

# New Jersey's Clean Energy Program<sup>TM</sup> Fiscal Year 2025 Program Descriptions and Budget

# **Energy Efficiency and Renewable Energy Program Plan Filing**



# FY25 (6-month filing: July 1 through December 31, 2024) Compliance Filing

June 27, 2024

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#### Introduction

This partial Fiscal Year 2025 ("FY25") compliance filing ("Compliance Filing") presents the program plans, budgets, and anticipated savings of those initiatives of *New Jersey's Clean Energy Program*<sup>TM</sup> ("NJCEP") administered by TRC for the first six months of FY25, i.e., from July 1, 2024 through December 31, 2024. In late 2024, the New Jersey Board of Public Utilities ("Board" or "BPU") expects to consider another TRC NJCEP Compliance Filing that would cover a two and one half year period from January 1, 2025 through June 30, 2027. The Board is staging the filings this way so as to bring the TRC NJCEP Compliance Filings into synch with the energy efficiency plans the New Jersey utilities have filed pursuant to the New Jersey Clean Energy Act of 2018 ("CEA"). <sup>2</sup>

Administered through the Division of Clean Energy, NJCEP is a signature initiative of the Board that provides financial incentives and support for energy efficiency technologies, distributed energy resources, and solar renewable energy.

#### **Budgets**

Budget information for the programs administered by TRC can be found in <u>Appendix C</u>, *Program Budgets*.<sup>3</sup>

All budgets set forth in this Compliance Filing are subject to state appropriations law, and all incentive offerings are subject to availability of funds.

#### **Savings Goals**

Energy savings projections for the programs administered by TRC can be found in <u>Appendix D</u>, Program Goals and Performance Metrics.

# **Cost-Benefit Analyses**

Cost-benefit analyses for the programs administered by TRC can be found in <u>Appendix E</u>, Cost-Benefit Analysis.

# **New Jersey's Energy Efficiency Program Transition**

In 2018, Governor Murphy signed into law the landmark CEA. The law called for a significant overhaul of New Jersey's clean energy systems by building sustainable infrastructure to fight climate change and reduce carbon emissions, which will in turn create well-paying local jobs, grow the State's economy, and improve public health while ensuring a cleaner environment for current and future residents.

<sup>&</sup>lt;sup>1</sup> This Compliance Filing only addresses programs implemented by TRC. NJCEP funds are also directed to other state energy programs not implemented by TRC and, therefore, are not addressed in this filing.

<sup>&</sup>lt;sup>2</sup> N.J.S.A. 48:3-87.8 et al.

N.J.S.A. 46.3-67.6 et al.

<sup>&</sup>lt;sup>3</sup> The budget for all the new construction programs, including the new New Construction Program and the legacy programs transitioning into that new program (see below in main text), will consist of the amount set forth at "New Construction Program."

As part of this statewide undertaking, the Clean Energy Act required New Jersey's investor-owned gas and electric utility companies ("IOUs") to reduce their customers' use of gas and electricity by set percentages over time. To help reach these targets, the BPU approved a comprehensive suite of efficiency programs that would transition the State to some of the highest energy savings in the country.

These "next generation" energy efficiency programs feature new ways of managing and delivering programs historically administered by NJCEP. Some of the programs will continue to be administered by NJCEP, but most have been transferred to the IOUs.

The programs that will continue to be administered by and through NJCEP are:

- 1. The New Construction Program ("NCP").
- 2. Large Energy Users Program ("LEUP").
- 3. Local Government Energy Audit ("LGEA") Program.
- 4. Combined Heat and Power Fuel Cells ("CHP-FC").
- 5. Solar Registration Programs ("Solar Programs").

Complete descriptions of the above-described programs and their incentives are set out in **Part 1** of this Compliance Filing.

The NCP will in large part replace the following legacy programs: Residential New Construction ("RNC"); and Commercial and Industrial ("C&I") Buildings which has 3 sub-programs – 1) New Construction ("SmartStart NC"); 2) C&I Buildings: Pay for Performance - New Construction ("P4P NC"); and C&I Buildings: 3) Customer Tailored Energy Efficiency Program for new construction ("CTEEP NC") (collectively, "Legacy Programs"). The transition from the Legacy Programs to the new NCP will take place on a schedule provided to stakeholders and the public through means other than this Compliance Filing. To the extent applicable during FY25 and beyond, complete descriptions of the Legacy Programs and their incentives are set out in **Part 2** of this Compliance Filing.

Certain other programs and/or program components identified in <u>Appendix C</u>, *Program Budgets*, will continue to operate and expend NJCEP funds only for applications received during prior fiscal years ("FYs") in accordance with the applicable program rules in place during the applicable FY(s).

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# **PART 1 (Active Programs)**

# **Commercial and Industrial Energy Efficiency Programs**

#### General Overview

The NJCEP C&I Energy Efficiency ("EE") Programs ("C&I Programs") are designed to help New Jersey's businesses use electricity and natural gas more efficiently. Efficiency in electricity and gas usage will promote competition and increase industry success ensuring job retention and creation. There is also an environmental benefit to electricity and gas usage efficiency. Each individual C&I Program is described in more detail in the relevant subsections below.

#### The C&I Programs are designed to:

- Provide information on how to meet and exceed current energy code requirements so buildings operate more efficiently thereby minimizing operating costs;
- Encourage customers to choose high efficiency options when undertaking construction or equipment upgrades (i.e., when customers normally construct buildings or purchase building systems equipment);
- Support market transformation by providing information and incentives to help customers and designers make energy efficient equipment specification, building/system design, lighting design, and commissioning part of standard business practices; and
- Stimulate commercial and industrial customer investments in energy efficiency that will support the growth of the industries that provide these products and services.

The C&I Programs address the key market barriers that make it challenging for developers, designers, engineers, and contractors to routinely incorporate energy efficiency in their projects, including:

- Lack of familiarity or uncertainty with energy efficient building technologies and designs;
- Bias toward lower initial cost and lack of procedures for considering lifetime building operating costs during decision-making;
- Compressed time schedules for design and construction;
- Aversion to risk involved with specifying technologies less familiar to the local design community despite the proven reliability of efficient technologies and designs; and
- Priorities for engineers, designers, and contractors that often do not align with incentive structures and energy efficiency considerations.

The C&I Programs employ a set of offerings and strategies to address the market barriers noted above and to achieve market transformation in equipment specification, building/system design, and lighting design. These include:

- Program emphasis on intervention during customer-initiated construction and equipment replacement events that are a normal part of their business practice;
- Coordinated and consistent outreach to C&I customers, especially large and centralized players, such as national/regional accounts, major developers, etc.;

- Consistent incentive levels for efficient electric and gas equipment and design practices to permanently raise efficiency levels;
- Information and technical support provided to customers and designers to make energy efficient equipment specification, building/system design, lighting design, and commissioning part of standard business practices;
- Information and technical support provided to customers and designers to facilitate compliance with New Jersey's new commercial energy code, as well as future upgrades to that code; and
- Programs designed to meet the needs of a diverse set of customers, including non-profit entities, local governments, and businesses of all sizes.

Unless specifically stated otherwise in the following program descriptions, customers eligible for incentives under New Jersey's C&I EE Program are defined as non-residential electric and/or gas customers of one of New Jersey's regulated electric or gas utilities who contribute to the SBC. With the exception of the new construction segment, applicants to any of the NJCEP C&I EE Programs must be contributors to the SBC within the previous twelve months.

Construction projects are subject to prevailing wage requirements pursuant to <u>L.</u> 2009, <u>c.</u> 203, which amends <u>L.</u> 2009, <u>c.</u> 89, as well as the prevailing wage regulations promulgated by the New Jersey Department of Labor and Workforce Development pursuant to <u>L.</u> 1963, <u>c.</u> 150 as amended, and N.J.A.C. 17:27-1.1 <u>et seq.</u> and Affirmative Action rules. The prevailing wage rate shall be paid to workers employed in the performance of any construction undertaken in connection with BPU financial assistance programs. This law applies to contracts greater than the amount set forth by the New Jersey Department of Labor and Workforce Development. Unless otherwise stated in a program description, customers self-certify that they are complying with prevailing wage requirements by submitting an application to the program and receiving program incentives.

#### C&I Buildings: Large Energy Users

#### **Program Purpose and Strategy Overview**

The purpose of the Large Energy Users Program ("LEUP") is to foster self-investment in energy efficiency and combined heat and power projects for New Jersey's largest C&I non-hospital utility customers. This program was established in 2011 as a pilot following requests from these customers to develop a program specific to their needs and in recognition of their large contribution to the SBC. These large, sophisticated facilities have unique needs and internal processes which may not align with the structure of other C&I programs with respect to submission criteria or timing. The LEUP offers a more flexible process to these customers, many of whom have engineers on staff, but in turn requires that participating facilities comply with accountability processes to obtain incentives, thus assuring that the desired efficiency is achieved. The program supports various types of large customers spanning the pharmaceutical, higher education, industrial, building management, data center, and other commercial sectors.

Specific design features include:

- Ability to submit multiple projects/buildings under one application;
- Flexible application submission process providing the customer the opportunity to submit up to 3 scopes of work in each program year;
- Ability to participate in other programs while engaged in LEUP.

#### Support for Energy Master Plan ("EMP") Goals

The LEUP supports many of the EMP's strategies and goals, including, among others, the following:

- Primary Goal 3.1 (Increase New Jersey's overall energy efficiency).
- Primary Goal 3.3 (Strengthen building and energy codes and appliance standards), especially its Goal 3.3.3 (Establish mechanisms to increase building efficiency in existing buildings).

# **Program Description**

Incentives are awarded to customers that satisfy the program's eligibility and program requirements ("Eligible Entities" or "Eligible Customers") for investing in self-directed energy projects that are customized to meet the requirements of the customers' existing facilities, while advancing the State's energy efficiency, conservation, and greenhouse gas ("GHG") reduction goals. The program relies on eligible customers and their technical consultants to identify and develop qualifying energy efficiency projects that they believe will be beneficial for their operations and will meet program criteria as described below. In support of LEUP projects, the Program Manager will provide the following services:

- Budget management and energy savings reporting;
- Review and approval/rejection of all submitted enrollment submittals for program eligibility;

- Review and approval/rejection of all submitted Draft Energy Efficiency Plan ("DEEP") submittals; <sup>4</sup>
- Review and approval/rejection of all submitted Final Energy Efficiency Plan ("FEEP") submittals;
- Technical assistance via email and telephone to assist entities in the proper submittal of the required information;
- Updates of data tracking tools to incorporate additional tasks related to this initiative; and
- Incentive processing including issuance of checks and tracking/recordkeeping.

Eligible customers who wish to participate in the LEUP must comply with the standards and criteria below.

#### **Target Markets and Eligibility**

The LEUP is available on a first come, first served basis so long as funding is available to existing, large C&I buildings that meet the following qualifications:

- Eligible entities must have incurred at least \$5,000,000 in annual energy costs (on a presales tax, aggregate of all buildings/sites) during the immediately preceding fiscal year. Eligible entities shall be defined as (1) Public: having distinct and separate budgetary authority, i.e., a budget used to fund only that entity (e.g., a utility authority); (2) Public Schools: having distinct and separate budgetary authority, i.e., a budget used to fund only that entity (e.g., a school district); and (3) Private: Non-residential companies including all related subsidiaries and affiliates regardless of separate EIN numbers or locations within New Jersey, consistent with the May 3, 2013 Order in Docket No. EO07030203.<sup>5</sup>
- Further, in order to be considered for incentives, the billed peak demand of each facility included in the DEEP/FEEP must meet or exceed 400 kW and/or 4,000 dekatherms ("Dth").6
- Finally, the limitations/restrictions listed below, including, among others, the exclusion of hospitals, apply.

Entities interested in applying to participate in the program will submit the following information through form(s) available through the NJCEP website and/or Program Manager:

- Number of buildings/sites and list of all associated utility and third-party supplier accounts;
- Energy cost, billed usage and number of location or premise IDs as provided by utility for each account from previous fiscal year.

<sup>&</sup>lt;sup>4</sup> Note: the approved entity may choose to skip the DEEP submittal and to submit only a FEEP.

<sup>&</sup>lt;sup>5</sup> <u>In re the Comprehensive Energy Efficiency and Renewable Energy Resource Analysis for the 2009 Through 2012 Clean Energy Program – Revised 2012-2013 Programs & Budgets – Revised Rebate Approval Process, BPU Docket No. EO07030203, Order dated May 3, 2013 ("May 3, 2013 Order").</u>

<sup>&</sup>lt;sup>6</sup> A dekatherm is a unit of heating value equivalent to 1,000,000 British Thermal Units.

#### Submittal Requirements for Fund Commitment

• Qualifying entities shall submit a FEEP to the Program Manager for existing facilities only. The FEEP must be submitted to the Program Manager for review three (3) months from the date of the DEEP approval letter.

#### **Program Standards**

- 1. All energy conservation measures ("ECMs" and each, an "ECM") must meet Minimum Performance Standards, which may be fulfilled during professional engineer review, which shall be understood as the most stringent of:
  - a. Appendix A to the Large Energy Users Program Guide; and
  - b. ASHRAE 90.1-2019;
  - c. Local code; and
  - d. Appendix A, C&I and DER Incentive Caps and General Rules.
- 2. ECMs must be fully installed no later than twelve months from approval of the FEEP, provided, however, that the Program Manager may allow up to twenty-four months where special circumstances beyond the reasonable control of the applicant (such as exceptionally large or complex projects or projects experiencing unusually severe supply chain disruptions or personnel shortages) justify such longer period. In addition, up to two extensions may be granted for a period of up to six months with satisfactory proof of project advancement and upon due cause otherwise. Project advancement may be demonstrated through copies of permits, equipment invoices, installation invoices indicating percentage complete, updated project schedules, and similar documents.

#### Limitations/Restrictions

- 1. New construction and substantial renovation (also known as gut renovation) projects are not eligible under the program.
- 2. Hospitals are not eligible for this LEUP.
- 3. Incentive will be limited to EE measures. The following shall not be included as part of this program:
  - a. Renewable energy; and
  - b. Maintenance energy saving projects
- 4. Incentives shall only be available for ECMs approved in the FEEP. The Program Administrator may waive this restriction on a case-by-case basis using the Board's usual waiver standard.
- 5. ECMs already installed or under construction will not be considered for incentives and shall not be included in FEEP. The Program Administrator may waive this restriction on a case-by-case basis using the Board's usual waiver standard.
- 6. Federal grants/incentives are allowed. Other state grants/incentives are allowed provided they do not originate from NJCEP funds. NJCEP loan funds are allowed. Funds provided

- by a New Jersey IOU are not allowed. The total of federal, state, and LEUP funding shall not exceed 100% of total project cost.
- 7. No DEEP or FEEP may have more than 50% of the overall total energy savings coming from lighting and/or lighting controls measures, unless the Program Manager determines the applicant has demonstrated the scope of work is otherwise comprehensive in that it:
  - a. Assesses the cost-effectiveness of installing energy conservation measures in each of the following areas in a given building: (i) heating systems, (ii) cooling systems, (iii) ventilation systems, (iv) domestic hot water systems, and (v) building envelopes, and
  - b. Implements all cost-effective energy conservation measures identified through the foregoing assessment in a given building or, as to any such measures not implemented, explains why such implementation would not be practicable.
    - For example, a scope of work that does not include replacement of a 30-year-old atmospheric boiler would not be allowed to include lighting savings greater than 50% of the total energy savings.

#### Review and Payment Framework

- 1. Upon receipt of the FEEP, Program Manager will have sixty (60) days to review each submittal and provide comments to entity.
- 2. Program Administrator will present FEEPs to Board for approval as required by Board policy and commitment of incentive. The Program Administrator may conduct up to three site inspections per FEEP submission including a pre-inspection at 50% completion and 100% completion, as required.
- 3. If ECMs are not completed within the specified timeframe, incentive commitment may be forfeited.
- 4. Entity will provide M&V data as requested and will comply with any program evaluation activities.

#### **Program Offerings and Incentives**

The program will offer a maximum incentive, which will be the lesser of the incentive levels identified in the four bulleted items below:

- 75% of total project(s) cost as identified in the FEEP(s). Total project costs may include pre-engineering costs, soft costs, and other costs associated with the preparation of the FEEP; and
- For all lighting measures: \$0.16/kWh per projected kWh saved annually; for all other measures: \$0.33 per projected kWh saved annually; \$3.75 per projected therms saved annually, all as identified in the FEEP(s); and
- \$4,000,000 per entity per FY, determined by summing the commitments associated with each FEEP approval made during the applicable FY;

or,

• The amount necessary to buy down to no less than a two-year payback. Details regarding this buy down will be set forth in the LEUP Program Guide, LEUP application, and/or similar documents.

The program has a minimum incentive commitment per FEEP of \$100,000. Projects with incentives below this threshold will be redirected to other programs. Incentives shall be reserved upon approval of the DEEP. Program funds will be committed upon approval of FEEP by the Program Manager and, if required, by BPU. Incentive shall be paid upon project completion and verification that all program requirements are met. Entities may submit up to three (3) DEEP/FEEPs throughout the program year.

#### **Quality Control Provisions**

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all program participants. All energy efficiency plans are reviewed upon receipt to confirm compliance with eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of energy efficient measure qualification and incentive calculation. Applicant-supplied information and Program Administrator-performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence. Pre- and/or post- inspections and quality control file reviews will be conducted, as required.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

#### **C&I Buildings: LEUP Decarbonization Pilot**

#### **Program Purpose and Strategy Overview**

The purpose of the Decarbonization Pilot is to gauge the potential for energy programs to encourage certain New Jersey non-residential customers to reduce GHG emissions. This proposed pilot is offered as an enhancement to NJCEP's LEUP, which program allows large utility customers to submit a wide range of complex self-directed projects through a single program framework, maximizing the program's effectiveness while minimizing the administrative burden on the customer. However, whereas the LEUP only allows energy efficiency projects, the Decarbonization Pilot will incentivize a broader scope of work such as energy efficiency, beneficial electrification, electric vehicle ("EV") chargers, storage, and combined heat and power, among others. Unlike traditional energy efficiency programs, the Decarbonization Pilot is designed to explicitly target GHG emissions reductions. Prospective projects will be required to include a significant portion of non-energy efficiency measures within their overall scope to ensure that the pilot evaluates a broad range of decarbonization technologies.

#### Support for Energy Master Plan Goals

The Decarbonization Pilot will directly support many of the State's EMP strategies and goals, including, among others, the following:

EMP Code	EMP Goal	Technology
Primary Goal 1.1	Decarbonize the transportation sector	EV Chargers; Other Alternative Fuel Types
Primary Goal 2.3	Maximize local (on-site or remotely-sited) solar development and distributed energy resources by 2050	On-Site Renewables; CHP/FC
Primary Goal 3.1	Increase New Jersey's overall energy efficiency	Energy Efficiency
Primary Goal 4.2	Start the transition to electrify existing oil- and propane-fueled buildings	Beneficial Electrification

#### Through this pilot, the program aims to:

- Gain better understanding of the effort and cost needed to develop and implement a Decarbonization Plan.
- Analyze the effectiveness of the incentive framework to encourage customers to reduce GHG emissions.
- Determine GHG reduction potential by use case scenario and by technology deployed.
- Determine customer receptivity to decarbonization solutions.
- Provide a qualitative analysis of the pilot and its potential as a program with a broader mandate.

#### **Program Description**

Incentives are awarded to customers that satisfy the pilot's eligibility and requirements for investing in self-directed energy projects that result in GHG reductions, as measured in terms of tons of carbon dioxide equivalent ("tCO2e").<sup>7</sup> The pilot relies on eligible customers and their technical consultants to identify and develop qualifying projects that they believe will be beneficial for their operations.

#### **Target Markets and Eligibility**

The pilot will focus on higher education (colleges/universities) customers because their campuses offer a wide range of building types and energy use cases, including, among others, large multi-unit residential (dormitory); one- to four-unit residential housing; classrooms; cafeterias; coffee shops; gymnasiums; student centers; laboratories/research facilities; offices; garages; libraries; auditoriums, vehicle fleets. Higher education customers also allow for opportunities to make deep system changes that could potentially be harder to model in a different setting. This could include more cross-category projects such as Demand Response/renewables/EVs, whose combined impact would be more difficult to gauge for projects that are not at a contiguous site.

Due to the limited number of customers in the target market sector, this pilot will be open to all existing college/university customers that are accredited<sup>8</sup> institutions that have a multi-building campus. To be eligible, any submission must encompass the entire campus or, if there is more than one campus, may encompass the entire collection of campuses owned or operated by the college/university.

#### **Program Standards**

- Eligible customers are required to submit to the Program Manager a Decarbonization Plan, which may be done through a preferred technical consultant. The plan must encompass the entire campus (or collection of campuses if the applicant owns or manages more than one campus) and include all decarbonization solutions that can reasonably be implemented within a 3-year period. Additional longer-term solutions may also be included at the customer's discretion.
- Each included decarbonization solution must meet the Minimum Performance Standards ("MPS") of its specific equipment category. The relevant MPS for each such category shall be the most stringent of:
  - o Appendix A to the Large Energy Users Program Guide, or
  - o ASHRAE 90.1-2019.
- Upon receipt of the Decarbonization Plan, the Program Manager will have sixty (60) days to review the submittal and provide comments to the applicant. In addition to reviewing

<sup>&</sup>lt;sup>7</sup> The method for calculating tCO2e will be set forth in the Program Guide or other program documents.

<sup>&</sup>lt;sup>8</sup> Please refer to this site for a list of New Jersey's accredited institutions: https://www.nj.gov/highereducation/colleges/schools sector.shtml

the anticipated magnitude of GHG reduction, the Program Manager will evaluate the Decarbonization Plan as to the breadth and variety of the proposed scope of work, the expected useful life of the projects within that scope, and general cost effectiveness.

- Upon completion of its review, the Program Manager will reject or approve the Decarbonization Plan, and, if approved, commit the incentive.
- Decarbonization measures must be fully installed no later than three years from the approval of the Decarbonization Plan. The commitment may provide for one or more progress payments to be made during this timeframe to accommodate work as it is completed.
- Up to two extensions may be granted for a period of up to six months for good cause shown. If measures are not completed within the specified timeframe, the related incentive commitment will be forfeited.
- The Program Manager may, in its discretion, conduct site inspections of sites covered by a pending or approved application, including, among others, a pre-inspection and inspections at 50% completion and 100% completion.
  - The Program Manager may, in its discretion, require participants to submit monitoring and verification ("M&V") data and to otherwise reasonably cooperate with the Program Manager's evaluation of the participant's project and the pilot more generally.

#### Limitations/Restrictions

- Only those decarbonization measures implemented at existing buildings are eligible for incentives.
- Decarbonization Plans must address more than a single category of equipment (i.e., may not address an energy efficiency only project, a solar only project, an EV only project, etc.).
- Solar photovoltaic ("PV") systems may be considered as part of a Decarbonization Plan for the purpose of meeting program requirements, but any financial incentives for solar must be applied for through only the solar programs (i.e., not this Decarbonization Pilot).
- Limitation on lighting savings will be the same as stipulated in LEUP.
- Incentives shall only be available for solutions set forth in the approved Decarbonization Plan. However, for good cause shown, the Program Manager may allow solutions to be added after the initial approval of the Decarbonization Plan.
- Measures already installed or under construction prior to the approval of the Final Decarbonization Plan will not be considered for incentives and shall not be included in the Decarbonization Plan.
- For electric generating equipment, such as CHP, GHG reduction credit will be given only for energy produced <u>and</u> consumed on-site.
- While eligible customers are allowed to participate in other NJCEP or utility programs, it is recommended that all decarbonization solutions be included comprehensively through this pilot. Should a customer choose to participate in another NJCEP or utility program

such customer cannot and will not receive incentives from this pilot for the same equipment.<sup>9</sup> Should a customer nonetheless receive incentives or grants for GHG reductions from another NJCEP or utility program, the customer will be required to quantify and report those reductions to the Program Manager of this Decarbonization Pilot.

- The Board and its contractors reserve the rights in their absolute discretion to deny applications they deem for any reason to be unsuitable for this pilot.
- In the event this pilot receives more applications than permitted by the allocated budget, the Board and its contractors reserve the right to prioritize applications based on geographic location so that participation is spread across the state's investor-owned utilities service territories.

#### **Program Offerings and Incentives**

The pilot will offer two incentives:

- 1. An incentive to offset 100% of the cost of developing the Decarbonization Plan.
  - a. This incentive is variable and will require a submission of a Proposal, whether from the applicant or its preferred technical consultant, outlining the proposed fees and any other relevant costs associated with developing the Decarbonization Plan. The proposal and final incentive amount are subject to screening and approval by the Program Manager.
  - b. Proposals already accepted and/or underway at the time of application to NJCEP are not eligible for this incentive.
- 2. \$1,000 per tCO2e first year reductions based on the amounts set forth in the Decarbonization Plan.
  - a. This incentive is paid at completion of the approved decarbonization solutions.
  - b. As mentioned above, the commitment may in the Program Manager's discretion provide for one or more progress payments.
  - c. The incentive will be capped at the lesser of:
    - i. 75% of total project(s) cost (estimated or actual, whichever is less). Total project costs include material, labor, and generally accepted soft costs such as engineering and design, or
    - ii. \$5,000,000 per entity per FY for this pilot, determined by summing the commitments associated with each approved Decarbonization Plan made during the applicable FY.

Incentives are available on a first come, first served basis so long as funding is available.

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<sup>&</sup>lt;sup>9</sup> For the avoidance of doubt: (a) any and all solar projects shall be eligible to receive incentives only through the Board's solar program, not through this Decarbonization Pilot and (b) this Decarbonization Pilot does not in any way restrict its participants' ability to seek or receive federal incentives, tax credits, or loans.

#### **Quality Control Provisions**

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all program participants. All Decarbonization Plans are reviewed upon receipt to confirm compliance with eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of decarbonization measure qualification and incentive calculation. Applicant supplied information and Program Manager performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence. Pre- and/or post- inspections and quality control file reviews will be conducted, as required.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

#### Local Government Energy Audit

#### **Program Purpose and Strategy Overview**

The Local Government Energy Audit Program ("LGEA") Program was launched as part of NJCEP's portfolio in 2008 to provide financial incentives to cover the cost of having an energy audit performed on eligible facilities owned by eligible applicants consisting of municipalities, school districts, 501(c)(3) nonprofits, and other local and state government entities ("Applicant" or "Applicants").

The goal of the energy audit is to provide Applicants with information on how their facilities use energy, identify ECMs that can reduce energy use, and put Applicants in a position to implement the ECMs. The energy audits also help guide Applicants towards appropriate incentive programs to help reduce costs associated with implementing the ECMs.

The program is also used as a means of qualifying applicants for other relevant initiatives, most notably the Energy Savings Improvement Program ("ESIP") and Sustainable Jersey's municipal and school programs. Collaboration with these programs can provide cost-effective benefits to these publicly funded facilities while helping to achieve mutual goals.

#### Support for Energy Master Plan Goals and Strategies

The LGEA Program will support many of the EMP's strategies and goals, including, among others, the following:

- Goal 1.1.6 (Continue to improve NJ TRANSIT's environmental performance).
- Primary Goal 3.1 (Increase New Jersey's overall energy efficiency).
- Primary Goal 3.3 (Strengthen building and energy codes and appliance standards), especially its Goal 3.3.5 (Improve energy efficiency in, and retrofit state buildings to, a high performance standard).
- Primary Goal 4.1 (Start the transition for new construction to be net zero carbon), especially its Goal 4.1.1 (Electrify state facilities).

### **Program Description**

This program is implemented as follows:

- The Applicant will submit an application to the program identifying basic facility information such as, building type, square footage, and recently implemented ECMs, as well as the reason(s) for requesting an energy audit;
- A case manager will assist the Applicant in determining the audit path that best addresses the Applicant's needs (as described below);

- Available energy audit paths include:
  - ASHRAE Level I audit<sup>10</sup>;
  - o ASHRAE Level II audit; and
  - o Add-on scope audits as provided for in the LGEA Program Guide or application materials (e.g., a more detailed review of an existing or potential RE system, a deeper feasibility assessment for rooftop PV system, or certifying a building as having met ENERGY STAR requirements). 11

Each level of audit would also include a high-level feasibility assessment for EV charging stations.

- When an Applicant is enrolled in LGEA and participating in any NJCEP and/or utilitymanaged energy efficiency programs at the same time for the same facility(ies), the Program Manager will assess the impact the work may have on the energy audit and require the Applicant take one of the following actions within a determined timeframe, depending on the level of impact:
  - o Proceed with energy audit and equipment upgrades (minimal impact);
  - o Complete equipment upgrades prior to proceeding with energy audit process or vice versa (moderate impact); or
  - o Cancel energy audit application (significant impact).

Level I – Walk-through Assessment – Assess a building's energy cost and efficiency by analyzing energy bills and conducting a brief survey of the building. A Level I energy analysis will identify and provide a savings and cost analysis of low-cost/no-cost measures. It will also provide a listing of potential capital improvements that merit further consideration, along with an initial judgment of potential costs and savings.

Level II - Energy Survey and Analysis - This includes a more detailed building survey and energy analysis. A breakdown of energy use within the building is provided. A Level II energy analysis identifies and provides the savings and cost analysis of all practical measures that meet the owner's constraints and economic criteria, along with a discussion of any effect on operation and maintenance procedures. It also provides a listing of potential capitalintensive improvements that require more thorough data collections and analysis, along with an initial judgment of potential costs and savings. This level of analysis will be adequate for most buildings and measures.

Level III – Detailed Analysis of Capital-Intensive Modifications – This level of analysis focuses on potential capitalintensive projects identified during Level II and involves more detailed field data gathering and engineering analysis. It provides detailed project cost and savings information with a high level of confidence sufficient for major capital investment decisions.

<sup>&</sup>lt;sup>10</sup> From the ASHRAE Handbook:

<sup>&</sup>lt;sup>11</sup> For the avoidance of doubt, the add-on scope audits must be added on to a standard eligible audit and cannot be a standalone study.

- If the initial program eligibility and application requirements have been met and the Applicant is approved to have an energy audit performed under this program, the Program Manager will issue an Approval Letter/Notice to Proceed to the Applicant.
- In order to provide increased visibility for energy savings project potential, the energy audit scope will include an evaluation of energy related water conservation measures (which may also be included in standard audit scopes), demand response potential, and estimated GHG reduction for each recommended measure.
- After verifying all program requirements have been met, the Program Manager will perform the audit, prepare an audit report, and notify the Applicant when the audit report is completed. Additionally, the Program Manager may meet in person or conduct a web/phone conference with the Applicant to discuss audit findings and next steps for implementing measures recommended in the report.

The LGEA will provide audits up to a value of \$150,000 per fiscal year, per Applicant.

- In applying the foregoing cap to state entities, LGEA will treat each State Agency and Department as a separate entity but subject the group of State Departments (defined as all those entities using Tax ID: 21-6000928) to an overall cap of \$450,000 per fiscal year, which overall cap may, with the approval of Board Staff, be increased up to a maximum of \$1,000,000. 12
- For larger Applicants interested in pursuing ESIP (by selecting intent to pursue ESIP on the application), if the audit cost exceeds or is expected to exceed \$150,000, the Program Manager will work with the Board Staff to determine and authorize a larger cost cap, not to exceed \$300,000.
- For non-profit 501(c)(3) healthcare entities, the Program Manager will work with Board Staff to determine and authorize a larger cost cap, not to exceed \$300,000, so long as the funds exceeding the initial \$150,000 would be for auditing facilities designated as hospitals by the NJ Department of Health ("DOH").

# **Target Markets and Eligibility**

LGEA is open to the following eligible entities that contribute to the SBC through either their gas and/or electric utilities:

- "State contracting agency" as defined by N.J.S.A. 52:34-25;
- "Public agency" as defined by N.J.S.A. 52:35A-1;
- Local governments per Local Public Contracts Law (N.J.S.A. 40A:11-1);
- Local governments per Public School Contracts Law (N.J.S.A. 18A:18A-1);
- County colleges per County College Contracts Law (N.J.S.A. 18A:64A-25.1);
- NJ State Colleges or State Universities per State College Contracts Law (N.J.S.A. 18A:64-52); and
- Non-profit charitable organizations per Section 501(c)(3) of the Internal Revenue Code

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<sup>&</sup>lt;sup>12</sup> The Tax ID is provided to TRC by the New Jersey Department of Treasury ("Treasury"), which Treasury uses to qualify the State Agency or Department.

Applicants may apply for an energy audit for buildings they own. A building may still be eligible if the Applicant leases the building and provides supporting documentation from the building owner authorizing the energy audit before it is performed.

Buildings must demonstrate an average demand of 200kW or greater in the most recent twelve (12) months of electric utility bills (inclusive of all accounts in the building) in order to qualify to participate in LGEA. The Program Manager will have the ability to grant exceptions to the kW requirement, on a per building basis, if the Applicant can demonstrate it meets at least one of the following criteria:

- 1. ESIP is an anticipated source of funding;
- 2. Master metering or campus metering arrangement on-site, where average demand of any single building is unknown; or
- 3. The unavailability or inapplicability of other NJCEP or utility-sponsored energy efficiency programs at this time due to facility type or measure type.

For #2 and #3 above, the Applicant must provide a detailed explanation as to how it meets the criteria for the claimed exception.

LGEA is available to buildings never previously audited under the Program, as well as buildings that have received an audit no less than three years earlier (measured from the audit report approval date). All program requirements must be met in order for an entity to qualify for a second energy audit.

# **New Construction Energy Efficiency Program**

### **New Construction Program**

#### **Program Purpose and Strategy Overview**

The New Construction Program is designed to increase energy efficiency and environmental performance, as well as simplify the customer experience and application process for all new construction buildings in New Jersey, including single family homes, townhomes, multifamily dwellings, commercial buildings, and industrial buildings. The NCP's long-term objective is to transform the new construction market into one in which most new buildings in the State will be "net zero energy." <sup>13</sup>

NJCEP's new construction programs that existed prior to the launch of the present NCP<sup>14</sup> consisted of different programs for each market segment. This created confusion in the marketplace and barriers to participation, especially for multipurpose buildings. The NCP will replace NJCEP's legacy new construction programs on a reasonable, predetermined schedule, which will be provided to stakeholders and the public in an effort to ensure an orderly and smooth transition.

#### The NCP is designed to:

1. **Broaden and Expand the Scope of Energy Savings**: Introduces Passive House Institute ("PHI") and Phius standards. <sup>15</sup> Eliminates single-measure incentives and instead requires a bundle of at least two ECMs to drive deeper energy savings. Includes a rigorous and sophisticated High-Performance Pathway.

2. Support Electrification and the Reduction of GHG Emissions: Introduces a GHG reduction initiative that is easy to understand and participate in and which will, among

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<sup>&</sup>lt;sup>13</sup> A net zero energy building is one that generates sufficient clean renewable energy to meet its total energy consumption need.

<sup>&</sup>lt;sup>14</sup> I.e., the RNC, SmartStart NC, P4P-NC, and CTEEP NC Programs. This NCP section will hereinafter refer to each of those expiring programs as "Legacy" programs, e.g., the "Legacy RNC Program."

<sup>&</sup>lt;sup>15</sup> Passive House Institute is an independent research institute whose mission is to further the development of the Passive House concept. The Passive House concept is described in more detail in the Passive House subsection of the Program Description and Strategy Overview section below. Phius is an organization that certifies building professionals, standards, buildings, and products as Passive House. See <a href="https://www.phius.org/">https://www.phius.org/</a>.

- other things, help prepare the market for electrification and decarbonization as outlined in the EMP. This in turn will encourage participation in the Solar Programs.
- 3. Create a Single Point of Entry and Eliminate Market Gaps: Implements a new streamlined program for all new construction buildings that, among other things, eliminates potentially confusing overlaps in the multifamily market and eliminates the need for multiple program applications for mixed-use buildings. Provides an entry point for every type of project from single-family homes incorporating a small bundle of ECMs, to large industrial buildings incorporating many ECMs, calculated through sophisticated modeling.
- 4. **Optimize Program Process Flow**: In addition to the benefits of the single point of entry described above, the use of well-known, widely used standards and programs sponsored by third parties, such as Leadership in Energy and Environmental Design ("LEED") and USEPA's ENERGY STAR®, often referred to collectively as "Proxies," simplifies and will increase participation because the processes they use have been refined over the years and because many program participants, their contractor/consultants, or both, are familiar with those processes.
- 5. **Increase Equity and General Participation**: Provides equitable access to programs for projects located in Low- and Moderate-Income ("LMI") census tracts, income-qualified Affordable Housing, <sup>16</sup> and Urban Enterprise Zones/Opportunity Zones ("OZs") through enhanced incentives, targeted outreach, and other initiatives. <sup>17</sup> Promotes and supports professional growth among those in the EE and RE industries, especially with regard to LEED and Passive House projects.
- 6. **Inform Code Development and Support Code Compliance**: By encouraging program participants to achieve deeper energy savings and GHG reductions than do current building energy codes, and by gathering data and experience regarding same, the new program may help to inform and advance the development of future codes.

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<sup>&</sup>lt;sup>16</sup> See the following webpages for the identification of and more information about UEZs, and OZs: New Jersey Opportunity Zones Resource Center (nj.gov), and NJ Division of Taxation - Urban Enterprise Zone. "Affordable Housing" means any housing that an official document identifies as participating in a federal, state, or local affordable housing program. This may also include official documents showing identification from the New Jersey Housing and Mortgage Finance Agency, United States Low Income Housing Tax Credit (LIHTC), and United States Housing and Urban Development (HUD).

 $<sup>^{17}</sup>$  LMI is defined in consultation with Board Staff and is set forth in the Program Guide, applications, and/or other program documents.

#### Support for Energy Master Plan Goals

The NCP will support many of the EMP's strategies and goals, including, among others:

- Primary Goal 3.1 (Increase New Jersey's overall energy efficiency).
- Primary Goal 4.1 (Start the transition for new construction to be net zero carbon).

In addition, the NCP will support the Executive Order 316 target to electrify commercial and residential buildings in an additional 400,000 homes and 20,000 commercial properties, and to make an additional 10% of all LMI properties electrification-ready by 2030. 18

#### **Target Market and Eligibility**

New construction or buildings undergoing substantial renovation (also known as "gut rehab") of all types (e.g., single family, townhome, multifamily, commercial, and industrial) are eligible to participate in the NCP, so long as their utility bills include or will include contributions to the Societal Benefits Charge ("SBC").

The target market for the NCP is builders, developers, and program partners (e.g., program-approved energy consultants, architects, engineers, and Raters, <sup>19</sup> collectively, "Partners").

Any EE measures included in, or as part of, an application to the NCP will not be eligible for incentives under any other NJCEP energy efficiency or New Jersey utility-sponsored EE programs.

A substantial renovation project may be eligible for a utility-sponsored energy efficiency program, as well as for this NCP. In those circumstances, the applicant will be able to choose which program it will utilize. The applicant submitting such a project will be able to choose only one program to cover a specific ECM or piece of energy efficient equipment, e.g., the applicant can choose to receive an incentive for a heat pump hot water heater from either this NCP or a utility-sponsored program, not from both programs.

# **Program Description and Delivery Methods**

The NCP offers three pathways to earn incentives: **Bundled, Streamlined,** and **High-Performance**. Each pathway includes a different set of Program requirements, and each will

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<sup>&</sup>lt;sup>18</sup> Exec. Order No. 316 (Feb. 15, 2023), 55 N.J.R. 510(a) (Mar. 20, 2023).

<sup>&</sup>lt;sup>19</sup> A "Rater" is an energy professional who oversees the energy efficiency work completed by participating builders and developers. Raters are typically certified by third party organizations. By way of example, a Rater may be certified (a) as a Home Energy Rating System ("HERS") Provider approved by an EPA-Approved Verification Oversight Organization ("VOO"), or (b) as a Modeler approved by an EPA-Approved Multifamily Review Organization ("MRO").

provide incentives for projects meeting those requirements. The incentives will largely be calculated based on the square footage of the building covered by the applicant's submission to this NCP. Immediately below is a summary of the requirements for each pathway:

- 1. The **Bundled Pathway** requires the implementation of a bundle of relatively typical above-code ECMs. Eligible ECMs under this pathway consist primarily of electric efficiency equipment, as well as efficient building envelope<sup>20</sup> and insulation measures.
- 2. The **Streamlined Pathway** encourages deeper energy savings than the Bundled Pathway but requires less time and expense than the High-Performance Pathway described below. Although it requires some modeling of ECMs, the modeling is performed in a web-based user interface that requires minimal inputs and generates quick and accurate projected savings.
- 3. The **High-Performance Pathway** encourages the deepest energy savings by requiring that applicants take a whole-building approach and either exceed code requirements by a certain percentage or meet one of several sets of stringent technical standards set by Proxies for new construction. This pathway largely replaces the Legacy RNC and P4P NC Programs.

Not all pathways are available to all building types. Building types are determined by using the EPA Multifamily New Construction ("MFNC") Program Decision Tree, located in <u>Appendix B</u>, *Multifamily Decision Tree*. If a building does not fall into the Single-Family New Homes ("SFNH") or MFNC categories, the project will be considered Non-residential for all purposes

<sup>&</sup>lt;sup>20</sup> "Building envelope" is the part of a building that separates conditioned from unconditioned spaces; it includes things such as doors, windows, walls, and siding.

relevant to this NCP section. The table below outlines which pathway(s) may be used by which building type(s):

Table 1: Eligibility for Pathways by Building Type

New Construction Program - Eligibility								
	Building Type							
	Resid	Non- Residential						
Program Pathways	Single Family or Townhome	Multifamily	Non- residential					
Bundled	n/a	n/a	Υ					
Streamlined	n/a	n/a	Υ					
High-Performance Pathway Non-Proxy	n/a	n/a	Υ					
High-Performance Pathway LEED V4.1	n/a	n/a	Υ					
High-Performance Pathway ENERGY STAR	Υ	Υ	n/a					
High-Performance Pathway  DOE Zero Energy Ready Home	Υ	Υ	n/a					
High-Performance Pathway: PHIUS Core, Zero or Core REVIVE 2021; PHI V10 Classic, Plus, or Premium	Y	Y	Y					

Applicants must submit their applications prior to commencing the construction or installation of the measures covered by their applications. Applicants are encouraged to apply prior to or during the early design stage, which will provide a meaningful opportunity for the Program to work with the applicant to achieve deeper savings.

In addition to the above-described pathways, the NCP includes a **Workforce Development** component, described in more detail below. The Workforce Development component provides incentives for the recruitment and training of new energy professionals and Partners to oversee the energy efficiency work completed by participating developers and builders, as well as designers and tradespeople with the specialized training and skills to design and install the ECMs.

#### Partner Network

This market-based Program relies on a network of Partners. Partners work under contract with builders and developers, acting as their "energy expert," and are required to strictly follow Program requirements. Partners must be reviewed and approved by the Program Manager to be allowed to work within the Program. They may be approved to work under a single or several pathways.

#### **Program Requirements**

The NCP's three pathways provide New Jersey's builders and developers with a range of participation options to suit different levels of effort and experience with energy efficient design. Minimum energy performance requirements across all pathways are measured from IECC 2018/2021 or ASHRAE 90.1-2016/2019<sup>21</sup> energy code baselines. Therefore, the pathways all result in energy performance better than that required by the applicable IECC or ASHRAE code, i.e., the applicable New Jersey energy codes. The following sets out additional details regarding each pathway.

#### **Bundled Pathway**

Applicants applying through this pathway must select from a list of prescriptive measures set forth in the applicable Table 2 or Table 3 below. 22 Eligible ECMs under this pathway consist primarily of electric efficiency equipment, as well as efficient envelope and insulation measures. To qualify for an NCP incentive, an applicant must select a minimum of two measures from the Bundled Pathway Credits Table applicable to its Climate Zone ("CZ") and meet or exceed the applicable Minimum Points Required for its building type, as set forth in the applicable table. The Program Manager may modify either or both of the foregoing requirements for any type of building for which only a single type of measure (e.g., only a heat pump water heater) can be implemented.

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<sup>&</sup>lt;sup>21</sup> Unless otherwise expressly set forth in this NCP section, 2018/2021 and 2016/2019 means whichever is applicable dependent on the date of the project's building permit.

<sup>&</sup>lt;sup>22</sup> A similar table applicable to Indoor Agriculture is under development. Subject to the approval of Board Staff, such table may be posted on the NJCEP website and included in other Program materials, and the Program Administrator may provide incentives described in this Compliance Filing to applicants that satisfy the criteria in that table.

Table 2: Bundled Pathway Credits, CZ 4A

	Bundled Pathway Credits, Climate Zone 4A										
Measure Energy Credit A	Energy Credit Abbreviated	Addendum	Dormitory or Retirement	Healthcare	Hotel or Motel	Office	Restaurant	Retail	School or Education	Warehouse or Storage	Other
ID	Title	AP Section				Minii	mum Points Re	quired			
			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	0	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	SHW 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	SHW 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	×	×	×	×

<sup>1.</sup> 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.

<sup>2. &</sup>quot; $\underline{x}$ " means the applicable type of building earns no points for the applicable measure.

Table 3: Bundled Pathway Credits, CZ 5A

Measure	Energy Credit Abbreviated		Dormitory or Retirement	Healthcare	Hotel or Motel	Office	Restaurant	Retail	School or Education	Warehouse or Storage	Other
ID	Title	Section				Minim	um Points Rec	luired			
			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	<u>×</u>	13
W01	SHW 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	SHW 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	×	×	×	×

<sup>1.</sup> 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.

<sup>2. &</sup>quot; $\underline{x}$ " means the applicable type of building earns no points for the applicable measure.

By way of example, an applicant constructing a dormitory in CZ 4A and implementing only Measure ID E03 (Envelope Leakage Reduction) would earn 47 points but would not qualify for an incentive because it failed to select the required minimum of two measures. However, if the applicant added Measure ID H02 (Heating Efficiency (*electric only*)), it would qualify because it was implementing the required minimum of two measures and earning 51 points, an amount greater than the 30 Minimum Points Required.

The NCP incorporates, by reference, the requirements for each measure as set forth in ASHRAE 90.1-2019, Addendum AP ("Addendum AP"), <sup>23</sup> the document from which the above Tables were drawn. <sup>24</sup>

#### Streamlined Pathway

For an applicant utilizing this pathway, the Program will provide access to, through an online portal or similar means, a relatively simple modeling tool, Sketchbox, to enter data about its project and the project's ECMs.<sup>25</sup> The applicant will be eligible for NCP incentives if Sketchbox calculates that the ECMs will achieve site energy savings at least 5% above code.

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<sup>&</sup>lt;sup>23</sup> As approved by the ASHRAE Standards Committee on July 20, 2022; by the ASHRAE Board of Directors on August 15, 2022; by the Illuminating Engineering Society on September 8, 2022; and by the American National Standards Institute on September 9, 2022. If Addendum AP is updated or otherwise revised, the relevant sections of this Compliance Filing (including, without limit, the tables above) may, with the approval of Board Staff, be revised to reflect such updates or other revisions.

<sup>&</sup>lt;sup>24</sup> The Tables in this Compliance Filing do not include every measure included in Addendum AP. For the avoidance of doubt, NCP incentives will not be paid for measures that are not included in the Tables in this Compliance Filing. In addition, the applicable Program Guide may further limit the scope of equipment eligible for incentives.

<sup>&</sup>lt;sup>25</sup> Sketchbox estimates performance by incorporating select rules from both ASHRAE 90.1-2016/2019, Section 11 (Energy Cost Budget Method) and Appendix G of ASHRAE 90.1-2016/2019 (Performance Rating Method).

The following types of buildings are currently capable of being entered into Sketchbox and are thereby potentially eligible for incentives through this pathway<sup>26</sup>:

Table 4: Building Types Eligible for Streamlined Pathway

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
Gymnasium	Religious building
Health-care clinic	Retail
Hospital	School/university
Hotel	Transportation
Library	Warehouse

Further, the Program Guide<sup>27</sup> and/or other Program documents may limit eligibility beyond the requirements set forth in this Compliance Filing. By way of example, buildings with more than three building shells and/or with different types of HVAC systems are required to seek and obtain the Program Manager's approval to participate in this pathway, and certain conditions may be imposed on the application. In addition, the Program documents may impose stricter requirements for certain ECMs than those set forth in this Compliance Filing, including, among others, those related to natural gas equipment.

Eligible measures in this pathway include, for example, reduced lighting power density, improved HVAC equipment efficiency, improved vertical fenestration U-value, air-side economizer, depth of vertical fenestration overhangs, and demand-controlled ventilation.

Each project must address each of the following building systems: envelope, heating, cooling, and lighting. The Program Manager may, however, grant exceptions to substantial renovation projects for which the applicant establishes that it considered measures for the subject system but reasonably determined it would not be practicable to implement any measures for that system. The

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<sup>&</sup>lt;sup>26</sup> If Sketchbox is updated or otherwise revised, the table of eligible building types may, with the approval of Board Staff, be revised to reflect such updates or other revisions.

<sup>&</sup>lt;sup>27</sup> The Program Guide is a document that provides guidance regarding applying to and complying with the program; it can be accessed through <a href="https://njcleanenergy.com/">https://njcleanenergy.com/</a>.

Program Manager may also except buildings that are not heated from the requirement to include a heating measure and buildings that are not cooled from the requirement to include a cooling measure.

#### High Performance Pathway

Applicants applying through this pathway must either (a) perform whole-building energy modeling to demonstrate savings beyond code ("ASHRAE Modeling Approach") or (b) have their project building certified through well-known, nationally recognized Proxies, all as described in more detail below.

#### ASHRAE Modeling Approach (aka "non-Proxy")

The ASHRAE Modeling Approach requires applicants to optimize a project's design by using approved energy modeling software to evaluate the savings from ECMs as compared to a design that merely meets the applicable baseline building code. The list of approved software will be based on the software requirements outlined in ASHRAE 90.1, Section 11 or Appendix G of ASHRAE 90.1, it may also include other software approved by the Program Manager.

An applicant must develop a Proposed Energy Reduction Plan ("ERP") for each project. The Proposed ERP must detail a set of measures that will achieve the minimum performance target; it is subject to review and approval by the Program Manager. After the ERP is approved, the applicant must construct its project and provide an As-Built ERP, along with a Commissioning Report, <sup>28</sup> to demonstrate that the ERP measures are installed and functioning.

The minimum performance target is 5% site energy savings compared to the baseline. The model baseline is established using Appendix G of ASHRAE 90.1-2016/2019. Measures must be modeled as interactive improvements to the baseline in Appendix G of ASHRAE 90.1-2016/2019.

Each project must address each of the following building systems: envelope, heating, cooling, and lighting. The Program Manager may, however, grant exceptions to substantial renovation projects for which the applicant establishes that it considered measures for the subject system but reasonably determined it would not be practicable to implement any measures for that system. The Program Manager may also exempt buildings that are not heated (e.g., a refrigerated warehouse) from the requirement to include a heating measure and buildings that are not cooled (e.g., an unrefrigerated warehouse) from the requirement to include a cooling measure.

#### **LEED**

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Applicants using this approach must submit documentation establishing that (a) they have satisfied the requirements for LEED certification utilizing either the V4.1 Building Design & Construction ("BD&C") or the Interior Design & Construction ("ID&C") rating systems, and (b) their projects achieve the minimum point values for *EAc2 Optimize Energy Performance Points for Option 1*, as shown in Table 5 below.

<sup>&</sup>lt;sup>28</sup> An As-Built ERP depicts the ECMs as they were actually installed as compared to what was in the ERP; a Commissioning Report reports the steps taken to test and, if necessary, adjust the ECMs to confirm they are operating and performing as designed.

*Table 5: LEED Point Requirements.* 

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					

#### **US EPA ENERGY STAR Program**

Applicants using this approach must submit documentation establishing that they have satisfied the requirements for ENERGY STAR certification utilizing the applicable ENERGY STAR program, either the SFNH or the MFNC Program, subject to the restrictions and conditions set out below.<sup>29</sup> For buildings and projects using this approach, the Decision Tree set forth in this Compliance Filing at <u>Appendix B</u>, *Multifamily Decision Tree*, will be used to determine which ENERGY STAR Program governs the application.

#### ENERGY STAR SFNH Program

Applicants must satisfy the requirements for ENERGY STAR certification utilizing the Performance Path by way of the Energy Ratings Index ("ERI"). Compliance will be based upon ENERGY STAR Version 3.2.

#### ENERGY STAR MFNC Program

Applicants must satisfy the requirements for ENERGY STAR certification utilizing the Performance Path by way of the ERI or ASHRAE pathways. The applicant can choose to base its application on compliance with either ENERGY STAR MFNC Version 1.1 or ENERGY STAR MFNC Version 1.2. Projects using ENERGY STAR MFNC Version 1.1 and following the ERI path must also demonstrate at least 10% site energy savings as compared to the IECC 2021 code baseline. Projects following the ASHRAE path must demonstrate at least 15% site energy savings as compared to the ASHRAE 90.1-2019 baseline.

<sup>&</sup>lt;sup>29</sup> For the avoidance of doubt, projects that choose to utilize ENERGY STAR's Prescriptive Path(s) are not eligible for NCP incentives at this time.

#### US DOE Zero Energy Ready Home ("ZERH") Program

Applicants must satisfy the requirements for the ZERH certification following the applicable version of the program, which is determined in accordance with the DOE ZERH – Program Versions and Implementation Timelines currently available here: <a href="https://www.energy.gov/eere/buildings/doe-zero-energy-ready-home-zerh-program-requirements">https://www.energy.gov/eere/buildings/doe-zero-energy-ready-home-zerh-program-requirements</a>. Projects whose building permits are issued under IECC 2021 and whose submissions are based upon compliance with ZERH Version 1 must also demonstrate at least 10% site energy savings as compared to the IECC 2021 code baseline or at least 15% site energy savings as compared to the ASHRAE 90.1-2019 baseline.

#### **Passive House**

PHI and Phius have developed design principles for attaining a rigorous level of energy efficiency while also creating comfortable indoor living spaces. Passive House focuses on continuous insulation, airtight construction, optimized windows, balanced ventilation, and minimal mechanical systems. PHI and Phius facilitate electrification of the entire building. Applicants using this approach must submit documentation establishing that they have satisfied the requirements of either (a) PHI Classic, Plus, or Premium Version 10 or (b) Phius Core 2021, Phius Zero 2021, or Phius Core Revive 2021.

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### **Incentives**

# **Project Incentives**

Project incentives are as set forth in Table 6 and Table 7, subject to the Notes immediately below the tables. Incentives will be paid after construction/installation has been completed, the as-built documentation and construction have been approved by the Program Manager, and any applicable NJCEP QA/QC has been successfully completed.

Table 6: Base and GHG Reduction Incentives

	Incentives			
		GHG Reduction Bonus		
Pathway	Incentive Rate (\$/sqft)	Tons CO2e per kSF	\$/sqft	
Bundled	\$0.25	n/a	n/a	
Streamlined	\$0.50			
High-Performance Non-Proxy	\$1.00	0.7 - 0.99 tons \$0.		
High-Performance LEED V4.1	\$1.00			
High-Performance ENERGY STAR	\$1.00		\$0.25	
High-Performance  DOE Zero Energy Ready Home	\$1.75	1.0 - 1.99 tons 2.0 - 2.99 tons 3.0+ tons	\$0.50 \$1.00 \$1.50	
High-Performance (choose one):  PHIUS Core 2021  PHIUS Zero 2021  PHIUS CORE REVIVE 2021  PHI Classic V10  PHI Plus V10  PHI Premium V10	\$2.50			

Table 7: Additional Incentives

Incentives			
	Additional Incentive Rate (\$/sqft)		
Pathway	Affordable Housing (residential)	UEZ/OZ (non-residential)	Industrial/High Energy Intensity (non-residential)
Streamlined	n/a	+\$0.15	+\$0.60
High-Performance	+ \$0.25	+ \$0.25	+\$1.00

#### Notes to Table 6 and Table 7:

For Single Family Homes and Townhomes:

- 1. The minimum floor for calculating incentives will be 2,000 sqft, even if the subject home is less than 2,000 sqft. By way of example only, a 1,500 sqft home that qualified for an ENERGY STAR incentive would be paid a base incentive of \$2,000 (2,000 sqft x \$1/sqft). It might also be eligible for a GHG reduction incentive or Additional Incentive, each of which would, if earned, be calculated as if the home were 2,000 sqft.
- 2. The maximum ceiling for calculating incentives will be 4,000 sqft, even if the subject home is greater than 4,000 sqft. By way of example only, a 5,000 sqft home that qualified for an ENERGY STAR incentive would be paid a base incentive of \$4,000 (4,000 sqft x \$1/sqft). It might also be eligible for a GHG reduction incentive or Additional Incentive, each of which would, if earned, be calculated as if the home were 4,000 sqft.

# Workforce Development Reimbursement

The Workforce Development Incentive offers up to 100% reimbursement for successful completion of pre-approved trainings and certifications for persons who live in New Jersey, whose principal place of work is in New Jersey, or who have another nexus to New Jersey as approved by the Program Manager and Board Staff.

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The Program will reimburse up to \$2,000 per person per course, with a limit of two courses per person per Fiscal Year. Eligible topics are described below in Table 8; specific courses and certifications within those topics will be eligible for reimbursement only if the Program Manager has approved the specific course or certification prior to the application for reimbursement.

Table 8: Eligible Topics

PHI Certified Passive House Designer	PHI Certified Passive House Tradesperson
Phius Certified Consultant (CPHC)	Phius Certified Rater, Phius Certified Verifier
Phius Certified Builder (CPHB)	RESNET HERS Rating Field Inspector (RFI)
RESNET HERS Rater	RESNET HERS Modeler
LEED Green Associate	LEED AP (BD+C and ID+C only)
AEE's Building Energy Simulation Analyst (BESA)	AEE Certified Building Commissioning Professional (CBCP)
ASHRAE Building Energy Modeling Professional (BEMP)	[ENERGY STAR New Homes or MFNC Rater Certification
Other courses/certifications may be considered case	se-by-case if the applicant can demonstrate that the

Other courses/certifications may be considered case-by-case if the applicant can demonstrate that the course/certification will support participation in the NCP.

### Cooperative Marketing

The Cooperative Marketing Incentive offers cost-sharing for pre-approved advertising placed by contractors participating in the New Construction Program. The cost sharing is 50% of the cost of advertising, which may consist of print (newspaper, magazine, newsletter), yellow pages, direct mail, television, radio, web banner (digital), signage, billboard, and social media. In addition, other types of advertising may be approved on a case-by-case basis, if the applicant can demonstrate its relative cost-effectiveness and benefits to NJCEP. The fiscal year cap per Partner is \$50,000. Partners seeking to utilize the program should contact coop@NJCleanEnergy.com.

# **Expirations & Extensions**

The Program will issue commitment letters that include the amounts of incentives committed to specific projects ("Commitment Letters"), in accordance with schedules and procedures set forth in other Program documents. The incentive commitments will be valid for one year for Bundled Pathway projects and three years for Streamlined and High-Performance Pathway projects, in all cases measured from the date of the Commitment Letter. The Program Manager may, for good cause shown, extend the initial commitment period for up to two additional six-month periods. Further, the Program Administrator may approve up to two extensions, each of a length set by the Program Administrator with the approval of Board Staff, beyond the extensions the Program Manager is authorized to approve.

# **Quality Control Provisions**

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all NCP applications. All applications received are reviewed to confirm compliance with eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of measure qualification and incentive calculation. Applicant supplied information and project technical data are entered into a database. Electronic files are created for all documents and for ongoing project correspondence.

The Program Administrator quality control staff will perform and/or oversee pre- and post-construction inspections, conduct technical reviews of submissions, and perform file reviews on a sampling of applications prior to incentive payments, based upon pre-determined, random sampling percentages, which may account for the applicant's, or its contractors/consultants', track record with the Program.

TRC will utilize the Contractor Remediation Procedures, as necessary or appropriate, to address significant performance or other problems.

# New Construction Program: Garden State Challenge Pilot

# **Program Purpose and Strategy Overview**

The Garden State Challenge ("GSC") is a pilot program that supports the design and development of innovative, sustainable, and energy efficient new construction buildings. The GSC's goals are directly aligned with New Jersey's aggressive efficiency and decarbonization goals as laid out in the EMP, and as described in more detail below. The GSC will provide development and construction support for advanced building designs that take especially significant strides toward a carbon-free future. The GSC recognizes the benefits of collaborating with the private sector to innovate and test non-traditional standards or designs which are critical to meeting our aggressive climate goals.

The state needs large scale adoption of low- to no-carbon new construction buildings to advance the market and to achieve its decarbonization goals. In line with the fast-approaching carbon reduction deadlines of the EMP, the recipient(s) of the Garden State Challenge will work to set precedent in reaching for a carbon-neutral future. As replicable examples, the challenge winners will lay the groundwork to inspire low- to no-carbon new construction buildings to become industry standard. The GSC encourages design teams to design and test theories outside of traditional construction methods to encourage quicker and more efficient designs and construction.

The GSC creates a statewide building competition which will provide incentives for efficient and replicable designs in specified building categories. The GSC's requirements support the following goals:

- Inspire the market to take bigger steps towards a carbon-free future by:
  - o Incorporating measures that accelerate achievement of the EMP's goals.
  - Displaying financial feasibility to design and build low- to no-carbon emitting buildings.
  - o Fostering and supporting the advancement of building codes.
- Provide environmentally friendly buildings that represent the pinnacle of building design by:
  - o Complementing the surrounding environment and ecosystem.
  - o Providing superior comfort & functionality.
- Promote designs to give buildings a competitive edge in the marketplace through:
  - o Enhanced health & safety.
  - Expedited construction duration.
  - o Resiliency.

# Support for EMP Goals and Strategies

The GSC will support many of the EMP's strategies and goals, including, among others, the following:

- Primary Goal 2.1 (100% clean power by 2050), especially its Goal 2.1.1 (Meet the 50% Renewable Portfolio Standard by 2030 and explore possible regulatory structures to enable New Jersey to transition to 100% clean energy by 2050);
- Primary Goal 3.1 (Increase New Jersey's overall energy efficiency);
- Primary Goal 4.1 (Start the transition for new construction to be net zero carbon);
- Primary Goal 7.1 (Grow world-class research and development and supply chain clusters for high-growth clean energy sub-sectors); and
- Goal 7.2.3 (Establish vocational training to establish a pipeline of well-qualified, modern energy specialists).

# **Program Description**

The Garden State Challenge is a competition with monetary awards distributed in three successive rounds of the building design process and upon construction completion. Designs should represent buildings that will be aesthetically pleasing, low to no-carbon, will provide superior comfort, enhance health and safety, be replicable and quicker to construct than other comparable buildings, and most importantly, inspire the industry to promote and ultimately achieve New Jersey's strategy for 100% Clean Energy by 2050.

Applicants are expected to be teams of forward-thinking architects, engineers, developers, builders, undergraduate or graduate students who take pride in leading the new construction market. Related incentives are set out below in this GSC section.

Successful applicants' teams must demonstrate the following:

- Competence in carbon-neutral-ready design that is coupled with architectural design quality and innovation;
- Ability to deliver high quality, cost-effective, easily constructed, functional, carbon-neutral-ready, and resilient buildings at competitive costs;
- How their projects generate interest in and demand for the design and construction of carbon-neutral-ready and resilient buildings; and
- Their commitment to share information related to the project's design, costs, and performance.

# **Target Markets and Eligibility**

Eligible projects include only those at the schematic or early design drawing stage of a ground-up new construction project, as those stages are most amenable to incorporating new ideas. The GSC will accept and make awards<sup>30</sup> in each of four Building Categories: Commercial, Industrial, Institutional, and Lodging/Residential. The Program Guide and/or other program documents will provide more details as to which buildings are encompassed in these Building Categories.

Applicants may submit more than one application.

 $<sup>^{30}</sup>$  Subject to the terms and conditions set forth in this Compliance Filing and/or other program documents.

Projects having an active incentive commitment from any other NJCEP program are not eligible to participate in GSC, and any projects that receive an incentive award from GSC are not eligible to participate in any other NJCEP programs.

# **Program Delivery Method, Standards, and Incentives**

The Garden State Challenge is a competition providing monetary awards for eligible projects, with the awards distributed in three competitive rounds based upon an evaluation of the following features and criteria of the submitted design:

- Cost-effective construction;
- No- to low-GHG emissions and low energy costs during operation;
- Facilitation of expedited construction periods; and
- Offers a competitive edge with predictable revenue and cost projections.

Each winning demonstration project is eligible to receive over \$1,000,000 in design and construction incentives, plus applicable student incentives, <sup>31</sup> all as described in more detail below. Each round of the competition will open and close on dates specified by a committee of policy, technical, and regulatory stakeholders selected by the Program Manager in consultation with Board Staff ("Review Committee"). Extensions will not be granted for individual projects; however, at its discretion, the Program Manager may grant an extension that is applicable to all projects. The Review Committee will review all eligible submittals. The Review Committee will promulgate scoring sheets that will be included in the program documentation. The Review Committee will assemble to review the projects and develop one final, filled out scoring sheet for each project at each round described below. A minimum score will be set and must be met for any given project to be considered for advancement. The winner(s) of each round will be notified and publicly announced.

Each round of the competition will narrow down the number of eligible projects that may be awarded incentives and advanced to the next round. Round 1 will be narrowed down to no more than five buildings in each Building Category. Round 2 will be narrowed down to no more than three buildings in each Building Category. Round 3 will select one winner in each Building Category. Program documents may set guidelines for managing a situation in which there are insufficient submissions to support a robust competition in any Building Category. Further, if there is sufficient budgetary capacity and an unexpectedly high number of well-qualified applications in one or more categories, the Program Manager may make awards to and advance greater numbers of buildings in one or more rounds than is set forth above.

For the avoidance of doubt, each round's incentives shall only be available and awarded to projects selected to advance to that round.<sup>32</sup>

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<sup>&</sup>lt;sup>31</sup> To encourage applicants to include students on their teams.

<sup>&</sup>lt;sup>32</sup> Incentives are awarded for the earlier rounds to encourage participants to participate even though they may consider their chances of being the overall winner of Round 3 to be low.

# Round 1: Schematic Design

A request for proposals for new construction building design concepts will be announced with a minimum of three months granted to assemble a design team and develop schematic designs for the proposed project. Submittals shall include at least the following:

- Documentation displaying the financial feasibility of the design team.
- Design team resumes and credentials.
- Schematic design drawings with supporting information about the proposed project with concept ideas for non-traditional measures, design drawings, and support material.
- The Review Committee will select up to **five projects** with the highest score in each Building Category, each of which will receive a monetary incentive award and advancement to the next round.

**Incentive Award**: \$50,000 per project, \$250 per student, and advancement to Round 2: Design Drawings.

### Round 2: Design Drawings

Applicants selected in Round 1: Schematic Design will be asked to complete their Design Drawings and submit them to the GSC no later than six months after the Round 1 award date. Submittals shall include the following:

- Design drawings, support material, and savings calculations.
- Preliminary detailed construction schedule.
- In addition, each applicant that accepts the invitation to participate in Round 2 must agree that its submittals constitute public and government records which the Board and its agents may publish, disseminate, and otherwise use to promote the GSC's goals and the GSC itself.

The Review Committee will select up to **three projects** with the highest score in each of the four Building Categories described above in this section of this Compliance Filing, each of which will receive a monetary incentive award and advancement to the next round.<sup>33</sup>

**Incentive Award**: \$100,000 per project, \$500 per student, and advancement to Round 3.

# Round 3: Final Design & Construction

Applicants selected in Round 2: Design Drawings will be asked to complete their Construction Drawings and to submit them to the GSC no later than six months after the Round 2 award date. Submittals shall include the following:

<sup>&</sup>lt;sup>33</sup> Awards will be granted in accordance with the above-described Review Committee processes and standards and will consider among other things the subject projects' relative performance as to: (1) cost-effective construction; (2) no- to low-GHG emissions and low energy costs during operation; (3) facilitation of expedited construction periods; and (4) offers a competitive edge with predictable revenue and cost projections).

- All construction drawings, support material, and savings calculations.
- Proposed detailed construction schedule.
- Construction cost estimates.
- A description of the building's expected performance.

In addition, each applicant that accepts the invitation to participate in Round 3 must agree that:

- 1. Its submittals constitute public and government records that the Board and its agents may publish, disseminate, and otherwise use to promote the GSC's goals and the GSC itself.
- 2. If the applicant wins Round 3, it will reasonably cooperate with the Board and/or the Program Manager to promote the winning building, including, among other things, allowing the interior and/or exterior of the building to be photographed or otherwise depicted and for such depictions to be published.
- 3. If the applicant wins Round 3, it will provide the Program Manager with the building's utility usage for the amount of time set forth in program documentation.

Winning designs should demonstrate that all competition goals are met.

The Review Committee will select the project with the highest score in each Building Category. Each selected project will be deemed the final winner for its Building Category, will be used as a demonstration project to encourage low- to no-carbon building designs across the state of New Jersey, and will receive monetary incentive awards as follows: (a) the First Incentive, upon determination of the final winner, and (b) the Second Incentive, upon completion of construction and confirmation and documentation that the as-built project substantially incorporated the design features upon which the First Incentive was based.

First Incentive Award: \$500,000 and \$1,500 per student on the winning team.

**Second Incentive Award:** \$1,000,000 upon completion of construction (i.e., the issuance of a temporary or final Certificate of Occupancy for the building) and submission of the as-built documentation described above, all within 18 months after the issuance of the Round 3: Design Completion award. The Program Manager may, for good cause shown, extend the above-described 18-month period for up to two additional six-month periods.

#### Outreach and Promotion

This competition relies heavily on promotion of the GSC and its Request(s) for Proposal through collaboration with the Outreach Team and the NJBPU Communications Office. It will raise industry awareness that buildings can be designed and built to the highest electrification and decarbonization standards, and to incorporate new technologies, for the benefit of all New Jerseyans. Outreach may include events such as public announcements of round winners, groundbreaking events, ribbon cutting events, tours of constructed buildings, digital award badges for winner websites and social media, specialized signs to be included inside the buildings to highlight winning status, and cooperative advertisement for the winning projects.

# **Quality Control Provisions**

Documented policies and procedures provide proper guidelines to ensure fairness and consistency in the evaluation of all applications. The Program Manager may arrange for on-site visits or inspections of projects that have received a Round 3 award.

TRC will utilize the Contractor Remediation Procedures, <sup>34</sup> as necessary or appropriate, to address significant performance or other problems.

All applications received are reviewed to confirm compliance with eligibility requirements. Applicant eligibility information is verified, along with all technical Electronic files are created for all documents and for ongoing project correspondence.

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<sup>&</sup>lt;sup>34</sup> The Contractor Remediation Procedures are explained and available at <a href="https://njcleanenergy.com/main/board-public-utilities/board-public-utilities-0">https://njcleanenergy.com/main/board-public-utilities-0</a>.

# **Distributed Energy Resources**

#### **Overview**

NJCEP promotes several categories of Distributed Energy Resources ("DER") to assist in increasing market activities that will increase overall combined electricity delivery system efficiency, reduce overall system peak demand, further the use of emerging and renewable technologies, reduce emissions, and provide cost-effective reliability solutions for New Jersey while supporting the State's EMP.

#### Combined Heat and Power - Fuel Cell

# Program Purpose, Strategy, and Description

This NJCEP Combined Heat and Power – Fuel Cell ("CHP-FC") Program offers incentives for Combined Heat and Power and Fuel Cell projects.

For the purposes of this program, Combined Heat and Power is defined as follows:

• Combined heat and power ("CHP"), also known as cogeneration, is the production of electricity and useful thermal energy from a single source fuel. Useful thermal energy means energy in the form of direct heat, steam, hot water, or other thermal form that is used for heating, cooling, humidity control, process use, or other valid thermal end-use energy requirements, and for which fuel or electricity would otherwise be consumed. Bio-power and partial bio-power projects that meet these criteria are considered to be CHP projects for Program purposes.

Waste Heat to Power ("WHP") projects that comply with the following definition are treated as CHP projects by the program:

• Waste heat to power is the process of capturing waste heat discharged as a byproduct of an industrial process and using that heat to generate power. In this configuration, a source fuel is first used to provide thermal energy to meet load requirements of a process or system (i.e., not deliberately creating excess thermal energy for the purpose of electricity generation). The byproduct of this process is heat that would otherwise be wasted to the atmosphere. The waste heat is then repurposed to produce electricity, as opposed to, directly consuming additional fuel for this purpose.

Projects meeting the definitions of either CHP or WHP above are collectively referred to as CHP projects in the remainder of this Compliance Filing.

For the purposes of this program, fuel cells are not considered to be WHP or CHP.

For the purposes of this program, fuel cell ("FC") is defined as follows:

• Power plants that produce electricity through an electrochemical reaction with a fuel source.

FCs are further broken down between " $\geq$  60% FCs" that can achieve an annual system efficiency of  $\geq$  60% (Higher Heating Value – HHV), based on total energy input and total utilized energy output (Efficiency) and " $\geq$  40% FCs" that can achieve an Efficiency  $\geq$  40% < 60%.

CHPs and FCs are all eligible for incentives through this program as set forth in more detail below.

# Support for EMP Goals and Strategies

This program will support many of the EMP's strategies and goals, including, among others, the following:

- Primary Goal 3.1 (Increase New Jersey's overall energy efficiency).
- Primary Goal 2.1 (100% clean power by 2050), especially its Goal 2.1.6 (Develop mechanisms to compensate distributed energy resources for their full value stack at the regional and federal level).

# **Target Market and Eligibility**

This CHP-FC Program is open to all New Jersey C&I utility customers paying into the SBC. Applications are reviewed and funds are committed on a first come, first serve basis provided all program requirements are met. CHP-FC systems that receive funding from the Energy Resiliency Bank will not be eligible for incentives through NJCEP.

# **Equipment Eligibility**

Natural gas, hydrogen, biogas, and mixed fuel (e.g., natural gas and biogas) CHP-FC equipment, as well as FC equipment using any fuel that is installed on the customer side of the utility meter, is eligible for incentives. For the avoidance of doubt, one hundred percent renewable fueled projects, including biogas and landfill gas-fueled projects that meet CHP-FC Program criteria, are also eligible to receive incentives.

To qualify for incentives, CHP and FC projects must meet all the following eligibility criteria:

- Equipment must be new, commercially available, and permanently installed. Expansion of an existing system with new equipment is also eligible. However, only the incremental expansion would be eligible for incentives; and
- Systems must operate a minimum of 5,000 full load equivalent hours per year (i.e. run at least 5,000 hours per year at full rated KW output). Board Staff may grant exceptions to the minimum operating hours requirement for Critical Facilities (as identified in the CHP Incentives section of this Compliance Filing), provided the proposed system operates a minimum of 3,500 full load equivalent hours per year and has islanding capability; and
- All FC project submissions must include documentation that the purchase price includes at least one stack upgrade at no additional cost to the customer/applicant so that the equipment's maximum useful life is realized; and
- All project submissions must contain specific cost data for providing the unit with blackstart/islanding capability regardless of whether the project will have that capability; and
- Installations of multiple systems planned for the same site within a twelve (12) month period must be combined into a single project.

To qualify for incentives, CHP projects must also meet all the following eligibility criteria:

- The CHP system must achieve an annual system efficiency of at least 60% (Higher Heating Value HHV) based on total energy input and total utilized energy output. Mechanical energy may be included in the efficiency evaluation; and
- Waste heat utilization systems or other mechanical recovery systems are required for CHP projects. New electric generation equipment which captures waste heat or energy from existing systems is also allowed.

To qualify for incentives, FC projects must also meet the following eligibility criteria:

• FC systems must achieve an annual electric system efficiency of at least 40% (HHV) based on Net Useful Electric Power plus Net Useful Thermal Production (if any) divided by the Total Fuel Input at HHV.

Third party ownership (or leased equipment), such as procured under Power Purchase Agreements, is permitted within the program with the following provisions:

- In order to ensure the equipment remains on site and operational for the term of the agreement, a binding agreement is required between the parties. A copy of this agreement shall be provided to the Program Manager prior to commitment of incentives. The agreement should state that the equipment could be transferred to new owners should the property be sold or otherwise have a buyout provision such that the equipment remains on site and stays in operation. Only permanently installed equipment is eligible for incentives and must be physically demonstrable upon inspection prior to receiving an incentive. This can be demonstrated by electrical, thermal, and fuel connections in accordance with industry practices for permanently installed equipment and be secured to a permanent surface (e.g., foundation). Any indication of portability, including but not limited to, temporary structures, quick disconnects, unsecured equipment, wheels, carrying handles, dolly, trailer, or platform will deem the system ineligible;
- The customer/applicant will be allowed to sign over the incentive to the third-party owner. A valid project cost shall be demonstrated as part of the application in order to establish an appropriate incentive level; and
- All other program rules apply.

#### Not Eligible for CHP-FC Incentives

The following types of generating systems/equipment are not eligible for this CHP-FC Program:

- Used, refurbished, temporary, pilot, demonstration or portable equipment/systems;
- Back-Up Generators (systems intended for emergency or back-up generation purposes); and
- Any system/equipment that uses diesel fuel, other types of oil, or coal for continuous operation.

### Manufacturer Diversity Caps for ≥ 40% FCs

During FY25, that is, from July 1, 2024 through June 30, 2025, new incentive commitments for  $\geq$  40% FCs are capped at \$4,500,000, and new incentive commitments for projects primarily involving equipment from any single  $\geq$  40% FC manufacturer are capped at \$2,000,000. By way of example, if during FY25 applicants A, B, C, and D have each been issued a \$500,000 commitment for  $\geq$  40% FC projects using equipment primarily supplied by manufacturer D, no further commitments would be issued during FY25 for  $\geq$  40% FC projects using manufacturer D's equipment.

Board Staff may approve exceptions to the above caps on a case-by-case basis if it determines that doing so is necessary to ensure full use of the current FY's FC and/or CHP-FC budgets.

### Feasibility Studies

CHP and  $\geq$  60% FCs are eligible for incentives for having completed and submitted to NJCEP a feasibility study. To be eligible for an incentive, the applicant must first submit its proposal for the feasibility study and have such proposal approved by the Program Manager. It, of course, must also submit the completed study itself, along with proof of its cost. The Program Manager will approve the proposal and final submittal only if it determines that that each is technically sound and is at a reasonable cost. Additional requirements are outlined in the Program Guidelines.

#### **Incentives**

Incentives vary based on CHP-FC technology, fuel source, type, the presence or absence of heat recovery, project size, and total project cost. Details on qualifying technologies and available incentives can be found in the Tables below in this Incentives subsection.

Applicants will not be allowed to receive incentives for the installed generation equipment from other available SBC-funded programs or from the Energy Resilience Bank. CHP-FC projects will be evaluated on a per site basis and incentives awarded accordingly. For the avoidance of doubt, if at any time prior to system installation and operation a project is cancelled or abandoned, the incentive funds paid to date must be promptly returned to NJCEP.

#### Feasibility Study Incentive for CHP and ≥ 60% FCs Only

50% of the cost of the study, capped at an incentive of \$50,000 and payable upon NJCEP approval of the completed study. This incentive would, among other things, count towards all other applicable NJCEP caps.

### Other CHP-FC Incentives

Table 9: CHP-FC Technology and Incentive Levels

Eligible Technology	Size (Installed Rated Capacity)	Incentive (\$/Watt) (5)	% of Total Cost Cap per project	\$ Cap per project
CHPs powered by non-renewable or renewable fuel source, or a combination <sup>(4)</sup> :	≤500 kW <sup>(1)</sup> >500 kW − 1 MW <sup>(1)</sup>	\$2.00 \$1.00	30-40%(2)	\$2 million
Gas Internal Combustion Engine     Gas Combustion Turbine     Migraturbine	>1 MW – 3 MW <sup>(1)</sup>	\$0.55	2004	0.0 1111
• Microturbine ≥ 60% FCs	>3 MW <sup>(1)</sup>	\$0.35	30%	\$3 million
≥ 40% FCs	All of the above <sup>(1)</sup>	Applicable amount above	30%	\$1 million
WHPs <sup>(3)</sup> Powered by non-renewable fuel	≤1 MW <sup>(1)</sup>	\$1.00	30%	\$2 million
source. Heat recovery or other mechanical recovery from existing equipment utilizing new electric generation equipment (e.g. steam turbine)	>1 MW <sup>(1)</sup>	\$0.50	30%	\$3 million

- 1. Incentives are tiered, which means the incentive levels vary based upon the installed rated capacity, as listed in the chart above. For example, a 4 MW CHP system would receive \$2.00/watt for the first 500 kW, \$1.00/watt for the second 500 kW, \$0.55/watt for the next 2 MW and \$0.35/watt for the last 1 MW (up to the caps listed).
- 2. The maximum incentive will be limited to 30% of total project. This cap will be increased to 40% where the recovered heat is used in a cooling application (e.g. absorption chiller) at the facility at which the CHP-FC system is located.
- 3. Projects installing CHP with WHP will be eligible for incentives shown above, not to exceed the lesser of percent per project cap or dollars per project cap of the CHP. Minimum efficiency will be calculated based on annual total electricity generated, utilized waste heat at the host site (i.e., not lost/rejected), and energy input.
- 4. Systems fueled by a Class 1 renewable fuel source are eligible for a 30% incentive bonus (additional to the incentives calculated in accordance with the table immediately above). If the fuel is mixed, the bonus will be prorated accordingly. For example, if the mix is 60/40 (60% being a Class 1 renewable), the bonus will be 18%. This bonus will be included in the final partial payment, based on system performance and fuel mix consumption data.

- 5. All CHP-FC systems located at Critical Facility and incorporating blackstart/islanding technology are eligible for a 25% incentive bonus (additional to the incentives calculated in accordance with the table immediately above). For this Program, a Critical Facility is any:
  - a. Public facility, including, without limitation, any federal, state, county, or municipal facility, or
  - b. Non-profit and/or private for-profit facility, including, without limitation, any hospital, water/wastewater treatment facility, school, multifamily building, or similar facility that:
    - i. Is determined to be either Tier 1 or critical infrastructure by the New Jersey State Office of Emergency Management or Office of Homeland Security and Preparedness, or
    - ii. Could serve as a Shelter during a power outage. For this Program, a Shelter is a facility able to provide food, sleeping arrangements, and other amenities to its residents and the community.

For the avoidance of doubt, any public facility is a Critical Facility.

6. The incentive bonuses described in the notes above shall count towards neither the % of Total Cost Cap per project nor the \$ Cap per project, in each case as included in Table 9: CHP-FC Technology and Incentive Levels.

Table 10: CHP-FC Incentive Payment Schedule (other than for Feasibility Studies)

1 <sup>st</sup> – Purchase	2 <sup>nd</sup> – Installation	3 <sup>rd</sup> - Acceptance of post-installation data
30%	50%	20%

- 1. Projects will receive program incentives in three partial payments. The first incentive will be paid upon proof of purchase of equipment. The second incentive will be paid upon project installation and operation, including successful inspection. The third incentive will be paid upon acceptance and confirmation that the project is achieving the required performance thresholds based on twelve (12) months of continuous operating data submitted within eighteen (18) months of installation, with the foregoing deadline being subject to being extended for six (6) additional months by the Program Manager upon the request of the applicant submitted prior to the expiration of the deadline and for good cause shown.
- 2. Regarding the third incentive, if all other required performance thresholds are achieved:
  - a. And the total annual net kWh generated is  $\geq 80\%$  of that specified in the Program-approved application, the full third incentive is earned.
  - b. But the total annual net kWh generated is ≥50% but <80%, of that specified in the Program-approved application, the amount of the third incentive earned is reduced proportionately by the ratio of actual total annual net kWh generated to the approved application total annual net kWh generated.
  - c. But the total annual net kWh generated is <50% of that specified in the Program-approved application, no third incentive is earned.

# **Quality Control Provisions**

Quality control provisions are designed to ensure that systems that receive incentives are operating as expected and providing the desired benefits to the State. All applications received are reviewed to confirm compliance with eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of energy efficient measure qualification and incentive calculation. Applicant supplied information and Program Administrator performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

# Renewable Energy

# Solar Registration Programs

# **Program Purpose and Strategy Overview**

New Jersey's solar policies and Renewable Portfolio Standards ("RPS") have been established through legislation and implemented mainly through regulations and Board Orders. NJCEP's Solar Renewable Energy Certificate ("SREC") Registration Program ("SRP") was designed to meet the goals and objectives of the regulations in place at the time of its design. In 2020, the Board proposed and adopted regulations establishing a solar Transition Incentive ("TI") Program to provide a bridge between the legacy SRP and the then soon to be established Successor Program. In 2021, the Board proposed and adopted additional regulations establishing the Successor Solar Incentive ("SuSI") Program. The SuSI Program is comprised of two sub programs: 1) the Administratively Determined Incentive ("ADI") Program; and 2) the Competitive Solar Incentive ("CSI") Program, which CSI Program's application portal was opened to new applications on April 15, 2023.

# Support for EMP Goals and Strategies

The Solar Programs support many of the EMP's strategies and goals, including, among others, the following:

- Primary Goal 2.1 (100% clean power by 2050), especially its Goal 2.1.1 (Meet the 50% Renewable Portfolio Standard by 2030 and explore possible regulatory structures to enable New Jersey to transition to 100% clean energy by 2050), Goal 2.1.2 (Ensure at least 75% of electricity demand is met by carbon-free renewable generation by 2050 and set interim targets), and Goal 2.1.3 (Routinely model scenarios and pathways to achieve 100% clean energy generation by 2050 with consideration for least-cost options).
- Primary Goal 2.3 (Maximize local (on-site or remotely-sited) solar development and distributed energy resources by 2050), especially its Goal 2.3.2 (Transition to a successor solar incentive program), which has been achieved.

# **Program Description**

The Solar Registration Programs ("Solar Programs") provide registration for RECs for solar projects, including behind-the-meter, community solar, and direct grid-supply projects connected to the New Jersey electric distribution system. The Generation Attribute Tracking System ("GATS") operated by PJM Environmental Information Services is used for the tracking and trading of RECs.

Pursuant to the Board's regulations, each megawatt hour ("MWh") of solar generation generates one solar renewable energy certificate ("REC"), which REC represents the clean energy benefits related to the MWh. For the SREC Registration Program, the RECs are called "SRECs" and are tradable in an open market; for the TI Program, they are called Transitional RECs ("TRECs") and can be sold to a utility at a fixed price set by the Board; and, for the SuSI Program, they are called "SREC IIs" and can be sold to a utility at a fixed price. The values of the SREC-IIs under the ADI

Program are set by the Board, and the values of the SREC-IIs under the CSI Program will be set through a solicitation process.

The Solar Registration Program team processes registrations and certifies solar projects as eligible for each of the three programs noted above. The SRP team will continue to process SREC and TI registrations submitted before those programs closed to new registrations and it will process any new registrations submitted for the SuSI Program.

# FY25 Program Changes

The Solar Programs will be modified as required to remain consistent with any revisions to the programs approved by the Board.

### Planned Program Implementation Activities

The Solar Programs will have the following areas of focus:

- Sustain the growth of New Jersey's solar markets, while communicating accurate and objective information on market development activity.
- Monitor legislative and policy developments, inform the market of key outstanding questions and decisions (e.g., new RPS levels, net metering rules), and translate new policies into program operational procedures, as required.
- Work with the Board and its staff to consider, develop, and implement possible programmatic changes, including those described below and otherwise implementing the Solar Act of 2021, N.J.S.A. 48:3-114 et seq., L. 2021, c.169.

# **Target Markets and Eligibility**

Eligible solar technology is defined as a system that utilizes semi-conductor technologies to produce electricity directly from sunlight. All systems must meet program requirements regarding equipment certification, proper installation practices, and compliance with program procedures and processes. Solar PV systems connected to the electric distribution system serving New Jersey can participate in the programs.

# Offerings and Customer Incentives

The Solar Programs provide a means for solar electric generation facilities to access a market where their RECs can be sold or traded. Solar generating facilities that are interconnected with the electric distribution system serving New Jersey and that meet all applicable rule requirements, as well as all program requirements will be eligible to generate RECs upon successful completion of all requirements. The regulations governing RECs can be found at N.J.A.C. 14:8-2, 14:8-10, and 14:8-11. The program rules will continue to conform to these regulations.

#### In addition:

- A web based solar portal will be used for submitting registrations; and
- The Program Manager will prepare monthly reports identifying program results and trends including tracking capacity blocks for the SuSI Program.

# **Quality Control / Quality Assurance Provisions**

All renewable energy systems facilitated through the SRP must be installed in accordance with program equipment requirements, program performance requirements, manufacturer specifications, and provisions of the National Electrical Code ("NEC"). The installer is also required to meet Solar Programs contractor license requirements.

Quality Control ("QC") serves as a check to ensure specific parameters of a renewable energy installation have been achieved. Quality Assurance ("QA") defines processes that ensure quality standards using efficient and cost-effective mechanisms.

The QA protocol requires diligence on the part of the "in-office" processing team to ensure the "Final As-Built" (Post-Construction) project information submitted as part of the final application paperwork is complete, correct, and in compliance with all program requirements. This review process is critical for the success of the QA function, which complements the on-site QC inspection process to ensure program compliance.

On-site verifications will be conducted for a pre-determined percentage of projects for residential and add-on systems that add additional capacity to a previously installed solar systems. An on-site verification will be performed for all grid-supply projects, behind the meter projects with a capacity greater than 500 kW, and community solar projects. The Program Manager may also conduct on-site verifications upon written request from the Board Staff or PJM-GATS to verify the cause for high meter reads or system production reading anomalies and submit written explanation of the findings to the Board Staff and PJM-GATS.

A pre-determined percentage of the projects that receive an inspection waiver will be randomly selected for a more in-depth paperwork review. The Program Manager reserves the right to request additional information, including, PV watts, shading analysis, photos, etc.

TRC will utilize the Contractor Remediation Procedures, as necessary or appropriate, to address significant performance or other problems.

# **Outreach, Website and Other - Outreach Plan**

#### **Outreach Plan**

# **Executive Summary**

This Outreach Plan ("Plan") highlights the strategies and tactics that the TRC Outreach Team will use to raise awareness of new and existing NJCEP clean energy programs, and educate potential program applicants, contractors, and stakeholders.

This Plan supports the State's EMP and specifically, the existing and proposed NJCEP programs:

- Local Government Energy Audit Program
- Large Energy Users Program
- New Construction Program
- Combined Heat & Power and Fuel Cells
- LEUP Decarbonization Pilot

The Plan's tactics support the priorities and focus areas of BPU NJCEP and include:

- Support for the anticipated launch of the unified New Construction Program through enhanced education for trade allies and new program awareness tactics;
- Within the New Construction Program, support for the launch of the Workforce Development and Garden State Challenge Pilots with program awareness efforts, higher education collaboration, and ongoing applicant engagement;
- Support for the launch of the LEUP Decarbonization Pilot through direct outreach and organizational collaboration;
- Provide additional data regarding trade allies listed on website to assist customers in selection process;
- Provide NJCEP trade allies with a welcome packet, including an overview of program requirements and applicable program materials;
- Provide enhanced NJCEP program awareness at public events; and
- Expand external-facing program awareness through support in the development of collateral and messaging via coordinated efforts with BPU.

After gauging market interest and measuring success, improvements have been made to the existing outreach tactics to focus more deeply on specific NJCEP programs. The Outreach Team will continuously monitor success and adjust tactics as needed.

The Team will continue to focus on LMI customers and underserved communities as they continue to help raise awareness about the programs and how to use them. The New Construction Program will be a specific focus.

# Background

As the state continued to recover from the COVID-19 pandemic, the Outreach Team increased its participation via in-person activities. The Outreach Team strategically shifted outreach tactics to allow for both in-person and hybrid customer and contractor engagement activities. These

strategies were embraced by the C&I market during FY23 and had a positive impact on application enrollment, presentations given, energy savings, trade ally recruitment, and audit program participation. This Outreach Plan incorporates lessons learned from past years and prioritizes tactics that increase engagement and energy savings.

# Support for State's Clean Energy Goals and Strategies

The Outreach Plan supports many of the State's goals and strategies, as set forth in more detail below under Outreach Goals.

#### **Outreach Goals**

The Outreach Team supports the goals of NJCEP, as well as those of BPU and the Administration, including:

• Support the Administration's goal of 100% clean energy by 2035 – The Outreach Team will continue to support the State's clean energy goals and will play a crucial role in meeting the objectives set forth in newly released Executive Orders 315, 316, and 317. Table 3 lists the seven EMP strategies and the associated level of outreach tactical emphasis planned in support of the current NJCEP program suite.

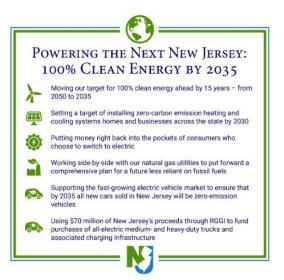


Table 11: EMP Strategies versus Outreach Tactics

E	MP Strategy	Outreach Tactics
1.	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	Ш
4.	Reduce Energy Consumption and Emissions from the Building Sector	Ш
5.	Decarbonize and Modernize New Jersey's Energy System	
6.	Support Community Energy Planning and Action with an Emphasis on Encouraging and Supporting Participation by Low and Moderate Income and Environmental Justice Communities	Ш
7.	Expand the Clean Energy Innovation Economy	

- **Promote programs to customers, contractors, and trade allies** TRC will actively represent NJCEP in the marketplace for all programs and program enhancements. We will work across all target markets to have the necessary information and training to fully engage in the programs.
- Support Environmental Justice to Overburdened Communities and customers To support environmental justice for Overburdened Communities (defined by NJDEP) and customers, the Outreach Team will continue to collaborate with the BPU, other state agencies, and community organizations. Our goal for all customers to have a fair and equal opportunity to learn about and benefit from NJCEP offerings.
- Support the Marketing Team's promotional efforts Collaborate with BPU and the Marketing Team to deliver consistent marketing messages and themes. Program information will be shared as requested to highlight successes around program opportunities, successes, and events.
- Collaborate with BPU to reach specific sectors and customers Jointly develop outreach strategies for specific sectors to leverage contacts and expertise.

The tactics outlined in this Plan support these goals. The Key Performance Indicators (KPI) and highlights will be included in a monthly report to track progress toward these goals.

# **Target Markets**

NJCEP programs are available to both Investor-Owned Utility (IOU) and Non-IOU New Jersey customers. Outreach efforts address a vast audience across multiple markets including residential, business, local government, and nonprofit entities. The tactics described within this plan address these target markets to increase the reach and success of NJCEP programs.

Table 12: Market Category Definitions

Market Category	Definition
Customer	Homeowners, Property Owners/Managers, Renters, Businesses, NPOs, State, County & Municipal Government Entities, Schools
Contractor	HVAC & Insulation Contractors, Plumbers, Remodelers, Electricians, Program Contractors
Trade Ally	Builders, Developers, Architects, HERS Raters, Consultants, ESCOs, Engineers, Realtors, Manufacturers, Distributers, Retailers, Certification Technicians
Stakeholder	Community Organizations, Membership Organizations, Green Teams, State Agencies, Chambers of Commerce, Business and Economic Development Associations, Municipal Permitting and Local Code Enforcement Offices
O Partner	Marketsmith, Sustainable Jersey, NJ Institute of Technology, GreenFaith, County Improvement Authorities, Utilities (Atlantic City Electric, Elizabethtown Gas, Jersey Central Power & Light, Public Service Electric & Gas, New Jersey Natural Gas, Rockland Electric, South Jersey Gas), American Public Power Association, Environmental Protection Agency, ENERGY STAR, Department of Energy, United States Department of Agriculture (New Jersey), New Jersey Department of Environmental Protection, New Jersey Business Action Center, United States Green Building Council

#### **Outreach Tactics**

Tactics are how we achieve our goals. They are specific steps and actions taken to support the outreach strategy and give structure to day-to-day activities. Most tactics employed address the goals of the State along with the Clean Energy Program portfolio at large. Some tactics are unique to markets and/or sectors as outlined below.

# Customized Program-Specific Outreach

Outreach Account Managers focus on outreach designed to bring projects into the programs offered in this filing. Each program has different target markets, membership organizations, and other access points that require unique outreach tactics. A customized outreach approach for each program allows the Account Managers to serve as single points of contact for their designated geographic territories while specializing in specific focus areas needed to assist participants in navigating programs (those offered by NJCEP and their utilities), understanding their opportunities for energy savings, and applying to the programs.

Program awareness to existing and potential trade allies and customers is a primary source of project referrals. The Outreach Team identifies the program path that best fits their projects and additional projects.

The Outreach Team will continue our educational training series

standard part of the messaging for increased clean energy awareness.

offers ongoing support as they re-engage in the program with ongoing support specific to each sector to educate potential participants about the benefits of participation and help identify the program path most-suited to each potential participant's needs and interests. We will represent the entire NJCEP portfolio at events and triage inquiries about BPU-led initiatives to the BPU. Utility run programs will be referenced as a

program

awareness

single point of contact

individualized

program path

# New Construction Program: Engage Contractors, Trade Allies, Technical Institutions, and Construction Permit Offices

In FY25, the residential and C&I new construction programs will merge into a single streamlined New Construction Program as referenced in this filing. This unified program will change the way in which the Outreach Team networks and communicates with customers and trade allies about NJCEP offerings. The Outreach Team will create presentation slides, website content, assist trade allies with the new program design, and spread program information to industry and partner organizations.

New construction contractors and trade allies have direct contact and influence with potential new The Outreach Team takes charge of maintaining and cultivating construction customers. relationships with these trade allies by seeking program feedback and engaging with their associated professional organizations. This approach serves to improve the customer experience and enhance the quality of NJCEP programs. A goal is to minimize lost opportunities by proactively informing trade allies about program benefits during the planning and design phases of new construction projects.

Account Managers will serve as single points of contact for registered NJCEP trade allies and work to recruit new trade allies within their geographic territories. Account Managers will provide program education to these partners through collateral, trade ally newsletters, social media content development, program overview presentations/webinars, application training presentations/webinars, educational webinars, in-person lunch and learn staff trainings, project meetings, and events. Account Managers will also function as the educational link between customers and trade allies which includes builders, developers, contractors, stakeholders, facility managers, energy managers, and realtors. Account Managers support their assigned trade allies by providing awareness of other BPU administered programs.

Some contractors and membership organizations span both residential and C&I markets, such as the U.S. Green Buildings Council of NJ and the American Institute of Architects, while other organizations focus on specific building or development types. One such sector that focuses on a development type is indoor agriculture, a sector with which we are actively engaged through our relationships with groups including the NJ Cannabis Insider, Cannabis Regulatory Commission, US Department of Agriculture, and Rutgers Eco Complex. The new, unified New Construction Program allows the Outreach Team to have a more streamlined approach to partnering with these organizations, as well as a simplified process and message to their members.

Additional memberships and partnerships that support new construction offerings include among others:

- Associated Builders & Contractors
- Commerce & Industry Association of New Jersey
- Commercial Real Estate Development Association
- Construction Roundtable of New Jersey
- New Jersey Alliance for Action
- New Jersey Apartment Association
- New Jersey Association of Energy Engineers
- New Jersey Builders Association
- Jersey Shore Builders
- International Facility Management Association of New Jersey
- Metropolitan Builders & Contractors Association of New Jersey
- Society of Mechanical Engineers New Jersey
- Southern New Jersey Development Council

As the new construction industry in New Jersey continues to expand, we are actively updating our list of new construction stakeholders while encouraging NJCEP trade ally network participation. The active stakeholder list will be used to share program launch information and invite key decision-makers to NJCEP-hosted events including webinars, presentations, and NJCEP booths at industry trade shows and conferences. The Outreach Team will maintain up-to-date messaging that reflects program updates and references to other NJCEP programs that may be of interest to stakeholders.

This FY, it is crucial that outreach efforts are complemented by marketing support: to transform the new construction marketplace; to increase consumer awareness; and to increase demand for highly energy efficient buildings. Outreach efforts will encourage builders to incorporate bundles of high efficiency equipment or use one of the higher efficiency pathways by partnering programs with ENERGY STAR, LEED, Passive Home, or Zero Energy Ready Homes. The Outreach Team helps increase public awareness through educational awareness such as co-op advertising,

sponsorship of events, project site construction signage, and post project completion placards. The Outreach Team will work with the BPU to recommend complimentary marketing strategies or campaigns.

This FY the outreach team will engage with universities, technical institutions, and trade schools to support a new workforce development component of NJCEP's New Construction Program with an emphasis on underserved student populations and institutions within New Jersey's overburdened communities. Outreach will provide awareness of the various LEED, AEE, and PHI courses and certifications offered for reimbursements, encouraging students within the various institutions to participate in this initiative.

Municipal permit and planning offices are also viable avenues to educate new construction contractors and building owners about NJCEP incentive programs at the early stage of a new construction project. The Outreach Team will engage with these entities and prioritize outreach engagement campaigns to municipalities within state designated overburdened communities, providing educational collateral for distribution to new construction permittees.

### Garden State Challenge Pilot: Promote a Low- to No-Carbon Future

The Outreach Team will support the New Construction Program's Garden State Challenge Pilot by engaging architects, engineers, developers, builders, and trade allies within the targeted new construction building categories. These efforts will raise industry awareness and encourage the new construction market to adopt low- to no-carbon building designs, advancing a carbon-neutral future for New Jersey. The Outreach Team will conduct a concerted program awareness messaging campaign upon pilot launch, relying on its current list of new construction trade allies and contacts. The Outreach Team will work with these trade allies and stakeholders to identify and promote new construction projects at the early stages of planning and design, synchronizing program participation.

New Jersey colleges and universities will also be engaged to encourage forward-thinking graduate and undergraduate students to participate, while providing a valuable linkage to new construction project teams.

A dedicated Account Manager will work with the program lead and the BPU to develop engaging marketing material, website content, and social media messaging. This Account Manager will orchestrate focused outreach campaigns, monitor outreach effectiveness, attend groundbreaking events and ribbon cutting ceremonies, and provide ongoing support to program applicants.

An Account Manager will coordinate LGEA with the organization of outreach efforts informational campaigns, development of newsletter content, and involvement in annual Organizational involvement will conferences. continue with the Association of Counties, Conference of Mayors, School Buildings and Grounds Association, School Boards Association, and League of Municipalities. Equitable outreach for targeted overburdened towns and authorities will be included.

The New Jersey League of Municipalities' 107<sup>th</sup> annual conference provided meaningful face-to-face networking and a showcase of BPU and NJCEP programs in a post-COVID-19 environment

# <u>LEUP Decarbonization Pilot: Higher Education</u> <u>Target Market</u>

The Outreach Team will continue to harness existing relationships with higher education (colleges and universities) customers and conduct focused campaigns to encourage participation in the new LEUP Decarbonization Pilot. An Account Manager will coordinate this effort for awareness to eligible customers and their technical consultants of this program and assist in the design of promotional material. Engagement with this sector includes through calling campaigns, canvassing efforts, focused webinars, and in-person presentations.

# Large Energy Users: Targeted Trade Allies

Outreach activities to expand the customers that participate in the Large Energy Users Program will be done in conjunction with the known contractors and trade allies who target these customers. Additionally, we will continue to maintain relationships with past program participants to ensure they remain engaged in the program as many applicants tend to re-apply each fiscal year.

# Combined Heat & Power and Fuel Cell: Targeted Trade Allies

The Outreach Team will communicate any updated program information for the Combined Heat & Power and Fuel Cell Program via webinars and send an eblast to trade allies who have worked on past NJCEP CHP/FC projects.

# Trade Ally Development

Recruiting, maintaining, and supporting a healthy trade ally network supports the overall success of the programs. Historical NJCEP data has shown that campaigns focused on recruiting new trade allies bring in the largest number of program applications. To streamline operations that support contractors and trade allies, an Account Manager will coordinate a plan for the team to engage the existing trade ally network and actively recruit new contractors, consultants, and other business entities that have an energy efficiency-focused business interest in New Jersey. The list of NJCEP trade allies will be divided amongst Account Managers to allow for a single outreach point of contact for inquires and regular communications. The lead Account Manager is responsible for developing content including collateral, newsletters, and presentations that recruit, train, and

support the trade allies. Individual Account Managers will continue to offer one-on-one, project specific assistance to their assigned trade allies.



#### Recruit

The Outreach Team hosted monthly Trade Ally Engagement and Recruitment webinars. Using a combination of purchased lists and public-facing data, a strategic recruitment initiative is being implemented place for leaders in New Jersey's sectors such as new construction and local government code officials. Additionally, outreach will focus on contractors and residential raters who have previously participated in the programs. Recruitment efforts will take place through calling campaigns, professional organization involvement, and round-table events. The Outreach Team will create program collateral to support these efforts.

#### **Train**

A series of contractor trainings will be developed to address various areas of interest, including program benefits, program requirements, and application assistance. Trainings will offer short and streamlined messaging that will be recorded and saved on the program website and Clean Energy Learning Center in the form of short vignettes for future reference. The outreach lead will create and deliver content for the training presentations. There have been several application training and program overview webinars that were posted to The Clean Energy Learning Center.

A monthly 30-minute webinar with a focus on program awareness and trade ally recruitment will explore the details of the programs and showcase success stories. The target audience will be new contractors being recruited as well as existing contractors and their application processing staff who may need a program refresher.

#### Support

The Outreach Team offers supports to program contractors through the trade ally network to solicit input on needs, feedback on their experience with the programs, and input on potential program changes or enhancements. Trade ally support includes:

- Collateral (e.g., brochures, testimonials) is developed to support contractors and general program awareness, and more focused, sector-specific collateral may be developed as appropriate or needed;
- New Trade Ally Welcome Toolkit provided to all newly approved NJCEP trade allies. This toolkit includes an introductory email from their designated outreach contact, digital training material, program collateral, and additional support materials to be coordinated with the BPU;
- Co-op Advertising to leverage the NJCEP brand and assist new construction builders and raters in their marketing efforts will expand to C&I in FY25 with the anticipated launch of the New Construction Program;

- Success Story collaboration with Account Managers to develop a regular flow of new case studies for each program;
- Monthly Newsletter of program updates, collateral links, training invitations, and upcoming networking events;
- In Person Contractor Coffees will be hosted by TRC three to four times a year to address questions the trade allies may have about the programs or application process. Program staff will be in attendance for detailed questions and facilitate networking; and
- **Annual/Bi-Annual Survey** to solicit feedback that will further allow the Outreach Team and program design team to support the program participants.

Several enhancements were made to the trade ally list available on the NJCEP website. They include the inclusion of the business certification and past program participation:



An updated FY24 trade ally registration form will include New Jersey's Division of Revenue and Enterprise Services certification categories to encourage equitible participation in NJCEP's trade ally network and assist customers in their selection of an appropriate trade ally for their project. These certifications include:

- Disabled Veteran Owned Business (DVOB)
- LGBTQ+ Owned Business Enterprise (LBE)
- Minority Business Enterprise (MBE)
- Minority Women Business Enterprise (MWBE)
- Small Business Enterprise (SBE)
- Veteran Owned Business (VOB)
- Women Business Enterprise (WBE)

Listing trade ally experience with the programs by inlcuding data related to program use such as applications submitted/projects completed and other information. We may solicit additional input from Trade Allies on other enhancements that may help customers made a contractor selection.

# Energy Efficiency Transition Support

As of July 1, 2021, some programs previously run by NJCEP are now run by the investor-owned utility companies. The process of the change is referred to as the Energy Efficiency Transition. The Outreach Team has continued to provide transition-related education and messaging as needed and ensured that the website content is in both English and Spanish. The team will continue to provide ongoing support related to transition.

### **BPU Support**

The Outreach Team will continue to support the BPU through the EE Stakeholder Meetings, public messaging, and website updates of new initiatives including the maintenance of the Transition Landing Page and Frequently Asked Questions in both English and Spanish.

#### **Utility Coordination**

TRC will continue to attend the EE Marketing workgroup meetings with utilities and BPU staff to participate in joint efforts around messaging and marketing. This has included the coordination of

"key utility implementor" contacts for sharing information about projects with the potential to participate in the utility-sponsored programs. For example, when LGEA projects are at their final stage, the Outreach Team coordinates with their utility counterparts to provide existing building retrofit program information.

# **Expanded Outreach Education**

A key outreach tactic is the education of trade allies and end-users about the positive environmental and financial impacts of participating in NJCEP programs. Educational efforts start with research and collateral development. The Outreach Team will identify and secure speaking opportunities to reach larger audiences to present the programs. The Outreach Team will continue to leverage and coordinate speaking or event engagements with BPU, utilities, Sustainable Jersey, GreenFaith, and other partners. These efforts lead to one-on-one assistance into the programs.

We will continue to assess community, customer, trade ally, and partner needs to develop delivery timelines in collaboration with them. We will also evaluate the level of education needed for each audience and the need for sector specific collateral.

### Customized Collateral Development

Customized, sector-specific collateral has become increasingly well received. This FY, the Outreach Team will identify additional sectors that would benefit from customized collateral such as one-page summary sheets and case studies for design-build contractors, architects, developers, and end-users. The Outreach Team will use BPU's one-page template with the option to include a new design; all collateral will be reviewed by BPU staff.

Known collateral needs are listed below. These materials will provide basic information to generate interest and direct the reader to an Account Manager who can then provide personalized guidance.

- New Construction: An overview of the New Construction Program offering. Collateral will need to be developed to educate and increase awareness of the newly designed program. Promotional materials will also be developed to support the Workforce Development component of this initiative and encourage program participation.
- Garden State Challenge Pilot: Promotional materials will be developed to support the awareness of the pilot to potential participants.
- **LEUP Decarbonization Pilot:** An overview and recruitment one-page collateral piece highlighting the new LEUP Decarbonization Pilot tailored to the higher education target market.
- **SEP Non-IOU Program:** An overview of the new energy efficiency program for non-IOU customers. Website only text is needed to promote and educate about program rules and requirements.
- Case Studies: Success stories and project examples encorpoarted into program information sheets with accompanying slides for all programs showcasing noteworthy projects that utilized NJCEP incentives to attain significant energy savings and reduced project payback periods.

### **Customized Training Series**

The Outreach Team will continue to assess the educational needs of our various audiences. We will respond to those needs and adjust our presentations to reflect the most current suite of program offerings and provide enhanced training opportunities for trade allies. Moreover, we will conduct a series of trainings on the newly anticipated redesigned New Construction Program and its application process. The Outreach Team will continue to grow our current trade ally network and increase the number of contractors who understand and participate in NJCEP programs.

#### **Expanded Program Awareness**

The Outreach Team will support the education efforts and promotion of new programs and pilot programs. Efforts such as virtual trainings, NJCEP newsletters, and social media support will be developed to help increase program participation. Additionally, the Outreach Team will identify key projects that have utilized NJCEP program incentives for educational and program promotional activities.

In the form of targeted marketing to potential applicants for FY25, the Outreach Team will leverage the TRC marketing team to expand upon the base of NJBPU's marketing campaigns. The goal will be to spread awareness of energy efficiency programs to the C&I sector where marketing tactics require a more focused approach to reach the project decision makers. The team will especially focus on the new construction industry to prepare for the launch of the new NCP and more generally to support the goals set forth in any programs the Board approves for the second triennium. Tactics include advertisement campaigns in business publications, sponsorships of key trade ally organizations and events, and increased social media.

# Call Center Customer Support

An efficient and effective Outreach Team is characterized by its ability to provide informed responses to customer inquiries, creating a seamless pathway to program enrollment. One of the first contacts with a stakeholder may be through the Call Center which supports program outreach and operations by responding to inquiries about the Clean Energy Programs. Two call center phone numbers are managed and answered by TRC: Comfort Partners and NJCEP. The Comfort Partners inquiries are by phone and are directed to their respective utility company. The NJCEP inquiries come from the toll-free telephone number (866-NJSMART), website and email inquiries. Call center support includes the following activities:

- Represent NJCEP in responding to public inquiries and requests;
- Discuss NJCEP programs with potential applicants; directing callers to appropriate NJCEP and/or BPU program website(s); and
- Forward inquiries that need further follow-up to NJCEP or BPU contacts.

TRC staffs the Call Center from 8:00 a.m. ET to 7:00 p.m. ET, Monday through Friday, excluding State holidays. TRC responds to email inbox inquiries and voicemails within 24-48 business hours of receipt.

Call Center operations as described above will continue to support the Clean Energy Program. As new programs and initiatives are established, call scripts and email templates will be updated for use by Call Center staff.

# Multilingual Educational Outreach



According to the U.S. Census Bureau, New Jersey has a higher percentage of Spanish speaking households than the average in the United States and the highest percentage in the Northeast region of the United States.

All applicable new and updated collateral is planned to be make available in Spanish and English. Outreach pass-through funds have been set aside for professional translation services.

A Hispanic Account Manager oversees Spanish educational outreach, working with the Outreach Team to address the needs of Hispanic customers. This service will continue to align with new programs and will be a key outreach resource when engaging with bi-lingual organizations including the Statewide Hispanic Chamber of Commerce, and regional Chamber of Commerce - Hispanic Business Committees.





NJ Business Action Center Hispanic Business Owners Event

While Spanish is the main language spoken after English, the Outreach Team will also work with any community organizations that may request NJCEP collateral in other languages to offer translation services.

# Support BPU-Led Initiatives

BPU and TRC each lead the development and delivery of the NJCEP initiatives. BPU-led initiatives include EVs, Community Solar, Comfort Partners, and Community Energy Plan Grants, for example. It is important for the TRC and BPU-led initiatives to work together for consistent and comprehensive messaging to serve the full scope of customer needs.

To do so, the Outreach Team engages with customers to discuss their needs and provide awareness of the entire Clean Energy Program portfolio. The Outreach Team will continue to refine the NJCEP presentation so that the graphics and presentation flow addresses the audience's specific needs. The NJCEP portfolio overview infographic is used in most presentations to give an overview of all programs available before diving into the discussion topic of the core presentation.

The Outreach Team stays up-to-date on BPU-led initiatives through BPU staff presentations. Outreach Team members can answer high level questions about BPU-led initiatives and direct specific inquiries to BPU staff, as needed. Many events that the Outreach Team already attends offer solid opportunities for the sharing information about BPU-led initiatives.

In FY23, the new position of NJCEP Clean Energy Champion was filled to staff events that are outside of the current umbrella of TRC energy efficiency outreach for programs. The Clean Energy Champion provides general awareness of clean energy initiatives and programs that the

BPU administers. Events are identified through BPU requests, collaboration with regional green team hubs, and research based on records of previous events that had a residential focus.

The Outreach Team coordinates and processes the purchases and expenses related to printing program collateral related to TRC-led energy efficiency programs as needed for the BPU. The Outreach Team provides a current stock to the BPU and Outreach Team members, as well as at meetings and events.

# **BPU Support and Coordination**

The Outreach Team will work closely with BPU staff to align program messaging and event representation with the priorities of the BPU. This includes regular status meetings to inform BPU staff of outreach activities, events, and speaking opportunities identified for BPU staff and/or Commissioners.

### Support Commissioner Engagement

BPU Commissioners have expressed interest in continuing their involvement in the promotion of the programs, along with experiencing some of the interactions that take place between NJCEP participants and program staff. Commissioner participation supports the NJCEP, demonstrates program enthusiasm, and allows Commissioners to receive direct feedback from participants and stakeholders.

We have continued to identify speaking opportunities for BPU Commissioner and BPU staff participation and looked for opportunities for the Commissioners to engage with customers on a one-on-one basis.



We will continue the "Commissioner Concierge" approach to support Commissioner events from beginning to end. A team member is assigned to supply the Commissioners and their staffs with a seamless speaking engagement experience. The Commissioner Concierge supplies specific background details as defined by BPU speaking engagement templates, such as presentation type and length, event agenda, speaking time window, bulleted program data points, and post-event networking opportunities. The Outreach Team will also provide site support for the Commissioners and their staff. Additional support requirements will be defined as required.

#### Coordinate with BPU Staff

Coordination with the Division of Clean Energy and Ombudsman's Office is critical to ensure our messages are consistent, that we are not duplicating efforts, and that we are documenting both successes and opportunities for additional communication and outreach. We will coordinate with BPU staff to support and monitor cross-team outreach efforts to community organizations, local governments, and state agencies.

Regular reports, meetings, and calls will continue to address specific events and provide more indepth knowledge into program information. We will continue to share event calendars and presentation content.

Outreach staff will attend meetings, site visits, or events as requested by the BPU staff. The Outreach Team will provide the relevant program presentation and materials for the meeting, in addition to conducting any follow-up needed to assist the customer in using the programs.

### Coordinate with NJCEP Marketing

The Outreach Team will support the Marketing Team's marketing campaigns, both by responding to data information requests and by preparing program-specific plans. Collaboration will be critical as specific marketing plans are developed and implemented so that the Outreach Team can be prepared to support and provide the data needed.

The NJCEP branding and messaging that the Outreach Team uses will be consistent with the messaging of the marketing campaigns. The program benefits most from synchronized Marketing and Outreach coordination to best target NJCEP programs and provide equitable awareness of the programs. The Outreach Team proposes having monthly meetings with the Marketing Team to understand their timelines and to prepare the program staff for the upcoming focuses and workload shifts.

### Create, Develop, and Maintain Partnerships

Maintaining partnerships is key to ensuring that the Outreach Team and Partners are aware of the other's initiatives and changes that occur. We will continue to build upon our existing partnerships and pursue new partnerships that include Overburdened Communities, targeted community organizations, and new trade specific membership organizations.

#### Sustainable Jersey

Coordination with Sustainable Jersey will continue to support its participants who are interested in NJCEP and offer program guidance to their Energy Team. Outreach efforts will include:

- Working with the seven active Regional Hubs that bring together the Green Team representatives from all the participating towns in that region to share information about the Clean Energy Programs and develop coordinated plans to implement actions and measure success;
- Co-presenting webinars about NJCEP;
- Participating in the Sustainable Jersey Energy Task Force Meetings to provide input regarding updates to Sustainable Jersey relating to NJCEP initiatives;
- Coordinating with Sustainable Jersey on monthly conference calls about upcoming events, conferences, and inquiries it receives regarding NJCEP; and
- Training Sustainable Jersey's Environmental Defense Fund interns and Sustainable Jersey staff on the LGEA process, tips around LGEA outreach, and how to refer new construction opportunities to NJCEP staff.

## **County Improvement Authorities**

The roles of County Improvement Authorities vary from county to county depending on their enabling laws. They typically support business retention and attraction for their respective territories. Some may provide financing and tax incentives, and most work closely with their municipalities to support local growth initiatives. Improvement authorities also work closely with local chambers of commerce, rotary clubs, and business associations. They provide a platform to educate local government units and entities to programs that support their objectives. These organizations provide a valuable opportunity to promote the programs and help identify potential projects. Account Managers will continue to connect with improvement authorities to pro-actively seek opportunities to participate in meetings and events to create awareness of NJCEP offerings.

### **Investor-Owned Utilities**

Collaboration with the State's utilities is critical to providing customers with a clear and understandable path while undertaking energy efficiency projects and obtaining financial incentives. The Outreach Team will strengthen these relationships, co-promote program offerings, and provide continued customer assistance. We will communicate program changes directly to utility contacts, so they are aware of the changes and can answer their customers' questions. Account Managers will work with utility representatives to understand their program offerings, enabling them to guide potentially eligible projects to programs that best fit customers' needs. We will continue to offer co-presentation with utilities to relevant audiences, educating them on the transition, utility program offerings, NJCEP offerings, or a combination of these. Such partnerships may include joint presentations with organizations where NJCEP has an active presence or joint presentations at larger conferences.

#### Organizations, State, and Federal Agencies

The Outreach Team is an active member of several organizations listed below. The Outreach Team will investigate additional membership and partnership opportunities to leverage more speaking engagements and promotional options (e.g., newsletter articles, success stories).

- Association of Women Business Owners
- African American Chamber of Commerce of New Jersey
- American Institute of Architects New Jersey
- Housing and Community Development Network of New Jersey
- New Jersey Association of Counties
- New Jersey Association of School Business Officials
- New Jersey Conference of Mayors
- New Jersey League of Municipalities
- New Jersey School Boards Association
- New Jersey Veterans Chamber of Commerce
- Property Owners Association of New Jersey
- Shore Builders Association of Central New Jersey
- Statewide Hispanic Chamber of Commerce
- U.S. Green Building Council

• Regional Chambers of Commerce (Greater Elizabeth Chamber of Commerce, Newark Regional Business Partnership, North Essex Chamber of Commerce, Somerset County Business Partnership Chamber of Commerce)

State and federal relationships will be maintained as well, such as:

- U.S. Department of Agriculture Project coordination with NJ staff to incorporate their grant program with NJCEP offerings;
- NJ Business Action Center Project referrals to NJCEP and joint presentations;
- Design Lights Consortium Active participation and applicable outreach with program committees;
- ENERGY STAR Active participation and applicable outreach and marketing shared with BPU; and
- New Jersey Institute of Technology Provide programmatic and educational content for the Clean Energy Learning Center.

## Prepare the Market for Program Enhancements

NJCEP programs are continually updated and enhanced, typically on an annual basis. The Outreach Team supports customers, contractors, trade allies, and other stakeholders through these changes. Current program enhancements include the updates on programs within this filing and high-level updates on other BPU-led programs. The related outreach effort will include:

- Development and delivery of training for contractors and customers;
- Development and delivery of informational webinars;
- Newsletter articles for organizations;
- Presentations at conferences and trade shows;
- One-on-one customer engagement, including either in-person visits or virtual contact with, equipment manufacturers, contractors, builders, and architects;
- Website postings;
- E-mail blasts;
- NJCEP monthly newsletter;
- Communication with program partners;
- Collaboration with the Marketing Team on public facing materials; and
- Updates to presentations and collateral materials.

The Outreach Team will coordinate with BPU staff as it develops these plans and tools.

# **Delivery**

#### The Team

The Outreach Team is comprised of an Outreach Manager, an Administrative Coordinator, Account Managers (AMs), three staff members who focus on new program launches and

expanding awareness of NJCEP, a Clean Energy Champion, and a Market Analyst. This Team collaborates closely with BPU staff, and the market sectors identified above.



## Outreach Manager

The Outreach Manager works with the BPU and the members of the Outreach Team to accomplish the tactics of this plan and the priorities of the Division of Clean Energy. The Outreach Manager oversees open and effective communication between the Outreach Team and the BPU, as well as regular reporting on Key Performance Indicators and Outreach event follow-up.

### **Administrative Coordinator**

The Administrative Coordinator plays a key, office-based role in supporting Account Managers and the Clean Energy Champion. The Administrative Coordinator is a key communicator among professional organizations, event coordinators, the Outreach Team, and the BPU. The coordinator manages event logistics, supplies literature and giveaways, maintains the calendars of events and approvals, and processes purchasing. Their role may require the coordinator to attend some events and presentations in support of Outreach Team activities.

### Account Managers & Expanded Program Awareness

Outreach Account Managers are the cornerstone of the Outreach Team. Account Managers tailor engagement to participant knowledge and expertise that are best suited for each unique project. Account Managers help make contractors, trade allies, stakeholders, and partners are aware of NJCEP and submit applications to the NJCEP. They focus on specific programs since each program has a different target applicant type. Most are working on new construction and have a regional presence across the state of New Jersey. Each Account Manager has a lead position on the team. For example, the trade ally lead supervises the NJCEP trade ally network and orchestrates trade ally recruitment and engagement campaigns for the Outreach Account Management Team.

**Expanded Program Awareness** is to support several new program launches and create a larger NJCEP brand awareness of energy efficiency programs across the state. This will be done with dedicated outreach staff to assist BPU in the development of public facing content and materials. This role will take on new tasks identified with the BPU to support the programs and may include resuming the monthly NJCEP Newsletter and taking a more active role in creative design items such as the development of program collateral, case studies, slides, social media suggestions, and sponsorship advertisements.

The SEP Non-IOU Program and New Construction Program, new in FY25, and will require additional public awareness deliverables that this position will assist with as noted within this

Filing. While all new programs require a series of deliverables at the time of program launch, the New Construction Program requires additional deliverables over the course of the first year. In addition, this team will leverage some of the trade allies and project site locations to expand program awareness to potentially include cobranded trade ally program collateral, trade ally window clings, point of purchase displays, public project signage, and select project completion events. For FY25, additional support is added to address a larger scope to target potential applications for the New Construction Program.

## Clean Energy Champion (CEC)

The CEC promotes public awareness of all NJCEP programs including those administered directly by the BPU. The primary objective of the CEC is to enhance brand recognition thereby increasing program participation. The CEC will achieve this objective by identifying, organizing, managing, and attending residential and community clean energy events across New Jersey.

### Market Analyst

In preparation for the next triennium, this new position was added in Q4 of FY24 to focus on New Jersey building data and identify gaps that need to be filled to reach higher energy saving targets. The role focuses on evaluating the current construction market in the state, evaluating the market potential for program participation, and using market research to quantify program awareness and any program or outreach changes that would increase program awareness and participation.

# **Key Performance Indicators and Reporting**

## **Key Performance Indicators**

The Outreach Team tracks the impacts of its efforts via key performance indicators (KPIs). The KPIs below are a sample of the metrics tracked and reported monthly. Monthly reports will be provided to BPU staff regarding progress toward goals, monthly planning, and other outreach activity. Additional details are provided in the monthly reports that are sub-metrics of these KPIs, such as the number of people engaged at events and presentations and the number of LGEA applications attributed to Outreach. The Outreach Team will continue to work with BPU staff to refine these reports.

Table 13: Outreach Key Performance Indicators (6 months)

Outreach	6-month Target
<b>Application Enrollments:</b> # of applications received attributed to outreach	106
<b>Activities:</b> One-on-one meetings with customers, contractors, trade allies, or stakeholders	540
<b>Events:</b> Events such as conferences and trade shows attended promoting NJCEP included events attended by the CEC	64
<b>Presentations:</b> Presentations made at events (not included in the above events) or hosted by NJCEP	30
<b>Trade Ally Recruitment:</b> New trade allies registered with NJCEP to focus on the current portfolio of energy efficiency programs	35

The above KPIs for the first 6 months of FY25 are based on the previous FY's performance and assume that the Outreach Team efforts will continue to be a hybrid of virtual and in-person environment. Should work conditions change, KPIs may be adjusted.

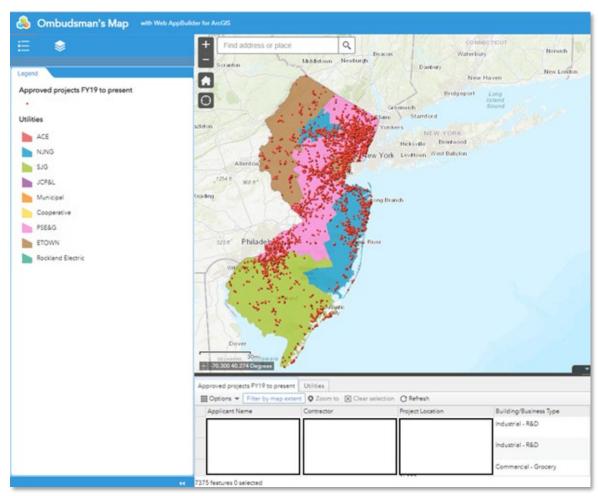
## Reporting

A variety of tools help inform the BPU staff and Commissioners about outreach activities. The Outreach Monthly Progress Report is the primary reporting tool. It contains a dashboard overview of KPI metrics and progress towards the goals. It highlights themes, events, and purchases completed throughout the month, as well as joint planning initiatives and partner collaboration. Additional reporting includes invoice back-up, a list of approved program projects, monthly call center summary, and updates made to the Office of the Ombudsman's GIS reporting system, described below.

#### **GIS** Reporting

A geographic information system (GIS) reporting platform delivers monthly data regarding incoming projects. This enhanced GIS application tool provides regional visualization that is used for internal planning and included in NJCEP quarterly reporting to the BPU.

The platform is accessible to Account Managers, BPU staff, and the BPU's Office of the Ombudsman via desktop or mobile applications. Additional layers may be added at the request of the Board staff and/or Office of the Ombudsman to coordinate efforts between its office and the Outreach Team. Data is updated monthly to include Outreach campaigns, opportunities, and project submissions. Maps are used as an outreach management tool and can be produced for BPU staff to include in presentations.



The Outreach Team manages the Ombudsman's Office ArcGIS access to "layers" such as these shaded zones showing utility coverage and the red circles indicating NJCEP approved project data that has been filtered by the user using any number of data fields.

## Rider A: Website

TRC will continue to host New Jersey's Clean Energy Program website.

A redesign of the website has been identified as a priority by the BPU. The Outreach Team looks forward to supporting those redesigning the site, and it will continue to provide feedback from interactions with trade allies and the public. An updated design will improve the user experience and facilitate customer and partner use the site by making it easier for them to find the most frequently used documents, submit applications, and identify new content. The new website will, through the use of website analytics, provide a better user experience and logical points of engagement along the customer's journey.

# Rider B: Outreach Pass-Through Budget

The Outreach Pass-through budget supports activities specifically related to implementing the Outreach tactics described in the Outreach Plan. All expenses are approved in advance by BPU staff. Examples of expenses that support Outreach may include:

- Booth space at trade shows
- Event registration costs
- NJCEP promotional giveaways
- Sponsorship at events and local chamber of commerce meetings
- Advertisements at events attended by outreach staff
- Printing of program collateral
- Translation services for program information/collateral

# Appendix A, C&I and DER Incentive Caps and General Rules

## **Extension Policies**

Many programs include deadlines for submittal of information. For example, some programs require the submittal of a final application within six months or one year from the date of the letter approving the initial application. NJCEP provides for extensions of deadlines provided certain conditions are met. Program Managers in general are authorized to approve first and, in some cases, second extensions. Additional standards/guidelines for approving extensions and/or reinstatements are set out in the Compliance Filings and in the Guidelines established for each program. The Program Administrator, with the approval of Board staff, may approve up to two extensions, each of a length set by the PA with the approval of Board staff, beyond the extensions the Program Managers are authorized to approve.

# **C&I / DER Incentive Caps**

Incentive caps have been established to ensure that there is equitable access to the C&I and DER programs for all qualifying customers. These caps have been established because of the potential scale of commercial/industrial projects, where a few extremely large projects could otherwise consume a significant share of the available budgets, leaving other customers unable to access project funding.

# **Program / Project Incentive Caps**

Most C&I and DER programs set incentive caps on a program per FY and/or per project basis; those caps are described in the program descriptions and/or incentive descriptions in this Compliance Filing.

# **Total Cost Incentive Cap**

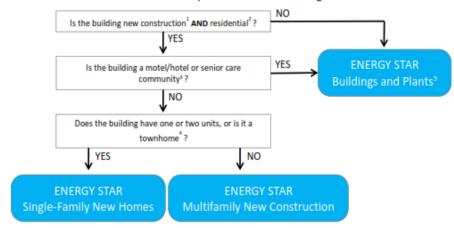
No project shall receive incentives from one or more NJCEP programs and/or Board-approved utility programs in an amount that exceeds the total cost<sup>35</sup> of measures installed or performed.

<sup>&</sup>lt;sup>35</sup> Total cost is usually determined by reference to a sales invoice. It is not, for example, impacted by federal tax credits that will become available to the applicant on its next tax return or grants from sources other than NJCEP or Board-approved utility programs.

# Appendix B, Multifamily Decision Tree

Figure 1 ENERGY STAR Multifamily Decision Tree (May 2021)

#### EPA ENERGY STAR Multifamily New Construction Program Decision Tree



#### NOTES:

- New construction can include significant gut rehabilitations if the building is able to meet all the program requirements.
- 2. The primary use of the building must be for a residential purpose. In a mixed-use building, the dwelling units, sleeping units, and common space combined must exceed 50% of the building's square footage. Parking garage square footage is excluded from this calculation. Common space includes any spaces in the building that serve a function in support of the residential part of the building, that is not part of a dwelling or sleeping unit. This includes spaces used by residents, such as corridors, stairs, lobbies, laundry rooms, exercise rooms, residential recreation rooms, and dining halls, as well as offices and other spaces used by building management, administration, or maintenance in support of the residents.
- Assisted living and skilled nursing facilities that meet the definition of <u>Senior Care Communities</u> are <u>not</u> eligible
  for the MFNC program. Dormitories, residence halls, buildings with single-room occupancies, supportive
  housing, cohousing, and other non-senior assisted living facilities are eligible for the MFNC program.
- 4. Townhomes may choose to use the Multifamily New Construction Checklists as well, but they must use the ERI Path and Single-Family New Homes Reference Design. A townhome is defined as a single-family dwelling unit constructed in a group of three or more attached units in which each unit extends from the foundation to roof and with open space on at least two sides.
- 5. As of September 16, 2014, multifamily buildings, with at least 1 year of actual, whole building energy use data are eligible to earn the ENERGY STAR using EPA's Portfolio Manager. Portfolio Manager compares a multifamily building's measured performance against a database of similar buildings to generate a 1-100 score. Buildings that score 75 or above earn the ENERGY STAR. For more information on how multifamily buildings can earn the ENERGY STAR with Portfolio Manager please visit the eligibility criteria for the 1-100 ENERGY STAR score page.

New construction commercial facilities such as motels/hotels, nursing homes, and assisted-living facilities do not qualify under the Multifamily New Construction program, however, they may be eligible to earn the ENERGY STAR through the EPA's commercial and industrial programs. To learn more about how these and other existing commercial buildings can earn ENERGY STAR certification, please visit the <a href="Buildings and Plants">Buildings and Plants</a> page. To learn more about the new construction program for commercial buildings visit <a href="www.energystar.gov/DesignToEarn">www.energystar.gov/DesignToEarn</a>.

May 2021

# Appendix C, Program Budgets (for the first 6 months of FY25)<sup>36</sup>

TRC FY25		FY25 Cost Category Budgets					
Program/Budget Line	Total Budget	Administration	Sales, Marketing, Website	Training	Rebates, Grants and Other Direct Incentives	Rebate Processing and QA	Evaluation
Total TRC	\$116,442,596	\$5,852,878	\$2,451,109	\$75,000	\$105,862,946	\$2,200,663	\$0
EE Programs	\$83,289,926	\$4,530,014	\$182,730	\$50,000	\$77,666,142	\$861,040	\$0
New Construction Program	\$36,974,654	\$2,680,526	\$60,910	\$37,500	\$33,782,553	\$413,165	\$0
New Construction Program	\$36,974,654	\$2,680,526	\$60,910	\$37,500	\$33,782,553	\$413,165	\$0
C&I EE Programs	\$46,315,272	\$1,849,488	\$121,820	\$12,500	\$43,883,589	\$447,875	\$0
C&I Buildings	\$39,952,447	\$1,193,513	\$60,910	\$0	\$38,608,559	\$89,465	\$0
LGEA	\$6,362,825	\$655,975	\$60,910	\$12,500	\$5,275,030	\$358,410	\$0
Distributed Energy Resources	\$28,942,937	\$530,130	\$60,910	\$0	\$28,196,804	\$155,093	\$0
CHP - Fuel Cell	\$28,942,937	\$530,130	\$60,910	\$0	\$28,196,804	\$155,093	\$0
RE Programs	\$2,063,174	\$792,734	\$60,910	\$25,000	\$0	\$1,184,530	\$0
Solar Registration	\$2,063,174	\$792,734	\$60,910	\$25,000	\$0	\$1,184,530	\$0
Planning and Administration	\$2,146,559	\$0	\$2,146,559	\$0	\$0	\$0	\$0
Outreach and Education	\$2,146,559	\$0	\$2,146,559	<i>\$</i> 0	\$0	\$0	\$0
Outreach, Website, Other	\$2,146,559	\$0	\$2,146,559	\$0	\$0	\$0	\$0

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<sup>&</sup>lt;sup>36</sup> TRC has submitted a full year FY25 forecast of anticipated budget needs to the Board. This Table represents the budget for only the first six months of FY25. Later in FY25, as part of TRC's proposed programs and budgets for the Second Triennium EE and Peak Demand Reduction Programs, TRC will provide an updated forecast for the remainder of FY25.

# Appendix D, Program Goals and Performance Metrics (for the first 6 months of FY25)

NJCEP FY25 1st Half Energy Savings Goals: Portfolio Summary					
Program/Budget Line	Annual MWH Savings	Lifetime MWH Savings	MW Savings	Annual MMBTU Savings	Lifetime MMBTU Savings
Total TRC	56,044	970,352	5.9	73,626	1,463,219
EE Programs	21,036	357,805	2.5	64,337	1,300,676
C&I EE Programs	16,074	268,101	1.8	41,725	858,223
C&I Buildings	16,074	268,101	1.8	41,725	858,223
C&I Retrofit	0	0	0.0	0	0
P4P EB	7,207	113,729	1.1	27,485	601,924
LEUP	8,867	154,373	0.7	14,240	256,299
Customer Tailored EB	0	0	0.0	0	0
Customer Tailored NC	0	0	0.0	0	0
LGEA	0	0	0.0	0	0
DI	0	0	0.0	0	0
New Construction	4,962	89,704	0.8	22,613	442,453
NCP	0	0	0.0	0	0
RNC	2,179	43,584	0.4	19,675	393,488
C&I NC	2,227	37,249	0.2	90	1,603
P4P NC	555	8,871	0.1	2,848	47,361
Distributed Energy Resources	35,008	612,547	3.4	9,288	162,543

# Appendix E, Cost-Benefit Analysis

Cost-effectiveness analysis compares the costs and benefits of energy efficiency and renewable energy measures, programs, and portfolios of programs. Estimates of both costs and benefits are relative to those that would otherwise have been incurred had "baseline" or "standard" equipment, building systems and/or energy using practices been purchased or remained in place. A measure, program, or portfolio is considered cost-effective if the benefit-cost ratio is 1.0 or greater.

TRC, in collaboration with the Center for Green Building of the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, conducted a cost-benefit analysis ("CBA") for residential, commercial, and industrial NJCEP EE programs.

#### Cost-Benefit Tests

Benefit cost ratios for each of the five traditional cost-effective tests were developed. The five tests are: Participant Cost Test, Program Administration Cost Test, Ratepayer Impact Measure Test, Total Resource Cost Test and Societal Cost Test.<sup>37</sup> In addition, a benefit cost ratio was also developed using the New Jersey Cost Test.

<u>Participant Cost Test:</u> The measure of the quantifiable benefits and costs to the customer attributed to participation in a program. The participant benefits are equal to the sum of any participant incentives paid, any reductions in bills, and any federal or state tax deductions or credits. Participant costs include any out-of-pocket costs associated with the program.

<u>Program Administrator Cost Test:</u> The costs of a program as a resource option based on the costs incurred by the program administrator including incentive costs and excluding any costs incurred by the participant. The benefits are the avoided supply costs of energy and demand and the reduction in capacity valued at marginal costs for the periods when there is a load reduction. The costs are the program costs incurred by the administrator, the incentives paid to the customers, and the increased supply costs for the periods in which load is increased.

Ratepayer Impact Measure Test: Measure of what happens to customer bills or rates due to changes in revenues and operating costs caused by the program. The benefits equal the savings from avoided supply costs, including the reduction in capacity costs for periods when load has been reduced and the increase in revenues for periods in which load has increased. The costs are the program costs incurred by administration of the program, the incentives paid to the participant, decreased revenues for any periods in which load has been decreased and increased supply costs for any periods when load has increased.

<u>Total Resource Cost Test:</u> The costs of a program as a resource option based on the total costs of the program, including both the participants' and the utility's costs. This test represents the combination of the effects of a program on both the participating and non-participating customers. The benefits are the avoided supply costs, federal tax credits, and the reduction in generation and capacity costs valued at marginal cost for the periods when there is a load reduction. The costs

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<sup>&</sup>lt;sup>37</sup> California Standard Practice Manual. Economic Analysis of Demand-Side Programs and Projects. (October 2001).

are the program costs paid by the utility and participants plus the increase in supply costs for the periods in which load is increased.

<u>Societal Cost Test:</u> Attempts to quantify the change in the total resource costs to society as a whole rather than only to the utility and its ratepayers. Costs include all consumer, utility and program expenses. Benefits associated with the societal perspective include avoided power supply costs, capacity benefits, avoided transmission and distribution costs, and emissions savings. It has been assumed that wholesale electricity prices account for the national sulfur dioxide and nitrogen oxide allowance. Therefore, the societal cost test includes only emissions savings accrued from carbon dioxide. Federal tax credits are not included.

New Jersey Cost Test: In accordance with the Board's Order Directing the Utilities to Establish Energy Efficiency and Peak Demand Reduction Programs, In re the Implementation of P.L. 2018, c. 17 Regarding the Establishment of Energy Efficiency and Peak Demand Reduction Programs, Docket Nos. QO19010040, QO19060748 & QO17091004 (June 10, 2020) ("Framework Order"), this test uses the California Standard Practice Manual's ("CSPM's") Total Resource Cost Test, which includes consideration of certain non-energy impacts. Its avoided cost values are based upon the Rutgers University Center for Green Building Technical Memo, Energy Efficiency Benefit-Cost Analysis Avoided Cost Assumptions for 2019 BCA, March 2021, Updated May 6, 2021. In the future, and after considering any stakeholder input, this test may be revised to include additional non-energy impacts.

The table below includes the results of the benefit cost modeling.

NJCEP FY25 1st Half Prospective Benefit Cost Analysis						
Program/Budget Line	РСТ	PACT	RIM	TRC	SCT	Modified NJCT
Total TRC	3.3	1.8	0.3	0.8	1.3	2.1
EE Programs	3.4	1.1	0.3	0.8	1.2	2.0
C&I EE Programs	3.0	1.1	0.2	0.7	1.1	1.8
C&I Buildings	2.9	1.5	0.3	0.7	1.2	1.9
P4P EB	2.8	1.6	0.3	0.8	1.2	2.0
LEUP	2.9	1.2	0.2	0.6	1.1	1.7
LGEA	0.0	0.0	0.0	0.0	0.0	0.0
New Construction	3.9	1.2	0.3	0.8	1.3	2.1
NCP	4.3	1.5	0.3	1.1	1.5	2.6
RNC	2.7	0.6	0.2	0.5	0.7	1.2
C&I NC	6.4	2.1	0.3	1.3	2.2	3.5
P4P NC	4.2	0.7	0.3	0.8	1.3	1.9
Distributed Energy Resources	3.1	5.4	0.3	0.8	1.4	2.2

# PART 2 (Legacy Programs being transitioned to NCP)

# **Residential Energy Efficiency Program**

# Residential New Construction Program

As noted in the Introduction to this Compliance Filing, this program will, on a reasonable and orderly schedule provided to stakeholders and the public through means other than this Compliance Filing, eventually be replaced and superseded by the NCP.

# **Program Purpose and Strategy Overview**

The Residential New Construction ("RNC") Program is designed to increase the energy efficiency and environmental performance of residential new construction buildings (single and multifamily) in New Jersey. The RNC Program has the long-term objective of transforming the market to one in which a majority of residential new construction in the state is "net zero-energy" (i.e., extremely efficient buildings where low energy needs can be met by renewable energy generation).

The RNC Program strategy is to establish technical standards for energy efficient new construction in New Jersey utilizing nationally recognized platforms, including the EPA ENERGY STAR® Single Family New Homes Program ("SFNH"), EPA ENERGY STAR Multifamily New Construction ("MFNC") Program, and U.S. Department of Energy (DOE) Zero Energy Ready Home ("ZERH") Program. The RNC Program then provides technical support and incentives to home energy raters, architects, trade allies, builders, and homebuyers to enable them to design, build, and purchase homes that comply with these standards.

Using an account management approach, the RNC Program recruits new and supports existing energy professionals who oversee the energy efficiency work completed by participating builders. There are two paths for energy professionals to participate: 1) as a Home Energy Rating System ("HERS") Provider approved by an EPA-Approved Verification Oversight Organization ("VOO"); and 2) as a Modeler approved by an EPA-Approved Multifamily Review Organization ("MRO"). Those approved through either path are generally, and in this Compliance Filing, referred to as "Raters" or "Rating Companies."

The RNC Program is focusing on the use of account managers to provide more direct support to the builders and the use of the Outreach Team to recruit new builder participants with an emphasis toward ZERH Program projects. The RNC Program also provides the necessary training to Raters, trade allies, and builders to ensure they understand the program rules/requirements, and have the skill set to meet the higher-than-code program standards to build homes that contribute to New Jersey's energy reduction efforts. Incentives are offered to partially offset the incremental construction costs associated with building higher efficiency homes and to generate interest and enthusiasm for the RNC Program among builders and homeowners.

# Support for Energy Master Plan Goals

The RNC Program will support many of the 2019 EMP's strategies and goals, including, among others, the following:

• Primary Goal 3.1 (Increase New Jersey's overall energy efficiency).

• Primary Goal 4.1 (Start the transition for new construction to be net zero carbon), especially through the NC Program's support for Zero Energy Ready Homes and Passive Houses.

# **Program Description**

The RNC Program is market-based and relies on builders and Raters to build to nationally recognized platform standards, which are defined by core efficiency measures, energy modeling, rater and builder oversight, and checklists to ensure quality installation.

To participate in this RNC Program, HERS Raters must use modeling software approved by the Program to model savings, calculate the Energy Rating Index ("ERI") and MMBtu incremental savings compared to the User Defined Reference Home ("UDRH").<sup>38</sup> To be approved, the software must be accredited by an EPA-Approved VOO and be capable of providing batch reporting, including building components for QA review of rating files and savings utilizing the UDRH.

There are a number of market barriers to efficiency investments in new construction in New Jersey. Key among these are:

- 1. Builders do not always see the value of the additional administrative procedures and associated costs of ENERGY STAR;
- 2. The higher incremental cost associated with the additional Rater administrative and field inspection requirements of a ZERH;
- 3. Builders and designers are not proficient with the energy code requirements that the RNC Program requires them to meet or exceed;
- 4. Conflicting motivations guiding design criteria and choices (i.e., builders who make design, procurement, and construction decisions do not pay the homeowners' operating costs associated with those decisions);
- 5. Lack of local market awareness regarding the benefits of efficiency and environmental performance on the part of consumers, builders, lenders, appraisers, realtors and others;
- 6. Limited technical skills on the part of some builders and their trade allies to address key elements of efficiency;
- 7. Lack of local consumer marketing on the benefits of owning an RNC Program-participating home to drive demand;
- 8. Limited awareness of the ZERH requirements, benefits, and incentives that are available to support that market segment; and
- 9. Inability of consumers, lenders, appraisers, and others to differentiate between efficient and standard new construction homes.

The RNC Program employs several key strategies to overcome these barriers including:

- Direct financial incentives to builders of homes that meet program standards;
- An incentive to offset the incremental Rater cost associated with certifying ZERH single-family, multi-single (i.e., townhome), and low-rise multifamily homes;

<sup>&</sup>lt;sup>38</sup> I.e., a baseline home which, among other things, is defined and used in the NJCEP Protocols to Measure Resource Savings.

- Multiple pathways that allow participation across efficiency levels, entice new builders to the RNC Program, support the NJ construction market for energy code, and promote increased efficiency and quality-assurance with higher incentives;
- Utilization of nationally recognized EPA ENERGY STAR and DOE ZERH brand and website to help promote residential energy programs;
- Technical assistance to inform builders and their trade allies on details of the program pathways and how to comply with the rigorous performance requirements; and
- ENERGY STAR and ZERH certification, inspections, and testing through third-party rating companies that compete in an open market for services.

## **Program Participation Pathways**

The following participation pathways provide New Jersey's builders and homeowners with a range of participation options to suit builders at different levels of experience with energy efficient construction techniques and homebuyers with varying interest and budgets. All are based on the presumption that the applicable IECC 2018/2021 or ASHRAE 90.1-2016/2019 energy code sets the minimum energy performance requirement for newly constructed homes and the basic requirement is that eligible buildings using the ERI pathway exceed the applicable energy code by 10% and that eligible buildings using ASHRAE modeling exceed the applicable energy code by 15%.<sup>39</sup> Therefore, they all result in energy performance that is better than that required by IECC 2018/2021 or ASHRAE 90.1-2016/2019, as applicable, depending on the home's permit date.

#### **ENERGY STAR**

Builders that enroll in either the SFNH or MFNC pathway will satisfy the requirements for ENERGY STAR certification utilizing the Performance Path by way of the ERI or ASHRAE pathway, including full inspection checklist requirements. This pathway includes the applicable version of ENERGY STAR SFNH and ENERGY STAR MFNC, depending on the date and eligibility determination per the EPA Multifamily Decision Tree (see <u>Appendix B</u>, *Multifamily Decision Tree*, of this Compliance Filing), as well as the date of the applicable building permit. The incentive structure within this segment will include a base incentive plus a performance incentive using MMBtu saved as compared to the applicable code UDRH as the indicator.

## Zero Energy Ready Home (ZERH)

This pathway recognizes a higher energy efficiency achievement in new home construction. Applicants must satisfy the requirements for the DOE ZERH certification following the applicable version of that program. The incentive structure within this pathway will include a base incentive plus a performance-based incentive using MMBtu saved as compared to the applicable UDRH as the indicator.

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<sup>&</sup>lt;sup>39</sup> The details of the implementation of these requirements, including which version of which energy code and/or version of ENERGY STAR and/or US DOE ZERH applies to which projects, and of a 90-day transition period regarding implementation of the new energy codes (i.e., IECC 2021 / ASHRAE 90.1-2019), will be provided to stakeholders and the public through means other than the present Compliance Filing.

## Zero Energy Home +RE (ZERH+RE)

This pathway has the same requirements as the ZERH pathway with the additional requirement that 100% of the building's modeled energy usage is met by renewable energy ("RE") systems installed prior to completion of the home. The incentive structure within this pathway will include a base incentive plus a performance-based incentive using MMBtu saved as compared to the applicable UDRH as the indicator. Incentives will be paid based upon the ERI before the addition of renewables. An additional fixed incentive for the renewable energy system will be awarded for a project meeting the ZERH+RE eligibility requirements.

# **Target Market and Eligibility**

Newly constructed or substantially renovated (also known as gut rehabilitated) single-family (i.e., one- and two-family homes), multi-single (i.e., townhomes), multifamily buildings are eligible for RNC Program benefits if the home/building will use natural gas and/or electricity as the heating fuel supplied by a New Jersey public utility. The target market for this RNC Program is homebuilders and Raters.

Applicants who pursue their multifamily projects through the ENERGY STAR Multifamily New Construction ("MFNC") program may apply for NJCEP incentives through the RNC Program. Applicants who do not pursue their multifamily projects through the ENERGY STAR MFNC program may apply for NJCEP incentives through the P4P NC Program. Regardless of which program the applicant pursues, all applicable NJCEP program requirements must be satisfied to receive incentives.

For buildings and projects registered in this RNC Program, the Decision Tree used in the new ENERGY STAR MFNC Program, which is set forth in this Compliance Filing as <u>Appendix B</u>, *Multifamily Decision Tree*, will be used to determine which ENERGY STAR Program will apply to the building or project.

Projects participating under this RNC Program are not eligible for participation or incentives under any other NJCEP program for any building envelope components, equipment, or appliances that were included as part of application to this RNC Program. However, a given substantial renovation project may be eligible for a utility-sponsored EE program, as well as for this RNC Program. In that case, the applicant would be able to choose which program it would utilize. However, the applicant could not have both programs cover the project. NJCEP and the relevant utility-sponsored EE programs have, or will have, program rules and procedures to implement the foregoing.

# **Program Requirements**

To qualify for the RNC Program, a home must meet ENERGY STAR SFNC or MFNC, DOE ZERH or ZERH+RE, requirements.

The technical details presented below address most program requirements. The full technical specifications for RNC Program compliance are available upon request. The ENERGY STAR and ZERH Program requirements (e.g., checklists, standards and modeling inputs) are periodically updated by the EPA and/or the DOE and supersede requirements of this program.

#### **ENERGY STAR SFNH**

Meet or exceed all the applicable version of the EPA ENERGY STAR SFNH Performance Path standards<sup>40</sup> including:

- Meet or exceed the applicable version of the ENERGY STAR SFNH Energy Rating Index Target; and
- Complete the applicable version of all ENERGY STAR SFNH mandated checklists.

# Zero Energy Ready Home (ZERH)

Meet or exceed all DOE ZERH Performance Path technical standards<sup>41</sup> including:

• Complete the applicable version of all ENERGY STAR SFNH Program and all ZERH checklists.

## Zero Energy Ready Home + RE (ZERH + RE)

Meet or exceed all ENERGY STAR and ZERH requirements as described above.

Additional RNC Program Requirements:

• 100% of the building's modeled energy usage must be met by RE systems installed onsite prior to completion of the home.

# ENERGY STAR Multifamily New Construction (MFNC)

Meet or exceed the applicable version of the EPA ENERGY STAR MFNC performance path standards<sup>42</sup> including:

- Meet or exceed the applicable version of the ENERGY STAR MFNC following either the Energy Rating Index or ASHRAE pathways; and
- Complete the applicable version of all ENERGY STAR MFNC mandated checklists.

#### **Incentives**

The RNC Program incentive tables can be found in <u>Appendix F</u>, *Residential Incentives (including Enhancements)*.

The incentives include a base incentive determined by building type, plus a performance-based incentive calculated using the incremental annual MMBtu saved as compared to the calculated annual usage of the baseline, reference home defined by the applicable energy code. For all but MFNC utilizing the ASHRAE pathway, the applicable code is IECC. For MFNC utilizing the ASHRAE pathway, the applicable code is ASHRAE 90.1. The IECC code reference home is a UDRH utilized in the rating software to compare the rated home to a home of the same dimensions,

<sup>&</sup>lt;sup>40</sup> ENERGY STAR SFNH: <a href="https://www.energystar.gov/newhomes/homes">https://www.energystar.gov/newhomes/homes</a> prog reqs/national page

<sup>&</sup>lt;sup>41</sup> Zero Energy Home Standards <a href="https://www.energy.gov/eere/buildings/zero-energy-ready-home">https://www.energy.gov/eere/buildings/zero-energy-ready-home</a>

<sup>&</sup>lt;sup>42</sup>Multifamily New Construction Standards: https://www.energystar.gov/newhomes/homes\_prog\_regs/multifamily\_national\_page#site-built

but with components meeting the applicable IECC code as determined by the date of the project's building permit. The ASHRAE reference building is incorporated in the EPA-approved rating software. The building component values used in the UDRH are included in the NJ Protocols to Measure Resource Savings.

# Urban Enterprise Zone ("UEZ") / Affordable Housing / Low- and Moderate Income Enhanced Incentive

The RNC Program will offer bonus incentives for eligible homes located in UEZs that are, or will be, Affordable Housing, and/or that are, or will be, occupied by those of LMI.

#### ZERH Rater Incentive

The RNC Program will offer Rater incentives to Raters for each single-family or multi-single (i.e., townhome) homes that the Rater is successful in obtaining ZERH or ZERH+RE incentives.

## Cooperative Marketing

The Cooperative Marketing Incentive offers cost-sharing for pre-approved advertising placed by contractors participating in the RNC Program. The cost sharing is for 25% of the cost of event booth spaces and 50% of the cost of other types of advertising. Those other types of advertising include print (newspaper, magazine, newsletter), yellow pages, direct mail, television, radio, web banner (digital), signage, billboard, and social media. In addition, other types of advertising may be approved on a case-by-case basis if the applicant can demonstrate its relative cost-effectiveness and benefits to NJCEP. The fiscal year cap per contractor is \$50,000. Contractors seeking to utilize the Program should contact coop@NJCleanEnergy.com.

# **Planned Program Implementation Activities**

The following program implementation activities will be undertaken. The RNC Program will:

- Implement the changes and updates described above;
- Continue to review applications and, on a first-in-time basis, issue Commitment Letters that indicate, among other things, the amount of program funds committed to projects whose applications demonstrate their eligibility for the program as long as funding is available:
- Continue to process incentives for completed projects meeting program requirements;
- Utilize the Outreach Team to recruit new builder participants with an emphasis on ZERH projects;
- Actively engage with DOE, Raters, and builders to identify challenges of participating in the ZERH pathway; and
- Work with Board Staff and/or the Board's other contractors to identify a more consumer-friendly term for ZERH.

# **Quality Control Provisions**

Market-based delivery of rating services and certifications requires an effective set of standards for quality assurance. The responsibility for builder quality and ENERGY STAR and/or ZERH Certification rests with Raters, ratings providers, DOE, and EPA-approved VOOs, and MROs. It

is incumbent upon the program to ensure that a robust system for identifying and communicating quality issues exists to manage the credibility of the savings and associated incentives offered.

To maintain a robust rating marketplace, TRC will perform inspections and conduct oversight processes on Raters and projects. Quality Assurance activities will continue to be performed by TRC based on the track record of Raters and builders measured through program inspections.

In addition to reviews for data completeness on all checklists, forms and applications, on-site inspections, and technical review of building and Rater files will be required based upon the demonstrated proficiency of the builders and Raters. Inspection requirements will be adjusted based upon the track record of the program participants. Initial inspection rates for new builders and rating companies will be above average and will decrease as they demonstrate proficiency in proper building techniques and in understanding the qualifying requirements of the program.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

# **Commercial and Industrial Energy Efficiency Programs**

#### General Overview

The NJCEP C&I EE Programs are designed to help New Jersey's businesses use electricity and natural gas more efficiently. Efficiency in electricity and gas usage will promote competition and increase industry success ensuring job retention and creation. There is also an environmental benefit to electricity and gas usage efficiency. Each individual C&I Program is described in more detail in the relevant subsections below.

## The C&I Programs are designed to:

- Provide information on how to meet and exceed current energy code requirements so buildings operate more efficiently thereby minimizing operating costs;
- Encourage customers to choose high efficiency options when undertaking construction or equipment upgrades (i.e., when customers normally construct buildings or purchase building systems equipment);
- Support market transformation by providing information and incentives to help customers and designers make energy efficient equipment specification, building/system design, lighting design, and commissioning part of standard business practices; and
- Stimulate commercial and industrial customer investments in energy efficiency that will support the growth of the industries that provide these products and services.

The C&I Programs address the key market barriers that make it challenging for developers, designers, engineers, and contractors to routinely incorporate energy efficiency in their projects, including:

- Lack of familiarity or uncertainty with energy efficient building technologies and designs;
- Bias toward lower initial cost and lack of procedures for considering lifetime building operating costs during decision-making;
- Compressed time schedules for design and construction;
- Aversion to risk involved with specifying technologies less familiar to the local design community despite the proven reliability of efficient technologies and designs; and
- Priorities for engineers, designers, and contractors that often do not align with incentive structures and energy efficiency considerations.

The C&I Programs employ a set of offerings and strategies to address the market barriers noted above and to achieve market transformation in equipment specification, building/system design, and lighting design. These include:

- Program emphasis on intervention during customer-initiated construction and equipment replacement events that are a normal part of their business practice;
- Coordinated and consistent outreach to C&I customers, especially large and centralized players, such as national/regional accounts, major developers, etc.;

- Consistent incentive levels for efficient electric and gas equipment and design practices to permanently raise efficiency levels;
- Information and technical support provided to customers and designers to make energy efficient equipment specification, building/system design, lighting design, and commissioning part of standard business practices;
- Information and technical support provided to customers and designers to facilitate compliance with New Jersey's new commercial energy code, as well as future upgrades to that code; and
- Programs designed to meet the needs of a diverse set of customers, including non-profit entities, local governments, and businesses of all sizes.

Unless specifically stated otherwise in the following program descriptions, customers eligible for incentives under New Jersey's C&I EE Program are defined as non-residential electric and/or gas customers of one of New Jersey's regulated electric or gas utilities who contribute to the SBC. With the exception of the new construction segment, applicants to any of the NJCEP C&I EE Programs must be contributors to the SBC within the previous twelve months.

Construction projects are subject to prevailing wage requirements pursuant to <u>L.</u> 2009, <u>c.</u> 203, which amends <u>L.</u> 2009, <u>c.</u> 89, as well as the prevailing wage regulations promulgated by the New Jersey Department of Labor and Workforce Development pursuant to <u>L.</u> 1963, <u>c.</u> 150 as amended, and N.J.A.C. 17:27-1.1 et seq. and Affirmative Action rules. The prevailing wage rate shall be paid to workers employed in the performance of any construction undertaken in connection with BPU financial assistance programs. This law applies to contracts greater than the amount set forth by the New Jersey Department of Labor and Workforce Development. Unless otherwise stated in a program description, customers self-certify that they are complying with prevailing wage requirements by submitting an application to the program and receiving program incentives.

# **C&I Buildings: C&I New Construction**

#### "SmartStart"

As noted in the Introduction to this Compliance Filing, this program will, on a reasonable and orderly schedule provided to stakeholders and the public through means other than this Compliance Filing, eventually be replaced and superseded by the NCP.

## **Program Purpose and Strategy Overview**

The C&I New Construction ("SmartStart NC") Program was part of the original suite of C&I programs available through the NJCEP.

The SmartStart NC Program's primary goals are to induce C&I customers to choose high efficiency equipment rather than standard efficiency equipment when they are making purchasing decisions. This is accomplished by providing incentives and information on a wide range of high efficiency alternatives. Prescriptive Incentives— where dollar amounts are fixed for specific categories of equipment— are offered where one-for-one, business as usual replacements are typical. The Prescriptive Incentive applications are labeled by technology, such as lighting and HVAC, and defined as equipment most commonly recommended for energy efficient projects with well-established energy savings. Custom incentives are offered for non-standard equipment, complex systems, and specialized technologies that are not easily addressed through prescriptive offerings. Customers are provided a discrete yet flexible application process with the ability to submit one or multiple applications for any size project. The transparency of incentives aids customers in making informed decisions, while assisting energy efficiency professionals to better solicit a prospective energy efficiency project.

# Support for EMP Goals

This program will support many of the EMP's strategies and goals, including, among others, the following:

- Primary Goal 3.1 (Increase New Jersey's overall energy efficiency).
- Primary Goal 4.1 (Start the transition for new construction to be net zero carbon).

# **Program Description**

The SmartStart NC Program offers both prescriptive and custom incentives for the broad range of C&I customers who are in the market to purchase energy efficiency measures. On September 6, 2022, the State of NJ adopted the ASHRAE 90.1-2019 energy code for all commercial and industrial buildings. NJCEP utilizes this code in determining performance requirements and incentive eligibility.

The SmartStart NC Programs will include the following offerings:

• **Prescriptive Efficiency Measure Incentives** that provide fixed incentives for energy efficiency measures. Incentives are based on incremental costs (i.e., the additional cost above baseline equipment) taking into consideration market barriers, changes in baselines over time, and market transformation objectives. Eligible measures are listed in <u>Appendix G, C&I and DER Incentives and General Rules</u> below.

Custom Measure Incentives for more complex and aggressive efficiency measures. The process for calculating custom measure incentives is performance-based, which may include a commissioning component. Incentives are evaluated and determined via an incremental cost and energy savings analysis to be provided by the customer or customer's authorized representative (vendor/contractor). Determination of the appropriate baseline (existing conditions and/or industry standard) will be reviewed on a case-by-case basis subject to program review and approval. For measures that appear to have no clear baseline per energy code or recognized industry standard, the Program Manager will work with the applicant to define an appropriate baseline. The Program Manager has the discretion to determine the reasonableness of project costs for proposed technologies based on industry standards and other market research. Eligible electric and gas measures include lighting systems, HVAC systems, motor systems, large boiler systems, gas-engine driven chillers, and other non-prescriptive measures proposed by the customer. explicitly listed as custom (per the filing and/or Program Guide) will be reviewed for eligibility and are subject to approval at the discretion of the Program Manager. More details regarding this process can be found below in this Compliance Filing under the Custom Measure Incentive Guidelines section and in this Compliance Filing's Appendix G, C&I and DER Incentives and General Rules Custom Measures section.

Customers or their contractors must submit an application for the type of equipment they have chosen to install. The application should be accompanied by a related worksheet (where applicable), a manufacturer's specification sheet for the selected equipment, and one month of the most recent electric/natural gas utility bill. The Program Manager may also require additional utility bills if such bills are relevant to its review of any given application. To qualify for incentives, customers must be contributors to the SBC that corresponds to their incentive (e.g., must contribute to the SBC electric fund if applying for an electric incentive). For example, customers applying for lighting incentives must provide an investor-owned utility ("IOU") electric bill identifying SBC contribution. Similarly, an IOU gas bill identifying SBC contribution is required for natural gas saving measures such as gas heating. Program representatives will then review the application package and approve it, reject it, and/or advise of additional upgrades to equipment that will save energy costs.

# **Target Markets and Eligibility**

The C&I New Construction Program targets commercial, educational, governmental/institutional, industrial, and agricultural customers engaged in customer-initiated construction events including public school construction, other new building construction, and substantial renovations (also known as gut rehabilitations). The program may be used to address economic development opportunities and transmission and distribution system constraints. It is primarily geared towards the mainstream C&I market, as opposed to programs that target specialized markets such as the

<sup>&</sup>lt;sup>43</sup> A given substantial renovation project may be eligible for a utility-sponsored EE program as well as for this NJCEP Program. If it is, the applicant would be able to choose which program it would utilize. I.e., the applicant could have one or the other program, but not both, cover the project. NJCEP and the relevant utility-sponsored EE programs have, or will have, program rules and procedures to implement the foregoing.

Large Energy Users Program and, the Local Government Energy Audit Program. Applicants to the program must be contributors to the SBC.

#### **Incentives**

The tables in <u>Appendix G</u>, *C&I* and *DER* Incentives and General Rules list the incentives for the C&I New Construction Program. The incentives vary by size, technology, and efficiency level and will be paid based on specific eligibility requirements. The program offers both prescriptive incentives and custom measure incentives.

### Custom Measure Incentive Guidelines

The program utilizes a performance-based approach to determine incentives for custom equipment. Established incentive caps for the program are the lesser of:

- \$0.16/kWh and/or \$1.60/therm based on estimated annual savings;
- 50% of total installed project cost; or
- buy down to a one-year payback.

The program will allow a single facility with multiple utility accounts to submit a proposed custom project under one application. A customized set of Microsoft Excel-based forms is required for all projects. These forms summarize the critical components of the custom measure, including a detailed description of the technology, installed project cost, and projected savings. Upon project completion, additional documentation is required to confirm that the measures were installed as proposed and that any changes during construction are reflected in the final savings values. As is clearly described in the program forms, certain measures may require post-installation metering, trending analysis, and/or the installing contractor's Statement of Substantial Completion. Projects will use ASHRAE 90.1-2019 as the baseline for estimating energy savings and the proposed measure(s) must exceed ASHRAE 90.1-2019 standards, where applicable. In cases where ASHRAE guidelines do not apply, the program will require that custom measures meet or exceed industry standards per the Consortium for Energy Efficiency ("CEE"), EPA ENERGY STAR, or using such resources as the current New Jersey baseline studies and other market research; the program experience of the Commercial/Industrial Program Manager; and experience of the New Jersey utilities or utility/public program experience from other comparable jurisdictions. The Program Manager will provide contractors with program spreadsheets that include standard formats for reporting program savings, as well as standard incentive calculations.

As a general matter, the preference is to avoid repeated custom measure applications. Accordingly, the Program Manager will generally consider the possibility of developing and proposing a prescriptive standard and incentive once it has received three or more custom applications for the same measure.

# Account/FY Cap:

In addition to any other caps described elsewhere in this Compliance Filing, SmartStart incentives will also be capped at a maximum of \$500,000 per electric account and \$500,000 per natural gas account, in each case, per FY.

# **C&I New Construction Application Deadlines**

To be eligible for related incentives, an application for custom measures must be submitted to the Program Manager prior to the installation of any equipment and applications for all other measures must be submitted within 12 months of equipment purchase. Documentation confirming the date the equipment was purchased, such as a material invoice or purchase order, must be provided to the Program Manager.

Notwithstanding the above, all applicants are strongly encouraged to obtain the Program Manager's approval and an incentive commitment prior to commencing installation or construction. Customers implementing projects without the Program Manager's approval risk having their project deemed ineligible for incentives.

# **Delivery Methods**

As new technologies are introduced and prices for measures change, sometimes in response to program offerings, Program Managers will continuously monitor technologies and costs and adjust program incentives accordingly. The Program Manager will propose adjustments to program offerings based on program experience, the results of any evaluations, program and market studies, as well as other state/regional market research, and current pilot/demonstration projects.

# **Quality Control Provisions**

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all C&I program participants. All applications received are reviewed to confirm compliance with eligibility requirements. Additionally, all technical information submitted in support of the application is reviewed to confirm measure qualification and to verify the incentive calculation. Applicant-supplied information and Program Manager-performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence.

A sample percentage of applications will be randomly selected for inspections and Quality Control file reviews. The specific percentages by program are outlined in the individual program guideline documents. Inspections include a site visit to verify customer eligibility and energy efficient measure technical specifications that result in a verification of the incentive calculation. A field inspection report is prepared and maintained in the project file for future verification.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

# **C&I Buildings: Pay for Performance - New Construction**

As noted in the Introduction to this Compliance Filing, this program will, on a reasonable and orderly schedule provided to stakeholders and the public through means other than this Compliance Filing, eventually be replaced and superseded by the NCP.

## **Program Purpose and Strategy Overview**

The Pay for Performance – New Construction Program ("P4P NC") is intended to encourage developers and design professionals to look for ways to optimize design, operation, and maintenance of new construction and substantial renovation projects in order maximize energy and energy cost savings. The P4P NC Program does this by requiring the use of standardized energy simulation software to estimate energy use and costs of the proposed design compared to a code compliant baseline. A portion of project incentives is tied to actual building performance to emphasize to building owners the critical value of addressing operational practices. The P4P NC Program aligns with other rating authorities such as LEED and ENERGY STAR.

## Support for EMP Goals

This program will support many of the EMP's strategies and goals, including, among others, the following:

- Primary Goal 3.1 (Increase New Jersey's overall energy efficiency).
- Primary Goal 4.1 (Start the transition for new construction to be net zero carbon).

# **Program Description**

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The P4P NC Program takes a comprehensive, whole building approach to energy efficiency in the design and operation of new commercial and industrial buildings, as well as in substantial renovations. 44 The program provides tiered incentive levels correlated to the modeled energy and energy cost savings as demonstrated in the proposed design and includes a performance component to reflect the value that effective building operation has in determining energy use. This market-based program relies on a network of partners selected through a Request for Qualifications process. Once approved, partners may provide technical services to program participants.

<sup>&</sup>lt;sup>44</sup> A given substantial renovation project may be eligible for a utility-sponsored EE program as well as for this NJCEP Program. If it is, the applicant would be able to choose which program it would utilize. I.e., the applicant could have one or the other program, but not both, cover the project. NJCEP and the relevant utility-sponsored EE programs have, or will have, program rules and procedures to implement the foregoing.

Although partners work under contract with building owners, acting as their "energy expert", they are required to strictly follow program requirements. Partners will be required to develop a Proposed Energy Reduction Plan ("ERP") for each project. The Proposed ERP details a set of recommended measures that will achieve the minimum performance target. Partners will then provide an As-Built ERP, along with a Commissioning Report to demonstrate that recommended measures are installed and functioning. Lastly, the partner will benchmark the building following one year of operation to document how well the building is operating relative to the As-Built ERP.

Participants will be required to work with an approved partner to develop the Proposed ERP and facilitate the incorporation of the recommended energy efficiency measures. The submitted Proposed ERP must include a package of energy efficiency measures that achieve the minimum performance target of 5% savings for commercial and industrial buildings and 15% for multifamily buildings compared to ASHRAE 90.1-2019. The minimum performance target will be measured in terms of energy cost and source energy savings, which is consistent with Appendix G of ASHRAE 90.1-2019, EPAct Federal Tax Deductions and LEED NC.

Partners are required to develop whole building energy simulations using approved simulation tools. The list of approved tools will be based on the software requirements outlined in ASHRAE 90.1, Section 11 or Appendix G of ASHRAE 90.1 or as approved by the Program Manager. The program follows Appendix G of ASHRAE 90.1-2019 to demonstrate that the proposed design meets or exceeds the minimum performance target.

## Appendix G of ASHRAE 90.1-2019

Under this path, the partner will model a baseline and proposed building using Appendix G of ASHRAE 90.1-2019. Appendix G of ASHRAE 90.1-2019 uses a common baseline building approach that will remain the same for all future iterations of ASHRAE 90.1 and is roughly equivalent to ASHRAE 90.1-2004, Appendix G. Program Guidelines and tools will outline/calculate equivalent savings values relative to Appendix G of 90.1-2019. Measures must be modeled as interactive improvements to Appendix G of ASHRAE 90.1-2019.

Each project must have at least one measure addressing *each* of the following building systems: envelope, heating, cooling, and lighting (e.g., increased insulation, improved HVAC efficiency, lighting power density below code requirements, etc.). Buildings that are not heated (e.g., refrigerated warehouse) or not cooled (e.g., warehouse) will not be required to have a measure addressing the missing building system. Measures are defined as components that exceed ASHRAE 90.1-2019 requirements.

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<sup>&</sup>lt;sup>45</sup> Energy Target is rounded <u>down</u> to two significant figures e.g., 0.0487 is rounded to 0.04 or 4%.

Note also that applications for projects that submit documentation they received their construction/building permits under ASHRAE 90.1-2016 will have their P4P NC applications processed using ASHRAE 90.1-2016 as their baseline.

<sup>&</sup>lt;sup>46</sup> For the avoidance of doubt, as so outlined, modeled or calculated, they must meet the minimum performance target set out above in this Program Description.

#### Core and Shell vs. Tenant Fit-Out Considerations

Generally, P4P NC projects are required to evaluate the whole building design. Further, if a P4P NC application is submitted to the Program, that same building(s) cannot also submit applications to other programs. An exception to this rule may apply to eligible projects pursuing Core & Shell separate from tenant fit-out improvements, which may fall into one of two scenarios below.

Scenario 1: Core & Shell and Tenant Fit-out are combined - In this scenario, all aspects of the design (whole building) must be included under a single P4P NC application and treated as a single project following all Program Guidelines, as typical. This may apply where:

- Developer is funding and constructing both Core & Shell and Tenant Fit-out; or
- High performance systems are specified and funded for the tenant space separate from Core & Shell, but the building owner and tenant have come to an agreement to include both scopes of work under a single project.

Scenario 2: Core & Shell Separate from Tenant Fit-out - This scenario applies when the Core & Shell work is known, but the tenant space development is unknown and/or is funded separately. In this case, the Core & Shell is treated as a separate project from the Tenant Fit-out and a building may apply for P4P NC for either Core & Shell or Tenant Fit-out(s), but not both. The determining factor depends on which scope will include design and construction of the central HVAC system, in which case:

- P4P NC incentives will apply to all conditioned square footage of the building serviced by the central HVAC in the project's scope of work;
- The project scope applying for P4P NC (e.g., Core & Shell or Tenant Fit-out) must be able to meet all requirements for P4P NC on its own;
- Any Tenant Fit-out or Core & Shell work not included in P4P NC (and connected to a non-residential electric/gas account paying into the SBC) may seek incentives through the C&I Prescriptive or Custom Measure programs for eligible equipment.

A project may apply to the program at any point during the design phase. Projects that have begun construction may still apply so long as measures have not been purchased prior to receipt of the program application. Any measures installed prior to approval of Proposed ERP are done so at the project's risk. In the event the equipment selected does not qualify for an incentive, it will be removed from the Proposed ERP. Projects that cannot identify efficiency improvements that meet the above requirements will be referred to the appropriate C&I Buildings Program(s).

See Program Guidelines at www.njcleanenergy.com for additional modeling considerations.

# **Target Market and Eligibility**

The P4P NC Program is open to new C&I construction projects with 50,000 square feet or more of conditioned space. The Program Manager has the discretion to approve projects that are within 10% of the minimum 50,000 square foot threshold. Projects may include a single building meeting square footage requirements or multiple buildings provided those buildings are owned by the same entity, are located on adjacent properties, and are designed and constructed within the same time

period.<sup>47</sup> Multiple buildings that are grouped into one program application are viewed as a single project that is eligible for one set of program incentives and all incentive caps apply to the group of buildings.

Due to the comprehensive design of this program, projects may not apply for incentives in other NJCEP programs while enrolled in P4P NC for the same facility(ies). All eligible measures must be considered in P4P NC, with the exception of on-site generation (e.g. CHP program). Exceptions also apply to Core & Shell and/or Tenant Fit-out projects as set out in the foregoing paragraphs. Additional exceptions may be considered by the Program Manager on a case-by-case basis.

# **Multifamily Buildings**

The P4P NC Program accommodates certain types of multifamily buildings. Applicants who pursue their multifamily projects through the ENERGY STAR Multifamily New Construction (MFNC) program may apply for NJCEP incentives through the RNC Program; applicants who do not pursue their multifamily projects through the ENERGY STAR MFNC program may apply for NJCEP incentives through the P4P NC Program. Regardless of which program the applicant pursues, all applicable NJCEP program requirements must be satisfied in order to receive incentives. Please see Appendix B, Multifamily Decision Tree, for further guidance on multifamily program eligibility.

Low-rise (and mid-rise where appropriate), garden-style complexes will be treated as one project under the P4P program. In other words, if there are 10 garden-style buildings that are part of one multifamily community, all 10 will be aggregated into one P4P NC application. The 50,000square-foot participation threshold will be met through this aggregation (including common area and in-unit). The minimum performance target (as well as all other program requirements) will also be determined on an aggregated basis. Only one set of incentives will be paid per project and all incentive caps apply.

#### **Partner Network**

Existing approved P4P NC Partners will need to complete online re-training on a regular basis as determined by the Program Manager in order to remain an approved partner in the program. The Program Manager may offer select partners one-on-one training on projects to ensure success in the program, as well as kick-off meetings upon project enrollment. Depending on program demand, the Program Manager may provide subsidized Energy Modeling Training Sessions for Program Partners related to ASHRAE 90.1-2019.

<sup>&</sup>lt;sup>47</sup> For the purpose of tracking technical reviews and site inspections, each building addressed within a multi-building ERP may be considered a separate project. This is necessary because although a single ERP will include all of the necessary project information, the review of each of the building simulation models will require individual attention. Similarly, site inspections will take considerably longer for multi-building projects as each building will require an inspection. Where applicable, administrative tracking will be associated with any approved sampling of building simulation models (i.e., if a single model is developed to represent several similar buildings).

# **Program Offerings and Incentives**

The P4P NC Program's incentive structure was conceived to encourage the design and achievement of comprehensive energy savings and are, therefore, released in phases upon satisfactory completion of each of these three program milestones:

- 1. Submittal and approval of a Proposed ERP with proposed design meeting all program requirements;
- 2. Submittal and approval of an As-Built ERP and Commissioning Report confirming installation and operation of recommended measures per the Proposed ERP. Changes between proposed and as-built design must be accounted for at this point, although as-built project must still meet all program requirements; and
- 3. Submittal of ENERGY STAR Portfolio Manager benchmark based on first year of operation with score of 75 or higher. Building types not eligible for ENERGY STAR Certification can qualify for this incentive by obtaining *ASHRAE Building Energy Quotient* (bEQ) In-Operation Certification with equivalent score as set by Program Guidelines. Additional certification for compliance may be considered by Program Manager.

Incentives are paid based on the rate schedule in the table below. At the customer's written request, incentive payments may be assigned or directed (including re-assignment or re-direction) to either the customer, the partner, or other designated representative.

	Cost or Source Energy Reduction from 90.1-2019 Baseline	Incentive by Building Type Per Square Foot		
Minimum Performance	15% Multifamily	Industrial/High	Commercial and	
Requirement	5% All other	Energy Use Intensity	Multifamily	
	+ 0 - <2% (Tier 1)	\$0.10	\$0.08	
	+ 2 - <5% (Tier 2)	\$0.12	\$0.10	
Incentive #1 Proposed Energy	+ 5% or greater (Tier 3)	\$0.14	\$0.12	
Reduction Plan	Max	\$50,000.00		
Reduction Flan	Pre-Design Bonus	\$0.04		
	Max	\$20,000.00		
Incentive #2	+ 0 - <2% (Tier 1)	\$1.00	\$0.80	
As-Built Energy	+ 2 - <5% (Tier 2)	\$1.20	\$1.00	
Reduction Plan and Cx Report + 5% or greater (Tier 3)		\$1.40	\$1.20	
Incentive #3 Building Performance		\$0.40	\$0.35	

Table 14: P4P NC Incentive Schedule

• Incentive #1 is contingent on moving forward with construction and must be supported by required program documentation (e.g., signed Installation Agreement). The Program Manager, in coordination with the Division of Clean Energy, may waive this contingency in extreme situations where construction is halted due to economic or other external factors.

If a project is cancelled after the receipt of Incentive #1, the incentive amount shall be returned to NJCEP. If the Incentive #1 payment is not returned to NJCEP, the customer/partner will not be eligible in the future for another Incentive #1 payment for the same facility.

- The total of Incentives #1, #2, and #3 combined shall not exceed \$2,000,000 per project, assuming both electric and natural gas measures are recommended and implemented. Should only electric measures or only gas measures be recommended and implemented, then the total of Incentive #1, #2, and #3 combined shall not exceed \$1,000,000 per project. The foregoing would place a \$1,000,000 per project cap on electric-only facilities.
- Certain circumstances may impact an incentive amount after a commitment has been made:
  - o Increase or decrease in project square feet may increase (budget permitting) or decrease the incentive;
  - Significant modifications to the approved scope of work, including addition and removal of a measure, may impact the overall project savings causing a project to move between incentive tiers. Incentives will be adjusted up (budget permitting) or down, accordingly; and
  - o Generally, any required adjustments will also include under or overpayment of incentives already paid.

Incentive #1 Pre-Design Bonus (Integrative Process): Projects that are in pre-design or schematic design may be eligible for a higher Incentive #1. The goal is to incentivize applicants to think critically about their building design from an energy efficiency standpoint early in the process when changes are easier to make, thereby supporting high-performance, cost-effective project outcomes. To qualify, the partner will need to work with the applicant beginning in pre-design and continuing throughout the design phases. They will perform a preliminary "simple box" energy modeling analysis before the completion of schematic design that explores how to reduce energy loads in the building and accomplish related sustainability goals by questioning default assumptions. They will then document how this analysis informed building design decisions relative to owner's project requirements, basis of design, and eventual design of the project. This submittal shall be submitted after application approval, but prior to the Proposed ERP. Although pre-construction inspections are not routinely performed in this program, TRC may inspect projects applying for this bonus.

# **Quality Control Provisions**

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all P4P NC Program projects. All applications received are reviewed to confirm compliance with eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of measure qualification and incentive calculation. Applicant supplied information and project technical data are entered into the database. Electronic files are created for all documents and for ongoing project correspondence. The Program Manager reviews submitted ERPs.

The Program Administrator quality control staff will perform pre- and post-construction inspections, will regularly conduct pre-approval technical reviews of ERPs, and will perform file reviews on a sampling of applications prior to incentive payments. The selection of inspections and reviews will be based on a pre-determined, random sampling percentage.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

# C&I Buildings: Customer Tailored Energy Efficiency – New Construction

As noted in the Introduction to this Compliance Filing, this program will, on a reasonable and orderly schedule provided to stakeholders and the public through means other than this Compliance Filing, eventually be replaced and superseded by the NCP.

## **Program Purpose and Strategy Overview**

This program supplements the current New Jersey C&I incentive programs by offering a streamlined approach to developing and implementing energy efficiency projects for mid-to-large customers. The key features of the program:

- Allows customers to bundle multiple prescriptive and custom measures into one application with one project delivery approach;
- Customers can receive incentives for qualified advanced and emerging energy efficiency technologies that are not currently addressed under SmartStart;
- Technical assistance incentives offered to help minimize the soft costs associated with developing an energy efficiency project;
- Leverages existing energy efficiency professional networks;
- Larger customers with multiple measures can access incentives for their targeted energy efficiency projects without enrolling in a whole-building program; and
- Performance verification to engage customers after their project is complete to ensure persistence of savings.

The goals of the program are to:

- increase participation among mid to large customers;
- increase the amount of energy saved per project for participating customers;
- understand from participating customers whether assistance beyond measure incentives will facilitate the installation of energy efficiency projects;
- promote the installation of advanced lighting controls in conjunction with high efficiency LED luminaires; and
- collect information and data that can inform program changes or new program designs in the future.

# Support for EMP Goals

This program will support many of the EMP's strategies and goals, including, among others, the following:

- Primary Goal 3.1 (Increase New Jersey's overall energy efficiency).
- Primary Goal 4.1 (Start the transition for new construction to be net zero carbon).

# **Program Implementation Description**

The program was developed and launched in FY18 in response to customer concerns regarding the application process for projects involving completion and submission of multiple SmartStart applications. It will be promoted through traditional methods, the C&I Outreach Account Managers, and energy efficiency professionals.

The program process is as follows:

- 1. **Outreach and Recruitment** The CTEEP NC will be included in any C&I customer outreach conducted by the Account Managers. Information about it will be placed on the web site and shared with the Ombudsman's office and trade allies who can assist in promoting the pilot to their customers.
- 2. **Enrollment** The enrollment application will allow the Program Management team to assess the opportunities, the status of the potential project, and to schedule a Scoping Session meeting where the Case Manager performs a needs assessment to determine whether the customer requires additional assistance such as referral to technical expertise, financial assistance, internal sales, or benchmarking.
- 3. **Energy Efficiency Plan Development** Upon application acceptance, the customer works with its technical experts to develop the EEP.
- 4. **Incentive Commitment** Upon acceptance of a complete EEP, the Program Manager will commit incentives as defined by the EEP and program requirements. The incentive commitment will be valid for twelve (12) months. The Program Manager may extend the initial expiration period in two, six (6) month intervals.
- 5. **ECM Installation** The customer will submit final documents necessary to process the incentive payment consistent with the schedule defined below.
- 6. **Performance Verification** The performance verification submission applies to custom measures only. A customer will receive the final 10% of custom measure incentives consistent with the schedule defined below.

### **Target Markets and Eligibility**

The target customer size is 50,000 square feet.

Additional criteria that will be considered for inclusion:

- Customers with complex operations and/or unique energy usage profiles who would most benefit from custom assessments of efficiency opportunities;
- Customers whose efficiency opportunities, barriers to investment, and/or business needs suggest they may benefit from support beyond just financial incentives (e.g. technical analysis, financial analysis, etc.);
- Customers with projects requiring multiple applications under existing program offerings; and
- Customers who are good candidates for installation of new, innovative, or advanced efficiency technologies.

### **Program Offering and Incentives**

Financial incentives offered to customers of the CTEEP NC will be the same as those available through the existing prescriptive and custom program offerings. However, for ease of customer participation, the financial incentives will be bundled into a single "package" application. The

total incentive available for any project will be equal to the sum of the incentives available through the existing prescriptive and custom program offerings for the measures installed. For ECMs possessing both prescriptive and custom features, the Program Manager will have discretion to determine if some or all of the energy efficiency benefits will be eligible under the custom incentive structure.

#### Prescriptive Measures:

• Measures meeting the requirements of the current SmartStart Building Program will receive the established incentive (including any applicable enhancements) under that program.

#### **Custom Incentives:**

- \$0.16 per kWh
- \$1.60 per therm
- 50% of project cost
- Buy-down to 1-year payback
- Same enhanced incentives as for the current SmartStart Building Program

#### Technical Assistance:

In addition to measure incentives, where initial design costs are a barrier to the pursuit of projects that appear to be promising, the Pilot may offer customers an additional incentive towards design assistance or technical support provided by an independent<sup>48</sup> third party design professional. Incentives will be available for up to 50% of the cost of the design/technical assistance up to a maximum of \$10,000 upon approval of the NJCEP Program Manager, with half of the incentive payable upon proof of construction kick-off and the remainder upon installation of the recommended measures.

### *Incentive cap:*

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The same caps in SmartStart Program apply here, including the \$500,000 per utility account cap; however, the Technical Assistance incentive does not count towards this incentive cap.

<sup>&</sup>lt;sup>48</sup> Independent in this case means the design professional does not sell or represent products that are being considered for installation.

### Payment Schedule

Incentive payments are made along the life of a project as outlined below.

Project material/labor invoices will signify projected completion followed by a post-inspection as deemed appropriate.

Table 15: CTEEP NC Schedule of Payments

Schedule of Payments								
Type of Incentive	Milestone 1 Construction Kick- Off	Milestone 2 Substantial Completion	Milestone 3 Performance Verification					
Technical Assistance Incentive	50%	50%	-					
Base Incentives - Prescriptive	-	100%	-					
Base Incentives - Custom	-	90%	10%					

Milestone 1: The EEP is approved and construction contracts are in place.

Milestone 2: All work is installed and new equipment and systems are generating energy

savings. Multiple payments may be provided.

Milestone 3: Performance Verification is complete. Multiple payments may be provided.

This milestone may occur between 3-6 months after substantial completion.

### **Program Standards**

- **Prescriptive measures** must meet the minimum requirements of the SmartStart Buildings program.
- Custom measures must meet or exceed current SmartStart Custom requirements (with the exception of minimum energy savings requirements) or the Minimum Performance Standards for the LEUP.
- Advanced Lighting Control Systems must be listed on the Design Lights Consortium's Qualified Products List.
- **Emerging Technologies** must meet current building codes or industry standards, as applicable.

#### Limitations/Restrictions

- Renewable and power storage technologies including, but not limited to, photovoltaics, fuel cells, battery storage, and microturbines are not eligible.
- Combined heat and power systems are incentivized under New Jersey's Combined Heat and Power program and are not eligible for CTEEP NC incentives.
- Previously installed measures (i.e., any measures installed prior to enrollment) are not eligible.

- Measures that do not save energy (kWh or therms) are not eligible. Customers may install measures that exclusively reduce operating costs and/or energy/demand costs, but they may not be included in the CTEEP NC EEP.
- Operations & Maintenance and behavioral measures are not eligible. Behavioral measures include those where equipment is adjusted to improve performance or change energy use. Behavioral measures may include boiler clean & tunes, commissioning of existing equipment, thermostat adjustment, or seasonal equipment removal.

### **Quality Control Provisions**

All applications are reviewed upon receipt to verify adherence to eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of energy efficient measure qualification and incentive calculation. Applicant supplied information and program administrator performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence. Inspection protocols for custom measure projects will require a pre-determined percentage of pre- and post-inspections. Pre-inspections may be waived after successful completion of a Scoping Session.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

# Appendix F, Residential Incentives (including Enhancements)

#### **Residential New Construction**

As noted elsewhere in this Compliance Filing, this program and these incentives will, on a reasonable and orderly schedule provided to stakeholders and the public through means other than this Compliance Filing, eventually be replaced and superseded by the NCP and its incentives.

Table 16: RNC Financial Incentives per Unit for ENERGY STAR New Construction Programs, Zero Energy Ready Home, and Zero Energy Home + RE

Program	Single Family (1 & 2 Family Homes)	Townhome (as defined by EPA)	Multifamily (as defined by EPA)
Energy Star	\$1,000 per home + \$30 per MMBtu saved	\$500 per home + \$30 per MMBtu saved	\$500 per unit + \$30 per MMBtu saved
ZERH (Zero Energy Ready Home)	\$4,000 per home +  \$30 per MMBtu saved Rater Incentive: \$1,200 per home	\$2,500 per home +  \$30 MMBtu saved Rater Incentive: \$1,200 per home	\$1,500 per unit + \$30 per MMBtu saved
ZERH + Renewables	\$6,000 per home  +  \$30 per MMBtu saved Rater Incentive: \$1,200 per home	\$4,000 per home  +  \$30 per MMBtu saved Rater Incentive: \$1,200 per home	\$2,250 per unit + \$30 per MMBtu saved
UEZ/Affordable Housing Bonus	+\$500 per home	+\$500 per home	N/A

#### Notes:

- 1. The above \$30/MMBTU is based on savings before any savings from Renewable Energy. MMBtu is the incremental annual MMBtu saved as compared to the calculated annual usage of the baseline reference home, defined by the applicable energy code as described in more detail in the New Jersey Clean Energy Program Protocols to Measure Resource Savings
- 2. Building types are determined using the EPA MFNC Program Decision Tree, located at this Compliance Filing's <u>Appendix B</u>, *Multifamily Decision Tree*.

# Appendix G, C&I and DER Incentives and General Rules

#### **Extension Policies**

Many programs include deadlines for submittal of information. For example, some programs require the submittal of a final application within six months or one year from the date of the letter approving the initial application. NJCEP provides for extensions of deadlines provided certain conditions are met. Program Managers in general are authorized to approve first and, in some cases, second extensions. Additional standards/guidelines for approving extensions and/or reinstatements are set out in the Compliance Filings and in the Guidelines established for each program. The Program Administrator, with the approval of Board staff, may approve up to two extensions, each of a length set by the PA with the approval of Board staff, beyond the extensions the Program Managers are authorized to approve.

### C&I / DER Incentive Caps

Incentive caps have been established to ensure that there is equitable access to the C&I and DER programs for all qualifying customers. These caps have been established because of the potential scale of commercial/industrial projects, where a few extremely large projects could otherwise consume a significant share of the available budgets, leaving other customers unable to access project funding.

### **Program / Project Incentive Caps**

Most C&I and DER programs set incentive caps on a program per FY and/or per project basis; those caps are described in the program descriptions and/or incentive descriptions in this Compliance Filing.

## **Total Cost Incentive Cap**

No project shall receive incentives from one or more NJCEP programs and/or Board-approved utility programs in an amount that exceeds the total cost<sup>49</sup> of measures installed or performed.

<sup>&</sup>lt;sup>49</sup> Total cost is usually determined by reference to a sales invoice. It is not, for example, impacted by federal tax credits that will become available to the applicant on its next tax return or grants from sources other than NJCEP or Board-approved utility programs.

#### **C&I New Construction Incentives**

As noted elsewhere in this Compliance Filing, this program and these incentives will, on a reasonable and orderly schedule provided to stakeholders and the public through means other than this Compliance Filing, eventually be replaced and superseded by the NCP and its incentives.

### **Custom Measures**

- Performance incentives of \$0.16/kWh and \$1.60/therm of first year savings, 50% of total installed project cost, or buy down to 1-year payback, subject to enhancement, where applicable, pursuant to the table immediately below. Based on estimated savings as approved by the Program Manager.
- Projects will use ASHRAE 90.1-2019 as the baseline for estimating energy savings and the proposed measure(s) <u>must exceed</u> ASHRAE 90.1-2019 standards, where applicable. In cases where ASHRAE guidelines do not apply, the program will require that custom measures meet or exceed industry standards per the Consortium for Energy Efficiency ("CEE"), EPA ENERGY STAR, or using such resources as the current New Jersey baseline studies and other market research; the program experience of the Commercial/Industrial Program Manager; and experience of the New Jersey utilities or utility/public program experience from other comparable jurisdictions.

Incentive **Equipment Type** Cap **Incentive Amount** Electric Savings: \$0.16/kWh First-Year Savings Cap Gas Savings: \$1.60/therm **Custom Measures Project Cost** 50% of Total Installed **Project Cost** Cap **Buy-Down** Amount to buy-down to 1-Cap year payback

Table 17: C&I Custom Measure Incentives

### **Electric Chillers**

• Note: - The manufacturer's published chiller efficiency must be determined using the Air-Conditioning, Heating and Refrigeration Institute ("AHRI") 550/590 test procedures and at the AHRI standard evaporator and condenser temperatures. If an applicant has a water-cooled centrifugal chiller that is designed to operate at other than the AHRI standard conditions the procedure in Standard 90.1-2019, Section 6.4.1.2.1 may be used by the applicant to adjust the manufacturer's published efficiency at non-AHRI conditions to the efficiency at AHRI standard conditions. The applicant will need to provide the

- manufacturer's non-AHRI ratings, as well as the calculations for the chiller efficiency at AHRI conditions.
- Electrically operated comfort cooling air-cooled and water-cooled chillers are eligible for incentives under the prescriptive path. Chillers for process cooling (e.g., manufacturing, data center, food storage or processing, etc.) loads may apply for an incentive under the custom path.
- Performance Incentives apply for each 0.1 EER above the Incentive Minimum EER or for each 0.01 kW/ton below the Incentive Minimum kW/ton.
- Proposed equipment must exceed minimum program efficiency requirements for Path A (constant speed) IPLV and Path B (variable speed) Full Load.

Table 18: C&I Electric Chiller Incentives

			New Construction				
Equipment	Capacity	Consta	nt Speed	Variabl	e Speed		
Туре	Cupacity	Base \$/ton	Performance \$/ton	Base \$/ton	Performance \$/ton		
Air Cooled	tons < 150	\$10.00	\$3.50	\$45.00	\$4.00		
Chiller	tons <u>≥</u> 150	\$10.00	\$2.75	\$46.00	\$4.00		
	tons < 75	\$6.50	\$2.25	\$20.00	\$2.50		
Water Cooled	75 <u>&lt; t</u> ons < 150	\$10.00	\$2.00	\$21.50	\$2.00		
Chiller,	$150 \le tons \le 300$	\$8.50	\$2.00	\$21.50	\$2.00		
Positive Displacement	$300 \leq tons \leq 600$	\$7.50	\$2.25	\$18.50	\$2.00		
Displacement	tons <u>≥</u> 600	\$15.00	\$2.00	\$22.00	\$2.00		
	tons < 150	\$12.00	\$2.25	\$12.00	\$2.75		
Water	$150 \le tons \le 300$	\$5.00	\$2.00	\$15.00	\$2.50		
Cooled Chiller,	$300 \leq tons \leq 400$	\$4.00	\$2.00	\$10.00	\$2.00		
Centrifugal	400 <u>&lt; t</u> ons < 600	\$4.00	\$2.00	\$12.50	\$2.00		
	tons <u>≥</u> 600	\$4.00	\$2.00	\$12.50	\$2.00		

Table 19: C&I Electric Chiller Minimum Efficiency Requirements

		Constar	nt Speed	Variable	e Speed	Constan	t Speed	Variabl	e Speed
Equipment Type	Capacity	Incentive Minimum Full Load kW/ton	Qualifying IPLV kW/ton	Qualifying Full Load kW/ton	Incentive Minimum IPLV kW/ton	Incentive Minimum Full Load EER	Qualifying IPLV EER	Qualifying Full Load EER	Incentive Minimum IPLV EER
Air Cooled	tons < 150					10.3	13.7	9.7	16.12
Chiller	tons <u>≥</u> 150					10.3	14.0	9.7	16.42
	tons < 75	0.735	0.60	0.78	0.49				
Water Cooled	75 <u>&lt; t</u> ons < 150	0.706	0.56	0.75	0.48				
Chiller,	$150 \le tons \le 300$	0.647	0.54	0.68	0.431				
Positive Displacement	300 <u>&lt; t</u> ons < 600	0.598	0.52	0.625	0.402				
Displacement	tons <u>≥</u> 600	0.549	0.50	0.585	0.372				
	tons < 150	0.598	0.55	0.695	0.431				
Water	$150 \le tons \le 300$	0.598	0.55	0.635	0.392				
Cooled Chiller,	300 <u>&lt;</u> tons < 400	0.549	0.52	0.595	0.382				
Centrifugal	400 <u>&lt; t</u> ons < 600	0.549	0.50	0.585	0.372				
	tons <u>≥</u> 600	0.549	0.50	0.585	0.372				

# **Gas Cooling**

• For gas chillers, full load efficiencies are determined in accordance with A.H.R.I. 560; however, part load efficiencies are not rated.

Table 20: C&I Gas Absorption Chiller Incentives

Equipment Type	Size Range	Min Efficiency	Incentive
	< 100 tons		\$450/ton
Gas Absorption Chiller	100 to 400 tons	> 1.1 Full Load COP	\$230/ton
ŕ	> 400 tons		\$185/ton

Table 21: C&I Regenerative Desiccant Unit Incentives

Equipment Type	Requirement	Incentive
Regenerative Desiccant Unit	Must be matched with core gas or electric cooling equipment.	\$1.00/CFM of process air flow

## **Electric HVAC**

- To be eligible for an incentive, the equipment must exceed the requirements in the tables below.
- For systems < 65,000 Btu/h, if the equipment is rated using SEER2 efficiency units, SEER2 shall be used to determine eligibility. Otherwise, the SEER rating may be used.
- For systems < 65,000 Btu/h, if equipment is rated using HSPF2 efficiency units, HSPF2 shall be used to determine eligibility. Otherwise, the HSPF rating may be used.

Table 22: C&I Unitary Electric HVAC Incentives

	Cooling Capacity		Min	Incentive		
Equipment Type	(Btu/h)	Tier	SEER/ SEER2	EER	IEER	\$/Ton
Unitary HVAC	< 65 000	1	15.2 / 14.4			\$92
Split System	< 65,000	2	17.4 / 16.5			\$105
Unitary HVAC	<65,000	1	15.2 / 14.4			\$92
Single Package		2	17.4 / 16.5			\$103
TI TITLE C	$\geq$ 65,000 and <	1		11.5	15.0	\$73
Unitary HVAC Single Package or Split	135,000	2		12.5	16.1	\$79
System System	$\geq$ 135,000 and <	1		11.5	14.2	\$79
System	240,000	2		12.0	16.1	\$89
	$\geq$ 240,000 and <	1		10.5	13.2	\$79
Central DX AC	760,000	2		11.0	14.2	\$85
	> 760,000	1		9.7	12.5	\$72
	≥ 760,000	2		10.0	13.4	\$77

Table 23: C&I Air Source Heat Pump Incentives

	Cooling Capacity		Minimum Efficiency					Incentive
Equipment Type	(Btu/h)	Tier	SEER/ SEER2	HSPF/ HSPF2	EER	IEER	COP	\$/ton
Air Source Heat Pump	< 65,000	1	15.4 / 14.6	9.1 / 7.7				\$92
Split System	< 65,000	2	16.6 / 15.8	9.2 / 7.8				\$100
Air Source Heat Pump	< 65,000	1	14.4 / 13.7	8.2 / 6.9				\$92
Single Package		2	15.6 / 14.8	8.5 / 7.1				\$100
	≥ 65,000 and <	1			11.5	14.1	3.5	\$73
	135,000	2			12.1	14.8	3.6	\$77
Air Source Heat Pump Split System and Single	$\geq$ 135,000 and <	1			11.5	13.5	3.4	\$79
Package	240,000	2			11.7	15.0	3.4	\$82
	> 240,000	1			9.5	12.5	3.3	\$79
	<u>&gt; 240,000</u>	2			9.7	14.2	3.3	\$82

Table 24: C&I Water Source Heat Pump Incentives

Equipment Type	Cooling Capacity (Btu/h)	Tier	Minimum EER	Efficiency COP	Incentive \$/Ton	
	< 17,000	1	12.4	4.3	\$20	
	< 17,000	2	14.0	4.8	\$23	
Water to Air, Water Loop	≥ 17,000 and < 65,000	1	13.3	4.3	\$30	
Heat Pump		2	15.0	4.5	\$34	
	$\geq$ 65,000 and <	1	13.3	4.3	\$40	
	135,000	2	15.0	4.5	\$45	

Table 25: C&I Single Packaged Vertical AC and Heat Pump Incentives

Essissant Temp	Cooling Capacity	Tier	Minimum	Efficiency	Incentive
Equipment Type	(Btu/h)	Her	EER	COP	\$/Ton
	< 65,000	1	11.2		\$10
	< 03,000	2	11.8		\$12
Single Packaged Vertical	$\geq$ 65,000 and <	1	10.2		\$10
AC - SPVAC	135,000	2	10.7		\$12
	≥ 135,000 and < 240,000	1	10.2		\$10
		2	10.7		\$12
	. (5 000	1	11.2	3.4	\$10
	< 65,000	2	11.8	3.5	\$12
Single Packaged Vertical	$\geq$ 65,000 and <	1	10.2	3.1	\$10
Heat Pump - SPVHP	135,000	2	10.7	3.2	\$12
	$\geq$ 135,000 and <	1	10.2	3.1	\$10
	240,000	2	10.7	3.2	\$12

Table 26: C&I Ground Source Heat Pump Incentives

Equipment Type	Cooling Capacity	Tier	Minimun	n Efficiency	Incentive	
	(Btu/h)	1 161	EER	COP	\$/Ton	
C IC II ID	< 135,000	1	14.4	3.2	\$40	
Ground Source Heat Pump		2	18.0	3.6	\$50	
Groundwater Source	< 135,000	1	18.4	3.7	\$40	
Heat Pump		2	22.0	3.9	\$48	

Table 27: C&I Packaged Terminal AC and Heat Pump Incentives

Eminorant Toma	Cooling Capacity	Minimum	Efficiency	Incentive
Equipment Type	(Btu/hr)	EER	COP	\$/Ton
	< 7,000	12.0		
	≥ 7,000	12.0		
	≥ 8,000	11.7		
	≥ 9,000	11.4		
Packaged Terminal AC	≥ 10,000	11.1		
Tackageu Teriiiilai AC	≥ 11,000	10.8		
	≥ 12,000	10.5		
	≥ 13,000	10.2		
	≥ 14,000	9.9		\$20/ton
	≥ 15,000	9.6		
	< 7,000	12.0	3.4	(all cooling
	≥ 7,000	12.0	3.4	capacities)
	≥ 8,000	11.7	3.3	
	≥ 9,000	11.4	3.3	
Packaged Terminal Heat	≥ 10,000	11.1	3.2	
Pump	≥ 11,000	10.8	3.2	
	≥ 12,000	10.5	3.1	
	≥ 13,000	10.2	3.1	
	≥ 14,000	9.9	3.0	
	≥ 15,000	9.6	3.0	

Table 28: C&I Electric HVAC Controls Incentives

• Hospitality/institutional buildings with more than 50 units are not eligible for Occupancy Controlled Thermostats for Hospitality/Institutional Facilities incentive.

Equipment Type	Controlled Unit Size	Incentive
Occupancy Controlled Thermostats for Hospitality/Institutional Facilities	Any capacity	\$75 per occupancy- controlled thermostat
A/C Economizing Control	< 4.5 tons	\$85/control

# **Gas Heating**

Table 29: C&I Non-Condensing Boiler HVAC Incentives

Equipment Type	Boiler Type	Size (Input Rate)	Minimum Efficiency	Incentive
		< 300 MBtu/h	85% AFUE	\$0.95/MBH; Min \$400
	Hot Water	≥ 300 and < 1,000 MBtu/h	85% Et	\$1.75/MBH
		< 300 MBtu/h	82% AFUE	\$1.40/MBH; Min \$400
	Ctarra all arrant	$\geq$ 300 and $\leq$ 1,500 MBtu/h	81% Et	\$1.20/MBH
	Steam, all except natural draft	> 1,500 and ≤ 2,500 MBtu/h	81% Et	\$1.20/MBH
Gas Boiler, Non-Condensing		> 2,500 and ≤ 4,000 MBtu/h	81% Et	\$1.00/MBH
		< 300 MBtu/h	82% AFUE	\$1.40/MBH; Min \$300
	Charm matrical	$\geq$ 300 and $\leq$ 1,500 MBtu/h	81% Et	\$1.00/MBH
	Steam, natural draft	> 1500 and ≤ 2,500 MBtu/h	81% Et	\$0.90/MBH
		> 2,500 and ≤ 4,000 MBtu/h	81% Et	\$0.70/MBH
	All types	> 4,000 MBtu/h		Treated under Custom Measure Path

Table 30: C&I Condensing Boiler HVAC Incentives

Equipment Type	Boiler Type	Size (Input Rate)	Minimum Efficiency	Incentive
		< 300 MBtu/h	88% AFUE	\$1.35/MBH; Min \$1,000
			93% AFUE	\$2.00/MBH; Min \$1,000
		$\geq$ 300 and $<$ 1,000	92% Et	\$2.00/MBH; Min \$1,000
		MBtu/h	95% Et	\$2.20/MBH; Min \$1,000
Gas Boiler,	Hot Water	$\geq 1,000 \text{ and } \leq 2,500$	92% Et	\$1.85/MBH
Condensing	nsing	MBtu/h	95% Et	\$2.20/MBH
	$> 2,500 \text{ and } \le 4,000$	92% Ec	\$1.55/MBH	
		MBtu/h	95% Ec	\$2.00/MBH
		> 4,000 MBtu/h		Treated under Custom
				Measure Path

Table 31: C&I Gas Furnace and Infrared Heater Incentives

Equipment Type	Capacity	Requirement	Minimum Efficiency	Incentive
		ENERGY STAR®	≥ 95% AFUE	\$400
Gas Furnace	All Sizes	Qualified, 2.0% Fan Efficiency	≥ 97% AFUE	\$500
	≤ 100 MBtu/h	Low intensity infrared		\$500
Gas Infrared Heater	> 100 MBtu/h	heater with reflectors. For indoor use only.	n/a	\$300

Table 32: C&I Domestic Hot Water Pipe Wrap Insulation Incentives

• Pipe insulation thickness must exceed required thickness listed in ASHRAE 90.1-2019 Table 6.8.3-1.

Equipment Type	Pipe Diameter	Incentive
Domestic Hot Water Pipe Wrap	$\leq$ 0.5 inch diameter piping	\$1/linear foot
Insulation	> 0.5 inch diameter piping	\$2/linear foot

# **Gas Water Heating**

Table 33: C&I Gas Water Heating Incentives

Equipment Type	Water Heater Type	Size (Input Rate)	Min Efficiency	Incentive	
		≤ 75 MBtu/h	≥ 0.64 UEF	\$1.75/ MBtu/h	
		(consumer)	≥ 0.85 UEF	\$3.50/ MBtu/h	
	Con fined Stamon	>75 MBtu/h and ≤ 105 MBtu/h	≥ 82% Et or ≥ 0.64 UEF	\$1.75/ MBtu/h	
	Gas-fired, Storage	(residential duty commercial)	≥ 90% Et or ≥ 0.85 UEF	\$3.50/ MBtu/h	
Gas Water		Water > 105 MBtu/h	> 105 MBtu/h	≥ 82% Et	\$1.75/ MBtu/h
Heaters		(commercial)	≥ 92% Et	\$3.50/ MBtu/h	
	Gas-fired, instant	< 200 MBtu/h (consumer)	≥ 90% Et or ≥ 0.90 UEF	\$300/unit	
	(tankless)	≥ 200 MBtu/h (commercial)	≥ 90% Et	\$300/unit	
	Gas-fired, Water	≤ 100 MBtu/h	n/a	\$35/ MBtu/h	
	Booster Heater	> 100 MBtu/h	n/a	\$17/ MBtu/h	

Table 34: C&I Low-Flow Fixture Incentives

• Public lavatory faucet aerators are not eligible for incentives.

Equipment Type	Pipe Diameter	Incentive
Low Flow Showerhead	1.5 GPM or Less	\$10/showerhead
Low Flow Faucet Aerator	1 GPM or Less	\$2/aerator

# **Variable Frequency Drives**

- Motor Size (HP) Controlled per VFD is the cumulative motor HP controlled by each VFD.
- Controlled Motor HP less than the listed range of eligible values are ineligible for incentives.
- Controlled Motor HP more than the listed eligible values should use the C&I Custom program.
  - For all VFD measure except air compressors, the maximum controlled threshold is 50HP. VFDs controlling more than 50HP, except related to air compressors, will be reviewed through the custom measure path.
  - For new air compressors with VFDs, prescriptive incentives will be provided for units up to 200HP. VFDs controlling air compressor motors exceeding 200HP will be reviewed through the custom measure path.
- If the controlled HP falls in between the HP listed on the VFD incentive table, the incentive is based on the lower controlled HP listed.

Table 35: C&I VFD Incentives

Equipment Type	Motor Size (HP) Controlled per VFD	Incentive
	0.5	\$50
	1	\$75
	2	\$100
	3	\$200
	4	\$300
	5	\$900
	7.5	\$1000
	10	\$1,100
Vaniable Engagement Duives	15	\$1,200
Variable Frequency Drives	20	\$1,300
	25	\$1,400
	30	\$1,500
	40	\$2,500
	50	\$3,000
	60	\$3,500
	75	\$4,000
	100	\$5,000
	200	\$7,000

Table 36: VFD Eligible Size Range of Controlled Motor

	Eligible Size	Eligibility Requirements
Equipment Type	Range of	
	Controlled Motor	
VFD on Air Compressor	25 HP ≤ 200 HP	Must be installing VFD on new air or water cooled, single or double stage, oil lubricated or oil free twin rotor screw air compressors outfitted with VFDs (providing compressed air for typical plant air use).  Only one VFD controlled air compressor will be eligible for an incentive for each compressed air system.

# **Performance Lighting**

- Performance Lighting incentives are available for eligible indoor light fixtures and outdoor fixtures where electricity usage is billed through the applicant's meter in new construction and substantial renovations of existing buildings. Substantial renovations of areas within existing buildings are also eligible only if existing lighting is completely removed. 50
- Proposed lighting design must demonstrate lighting power density ("LPD") lower than specified by ASHRAE 90.1-2019 for all relevant eligible spaces, except as specifically excepted in Section 9.1.1 and Table 9.2.3.1 of ASHRAE 90.1-2019.
  - Note: Horticultural lighting incentives, which are covered by the exception immediately above, are available in accordance with Table 38: C&I DLC® Certified Indoor Horticultural LED Fixtures.
- Proposed lighting design must predominantly consist of LED fixtures and lamps qualified by DesignLights Consortium® or ENERGY STAR®.

Table 37: C&I Performance-Based Lighting Incentives

Equipment Type	Incentive Cap	Incentive Caps
Performance-Based Lighting	Design Wattage Cap	\$1/Watt over the LPD baseline per qualified area

Table 38: C&I DLC® Certified Indoor Horticultural LED Fixtures

Equipment Type	Facility Type	New LED Fixture Wattage	Incentive
DesignLights Consortium®	Indoor Horticultural Facilities	≥ 500 Watts	\$250/fixture
Qualified <u>Horticultural LED</u>	Operating ≥ 3000 hours/year	< 500 watts	\$150/fixture
<u>Fixtures</u>	Indoor Horticultural Facilities Operating < 3000 hours/year	≥ 500 Watts	\$200/fixture
Qualified Products List <sup>51</sup>		< 500 watts	\$50/fixture

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<sup>&</sup>lt;sup>50</sup> A given substantial renovation project may be eligible for a utility-sponsored EE program as well as for this Program. If it is, the applicant would be able to choose which program it would utilize. I.e., the applicant could have one or the other program, but not both, cover the project. NJCEP and the relevant utility-sponsored EE programs have, or will have, program rules and procedures to implement the foregoing.

<sup>&</sup>lt;sup>51</sup> https://www.designlights.org/.

# **Food Service Equipment**

### Table 39: C&I Dishwasher Incentives

• Equipment must be qualified by the current version of ENERGY STAR® or CEE.

Equipment Type	Description	Incentive
Commercial	Under Counter	\$400 per unit
	Door Type	\$700 per unit
Dishwasher	Single Tank Conveyor	\$1,000 per unit
	Multiple Tank Conveyor	\$1,500 per unit

Table 40: C&I Cooking Equipment Incentives

- Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined in the table at the end of this section.
- Commercial Fryers: Multiple vat configurations are paid per qualifying vat.

Equipment Type	Description	Incentive
Commercial Combination Oven/Steamer	Electric	\$1,000 per oven
	Gas	\$750 per oven
Commercial Convection Oven	Electric	\$350 per oven
	Gas	\$500 per oven
Commercial Rack Oven	Single oven (Gas)	\$1,000 per single oven
	Double oven (Gas)	\$2,000 per double oven
Commercial Griddle	Electric	\$300 per griddle
	Gas	\$125 per griddle

## Table 41: C&I ENERGY STAR® Refrigerator and Freezer Incentives

- The refrigeration system must be built-in (packaged).
- Cases with remote refrigeration systems do not qualify.
- Must meet ENERGY STAR Version 4.0 specification.

Equipment Type	Refrigerator/Freezer Internal Volume	Incentive
ENERGY STAR® Commercial Glass Door Refrigerator	< 15 ft <sup>3</sup>	\$75 per unit
	$\geq 15 \text{ to} < 30 \text{ ft}^3$	\$100 per unit
	$\geq 30 \text{ to} < 50 \text{ ft}^3$	\$125 per unit
	$\geq 50   \mathrm{ft}^3$	\$150 per unit
ENERGY STAR®	< 15 ft <sup>3</sup>	\$50 per unit
Commercial	$\geq 15 \text{ to} < 30 \text{ ft}^3$	\$75 per unit
Solid Door Refrigerator	$\geq$ 30 to < 50 ft <sup>3</sup>	\$125 per unit
	≥ 50 ft <sup>3</sup>	\$200 per unit
ENERGY STAR® Commercial Glass Door Freezer	< 15 ft <sup>3</sup>	\$200 per unit
	$\geq$ 15 to < 30 ft <sup>3</sup>	\$250 per unit
	$\geq$ 30 to < 50 ft <sup>3</sup>	\$500 per unit
	≥ 50 ft <sup>3</sup>	\$1,000 per unit
ENERGY STAR® Commercial Solid Door Freezer	< 15 ft <sup>3</sup>	\$100 per unit
	$\geq$ 15 to < 30 ft <sup>3</sup>	\$150 per unit
	$\geq 30 \text{ to} < 50 \text{ ft}^3$	\$300 per unit
	$\geq 50   \mathrm{ft}^3$	\$600 per unit

#### Table 42: C&I ENERGY STAR® Ice Machine Incentives

- Ice machines must be tested in accordance with the Air Conditioning and Refrigeration Institute (ARI) Standard 810.
- Includes machines generating ice cubes that are 60 grams (2 oz.) or lighter. It also includes flaked, crushed and fragmented ice makers.
- Only air-cooled machines (self-contained, ice making heads, or remote condensing) qualify.
- The entire ARI tested ice making system must be purchased.
- Remote machines must be purchased with qualifying remote condenser or remote condenser/compressor unit.
- The efficiency specifications for the two qualifying tiers are equivalent to ENERGY STAR® or Super-Efficient. ENERGY STAR® ice machines must meet ENERGY STAR® Version 3.0 specification.

Equipment Type	Ice Harvest Rate	Incentive
ENERGY STAR® Commercial Ice Machine	101–200 lbs/day	\$50 per unit
	201–300 lbs/day	\$50 per unit
	301–400 lbs/day	\$75 per unit
	401–500 lbs/day	\$75 per unit
	501–1000 lbs/day	\$125 per unit
	1001–1500 lbs/day	\$200 per unit
	Greater than 1500 lbs/day	\$250 per unit
Super-Efficient Ice Machine	101–200 lbs/day	\$100 per unit
	201–300 lbs/day	\$100 per unit
	301–400 lbs/day	\$150 per unit
	401–500 lbs/day	\$150 per unit
	501–1000 lbs/day	\$250 per unit
	1001–1500 lbs/day	\$400 per unit
	Greater than 1500 lbs/day	\$500 per unit

Table 43: C&I ASTM Cooking Equipment Criteria

Equipment Type	Fuel	ASTM Cooking Equipment Criteria	
Commercial	Electric	<ul> <li>Must meet the idle energy rate requirements in the Electric Combination Oven/Steamer Table, utilizing American Society for Testing and Materials (ASTM) F2861.</li> <li>Must have a cooking energy efficiency of 55 percent or greater in steam mode and 76 percent cooking energy efficiency or greater in convection mode, utilizing (ASTM) F2861.</li> <li>Combination oven/steamer pan capacity based on the maximum capacity of full-size 2 1/2-inch deep hotel pans. This must be consistent with the number of pans used to meet the energy-efficiency qualifications per ASTM F2861.</li> </ul>	
Combination Oven/Steamer	Gas	<ul> <li>Must have a cooking energy efficiency of 41 percent or greater in steam mode and 56 percent or greater in convection mode, utilizing ASTM F2861.</li> <li>Must meet the idle energy rate requirements in the Gas Commercial Combination Oven/Steamer Table, utilizing ASTM F2861.</li> <li>Combination oven/steamer pan capacity on based on the maximum capacity of full-size 2 1/2-inch deep hotel pans. This must be consistent with the number of pans used to meet the energy-efficiency qualifications per ASTM F2861.</li> </ul>	
Commercial Electric Convection Oven		<ul> <li>Must have a tested heavy load (potato) cooking energy efficiency of 71 percent or more, utilizing ASTM F1496.</li> <li>Full-size electric ovens must have a tested idle energy rate of 1.6 kW or less, utilizing ASTM F1496.</li> <li>Half-size electric ovens must have a tested idle energy rate of 1.0 kW or less, utilizing ASTM F1496.</li> </ul>	
	Gas	Must have a tested heavy load (potato) cooking energy efficiency of 46 percent or greater and an idle energy rate of 12,000 Btu/h or less, utilizing ASTM F1496.	
Commercial Rack Oven	Gas	<ul> <li>Single rack ovens must have a tested baking energy efficiency of 48 percent or greater and a total energy idle rate of 25,000 Btu/h or less, utilizing ASTM F2093.</li> <li>Double rack ovens must have a tested baking energy efficiency of 52 percent or greater and a total energy idle rate of 30,000 Btu/h or less, utilizing ASTM F2093.</li> </ul>	
Commercial Griddle	Electric	Must have a tested heavy load cooking energy efficiency of 70 percent or greater and an idle energy rate of 355 watts per square foot of cooking surface or less, utilizing ASTM F1275.	
	Gas	Must have a tested heavy load cooking energy efficiency of 38 percent or greater and an idle energy rate of 2,650 Btu/h per square foot of cooking surface or less, utilizing ASTM F1275.	

Note: The incentives identified above in this <u>Appendix G</u>, *C&I and DER Incentives and General Rules* may be reduced with the approval of the Division of Clean Energy.