



New Jersey's Clean Energy Program™

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

March 20, 2020

Agenda

- Introduction to BPU and New Jersey's Clean Energy Program
- Program Highlights from FY19
- NJCEP program portfolio
- ESIP Financing

NJCEP Background

ADMINISTERED BY

New Jersey Board of Public Utilities' Division of Clean Energy

FUNDING

Societal Benefits Charge (SBC) on utility bill

PROGRAM GOALS

- Education
- Change behavior
- Provide opportunity for ALL NJ residents to reduce energy and lower operating cost
- Protect the environment and lower emissions
- Meet Governor's goal of 100% clean energy by 2050



Programs to Meet Goals



CUSTOMER EDUCATION



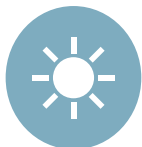
ENERGY CONSERVATION



ENERGY EFFICIENCY



DISTRIBUTED ENERGY RESOURCES



RENEWABLE ENERGY

PROGRAM HIGHLIGHTS

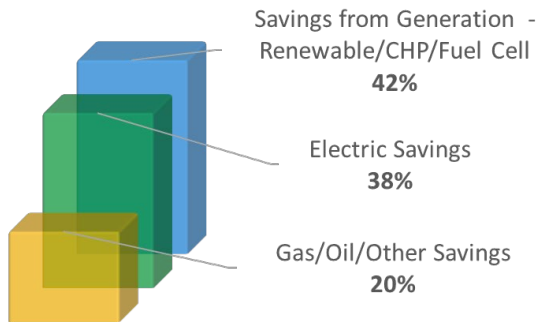


Program Performance...

FY19 data



131,000+ applications processed in FY19



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



\$136,000,000+ incentives paid in FY19

...Brings Real-World Results

FY19 data

Clean Energy Programs eliminated enough CO₂ to equate to:



96,000+ cars removed



7,400,000+ trees planted



452,616 metric tons greenhouse gases eliminated

NJCEP Portfolio of Programs

RENEWABLE ENERGY

- Offshore Wind
- SREC Registration
- Community Solar



SPECIALIZED ENERGY EFFICIENCY

- Community Energy Grants
- State Facility Initiatives
- R&D Energy Tech Hub*
- Workforce Development*



COMMERCIAL & INDUSTRIAL

- Energy Audits
- Energy Efficiency Incentives
- High Performance Building Competition
- Trade Allies



DISTRIBUTED ENERGY RESOURCES

- Combined Heat & Power – Fuel Cells
- Microgrid Development
- Battery Storage*
- Electric Vehicles



RESIDENTIAL

- New Construction
- Existing Homes
- Energy Efficient Products
- Trade Allies



** coming soon!*

RENEWABLE ENERGY



Solar Registration

NJCleanEnergy.com/SREC

Registration

- Facilitates registration of solar projects (no rebates)
- Initial registration and final as-built can be submitted via online portal

Inspection

- Projects are selected randomly for inspection

Installation

- Installation and pipeline reports posted on the NJCEP website mid-month

Note: This process applies for both SREC and TREC programs

Solar Energy – SREC Program

NJCleanEnergy.com/SREC

- The SREC is a market based incentive with value determined by supply and demand
- The market rules are established by the Board's Renewable Portfolio Standards
- By law, the market will close to new registrants when eligible installations generate 5.1% of the state's electricity. (the "5.1% Milestone")
- Staff are leading a stakeholder proceeding to recommend a replacement incentive program (the "successor program")

Solar Energy – Transition Incentive (TI) Program

- The TI program is a bridge between the Legacy SREC Program and a to-be-determined successor incentive program
- Projects that have not reached commercial operation when the Board closes the SREC Program at the 5.1% Milestone will be eligible for the TI program
- The TI program consists of fixed-price, 15-year Transition Renewable Energy Certificates (TRECs)

Solar Energy – TREC Program

- TRECs are factored by project type:

Project Type	Factor
Subsection (t): landfill, brownfield, areas of historic fill	1.0
Grid supply rooftop	1.0
Net metered non-residential rooftop and carport	1.0
Community solar	0.85
Grid supply ground mount	0.6
Net metered residential ground mount	0.6
Net metered residential rooftop and carport	0.6
Net metered non-residential ground mount	0.6

COMMUNITY SOLAR



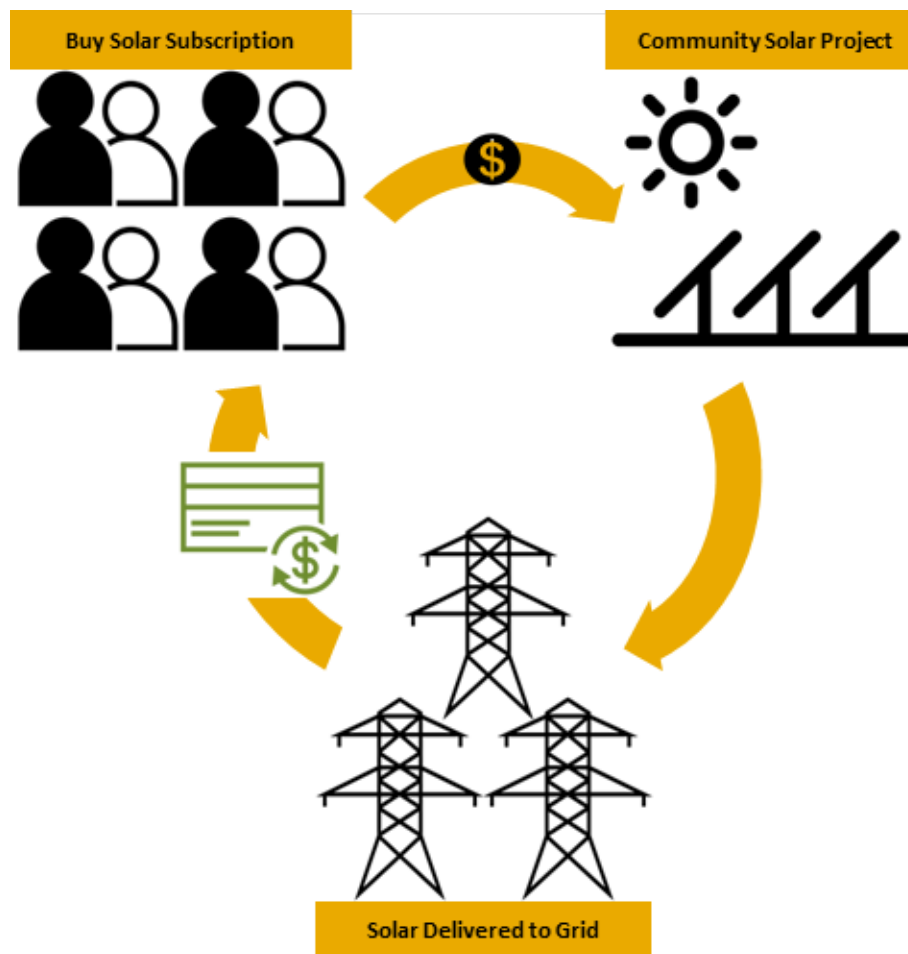
Community Solar: What is it?

NJCleanEnergy.com/COMMUNITYSOLAR

- 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

Community Solar

NJCleanEnergy.com/COMMUNITYSOLAR



Community Solar: Find your fit

NJCleanEnergy.com/COMMUNITYSOLAR



Subscribers: individual entities who get solar power



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

Community Solar: Subscribers

NJCleanEnergy.com/COMMUNITYSOLAR

Participation can be in the form of:

- **Ownership:** buying a share or 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 ENERGY PLANS



Community Energy Plan Grant

NJCleanEnergy.com/CEP

Localizing the Energy Master Plan Goals



ENERGY USE



**TRANSPORTATION
PLANNING**



LAND USE



**WATER
MANAGEMENT**



**WASTE
MANAGEMENT**

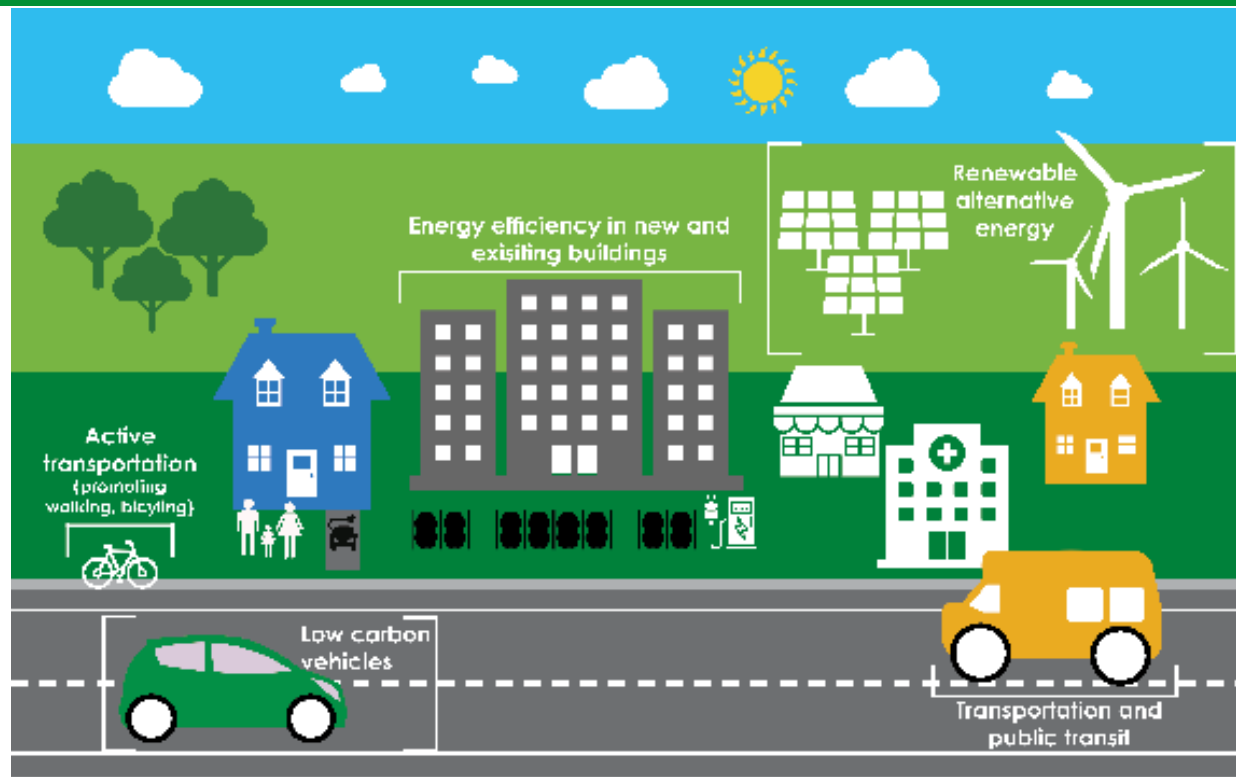
Community Energy Plan Grant

NJCleanEnergy.com/CEP

- Planning grant
- Look at energy use as a whole
 - Residential
 - Business
 - Government
- Identify areas for improvement
- Create a plan to reduce energy use, increase renewables and meet the EMP goals
- Application is available at NJCleanEnergy.com
- Grants are based on population size

Community Energy Plan Grant

NJCleanEnergy.com/CEP



Community Energy Plans

A Community Energy Plan is a way for a community to work toward 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.



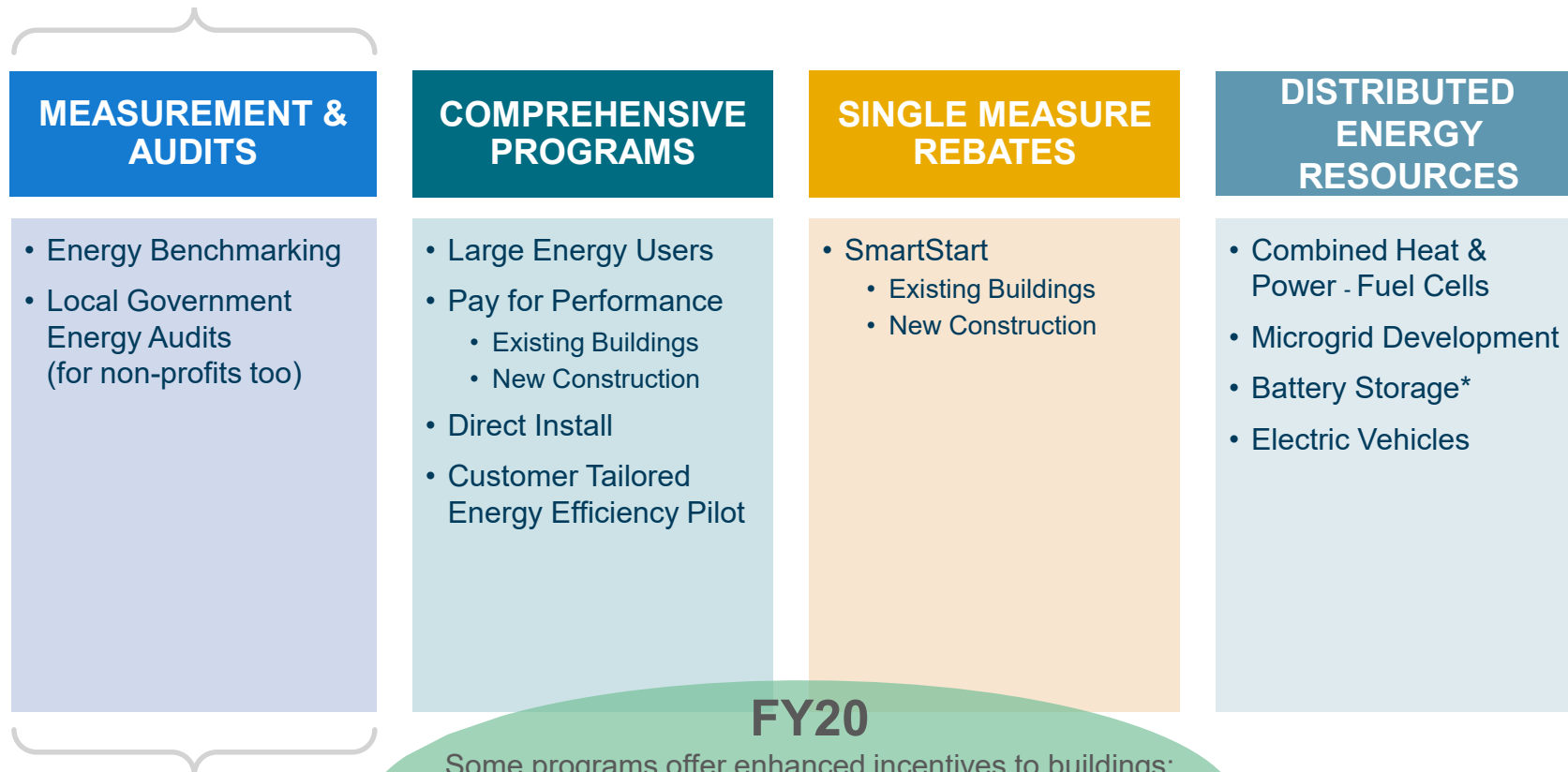
<https://www.energy.gov/eere/slsc/guide-community-energy-strategic-planning>

C&I PROGRAMS



C&I Portfolio of Programs

Eligible Sectors: Commercial, Industrial, Government, Schools, Non-Profit, Institutional and Multifamily



FY20

Some programs offer enhanced incentives to buildings:

- in a **UEZ** or **OZ**
- owned or operated by a **local government**
- owned or operated by a **K-12 public school**

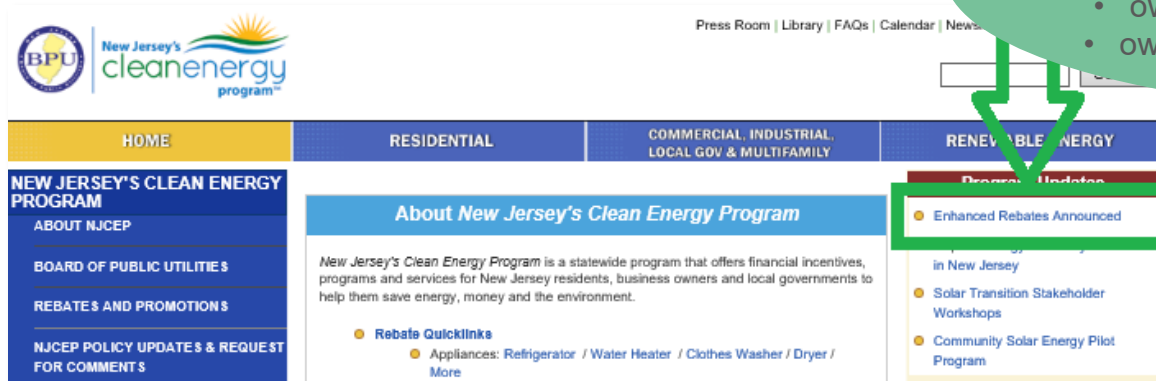
** coming soon!*

Definitions: UEZs and OZs

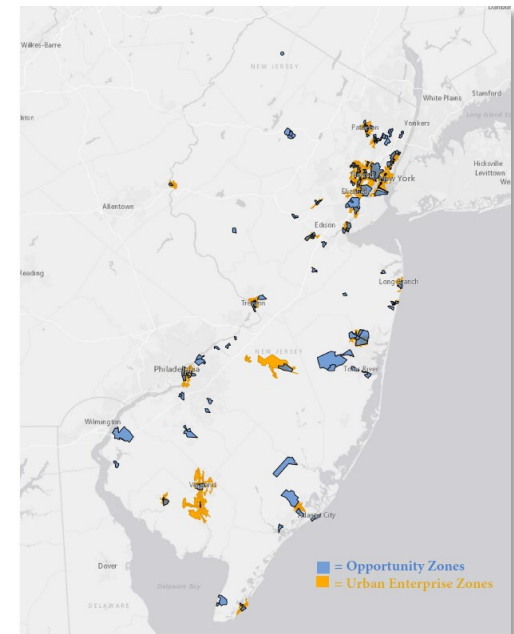
FY20

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- in a **UEZ** or **OZ**
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Eligibility Basis	Criteria
➤ Located in an Urban Enterprise Zone (UEZ)	The building where equipment is or will be installed must be located within the bounds of an Urban Enterprise Zone (UEZ). Please follow the steps below to confirm your facility is within the qualifying zone. The building location must be checked against the NJ Community Asset Map. 1. Enter the address of your building in the field at the top of the map. 2. Under the Layers menu on the left side of the screen, scroll down to Urban Enterprise Zones and <i>check</i> to enable the layer. 3. Print or save a screenshot of the page to include with your submission. For the avoidance of doubt, companies do not need to become a Certified UEZ Business to be eligible for enhanced incentives from NJCEP.
➤ Located in an Opportunity Zone (OZ)	The building where equipment is or will be installed must be located within the bounds of an Opportunity Zone (OZ). Please follow the steps below to confirm your facility is within the qualifying zone. The building location must be checked against the NJ Community Asset Map.



[Click here for a link to NJ Community Asset Maps](#)

Benchmarking

NJCleanEnergy.com/BENCHMARKING

MEASUREMENT &
AUDITS

WHO Commercial, Industrial, Agricultural, Government, 501(c)(3) Non-Profit, and Institutional Entities

COST Free

WHY

- Compare your building to other similar buildings nationally
- Suggestions for improving operations and maintenance
- Personalized incentive program eligibility and account manager follow-up support
- ENERGY STAR® Portfolio Manager account setup and score

Great opportunity to be a leader in benchmarking energy and water use, prior to the 2024 deadline.



Benchmarking

NJCleanEnergy.com/BENCHMARKING

MEASUREMENT & AUDITS

Energy Consumption & Cost

Analysis Period: July 2018 – June 2019

Energy Benchmark	Example Building	Average Building
EPA Portfolio Manager Score	48	50
Site Energy Intensity ¹ (kBtu/sf)	85.9	82.2
Source Energy Intensity ² (kBtu/sf)	88.3	90.8
Energy Cost	\$13,841	\$13,082
Total GHG Emissions (Metric Tons CO ₂ e)	43	40

U.S. EPA Portfolio Manager Account:

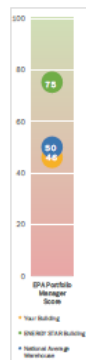
Your building was benchmarked using the U.S. Environmental Protection Agency's (EPA's) Portfolio Manager tool. The impact of factors outside of your control, such as location, occupancy and operating hours, are removed. Some building types will be provided with a 1-100 ranking of a building's energy performance relative to the national building market.

46

Your building received an EPA benchmark score of 46. Think the U.S. EPA's building type guidelines, this score is slightly below average when compared to other warehouse/distribution buildings in the United States.

Understanding and tracking energy consumption is one of the first steps in an energy reduction plan. Portfolio Manager is an energy management tool that allows you to track and assess energy and water consumption across your entire portfolio of buildings in a secure online environment. We encourage you to use Portfolio Manager to track your energy and water consumption month to month. An account has been set up for Example NJ Commercial Building. The login information is as follows:

Website: <https://www.eportmanager.gov/energy/>
 User Name: ExampleCommercialBuilding
 Password: SavingEnergy2019

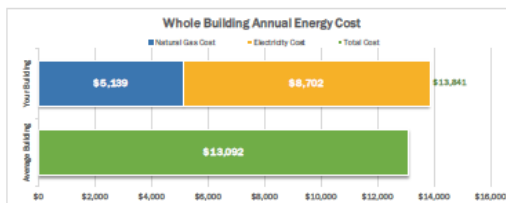


¹ Site Energy Intensity is a measure of a building's annual energy utilization per square foot. Site energy intensity score is a good measure of a building's energy use, and is utilized regularly for comparison of energy performance for similar building types.

² Source Energy Intensity is a measure of the building's energy usage in addition to the transmission, delivery and production losses.

Example NJ Commercial Building Page 3 of 7 New Jersey's Clean Energy Program www.njcleanenergy.com 1-866-NJCLEAN

Energy Consumption & Cost



Energy Cost:

The annual energy cost for Example NJ Commercial Building is \$13,841 (\$5,139 natural gas + \$8,702 electricity). Example NJ Commercial Building spends \$13.84 per square foot to power the building. The estimated average annual energy cost for a building of similar square feet, type, and usage is \$13,082. Therefore, your building's energy costs are slightly higher than average when compared to other warehouse/distribution buildings nationwide.

Electricity costs make up 63% of your building's total annual energy cost. Natural gas costs make up 37% of your building's total annual energy cost.

Carbon Emissions:

The energy consumption for Example NJ Commercial Building is equivalent to carbon emissions of 43 metric tons of CO₂, compared to the national average of 40 metric tons of CO₂ for a similar building type. Your building's GHG emissions are slightly higher than average.

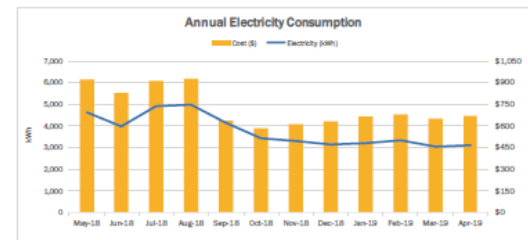
If you improved your building's energy usage to meet ENERGY STAR level the energy savings would be equivalent reducing carbon emissions by 18 metric tons of CO₂. This reduction would be equivalent to:



Example NJ Commercial Building Page 3 of 7

New Jersey's Clean Energy Program www.njcleanenergy.com 1-866-NJCLEAN

Energy Consumption & Cost



Electricity Usage:

The annual electricity consumption for Example NJ Commercial Building is 4.5 kWh per square foot. This amount of electricity is reasonable compared to similar building types in New Jersey.

Electricity Cost:

The property's electricity rate is slightly higher than the state average of \$0.17/kWh. It may be beneficial to contact your electric provider or a third-party provider to discuss rate options.

Electricity Use Description	Example Building	Area of Concern Scale
Annual Usage (kWh)	45,114	Low
Annual Usage per Sq. Ft. (kWh/sf)	4.5	
Annual Cost (\$)	\$8,702	Medium
Annual Cost per Sq. Ft. (\$/sf)	\$0.87	
Average Annual Cost (\$/kWh)	\$0.19	

Summary & Recommendations:

The amount of electricity shown above is slightly lower than average. However, the cost of that electricity is higher than average. As mentioned, it may be beneficial to contact your electric provider to discuss rate options. If not already in use, ENERGY STAR® products, LED and other lighting technologies could reduce the power demand needed and lower monthly electricity bills.

Example NJ Commercial Building Page 4 of 7

New Jersey's Clean Energy Program www.njcleanenergy.com 1-866-NJCLEAN

Local Government Energy Audit

NJCleanEnergy.com/LGEA

MEASUREMENT &
AUDITS

WHO

Local Government, New Jersey Colleges and Universities, and 501(c)(3) Non-Profit buildings with an average yearly demand >200kW*

INCLUDES
BENCHMARKING

COST

Free

WHY

- Inventory of all energy-consuming equipment and line by line program eligibility, savings and costs
- Comprehensive utility bill analysis
- Facility benchmarking
- Feasibility for solar and combined heat & power

INCENTIVE CAP

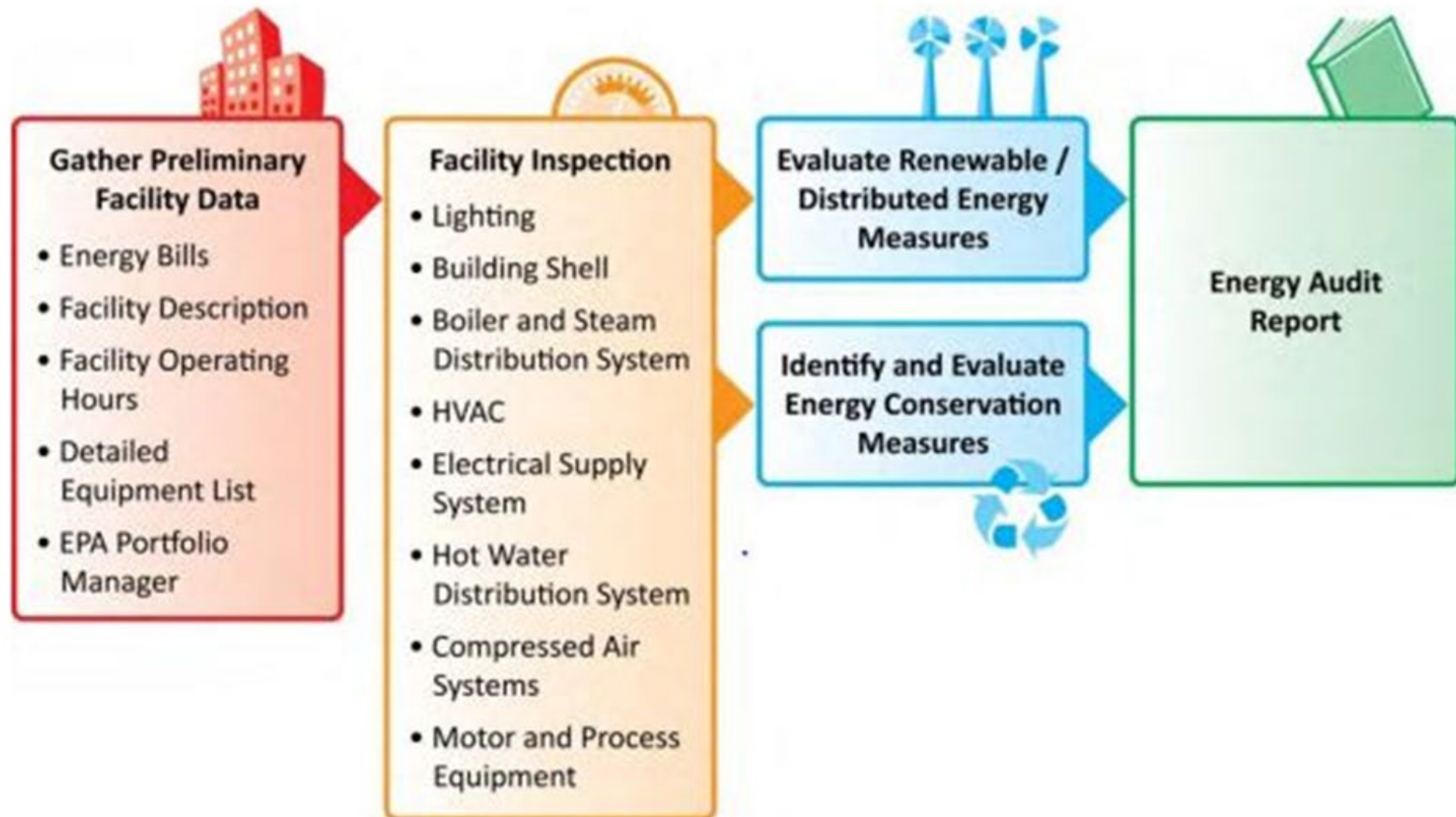
- \$100,000 per entity (covers most small to large entities)
- \$300,000 per 501(c)(3) hospital
- \$300,000 per entity interested in ESIP

* Inquire about the waivers available to buildings $\leq 200\text{kW}$ average

Local Government Energy Audit

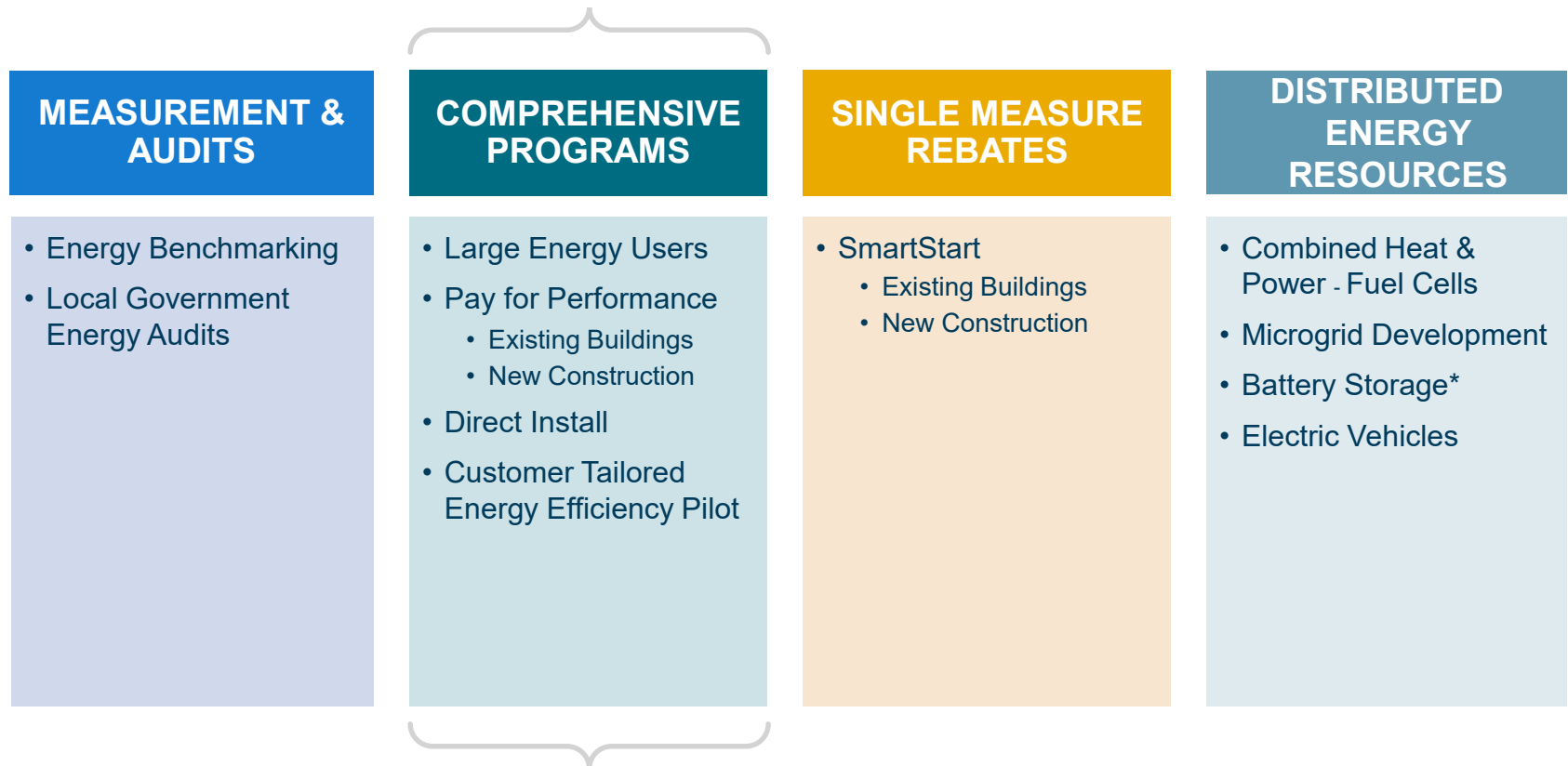
NJCleanEnergy.com/LGEA

MEASUREMENT &
AUDITS



C&I Portfolio of Programs

Eligible Sectors: Commercial, Industrial, Government, Schools, Non-Profit, Institutional and Multifamily



** coming soon!*

Large Energy Users

NJCleanEnergy.com/LEUP

COMPREHENSIVE
PROGRAMS

WHO

Large C&I entities who have paid a minimum of \$200,000 NJCEP funds (via the SBC) in the previous 12 months of utility bills

SIZE TO QUALIFY

The average peak demand of all facilities submitted $\geq 400\text{kW}$ and/or 4,000 DTh

ABOUT

- Encourages large C&I utility customers to self-invest in energy efficiency, combined heat & power, and fuel cell projects
- Must have ability to “bank” funds for up to two fiscal years

INCENTIVE CAP

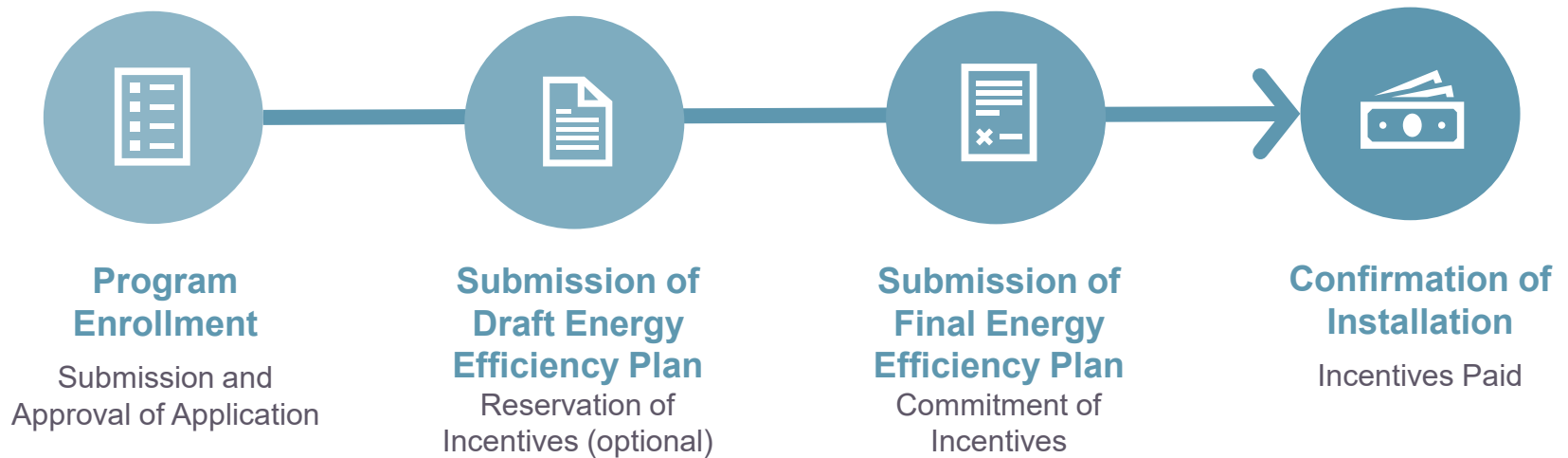
Maximum incentive per entity is the lesser of:

- \$4 million,
- 75% of total project cost, or
- 90% of NJCEP contribution or annual energy saving caps (\$0.33/kWh and \$3.75/therm)

Large Energy Users

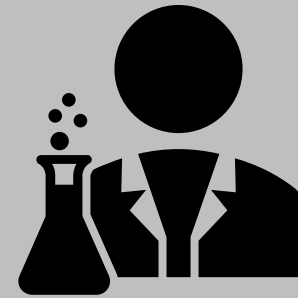
NJCleanEnergy.com/LEUP

COMPREHENSIVE
PROGRAMS



PHARMACEUTICALS

- HVAC Controls Upgrade
- **Total Project Cost: \$476,223**
- **Incentive: \$332,766**
- **Annual Savings: \$134,665**
- **Payback Period: 1.07 Years**



This case study was from a previous fiscal year and may not represent current incentive levels or costs.

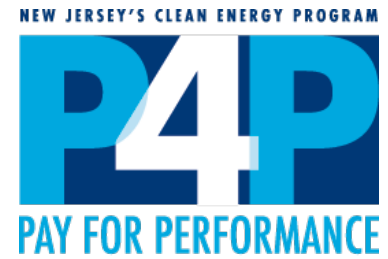
Pay for Performance

NJCleanEnergy.com/P4P

COMPREHENSIVE
PROGRAMS

WHO

Large C&I existing buildings or new construction seeking two or more energy efficiency measures with a minimum 15% savings



SIZE TO QUALIFY

Annual peak demand 200+ kW in the previous year for existing buildings or over 50,000 square feet of planned new construction

ABOUT

A pre-approved Participating Partner will streamline the program and guide users through the program phases

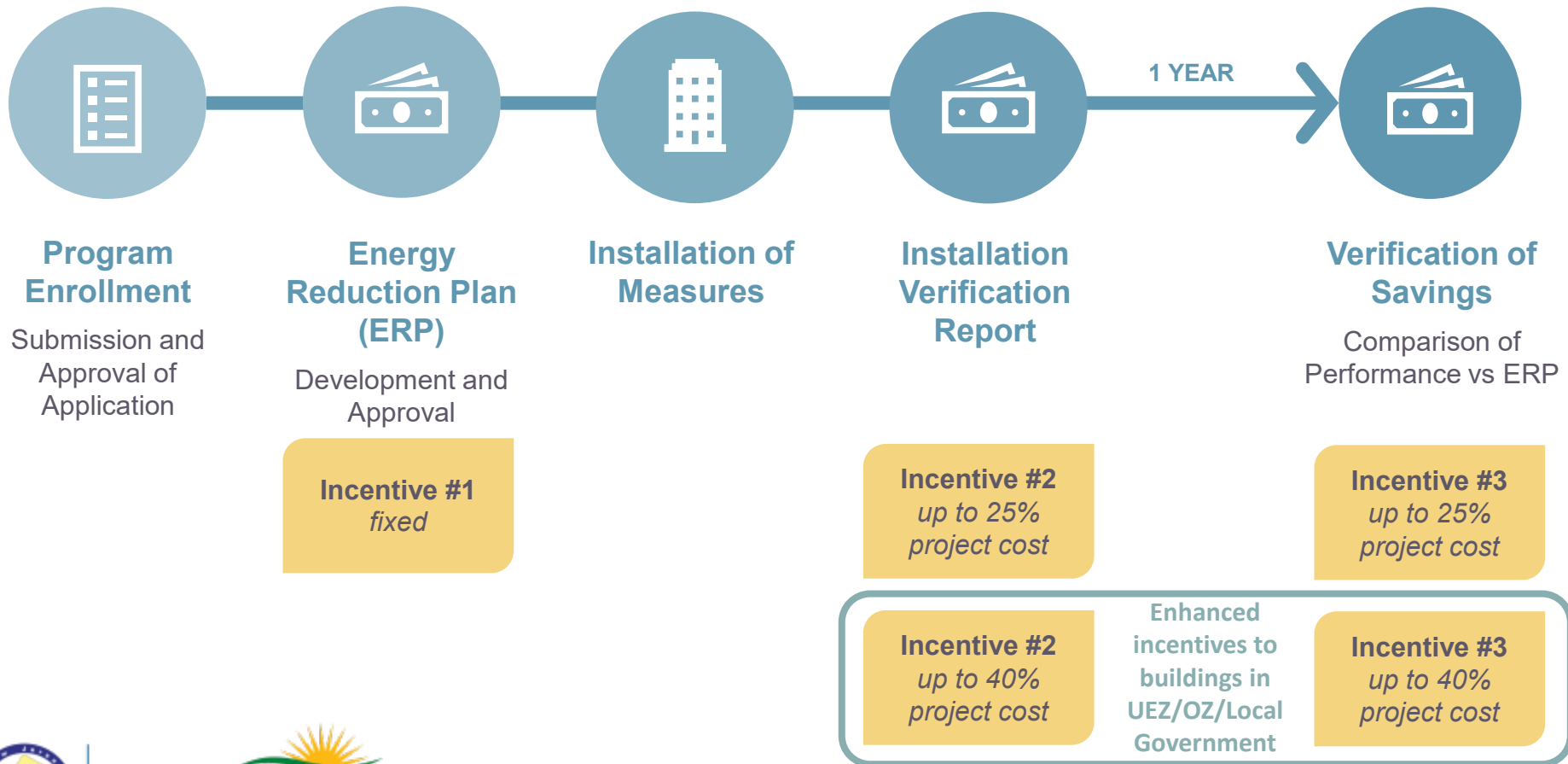
INCENTIVE CAP

- 50% of project cost (or 80% for UEZ/OZ/ Local Government/K-12 Public Schools) up to \$2M per project / \$4M per entity annually
- Incentive payments #2 and #3 are doubled for UEZ/OZ/ Local Government/K-12 Public Schools

Pay for Performance

NJCleanEnergy.com/P4P

COMPREHENSIVE
PROGRAMS



CRESTBURY APARTMENTS

- Multifamily
- Pay for Performance - EB
 - Lighting Upgrades
 - Boiler Replacement
 - Double Pane Windows
 - HVAC Controls
 - Air Seals
 - Attic Insulation
- **Total Project Cost: \$1,474,150.00**
- **Paid Incentive: \$315,141.00**
- **Annual Savings: \$215,610.00**
- **Project Payback: 5.375 years**



Photo courtesy of Google Maps

Direct Install

NJCleanEnergy.com/DI

COMPREHENSIVE
PROGRAMS

WHO

Small to medium sized C&I existing facilities seeking to replace inefficient equipment



SIZE TO QUALIFY

Average annual peak demand <200 kW in the previous 12 months

ABOUT

- A pre-approved regional Participating Contractor will do a walk-through evaluation and guide users through the program phases
- Turn-key process with fast project turnaround time

INCENTIVE CAP

- \$125,000 incentive funding per project/building (\$250K UEZ/OZ/ MUNI/K-12 Public Schools), or
- \$250,000 per entity (\$500K ESIP; \$4M UEZ/OZ/ Local Government/K-12 Public Schools

Direct Install

NJCleanEnergy.com/DI

COMPREHENSIVE
PROGRAMS

Facilities in Urban Enterprise Zones (UEZ), Opportunity Zones (OZ), local government, K-12 Public Schools:

INCENTIVE FUNDING

Up to **80%** of installed cost is paid
directly to the contractor

CUSTOMER

20% of
installed cost

All other eligible facilities:

INCENTIVE FUNDING

Up to **70%** of installed cost is paid
directly to the contractor

CUSTOMER

30% of
installed cost

PLAINSBORO LIBRARY

- Library
- LED Lighting upgrades including occupancy sensors
- Gas Fired Boilers
- Low Flow Aerators
- Premium motors
- **Total Project Cost: \$119,381**
- **Incentive: \$57,335**
- **Annual Savings: \$11,683**
- **Payback Period: 5.31 Years**



Courtesy of Friends of the Plainsboro Pubic Library

Customer Tailored Energy Efficiency Pilot

COMPREHENSIVE
PROGRAMS

NJCleanEnergy.com/CTEEP

WHO

C&I customers seeking a streamlined/single application for participants submitting for multiple different technology types

SIZE TO QUALIFY

N/A

ABOUT

- On site assistance available
- One application form for multiple prescriptive or custom measures
- Utilizes SmartStart Incentives
- Additional technical incentive available to offset soft costs associated with developing and planning custom projects

INCENTIVE CAP

Maximum incentive per entity is the lesser of:

- \$250,000 entity cap,
- 50% of eligible project costs, or
- Buy-down to 1-year payback

Up to \$10,000 for technical assistance of custom project evaluation

SAME INCENTIVE
VALUES AS
SMARTSTART

Customer Tailored Energy Efficiency Pilot

COMPREHENSIVE
PROGRAMS

NJCleanEnergy.com/CTEEP

Payment schedule based on program variation:



Energy Efficiency
Plan Approval



Installation
Complete



Performance
Verification

Technical Assistance (Optional)	50%	50%	
CTEEP Prescriptive Measures		100%	
CTEEP Custom Measures		90%	10%

University in New Jersey

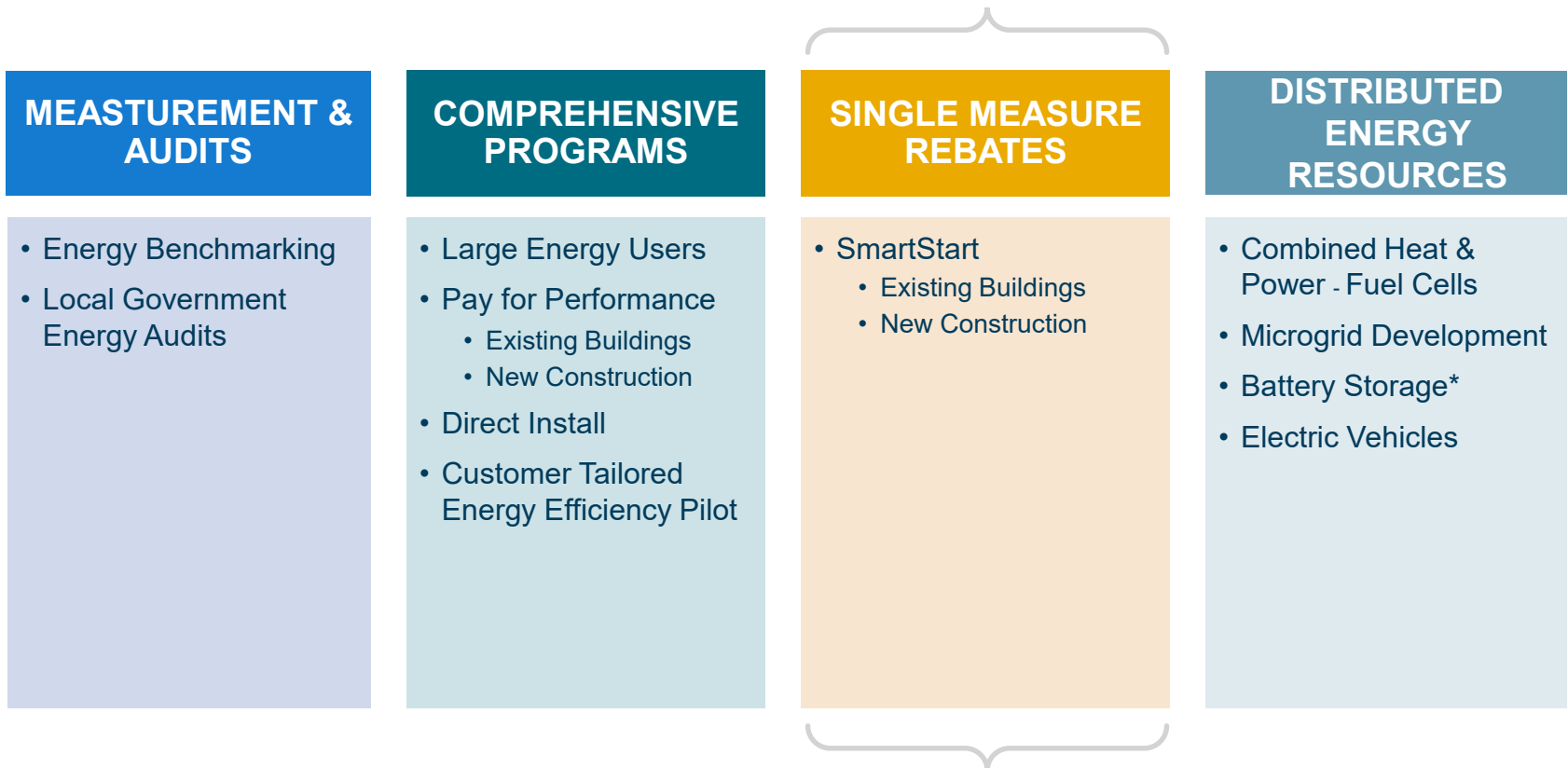
- University – Various Buildings
- CTEEP – Prescriptive
 - LED lighting
 - Lighting controls
- **Total Project Cost: \$669,894.85**
- **Committed Incentive: \$121,791**
- **Annual Savings: \$104,410.58**
- **Project Payback: 4.96 years**



This case study was from a previous fiscal year and may not represent current incentive levels or costs.

C&I Portfolio of Programs

Eligible Sectors: Commercial, Industrial, Government, Schools, Non-Profit, Institutional and Multifamily



** coming soon!*

SmartStart

NJCleanEnergy.com/SSB

SINGLE MEASURE
REBATES

WHO

All C&I: Commercial, Industrial, Agricultural, Government, Non-Profit and Institutional customers

SIZE TO QUALIFY

N/A

ABOUT

- Individual high efficiency equipment rebates for new construction, renovation, remodeling, equipment replacement
- Prescriptive and custom designed measures
- Pre-approval required for lighting $\geq$ \$100,000 and all custom measures

INCENTIVE CAP

- Prescriptive: \$500,000 for each electric or gas account
- Custom, lesser of the following:
 - \$0.16/kWh and/or \$1.60/therm saved annually;
 - 50% of incremental installed cost; and
 - Buy-down to 1 year payback based on incremental cost and savings



PRESCRIPTIVE INCENTIVES

- Lighting & Lighting Controls
- Packaged HVAC
- Boilers & Water Heaters
- Chillers
- VFDs
- Food Service
- Refrigeration

Existing buildings
prescriptive only:

**DOUBLE INCENTIVES
FOR OZ/UEZ/ LOCAL
GOVERNMENT/K-12
PUBLIC SCHOOLS**



CUSTOM INCENTIVES

- New or innovative technologies proven to be cost-effective and not listed as prescriptive
- Projects must have a minimum first year energy savings of 75,000 kWh or 1,500 therms
- Project pre and post inspection required

OCEAN COUNTY COLLEGE

- Education
- Lighting upgrades
 - Exterior LED Wall Packs
- Total Project Cost: \$7,710
- **Incentive: \$6,000**
- **Annual Savings: \$6,844**
- **Project Payback: 3 months**



Google Earth

This case study was from a previous fiscal year and may not represent current incentive levels or costs.

C&I Portfolio of Programs

Eligible Sectors: Commercial, Industrial, Government, Schools, Non-Profit, Institutional and Multifamily

MEASUREMENT & AUDITS

- Energy Benchmarking
- Local Government Energy Audits

COMPREHENSIVE PROGRAMS

- Large Energy Users
- Pay for Performance
 - Existing Buildings
 - New Construction
- Direct Install
- Customer Tailored Energy Efficiency Pilot

SINGLE MEASURE REBATES

- SmartStart
 - Existing Buildings
 - New Construction

DISTRIBUTED ENERGY RESOURCES

- Combined Heat & Power - Fuel Cells
- Microgrid Development
- Battery Storage*
- Electric Vehicles

** coming soon!*

Combined Heat & Power - Fuel Cells

NJCleanEnergy.com/CHP

DISTRIBUTED
ENERGY

WHO

C&I customers that require on-site electric generation that either does or does not utilize waste heat

SIZE TO QUALIFY

N/A - Projects must pass a cost-effectiveness test and run 5,000 full load equivalent hours per year (3,500 for critical facilities)

ABOUT

- Combined Heat & Power (CHP) units generates electricity and recycle waste heat to provide heating or cooling
- Resiliency with return on investment
- Technology-neutral incentives
- Fuel Cells (FC) with or without heat recovery (HR)

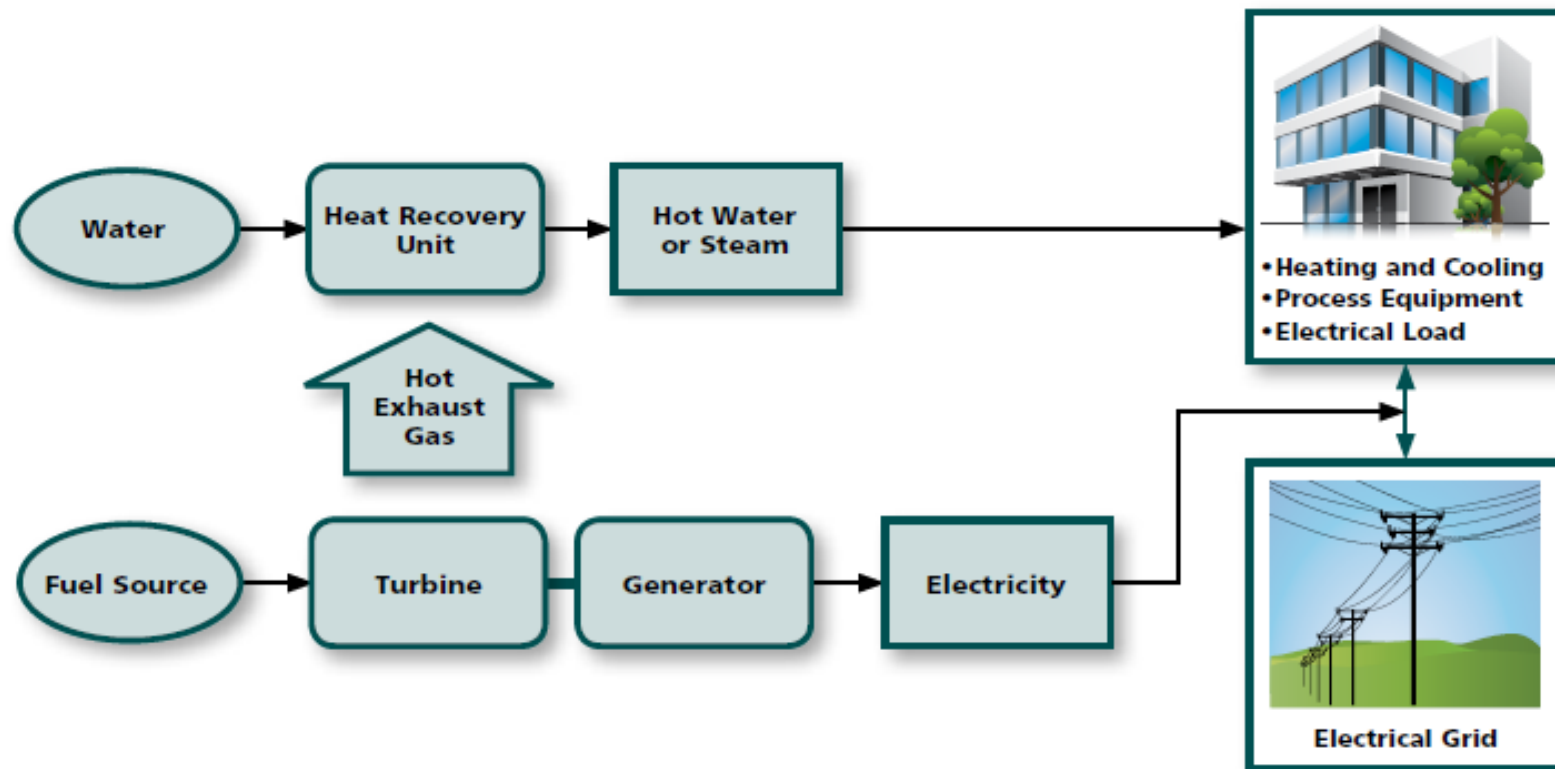
INCENTIVE LEVELS

- CHPs and FC with HR have a project cap of \$2MM - \$3MM
- 25% bonus for critical facilities with black-start/islanding capabilities
- Up to 30% incentive bonus for CHP using biofuel
- FC without HR have a project cap of \$1MM

Combined Heat & Power

NJCleanEnergy.com/CHP

DISTRIBUTED
ENERGY



Combined Heat & Power - Fuel Cells

DISTRIBUTED
ENERGY

NJCleanEnergy.com/CHP

Eligible Technology	Size (Installed Rated Capacity)	Incentive (\$/Watt) ⁽⁵⁾	% of Total Cost Cap per project	\$ Cap per project
CHP powered by non-renewable or renewable fuel source, or a combination ⁽⁴⁾ : • Gas Internal Combustion Engine • Gas Combustion Turbine • Microturbine	≤500 kW ⁽¹⁾	\$2.00	30-40% ⁽²⁾	\$2 million
	>500 kW – 1 MW ⁽¹⁾	\$1.00		
	>1 MW – 3 MW ⁽¹⁾	\$0.55	30%	\$3 million
	Fuel Cell with Heat Recovery (FCHR)	>3 MW ⁽¹⁾		
Fuel Cell without Heat Recovery (FCwoHR)	Same as above ⁽¹⁾	Applicable amount above	30%	\$1 million
Waste Heat to Power (WHP) ⁽³⁾ Powered by non-renewable fuel source. Heat recovery or other mechanical recovery from existing equipment utilizing new electric generation equipment (e.g. steam turbine)	≤1 MW ⁽¹⁾	\$1.00	30%	\$2 million
	>1 MW ⁽¹⁾	\$0.50	30%	\$3 million

+critical facility/blackstart bonus of 25%

ACUTECARE MANAGEMENT SERVICES

- Medical Support Facility
- Combined Heat and Power (CHP)
- **Total Project Cost: \$2.27M**
(estimated)
- **Incentive: \$690,000**
- **Estimated Annual Cost Savings:**
 - First Year: **\$684,937**
 - Average Annual Cost Savings: **\$690,560**
- **Payback Period: 1.49** (estimated)

System provides 345kW of grid parallel base load through a single power module. System has black start capability. Inverters are anti-islanding.

This case study was from a previous fiscal year and may not represent current incentive levels or costs.



- NJBPU Town Center Distributed Energy Resources (TCDER) Microgrids Program
 - TCDER Microgrid is a cluster of critical facilities within a municipal boundary that may also operate as shelter for the public during and after an emergency event or provide services that are essential to function during and after an emergency situation. These critical facilities are connected to a single or series of DER technologies that can operate while isolated and islanded from the main grid due to a power outage
- Board funded 13 feasibility studies
- Feasibility studies completed and being reviewed

Commitment to Resiliency

- The Clean Energy Act also requires the Board to conduct an Energy Storage Resource analysis for submission to the Governor and the Legislature. In doing so, the Board is required by law to consult with various stakeholders, including PJM
- Rutgers (RU-LESS) was retained to complete the study
 - Study addressed :
 - Resiliency
 - Effects on ratepayers
 - Impacts on renewable energy and EVs
 - Optimal amount of storage
 - Technologies
 - Optimal points of entry (customer sited, utility scale)
 - Cost-benefit



Energy Storage

DISTRIBUTED
ENERGY

- Final report accepted by the Board in June 2019
- CEA requires Board to initiate a proceeding within six months of completion of report to establish a process and mechanism for achieving energy storage goals
- Straw proposal being developed

ELECTRIC VEHICLES



EVs for Local Government Fleets

NJCleanEnergy.com/EV

- Electric vehicles are now included in the State Purchasing Contract
- New NJBPU Grant Program
 - Designed to encourage local governments to add EVs to their fleet
 - \$4000 per battery electric vehicle
 - \$1500 for one Level-Two EV charging station
 - Grants awarded on rolling basis until April 15, 2020 or until funding expended
- Questions? **EV.programs@bpu.nj.gov**

EVs in the Energy Master Plan

NJCleanEnergy.com/EV

- First strategy and goal is to **“Reduce Consumption and Emissions from the Transportation Section”**
- 2025 – 330,000 light duty electric vehicles
- Charging infrastructure
- State light-duty fleet
- Increase transportation options, encourage new options
- Decrease Vehicle Miles Traveled
- Port emissions

FINANCING FOR GOVERNMENT AGENCIES



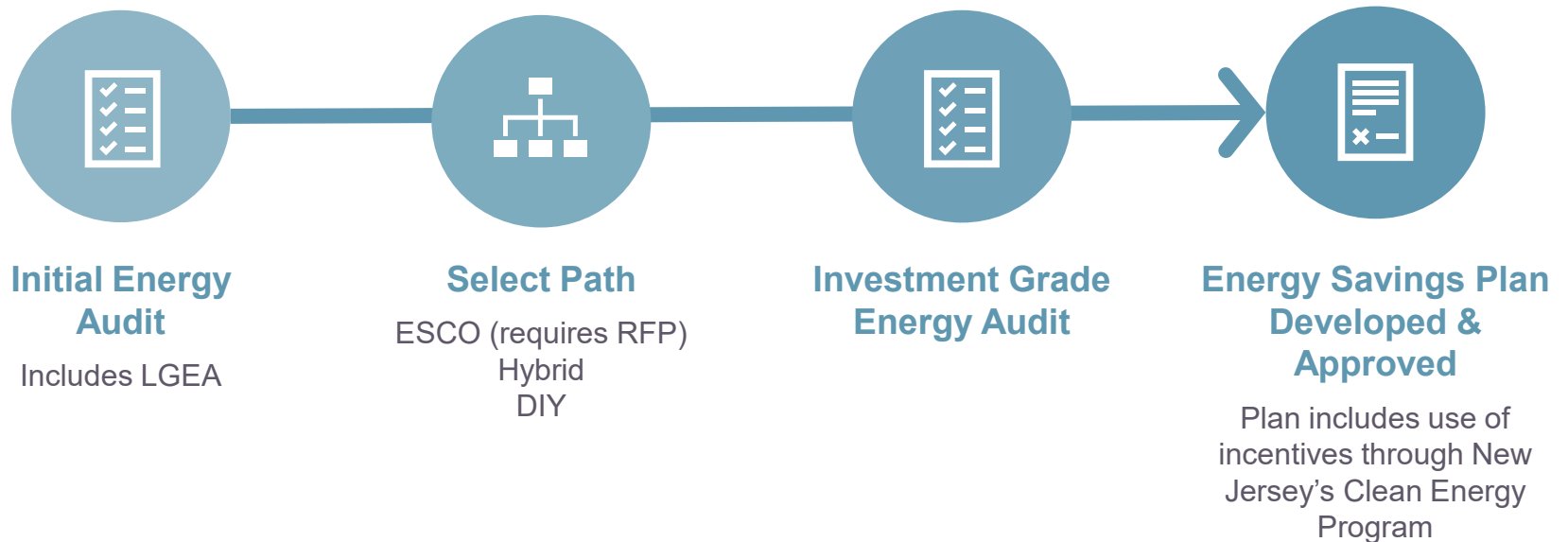
Financing Mechanism: ESIP

ENERGY SAVINGS IMPROVEMENT PROGRAM (ESIP)

- Provides alternative financing for energy savings projects at public institutions
- Administered directly by the NJBPU
- Value of energy savings leveraged to pay for cost of EE projects over a 15 year contract
- Requires NO new bonding and is outside of capital budget
- Does not count as debt or require voter approval



Financing Mechanism: ESIP



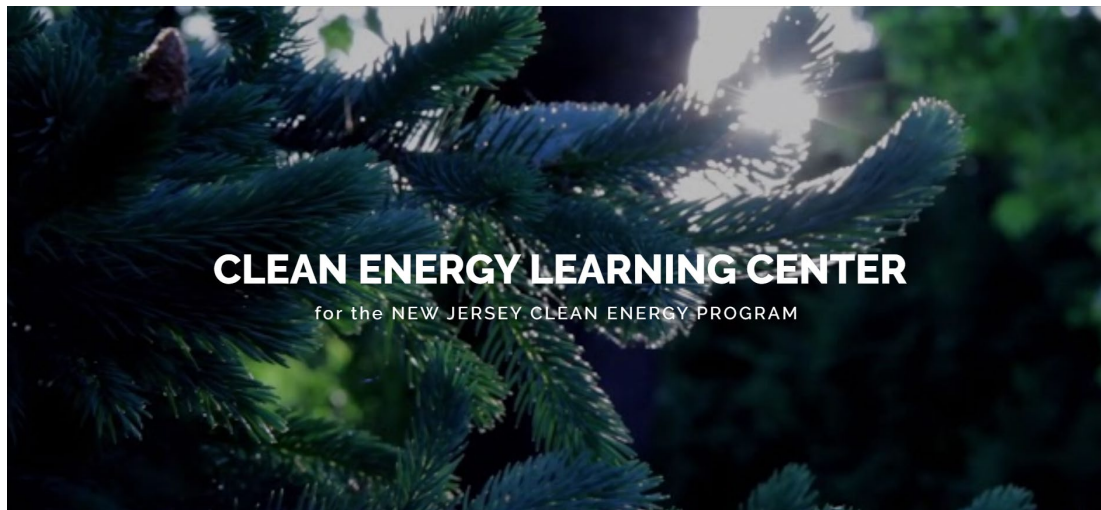
MORE INFORMATION



Clean Energy Learning Center

NJCELC.com

- Online education tool – courses and videos
- Audience is building owners and managers, design professionals, energy professionals, contractors, builders, code officials, homeowners and NJCEP representatives



More Information

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VISIT

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NEWSLETTER

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A photograph of a modern building with a glass facade and a semi-transparent white rectangular overlay in the center. The building has multiple floors with large glass windows and balconies. In the foreground, there are several small, rounded green trees and a green horizontal band on the left side of the building. The text "THANK YOU" is written in a bold, dark grey, sans-serif font across the center of the overlay.

THANK YOU

