

# CARRIER SUSTAINABILITY SYMPOSIUM

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# New Jersey Energy Efficiency Programs

NJClean Energy.com/TRANSITION

#### **NJBPU and NJCEP Administered Programs**



- New Construction (residential, commercial, State Facilities Initiative\* industrial, government)
- Large Energy Users
- Energy Savings Improvement Program (financing)
- Local Government Energy Audits
- Combined Heat & Power & Fuel Cells

\*State facilities are also eligible for utility programs

### **Utility Administered Programs**















- · Existing buildings (residential, commercial, industrial, government)
  - Efficient Products
    - Lighting & Marketplace
       Appliance Rebates
    - HVAC

Appliance Recycling

#### **NJBPU and Utility Co-Administered Programs**





# NJCEP Suite of Programs

### Energy Efficiency -Existing Buildings

- FREE Local Government Energy Audits
- C&I Large Energy Users
- New: Higher Education Decarbonization Pilot
- FREE Income
   Eligible Residential
   Upgrades

### Energy Efficiency - New Construction

 New Construction (Residential, Multifamily, Commercial & Industrial)



Coming soon in 2024!

New Construction Program (single point of entry)

#### Distributed Energy Resources

- New: 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

- SUSi Solar Incentives
- Community Solar
- Offshore Wind

### Specialized Programs

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





### **EXISTING BUILDINGS**

# Local Government Energy Audit

NJClean Energy.com/LGEA

WHO Local Gove

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 costs
- Comprehensive utility bill analysis
- Facility benchmarking
- Feasibility for solar and combined heat & power
- High level water assessment

INCENTIVE CAP

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



# NJCEP Suite of Programs

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#### Energy Efficiency -New Construction

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# **New Construction**

NJClean Energy.com

Any size C&I **new construction** or **gut rehab** project may be eligible for energy efficiency incentives.

New construction/gut-rehab projects must exceed ASHRAE 90.1-2019.\*





NJClean Energy.com

# NJCEP programs for new construction\* include substantial renovation and gut rehabilitation:

- Change of use and reconstruction of an existing building
- Construction work of a nature requiring that the building or portion of the building within be out of service for at least 30 days
- Reconstruction of a vacant structure or a portion of the building within





# SmartStart Buildings (SSB)

SINGLE MEASURE: NEW CONSTRUCTION

NJClean Energy.com

### **WHO**

New Construction C&I Projects: commercial, industrial, agricultural, government, non-profit institutional, and multifamily customers



# SIZE TO QUALIFY

N/A

### **ABOUT**

- Individual high efficiency equipment rebates for new construction, and gut rehab projects
- Prescriptive and custom designed measures

# INCENTIVE CAP

- C&I New Construction \$500,000 per electric account and \$500,000 per natural gas account, per fiscal year
- 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



# SmartStart Buildings (SSB)

NJClean Energy.com



### PRESCRIPTIVE INCENTIVES

- Electric Chillers
- Gas Cooling
- Electric Unitary HVAC
- Ground Source Heat Pumps
- Gas Heating
- Variable Frequency Drives
- Gas Water Heating
- Lighting/Lighting Controls
- Refrigeration Doors
- Refrigeration Controls
- Food Service Equipment
- Refrigerator/Freezer Motors



#### **CUSTOM INCENTIVES**

- New or innovative technologies proven to be cost-effective and not listed as prescriptive
- Project pre and post inspection required



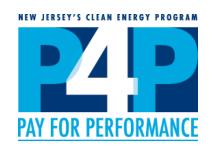
# Pay for Performance (P4P)

MID-LARGE:
NEW CONSTRUCTION

NJCleanEnergy.com

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New construction projects seeking one or more energy efficiency measures for each building end use with a minimum 5% savings compared to ASHRAE 90.1-2019 (15% savings for Multifamily).



SIZE TO QUALIFY

Over 50,000 square feet of planned new construction or gut

rehab

**ABOUT** 

A pre-approved Participating Partner will streamline the program

and guide users through the program phases

INCENTIVE CAP

\$2M per project



# Prescriptive and Custom Energy Efficiency Program

For commercial and industrial projects

Costs of these programs may be recovered through customer rates in accordance with New Jersey law. For a complete list of commercial, industrial, residential and low-income energy efficiency programs, please visit energysaveNJ.com.



# Full JCP&L Portfolio

### Prescriptive

Easy way to install high-efficiency electric equipment across a wide range of technologies and receive quick one-for-one incentives.

### Custom

Non-standard, more complex electric energy efficiency measures that are not defined as a prescriptive measure.

### Instant Discount

Instant discounts direct from participating distributors for lighting and HVAC.

- Small Business Direct Install
- Energy Management
- Engineered Solutions



# Prescriptive vs. Custom



fixed incentive based on the equipment list

### **Prescriptive**

Install high-efficiency eligible electric equipment across a variety of technologies including:

- Refrigeration Doors, Covers, Freezer Motors
- Electric HVAC
- Controls
- Lighting and Lighting Controls
- Food Service Equipment
- Variable Frequency Drives
- Ground Source Heat Pumps
- More!



### **Custom**

Incentives are available for:

- Compressed Air (excluding maintenance or repair for air system leaks)
- Refrigeration
- HVAC
- Building Optimization
- Process Improvements
- Custom Lighting Projects
- More!



### **Custom Program**



# The Custom program is designed for projects that do not fall under the Prescriptive program.

- Custom projects are typically multi-measure or optimization solutions for which customers earn performance-based incentives using \$/kWh
- Pre-approval is required for all incentives before any equipment is purchased or installed. Incentives are calculated based on annual kWh savings.
- Custom incentives are not available where a prescriptive incentive is available



# Instant Discounts Program:

Overview

For smaller scale projects, customers or contractors have an option to purchase specific pre-qualified lighting and HVAC from participating JCP&L distributors at a discounted "incentive" price.



### **Instant Discounts Program Benefits:**

- Eliminates application for the customer
- Minimum customer price of \$1.00 per product



# Instant Discounts Program:

**HVAC** 



# HVAC products eligible for instant discount must be purchased from a participating distributor

• Instant HVAC discounts are available for unitary air conditioners and heat pumps, split or packaged air source heat pumps, and packaged terminal air conditioners and heat pumps



# **Prescriptive Eligibility Pathways**

Installed in the past 180 days

You may apply for incentives no later than 180 days after project completion (installed and operable) if it did not receive pre-approval

Not yet installed 

Submit for pre-approval

Today



# **Small Business Direct Install Program**



# Small Business Direct Install (SBDI) Program

- Comprehensive, cost-effective, energy-efficient measures—cut energy costs by as much as 30%
- Businesses repay as little as 20% of the total project cost—interest-free—over 60 months with on-bill repayment on their PSE&G bill (or in one lump-sum payment, if preferred)

### **Eligibility**

- Eligible businesses must have 12-month individual facility electricity average peak demand of less than 200 kW
- All SBDI projects can only be performed by PSE&G-approved SBDI-certified
   Trade Allies, and incentives are paid directly to the Trade Ally



Addresses more
comprehensive energy
efficiency improvement
measures, while providing
greater incentives and
expanded Trade Ally support

## **Attractive SBDI-certified incentives**

For Customers Using 1-100 kW

Up to 80% (of total project cost)

For Customers Using 101-200 kW

Up to 70% (of total project cost)

... and generally, with faster payback!

# **UEZ/Nonprofit Direct Install Program**

 Vendors listed below can exclusively serve all government, nonprofit, and small business customers located in towns within <u>Urban Enterprise Zones</u> (UEZs).

<b>Vendor Name</b>	<b>Counties Serviced</b>	Contact Information
Tri-State Light & Energy (TSLE)	Essex, Mercer, and Union	psegenergysaver@TSLE.com 610-789-1900
Facility Solutions Group (FSG)	Bergen, Hudson, Somerset, Camden and Ocean	psegdirectinstall@fsgi.com 888-963-7465
Donnelly Energy	Hunterdon, Middlesex, Morris, Passaic, Burlington, Gloucester and Monmouth	JAvallone@donnellyenergy.com 862-400-2838



A separately run PSE&G
Direct Install Program—is
reserved for projects located
in Urban Enterprise
Zones, and for nonprofits,
government, and
municipal buildings

# Notes from the field

### Case study: medium SBDI project

- Local community center utilized SBDI Program
- Installed HVAC RTUs to optimize heating and cooling
- Included economizers, DCV, and thermostats
- Project cost: \$96,750
- Incentive received: \$77,400
- Balance of project cost after incentive: \$19,350
- Customer deposit covered through OBR: 100%

... the incentive covered 80% of project costs!



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# Energy Management Program

## **Overview**

- The program consists of four offerings to help C&I customers implement energy efficiency measures and identify opportunities for energy productivity savings.
- This program is designed to develop a culture of continuous improvement in facilities where energy use constitutes a significant operational cost.
- Commercial Customers are eligible for the following offerings:
  - HVAC Tune-Up
  - Full Building Tune-Up (RCx)
  - Monitoring-Based Commissioning (MBCx)



# **Offerings Overview**



HVAC Tune-Up connects customers with qualified providers to re-tune various types of electric HVAC equipment



**Full Building Tune-up** is a retrocommissioning (RCx) program designed to re-tune existing mechanical, electrical, and thermal systems



Monitoring-Based Commissioning (MBCx) uses monitoring software paired with the building's energy management system to optimize energy performance and efficiency

# **Eligibility: Equipment**

- The HVAC unit must be between 3 and 20 tons
  - Eligible units must not be included under a standing maintenance contract and must not have had a tune-up in the last three years
- Eligible Types:
  - Central HVAC Systems (air-cooled packaged, split systems, or air-source heat pumps)
  - Mini-Splits
  - Packaged Terminal Units
- All HVAC applications other than comfort cooling and heating, such as process cooling, are ineligible for this measure
- Expected services include general checks (e.g., change air filter, repair insulation), coil cleaning and refrigerant charge



# **Equipment Incentives**

Unit Type	Incentive Rate
Single Compressor Units	\$175/unit
Multiple Compressor Units	\$250/unit
PTAC, PTHP or Mini-Split	\$75/unit

Incentives are capped at 100% of the tune-up cost, applied at the unit level



# Full Building Tune-up (a.k.a. Retro-commissioning "RCx")



### **RCx Overview**

The retro-commissioning (RCx) program is designed to re-tune existing mechanical, electrical, and thermal systems

### **Eligibility**

- Atlantic City Electric commercial customers with 200 kW or higher average peak demand in the last 12 months
- Recommended minimum facility size of 50,000 square feet
- Facility has not been commissioned in the last 3 years and is not a new construction

- Functioning existing control system is highly recommended
- Building has potential for energy savings, with agreement the customer will implement all upgrades that have an 18-month payback or less
- Customers are only allowed to work with approved trade allies
  - Approved trade allies will be required to join an onboarding session to go through additional details

# Monitoring-Based Commissioning (MBCx)



### **MBCx Overview**

Monitoring-Based Commissioning (MBCx) uses monitoring software, with fault detection & diagnostics "FDD" capabilities, paired with the building's energy management system to optimize energy performance and efficiency

### **Eligibility**

- Atlantic City Electric commercial customers with 200 kW or higher average peak demand in the last 12 months
- Recommended minimum facility size of 50,000 square feet
- Facility has not been commissioned in the last 3 years and is not a new construction
- Functioning existing control system is required

- Customer must agree to install eligible MBCx software with Fault Detection and Diagnostics (FDD) with a monitoring service contract of at least 18 months
- Building has potential for energy savings, with agreement the customer will implement all upgrades that have an 18-month payback or less
- Customers are only allowed to work with approved trade allies
  - Approved trade allies will be required to join an onboarding session to go through additional details

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# Engineered Solutions Program

### **Overview**

The program provides comprehensive energy efficiency solutions to public service C&I customers

- Qualifying public service customers receive:
  - Investment grade energy audit
  - Incentives to offset measure cost
  - Equipment design services for selected upgrades
  - Bid and construction administration
  - Commissioning and M&V of installed equipment



# Who's Eligible?

All existing public service facilities in ACE territory:

- Hospitals and medical facilities
- Municipalities
- Schools, colleges and universities
- Nonprofits
- Multifamily



# Financing Options



### **PSE&G** customer resources

### Interest-free on-bill repayment (OBR) option

- On-bill repayment is available for all Prescriptive, Custom and SBDI project costs, inclusive of equipment and labor
  - Includes, but is not limited to, energy-efficient lighting, refrigeration, heating and cooling equipment, and more
  - All types of businesses, nonprofits, and municipalities are eligible
  - Must be eligible for program incentives to qualify for OBR
- Repay balance of project cost on PSE&G bill
  - No maximum limit for OBR, but extra requirements for over \$1M
  - Interest-free repayment term of 60 months
  - No application fee
- OBR eligibility assessed using Experian Financial Stability Risk (FSR) Score

Makes energy efficiency more affordable!



# Commercial Energy Efficiency Financing

JCP&L 0% financing from NEIF



- **Rate:** 0%
- **Repayment:** 3- or 5-year terms available
- Amount: \$2,500 minimum. Maximum financed amount varies based on program. Financed amount is net of program rebate.
- Eligibility: Work must qualify for a JCP&L rebate. Work must be performed by a NEIF-Approved Contractor
- More Info: <a href="https://www.neifund.org/jcpl-commercial/">https://www.neifund.org/jcpl-commercial/</a>



# **Atlantic City Electric Commercial Financing**

Rate	0%				
Repayment	1 – 5 year terms available				
Amount	<ul> <li>\$2,500 minimum.</li> <li>\$75,000 maximum for SBDI projects. \$250,000 maximum for all other programs.</li> <li>Financed amount is net of program rebate.</li> </ul>				
Eligibility	<ul> <li>Work must qualify for an Atlantic City Electric rebate</li> <li>Work must be performed by a NEIF-Approved Contractor</li> </ul>				
More Info	Learn more at: www.neifund.org/atlantic-city-electric-commercial-financing/				



### **Online Financing**

easy-to-use financing tools deliveNEIF'sr simple, transparent, and fast financing options, ondemand reporting, and more.



### **Sales Support**

NEIF provides expert sales support to close deals. NEIF ensures the finance process runs quickly, efficiently, and effectively.



# Thank You









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