

Clean Energy Program

Clean Energy and Efficiency Opportunities for Residential, Commercial, Industrial, Multi-family and Institutional Buildings

New Jersey's Board of Public Utilities (NJBPU)

Who is the NJBPU?

The NJBPU is the state agency with the authority to oversee the regulated utilities, which provide critical services such as natural gas, electricity, water, telecommunications, and cable television.

The NJBPU ensures safe and adequate utility services are provided at reasonable, non-discriminatory rates by developing and regulating a competitive, economically cost-effective energy policy that promotes responsible growth and clean renewable energy sources while maintaining a high quality of life in New Jersey.







New Jersey's Clean Energy Program

Currently administered by:

New Jersey Board of Public Utilities' Division of Clean Energy

Currently funded by:

Societal Benefits Charge (SBC) on your utility bill

Program goals:

- ✓ Educate the community
- ✓ Change behaviors
- ✓ Provide opportunities for all New Jersey residents and business owners to save energy and lower operating costs
- ✓ Protect the environment and reduce emissions
- ✓ Meet Governor Murphy's goal of 100% clean energy by 2035





New Jersey's Energy Master Plan

January 20, 2023

Governor Murphy announced that the State of New Jersey would:

- Begin planning for the development of a NEW Energy Master Plan (EMP)
- Include updates and expansions to expand on the pathway to achieving a 100% clean energy economy by 2035 as set forth in the 2019 EMP



Recent New Jersey State Policy



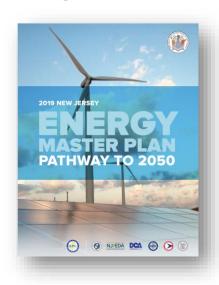
2018 CLEAN ENERGY ACT

Must achieve at least 0.75% annual energy reductions, based on the past three years, achieved in the next 5 years

Electric must achieve at least 2% average annual energy reductions, based on the past three years, achieved in the next 5 years



2019 ENERGY MASTER PLAN



www.nj.gov/emp



THE GOAL

100% clean energy by 2035

35% renewable energy by 2025 and 50% by 2050



COMING SOON

New Energy Master Plan







Reaching Our Clean Energy Goals

• Strategies:

- Reduce energy consumption and emissions from the transportation sector
- 2. Accelerate deployment of **renewable energy** and **distributed energy resources**
- 3. Maximize energy efficiency and conservation and reduce peak demand
- 4. Reduce energy consumption and emissions from the **building** sector
- 5. Decarbonize and modernize New Jersey's **energy systems**
- 6. Support **community energy planning** and action with an emphasis on encouraging participation by **low-and-moderate-income** and **environmental justice communities**
- 7. Expand the clean energy innovation economy

Energy Efficiency Defined



What is Energy Efficiency?

Energy efficiency is using technology that requires less energy to perform the same function*



Customer education



Energy conservation



Energy efficiency



Distributed energy resources



Renewable energy

The cheapest energy is the energy you don't use, it's as easy as the examples below:







* U.S. Energy Information Administration, https://www.eia.gov/energyexplained/use-of-energy/efficiency-and-conservation.php



Energy Efficiency Benefits

Why should you care about energy efficiency?



Energy efficiency helps reduce greenhouse gas emissions and mitigate climate impacts, which **improves health conditions**



Energy efficiency projects **lower energy costs**, especially for low- to moderate-income participants overburdened by energy bills



Energy efficiency projects are labor-intensive, therefore these projects strengthen and creates jobs



Energy Efficiency Benefits

Why should you care about energy efficiency?



Energy efficiency projects reduce energy use can **reduce energy bills** for customers and allow them to reinject the funds into the economy



Energy efficiency projects are designed to increase long-term comfort and safety



Energy efficiency projects are one of the **easiest and cheapest resources** against the global climate crisis



Energy Efficiency Incentives

How can you receive money for being energy efficient?



Choose energy-efficient equipment



Apply incentives to offset the cost of purchasing the equipment



Use the equipment



Enjoy a lower utility bill, healthier clean air, and better climate



Equity in Action



The Office of Clean Energy Equity

What is the purpose and goals of this office?

- Ensure equitable access for all residents, including New Jersey's low- and moderate-income (LMI) communities
- Oversee the development and implementation of clean energy policies, technologies, and programs, including energy efficiency programs
- Collaborate with partner agencies and organizations in the implementation of relevant policies, programs, training, and education, liaise with community-based organizations, and work within the communities to provide effective outreach on workforce training and program education initiatives



Equitable NJ State Policy

The NJBPU is committed to ensuring all New Jersey residents have access to clean energy and related workforce development and job opportunities. We believe that a more fair and equitable clean energy future that affords its benefits to all communities is possible, and we are working toward that goal.

2018 CLEAN ENERGY ACT

The CEA calls for programs that "ensure universal access to energy efficiency measures and serve the needs of low-income communities"

It seeks to reduce the inequity experienced by groups and individuals across NJ who disproportionately lack access to energy-efficient housing, appliances, and technologies

2019 ENERGY MASTER PLAN

The EMP establishes that the State's priorities in developing its statewide energy efficiency structure are affordability, equity, environmental justice, economic development, decarbonization, and public health

EXECUTIVE ORDER 316

Adopts a target to install zero-carbon-emission space heating and cooling systems in 400,000 homes and 20,000 commercial properties and make 10% of all low-to-moderate income (LMI) properties electrification-ready by 2030

COMING SOON

New Energy Master Plan



Energy Efficiency Programs





NJBPU and NJCEP Administered Programs Local Government Energy Audits (LGEA)

Community Energy Plans

Combined Heat & Power/Fuel Cells (CHP)

Combined Heat & Power Feasibility Study

Energy Savings Improvement (ESIP)

Community Solar

Large Energy Users Program (LEUP)

Higher Education Decarbonization Pilot (Decarb)

Electric Vehicles (EV)

New Construction

State Facilities Initiative

Utility Administered Programs

Existing Building Incentives Residential, commercial, industrial

Appliance Recycling

Energy-Efficient Residential Products Lighting, HVAC, marketplace

Appliance Rebates

NJBPU and Utility Administered Programs

Comfort Partners



Program Performance

Simple steps make a huge impact

61,000+ applications processed in FY23

\$99,330,000+ incentives paid in FY23

Energy Savings are delivered through electric, gas, oil, other efficiencies and generation:

- ✓ **74%** from renewables and CHP/Fuel Cells
- √ 15% electric savings
- √ 11% Gas/oil/other savings





2,597,000+ CARS REMOVED

9,035,000+ METRIC TONS

OF GREENHOUSE GASES ELIMINATED





13,920,000+ TREESGROWN FOR 10 YEARS



Energy Efficiency Programs

Existing Buildings



Suite of Clean Energy Programs

WE ARE HERE

Energy Efficiency - Existing Buildings

- FREE Local Government Energy Audits (LGEA)
- Energy Savings Improvement Program
- Large Energy Users Program (LEUP)
- Higher-Education Decarbonization Pilot
- Comfort Partners: FREE Income Eligible Residential Upgrades

Energy Efficiency - New Construction

 New Construction Program (Residential, Multifamily, Commercial & Industrial)

Distributed Energy Resources

- Combined Heat & Power Feasibility Study
- Combined Heat & Power; Fuel Cells

Electric Vehicles

- Light-Duty Residential EVs
- At-Home Charging
- Multi Unit Dwelling Chargers
- Municipal Fleets

Renewable Energy

- Successor Solar Incentive Program (SuSI) & ADI
- Community Solar
- Offshore Wind

Specialized Programs

- Community Energy Plan Grants (CEP)
- State Facility Initiatives
- Microgrid
 Development
- R&D Energy Tech Hub







For local government, New Jersey colleges and universities, and 501(c)(3) non-profit buildings with an average yearly demand >200kW*

- Inventory of all energy-consuming equipment and costs
- Comprehensive utility bill analysis
- Includes facility benchmarking
- Screenings for solar and combined heat & power
- High-level water assessment

COST

INCENTIVES

Free; state facilities receive up to \$1 million per fiscal year

- Up to \$150,000 per entity (covers most small to large entities)
- Up to \$300,000 per 501(c)(3) hospital**
- Up to \$300,000 maximum cap per entity with ESIP participation **



Financing for Government Agencies

The ESIP Process



Intake Form & Preliminary Energy Audit

- Get Informed
- Free LGEA or other ASHRAE Level II Audit

Select Model

- ESCO, Hybrid or DIY
- Public School Contract Law or Local Public Contract Law Compliance

Investment Grade Energy Audit

- · Deeper Dive
- More Comprehensive Audit

Energy Savings Plan Developed

- · Prioritize needs; Select ECMs
- Energy Savings Guarantee?
 - Third Party Review

Submitted for BPU Approval



Financing for Government Agencies

Energy Savings Improvement Program (ESIP)



- Energy performance contracting
- Administered by the BPU
- A creative tool and financing mechanism that allows public entities to make energy efficiency improvements without impacting their budgets
- Project is paid for with the value of its energy savings
- 15- or 20-year payback; self-funding
- NJBPU-approved incentives for utility company or New Jersey's Clean Energy Program
- Can be combined with Federal/State grants
- No upfront capital expenses
- No referendum or impact on taxpayers





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www.nj.gov/bpu/



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Financing for Government Agencies

The ESIP Process



Preliminary Energy Audit

Free LGEA or other ASHRAE Level II Audit

Select Path

ESCO, hybrid or DIY model, public contract law compliance

Investment Grade Energy Audit

Prioritize needs, select project's ECM's

Energy Savings Plan Developed

Must be cash flow positive, savings guarantee, third party review **Submitted for BPU Approval**







Encourages New Jersey's largest companies to self-invest in energy efficiency

- Entity must have paid a minimum of \$5,000,000 in utility bills across all investor-owned electric or gas accounts during the previous fiscal year
- The average peak demand of each facility where work is taking place must be ≥400kW and/or 4,000 DTh

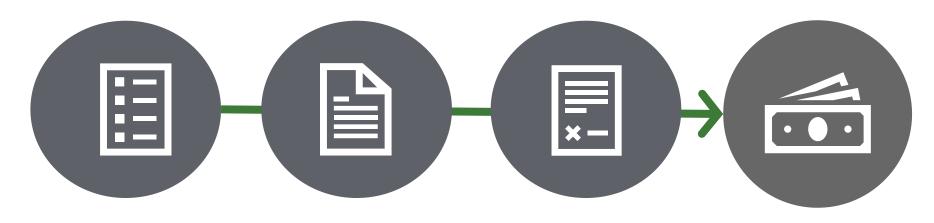
INCENTIVES

- Maximum incentive per project is capped by the lesser of the following metrics:
 - ✓ 75% of total project cost
 - ✓ Savings rates of \$0.33/kWh and \$3.75/therm for non-lighting measures; \$0.16/kWh for lighting and lighting control measures
 - ✓ Buydown of project to 2.0-year simple payback period
- Incentive commitments in a single fiscal year will not exceed \$4,000,000 per entity



Large Energy Users Program

The LEUP Process



Program Enrollment

Submission and approval of application

Submission of Draft Energy Efficiency Plan

Reservation of incentives (optional)

Submission of Final Energy Efficiency Plan

Commitment of incentives

Confirmation of Installation

Incentives paid







For existing accredited 2- and 4-year colleges and universities with multi-building campuses

- Assists New Jersey's colleges and universities reach their clean energy goals
- New construction projects are not eligible
- Projects pursuing decarbonization measures including but not limited to energy efficiency, storage, solar, beneficial electrification, electric vehicles, and more

INCENTIVES

- Up to \$5M available per applicant
- Reimbursements of up to 100% of the cost for the development of a decarbonization plan
- Reimbursements of \$1000/ton of CO2 equivalent reduced, up to 75% of total project cost



Higher Education Decarbonization Pilot

What is decarbonization and why is it important?



- May lower energy bills
- Reduces greenhouse gas emissions
- Helps meet your campus' decarbonization goals:
 - ✓ Rutgers to be net-zero emissions by 2040
 - ✓ Princeton to be net-zero emissions by 2046
 - ✓ Rider College to be carbon neutral by 2050

As NJCEP's first incentive pilot for decarbonization efforts, we hope to learn:

- ✓ Effort and cost of building/implementing a decarbonization plan
- ✓ Receptivity to decarbonization ideas and participation
- ✓ Potential for program expansion

CONTACT US



Learn more about the program application, rules, regulations and timeline



866-NJSMART



www.NJCleanEnergy.com/LEUPDecarb



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For low-income homeowners who have an income at or below 250% of the federal poverty level guidelines

Eligible participants may receive **free installation** by a Building Performance Institute (BPI) certified contractor of the following (on a home-specific basis):

- FREE program
- Energy efficient lighting
- Hot water conservation measures (water heater insulation, water heater pipe insulation and energy-saving showerheads, aerators)
- Replacement of inefficient refrigerators and thermostats
- Insulation upgrades (attic, wall, etc.)
- Heating/cooling equipment maintenance





Energy Efficiency Programs

New Construction



Suite of Clean Energy Programs

Energy Efficiency - Existing Buildings

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- Energy Savings Improvement Program
- Large Energy Users Program (LEUP)
- Higher-Education Decarbonization Pilot
- Comfort Partners: FREE Income Eligible Residential Upgrades

WE ARE HERE

Energy Efficiency - New Construction

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Electric Vehicles

- Light-Duty Residential EVs
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Renewable Energy

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Specialized Programs

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- State Facility Initiatives
- Microgrid
 Development
- R&D Energy Tech Hub



New Construction Program (NCP)



Program Launch Timeline

Pre-launch

May 1, 2025
Transition period

October 31, 2025 6-months post launch

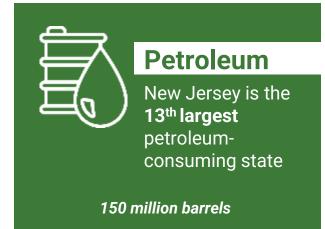
- Continue to use existing programs
 - Residential New Construction
 - SmartStart Buildings
 - Pay for Performance

- Option to use
 past programs
 OR
 all-new
 New Construction Program
- Only useNew Construction Program
 - High Performance Pathway
 - Streamlined Pathway
 - Bundled Pathway



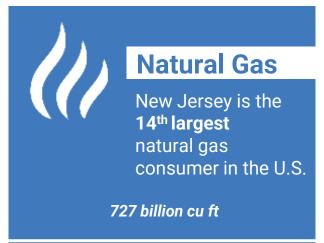
How is New Jersey using energy?

2022 Energy Use By Source



The equivalent of

14 million passenger vehicles driven for 1 year



The equivalent of

98 billion miles driven by the average passenger vehicle



Electricity

New Jersey consumes **MORE** electricity than it produces

Who consumes the electricity?

The commercial sector is the largest electricity consumer in New Jersey accounting for over 50% of the state's total electricity usage

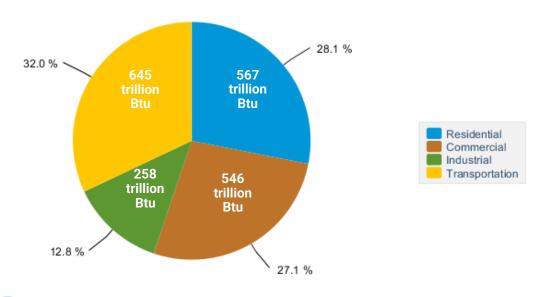


EIA Energy Use Source Link
EPA Greenhouse Gas Equivalencies Calculator

What sectors are consuming New Jersey's energy?

Commercial, Industrial, and Residential Sectors are the largest energy consumers

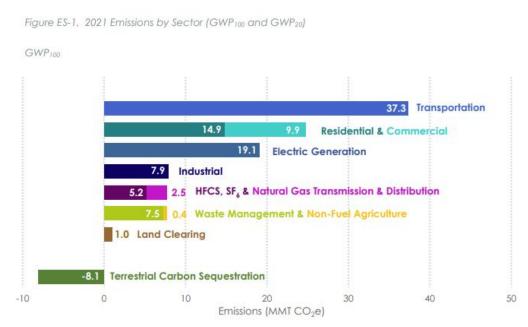
68% of total energy use







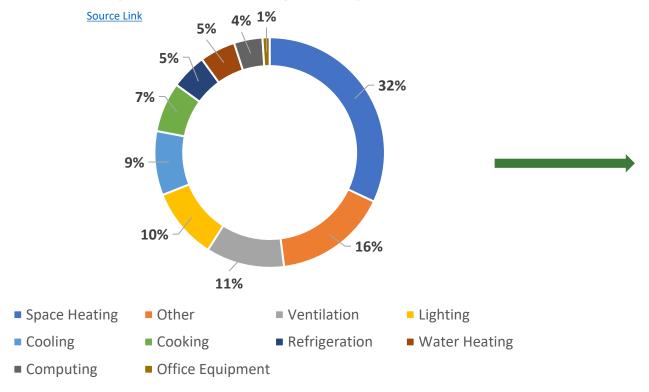
Commercial, Industrial, and Residential Sectors are the second largest carbon emitter



2021 Source Link

How are commercial buildings using energy?





The New Construction
Program can provide
incentives to make projects
more energy efficient



A New Approach to New Construction

What is the program?



A **single program with customized pathways** to serve residential and non-residential projects of all sizes



An easier application process for energy incentives



Pre-approved Partner Network to guide customers through the program



Increased equity and project participation providing equitable access through enhanced incentives and outreach



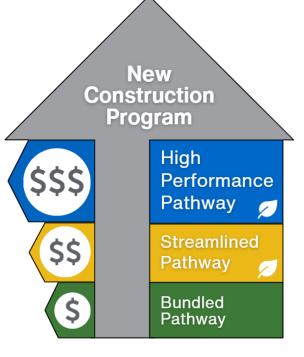
Improved customer experience and assistance including Coop marketing







- Several pathways offered to fit your needs to achieve energy savings
- Incentives based on selected pathways and project size
- All new construction buildings or gut renovation projects are eligible
- Additional incentives are available for energy efficiency measures that exceed code requirements





New Construction Program Process





^{*} An application may be submitted for a project at any point up to and during the design development phase; applicants are encouraged to apply prior to or during the early design stage.

New Construction Program Pathways

What are the details about the program?

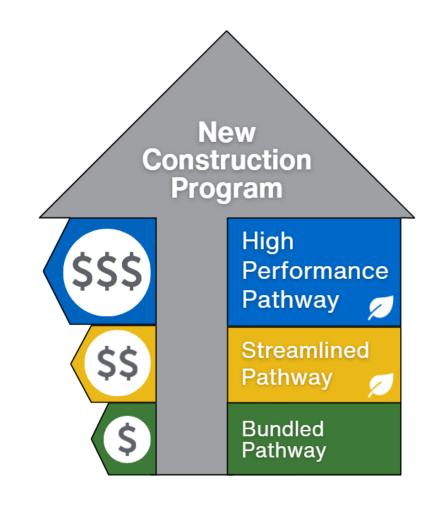
Choose the **pathway** for your next project:

- 1 High Performance
 - Deeper energy savings with tiered incentives
- 2 Streamlined

More efficient than code compliance

3 Bundled

Two or more eligible energy efficiency upgrades



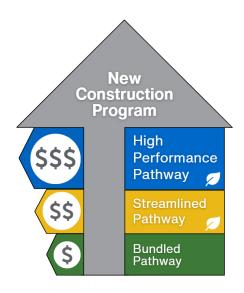


Non-residential

Bundled Pathway

What is the Bundled Pathway?

- Above-code measure upgrades are selected from pre-determined list to meet the minimum point requirement as applicable to the project's climate zone (CZ)
- Eligible energy conservation measures (ECMs) consist primarily of electric efficiency equipment and envelope/insulation measures
- Incentives are awarded to projects installing two or more eligible prescriptive measures and achieving the required minimum points at \$0.25 per square foot





Bundled Pathway Credits

Minimum Points for Each Measure

Bundled Pathway Credits, Climate Zone 4A											
Measure ID	Energy Credit Abbreviated Title	Addendum "ap" Section	Dormitory or Retirement	Healthcare	Hotel or Motel	Office	Restaurant	Retail	School or Education	Warehouse or Storage	Other
			Minimum Points Required								
			30	13	12	14	31	24	12	27	13
E02	UA reduction (15%)	C406.2.1.2	24	3	8	7	19	36	4	62	20
E03	Envelope Leakage Reduction	C406.2.1.3	47	6	14	8	24	44	х	77	28
H02	Heating Efficiency (electric only)	13.5.2.2.2	4	3	1	2	5	7	2	14	5
H03	Cooling Efficiency	13.5.2.2.3	4	7	7	6	5	7	9	1	5
H05	Ground-Source Heat Pump	13.5.2.2.5	10	11	6	10	13	18	6	×	11
W01	SWH Preheat Recovery	13.5.2.3.1(a)	21	2	7	2	10	7	3	3	7
W02	Heat-Pump Water Heater	13.5.2.3.1(b)	33	1	12	2	8	2	2	1	8
W04	SWH Pipe Insulation	13.5.2.3.2	3	1	2	1	×	×	1	×	2
W05	Point-of-Use Water Heaters	13.5.2.3.3 (a)	×	×	×	3	×	×	2	×	3
W06	Thermostatic Balancing Valves	13.5.2.3.3 (b)	1	1	1	1	1	1	1	1	1
W08	SWH Distribution Sizing	13.5.2.3.5	22	×	8	×	×	×	×	×	×
W09	Shower Drain Heat Recovery	13.5.2.3.6	19	×	6	×	×	×	2	×	9
L06	Light Power Reduction	13.5.2.5.6	2	8	2	8	4	10	9	13	6
Q01	Efficient Elevator Equipment	13.5.2.7.1	5	2	4	5	1	5	6	5	4
Q02	Efficient Kitchen Equipment	13.5.2.7.2	×	×	×	×	27	×	×	×	×

^{1.} Heat pumps providing both space heating and space cooling that meet program requirements may be eligible for credit in both H02 and H03 categories above.

^{2. &}quot;x" indicates that the applicable type of building earns no points for the applicable measure.



Bundled Pathway Credits

Minimum Points for Each Measure

Bundled Pathway Credits, Climate Zone 5A											
Measure ID	Energy Credit Abbreviated Title	Addendum "ap" Section	Dormitory or Retirement	Healthcare	Hotel or Motel	Office	Restaurant	Retail	School or Education	Warehouse or Storage	Other
			Minimum Points Required								
			33	13	11	16	29	22	12	32	15
E02	UA reduction (15%)	C406.2.1.2	30	4	9	10	26	45	3	74	25
E03	Envelope Leakage Reduction	C406.2.1.3	65	7	19	13	33	56	1	92	36
H02	Heating Efficiency (electric only)	13.5.2.2.2	5	4	2	5	8	10	3	21	7
H03	Cooling Efficiency	13.5.2.2.3	3	5	5	4	3	4	6	1	3
H05	Ground-Source Heat Pump	13.5.2.2.5	13	11	8	15	14	19	7	×	13
W01	SWH Preheat Recovery	13.5.2.3.1 (a)	22	2	8	2	11	7	3	2	7
W02	Heat-Pump Water Heater	13.5.2.3.1 (b)	36	1	13	2	9	2	2	1	8
W04	SWH Pipe Insulation	13.5.2.3.2	3	1	2	1	×	×	1	×	2
W05	Point-of-Use Water Heaters	13.5.2.3.3 (a)	×	×	×	2	×	×	3	×	3
W06	Thermostatic Balancing Valves	13.5.2.3.3 (b)	1	1	1	1	1	1	1	1	1
W08	SWH Distribution Sizing	13.5.2.3.5	23	×	8	×	×	×	×	×	×
W09	Shower Drain Heat Recovery	13.5.2.3.6	20	×	7	×	×	×	2	×	10
L06	Light Power Reduction	13.5.2.5.6	2	8	2	8	3	8	9	11	6
Q01	Efficient Elevator Equipment	13.5.2.7.1	5	2	4	5	1	5	6	4	4
Q02	Efficient Kitchen Equipment	13.5.2.7.2	×	×	×	×	26	×	×	×	×

^{1.} Heat pumps providing both space heating and space cooling that meet program requirements may be eligible for credit in both H02 and H03 categories above.

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Non-residential

Streamlined Pathway

What is the Streamlined Pathway?

- Buildings are modeled in specialized software (Sketchbox); access provided by the program
- Ideal for simpler building designs
- ECMs will achieve site energy savings at least 5% above code
- Projects must address each of the following building systems:

Building Systems

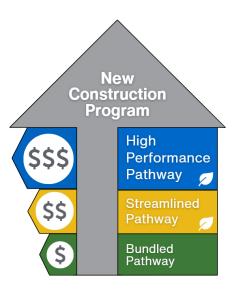
Envelope Heating

Lighting Cooling

 Incentives are awarded to projects that meet modeling savings and measure requirements at \$0.50 per square foot

Greenhouse gas (GHG) reduction bonus available for increased savings and incentives





Streamlined Pathway Measures & Buildings

Building Types

Automotive facility Manufacturing facility

Convenience store Motel

Convention center Museum

Dining: bar lounge/leisure Office

Dining: cafeteria/fast food Parking garage

Dining: family Penitentiary

Exercise center Performing arts theater

Retail

Gymnasium Religious building

Health-care clinic

Hospital School/university

Hotel Transportation

Library Warehouse

Measures

- Reduced lighting power density
- Improved HVAC equipment efficiency
- Improved vertical fenestration u-value
- Air-side economizer
- Depth of vertical fenestration overhangs
- Demand-controlled ventilation



High Performance Pathway

Residential & Non-residential

What is the High Performance Pathway?

- Whole building approach to energy savings
- Incentives are awarded in tiers by proxy certification or per the ASHRAE modeled savings

Tier 1: Tier 2: Tier 3: \$1.00/sq ft \$1.75/sq ft \$2.50/sq ft







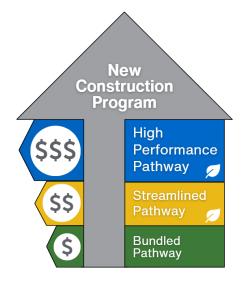








Greenhouse gas (GHG) reduction bonus available for increased savings and incentives





How to Navigate the High Performance Pathway

Projects must follow approved national proxy certifications **or** develop a whole building ASHRAE model demonstrating minimum program requirements are being met.

Proxy Certification





ASHRAE Modeling





High Performance Proxies for Residential



US EPA ENERGY STAR Program

- ENERGY STAR Single Family New Homes Program v3.2
 - Must use the performance path by way of Energy Ratings Index (ERI)
- ENERGY STAR Multifamily New Construction Program v1.2
 - May use the performance path by way of ERI or ASHRAE



US DOE Zero Energy Ready Home (ZERH) Program

Single family and Multifamily v2



Passive House

- PHI Classic, Plus, or Premium Version 10
- Phius Core 2021, Phius Zero 2021, or Phius Core Revive 2021



High Performance Proxies for Non-residential



LEED

- v4.1 Building Design & Construction (BD&C) or v4.1 Interior Design & Construction (ID&C)
- Projects achieve the minimum point values for EAc2 Optimize Energy Performance Points for Option 1 (see table)







- Focus of continuous insulation, airtight construction, optimized windows, balanced ventilation, and minimal mechanical systems
- Baselines will be established by the program for the purpose of calculating energy savings

LEED Point Requirements					
LEED 4.1 Rating System	Minimum Requirement for EAc2: Optimize Energy Performance				
BD+C: New Construction	4				
BD+C: Core & Shell	4				
BD+C: Major Renovation	4				
BD+C: Schools	4				
BD+C: Retail	4				
BD+C: Data Centers	4				
BD+C: Warehouses & Distribution	4				
BD+C: Hospitality	4				
BD+C: Healthcare	4				
ID+C: Commercial Interiors	14				
ID+C: Retail	14				
ID+C: Hospitality	14				



High Performance ASHRAE Modeling



- Non-residential buildings; Proxy certification is NOT required
- Optimize project design using an approved energy modeling software to evaluate savings from ECMs as compared to design that only meets baseline building code
- Proposed design must demonstrate minimum 5% site energy savings compared to ASHRAE 90.1 -2019 baseline
- Projects must address each of the following building systems:

Building Systems Envelope Heating Lighting Cooling

Full building Commissioning required



New Construction Program Incentives

What are the incentives?



- 1. Includes single-family, townhome, or multifamily. Excludes non-proxy (ASHRAE modeling approach) and LEED V4.1
- 2. Excludes ENERGY STAR® and DOE Zero Energy Ready Home (ZERH)
- 3. Includes residential Affordable Housing, non-residential UEZs/OZs, and Industrial/High Energy Intensity
- 4. Includes non-residential UEZs/OZs and Industrial/High Energy Intensity



New Construction Program

What is the Greenhouse Gas Reduction (GHG) Bonus?



- Calculated CO₂ equivalent reduction based on the project's energy savings
- Residential and non-residential projects participating in High Performance or Streamlined Pathways are eligible
- \$0.25-\$1.50 per square foot bonus incentive is awarded to projects achieving the minimum GHG reduction thresholds







New Construction Program

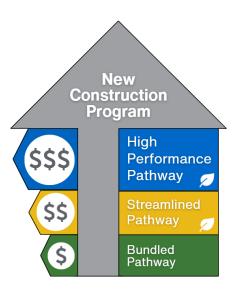
What are the enhanced incentives?

- Additional incentives available to:
 - Residential affordable housing
 - o Non-residential developments in designated areas of the State of New Jersey
 - Industrial/high energy intensity facilities
- Residential and non-residential projects participating in High Performance or Streamlined Pathways are eligible



- 1. Includes residential Affordable Housing and Overburdened Communities (OBC), non-residential UEZs/OZs/OBCs, and Industrial/High Energy Intensity
- 2. Includes non-residential UEZs/OZs/OBCs and Industrial/High Energy Intensity





Commercial Construction Example

Potential incentives that a 252,000 square foot office building may receive:

	Bundled Pathway	Streamlined Pathway	High Performance Pathway		
Incentive Range	\$63,000	\$126,000	\$252,000 - \$630,000		
Greenhouse Gas Bonus	N/A	\$63,000 - \$378,000	\$63,000 - \$378,000		
TOTAL	\$63,000	\$126,000 - \$504,000	\$252,000 - \$1,008,000		

Up to 133% INCREASE from previous program incentives



Multifamily Construction Example

Potential incentives that a 70,000 square foot multifamily construction project may receive through High Performance Pathway:

	ENERGY STAR®	DOE Zero Energy Ready	PHI/PHIUS	
Incentive Range	\$70,000	\$122,500	\$175,000	
Greenhouse Gas Bonus	\$17,500 - \$105,000	\$17,500 - \$105,000	\$17,500 - \$105,000	
TOTAL	\$70,000 - \$175,000	\$122,500 - \$227,500	\$175,000 - \$280,000	





Single Family Home Construction Example

Potential incentives that a 2,700 square foot home may receive through High Performance Pathway:

	ENERGY STAR®	DOE Zero Energy Ready	PHI/PHIUS	
Incentive Range	\$2,700	\$4,725	\$6,750	
Greenhouse Gas Bonus	\$675 – \$4,050	\$675 – \$4,050	\$675 - \$4,050	
TOTAL	\$2,700 - \$6,750	\$4,725 - \$8,775	\$6,750 - \$10,800	





New Construction Program

Partner Network



You can support New Jersey's Clean Energy Goals with the New Construction Program

The New Construction Program (NCP) is designed to increase energy efficiency and environmental performance

The program's main goal is to transform new buildings into "net zero energy"

Become part of the NCP Partner Network and drive the success of the program









A network of energy efficiency professionals working with builders and developers to deliver high-quality building services in support of the New Construction Program

Energy efficiency experts in the new construction space:

- Architects
- Engineers
- Contractors
- Energy Consultants



How to Apply









Gather Required Documents before starting application

- Submit Application and all required documents
- www.NJCleanEnergy.com/NCP

• Form W-9

- New Jersey Business Registration
- · Certificate of Insurance
- Organization Chart
- Three Project Examples

Receive Application Approval email

It can take 7-14 business days and may require additional information or revisions to the application

Complete Program Onboarding and additional training as needed

Only one representative is required to be in attendance for live webinars. Recorded webinars will be available to other staff on demand

Begin the Partner Network Journey

Become a leader in sustainable building and submit projects to the NCP



Benefits of the Partner Network

- Establish a reputation as a trusted energy advisor for clients in a competitive market
- Offer unique incentives for customers
- Limited use of NCP logo
- Get reimbursed for Coop marketing opportunities with exclusive access to the Partner Network logo and other materials
- High visibility on the NJCEP website and listed as a New Construction Partner
- Training and development opportunities in a changing industry







Cooperative Marketing (Co-op)

For NCP Partners





PROMOTING YOUR BUSINESS

Cooperative Marketing Opportunities for New Construction Program Partners





Coop Marketing for Approved Partners

- Cost-share reimbursement for approved advertisements:
 - √ 50% cost-share for qualified marketing
 - ✓ Maximum of \$50,000 per applicant, per fiscal year
- Enhance your business's visibility by utilizing the NCP name and approved Partner badge
- Flexibility to create your own marketing materials or use marketing materials provided by NJCEP

Ideas to Promote Yourself and Your Business

- Incorporate the badge in your email signature
- Feature the badge on your website
- Print the badge on your business cards
- Use the badge in print or digital ad placements in newsletters, direct mail pieces, or magazines
- Showcase the badge on lawn signs, event banners and door hangers
- Share social media posts on your LinkedIn, Facebook, X, or Instagram channels







Using the Approved Partner Badge

Two options for creative marketing materials:

- Create Your Own
- 2. NJCEP-provided



- All uses of the badge must be pre-approved
- Marketing material must primarily promote energy efficiency opportunities within:
 - NCP Pathways
 - High Performance proxies including ENERGY STAR®, DOE, LEED, PHI and PHIUS
- Review the <u>Cooperative Marketing Guidelines</u> on the <u>Partner Network webpage</u> for more details
- Contact Kerri Catalano at <u>coop@NJCleanEnergy.com</u> with questions



New Construction Program

Workforce Development Reimbursement



Workforce Development

Invest in yourself as an energy professional



ABOUT THIS

Offers reimbursement to those who complete **REIMBURSEMENT** courses leading to certifications that support the New Construction Program

WHO IS ELIGIBLE

Applicants must show proof of:

- 1. Residence in the State of New Jersey; OR
- 2. Principal place of work is in New Jersey; **OR**
- 3. A nexus to New Jersey and proof can be provided*

REIMBURSEMENT

Upon successful certification, up to \$2,000 will be reimbursed per person per course with a maximum reimbursement of \$4,000 per fiscal year from July 1 through June 30



^{*} See the <u>User Guide</u> and application for details



Application Steps

NEW CONSTRUCTION PROGRAM New Jersey's Clean Energy Program™ Constructing an energy efficient future

How to apply for reimbursement:

 Go to the application portal at <u>www.NJCleanEnergy.com/residential/NCP/Workforce-Development</u>

Follow the steps to create a user profile and application, upload documentation, and track your status through the portal

2. Receive pre-approval

Your application will be reviewed for eligibility. If pre-approved, you will receive a letter **prior** to taking the course to be eligible for reimbursement *

3. Take the training course

Take your pre-approved training/certification course and any applicable exam(s)

4. Submit proof of completion

Submit proof of payment and course completion to the application portal

5. Receive final approval and reimbursement

After documentation review, your reimbursement will be issued



^{*} To be eligible for reimbursement, the applicant must gain approval from the New Construction Program before taking the training course and certificate exam; see the User Guide for details

Training Courses & Certifications





AEE's Certified Building Commissioning Professional (CBCP)

AEE's Energy Efficiency Practitioner (EEP)



LEED Green Associate

LEED AP (BD+C and ID+C only)



ASHRAE Building Energy Modeling Professional (BEMP)



PHI Certified Passive House Designer

PHI Certified Passive House Tradesperson



RESNET HERS Rating Field Inspector (RFI)

RESNET HERS Rater

RESNET HERS Modeler



IGSHPA Accredited Installer

IGSHIPA Certified GeoExchange Designer



ENERGY STAR® New Homes or MFNC Rater Certification



PHIUS Certified Consultant (CPHC)

PHIUS Certified Rater

PHIUS Certified Verifier

PHIUS Certified Builder (CPHB)



WELL Accredited Professionals (WELL AP)



If you have any questions, email: <u>Workforce@NJCleanenergy.com</u>

* The list of available courses and certifications above is subject to change. Visit <u>www.NJCleanEnergy.com</u> for the latest information

Tax Clearance Certificate

Required for all NJCEP applications







The customer applies for a TCC directly after the NJCEP project approval to verify that all tax obligations in New Jersey have been fulfilled to date

- Submitted to NJCEP with verification of installation completion
- Expires after 180 days
- If TCC expires, an updated TCC can be printed from the portal

COST

APPLICATION

Free

Issued by New Jersey's Department of Taxation, apply through their <u>Premier</u> <u>Business Services</u>





Tax Clearance Certificate

What is needed for a TCC?

Several field questions will need to be answered.

Field Questions	Field Answers
Name of Issuer Agency	New Jersey Board of Public Utilities
Name of Assistance Program	New Jersey's Clean Energy Program
Agency Contact Person	Commercial and Industrial Program Manager
Agency Contact Address	317 George Street, Suite 520 New Brunswick, NJ 08901
Agency Contact Phone	866-657-6278
Application Number	As assigned by the program
Customer Name	Same as on NJCEP application
Customer Tax ID#	Same as on NJCEP application



Other Available State and Federal Programs

Stackable savings available with NJCEP programs







Incentives are available through the Inflation Reduction Act (IRA) and can be stacked with a variety of energy efficiency and clean energy initiatives

Some of the federal incentive opportunities can be found on the NJBPU website

Residential Incentives

- √ Home Energy Performance-Based, Whole-House Rebates (HOMES)
- √ High-Efficiency Electric Home Rebate (HEEHR)
- ✓ Energy Efficient Home Improvement Credit
- ✓ Residential Clean Energy Credit
- ✓ New Energy Efficient Homes Credit

C&I Incentives

- √ 179D Commercial Buildings Energy-Efficiency Tax Deduction
- ✓ Green & Resilient Retrofit Program Grants and Loans
- ✓ Green & Resilient Retrofit Program Benchmarking
- ✓ Small Business Improvement Grant Program
 (NJEDA)
- ✓ <u>USDA Rural Development REAP Loan &</u> Grant Program

Clean Vehicle Incentives

- ✓ Clean Vehicle Credit
- ✓ Credit for Previously-Owned Clean Vehicles
- ✓ Credit for Qualified Commercial Clean Vehicles



Distributed Energy Resources



Suite of Clean Energy Programs

Energy Efficiency - Existing Buildings

- FREE Local Government Energy Audits (LGEA)
- Energy Savings Improvement Program
- Large Energy Users Program (LEUP)
- Higher-Education Decarbonization Pilot
- Comfort Partners:
 FREE Income
 Eligible Residential
 Upgrades

Energy Efficiency - New Construction

 New Construction Program (Residential, Multifamily, Commercial & Industrial)

WE ARE HERE

Distributed Energy Resources

- Combined Heat & Power Feasibility Study
- Combined Heat & Power; Fuel Cells

Electric Vehicles

- Light-Duty Residential EVs
- At-Home Charging
- Multi Unit Dwelling Chargers
- Municipal Fleets

Renewable Energy

- Successor Solar Incentive Program (SuSI) & ADI
- Community Solar
- Offshore Wind

Specialized Programs

- Community Energy Plan Grants (CEP)
- State Facility Initiatives
- Microgrid
 Development
- R&D Energy Tech Hub







For existing and new construction commercial, industrial, and large multifamily properties with a commercial account. Best suited for facilities that have year-round coincident power and thermal loads

- Projects **MUST** run 5,000 full load equivalent hours per year (3,500 for critical facilities)
- Systems can also be designed to operate as backup power in emergencies

ABOUT THIS PROGRAM

Combined Heat & Power (CHP) systems allow for efficient on-site power generation with heat recovery, resulting in:

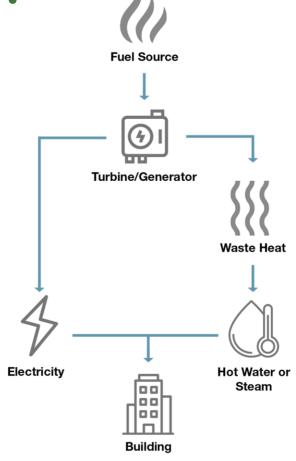
- Reduced demand on the power grid
- Lower energy bills
- Less greenhouse gas emissions





What is Combined Heat & Power and Fuel Cells?

- Combined Heat & Power (CHP) is the production of electricity and useful thermal energy from a single fuel source
- Fuel Cells (FC) produce electricity through an electrochemical reaction from a fuel source





Combined Heat & Power and Fuel Cells

Incentives

Eligible Technology

CHP powered by non-renewable or renewable fuel source, or a combination

Fuel Cell with heat recovery

Fuel Cell without heat recovery

Waste heat to power



Bonus Incentives:

- 25% bonus for critical facilities with black-start/islanding capabilities
- Up to 30% incentive bonus for CHP using biofuel





Combined Heat & Power Feasibility Study Is a CHP system right for me?

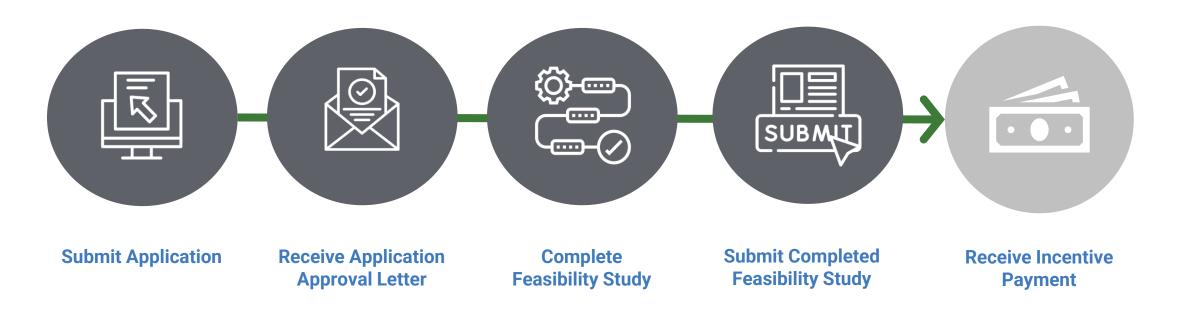
The CHP Feasibility Study will evaluate if a CHP system suits your property

- ✓ Incentive to offset the cost to evaluate if this solution is right for you
- ✓ Incentive up to 50% of the feasibility cost, capped at \$50,000



Combined Heat & Power and Fuel Cells

What are the next steps to participate in the feasibility study?





Electric Vehicle Programs



Suite of Clean Energy Programs

Energy Efficiency - Existing Buildings

- FREE Local Government Energy Audits (LGEA)
- Energy Savings Improvement Program
- Large Energy Users Program (LEUP)
- Higher-Education Decarbonization Pilot
- Comfort Partners:
 FREE Income
 Eligible Residential
 Upgrades

Energy Efficiency - New Construction

 New Construction Program (Residential, Multifamily, Commercial & Industrial)

Distributed Energy Resources

- Power Feasibility Study
- Combined Heat & Power; Fuel Cells

WE ARE HERE

Electric Vehicles

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In New Jersey's Energy Master Plan, the strategy and goal is to "reduce consumption and emissions from the transportation section"

Goals:

- ✓ 330,000 light-duty electric vehicles by 2025
- ✓ Creating a charging infrastructure
- ✓ Looking at the state of the light-duty fleet
- ✓ Increase transportation options, encouraging new options
- ✓ Decrease "vehicle miles traveled"
- ✓ Reduce port emissions

PDF of all EV vehicle and charger incentives in New Jersey through NJBPU, NJDEP, and utility companies



CONTACT US



Electric Vehicle Incentive Programs

- Office: 609.913.6295 Cell: 609.915.0903
- www.NJCleanEnergy.com/EV
- EV.programs@bpu.nj.gov





Electric Vehicles

NJ EV Law S-2252 was signed on January 17, 2020

Goals:

- By December 31, 2024
 - At least 10% of the new bus purchases made by the New Jersey Transit Corporation shall be zero emission buses, 50% by 2026, and 100% by 2032
- By December 31, 2025
 - o At least 330,000 EVs on New Jersey's roads
 - There must be 400 DC fast chargers and 1,000 level-two chargers available to the public
 - At least 15% of multi-unit dwellings must have a combination of level-one, level-two, or charger-ready ("make ready") parking spaces
 - 20% of all franchised overnight lodging establishments shall be equipped with EV chargers for routine electric vehicle charging by guests of the establishment
 - At least 25% of state-owned non-emergency light-duty vehicles shall be plugin electric vehicles
- By December 31, 2035
 - o At least 2 million EVs on New Jersey's roads
- By December 31, 2040
 - o At least 85% of all light-duty vehicles sold or leased in the State will be EVs

Light-Duty Residential EVs: Charge Up New Jersey Program

Status: Closed

Incentives

- Up to \$4,000 for MSRP under \$45,000
- Up to \$1,500 for MSRP between \$45,000-\$55,000
- \$250 for eligible home charger

Eligible

Available upon purchase of:

- Light-duty electric vehicles including battery electric and plug-in hybrid
- Home chargers (residential charger program)



Multi-Unit Dwelling: EV Charger Incentive

Status: Closed

Incentives

- \$4,000 for dual port, level-two EV charging station
- \$6,000 for level-two charging station in an:
 - Underserved community
 - 100% deed-restricted low- and moderate-income housing development

Eligible

- Available upon installation of eligible level-two charging equipment in apartments, condos, and other complexes with a minimum of 5 units and dedicated off-street parking
- Increase equitable access to EV charging for residents/guests of apartments, condos, and other complexes with a minimum of 5 units and dedicated off-street parking



Municipal Fleets: Regional Greenhouse Gas Initiative (RGGI) Medium and Heavy-Duty Electric Vehicle Charging Program

Status: Closed

Incentives

- DCFC (community)
 - Up to \$225,000 per 150 kW or greater dual-port, networked DCFC
- DCFC (private fleet)
 - o Up to \$175,000 per 150 kW or greater dual-port, networked DCFC

Eligible

Assist small and local businesses in gaining access to EV charging equipment

- Community Charging: Located or operating within an Overburdened Community
- Private Fleet: Private business participates in the New Jersey Zero-Emission Incentive Program



Municipal Fleets: Clean Fleet Electric Vehicle Incentive Program

Status: Closed

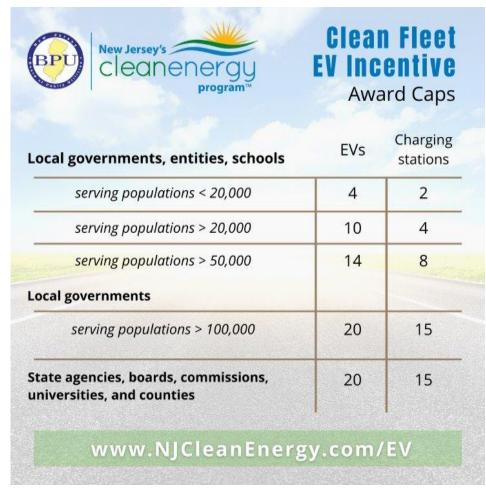
Incentives

- \$4,000 for a battery electric vehicle
- \$5,000 for a public level-2 charger
- \$4,000 for a fleet level-2 charger
- \$10,000 for class 2b-6 battery electric vehicle
- Overburdened municipalities are eligible for a 50% bonus award

Eligible

Local and state governments transitioning fleets to EVs





EV Tourism Program

Status: Closed

Incentives

Available for charger installation: *Up to the cost of the charger*

- Up to \$5,000 for a level-two charger
- Up to \$50,000 for a direct current (DC) fast charger

Eligible

Tourism attractions as well as overnight lodging establishments can apply for up to:

- 6 level-two chargers
- 2 DC fast chargers



Renewable Energy Programs

www.NJCleanEnergy.com/RENEWABLE



Suite of Clean Energy Programs

Energy Efficiency - Existing Buildings

- FREE Local Government Energy Audits (LGEA)
- Energy Savings Improvement Program
- Large Energy Users Program (LEUP)
- Higher-Education Decarbonization Pilot
- Comfort Partners: FREE Income Eligible Residential Upgrades

Energy Efficiency - New Construction

 New Construction Program (Residential, Multifamily, Commercial & Industrial)

Distributed Energy Resources

- Combined Heat & Power Feasibility Study
- Combined Heat & Power; Fuel Cells

Electric Vehicles

- Light-Duty Residential EVs
- At-Home Charging
- Multi Unit Dwelling Chargers
- Municipal Fleets

WE ARE HERE

Renewable Energy

- Successor Solar Incentive Program (SuSI) & ADI
- Community Solar
- Offshore Wind

Specialized Programs

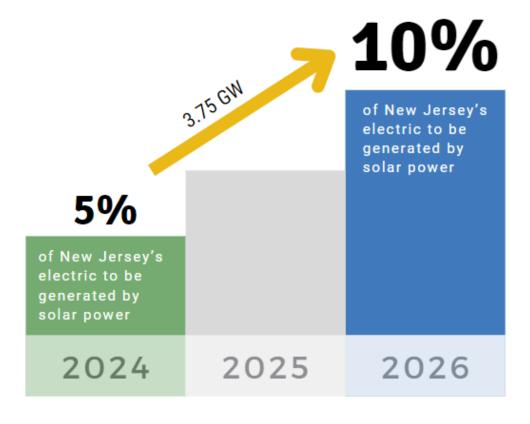
- Community Energy Plan Grants (CEP)
- State Facility Initiatives
- Microgrid
 Development
- R&D Energy Tech Hub



Successor Solar Incentive Program (SuSI)

What is the SuSI program?

- The SuSI program offers tailored solar renewable energy credits to earn money for electricity that solar panels generate
- The goal is to double New Jersey's installed solar capacity by 2026 by installing 3.75 GW of new solar
 - Includes 300 MW of net metered solar, 150 MW of community solar, and 300 MW of grid supply solar





Successor Solar Incentive Program (SuSI)

What are the two sub-programs of the SuSI program?

Successor Solar Incentive Program (SuSI) Competitive Solar Incentive Program (CSI)

Provides competitively set credit values for grid supply projects and net metered non-residential projects greater than 5 MW

Status: Closed

Administratively
Determined Incentive
Program
(ADI)

Provides administratively set credit values for net-metered residential projects of all sizes, net-metered non-residential projects of 5 MW (dc) or less, and community solar projects of 5MW (dc) or less

Includes Community Solar Program

Status: Open



Community Solar

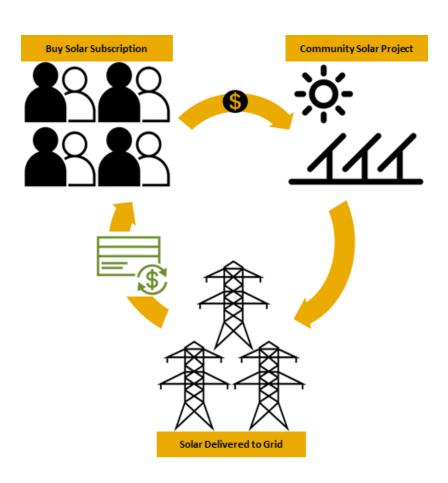
What is community solar?

- A larger, remotely located solar array or facility that is virtually divided among multiple participants ("subscribers") by means of a credit on their utility bill
- Provides access to solar energy to renters as well as households, institutions or businesses whose roofs aren't appropriate for solar installation

How can you participate?

- Ownership: buying a share of a portion of the community solar project or panels
- Subscription: buying a portion or share of the electric output produced by the community solar project





Community Solar

How can you get started in this program?

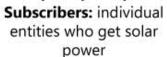
Potential role of government or business entities:

- Become an "anchor" subscriber for a community solar project
- Provide land/rooftop for siting of a solar array
- Conduct a competitive procurement on behalf of the community
- Serve as a project partner and help provide advertising

Potential role of affordable housing:

- Become an "anchor" subscriber for a community solar project
- Put Low and Moderate Income (LMI) properties into a community solar project







Developer: primary group organizing the solar project



Host Site: location where solar project is installed



Utility: electricity provider where solar project is installed



Installer: expert that installs the solar project



Offshore Wind

What is the offshore wind program?

Goals:

- 11,000 MW of offshore wind by 2040 to combat the threat of global climate change
- Establish a supply chain to support New Jersey and the east coast
- Minimize environmental and fishing impacts
- Develop a coordinated transmission solution
- Minimizing cost and risk to ratepayers







Specialized Programs



Suite of Clean Energy Programs

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Specialized Programs

- Community Energy Plan Grants (CEP)
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Community Energy Plan Grants (CEP)









Provides communities with the opportunity to localize the EMP's goals

The reconfigured CEP Grant
Program supports municipal
action on climate change, with
specific focus on energy resilience,
renewable energy, and efficiency

Redesigned to better prioritize low- and moderate-income and overburdened communities

Removes barriers to participation by simplifying and streamlining the application process

All New Jersey municipalities are eligible for \$10,000, with overburdened municipalities eligible for larger grants and enhanced support



State Facility Initiatives: Overburdened Municipalities

Incentives

- Larger grant award of \$25,000 for community energy planning
- Technical assistance to
 - Develop and submit applications for the CEP Grant
 - Create the plan once grant is awarded

Eligible

- 50%+ of population living in an overburdened community (OBC) as defined by NJDEP pursuant to New Jersey's Environmental Justice Law, N.J.S.A. 13:1D-157
- Must meet one or both criteria:
 - Over 35% of the population is living under 200% of the poverty level according to US Census 2021 ACS data
 - Categorized as "distressed" according to NJDCA's based on their score using the New Jersey Department of Community Affairs Municipal Revitalization Index (MRI) score (50 or above)



NJBPU Town Center Distributed Energy Resources (TCDER) Microgrids Program

About:

- Critical facilities within a municipal boundary can serve as a shelter or provide essential services during and after emergency events
- They are connected to a single or series of DER technologies that can operate while isolated from the main grid

Board funded:

- 13 feasibility studies in phase I of the program
- o 7 projects for detailed design to at least 30% in phase II of the program
- Project remain under engineering design
- Board, NJIT, and Rutgers received a Department of Energy Grant of \$300,000 for a microgrid financing study
 - Report released July 2021



Energy Storage

The Clean Energy Act pf 2018 directed the NJBPU to implement an Energy Storage Program

- The BPU:
 - ✓ Issued a straw proposal in 2022
 - ✓ Issued an RFI in 2023
 - ✓ Issued a second straw proposal in 2024
 - ✓ Plans to launch the program in 2025



Ways to Save in Energy Costs



Energy Savings Tips

- ✓ Regulate heating and cooling systems
- ✓ Set temperature 8 degrees lower when asleep or away in the winter
- ✓ Set temperature 7 degrees higher when away, and 4 degrees higher when asleep in the summer
- ✓ Turn on the ceiling fan to improve airflow and create gentle breezes
- ✓ Turn fans and lights off when you're not in the room





Energy Savings Tips

- Let the heat in or out by:
 - ✓ Blocking out heat in the summer by keeping blinds or curtains closed during the day (especially on southfacing windows)
 - ✓ Opening blinds or curtains on winter days to let the heat in
- Use less hot water by:
 - ✓ Lowering the water heater temperature from 150° to 120°
 - ✓ Washing your laundry in cold water
 - ✓ Installing low-flow showerheads and faucets
 - √ Fixing water leaks







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