

Consolidated Edison Company of New York, Inc. New Construction Pilot Program Guidelines 2021

Table of Contents

1. Pilot Program Overview	3
2. Pilot Program Process	3
3. Eligibility Requirements	5
3.1. Customer & Site Eligibility	5
3.2. Project Eligibility – Installation Timeline	6
3.3. General Participating Contractor Eligibility	6
4. Required Supporting Documentation	6
4.1. Scope of Work.....	6
4.2. Energy Code Compliance.....	6
4.3. Approved Department of Buildings Permit Submission.....	8
4.4. Cutsheet for proposed equipment.....	9
4.5. Installation Costs	9
5. Eligible Measures and Incentives	9
5.1. Custom Measures for Projects taking the Prescriptive and Tabular Code Compliance Pathway.....	9
5.2. Custom Measures for Projects taking the Whole Building Performance Code Compliance Pathway ...	9
6. Incentive Payments	10
7. Inspections	11
8. Measurement & Verification (M&V).....	11
9. Project Costs and Invoicing Requirements	11

1. Pilot Program Overview

The Con Edison New Construction Pilot Program (Pilot Program) offers incentives for installing energy-efficient electric and gas equipment and technologies in new construction buildings. Energy efficiency can help improve the bottom line by reducing energy use and maintenance costs while increasing operating efficiencies. These upgrades can also help protect the environment.

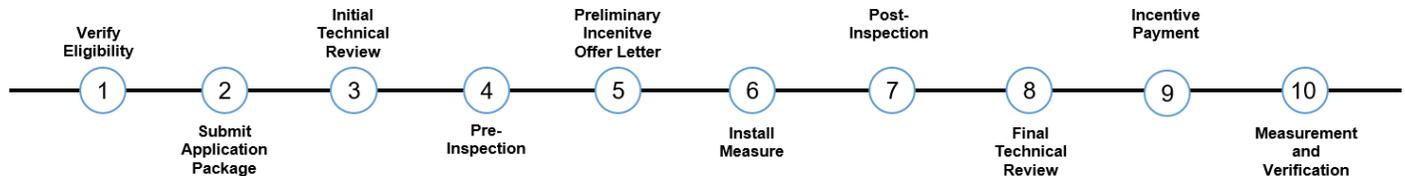
There may be incentives available for new construction projects that can demonstrate performance beyond the applicable Energy Conservation Construction Code of New York State (ECCCNYS). To get started, determine your project's eligibility and path, complete a short application, and speak with one of our dedicated Energy Advisors with any questions about your energy-efficiency project.

New construction projects interested in getting incentives for heat pump measures through the New York State (NYS) Clean Heat Program shall refer to the NYS Clean Heat Statewide Heat Pump Program Manual. New construction projects that intend to apply for both heat pump and other energy efficiency measures and are using the Whole Building Performance code compliance approach can choose to submit one combined "Stacked" parametric modeling report for energy savings estimates. In this case, the baseline criteria set up by the NYS Clean Heat Program will be considered as final.

To get incentives through the Con Edison New Construction Pilot, the project applications need to be submitted by June 30, 2022 and the project needs to be completed (all documents received, measures installed, and the project is ready for post inspection) by October 31, 2022.

Please note the limited scope of the Pilot Program. Total incentives are limited and Con Edison only expects to incentivize 10-20 projects. Preference will be given to complex projects that best serve the goals of the Pilot Program.

2. Program Process



1. VERIFY ELIGIBILITY

- Verify eligibility for the Pilot Program (customer, site, proposed measures, contractors) as specified in the [Eligibility Requirements](#) section below.
- To be eligible for incentives, installation of measures may not begin until a Notice to Proceed has been issued by Con Edison.

2. SUBMIT APPLICATION PACKAGE

- Customers and Participating Contractors should submit applications via email to EEDMPilots@conEd.com with a subject line of **New Construction – [Applicant Name]**
- An application package is required for all new construction projects and must include the items listed below (which should be labeled with the appropriate file names shown below).
 - **Completed Pilot Program Application** – Account name must match the name of the future Con Edison account holder (customer); and customers should also list any temporary account number or case numbers that have been provided to them by Con Edison. (Con Edison may ask for proof of account application if account number is not available.) (*Filename: Application*)

- **W-9 of the Incentive Recipient** – The W9 submitted must match the name of the payee as indicated on the Pilot Program application and must be the latest version available on the Internal Revenue Service website at the time of application to the Pilot Program. (*Filename: W9 Form*)
- **Scope of Work and Installation Timeline** – A detailed scope of work that contains a description of the proposed measure(s), the scope of application, the counterfactual baseline as well as the installation timeline in the construction cycle. (*Filename: Scope of Work*)
- **Energy Savings Analysis** – All calculations and analysis must be clear and transparent, utilizing standard engineering methodologies, including a listing of source values; a stacked modeling report will be required for projects taking the whole building performance pathway for code compliance. (*Filename: Calculations*).
- **Department of Building (DOB) Filing Documents**– A complete set of permit documentation from the Authority Having Jurisdiction (AHJ) including energy code forms like EN1, EN2, TR1, TR8, ComCheck analysis reports, etc., (*Filename: Permit Documents*).
- **Cut Sheets for Proposed Equipment** – Specific model(s) and product ratings being used in the project must be highlighted on the cut sheets before submission. (*Filename: Cutsheet – [Make - Model #]*)
- **Cost Estimate for Proposed Work** – Installation cost for the proposed measure, itemized to show material and labor costs for each measure. (*Filename: Cost Estimate*)
- **Other Measure-specific Documentation** – Other documentation listed in this Pilot Program guide specific to the technology (custom projects) or required to confirm savings calculations. *Filename: [Specify Document Type based on measure-specific requirements]*

3. INITIAL TECHNICAL REVIEW

Con Edison will conduct an initial review to determine preliminary savings and incentives for the project focused on such factors as the completeness of the documentation provided with the application to verify equipment eligibility, project incentive category, baseline and assumptions used in the energy analysis for the project.

4. PRE-INSPECTION

- Con Edison will pre-inspect the existing condition of your site in order to establish baseline conditions necessary for the accurate calculation of incentives.
- Please clearly identify a contact person who will be present during the pre-inspection site visit

5. PRELIMINARY INCENTIVE OFFER LETTER (PIOL) AND NOTICE TO PROCEED(NTP)

- Once the pre-inspection of the project site has been completed, and if results are satisfactory, then Con Edison will issue a PIOL.
- The signed PIOL expires if not returned to Con Edison within 30 days.
- A NTP (which will include updates to the PIOL, if any) indicating that project work may begin usually follows the return of a signed PIOL.

6. INSTALLATION OF PROJECT MEASURES

- The issuance of a NTP serves as indication that installation of project measures may begin with qualified Participating Contractor(s) of your choosing. Please submit your completion paperwork as soon as your project is installed and fully operational (100% of incentivized measures), which should include:
 - Approved AHJ permit submission including EN-drawings and final TR8 Form that is signed by DOB inspectors.
 - Customer and Participating Contractor signed Completion Certificate reflecting only costs directly related to incentivized measures.

- Final invoices and receipts broken out by product, with invoices including material and labor costs for each equipment line item and applicable labor costs per equipment.

7. POST-INSPECTION

In addition to inspections that may have occurred at different points of the construction cycle, after the installation of a project Con Edison will conduct a post-inspection of your site to confirm that all work was installed in accordance with the scope of work provided for by the NTP issued by Con Edison. Please note that all reviews by Con Edison, including Con Edison's post-inspection is to determine the appropriateness of incentive payments and is not focused otherwise on a review of the sufficiency of work performed, which is the responsibility of your Participating Contractor.

8. FINAL TECHNICAL REVIEW

Con Edison will review the completion paperwork and findings from the post-inspection to determine the final project savings and incentives.

9. INCENTIVE PAYMENT

Once a final incentive review is conducted and a positive determination of final project savings and incentives made, an incentive check will be mailed to you or your Participating Contractor. Please note that only designated Participating Contractors in good standing may be sent incentive payments.

10. MEASUREMENT AND VERIFICATION (M&V)

In order to assess the success and benefits of the Pilot Program, Con Edison may conduct data collection and other M&V activities that will vary by project.

3. Eligibility Requirements

3.1. Customer and Site Eligibility

- The predicted energy savings from the project and the selection of building systems must not meet the eligibility criteria provided for by the New York State Energy Research and Development Authority (NYSERDA) Commercial New Construction Program (Program Opportunity Notice ([PON 3609](#)) and NYSERDA New Construction Housing Program ([PON 4337](#)).
- The Con Edison customer of record listed on the application should be a directly metered future commercial and industrial or multifamily customer.
- For both C&I and MF gas projects, all customers with commercial accounts are eligible except customers with a service class of SC-14 or customers receiving service via a negotiated contract.
- Customers must not receive any financial incentives for measure installation from NYSERDA.
- Site owners must plan to have the site occupied year-round.
- Projects taking the whole building performance pathway and applying for multiple measures with cumulative annual savings greater than 200 MMBtus will be given preference. Projects only seeking incentives for lighting measures will not be accepted.
- **Commercial & Industrial Customers**
 - The project must forecast over 100 kW average peak demand on a rolling 12-month basis.
- **Multifamily Customers**
 - The building must be a residential building with 5+ dwelling units.

3.2. Project Eligibility – Installation Timeline

In addition to meeting all other requirements of the Pilot Program, projects for which a Notice to Proceed has been issued must be completed (all documents received, measures installed and the project is ready for post inspection) by October 31, 2022.

3.3. General Participating Contractor Eligibility

Approval as a participating contractor in the Pilot Program will rely on the participation requirements consistent with the relevant energy efficiency program. For multifamily buildings, contractors must comply with all participation requirements for the [Multifamily Energy Efficiency Program](#). Similarly, for Commercial and Industrial buildings, contractors must comply with all participation requirements for the [C&I Energy Efficiency Program](#).

4. Required Supporting Documentation

The following is the minimum required documentation for all eligible new construction projects and should be attached with every application. These guidelines are not a comprehensive listing of requirements for custom measures and may be amended as applicable to a project.

4.1. Scope of Work

A detailed scope of work that contains relevant information about the proposed measure.

- Describe the new construction measure and specify how it exceeds NYS Energy Code requirements. Also, specify the floors or building areas impacted by the measure.
- Specify which compliance pathway (i.e. Prescriptive or Performance Path) design follows to demonstrate compliance with the applicable NYS Energy Code and whether design trade-offs have been taken.
- List the energy consumption of both baseline and proposed design cases in terms of site and source energy use.
- Describe the counterfactual heating and cooling baseline and provide detailed descriptions of building systems being used.

4.2. Energy Code Compliance

New construction projects must demonstrate compliance with the applicable NYS Energy Code in one of the following ways:

- **Prescriptive:** Each discrete component complies with specific requirements
- **Component Performance Alternative:** Prescriptive approach that allows trade-offs between some components (a trade-off can be made by a component above code to “make up” for a component that does not comply with code; for example, a building owner might choose to install a larger, more energy-efficient heat pump system to “make up” for putting in more window area than allowed by the code)
- **Total Building Performance:** Using an energy model, show the entire building in compliance with code (with this method, performance trade-offs are allowed),

If trade-offs are taken, provide a side-by-side comparison table between proposed and baseline identifying the areas where trade-offs are made (i.e., building or system elements that do not comply with the prescriptive requirements of the code, elements exceeding requirements, and building elements or systems modeled to provide additional energy savings to offset the non-complying elements).

4.2.1. New Construction Energy Analysis

New construction projects that follow a prescriptive approach, preparing either a COMcheck or Tabular analysis to demonstrate energy code compliance, may opt to submit an energy analysis using excel calculations or a whole building energy model. Modeling methodology is discussed in section 4.2.2 below.

When a “Total Building Performance” compliance path is followed, the applicant shall submit a whole building energy model for review. Excel calculations will not be accepted.

4.2.2. Modeling Approach

Whole building energy models shall be prepared using an approved modeling software and shall be simulated following one of the compliance paths prescribed in Standard 90.1 by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). The model shall be developed using a “Stacked” parametric approach, where energy savings are modeled by starting with the proposed design model, and gradually transforming it into the minimally code-compliant baseline design by subtracting the Energy Efficiency Measures (EEMs) one-by-one in the following order:

- HVAC measure(s)
- Base load measure(s) such as lighting, process loads, plug loads, etc.
- Envelope measure(s)
- Non-interactive measures such as service water heating

If there are several EEMs of the same type, for example, several HVAC EEMs, the order in which they are modeled relative to each other is not prescribed to allow flexibility in supporting the specific project circumstances and may be determined by the Modeling Entity performing the modeling based on communications with the customer. For example, if a design includes a high-efficiency make-up air unit, and energy recovery is considered as a design alternative, the energy recovery EEM should be modeled (subtracted from the proposed design) first, to show the added energy savings for this option, with the unit efficiency EEM modeled (subtracted) second.

With the stacked approach, the difference between the sum of EEM savings and the total savings of the proposed design relative to the baseline is attributed entirely to the impact of components that differ between the baseline and proposed models but are not included in any EEM.

4.2.2.1. New Construction Modeling Submittals

- Whole building energy modeling, including where trade-offs among disciplines are calculated, should use the following software packages: DOE2.1E, eQUEST, EnergyPlus, Trane TRACE 700, or OpenStudio. The following documents should be provided for review: inputs, outputs and run files.
- For projects using eQUEST (DOE 2.2), the simulation reports with the following information for the baseline, proposed design, and each energy measure model must be included in the report appendix:
 - Monthly Energy End-use Summary (such as PS-E: Energy End-Use Summary for All Meters)
 - Overall annual building energy consumption including all fuels and meters (such as BEPS: Building Energy Performance Summary and BEPU: Building Utility Performance)
 - Energy cost summary (such as ES-D: Energy Cost Summary)
 - Information on hours when space/system loads are not met (such as BEPS/BEPU)
 - System design parameters report (SV-A: System Design Parameters for HVAC)

- For projects using other energy modeling software packages indicated above, equivalent simulation output reports need to be included.

4.2.3. Establishing Baselines

Establishing the equipment or system baseline is a necessary step in calculating energy savings for any project. This section defines the types of baselines used by the Pilot Program and the general requirements for each baseline type.

4.2.3.1. Baseline Requirements

Baseline system efficiencies for all projects shall be based on minimally code-compliant equipment in accordance with the latest Energy Conservation Construction Code of New York State (ECCCNYS). There is one exception to this requirement:

- Projects involving new construction whose design demonstrates compliance with Section 406 of the 2020 ECCCNYS or the New York City Energy Conservation Code (NYCECC) by providing more efficient HVAC performance shall set the baseline system efficiencies to exceed the minimum code efficiency requirements by 10%

Note that Projects that follow the total building performance path and whose design includes trade-offs must still set their savings baselines in accordance with minimally code compliant ECCCNYS prescriptive code values. While energy models created per Appendix G or Section 11 of ASHRAE 90.1 may be used for program eligibility, the Appendix G or Section 11 baselines are not intended to serve as the savings baseline.

4.2.4. Savings Calculations

4.2.4.1. Heat Pump Measures

- For NYS Clean Heat Category 4 and 6 heat pump measures, the entire net positive savings determined by the staked parametric modeling process will be attributed to this measure category.
- For all other NYS Clean Heat measures, incentives will be paid based on the NYS Clean Heat Program rules. Please refer to the [NYS Clean Heat Program: Consolidated Edison Commercial and Industrial Guidelines](#).

4.2.4.2. Non-Heat Pump Measures

- Saving estimates for projects taking the prescriptive and tabular pathway will be determined using engineering calculations listed in the NYS Technical Resource Manual (TRM) or through alternative calculations provided by the customer.
- Saving estimates for projects taking the whole building performance pathway will be weighted and adjusted to account for trade-offs between measures.

4.3. Approved Department of Buildings Permit Submission

The final approved Department of Buildings (DOB) permit submission including EN-drawings and energy analysis (COMcheck, tabular analysis) must be submitted along with other completion paperwork. Projects located in Westchester, NY will need to submit equivalent permit documents from the AHJ.

4.4. Cutsheet for proposed equipment

Specific model(s) and product ratings being used in the project must be submitted with the project application to properly determine equipment eligibility. Model numbers must be highlighted on the cut sheets before submission to the Pilot Program.

4.5. Installation Costs

Installation costs are the total project cost of labor and materials (including equipment) provided to the customer for the proposed measure scope. Other costs will not be included with the total project cost when making incentive calculations, including costs related to taxes, internal labor, shipping, administration, and project management and engineering. Labor and material costs shall be presented as separate line items.

5. Eligible Measures and Incentives

5.1. Custom Measures for Projects taking the Prescriptive and Tabular Code Compliance Pathway

Final custom measure eligibility, savings, and incentives are determined at the sole discretion of Con Edison. All custom projects must submit the following information along with the other required documents in the application package.

- List of all proposed measures with related technical specifications and estimated savings
- An unlocked spreadsheet (PDF form not accepted) with all equations, parameters, and assumption values used to calculate savings
 - All calculations must be clear and transparent utilizing standard engineering methodologies
 - Must list source of values
- All other applicable data and supporting documentation used to calculate savings and/or assumptions
- Savings calculations should follow the methodology shown in the NYS TRM (v8).

Description	Eligible Technologies	C&I Incentive Rate	MF Incentive Rate	Unit
Lighting Measures	Indoor and Outdoor Lighting	\$40/MMBtu	\$25/MMBtu	\$/annual energy saved
Non-Interactive Measures	Process loads, Plug loads, Service Water Heating, etc.	\$80/MMBtu	\$80/MMBtu	\$/annual energy saved
Heat Pump Measures	<i>Refer to the NYS Clean Heat Statewide Heat Pump Program Manual and the NYS Clean Heat Program: Consolidated Edison Commercial and Industrial Guidelines.</i>			

5.2. Custom Measures for Projects taking the Whole Building Performance Code Compliance Pathway

Final custom measure eligibility, savings, and incentives are determined at the sole discretion of Con Edison. All custom projects must submit an energy modeling report developed using a “Stacked” parametric approach. See section 4.2.2 (Modeling Approach) for more details. Saving estimates for each measure type will be weighted and adjusted to account for interactive effects and trade-offs between measures.

New Construction Pilot Program

Projects that intend to apply for both heat pump and other energy efficiency measures can choose to submit one combined “Stacked” parametric modeling report for energy savings estimates. In this case, the baseline criteria set up by the NYS Clean Heat Program will be considered as final.

Description	Eligible Technologies	C&I Incentive Rate	MF Incentive Rate	Unit
HVAC Measures	Any HVAC System Measures	\$115/MMBtu	\$115/MMBtu	\$/annual energy saved
Envelope Measures	Insulation, Glazing, etc.	\$150/MMBtu	\$150/MMBtu	\$/annual energy saved
Lighting Measures	Indoor and Outdoor Lighting	\$40/MMBtu	\$25/MMBtu	\$/annual energy saved
Non-Interactive Measures	Process loads, Plug loads, Service Water Heating, etc.	\$80/MMBtu	\$80/MMBtu	\$/annual energy saved
Heat Pump Measures	<i>Refer to the NYS Clean Heat Statewide Heat Pump Program Manual and the NYS Clean Heat Program: Consolidated Edison Commercial and Industrial Guidelines.</i>			

6. Incentive Payments

Project incentives cannot exceed 70% of the project cost for eligible measure(s) or 100% of each measure cost. Material and Labor costs submitted are subject to Con Edison review and may be capped for incentive calculations at Con Edison’s sole discretion.

C&I and MF customers seeking incentives from the Pilot Program may choose to be the applicant by submitting an incentive application to the Pilot Program directly. The customer must work with a Participating Contractor in accordance with the rules and requirements of the Pilot Program. As the applicant, the MF customer choosing this option will receive direct payment of the Total Incentive amount. Incentive payments related to a completed project will be issued either to the Customer or the PC as follows:

- The customer will be awarded the full incentive amount **OR**;
- The customer may choose to assign the full incentive amount to the Participating Contractor.

Participating contractors who are in good standing with the Pilot Program will be allowed to accept incentive payments on behalf of the customer with prior written approval from the customer. Participating Contractors on probation may not be allowed to accept incentive payments on behalf of the customer.

Incentive payment schedule timelines are shown below:

Code Compliance Pathway	Payment Schedule
Prescriptive and Tabular Code Compliance Pathway	Full payment after verification of installation
Whole Building Performance Measures	Full payment after final inspection reports from AHJ (Signed TR8 etc.)

7. Inspections

Con Edison's inspections team will perform inspections on projects in the Pilot Program at key points throughout the project lifecycle. The scheduling of inspections is coordinated with the customer and Participating Contractor based on the customer's availability.

A document review will be conducted to produce the Preliminary Incentive Offer Letter and Notice to Proceed.

Con Edison will pre-inspect the existing condition of your site in order to establish baseline conditions necessary for the accurate calculation of incentives. Post-inspections will be conducted after all measures have been installed and the completion paperwork has been submitted in order to verify the proper installation and functioning of the equipment and that work has been performed in accordance with the approved scope of work in compliance with the rules of the Pilot Program.

8. Measurement & Verification (M&V)

The overall intent of M&V for new construction projects is to assess the accuracy of initial savings estimates and to assist Con Edison with information necessary for the planning of future programs. All participating customers receiving incentives must agree to facilitate Con Edison's M&V activities for 24 months following installation.

A project-specific M&V Plan will be developed by Con Edison that contains all relevant customer, facility, and measure information and that describes in detail the International Performance Measurement and Verification Protocol (IPMVP) compliant M&V method selected for the site. M&V will typically involve the deployment of meters on all affected equipment covering both the heating and cooling seasons. Metering is necessary to obtain representative field measurements of the energy consumption or demand of related variables of the affected system. Site visits may be necessary to install, remove or replace meters, download the metered data, and replace batteries.

Con Edison may contact the applicant to obtain the information necessary for the completion of each activity. Timely responses by applicants are critical to ensuring that M&V activities are completed on time and to allow a project to proceed through the Pilot Program stages in an efficient and effective manner.

9. Project Costs and Invoicing Requirements

Refer to the Con Edison [Commercial and Industrial Program](#) and [Multifamily Program](#) manuals for invoicing requirements.