement staff can also refer developers to voluntary standards such as the municipality's Green Development Checklist (see Section 4.4).

Setting a Green Building Policy for municipal or school facilities can fulfill the municipal <u>Green</u> <u>Building Policy/Resolution</u> or schools <u>Green</u> <u>Building Policy</u> action.

Meeting LEED Silver or similar standards with a new building can merit points under the municipal <u>New Construction</u> action or for schools, the <u>Design, Build or Certify New</u> <u>Construction & Major Renovations to Green</u> <u>Standards</u> action.

Municipalities and schools can also train staff on green building for points under the <u>municipal</u> or <u>schools</u> Green Building Training action.

How municipalities can help

4.1 Building Electrification

As the state's electricity grid becomes increasingly supplied by renewable resources, electrification becomes an increasingly effective carbon reduction strategy not only for transportation (see <u>Strategy 1</u>) but also for buildings, especially when the electricity supply contains a higher proportion of renewable electricity than the standard grid mix (e.g., from a <u>Renewable Government Energy Aggregation</u> or third party supply arrangement). Common forms of electrification include <u>heat pumps</u>, electric water heaters, and electric kitchen appliances like stoves. Municipalities can upgrade equipment in their facilities to electric, and promote <u>utility incentive</u> <u>programs</u> that include electrification measures, such as the equipment rebate programs.

Municipalities can also engage with the Board of Public Utilities and their local utility providers to work on developing rebate programs for electrification (an idea cited as a potential policy directive in New Jersey's Energy Master Plan). Such programs could follow the model of the Massachusetts HeatSmart program. Community leaders can meet with their local state representatives to explain the benefits of electrification, or get involved with the regulatory process for utilities (which can be tracked on the NJBPU website).

Case Study: HeatSmart Massachusetts

Massachusetts's Clean Energy Center (MassCEC) and Department of Energy Resources launched the HeatSmart Massachusetts program in 2018. Communities participating in the program encourage the adoption of clean heating and cooling technology, including heat pumps, wood heating, and solar hot water. Akin to a Solarize campaign, HeatSmart communities solicit bids from certified installers to offer discounted heating and cooling systems to community residents. The program facilitates the sharing of marketing strategies and materials between past and present participants. The program targets Massachusetts communities with a higher prevalence of high-cost heating fuels to realize the greatest financial savings (MassCEC, "HeatSmart").



MassCEC. Solarize-HeatSmart Toolkit. www.masscec.com/solarize-heatsmart-toolkit

As part of the Town Center Distributed Energy Resources Microgrid Program, the New Jersey Board of Public Utilities (NJBPU) has funded feasibility studies for microgrids in several New Jersey communities. The purpose of the studies was to identify opportunities for connecting critical facilities in a microgrid structure to provide energy for essential services in situations of grid outages. In March 2021, the NJBPU approved additional funding for the second phase of the program, in which participating government entities will work on detailed project design. Municipalities not part of the program can fund their own feasibility study to take the first steps towards a microgrid system.

7.3.3 District Energy

District energy comprises a network of underground pipes that provide heating and/ or cooling to a given locale from a central plant (EESI). District energy is a particularly appealing approach to improving efficiency for small, older buildings that are difficult and expensive to independently retrofit. District energy can provide the benefits of scale (i.e., low cost and emissions per unit energy) to a network of small buildings in a specific area (Osdobo et al.).

District energy systems provide emissions savings when the central plant is powered by a low-emissions generation system. Many district energy systems utilize combined heat and power (CHP) generation, which captures heat and electric power simultaneously. Though generally powered by natural gas combustion, CHP can achieve much higher efficiency (i.e., ratio of energy output to GHG emissions) than typical fossil fuel combustion. New Jersey's Clean Energy Program offers <u>incentives for</u> <u>combined heat and power systems</u> with an annual system efficiency of at least 60%. College, hospital, and military campuses are common locations for district energy, but the format works for city downtown districts as well. The quintessential downtown system is <u>District</u> <u>Energy St. Paul</u> in St. Paul, MN, which heats over 80% of St. Paul's central business district via a biomass CHP plant (powered with wood waste) and solar thermal technology (EESI).

Municipalities can prompt local institutions such as colleges to consider district energy solutions for their physical locations. They can also consider spearheading a district energy project for a neighborhood of the municipality itself. For guidance on the process of implementing district energy, see <u>The</u> <u>Role of District Energy in Greening Existing</u> <u>Neighborhoods</u> by the National Trust for Historic Preservation and the University of Oregon.

Case Study: Trenton District Energy

FIGURE 25.

Case Study: Trenton District Energy

Since 1983, a district energy network has supplied the downtown core of Trenton, including the State Capitol Complex, with hot water, steam, and chilled water. The network includes highly-efficient 6MW combined heat and power generation that ensures buildings in the network receive energy during grid outages. The district energy operator <u>Vicinity</u> <u>Energy</u> has been adding renewable energy into the network fuel mix and anticipates achieving net zero emissions by 2050 (Vicinity Energy).

Appendix: EMP/SJ Actions Crosswalk

Section of New Jersey's Energy Master Plan	Local Gov't	Community Actions	Municipal Operations	Other Actions				
Strategy 1: Reduce Energy Consumption and Emissions from the Transportation Sector								
1.1 Decarbonize the transportation s	ector							
1.1.1 330,000 light-duty electric vehicles by 2025	~	EV Outreach MYTEVF Public EVSE	Green Fleets PAFV					
1.1.2 Deploy EV charging infrastructure	~	EV Outreach MYTEVF Public EVSE						
1.1.3 Encourage purchase of EVs and incentivize charging station installation	~	EV Outreach MYTEVF Public EVSE	Green Fleets PAFV					
1.1.4 Increase consumer and fleet owner awareness & acceptance of EVs	~	EV Outreach MYTEVF Public EVSE						
1.1.5 Transition state's fleet to EVs								
1.1.6 Improve NJ Transit environmental performance								
1.1.7 Increase clean transportation options in LMI and EJ communities	~	EV Outreach MYTEVF Public EVSE		Environmental Justice in Planning/Zoning				
1.1.8 Partner with industry to develop incentives to electrify medium/heavy duty fleet	~	EV Outreach	(PAFV)					
1.1.9 State policies to accelerate adoption of alt fuels								

Energy Master Plan	Local Gov't	Community Actions	Municipal Operations	Other Actions
2.1.6 Value-stacking for DER				
2.1.7 Develop low-cost loans or financing for distributed energy resources	~	Solar Outreach MYTSF	On-site Solar On-site Wind	
2.1.8 Coordinate permitting and siting processes for renewable energy development	~	Community Solar MYTSF Solar Outreach		Wind Ordinance
2.1.9 Stakeholder engagement to explore rules to limit CO2 emissions from electric generating units				
2.3 Maximize Local (On-site or Remo 2050	tely-Sited	-	nd Distributed En	ergy Resources by
-	otely-Sited) Solar Development a Solar Outreach Community Solar	nd Distributed En	ergy Resources by
2050 2.3.1 Continue to grow community	vtely-Sited)	Solar Outreach	nd Distributed En	ergy Resources by
2050 2.3.1 Continue to grow community solar 2.3.2 Transition to a successor solar	vtely-Sited)	Solar Outreach Community Solar (Community Solar) (MYTSF)	nd Distributed En	ergy Resources by Environmental Justice in Planning/Zoning
2050 2.3.1 Continue to grow community solar 2.3.2 Transition to a successor solar incentive program 2.3.3 Maximize solar rooftop and community solar development in	vtely-Sited)	Solar Outreach Community Solar (Community Solar) (MYTSF) (Solar Outreach) Community Solar MYTSF	On-site Solar	Environmental Justice

A SUSTAINABLE JERSEY GUIDE

Community Energy Plan Workplan Template



CEP Workplan Template

Table of Contents

ntroduction: How to use this Document
Part I: Checklist
Strategy 1: Reduce Energy Consumption and Emissions from the Transportation Sector
1.1 Adopt Supportive Zoning and Regulations for EV Infrastructure
1.2 Train First Responders on EVs and EVSE
1.3 Train Non-Emergency Staff on EVs and EVSE
1.4 Purchase Alternative Fuel Vehicles
1.5 Improve Municipal Fleet Efficiency
1.6 Install Public EV Charging Infrastructure
1.7 Encourage Non-Municipal Fleets to Improve Efficiency
1.8 Encourage Workplace EV Charging Infrastructure
Strategy 2: Accelerate Deployment of Renewable Energy and Distributed Energy Resources
2.1 Adopt Supportive Zoning and Permitting for Private Solar
2.2 Post Solar Permitting Checklist
2.3 Adopt Zoning and Permitting for Community Solar
2.4 Train First Responders on Solar
2.5 Train Non-Emergency Staff on Solar
2.6 Install On-site Municipal Renewable Generation
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

2	.10 Implement Renewable Government Energy Aggregation (R-GEA)
2	.11 Support Community Solar as Project Ambassador
2	.12 Support Community Solar as Outreach Coordinator
2	.13 Host a Community Solar Project on Municipal Property
Strat	tegy 3: Maximize Energy Efficiency and Conservation and Reduce Peak Demand
3	.1 Upgrade Energy Efficiency in Municipal Facilities
3	.2 Residential Energy Efficiency Outreach Campaign
3	.3 Commercial Energy Efficiency Outreach Campaign
3	.4 Conduct Energy Efficiency Outreach to Large Energy Users
Strat	tegy 4: Reduce Energy Consumption and Emissions from the Building Sector
4.	.1 Construct New Municipal Buildings as Model Green Buildings
4.	.2 Encourage Benchmarking and Commissioning for Existing Buildings
4.	.3 Require Developers to Complete Green Development Checklist
4.	.4 Conduct Outreach Targeting New Construction in the Community
Strat	tegy 6: Support Community Energy Planning and Action with an Emphasis on Encouraging and
Supp	porting Participation by Low- and Moderate-Income and Environmental Justice Communities
6.	.1 Make Community Energy Planning Inclusive
6	.2 Conduct Energy Efficiency Outreach to Low- and Moderate-Income Residents
6.	.3 Support Shared Mobility Programs
6	.4 Support Low- and Moderate-Income Community Solar Subscriptions
6	.5 Conduct Energy Efficiency Outreach to Community-Serving Institutions
Strat	tegy 7: Expand the Clean Energy Innovation Economy
7.	1 Adopt Energy Storage Policies
7.	.2 Install an Energy Storage System
7.	.3 Develop Local Microgrid
7.	.4 Develop/Participate in a District Energy System
Part	II: Template
	-

Part I: Checklist

 2.9 Institute a Community-wide
 DIFFIC

 Solar Purchasing Program
 снес

MPACT:	• •
DIFFICULTY:	- - 1
CHECK IF DO	ING:

Partner with solar installers or a solar marketplace to offer special pricing on solar installations to residents and/or businesses for a limited time. Establish the partner solar installer(s) and special pricing via RFP process, then advertise the offering to the community. Alternatively, partner with a competitive online solar marketplace to offer residents a custom online webpage to receive quotes.

Measures of Success

- 5% of residents receive quotes for solar installations
- · 2% of residents install solar as part of the campaign

Resources

- Sustainable Jersey's <u>Solar Outreach</u> action
- NREL's Solarize Guidebook

🐇 Potential Stakeholders

- Local solar developer(s)
- Service organizations
- Local media
- Homeowners associations

× Comments/Rationale for NOT including this Initiative:

4.4 Conduct Outreach Targeting New Construction in the Community	IMPACT:			
Reach out to developers to encourage participation in NJCEP's New Construction Energy Efficiency incentive programs.				
Measures of Success				
 Information on NJCEP's <u>New Construction Energy Efficiency</u> incentive programs distributed via multiple mediums 				
 Major new development utilizes NJCEP program(s) 				
Resources				
NJCEP's <u>New Construction Energy Efficie</u> Potential Stakeholders	ncy website			
 Builders trade associations (e.g., U.S. Greet Building architects and developers Financial institutions 	n Building Council)			
\times Comments/Rationale for NOT including this	s Initiative:			

Part II: Template

Initiative:	
Initiative start date:	Priority for muni:
Anticipated funding sources:	
Obstacles/Barriers:	
Next steps: (specific and tangible):	
	Initiative start date: Anticipated funding sources:

Part II: Template

EMP Strategy: 4: Reduce Energy Use from the Building Sector	Initiative: 4.4 Conduct Outreach Targeting New Construction		
Initiative lead: Environmental Commission	Initiative start date: 12/2023 Priority for muni: Medium		
Anticipated initiative length: 1 year	Anticipated funding sources: N/A		
Departments involved:	Obstacles/Barriers:		
- Building Department / Code Enforcement - Mayor's Office - Office of Economic Development	- None anticipated		
Community notes (include current status, selected measure of success):	Next steps: (specific and tangible):		
 Township does not currently perform any outreach on new construction energy efficiency Township has several new residential developments proposed or in progress Success will be measured in number of new construction projects that utilize New Jersey's Clean Energy Program incentives for the years that follow outreach. The Environmental Commission seeks to double the annual number of applications to New Construction incentive programs for buildings in the township 	 Environmental Commission will gather and organize outreach materials on the topic of energy efficiency in new construction. Environmental Commission will set meeting with New Jersey's Clean Energy Program staff to create an outreach paln. Environmental Commission will delegate outreach to Building Department, Mayor's Office, and Office of Economic Development. Environmental Commission will coordinate with New Jersey's Clean Energy Program and municipal staff to host an informational event for local developers. 		

Model Community Energy Plan

The Township of Gotham's Community Energy Plan



Model Plan - Introduction

I. Introduction

New Jersey is both a significant source of greenhouse gases (GHG) emissions and a state particularly vulnerable to climate change. Increasing heat waves, intense storms, and sea-level rise caused by climate change will dramatically alter our coastal state for many years to come (NJDEP, 2020). According to the New Jersey Department of Environmental Protection's 2019 <u>Statewide Greenhouse Gas Emissions Inventory</u>, New Jersey adds almost 100 million metric tons of CO2e to the atmosphere annually. New Jersey can mitigate the local and global impacts of climate change with a rapid transition from the current GHG-intensive energy system to one that optimizes energy use and produces energy with minimal GHG emissions.

Recognizing New Jersey's role in climate change mitigation, the State of New Jersey has established a goal of 100% clean energy in the state by 2050. <u>The New Jersey Energy Master</u> <u>Plan: Pathway to 2050</u> outlines the state's strategies for achieving that goal while also

addressing issues of social and economic inequity. To promote action at the local level in support of the state's goals, the New Jersey Board of Public Utilities (NJBPU) launched the Community Energy Plan Grant Program, offering support and funding for municipalities to develop a Community Energy Plan.

Co-benefits of Sustainable Energy

The sustainable energy transition offers an opportunity to realize various co-benefits in our community and beyond. Besides reducing GHG emissions, implementing this plan will improve:

- Public health
 - Lower concentrations of ground-level

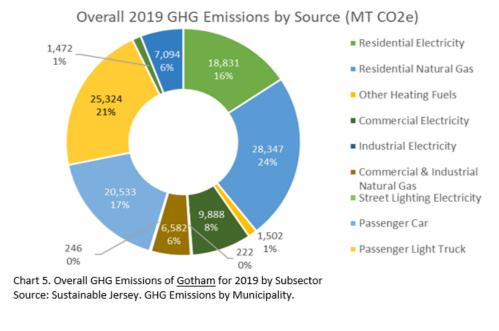
"Plug and Play" introductory language provided

Model Plan - Data

Cut and paste data charts from Sustainable Jersey Data Center

4) GHG Emissions from Energy Use

In 2019, the total community-wide greenhouse gas emissions from <u>stationary</u> and transportation energy use in <u>Gotham</u> was <u>119,043</u> metric tons of CO₂e. The largest share of community emissions came from <u>residential natural gas use</u>, followed by <u>passenger light trucks</u> and <u>passenger cars</u>. This suggests significant potential emissions reductions via efficiency improvements and electrification of both homes and residential vehicles.



Model Plan -Workplan

Use Workplan Template to identify:

- Lead department
- Timeline
- Funding Sources
- Next Steps
- Measures of Success

Initiative 1.2: Train First Responders on EVs and EVSE

Description: Require training for local first responders on electric vehicles and associated infrastructure, furthering public confidence and maintaining emergency preparedness.

Lead	Timeline	Funding
Police Chief	December 2023, then every three years	N/A

Current status:

No first responder departments have undergone training specific to electric vehicles and EV charging equipment. As of 2019, there were 30 passenger electric vehicles in Gotham; the number of EVs in town has likely increased since then (Sustainable Jersey EV Data).

Next steps:

- 1. Police chief purchases National Fire Protection Association online electric vehicle training for emergency responders.
- Police chief distributes training to police department, fire department, and EMS, and works with department heads to determine deadline for all staff to complete it.
- 3. Police chief sets the next date that the training will be distributed (in 2026).

Measures of success:

- First round of trainings completed for all first responders
- Policy implemented requiring first responder training every three years



- What's in a plan
- Why make a plan
- How to create a plan
 - o Data
 - Sustainable Energy Communities Guide
 - Workplan Template
 - Model Community Energy Plan

Sustainable Jersey Summit Sponsors and Partners

Corporate Sponsors

Platinum







IG: Sustainable_Jersey | Twitter: @SJ_Program and @SJ_Schools | FB: @SustainableJersey | LinkedIn: sustainable-jersey

Sustainable Jersey for Schools Summit Sponsors and Partners

Corporate Sponsors

Platinum



IG: Sustainable_Jersey | Twitter: @SJ_Program and @SJ_Schools | FB: @SustainableJersey | LinkedIn: sustainable-jersey

Panel Speakers

Lauren Griffith, New Jersey Board of Public Utilities lauren.griffith@bpu.nj.gov

Nancy Quirk, Sustainable Jersey quirkn@tcnj.edu

Hogan Dwyer, Sustainable Jersey dwyerh@tcnj.edu

Zenon Tech-Czarny, Sustainable Jersey czarnyz@tcnj.edu

SUSTAINABILITY SUSTAINABILITY

