

Success Stories in Community Energy Planning

Sustainability Summit

May 5, 2023

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

Speakers

Nancy Quirk

Senior Energy Program Manager Sustainable Jersey

Michele Alonso

Director of Planning and Redevelopment City of Asbury Park

Nicole Miller

Newark Green Team Chair Newark City



Create a Community Energy Plan for your local community that aligns with the State's Energy Master Plan.

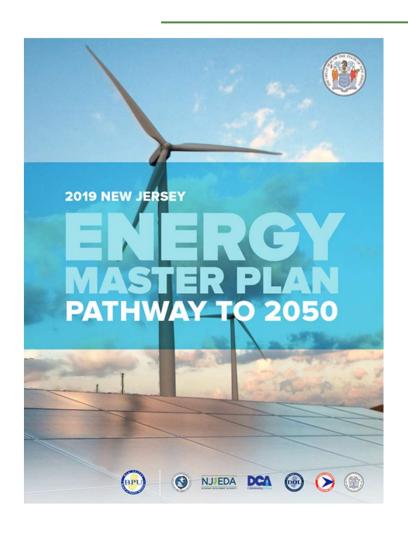
What is a Community Energy Plan?

Community Energy Plans help communities effectively organize to rapidly lower greenhouse gas emissions by reducing energy use and expanding sustainable energy production. A Community Energy Plan establishes priority sustainable energy initiatives based on demonstrated effectiveness, unique local factors, and co-benefits, such as improved local air quality, energy savings for residents, and workforce development. Many of these initiatives involve collaboration between municipalities, businesses, nonprofits, and residents.

A Community Energy Plan is developed by a team of local municipal staff, elected officials, relevant municipal board and commission members, and community representatives. This planning team integrates the perspectives of the broader community with established best practices for effectively lowering greenhouse gas emissions on the local level.

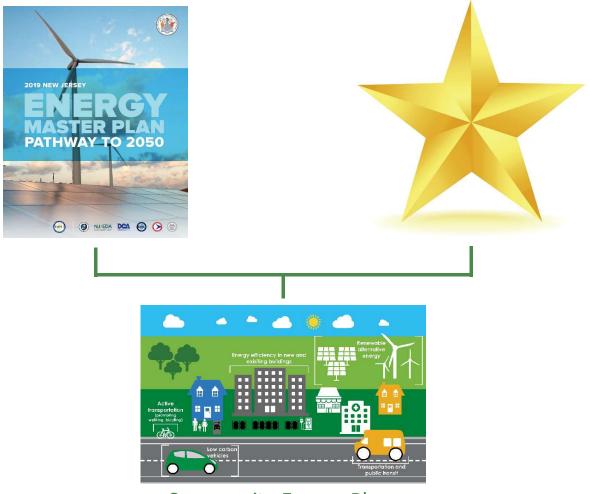


New Jersey Energy Master Plan



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

What is a Community Energy Plan?

- ... a tool to prioritize initiatives
 - to promote energy efficiency
 - o residential, multifamily
 - o commercial, nonprofits, government
 - to reduce transportation emissions
 - o passenger vehicles
 - o government fleet
 - local fleet operators
 - to support renewable energy
 - o zoning and permitting
 - o outreach and education

- ... a process that includes
 - o municipal decision makers
 - o community stakeholders
 - o 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

Creating a CEP

- Create a plan for 3-5 years into the future
- Fit the plan to the community
 - Target community needs
 - Take advantage of community opportunities
- Job creation/workforce development
- Engage stakeholders
 - o Local nonprofits for energy efficiency outreach
 - Local auto dealers for EV initiatives
 - Municipal departments, boards, commissions
 - Economic development
 - Planning board
 - Environmental commission



What's in a Community Energy Plan?

- 1. Introduction
- 2. Community Profile
- 3. Work Plan (including Implementation Timeline/Next Steps)
 - 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

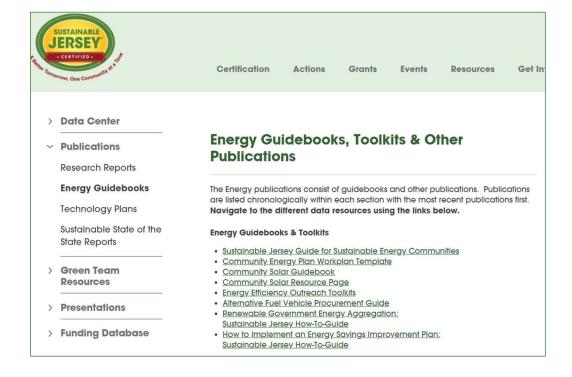
Creating a Team

- Liaison to governing body
- Administration
- Municipal staff
 - o Facilities
 - Public Works
 - o Engineering
- Other possible members:
 - Community Development
 - Fire/Police
 - Green Team/other volunteers
- Set meeting schedule for full team (e.g., monthly)



Sustainable Jersey Resources for Creating a Community Energy Plan

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



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



sustainablejersey.com/resources/data-center/

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

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

Community Profile Data

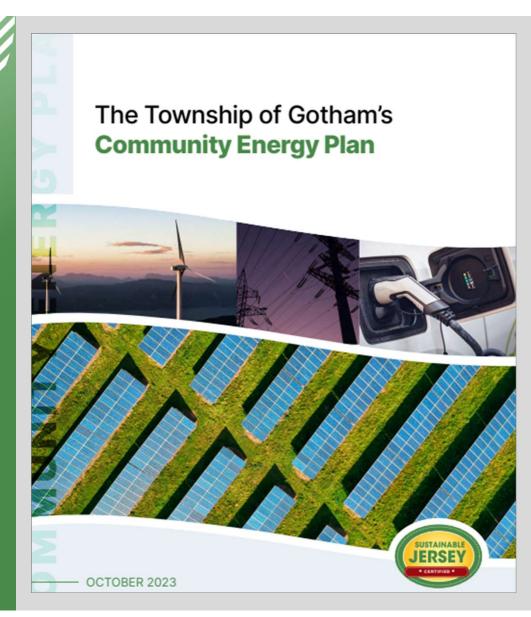
* Further explanation on Note	es sheet								Population C	haracteristics	
Municipality	County	Square Miles	Population	% White	% Black	% Asian, Pacific Islander =	% Other	% Hispanic or Latino	Households	Median Household	Percent of Population in
		~	_	~	*		▼	Origin* -	~	Income	Poverty
Aberdeen township	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	\$53,655	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	12.2%
Bay Head borough	Ocean	0.7	1,050	94%	0%	1%	5%	3%	472	\$102,000	3.1%
Bayonne city	Hudson	7.7	65.112	62%	10%	10%	18%	35%	24.784	\$69.511	12.4%

Community GHG Emissions

Community-So		- Management of the con-	- Control of the Control of the Control				TON BIOMIC	-quitalen	. (,			
Data Acronyms: CWC -		NAME OF TAXABLE PARTY OF TAXABLE PARTY.	NDA - No Data	Available									
Highlighted Data:	Data + CWC	BELLEVIN CONTRACTOR FOR STATE											
Further information o	n Notes Sheets								***				
Municipality	County	Year	Residential	Commercial	Industrial	Street Lighti		Commercial	Industrial	Street Lighting	ACCESS.	On-Road	Total
viunicipality.	-1	- Maria	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	18	1,971	1,338	NDA	NDA	2,827	10,647	26,741
Alpine borough	Bergen	2015	7,594	NDA	NDA	NDA	12,648	779	NDA	NDA	75	6,379	27,474
Andover borough	Sussex	2015	1,115	962	26	14			2 222				
Andover township	Sussex	2015	9,698	4,870	324	19	J unicipality	Aherdeen township. M	onmouth Count X	Select municipa	lity here		
sbury Park city	Monmouth	2015	12,881	21,040	1,107	472	nomcipuity	Aberdeen township, w	ommodeli codine vi	Sciect mamerpe	inty noic		
Atlantic City city	Atlantic	2015	32,046	291,291	14		015 MTCO2e by sector			Municipality -			
Atlantic Highlands boro	Monmouth	2015	6,909	4,039	42		Residential Electricity Commercial Electricity		21,189	Residenti Commerc Indus	tri Street Residentia.	Commerci Industrial	Street Other
Audubon borough	Camden	2015	10,740	8,843	41	2.22	ndustrial Electricity		11,212 558	O ^s	verall 2015 GHG	3 Emissions N	IT CO2e
Audubon Park borough	Camden	2015	NDA	NDA	NDA	9.2	treet Lighting Electricity		274		(By Sector a	nd Energy Typ	ne)
Avalon borough	Cape May	2015	16,437	5,773	NDA	100	Residential Natural Gas		28,223		(by sector a	nd Energy Typ	,,
Avon-by-the-Sea boroug	Monmouth	2015	3,306	1,203	53	33 -	Commercial Natural Gas ndustrial Natural Gas		6,850				
Barnegat Light borough	Ocean	2015	NDA	NDA	NDA	215.4	ndustriai Naturai Gas treet Lighting Natural Gas		0				
Barnegat township	Ocean	2015	35,803	10,821	173	_	Other Heating Fuels		1,516			Valu	
Barrington borough	Camden	2015	8,433	7,434	77	154	On-Road Vehicles		49,605		17,74%		Residential Electricity Commercial Electricity
Bass River township	Burlington	2015	2,412	1,297	1,817	23				/	100		Industrial Electricity
Bay Head borough	Ocean	2015	3,372	1,212	2,040	8				41.54%			Street Lighting Electricity
Sayonne city	Hudson	2015	52,156	58,008	11,571	1,680				32.2		9,3996	Residential Natural Gas
Beach Haven borough	Ocean	2015	19,804	6,017	11	107						0.2376	Commercial Natural Gas
eachwood borough	Ocean	2015	13,805	2,553	81	51				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		- 0.47%	Industrial Natural Gas
edminster township	Somerset	2015	12,868	30,782	174	15				No.			Street Lighting Natural Ga
elleville township	Essex	2015	30,925	27,496	1.913	736					23:63%		Other Heating Fuels
	nissions Data	a service calls	3 Emissions Ch	Service I Management 1	(+)					1.27%		•	On-Road Vehicles



Model 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 Statewide Greenhouse Gas Emissions Inventory, 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. *The New Jersey Energy Master Plan: Pathway to 2050* 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

Model Plan: Data

Copy and paste charts from Sustainable Jersey Data Center

4) GHG Emissions from Energy Use

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

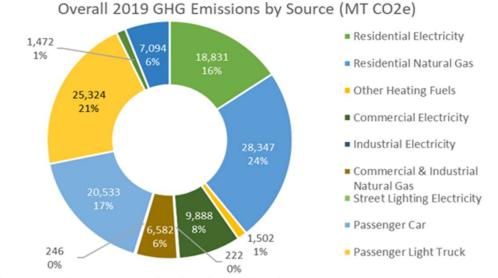


Chart 5. Overall GHG Emissions of <u>Gotham</u> for 2019 by Subsector Source: Sustainable Jersey. GHG Emissions by Municipality.

Model Plan: Municipal Workplan

Next steps:

- Township Clerk establishes commercial energy efficiency outreach coordinator.
- Outreach coordinator finds venue to hold workshop for large energy users to learn about utility incentive programs, NJCEP's Large Energy Users Program (LEUP), and PJM's Demand Response program.
- Outreach coordinator contacts NJBPU and/or utility companies to request representatives to attend the workshop, then coordinates with reps to determine date/time of workshop.
- Outreach coordinator calls largest energy users in Gotham according to New Jersey's Energy Benchmarking program.
- Workshop held for large energy users.

Initiative 3.4 Conduct Energy Efficiency Outreach to Large Energy Users

Description: Contact large energy users in the community to prompt interest in managing energy use, including participating in utility commercial energy efficiency incentive programs like Engineered Solutions and PJM's Demand Response program.

Lead	Start Date	Priority	Anticipated Length	Funding Sources
Township Clerk	August 2023	Medium	One year	N/A

Departments involved:

- Economic Development Office
- Township Clerk

Obstacles/Barriers:

No significant barriers were identified

Community notes:

As of 2019, there are 128 commercial and industrial properties in Gotham. The majority are located on Route 14. There are also some larger farms and agricultural processing facilities on Route 130. These properties may be well suited for commercial renewable energy generation and energy efficiency programs such as NJCEP's Large Energy Users Program (LEUP) or Energy Management solutions programs offered by the utilty.

Commercial and Industrial Properties of Gotham



Map 4. Commercial and Industrial Properties of Gotham

Case Studies in Community Energy Planning

Michele Alonso

Director of Planning and Redevelopment City of Asbury Park

Nicole Miller

Newark Green Team Chair Newark City

Upcoming Events and Opportunities

FREE ENERGY TECHNICAL ASSISTANCE FOR SCHOOLS AND MUNICIPALITIES IN ELIZABETHTOWN GAS, NEW JERSEY NATURAL GAS, AND SOUTH JERSEY GAS SERVICE TERRITORIES

Free technical assistance to identify and apply for utility incentives and New Jersey's Clean Energy Program (NJCEP) incentives for energy efficiency audits and facility upgrades. This technical assistance is funded by Elizabethtown Gas, New Jersey Natural Gas, and South Jersey Gas.

For more information please visit: bit.ly/EnergyTAforMunisandSchools

2023 MUNICIPAL CERTIFICATION CYCLE

The next deadline to apply for certification is **May 12, 2023**. The final application deadline is **July 27, 2023**. View the full cycle timeline on the 2023 Certification Cycle page.

For more information please visit: bit.ly/MuniCertCycle

2023 SUSTAINABLE COMMUNITIES GRANT PROGRAM

Atlantic City Electric and Sustainable Jersey are pleased to offer \$50,000 to support municipal environmental stewardship and resiliency projects in Atlantic City Electric's service territory. Municipalities are encouraged to work with local organizations on applications, which are due June 29, 2023. An informational webinar will be held on May 15, 2023 from 1:00pm - 2:00pm.

For more information please visit:

http://www.bit.ly/SustainableCommunitiesGrantProgram

TRI-COUNTY SUSTAINABILITY GENERAL MEETINGS

This Sustainable Jersey Regional Hub will host virtual meetings on a variety of sustainability topics throughout the year. The next meeting is **May 31, 2023 from 7:00pm - 8:00pm**.

For more information please visit: http://www.bit.ly/Tri-CountySustainability

2023 SCHOOL CERTIFICATION CYCLE

The final deadline to apply for certification and Digital Schools Star Recognition is **June 15, 2023**. View the full cycle timeline on the 2023 Certification Cycle page.

For more information please visit: http://www.bit.ly/SchoolsCertCycle

TREES FOR SCHOOLS PROGRAM, TREE-PLANTING GRANTS FOR NJ PUBLIC SCHOOLS, COLLEGES AND UNIVERSITIES

The Trees for Schools program will provide \$2.5 million in grants to New Jersey public school districts, county colleges and state colleges and universities to fund the planting of trees on campuses across New Jersey. Competitive grants of \$10,000 to \$500,000 will fund costs associated with planning, site preparation, trees, planting, watering, monitoring and related expenses over a three-year period. Applications are due on July 13, 2023, for spring 2024 plantings. An informational webinar will be held on May 18, 2023 from 3:00pm - 4:30pm. The Trees for Schools program is a collaboration of the New Jersey Department of Environmental Protection, The College of New Jersey and Sustainable Jersey.

For more information please visit: bit.ly/TreesforSchools

Sustainable Jersey Underwriters and Sponsors

PROGRAM UNDERWRITERS -























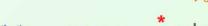


CORPORATE SPONSORS











































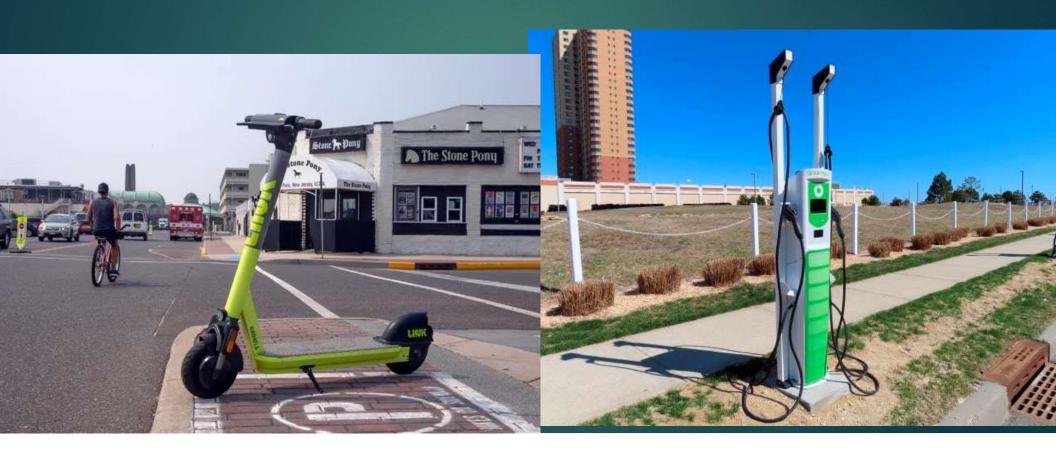
SUCCESS STORIES IN COMMUNITY ENERGY PLANNING Leading the Way to an Energy Plan

Michele Alonso, PP, AICP Director of Planning and Redevelopment City of Asbury Park, New Jersey

Asbury Park Green Team Administrator May 5, 2023



- Already focused on energy initiatives
 - ▶ Energy Fellow
 - Sustainable Monmouth Alliance Energy Aggregation Government Energy Program
 - ▶ NJ Direct Install
 - ▶ Leader in bike and scooter share
 - ► EV charging stations
 - ► Energy Savings Improvement Program (ESIP)



- ▶ Take it further
 - ▶ Electric vehicle car share
 - ▶ Electrify municipal fleet
 - ▶ Participate in community solar
 - ▶ Path to better communication

NJ Comfort Partners– including home heating and cooling, water heating, lighting, and major appliances.

Low Income Home Energy Assistance (LIHEAP)

NJ Natural Gas Gift of Warmth

Get the Gift of Warmth (NJNG Customers Only)

Available to New Jersey Natural Gas customers, the Gift of Warmth program is designed to help those who have exhausted all other forms of energy assistance.



Funded by New Jersey Natural Gas and customer donations, those who are experiencing financial difficulties because of illness, high medical expenses, or other unanticipated circumstances may qualify.

To see if you qualify or for additional information about Gift of Warmth, please call 732-389-2204.

Eligibility

2014 Income Guidelines (225% of the Federal Poverty Guidelines)

Size of Family	Monthly Income	Yearly Income
1	\$2,207	\$26,483
2	\$2,987	\$35,843
3	\$3,767	\$45,203

Add \$180 to the weekly income, \$780 to the monthly income, or \$9,360 to the yearly income for each additional member.







How are we putting the plan together

- ► Technical Assistance from Sustainable Jersey
- Monthly meetings
- ▶ Template
- Green Team volunteers
- Advice
- Consultant

How we are putting the plan together

- Green Team involvement
- Identify priorities
- What can be achieved short term v long term
- Subcommittee
- Work together on template

Thank you

www.cityofasburkpark.com

FB @CityofAsburyParkNJ and @inAsburyParkNJ

Twitter @inAsburyParkNJ and @APCmtyEvents

Instagram @CityofAsburyParkNJ

Michele Alonso michele.alonso@cityofasburypark.com



Success Stories in Community Energy Planning

"What Can We Do to Make a Positive Impact?"

Nicole Miller – SJ Sustainable Summit – May 2023











Newark's Clean Energy Stakeholders

General Public

- Virtual Community Outreach events
- Meetings with Newark Green Team and Newark Environmental Commission

Organizations

- Outreach to public and private education institutions, faith-based institutions, chambers of commerce & communitybased organizations.
- Outreach to Business- & Special-Improvement Districts (BIDs & SIDs)

City Departments

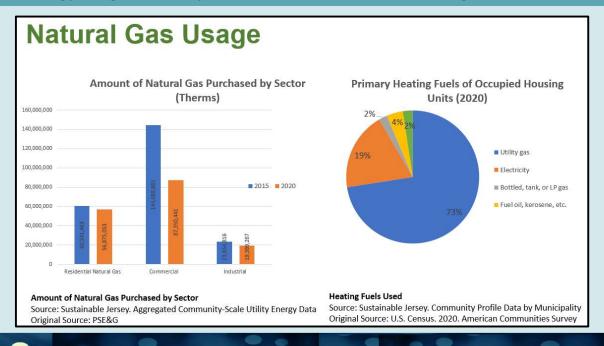
- Mayor's Office
- City Council
- Sustainability
- Engineering
- Public Works
- Economic & Housing Development
- Health & Community Wellness
- Invest Newark





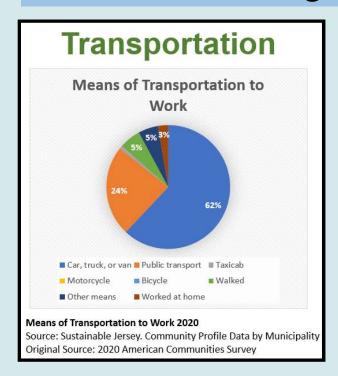
Newark's Current Energy Outlook

Energy usage data helps Newark evaluate the areas of greatest concern.





Communicating Newark's Energy Needs



Energy usage data helps Newark evaluate areas of potential impact.

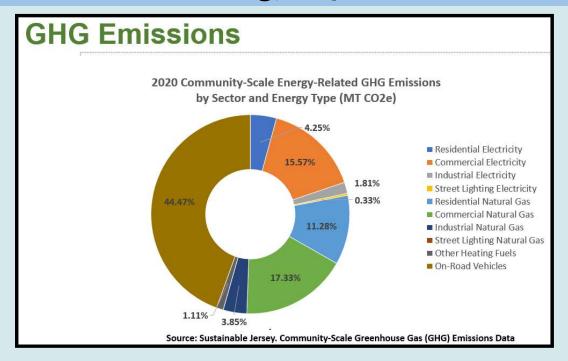
- What are low-hanging fruit opportunities for increasing public transportation ridership?
- How can land use planning increase walking and bike riding?
 - ➤ Where will EV and e-mobility interventions have the most impact?



Newark's Clean Energy Impact

Data shows Newark can make significant impact in GHG emissions:

- Reducing vehicles on the road or transitioning to EV
- Transitioning
 Commercial off utility
 gas to clean sources
- Transitioning
 Commercial Electric to
 clean or renewable
 sources



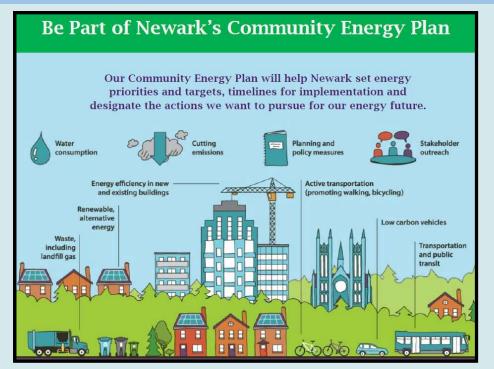




Community Energy Planning

Step 1:

Convene community, organizational and city representative stakeholders.







Community Energy Planning

Step 2:

Determine which energy-related actions are important to the community and which will have the most impact.

Strategy 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

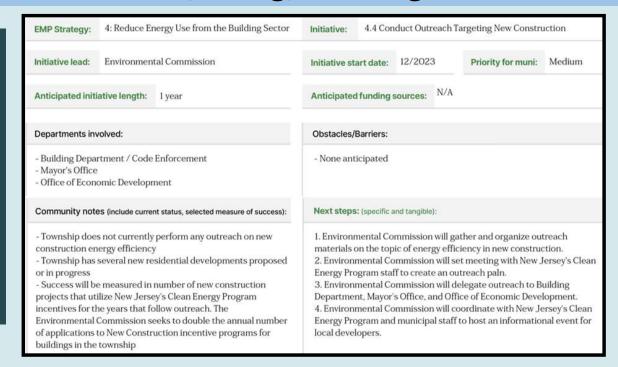




Community Energy Planning

Step 3:

Outline what team or group is taking leadership on this action and the specific requirements needed to ensure completion.







Clean Energy Considerations

- Environmental Justice concerns including air, water and soil quality
 - Workforce development opportunities and challenges
 - Unintended consequences (such as resident displacement)
 - * The cleanest energy is energy we never have to use: maximize energy efficiency



Thank You!

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Michele Alonso

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Nicole Miller

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