



COMMUNITY ENERGY PLAN

FOR THE
BOROUGH OF AUDUBON, NEW JERSEY

CEP PARTNERS:



AUDUBON
Public School
District

 **SUSTAINABLE
AUDUBON**
MAKING IT GREENER TOGETHER

PREPARED BY:

ACT
ENGINEERS

VERSION:

DRAFT

JANUARY 2024

Acknowledgements



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This report was made possible through a grant from New Jersey's Clean Energy Program™. New Jersey's Clean Energy Program is brought to you by the New Jersey Board of Public Utilities.

ABOUT THE NEW JERSEY BOARD OF PUBLIC UTILITIES (NJBPUB)

The New Jersey Board of Public Utilities ("NJBPUB" or "Board") is the state agency with authority to oversee the regulated utilities, which provide critical services such as natural gas, electricity, water, telecommunications, and cable television. The law requires the Board to ensure safe, adequate, and proper utility services at reasonable rates for customers in New Jersey.

ABOUT THE NEW JERSEY CLEAN ENERGY PROGRAM (NJCEP)

NJCEP, established on January 22, 2003, in accordance with the Electric Discount and Energy Competition Act (EDECA), provides financial and other incentives to the State's residential customers, businesses and schools that install high-efficiency or renewable energy technologies, thereby reducing energy usage, lowering customers' energy bills and reducing environmental impacts. The program is authorized and overseen by the New Jersey Board of Public Utilities (NJBPUB).

ABOUT SUSTAINABLE JERSEY

Sustainable Jersey is a nonprofit, nonpartisan organization that supports community efforts to reduce waste, cut greenhouse gas emissions, and improve environmental equity. Sustainable Jersey researches best practices for what communities could and should do to contribute to a sustainable future and provides tools, training, and financial incentives to support and reward communities as they pursue sustainability programs. Sustainable Jersey created the model Community Energy Plan (CEP) for municipalities participating in the New Jersey Board of Public Utilities' Community Energy Grant Program.



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Abbreviations

ACES	Alliance for Competitive Energy Services
ACT	ACT Engineers, Inc.
AFV	Alternative Fuel Vehicle
CEP	Community Energy Plan
CO₂e	Carbon Dioxide equivalent
DI	Direct Install
EDECA	Electric Discount and Energy Competition Act
EE	Energy Efficiency
EJ	Environmental Justice
EMP	Energy Master Plan
EV	Electric Vehicle
EVSE	Electric Vehicle Supply Equipment
GHG	Greenhouse Gases
LMI	Low- and Moderate- Income
NFPA	National Fire Protection Association
NJ	New Jersey
NJBPU	New Jersey Board of Public Utilities
NJDCA	New Jersey Department of Community Affairs
NJDEP	New Jersey Department of Environmental Protection
NJSEM	New Jersey Sustainable Energy Joint Meeting
PJM	Pennsylvania-New Jersey-Maryland Interconnection
PSD	Public School District
PV	Photo-Voltaic
REC	Renewable Energy Credit
VMT	Vehicle Miles Traveled



Executive Summary

The Borough of Audubon (herein referenced as Audubon, or the Borough) is committed to addressing climate change and reducing greenhouse gas emissions. The Borough aspires to not only contribute to the State's pursuit of its energy goals, but also to take actions to reduce the energy usage and greenhouse gas (GHG) impacts from services it provides to its residents and businesses, as well as help its residents and businesses reduce their own energy. The Borough received a grant from the New Jersey Board of Public Utilities (NJBPU) to develop a Community Energy Plan (CEP). This grant will help the Borough plan for and invest in renewable energy as well as work towards a better environment for all its residents. Using the State's Energy Master Plan (EMP) as a guide, the strategies outlined in this CEP will support the goal of increasing clean energy production and reducing energy use and emissions in the Borough. The following conditions currently represent the energy landscape of the Borough of Audubon:

- Approximately 56% of the Borough's electricity is consumed by residential uses, about 43% is consumed by commercial uses, and approximately 1% is consumed by industrial uses and street lighting.
- Residential natural gas consumption represents 72% of the overall natural gas consumption in the Borough. About 28% of natural gas use is from the commercial sector.
- The largest GHG emissions in the Borough is from on-road vehicles (48%). Residential electricity and natural gas follow at 11% and 21%, respectively. Commercial Natural gas (8%) and electricity (9%), and other heating fuels (3%) comprise the remaining GHG emissions.
- Passenger trucks, cars, and vans produced the largest vehicle miles traveled (VMT) at approximately 80% of the overall VMT in the Borough, followed by public transport at 5.96%.
- Less than 1% of the total personal vehicles within the Borough are electric vehicles.



- Solar installations within the residential sector represent 98% of the total solar installations in the Borough.

Typical strategies to reducing GHG emissions include an integrated approach to transition to the use of more energy efficiency equipment and vehicles powered by renewable energy coupled with storage. These strategies can be implemented incrementally over time. These strategies include:

- Energy Efficiency (EE) at the whole building approach
- On-Site or Community Solar
- On-Site Storage
- Electric Vehicles (EV)
- Cold Climate Heat Pumps for heating, air conditioning and water heating

In development of the CEP, municipalities are required to utilize the Sustainable Jersey Workplan template, a tool which consists of two parts. Part I provides descriptions of high-impact initiatives which are organized to correspond with the seven strategies of the New Jersey EMP. Part II provides worksheets for each initiative. The Borough of Audubon formed a Task Force, which took the initial step of sorting through the different actions and suggestions provided by Sustainable Jersey to support the development of the CEP. Within each EMP Strategy are the initiatives the Borough is required to consider as part of this Plan. Audubon's task force identified the strategies that were the most feasible to implement within the Borough, and further prioritized them from 'High' (implementation as soon as possible) to 'Low' (implementation within 3-5 years). Several strategies were deemed not to be a priority and may be re-considered in the future. The following table provides a summary of the selected strategies and their priority ranking.



Borough of Audubon, NJ – Selected CEP Strategy Priorities

INITIATIVES		Priority			Future Consideration
		High	Medium	Low	
1.1	Adopt Supportive Zoning and Regulations for EV Infrastructure	High			
1.2	Train First Responders on EVs and EVSE	High			
1.3	Train Non-Emergency Staff on EVs and EVSE			Low	
1.4	Purchase Alternative Fuel Vehicles		Medium		
1.5	Improve Municipal Fleet Efficiency	High			
1.6	Install Public EV Charging Infrastructure	High			
1.7	Encourage Non-Municipal Fleets to Improve Efficiency				Future Consideration
1.8	Encourage Workplace EV Charging Infrastructure				Future Consideration
2.1	Adopt Supportive Zoning and Permitting for Private Solar	High			
2.2	Post Solar Permitting Checklist		Medium		
2.3	Adopt Zoning and Permitting for Community Solar			Low	
2.4	Train First Responders on Solar		Medium		
2.5	Train Non-Emergency Staff on Solar		Medium		
2.6	Install On-Site Municipal Renewable Generation	High			
2.7	Buy Renewable Energy for Municipal Facilities		Medium		
2.8	Offer a Solar Employee Benefit Program				Future Consideration
2.9	Institute a Community-wide Solar Purchasing Program				Future Consideration
2.10	Implement Renewable Government Energy Aggregation (R-GEA)				Future Consideration
2.11	Support Community Solar as Project Ambassador				Future Consideration
2.12	Support Community Solar as Outreach Coordinator		Medium		
2.13	Host a Community Solar Project on Municipal Property				Future Consideration
3.1	Upgrade Energy Efficiency for Municipal Facilities	High			
3.2	Residential Energy Efficiency Outreach Campaign	High			
3.3	Commercial Energy Efficiency Outreach Campaign			Low	Future Consideration
3.4	Conduct Energy Efficiency Outreach to Large Energy Users				Future Consideration
4.1	Construct New Municipal Buildings as Model Green Buildings				Future Consideration
4.2	Encourage Benchmarking and Commissioning for Existing Buildings	High			
4.3	Require Developers to Complete Green Development Checklist				Future Consideration
4.4	Conduct Outreach Targeting New Construction in the Community				Future Consideration
6.1	Make Community Energy Planning Inclusive		Medium		
6.2	Conduct Energy Efficiency Outreach to Low- and Moderate-Income Residents	High			
6.3	Support Shared Mobility Programs				Future Consideration
6.4	Support Low- and Moderate-Income Community Solar Subscriptions				Future Consideration
6.5	Conduct Energy Efficiency Outreach to Community-Serving Institutions				Future Consideration
7.1	Adopt Energy Storage Policies			Low	
7.2	Install an Energy Storage System			Low	
7.3	Develop Local Microgrid				Future Consideration
7.4	Develop/Participate in a District Energy System				Future Consideration

The CEP Task Force recommends that the initiatives with a high priority level are started, and potentially completed, within a year. Likewise, the Task Force recommends the initiatives with a medium priority level be started within 2-3 years. And lastly, initiatives with a low priority level should be started within 3-5 years.



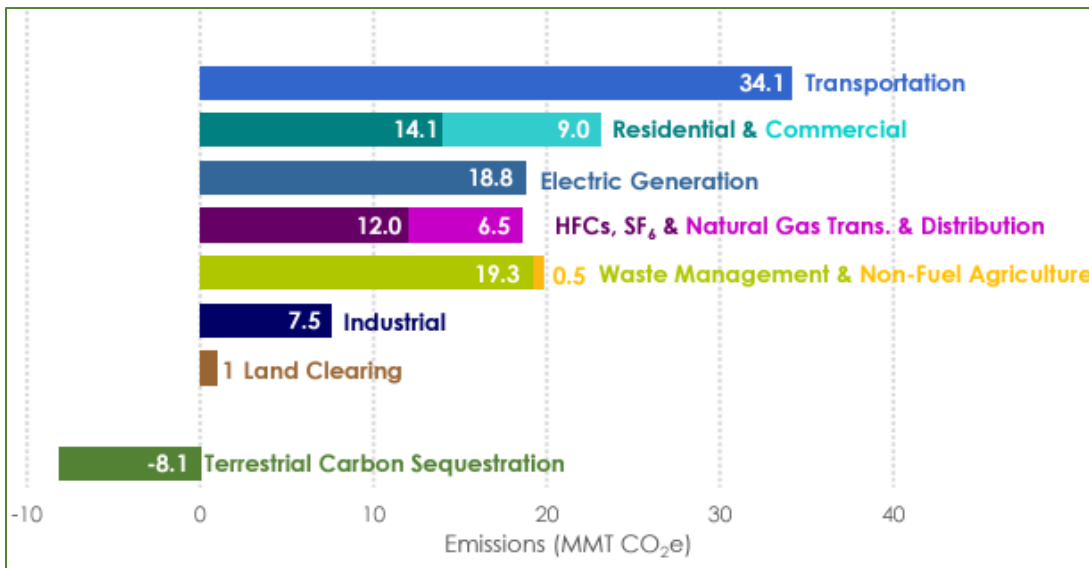
1. Introduction

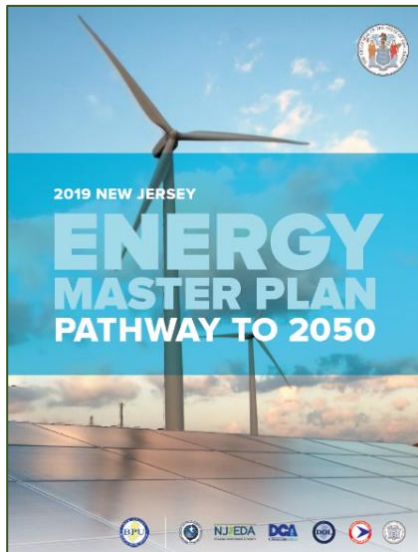
Climate change is one of the greatest threats to the future of New Jersey including all its 564 municipalities. New Jersey is both a significant source of greenhouse gas (GHG) emissions and a state particularly vulnerable to climate change. Increasing heat waves, intense storms, and sea-level rise caused by climate change will dramatically alter our coastal conditions for many years to come (*New Jersey Department of Environmental Protection (NJDEP), Scientific Report on Climate Change*). According to NJDEP’s *NJ Greenhouse Gas Emissions Inventory Report*, New Jersey adds almost 100 million metric tons of carbon dioxide equivalent (CO₂e) to the atmosphere annually. New Jersey can mitigate the local and larger-scale 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.

- Temperature**
Averages in NJ have increased 3.9°F since 1895
- Annual Precipitation**
Projected to increase from 6% to 9% by 2100
- Tropical Storms**
Expected to increase in intensity and duration
- Extreme Rain**
Totals have increased by 55% between 1958 and 2016
- Sea-level Rise**
Expected to meet or exceed 1.4 feet by 2050

Climate Change Impacts in NJ

NJ Greenhouse Gas Emissions for 2020 (GWP20) In millions of metric tons CO₂e.
New Jersey Greenhouse Gas Inventory 2022 Mid-Cycle Update Report





NJ Energy Master Plan

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 (CEP). The Borough of Audubon (herein referenced as Audubon, or the Borough) received the Community Energy Plan Grant and completed this Plan as a participant of the grant program. Municipalities, like the Borough of Audubon, can play a critical role in this state-wide effort to reduce greenhouse gas emission and transition to a sustainable energy system.

The Borough of Audubon's CEP will help the community to:

- Plan for, invest in, and enhance renewable energy use.
- Work towards a better environment for its residents.
- Develop sustainable strategies that increase clean energy production, reduce energy use, and cut emissions.
- Boost energy resilience.
- Provide equitable access.



Audubon is committed to creating a culture focused on sustainable actions to address climate change and reduce greenhouse gas emissions, not only in support of the State’s pursuit of its energy goals, but also from services the Borough provides to residents and businesses. Community outreach is

also a component of Audubon’s commitment with a focus to help its residents and businesses to reduce their own energy and GHG emissions.

Audubon’s CEP establishes how the Borough will promote the transition to sustainable energy over the next several years, in the short term and long term. Initiatives were selected based on demonstrated effectiveness, unique local opportunities, and co-benefits for the community, such as improved local air quality, energy savings for residents, and workforce development.

Co-benefits of Sustainable Energy

Public Health	Social Equity	Resiliency
<ul style="list-style-type: none"> • Lower concentrations of ground-level outdoor air pollutants • Removal of indoor air pollution sources 	<ul style="list-style-type: none"> • Better affordable transportation • More affordable renewable energy 	<ul style="list-style-type: none"> • More dependable electric grid • Decreased reliance on imported energy

This CEP details the specific strategies the Borough will pursue in the coming years to reduce GHG emissions from the local energy system. The CEP covers municipal operations such as the municipal vehicle fleet and buildings, as well as public policies and programs designed to support the community in reducing overall emissions.

Starting in January 2022, the Borough of Audubon created a CEP Task Force to begin reviewing the [Sustainable Jersey Guide for Sustainable Energy Communities](#) and [Community Energy Plan Workplan](#) Template to determine how to prioritize and



implement the high-impact initiatives. The CEP Task force was comprised of municipal personnel, Sustainable Audubon representatives, members from the Audubon Public School District and community members. Audubon’s Task Force members are included under ‘Acknowledgements’ at the beginning of this plan.

The planning process consisted of the following steps:

- Formation of the CEP Task Force.
- Series of Meetings to review and discuss the initiatives detailed in the CEP guidance documents; determine feasibility of initiatives to implement within the Borough; prioritize initiatives based on based on Task Force input.
- Public outreach and surveys to collect input on the prioritization of the selected initiatives and gauge support for potential actions to implement these initiatives.
- Analysis and summary of the results of the surveys to inform additional rounds of discussion about the difficulty and prioritization of initiatives.
- Drafting of this Plan with recommended initiatives and actions.

Audubon’s CEP Task Force considered several factors such as availability of resources, time commitments, community benefits, cost, funding opportunities and other challenges to implementations when selecting the initiatives. The Task Force’s preliminary focus was on initiatives that are achievable for the Borough and community. The following table summarizes the initiatives reviewed review process.

CMP Strategies & Initiatives

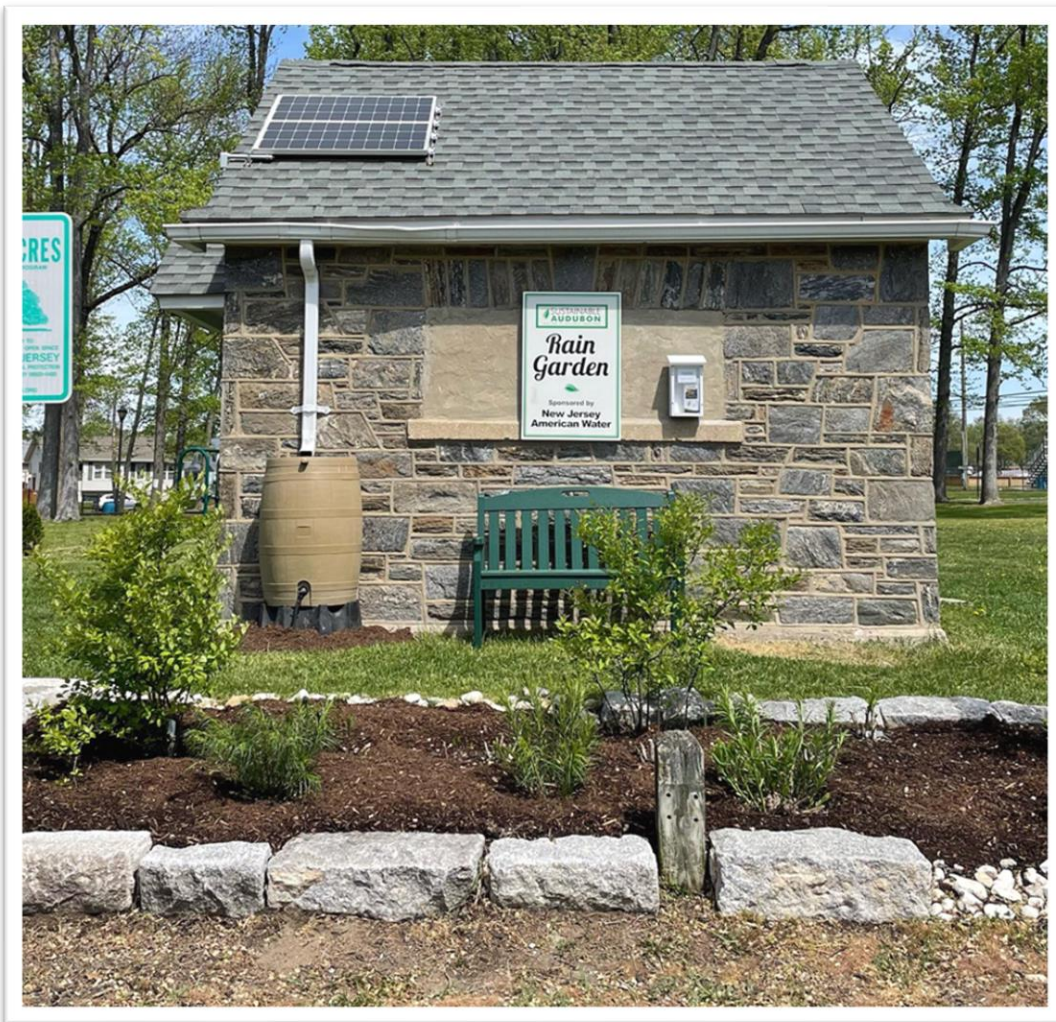
1. Reduce Energy Consumption and Emissions from the Transportation Sector	1.1	Adopt Supportive Zoning and Regulations for EV Infrastructure
	1.2	Train First Responders on EVs and EVSE
	1.3	Train Non-Emergency Staff on EVs and EVSE
	1.4	Purchase Alternative Fuel Vehicles
	1.5	Improve Municipal Fleet Efficiency
	1.6	Install Public EV Charging Infrastructure
	1.7	Encourage Non-Municipal Fleets to Improve Efficiency
	1.8	Encourage Workplace EV Charging Infrastructure



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 Energy 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
3. Maximize Energy Efficiency and Conservation and Reduce Peak Demand	3.1	Upgrade Energy Efficiency for 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
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
6. Support Community Energy Planning and Action	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
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



During the creation of this CEP, the Borough provided several opportunities for public input, taking care to enable low- and moderate-income residents to participate. Audubon's Draft CEP was posted on the Borough's website (<https://www.audubonnj.com/5/Content2/466>) for community review. The Draft CEP was presented at a public meeting on January 3, 2024. The draft CEP was presented during a second public meeting, held in conjunction with the Borough Commissioners meeting, on January 16, 2024. Audubon's Community Energy Plan was adopted by the Borough Commissioners via resolution on [xxxxxxxxxxxxx].



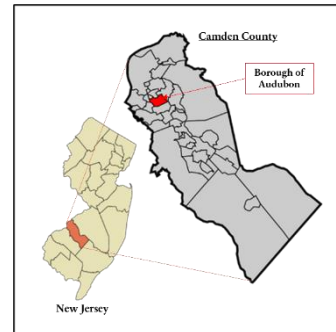
Sustainable Audubon Rain Garden and solar installation



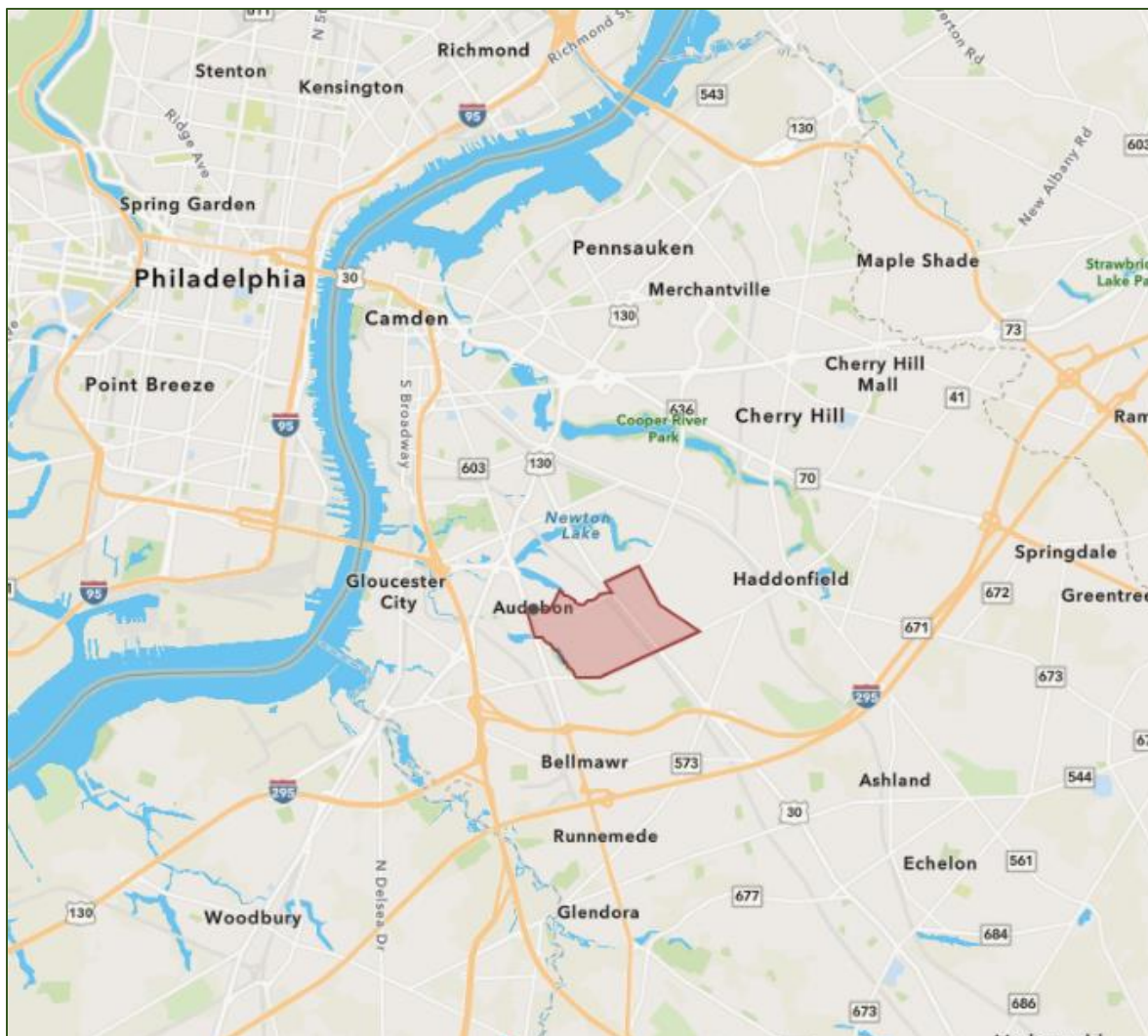
2. Community Overview

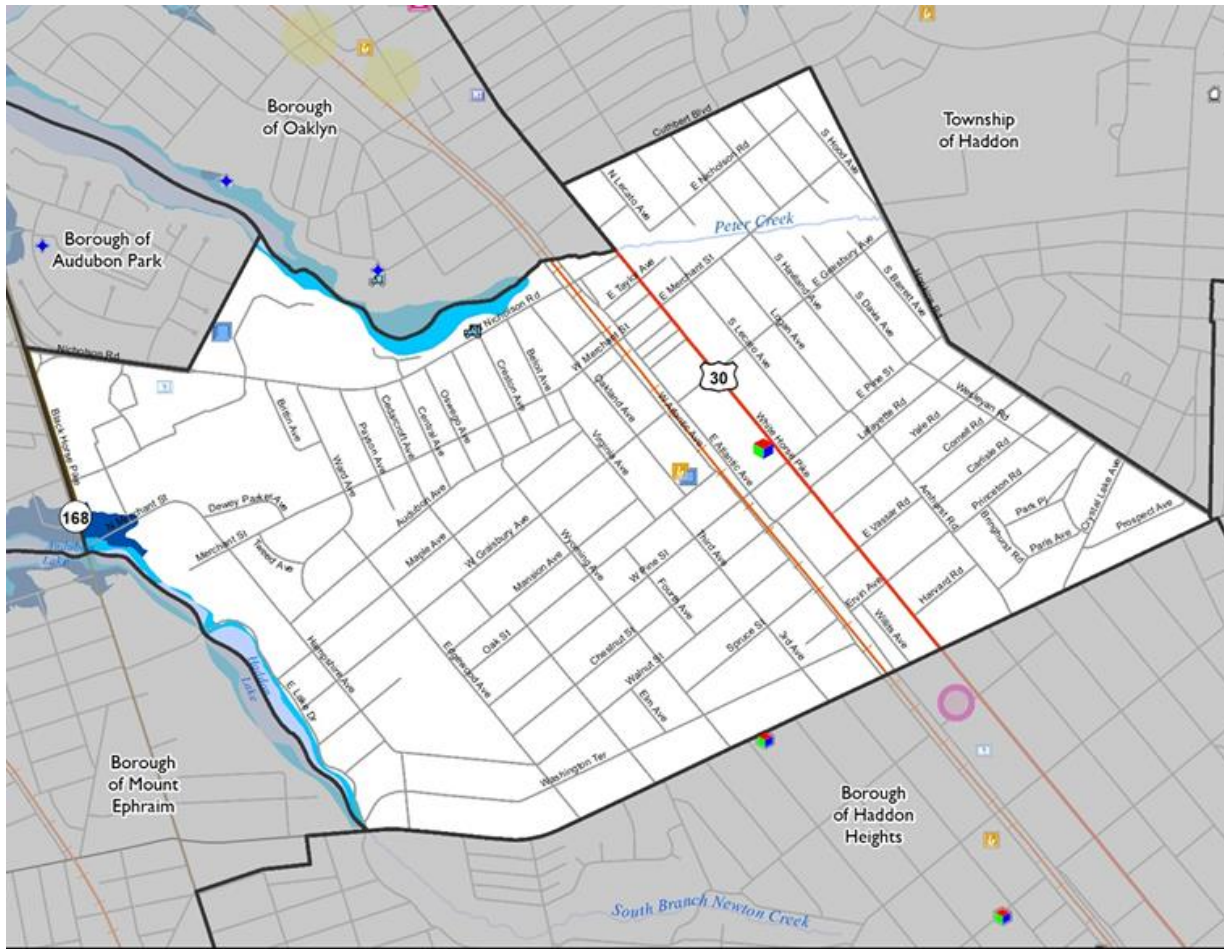
Relevant community data was gathered from the [Sustainable Jersey Data Center](#) and is presented in this Section.

The Borough of Audubon is an approximately 1.5 square mile municipality (comprised of 1.48 square miles of land and 0.01 square miles of water) located in Camden County, New Jersey.



Municipality Location Map





Borough of Audubon Limits and Road Map

The [Sustainable Jersey Community Profile Data](#) indicates that the Borough has a total of 3,304 households and 157 commercial/industrial properties.

The racial composition of Audubon's 8,656 residents is 92% White, 5% Black, 0% Asian or Pacific Islander, 2% "other," and 3% of the population is Hispanic/Latino.

Audubon's median household income is \$90,335, with 2.3% of households below the U.S. poverty threshold. Audubon's Municipal Revitalization Index (MRI) score, a measure of a municipality's economic conditions, is 23 out of a possible 100, which ranks 320th among New Jersey's 564 municipalities (Sustainable Jersey Community Profile Data by



Municipality). In other words, Audubon’s overall economic conditions are slightly better than most New Jersey municipalities.

Population Characteristics for Audubon, NJ (2020¹)

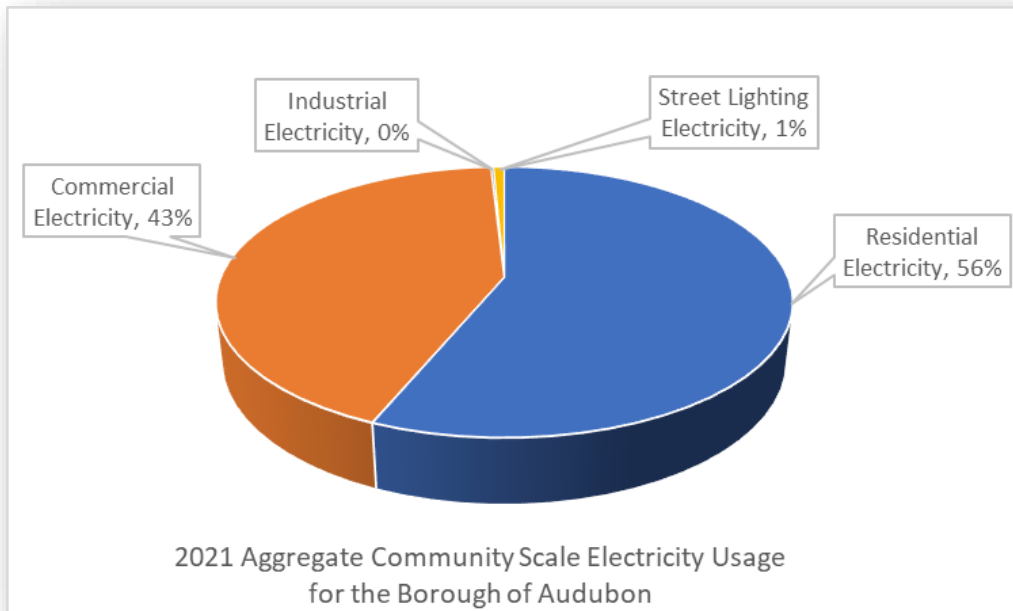
Population	Households	Median Household Income	Percent of Population in Poverty	NJ DCA MRI Score *	NJ DCA MRI Rank*
8,656	3,304	\$90,335	2.3%	23	320

¹2020 US Census American Community Survey (ACS) 5-year estimates data
Source: Sustainable Jersey. Community Profile Data by Municipality
*MRI = Municipal Revitalization Index (MRI)

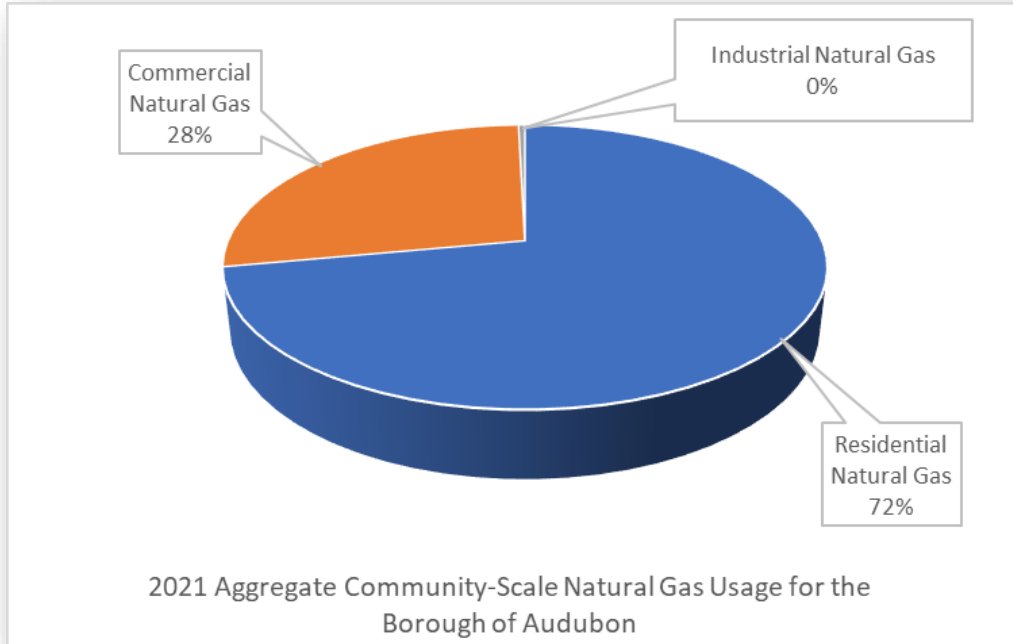
Electricity and Natural Gas Usage Data

Most electricity and natural gas use is currently associated with homes and buildings. Utility companies generally organize electricity and natural gas use into four sectors – residential, commercial, industrial, and street lighting. The commercial sector includes nonprofits and government entities such as schools and municipal buildings, as well as businesses.

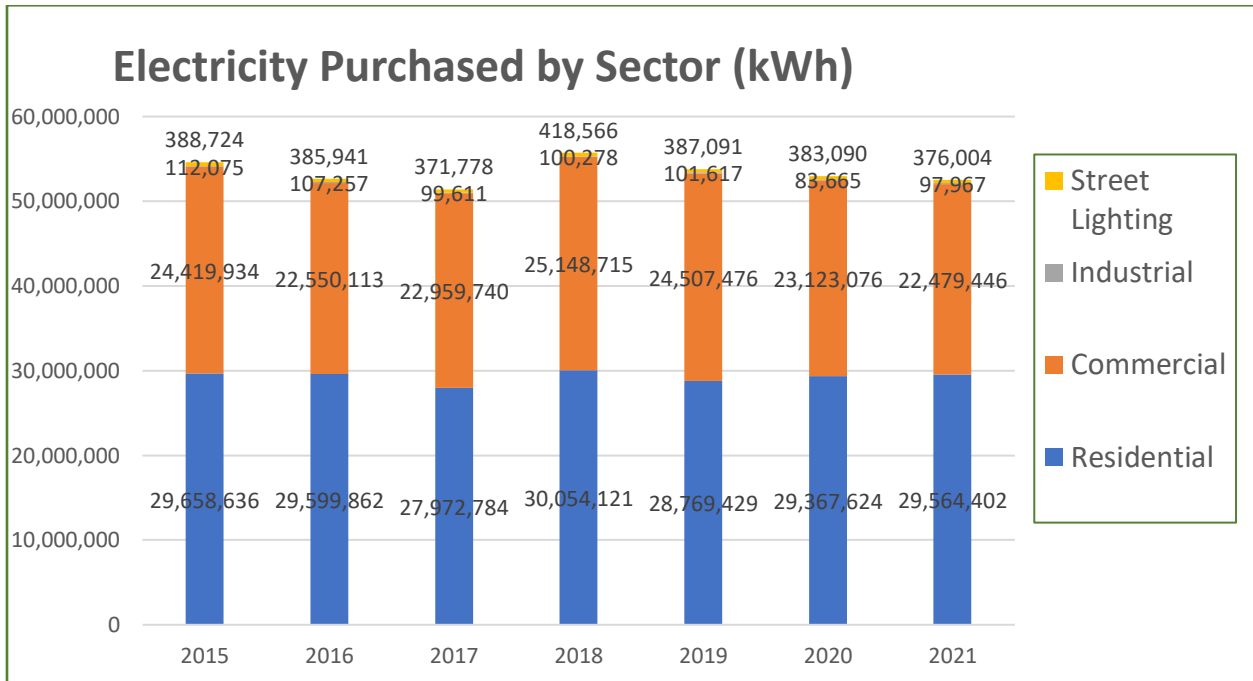
As illustrated in the charts on the next page, the residential sector accounts for a majority of electricity and natural gas use in the Borough. Utilizing 2021 data, residential attributed for 56% of electricity and 72% of natural gas use. Commercial electric and natural gas use followed attributing for 43% and 28%, respectively. The takeaway from this data is that residential buildings present the greatest opportunity for energy use reductions.



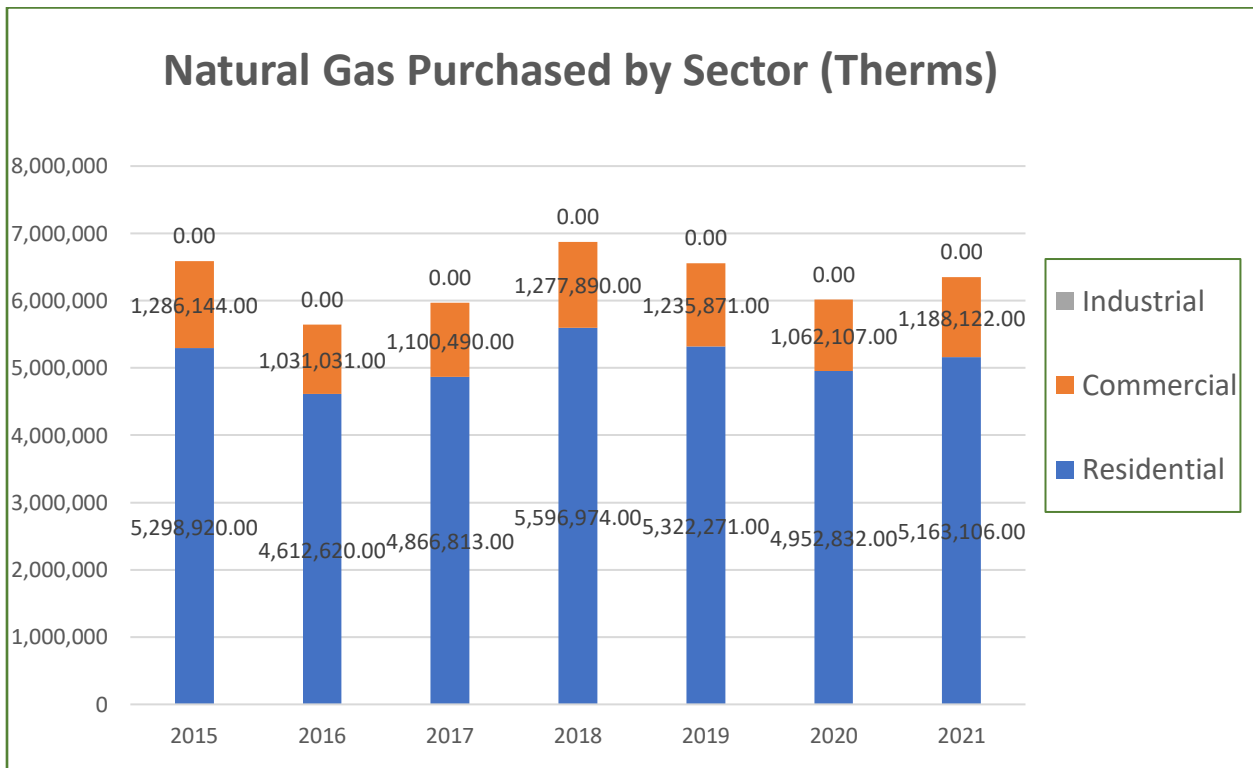
Borough of Audubon 2021 Aggregate Community-scale Electricity Usage



Borough of Audubon 2021 Aggregate Community-scale Natural Gas Usage



Source: Sustainable Jersey. Aggregated Community-Scale Utility Energy Data

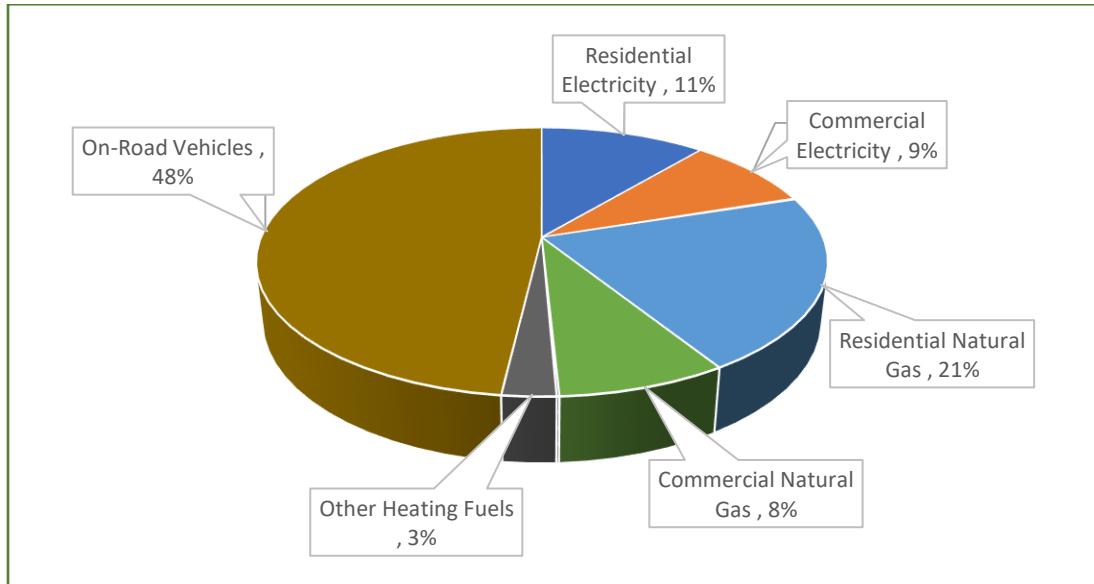


Source: Sustainable Jersey. Aggregated Community-Scale Utility Energy Data



Community GHG Emissions from Energy Use

In 2020, the total community-wide greenhouse gas emissions from electricity, natural gas/heating fuel, and transportation energy use in the Borough of Audubon was **58,972 metric tons CO₂e**. The largest share of community emissions came from On-Road Vehicles (48%), followed by Residential Natural Gas Use (21%).



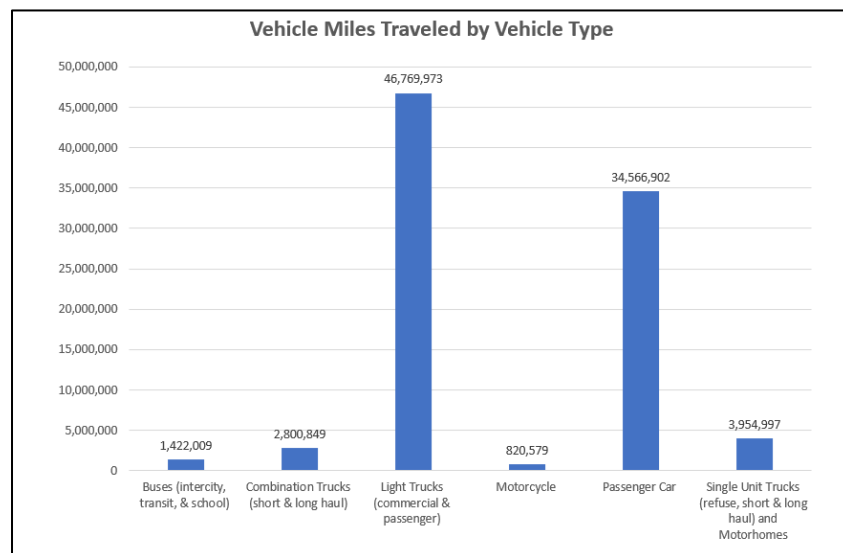
2020 GHG Emissions of Audubon by Subsector

Source: Sustainable Jersey. Community-Scale Greenhouse Gas (GHG) Emissions Data

In 2019, on-road vehicles attributed to 28,375.71 metric tons CO₂e. Light trucks (commercial and passenger) and passenger cars attributed to the most vehicle miles driven (VMT).

2019 GHG Emissions of Audubon by Subsector

Source: Sustainable Jersey. Community-Scale Greenhouse Gas (GHG) Emissions Data





3. Work Plan

The Borough of Audubon Community Energy Plan is primarily an implementation and action plan. This section details the initiatives selected as priorities for the Borough for the next five years (2024-2028). These initiatives will generate significant greenhouse gas emissions reductions for both municipal operations and the wider community while providing numerous local co-benefits, such as improved air quality and creation of local jobs. The initiatives identified in this Plan include, but are not limited to:

- Zoning to permit private solar installations and community solar projects, as well as battery energy.
- Working with the State, utilities providers, and contractors to reduce cost barriers to residential and commercial energy efficiency improvements and renewable energy generation.
- Educating and engaging the public in a collective effort to reduce energy consumption and switch to renewable energy sources.
- Encouraging developers to adopt green building practices.
- Electrifying municipal fleet vehicles.
- Installing public EV charging stations.
- Storage systems.
- Installing on-site renewable energy generation systems and battery energy storage systems on municipal properties and improving energy efficiency of municipal buildings.
- Ensuring that low- and moderate-income households are not excluded from the benefits of the Borough's initiatives.

The initiatives are formally organized by the Strategies of the [New Jersey Energy Master Plan: Pathway to 2050](#). Each Strategy section includes multiple initiatives. Implementation details are provided for each initiative, including the initiative lead person/entity, the time frame for implementation, and any significant obstacles to successful implementation.



The following Sections present the strategies and initiatives incorporated into Audubon’s CEP. Each of the initiatives presented include information on implementation that detail the Initiative Lead, Departments and Stakeholders involved, approximate timeframes, potential funding sources, as well as the specific measures of success and next steps toward implementation.

REDUCE ENERGY CONSUMPTION AND EMISSIONS FROM THE TRANSPORTATION SECTOR

Transportation accounts for over 40% of New Jersey's greenhouse gas emissions, primarily due to on-road gasoline consumption (NJDEP, "Transportation & Emissions"). Fossil fuel-powered transportation also produces local air pollution that significantly harms the health and quality of life of residents. Audubon can electrify municipal fleet vehicles and promote transportation electrification in the community to lessen the negative impact of our transportation system on our community and the world.



INITIATIVES	
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

*Initiatives in **Bold** were evaluated by the Borough for inclusion in this CEP.*

Initiative 1.1 - Adopt Supportive Zoning and Regulations for EV Infrastructure

Description:

Pass New Jersey Department of Community Affairs (NJCA) mandatory Statewide Municipal EV Ordinance specifying electric vehicle charging stations as a permitted accessory use, establishing the permitting process for charging stations, and requiring Make-Ready and EVSE (Electric Vehicle Supply Equipment) parking in new multifamily developments and parking lots. Modify the model ordinance standards for safety, signage, etc. as needed.

Lead
Director of Public Works, Parks & Buildings

Start Date
February 2024

Priority
High

Anticipated Length
6 Months

Funding Source
N/A

Departments involved:

Borough Engineer; Construction/Zoning

Potential Stakeholders:

Commercial Businesses; Developers

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

The Model Statewide Municipal EV Ordinance went into effect in September 2021 as specified by state law, but the policies in the ordinance are not integrated into Audubon’s municipal code. Code Enforcement currently requires applications for new developments to comply with the Model Ordinance. As of 2019, less than 1% of passenger vehicles in Audubon were electric. As EV adoption accelerates, demand for charging infrastructure will also accelerate.

Vehicles and Electric Vehicles (2015 & 2020)			
Year Updated	Estimated Total Passenger Vehicles	#of EVs	% Electric
2015	6,212	1	0.01%
2020	5,875	21	0.36%

Vehicles and Electric Vehicles in Audubon Borough
Source: Sustainable Jersey EV Ownership Data

NJDCA Model Statewide EV Ordinance → <https://www.nj.gov/dca/dlps/home/modelEVordinance.shtml>

Measures of Success:

The goals for this initiative are new regulations regarding EVSE site design, such as accessibility and signage, and integration of the **Model Statewide Municipal EV Ordinance** into Audubon’s land-use code and permitting documents.

Next Steps:

- The Director of Public Works will initiate and add Borough-specific information to Model Statewide Municipal EV Ordinance and edit the “Reasonable Standards” section to fit Borough’s needs.
- The Borough introduces ordinance to the Commissioners for review and approval.
- Borough Administrator works with code official to post permitting application and inspection processes on the municipal website.

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

Director of Public Safety

Start Date

May 2024

Priority

High

Anticipated Length

3-6 Months; on-going as needed

Funding Source

Camden County; NJDEP; others TBD

Departments involved:

Borough Administrator; Emergency Services (Fire, Police, EMS)

Potential Stakeholders:

Neighboring municipalities

Obstacles/Barriers:

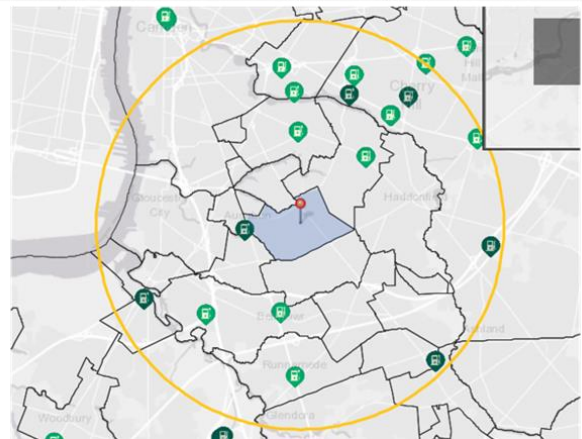
Coordination of time to train, staff availability.

Community notes:

No first responder departments have undergone training specific to electric vehicles and EV charging equipment. As of 2020, there were 21 passenger electric vehicles in Audubon; the number of EVs in town has likely increased since then ([Sustainable Jersey, Electric Vehicle Ownership Data](#)). There are no public EV charging stations in the township ([NJDEP, Charging Map](#)).

NJ Public Electric Vehicle (EV) Charging Locator

Created by NJDEP Bureau of Climate Change & Clean Energy



Source: NJDEP EV Charger Locator

Measures of Success:

The goal of this initiative is that all first responders will be regularly trained in how to deal with emergencies involving electric vehicles and EV infrastructure.

Next Steps:

- Purchase National Fire Protection Association (NFPA) online electric vehicle training for emergency responders.
- Distribute training to Police Department, Fire Department, and EMS, and work with department heads to determine deadline for all staff to complete.

Messaging emphasizes the unique danger presented by EV and EVSE emergencies.

Initiative 1.3 - Train Non-Emergency Staff on EVs and EVSE

Description:

Initiate electric vehicle cross-training for non-emergency staff such as code officials, automotive technicians, and electricians.

Lead

Director of Public Safety

Start Date

2026

Priority

Low

Anticipated Length

6 Months – 1 year

Funding Source

N/A

Departments involved:

Borough staff; DPW; Audubon PSD

Potential Stakeholders:

Neighboring Municipalities; unions

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

Due to the unique chemical, electrical, and thermal hazards associated with high voltage charging systems, and to address the potential consequences such hazards pose, municipal staff (non-emergency) should receive education and training related to electric vehicles and electric vehicle charging stations.

This would include DPW, mechanics, maintenance, engineers, and others as identified.



Measures of Success:

The goal of this initiative is to train relevant Borough department non-emergency personnel in how to deal with the unique hazards associated with electric vehicles and EV infrastructure.

Next Steps:

- Identify the need for training non-emergency staff once EVSEs are incorporated in the Borough.
- As EV ownership and EVSE usage increases, re-assess additional needs for training.

Initiative 1.4 - Purchase Alternative Fuel Vehicles

Description:

Replace existing municipal fleet vehicles with plug-in hybrid, battery electric, or other sustainable alternative fuel vehicles, using fleet analysis to inform purchases.

Lead

Director of Public Works, Parks & Buildings

Start Date

2025

Priority

Medium

Anticipated Length

3-6 Months to initiate; ongoing.

Funding Source

NJBPU; Sustainable Jersey; PSE&G

Departments involved:

Director of Finance; Borough Department Heads

Potential Stakeholders:

Neighboring municipalities

Obstacles/Barriers:

Costs/Available funding; Specialized vehicles like fire and garbage trucks may be less available and more expensive than their gas counterparts.

Community notes:

Within this initiative, it will be important for the Borough to determine the first vehicle or fleet to replace with EV or AFV, which can be done through fleet inventory and assessment. To facilitate adoption of EV/AFVs and promote to its residents, it would be advantageous to select a vehicle that provides constant services to the public throughout the Borough. In addition to determining the type of AFV to replace the conventional vehicle fleets, selecting the type of chargers will also play an important role.

Vehicles on the road Did you know?

Conventional	Alternative		
<p>Gasoline Vehicle Most vehicles use gasoline, including hybrids.</p>	<p>E85 FFV Flexible fuel vehicles (FFVs) can use gasoline or E85 (a mixture of 85% ethanol and 15% gasoline). E85 can be found at over 4,000 stations nationwide.</p>	<p>EV You can charge your electric vehicle (EV) at one of over 45,000 public charging stations in the United States. You can also charge your EV at home. In fact, depending on how far you drive each day, you may never need to visit a station.</p>	<p>PHEV Plug-in hybrid electric vehicles (PHEVs) are powered with electricity and gasoline. How much gasoline you'll use depends on how often you plug in, how far you drive, and the vehicle's design.</p>
<p>Diesel Vehicle Ultra-low sulfur diesel (ULSD) is the primary highway diesel fuel produced today, and allows diesels to be cleaner. Diesel vehicles and engines can also use blends of ULSD and biodiesel.</p>	<p>CNG Vehicle Compressed natural gas (CNG) fueling station pumps look similar to gasoline pumps, but have specialized fittings for a leak-free connection to your natural gas vehicle.</p>	<p>FCV Fuel cell vehicles (FCVs) use pressurized hydrogen, which you pump into your car through a special leak-free connection. The hydrogen powers a fuel cell, which then generates electricity to power the vehicle.</p>	<p>There are thousands of alternative fueling stations in the United States.</p> <p>Visit DOE's Alternative Fueling Station Locator for details.</p>

Measures of Success:

- Strategic plan prioritizing vehicles in fleet to replace with AFVs.
- Fleet charging infrastructure installed for municipal vehicles.
- First battery electric vehicle added to municipal fleet.

Next Steps:

- Conduct fleet analysis inventory.
- Develop strategic plan.
- Work with procurement to identify potential funding sources.

Initiative 1.5 - Improve Municipal Fleet Efficiency

Description:

Coordinate the strategic replacement (or retirement) of vehicles, scheduling of preventative maintenance, and improvement of driver efficiency to reduce the GHG footprint of all municipal fleets – public works, police, fire, etc.

Lead

Director of Public Works, Parks & Buildings

Start Date

February 2024

Priority

High

Anticipated Length

Initiate within 6 mo.; ongoing.

Funding Source

New Jersey Clean Fleet EV Incentive Program

Departments involved:

All departments operating fleet vehicles; finance

Potential Stakeholders:

DPW Fleet Manager;

Obstacles/Barriers:

Budget/funding; agreement from decision makers

Community notes:

Tracking fleet data such as fleet composition, vehicle maintenance, driver behavior, age of vehicles, duty cycle, and use patterns are critical in helping improve municipal fleet efficiency. Gathering these data can inform emission-reducing initiatives such as preventative maintenance, fleet size reduction, training drivers to reduce fuel use, and retrofitting vehicles that idle frequently (i.e., police cruisers) with idle-reduction technology. Maintenance or replacement of low-efficient and/or high-mileage vehicles should be prioritized under this initiative.

[Alternative Fuel Life-Cycle Environmental and Economic Transportation Tool](#)

The screenshot displays the AFLEET website interface. It features a navigation bar with icons for AFLEET Tool (xlsx), AFLEET Online, HDVEC, ATRAVEL, and AFLEET CFI. Below the navigation bar, there are six columns, each representing a different tool or service. The first column is a welcome message. The second column describes the AFLEET Tool (xlsx) spreadsheet. The third column describes the AFLEET Online calculator. The fourth column describes the HDVEC (Heavy Duty Vehicle Emissions Calculator) tool. The fifth column describes the ATRAVEL tool. The sixth column describes the AFLEET CFI (Charging and Fueling Infrastructure) tool.

Measures of Success:

The goal of this initiative is to reduce annual municipal fleet GHG emissions.

Next Steps:

- Form a fleet committee and conduct fleet inventory and fuel efficiency audit.
- Fleet tracking and Management.
- Create a policy for Fleet Efficiency.
- DPW Fleet Manager establishes process for annual fleet inventory, including tracking system for fuel usage and mileage of every vehicle in the municipal fleet.
- Create 3 to 5year procurement plan that includes requirement that all vehicles be replaced with plug-in or fully electric counterparts, when deemed cost-effective.

Initiative 1.6 - Install Public EV Charging Infrastructure

Description:

Install electric vehicle charging infrastructure, including chargers, signage, and safety and accessibility features, for public use.

Lead

Director of Public Works, Parks & Buildings

Start Date

June 2024

Priority

High

Anticipated Length

1 year for 1st EVSE; Ongoing as EV use increases

Funding Source

NJDEP; Sustainable Jersey; NJBPU; TMA

Departments involved:

Borough Administrator; Public Works; Engineering; Finance

Potential Stakeholders:

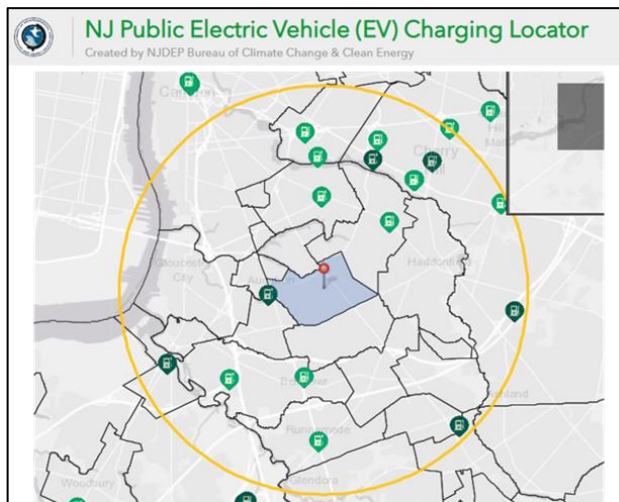
Audubon PSD; Utility (PSE&G); Sustainable Audubon; Commercial sector

Obstacles/Barriers:

Cost

Community notes:

Currently, there are no public EV charging stations in the township (NJDEP, Charging Map).



EV Charging Stations near Audubon Borough

Source: NJDEP EV Charger Locator

Measures of Success:

The goal of this initiative is to install a public charging station in the Borough of Audubon.

Next Steps:

- Mayor sets up meeting with DPW, Sustainable Audubon, and Borough engineer to discuss charger type and siting options.
- DPW and Borough engineer determine which aspects of installation can be completed in-house.
- Finance Department finalizes analysis of costs and consults with Mayor to determine site selection.
- Identify grant opportunities and apply for grant.
- Purchasing agent finalizes purchase of charging station.

ACCELERATE DEPLOYMENT OF RENEWABLE ENERGY AND DISTRIBUTED ENERGY RESOURCES

Expanding renewable energy generation is necessary to eliminate greenhouse gas emissions from our energy system. New Jersey's most readily available renewable resource is sunlight, which more and more utility customers can now access thanks to declining prices and new systems like community solar. The Borough of Audubon can continue to refine local policies regarding solar and other renewable resources to promote local growth of renewable generation capacity.



INITIATIVES	
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 Energy 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

*Initiatives in **Bold** were evaluated by the Borough for inclusion in this CEP.*

Initiative 2.1 - Adopt Supportive Zoning and Permitting for Private Solar

Description:

Provide clear guidance/standards for solar developers and limit barriers to solar adoption such as lengthy permitting and multiple reviews.

Lead

Borough Administrator

Start Date

February 2024

Priority

High

Anticipated Length

3 Months

Funding Source

N/A

Departments involved:

Borough engineer; Zoning/Construction

Potential Stakeholders

Sustainable Audubon; Community organizations

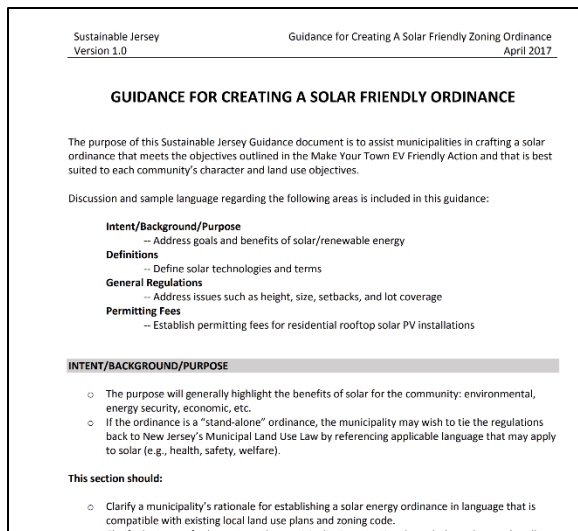
Obstacles/Barriers:

Community support and interest

Community notes:

The Borough of Audubon does not currently have any supportive zoning or permitting ordinances for private solar.

Utilize Sustainable Jersey's [Guidance for Creating a Solar Friendly Ordinance](#)



Measures of Success:

- Pass solar-friendly ordinance.
- Expedite/eliminate zoning permit.
- Establish flat fee for permitting.

Next Steps:

- Update municipal ordinance to remove restrictions on visibility and glare of rooftop solar systems.
- Submit draft ordinance to Borough Commissioners for approval.
- New permitting fees implemented.
- Notice published regarding the new regulations.

Initiative 2.2 - Post Solar Permitting Checklist

Description:

Provide clear guidance/standards for solar developers with a permitting checklist that can be easily found on the Borough's website. Solicit feedback from users and revise checklist based on comments.

Lead

Borough Administrator

Start Date

June 2024

Priority

Medium

Anticipated Length

3 Months

Funding Source

N/A

Departments involved:

Borough Engineer; Zoning/Construction

Potential Stakeholders:

Residents; solar developers; Sustainable Audubon

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

The [Solar Permitting Checklist by Interstate Renewable Energy Council \(IREC\)](#) may be used as a template to develop the checklist.



Measures of Success:

- Permit requirement checklist online
- Permit checklist revised based on user feedback

Next Steps:

- An online solar permit checklist should be developed, which should detail all the plans and forms required for approval and system design requirements, and sequential steps of the permitting process and inspections that follow.
- Solicit feedback on how to improve the permit checklist after a few weeks or months and make improvements as needed.

Initiative 2.3 - Adopt Zoning and Permitting for Community Solar

Description:

Update the Borough's zoning ordinances to specifically allow large-scale solar projects and designate future community solar sites as redevelopment zones. Consider offering direct assistance with permitting, expediting the permitting process, and/or reducing permitting fees for community solar.

Lead

Borough Administrator

Start Date

2026

Priority

Low

Anticipated Length

1 year

Funding Source

N/A

Departments involved:

Zoning/Construction

Potential Stakeholders:

Businesses & Associations; Community; Solar developers; Neighboring municipalities.

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

Private solar is an accessory use to a residence or business whereas community solar may be seen as a principal use in that it is used to generate revenues for the property owner or lessee of the solar mounting surface.

Utilize Sustainable Jersey's [Community Solar How-To Guide](#)



Measures of Success:

- Zoning ordinance adopted enabling large-scale solar projects
- Borough point of contact established for community solar developers
- Potential Site(s) designated as development zone to host community solar

Next Steps:

- Assessment of local regulations.
- Update zoning ordinances to specifically allow for large scale solar projects, including ground mount arrays and commercial rooftop installations.

Initiative 2.4 - Train First Responders on Solar

Description:

To further public confidence and maintain emergency preparedness, require training on solar infrastructure for first responders.

Lead

Borough Administrator

Start Date

January 2025

Priority

Medium

Anticipated Length

6 Months

Funding Source

N/A

Departments involved:

Emergency Services (Fire, Police, EMS)

Potential Stakeholders

Audubon PSD; neighboring municipalities

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

Regular solar PV training, at least every few years, is a best practice to ensure firefighters and first responders are up to date on new procedures, codes, and products within the solar industry. While fires caused by rooftop solar Photo-voltaic (PV) systems are rare, firefighters responding to fires caused by other means need to take special precautions when a solar PV system is present. Training fire safety staff on how to identify and avoid potential hazards can help ensure the safety of first responders and reduce misconceptions or discomfort around increased solar deployment.



Measures of Success:

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

Next Steps:

- Purchase online Solar system training for emergency responders.
- Distribute training to Police Department, Fire Department, and EMS, and work with Borough department heads to determine deadline for all staff to complete.

Initiative 2.5 - Train Non-Emergency Staff on Solar

Description:

To ensure municipal staff can efficiently and effectively inspect, review, permit, etc. solar installations in the community, require training on solar infrastructure for all relevant staff.

Lead

Borough Administrator

Start Date

June 2025

Priority

Medium

Anticipated Length

3 Months

Funding Source

N/A

Departments involved:

Emergency Services (Fire, Police, EMS)

Potential Stakeholders:

Audubon PSD; neighboring municipalities

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

Well-trained staff and completed permit applications can reduce staff time needed to review permits, which allows them to focus on other priorities. Regular solar training should be considered to ensure field inspectors are up to date on new procedures, codes, and products within the solar system industry. Increased and maintained staff knowledge can improve inspection efficiency.

Cross-training between building, zoning, inspection, and permitting staff should be considered to wholistically increase the understanding for the technology, its installation, and safety issues. Training for other relevant departments should be considered.

Measures of Success:

- Training for relevant departments
- Cross-train building, zoning, inspection, and permitting staff
- Policy for ongoing training

Next Steps:

- Require staff to attend workshops or training (in-person or online) and provide resources designed to help keep staff informed about advances in solar and storage technologies.
- Develop a policy for ongoing staff training that outlines the permitting processes and requirements, including changes or updates thereof, as well updates to state-level policies and building and electrical codes.

Initiative 2.6 - Install On-Site Municipal Renewable Generation

Description:

Host a solar, wind, or geothermal project on Borough property to generate renewable energy for Borough facilities. Such projects can be leased from a developer or purchased and owned outright.

Lead
Borough Administrator
Start Date
2026
Priority
High
Anticipated Length
1 year
Funding Source
NJBPU; NJDEP; PSE&G; Others TBD

Departments involved:

Code/Planning/Engineering; DPW

Potential Stakeholders:

Audubon PSD; Sustainable Audubon; solar developers

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

Within this initiative, the Borough has the option to install its own renewable energy generation on-site. These projects can be leased from a developer or purchased and owned outright. The benefit for the Borough is that it can offset facility electricity consumption. Municipalities' roles are to lead by example. Installation of on-site renewable energy projects can serve as demonstration to neighboring municipalities and counties.



NJDEP Solar Siting Analysis

Measures of Success:

- Contract with a developer to buy or lease a renewable installation on municipal property
- Implement outreach illustrating the benefits of renewable energy to the community using the municipal project

Next Steps:

- Create a project team.
- Identify potential Sites and conduct evaluation.
- Select Ownership Model.
- Outreach and Education

Initiative 2.7 - Buy Renewable Energy for Municipal Facilities

Description:

Buy renewable electricity for Borough facilities directly from a green energy supplier or participate in a buying pool that supplies electricity with high renewable content. The accompanying renewable energy certificates (RECs) should be certified as PJM Class I. PJM is a regional transmission organization that coordinates the movement of wholesale electricity.

Lead
Borough Administrator
Start Date
June 2024
Priority
Medium
Anticipated Length
3 Months
Funding Source
N/A

Departments involved:

Planning;

Potential Stakeholders:

PSE&G; Community; Neighboring municipalities

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

Purchasing renewable energy, such as solar, wind or geothermal, for public facilities or school districts can further increase the demand for renewable energy. The Borough can purchase renewable energy directly from an energy supplier or participate in a buying pool that has renewable energy. Buying pools are typically offered by commercial entities and local cooperatives and does not typically involve additional work for municipal staff. Some of the most popular options in the state are the New Jersey Sustainable Energy Joint Meeting (NJSEM) and Alliance for Competitive Energy Services (ACES)



Measures of Success:

- Contract with third-party supplier or buying.

Next Steps:

- Determine whether to directly purchase green energy from third party suppliers or join an aggregation pool. With third party supply contracts, the Borough should consider a renewable content that is higher than the current Renewable Portfolio Standard

Initiative 2.12 - Support Community Solar as Outreach Coordinator

Description:

Use Borough resources and networks (mailing lists, websites, etc.) to educate the community about community solar in general and the details of local projects (e.g., subscription rates and requirements).

Lead

Mayor

Start Date

2026

Priority

Medium

Anticipated Length

3 Months

Funding Source

N/A

Departments involved:

Borough Administrator

Potential Stakeholders:

Sustainable Audubon; Public School District; local organizations

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

With a community solar installation on municipal property, however, the community solar provider owns and maintains the solar equipment, and electricity is sold directly to the grid. The benefits to the Borough through this model include lease payments from the community solar provider to the Borough, discounts to the Borough if it signs up as the anchor subscriber, and the lack of any up-front costs to the Borough to install the panels.

The screenshot shows the BPU/NJCEP Community Solar Energy Program website. The header includes the BPU logo and navigation links. The main content area is titled "Community Solar Energy Program (CSEP)" and contains several key messages: a notice about PSE&G capacity blocks, a note about registration eligibility for previously participating sites, and information about the registration portal opening on December 12, 2023. A "Solar Installations" section highlights that 190,628 New Jersey homes and businesses have installed a solar electric system as of November 2023. A "Find a Trade Ally" section is also present.

[BPU/NJCEP Community Solar Energy Program](#)

Measures of Success:

- Community solar information posted to Borough website
- Community solar promoted by outreach partners via their networks

Next Steps:

- Preliminary assessment of the condition of Borough building roofs and parking lots to support solar equipment.

MAXIMIZE ENERGY EFFICIENCY AND CONSERVATION AND REDUCE PEAK DEMAND

Energy efficiency and conservation are the most cost-effective methods of reducing greenhouse gas emissions from the energy system. Improving energy efficiency also generates local jobs, reduces local pollution, improves health and comfort, and adds resiliency to the energy system. The Borough of Audubon can utilize energy efficiency to lower costs in municipal operations and encourage the community to follow suit to realize these many benefits.



INITIATIVES	
3.1	Upgrade Energy Efficiency for 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

*Initiatives in **Bold** were evaluated by the Borough for inclusion in this CEP.*

Initiative 3.1 - Upgrade Energy Efficiency for Municipal Facilities

Description:

Upgrade borough 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.

Lead

Borough Administrator

Start Date

February 2024

Priority

High

Anticipated Length

3 Months

Funding Source

N/A

Departments involved:

Director of Revenue and Finance;CFO

Potential Stakeholders:

DPW; Utilities (PSE&G)

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

An important piece of the Borough's energy strategy is reducing its energy consumption by replacing inefficient equipment, fixtures, and appliances and identify areas where energy is being wasted due to outdated building design or improper building maintenance.

[NJCEP Local Government Energy Audit \(LGEA\) Program](#)

Press Room | Library | FAQs | Call

HOME RESIDENTIAL COMMERCIAL, INDUSTRIAL AND LOCAL GOVERNMENT

COMMERCIAL, INDUSTRIAL & LOCAL GOVERNMENT

PROGRAMS

EXISTING BUILDINGS ENERGY EFFICIENCY

BENCHMARKING

LARGE ENERGY USERS PROGRAM (LEUP)

HIGHER EDUCATION DECARBONIZATION PROGRAM

LOCAL GOVERNMENT ENERGY AUDIT (LGEA)

UTILITY PROGRAMS

NEW CONSTRUCTION ENERGY EFFICIENCY

SMART START NEW CONSTRUCTION BUILDINGS

CUSTOMER TAILORED (CTEPT)

PAY FOR PERFORMANCE - NEW CONSTRUCTION

PAY FOR PERFORMANCE PORTAL

DISTRIBUTED ENERGY RESOURCES

Home » Commercial & Industrial » Programs

Local Government Energy Audit

LEAD BY EXAMPLE

All across New Jersey, residents and business owners are looking for ways to save energy and the environment. In order to understand how they can save, the Local Government Energy Audit (LGEA) Program allows local government agencies, state contracting agencies, public agencies, state colleges and state universities, and select non-profit agencies, to examine their facilities and see how they can improve their energy use. The program can help you identify cost-justified energy-efficiency measures, as well as subsidize the full cost of the audit. The entire audit process including customer assistance, application processing and auditing will be performed by TRC, the Program Manager for New Jersey's Clean Energy Program (NJCEP). More details are available about the LGEA program in this Video Overview, Program Guide and FAQs.

Eligibility

The LGEA Program targets buildings owned by many local government-related entities, New Jersey Colleges and Universities, and 501(c)(3) non-profit agencies. Such facilities may include, but are not limited to: offices, courtrooms, town halls, police and fire stations, sanitation buildings, transportation structures, schools and community centers.

Your Expense is Covered

NJCEP will subsidize 100% of the cost of the audit, up to an incentive cap, so there are no out of pocket expenses associated with services provided under this program.

Audit Scope

The audit includes an inventory of all energy-consuming equipment, comprehensive utility bill analysis, facility benchmarking, and a screening for solar combined heat & power, and electric vehicle charging stations. Add-on / targeted audit options as outlined in the program guide may also be available. When your audit is complete, you'll have a list of recommended, cost-justified measures and facility upgrades that will help reduce operating expenses and, in many cases, improve the health and productivity of the buildings' occupants.

Measures of Success:

- Apply for Local Government Energy Audit or Engineered Solutions audit, if eligible
- Achieve 20% annual energy savings for one building
- Achieve 20% annual energy savings across the municipal building portfolio

Next Steps:

- Conduct Energy auditing to identify opportunities and to improve the efficiency of its buildings.

Initiative 3.2 - Residential Energy Efficiency Outreach Campaign

Description:

Implement an outreach effort to help residents take advantage of energy efficiency incentive programs offered by New Jersey's electric and natural gas utilities, including Home Performance with ENERGY STAR and Comfort Partners.

Lead

Director of Public Works, Parks & Buildings

Start Date

March 2024

Priority

High

Anticipated Length

3-6 Months

Funding Source

N/A

Departments involved:

Borough Administrator

Potential Stakeholders:

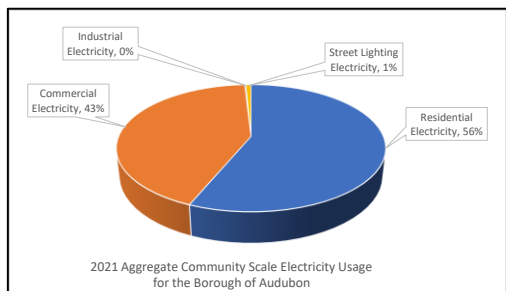
Sustainable Audubon; Utilities; Community Groups

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

Approximately 56% of the Borough's electricity is consumed by residential uses.



Audubon Residential Energy Efficiency Outreach Campaign

Our Campaign and Residential Energy Efficiency Program

The Borough of Audubon is participating in the Energy Efficiency Partnership Program to inform the community about an opportunity to improve the energy efficiency of their homes that potentially may also be financially beneficial as well.

Measures of Success:

- Outreach team training with Sustainable Jersey
- 5% of residents participate in Home Performance with ENERGY STAR program during the campaign.

Next Steps:

- Solicit contractors that are approved by PSE&G for the Home Performance program in order to obtain preferred rates for Borough residents.
- Work with community groups to include information about the programs in their own outreach mailings and meetings.
- Provide information about the programs on the Borough website.
- Remind the public about the programs during Borough Council meetings.

Initiative 3.3 - Commercial Energy Efficiency Outreach Campaign

Description:

Implement an outreach effort to help local businesses take advantage of energy efficiency incentive programs offered by New Jersey's electric and natural gas utilities, including the Direct Install (DI) program.

Lead

Director of Public Works, Parks & Buildings

Start Date

March 2024

Priority

Low

Anticipated Length

3-6 Months

Funding Source

N/A

Departments involved:

Borough Administrator

Potential Stakeholders:

Sustainable Audubon; Utilities;
Businesses and Business Associations


Obstacles/Barriers:

No significant barriers were identified.

Community notes:

Commercial Properties account for approximately 43% of the Borough's electricity usage and 28% of the Borough's natural gas usage.

[Commercial Energy Efficiency Outreach Toolkit](#)



Commercial Energy Efficiency Outreach Toolkit

Created specifically for existing small to medium-sized facilities, New Jersey's Clean Energy Program™ Direct Install is a turnkey solution that makes it easy and affordable to upgrade to high efficiency equipment. The program pays up to 80% of costs for energy-saving upgrade measures. The process starts with a FREE energy assessment by a NJCEP-designated Direct Install contractor. The contractor will work with the business to cut energy costs by replacing lighting, HVAC, and other equipment with energy efficient alternatives.

This toolkit is a resource for green teams and municipalities working on the [Commercial Energy Efficiency Outreach](#) action. To complete this action, municipalities must conduct an outreach campaign promoting the NJCEP Direct Install program. Collateral for outreach campaigns has been pre-approved by NJCEP to provide 'plug and play' outreach materials that maintain the language and branding of NJCEP programs.

A municipal outreach campaign is an effective and low-cost strategy for helping businesses benefit from Direct Install. Municipal outreach campaigns encourage broader participation in the Direct Install program by increasing awareness of the incentives available. Reducing energy use reduces operating expenses, which in turn, helps the bottom line for local businesses.

This toolkit contains:

- Overview of the process for businesses using the Direct Install program
- Overview of Commercial Energy Efficiency action, 10- and 20-point level options
- NJCEP pre-approved outreach collateral: letter from the mayor, press release, flyer, etc.

Measures of Success:

- Outreach team training with Sustainable Jersey
- 5% of businesses participate in Direct Install program during the campaign

Next Steps:

- Coordinate with PSE&G to maximize benefit from Direct Install program for local businesses

REDUCE ENERGY CONSUMPTION AND EMISSIONS FROM THE BUILDING SECTOR

According to New Jersey's Energy Master Plan, 62% of the state's total end-use energy consumption is associated with buildings, with space heating, water heating, appliances, and industrial uses accounting for 28% of New Jersey's greenhouse gas emissions. Decisions made during new construction and building retrofits have significant and long-lasting impacts on this energy use. Audubon can reduce energy use and emissions from buildings by prioritizing green design in new construction and utilizing municipal buildings as models for the community.



INITIATIVES	
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

*Initiatives in **Bold** were evaluated by the Borough for inclusion in this CEP.*

Initiative 4.2 - Encourage Benchmarking and Commissioning for Existing Buildings

Description:

Educate local building managers about benchmarking and commissioning. Inform building managers of utility building management programs that include benchmarking and/or commissioning.

Benchmarking is a method used to determine whether a building is using more or less energy than its peer facilities with similar occupancies, climates, and sizes. Commissioning is a quality-assurance process used to verify that a building performs according to the original design and intent and meets the needs of the owners and occupants.

Lead

Director of Public Works, Parks & Buildings

Start Date

May 2024

Priority

High

Anticipated Length

6 Months – Year; Ongoing

Funding Source

N/A

Departments involved:

DPW; Code Enforcement

Potential Stakeholders:

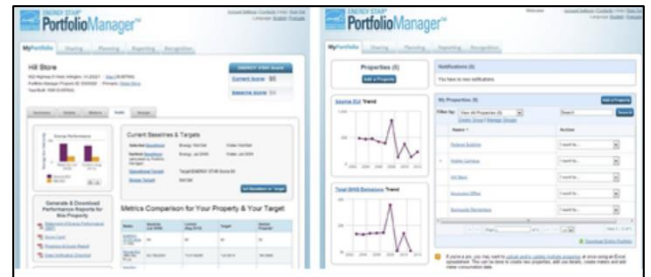
Utilities; Building managers

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

In New Jersey, benchmarking for large commercial buildings (25,000 square feet) is required by law, as the energy efficiency of these buildings has major emissions implications. However, benchmarking is useful for all building types and sizes. Therefore, the Borough can require benchmarking for certain building types and size or encourage voluntary benchmarking. Building owners can use NJCEP's free Energy Benchmarking program or ENERGY STAR Portfolio Manager to benchmark their buildings.



Measures of Success:

- Information about benchmarking and commissioning posted to municipal website.
- Major building owner agrees to have buildings benchmarked and commissioned.

Next Steps:

- Implement benchmarking and commissioning policies, both for public buildings and private buildings, within the Borough's zoning ordinance and regulations.
- Develop a policy or a plan to benchmark all public buildings annually.

SUPPORT COMMUNITY ENERGY PLANNING AND ACTION WITH AN EMPHASIS ON ENCOURAGING AND SUPPORTING PARTICIPATION BY LOW- AND MODERATE-INCOME AND ENVIRONMENTAL JUSTICE COMMUNITIES

New Jersey's Energy Master Plan calls for Community Energy Plans like this one to drive a rapid shift to a clean energy system that specifically benefits low- and moderate-income (LMI) and environmental justice (EJ) residents. Under the current system, low- and moderate-income residents often struggle to afford energy resources such as electricity and gasoline. Meanwhile, environmental justice communities suffer from health problems related to pollution from the fossil-fuel-based energy system. By integrating the needs of LMI and EJ communities with local energy initiatives, Audubon can alleviate burdens on these communities caused by the current system while mitigating global climate change.

EnergyOutreachNJ.com/Audubon



INITIATIVES	
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

*Initiatives in **Bold** were evaluated by the Borough for inclusion in this CEP.*

Initiative 6.1 - Make Community Energy Planning Inclusive

Description:

Ensure low- and moderate-income residents are represented in energy planning processes, both on the core planning team and among those contributing via public comment. Methods include scheduling meetings at convenient times (varying meeting time if needed), engaging with community organizations that can elevate underrepresented voices, and advertising planning meetings in appropriate media.

Lead

Director of Public Works, Parks & Buildings

Start Date

2025

Priority

Medium

Anticipated Length

3 Months

Funding Source

N/A

Departments involved:

Planning; Public Outreach

Potential Stakeholders:

Sustainable Audubon; Audubon PSD; Community Organizations

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

In addition to notifying underserved communities about the Community Energy Planning process, the Borough should ensure these communities have influence in the process as well – this includes appointing a representative for these communities to join the project team or group when implementing the initiatives within this Community Energy Plan.



Measures of Success:

- Demographics of entire community are represented on planning team.
- Public comment meetings are well-attended.

Next Steps:

- Begin to identify community needs and gather input about local issues.
- Attend existing local forums or regular community meetings at environmental justice organizations, community development corporations, tenant associations, or faith-based groups.
- Partner with community organizations. Communicating and tailoring messages on equity and clean energy will be a critical aspect of engaging the community.

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

Description:

Promote State and utility energy efficiency programs for low- and moderate-income (LMI) 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).

Lead

Borough Administrator

Start Date

2025

Priority

High

Anticipated Length

1 year

Funding Source

N/A

Departments involved:

Borough staff

Potential Stakeholders:

Sustainable Audubon; Audubon PSD; Community Organizations

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

Income Based Energy Assistance Programs

- Lifeline Program - Operated by the NJ Department of Human Services to assist income eligible disabled adults or seniors to afford utility costs.
- LIHEAP (Low Income Home Energy Assistance Program) / Universal Service Fund - Helps to offset home energy and heating costs for low-income households.
- PAGE (Payment Assistance for Gas and Electric) - Helps to offset energy and gas costs for income eligible households.
- Promote state and utility energy efficiency programs for low- and moderate-income (LMI) 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.

Next Steps:

- Establish a program implementation timeline, determine roles and responsibilities and recruit program participants and begin administering the program.

EXPAND THE CLEAN ENERGY INNOVATION ECONOMY

Clean energy industries already employ thousands of residents in the state and will employ thousands more to implement the transition to 100% clean energy. Innovation in clean energy technology can generate further high-quality job growth while developing new tools for tackling greenhouse gas emissions. Audubon can lead the charge in developing New Jersey's clean energy innovation economy through forward-thinking policies and development of clean energy resources.



INITIATIVES	
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

*Initiatives in **Bold** were evaluated by the Borough for inclusion in this CEP.*

Initiative 7.1 - Adopt Energy Storage Policies

Description:

Adopt standards and establish requirements for permitting battery energy storage systems. Post information about energy storage regulations to the municipal website and ensure appropriate municipal staff are informed.

Lead

Borough Administrator

Start Date

2026

Priority

Low

Anticipated Length

2 years

Funding Source

N/A

Departments involved:

Zoning/Construction

Potential Stakeholders:

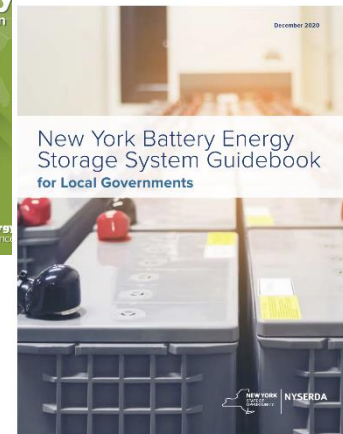
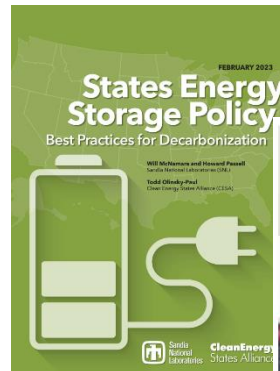
Utilities; Energy Storage Companies

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

Energy storage provides benefits to private and public users by maximizing the benefits of their on-site solar installations, offsetting demand-based energy costs from their utility provider, and providing a source of electricity during a power-outage. Ensuring that the Borough's ordinances permit battery energy storage systems is key to enabling property owners and businesses to take advantage of the benefits of this technology.



Measures of Success:

- Regulations adopted addressing battery energy storage.
- Permitting system for energy storage established

Next Steps:

- Utilize Model Laws and modify to suit the local conditions of the Borough, such as the zoning ordinance.
- After adoption of the ordinance, the Borough should consider providing training for first responders to learn about the technology of energy storage systems.

Initiative 7.2 - Install an Energy Storage System

Description:

Install on-site energy storage, such as batteries, compressed air, or thermal storage, for municipal facilities. Following construction, showcase the project with on-site kiosks and municipal webpages to encourage others to follow suit.

Lead

Director of Public Works, Parks & Buildings

Start Date

2026

Priority

Low

Anticipated Length

2 years

Funding Source

N/A

Departments involved:

Code Enforcement; Engineering

Potential Stakeholders:

Utilities; Energy Storage Companies

Obstacles/Barriers:

No significant barriers were identified.

Community notes:

Energy Storage Systems on Borough properties can not only maximize the benefits to the Borough from installing on-site solar installations but can also ensure that the Borough and its various services can continue to operate at full or functional capacity during a blackout.

Additionally, installing battery storage at emergency shelters, emergency staging areas, or senior centers can ensure that vulnerable populations have a safe place to stay during natural disaster, severe heat events, or other emergencies.



Measures of Success:

- Request for proposals from qualified companies for municipal energy storage system are posted.
- Energy storage project installed and operational.

Next Steps:

- Invite energy storage system developers and installers to meet with Borough officials.
- Identify potential projects (Site, Facilities)

4. References

- EIA (U.S. Energy Information Administration). 2021. *New Jersey State Profile and Energy Estimates*. <https://www.eia.gov/state/analysis.php?sid=NJ>.
- NJDEP (New Jersey Department of Environmental Protection). 2020. *New Jersey Scientific Report on Climate Change At-A-Glance*. <https://www.nj.gov/dep/climatechange/pdf/scientific-report-on-climate-change-at-a-glance.pdf>.
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- NJDEP. 2022. *NJ Greenhouse Gas Emissions Inventory Report Years 1990-2019*. https://dep.nj.gov/wp-content/uploads/ghg/2022-ghg-inventory-report_final-1.pdf
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- Sustainable Jersey. March 2022. Sustainable Jersey Guide for Sustainable Energy Communities.
- Sustainable Jersey. 2021. Community Energy Plan Workplan Template.
- Sustainable Jersey. March 2022. Alternative Fuel Vehicle Procurement Guide

5. Data Sources

Almost all data used in this plan is sourced from the [Sustainable Jersey Data Center](#).

Community Overview Data		
Section, Map, or Table	Original Source(s)	Link to data
General Information Section	U.S. Census American Community Survey (ACS)	SJ Community Profile Data by Municipality
Current Housing Units by Year Built Chart	U.S. Census ACS	SJ Community Profile Data by Municipality
Number of Units by Structure Type Chart	U.S. Census ACS SJ Community Profile Data by Municipality	SJ Community Profile Data by Municipality
Commercial & Industrial Properties Map	NJ MOD IV Tax Data	SJ Commercial & Industrial Properties Map
Commercial & Industrial Properties Data	NJ MOD IV Tax Data	SJ Commercial & Industrial Properties Data

Energy Use Data		
Section, Map, or Table	Original Source(s)	Link to data
Amount of Electricity Used by Sector (kWh) Chart	NJ Investor-Owned Utilities	SJ Aggregated Community-Scale Utility Energy Data
Amount of Natural Gas Used by Sector (Therms) Chart	NJ Investor-Owned Utilities	SJ Aggregated Community-Scale Utility Energy Data
Number of Occupied Housing Units by Primary Heating Fuel	U.S. Census ACS	SJ Community Profile Data by Municipality
Greenhouse Gas (GHG) Emissions Charts	SJ GHG Emissions by Municipality	SJ Community-Scale Greenhouse Gas (GHG) Emissions Data

Energy Efficiency and Renewable Energy Data		
Section, Map, or Table	Original Source(s)	Link to data
Solar Installations Chart	NJCEP Solar Installation Data	SJ Solar Installation Data
Commercial Energy Efficiency Program Participation Data	New Jersey Clean Energy Program (NJCEP) Data	SJ Energy Efficiency Program Participation (2008-2021) Data - Lifetime Commercial Participation
Residential Program Participation Data	NJCEP Data	SJ Energy Efficiency Program Participation (2008-2021) - Lifetime Commercial Participation
Energy Efficiency Projects Completed by Municipality Data	NJCEP Data	SJ NJCEP Local Government Projects 2008-2021