

## Bringing the Clean Energy Revolution to Your Community

2021 NJLM Conference

November 16, 2021







## Presenters

#### **Mayor Colleen Bianco Bezich**

Commissioner of Public Affairs and Public Safety Borough of Haddonfield

Ken Jones Environmental Commissioner Borough of Glen Rock

**Nicole Miller** Green Team Chair City of Newark

**Crystal Pruitt** Deputy Director, Office of Clean Energy Equity New Jersey Board of Public Utilities

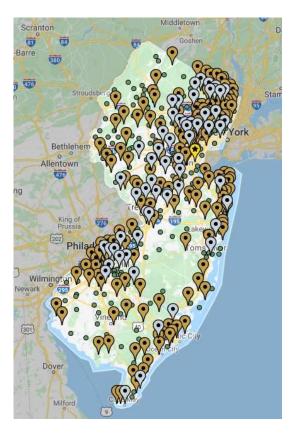


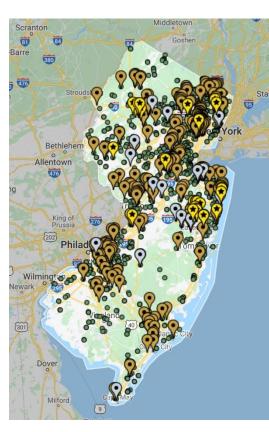
- **Certification program** for municipalities and schools
- Tools, resources, and guidance to help municipalities and schools become more sustainable
- Grants and funding for municipalities and schools
- Regional Hubs





## **Program Participants**





## **Municipal Program**

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

### **Schools Program**

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

Municipal Program

Schools Program



## Municipal Energy Actions

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



## Gold Star in Energy

## **Municipal Operations**

#### **Municipal Buildings**

- Energy efficiency
- Operations / equipment
- Green building policy

#### **Municipal Fleet**

- Fleet electrification
- Route optimization
- Telematics

#### GHG reductions

- 3.6% annually
- 10.8% over 3 years

#### **Community Actions** (two from each category)

#### **Energy Efficiency**

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

#### Renewable Energy

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

#### Transportation

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

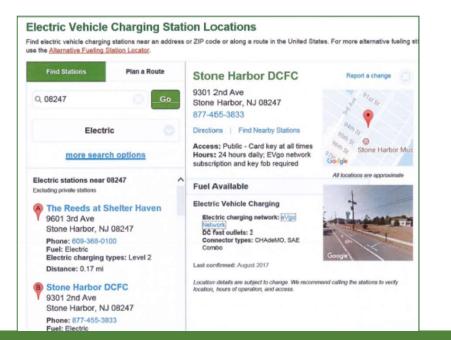
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## Electric Vehicle Actions

## **Public EV Charging Infrastructure**

- Municipal role in the project
- Listed on public directory
- Signage/promotion



#### Make Your Town EV Friendly

- Model Statewide EV Ordinance
- Update Land Use Code
- Training for first responders



## Electric Vehicle Outreach Action

- Select two audience types to target
- Residential
- Commercial
- Multifamily

- Commercial fleets
- Workplaces
- Auto dealerships



- For each selected audience, complete 2 outreach activities such as
  - Webpage on green team or municipal website
  - Create & distribute a brochure, flyer, and/or newsletter
  - Table and/or present at local events
  - Social media and/or email campaign
  - Award recognizing individuals/businesses for EV/EVSE accomplishments
  - o "Ride and drive" or other EV-centric event



## Solar Actions

## **Community-Led Solar Initiatives**

- Solarize campaign
- Employee purchasing program
- Solar marketplace
- Outreach
- Municipal incentives
  - o Reduced permitting fees
  - o Development bonus

### Make Your Town Solar Friendly

- Zoning permitted accessory use
- Solar permitting checklist
- Training for first responders
- Expedited permitting
- SolSmart *Silver* designation qualifies for 30 points for this action

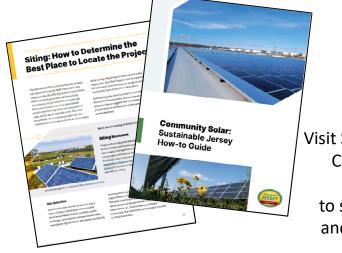




## Community Solar

Definition: solar installation with multiple subscribers

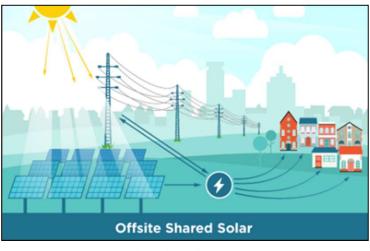
- Provides benefits of solar to those who are not able to install solar (renter, shade, cost)
- Each subscriber receives billing credits for section of larger solar array



Visit Sustainable Jersey's Community Solar Resource Page to see How-to Guide and other resources



**Onsite Shared Solar (Multi-Unit Building)** 



Images from energy.gov/eere/solar/community-and-shared-solar



## **Energy Efficiency Actions**

#### **Residential Outreach**

- Webpage with Home Performance with ENERGY STAR information
- Additional outreach activity
- Letter to residents promoting HPwES

## **Commercial Outreach**

- Letter to local businesses promoting Direct Install
- Additional outreach activity
- 2.5% businesses sign up for DI assessment



See You Around Town- Summit Home Energy Insight Program

Commercial (Direct Install) Projects Needed to Recieve 20 Points (Note: for data methodology, see last page)

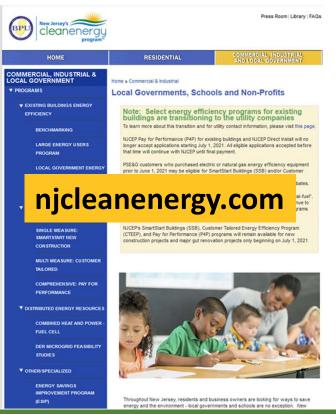
Municipality	County	# C&I Ta: (2018)	# of projects needed for 20 points (2.5%)	
Deerfield Township	Cumberland	71	2	
Delanco Township	Burlington	55	2	
Delaware Township	Hunterdon	46	2	
Delran Township	Burlington	176	5	
Demarest Borough	Bergen	8	1	
Dennis Township	Cape May	222	6	
Denville Township	Morris	418	11	
Deptford Township	Gloucester	395	10	
Dover Town	Morris	411	11	



## Energy Assistance Outreach

- Outreach about energy efficiency and bill payment assistance programs
- Partner with local community organizations
- Encourage local food bank, health clinic, social service agencies to take advantage of energy efficiency programs
- Comfort Partners outreach campaign

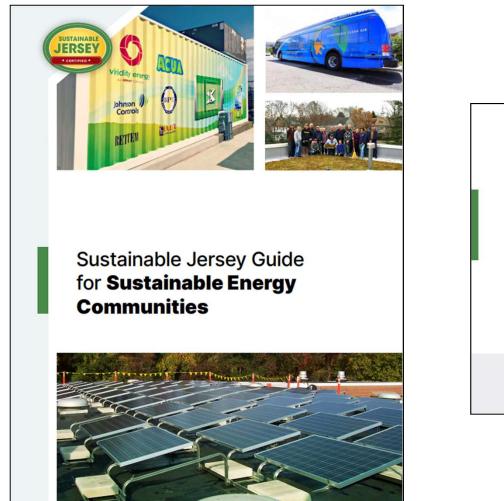


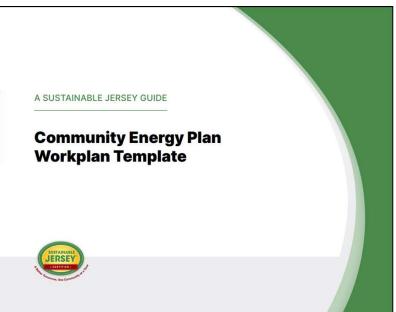


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## Community Energy Planning





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# SolSmart



- Points-based national certification program
- Solar planning, zoning, permitting, and outreach
- <u>SolSmart Silver</u> counts for Make Your Town Solar Friendly Action

## solsmart.org

#### Get started with SolSmart!

## Solar Statement to include

- Commitment to SolSmart certification
- Past solar achievement
- Solar goals
- Commitment to track solar metrics in your community



Image from www.solsmart.org.



## **Online Solar Permitting Tool**



- Developed by National Renewable Energy Laboratory (NREL)
- Free for municipalities
- Automated plan review, code compliance check
- Online fee payment
- Can reduce permitting time by 5-10 days



Image from NREL. solarapp.nrel.gov

## solarapp.nrel.gov/



## Upcoming Energy Events

#### NJLM sessions

- Making the Most of Solar in NJ
  - Wednesday, 11/17
  - o 1:30 pm 2:45 pm
  - o Room 421
- Municipal Fleet Electrification
  - Thursday, 11/18
  - o 10:45 am Noon
  - Room 421

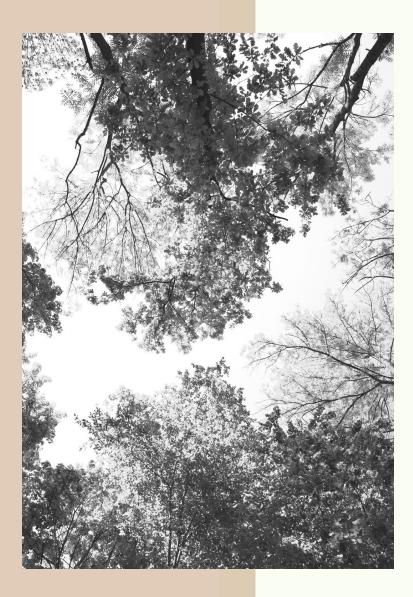
### Sustainable Jersey Webinars

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

## Sustainable Jersey Supporters & Sponsors

#### **Program Underwriters**





# THE SUSTAINABILITY BALANCING ACT

Promoting Solar Power while Preserving Historic Structures & Trees

Presented by: Colleen Bianco Bezich, Esq. Mayor, Haddonfield Borough, Camden County cbbezich@haddonfield-nj.gov /cbezich@mwm-law.com

## WHAT ARE WE PROMOTING?

Renewable energy - in this case, solar energy



# BUT, WHAT ARE WE ALSO TRYING TO PROTECT?

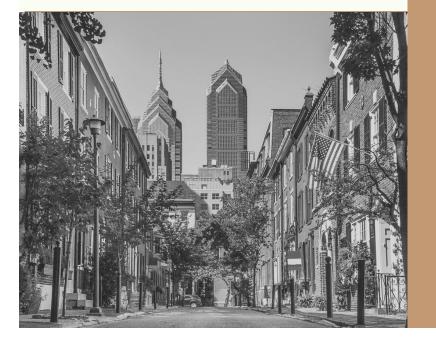
Historic structures + trees



# To be without trees would, in the most literal way, to be without our roots."

Richard Mabey

# HISTORIC PRESERVATION



Preserve historic spaces & structures

Stabilize & revitalize neighborhoods

Protect structural integrity & reduce waste

# SHADE TREES



Maintain & enhance the tree canopy

Reduce carbon emissions & curb pollution

Retain natural habitats & reduce flooding



#### HISTORIC STRUCTURES

# Both of these share sustainability goals with solar, and promote healthier communities...



but without proper planning, they create competing interests, and proponents may become adversaries.

#### TREES



*Engage the services of professional planners to ensure competing interests can co-exist in the future.* 



# WHAT CAN WE DO?

Adopt regulations that preserve historic character without prohibiting solar installations.







# WHAT CAN WE DO?

Adopt local zoning rules & regulations to facilitate solar approvals and permitting.









Examples of Balancing These Interests From Haddonfield & Beyond

## RESOURCES

https://www.planning.org/research/solar https://www.nj.gov/dep/aqes/opea-solar.html https://www.sustainablejersey.com https://www.dvrpc.org/solar/

> Presented by: Colleen Bianco Bezich, Esq. Mayor, Haddonfield Borough, Camden County cbbezich@haddonfield-nj.gov /cbezich@mwm-law.com

## Bringing the Clean Energy Revolution to Glen Rock

- 1. Showing the benefits of electric cars (EVs)
- 2. Bringing affordable renewable energy to all residents

## GLEN ROCK ENVIRONMENTAL COMMISSION



# Promoting adoption of electric vehicles

41% of estimated NJ greenhouse gas emissions in 2018 come from transportation. 40% of these come from cars.

Switching from gas to electric will have a major impact on reducing CO<sub>2</sub> emissions and improve local air quality

- Sources of CO<sub>2</sub> emissions in NJ Transportation Electricity Natural Gas
- Public awareness and education through webinars and EV shows
- Installation of Level 2 chargers in downtown public parking lot
  - Early adoption of EVs will "plant the seed" locally





EV-101 Webinar April 20, 2021

Created by Sustainable Jersey Bergen Hub

#### An EV For Every Budget







Tesla Model S



BMW i3s

Audi E-Tron

Chevy Bolt EUV

#### **Example EV Costs In Our Area**

Car (Range in Miles)	Sticker Price	Incentives (Fed credit + NJ rebate)	NJ Sales Tax	Final Cost
Hyundai Ioniq (170 mi)	\$33,245	\$7,500 + \$4,250	\$0	\$21,495
Nissan Leaf Plus (226 mi)	\$38,270	\$7,500 + \$5,000	\$0	\$25,770
VW ID.4 (250 mi)	\$39,995	\$7,500 + \$5,000	\$0	\$27,495
Chevy Bolt (259 mi)	\$36,500	\$5,000	\$0	\$31,500
Tesla Model 3 (263 mi)	\$41,990	\$5,000	\$0	\$36,990

#### These sites have up-to-date lists of over 63 EV models















### **Bringing EV Charging to Glen Rock**

- Installation of EV charging stations close to downtown restaurants and shops offers a unique amenity to our area
- Removes a barrier to purchase by providing a local place to charge



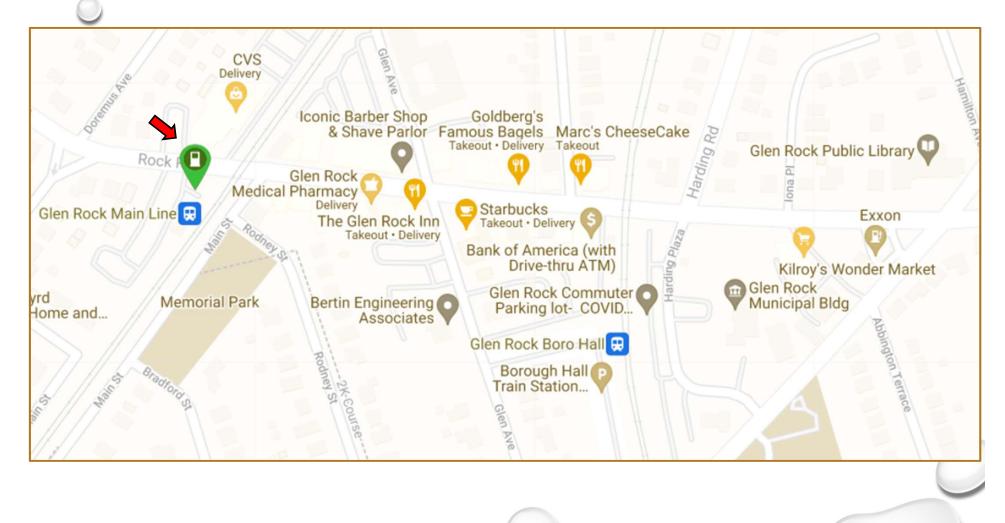
### **Funding for 2 EV Charging Stations**

- 100% through external sources
  - \$10,000 grant from NJDEP "It Pay\$ to Plug-In" program
  - <sup>-</sup> \$3,500 grant from Tesla
  - <sup>-</sup> Architectural drawings pro bono from local resident
- Running costs for electricity usage anticipated to be \$650 to \$1300 annually
  - <sup>-</sup> Initially to be paid for by the Borough



### Location, location, location

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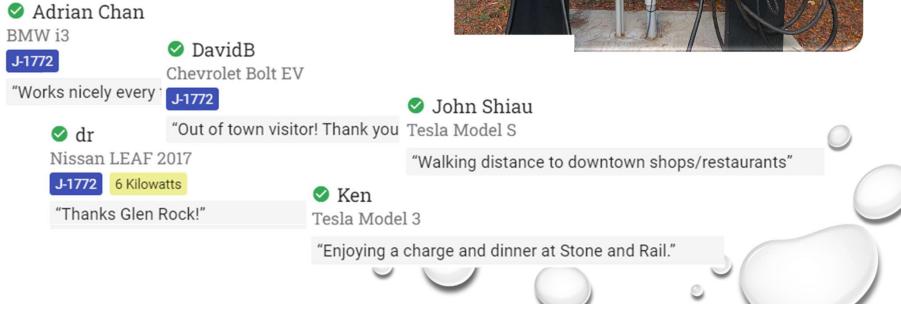






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### **New EV charging legislation**

New State law effective July 9, 2021 establishes numerical requirements and zoning standards for installation of electric vehicle supply equipment (EVSE) and Make-Ready parking spaces.

- Facilitates the application process for installation of new EV charging at parking sites.
- New multi-unit construction must include Make Ready (pre-wired) parking spaces as 15% of total parking. Initially, 1/3 of these need to include charging equipment.
- All municipalities are encouraged to pass local ordinances.
- This new legislation is already having a positive effect on new developments planned for Glen Rock.



### Renewable Energy Aggregation for Glen Rock



# What is energy aggregation?

- NJ laws passed in 2003 permit energy choice (electricity portion) and reduced cost through bulk purchase and competitive bidding (Government Energy Aggregation, or GEA).
- The utility continues to handle the billing and maintains the "pipes" and "wires"
- No cost to the town bids are placed by an energy agent of our choosing who is paid by the supplier.
- It's an opt-out program requires passing an ordinance
- Over 70 towns in NJ have already done this



**R-GEA** is a energy aggregation program that includes an enhanced renewable content for electrical generation (+20% above NJ RPS)

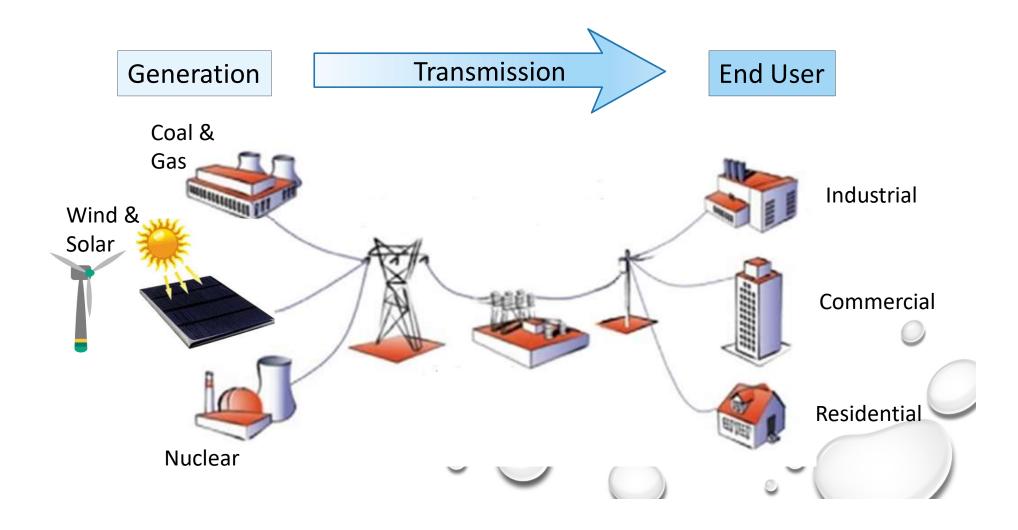
Note: RPS is now 22.5% renewable



# An R-GEA doesn't change how electricity gets to your home

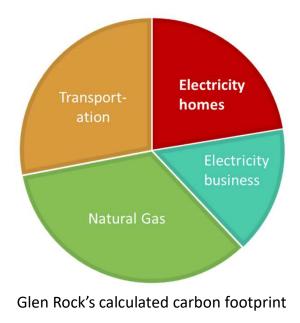
### But it <u>does</u> change who gets paid

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Fact: Residential electricity use is responsible for about ¼ of all CO<sub>2</sub> emissions in Glen Rock



An R-GEA can reduce our carbon footprint with minimal effort on the part of the Borough or residents

















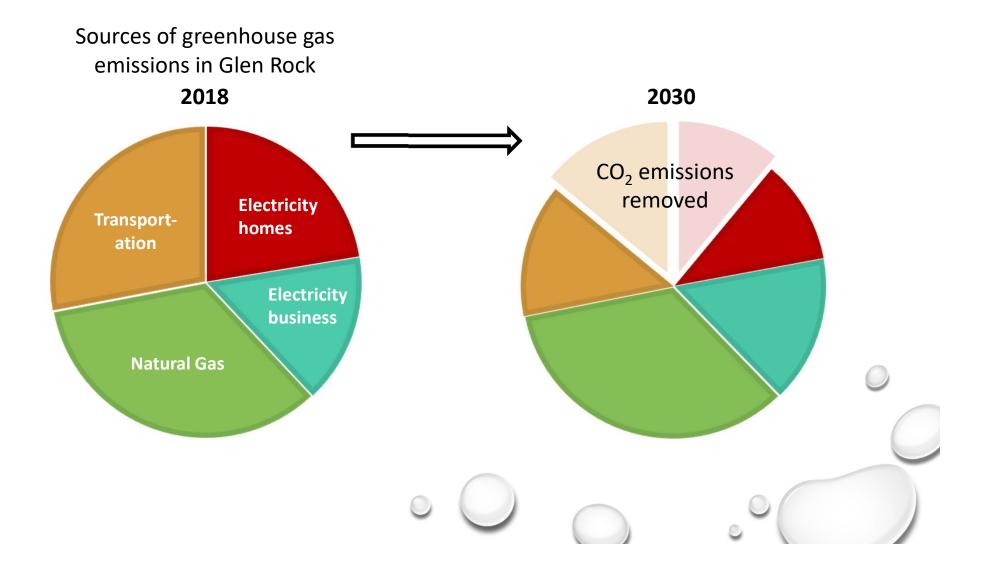
### Going for a Second R-GEA Contract

- With Sustainable Essex Alliance (SEA), a consortium of towns combining purchasing power and having the same goals
- Maplewood\*, Montclair, Glen Ridge, Verona, South Orange, Livingston, Glen Rock with combined 146,000 residents and 56,000 homes
- 17 month contract starting April 2021 includes a default renewable product ~40% renewable and an "opt-up" option for a 100% renewable product
- Fewer opted out in the 2<sup>nd</sup> contract



### Adoption of EVs and Renewable Energy Can Meaningfully Reduce CO<sub>2</sub> Emissions

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### Thank You!







#### Bringing the Clean Energy Revolution to Your Community

Nicole Miller - NJ League of Municipalities – November 2021











#### **Clean Energy Considerations**

Solar programs include rooftop and community solar.

Transportation upgrades require municipalities to invest in EV charging infrastructure.

Municipalities can see immediate benefits from efficiently upgrading public buildings and switching streetlights to LED. The cleanest energy is energy we never have to use

Energy Efficiency lets us do more with less: Insulation • Smart Meters • Energy Star Appliances

Replace filters & Sealants • LED lighting

Increase outreach and incentives to commercial businesses for efficiency retrofits.

Efficiency upgrades increase local hiring and support small businesses who work as contractors.

Towns and cities can require higher standards for building efficiency for new development and retrofits.



#### NJ Clean Energy Equity Act would, if passed...

Establish Office of Clean Energy Equity to oversee fair distribution of clean energy programs. Increase energy storage directly within lowincome communities. Sets state-wide targets for serving low-income customers, specifically with solar programs.

Fund bill components with \$50 million from NJBPU Clean Energy Program. Require new construction in low- and moderateincome communities be solar ready. Establish clean energy curriculum and paid workforce training programs.

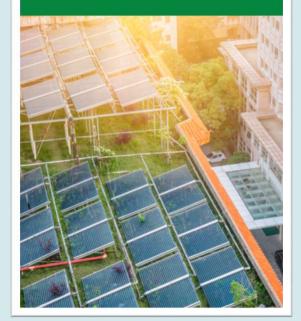
Develop and deploy programs to increase local access to renewable energy through community or onside solar along with energy efficiency programs designed to reduce energy costs of low-income communities







### COMMUNITY SOLAR



## **Community Solar**

- A community solar project is a solar array whose energy output is divided among multiple subscribers.
- For the NJ programs, subscribers will receive a bill credit on their utility bill for their participation in a community solar project.
- Community solar programs give clean energy options to those who have previously been unable to go solar because of cost, an unsuitable roof, or lack of roof control.





### Change in Programs for Energy Efficiency

Certain energy efficiency programs were transitioned from the NJ Clean Energy Program to the utilities after the Clean Energy Act of 2018.

Residential, Commercial, and Government customer should now go directly to their energy utility for rebate and efficiency programs.



#### Program areas to be served by the Utilities:

- Existing Buildings (residential, commercial, industrial, government)
- Efficient Products
  - HVAC
  - Appliance Rebates
  - Appliance Recycling

#### Proposed New Programs & Features: Dedicated multi-family program More financing options Quick home energy check-ups





#### Newark Green Team, Newark Environmental Commission and Essex Hub Comfort Partners Outreach Program

Conducting a joint campaign to increase outreach on NJ Comfort Partners program and new Moderate Income Home Weatherization programs alongside these Essex County municipalities green teams and environmental commissions:





Bloomfield Maplewood South Orange

Irvington I East Orange Verona

Montclair Orange



Nutley\* Belleville\*

\*contacted





### NJ Comfort Partners

A FREE program helping low-income residents reduce their energy bills by installing:

- ✓ Energy efficient lighting
- ✓ More efficient refrigerators & thermostats
- ✓ Insulation in walls and attics
- ✓ Efficient heating and/or cooling equipment
- ✓ Sealant to windows and doors …and possibly\* more

\*not all services are offered to all participants







#### **Newark Outreach to Renters**

#### Goal:

Due to existing popularity of the program in Newark, objective is to target renters, specifically those utilizing the Newark Housing Authority Section 8 voucher program.

> —Secondary target will be participants in a pilot program "NHA Section 8 Homeownership Conversion Program."



- Conduct Comfort Partners outreach session virtually via Newark Housing Authority, Newark Green Team, and Newark People's Assembly.
- Conduct private mailing to Section 8 recipients utilizing toolkit.
- Distribute posters and other toolkit materials to municipal offices, libraries, and partner organizations.
- Conduct social media outreach in Fall
   2021 with Newark Office of
   Sustainability.





#### When engaging with Environmental Justice communities...

- Research and acknowledge the cumulative environmental impacts, social and racial histories when approaching communities with clean energy solutions.
- Remember that a community combating environmental injustice is very often also working to battle social, economic, and racial injustice.
- Engage with community representatives when planning projects and programs and cast a wide net to get feedback from the community about potential unintended consequences to proposed solutions.
- Acknowledge the expertise of local leaders and honor their time and commitment by holding meetings on accessible days and times, providing translation services, and giving stipends to account for time spent in community outreach and planning.



# COMMUNITY ENERGY PLAN GRANT PROGRAM

### **Community Energy Plan Grant**

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



### **Overburdened Municipalities**

## Overburdened Municipalities are eligible for additional support:

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



### **Overburdened Municipalities Criteria**

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

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



### **Overburdened Municipalities**

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



### **CEP Grant Application**

#### To apply, municipalities must complete the following:

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



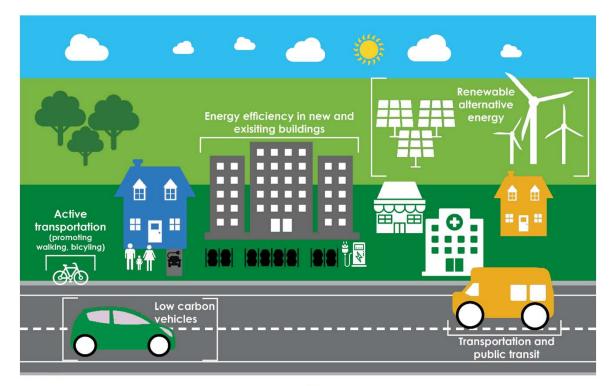
### **Grant Requirements**

#### One funds are received, grantees must complete the following:

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



### **Community Energy Plan Grant**



#### **Community Energy Plans**

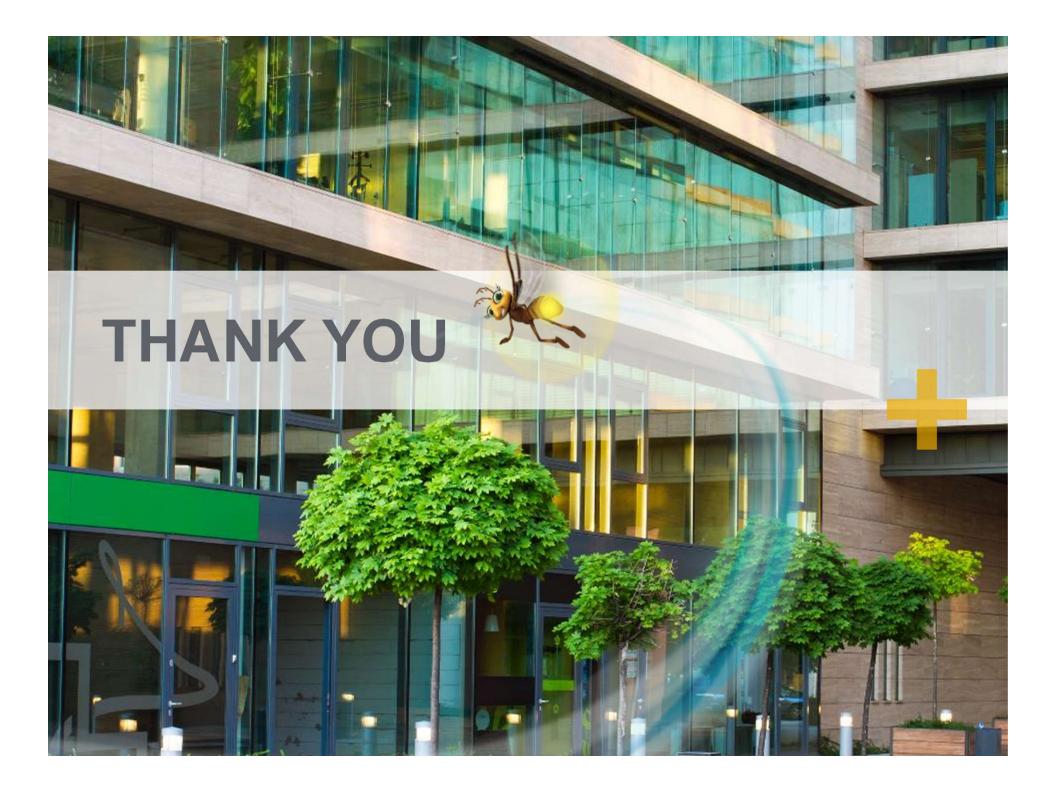
A Community Energy Plan is a way for a community to work towards a better environment for all residents by using the state's Energy Master Plan (EMP) as a guide to develop goals and strategies to increase clean energy production, reduce energy use, develop sustainable strategies and reduce emissions.







NJCleanEnergy.com/CEP



### **Contact Information**

#### **CRYSTAL PRUITT**

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> VISIT NJCleanEnergy.com/CEP

#### NEWSLETTER

NJCleanEnergy.com/NEWSLETTER

#### LISTSERVS

NJCleanEnergy.com/LISTSERVS







### Thank You!

#### Colleen Bianco Bezich, Mayor

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Nicole Miller City of Newark nicole@mnmconsulting.biz **Crystal Pruitt** 

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#### www.sustainablejersey.com