



Energy Efficiency Stakeholder Meeting

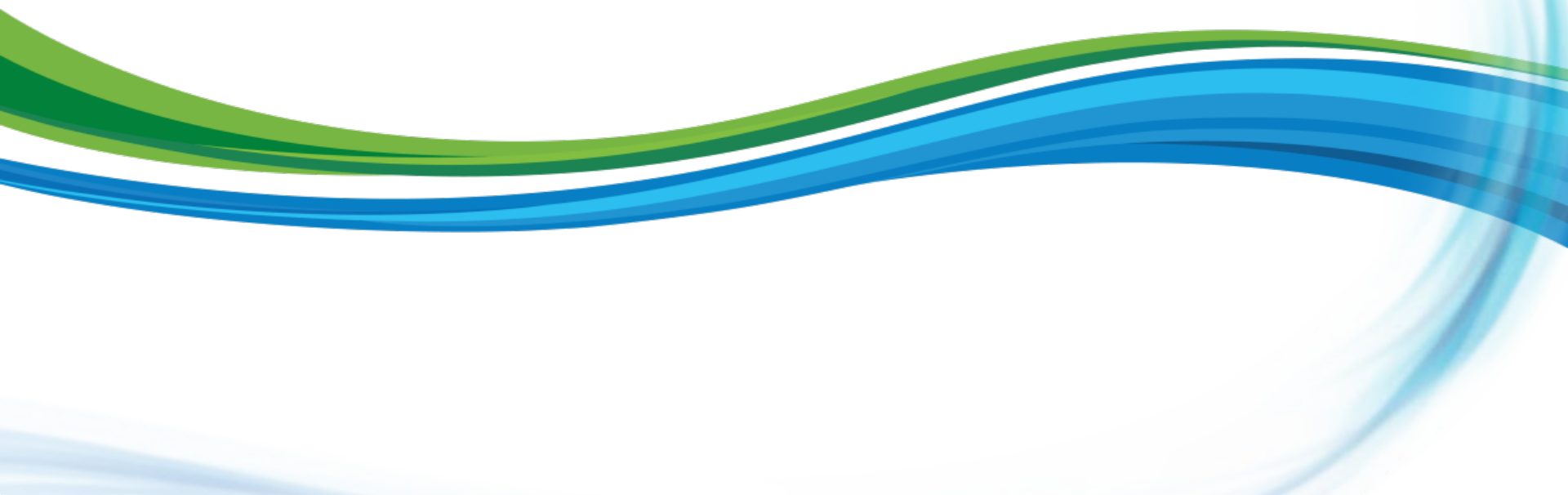
September 15, 2022

Agenda

1. Welcome & Introductions
2. Recap of Last Meeting
3. Current Program Updates
 - BPU Updates
 - Utility Company Updates – Overview of Residential Programs
4. New Construction Program Update
5. Benchmarking
6. Working Group Updates
 - State and Federal Lighting Legislation Update
 - Technical Reference Manual Updates
7. Clean Energy Conference
8. General Q&A
9. Items of Interest
10. Next Meetings



Welcome & Introductions



Recap of Last Month



August Meeting Recap

What we covered:

- ✓ Transition information on NJCEP website
- ✓ NJCEP and Utility Program updates
- ✓ NJCEP New Construction Program update
- ✓ Benchmarking
- ✓ Working Group updates
 - ✓ Rutgers NJ Energy Code Compliance Study
- ✓ Clean Energy Conference
- ✓ Q&A



Post-Transition Energy Efficiency Programs

NJBPU and NJCEP Administered Programs



- New Construction (residential, commercial, industrial, government)
 - Large Energy Users
 - Energy Savings Improvement Program (financing)
 - State Facilities Initiative*
 - Local Government Energy Audits
 - Combined Heat & Power & Fuel Cells
- *State facilities are also eligible for utility programs

Utility Administered Programs



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

NJBPU and Utility Co-Administered Programs



Visit our transition website:

www.NJCleanEnergy.com/TRANSITION

FAQs will be
updated
regularly



Visit our transition website:

www.NJCleanEnergy.com/TRANSITION



Press Room | Library | FAQs | Calendar | Newsletters | Contact Us | Site Map

HOME	RESIDENTIAL	COMMERCIAL, INDUSTRIAL AND LOCAL GOVERNMENT	RENEWABLE ENERGY																														
NEW JERSEY'S CLEAN ENERGY PROGRAM BOARD OF PUBLIC UTILITIES POLICY UPDATES & REQUEST FOR COMMENTS CALENDAR CLEAN ENERGY STAKEHOLDER GROUPS GRANTS & SOLICITATIONS TRAINING RESOURCES PRESS ROOM PUBLIC REPORTS AND LIBRARY CONTACT US	<h2 style="color: #0056b3;">New Jersey's Energy Efficiency Program Transition</h2> <p style="color: #0056b3;">Transición del Programa de Eficiencia Energética de Nueva Jersey</p> <h3 style="color: #0056b3;">Electric Utility Contact Information</h3> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #0056b3; color: white;">Utility Name</th> <th style="background-color: #0056b3; color: white;">Commercial & Industrial Programs</th> <th style="background-color: #0056b3; color: white;">Residential Programs</th> </tr> </thead> <tbody> <tr> <td>Public Service Electric & Gas</td> <td>Website and Email Phone: 844-300-7734</td> <td>Website and Email Phone: 855-846-2895</td> </tr> <tr> <td>Atlantic City Electric</td> <td>Website, Email and Phone: 806-353-0007</td> <td>Website, Email and Phone: 806-353-0007</td> </tr> <tr> <td>Jersey Central Power & Light</td> <td colspan="2">Website, Email and Phone: 800-862-3115</td> </tr> <tr> <td>Rockland Electric</td> <td colspan="2">Website, Email and Phone: 877-434-4100</td> </tr> </tbody> </table> <h3 style="color: #0056b3;">Gas Utility Contact Information</h3> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #0056b3; color: white;">Utility Name</th> <th style="background-color: #0056b3; color: white;">Commercial & Industrial Programs</th> <th style="background-color: #0056b3; color: white;">Residential Programs</th> </tr> </thead> <tbody> <tr> <td>Public Service Electric & Gas</td> <td>Website and Email Phone: 844-300-7734</td> <td>Website and Email Phone: 855-846-2895</td> </tr> <tr> <td>New Jersey Natural Gas</td> <td>Website and Email Phone: 877-455-5504</td> <td>Website and Email Phone: 877-455-5504</td> </tr> <tr> <td>South Jersey Gas</td> <td>Website and Phone: 888-263-7372</td> <td>Website and Phone: 833-463-0901</td> </tr> <tr> <td>Elizabethown Gas</td> <td>Website and Phone: 888-263-7372</td> <td>Website and Phone: 833-463-0902</td> </tr> </tbody> </table>		Utility Name	Commercial & Industrial Programs	Residential Programs	Public Service Electric & Gas	Website and Email Phone: 844-300-7734	Website and Email Phone: 855-846-2895	Atlantic City Electric	Website, Email and Phone: 806-353-0007	Website, Email and Phone: 806-353-0007	Jersey Central Power & Light	Website, Email and Phone: 800-862-3115		Rockland Electric	Website, Email and Phone: 877-434-4100		Utility Name	Commercial & Industrial Programs	Residential Programs	Public Service Electric & Gas	Website and Email Phone: 844-300-7734	Website and Email Phone: 855-846-2895	New Jersey Natural Gas	Website and Email Phone: 877-455-5504	Website and Email Phone: 877-455-5504	South Jersey Gas	Website and Phone: 888-263-7372	Website and Phone: 833-463-0901	Elizabethown Gas	Website and Phone: 888-263-7372	Website and Phone: 833-463-0902	<div style="background-color: #0056b3; color: white; padding: 5px; text-align: center;">Program Updates</div> <ul style="list-style-type: none"> ● New! School and Small Business Energy Efficiency Stimulus Program ● Energy Efficiency Stakeholder Meeting Feb 17 ● Energy Efficiency Program Transition <div style="background-color: #0056b3; color: white; padding: 5px; text-align: center;">Program Literature</div> <div style="text-align: center;"> <p>Applications and Brochures Download the Latest Program Materials</p> </div> <div style="background-color: #0056b3; color: white; padding: 5px; text-align: center;">Clean Energy Learning Center</div> <div style="text-align: center;"> <p>New Jersey Clean Energy Learning Center</p> </div> <div style="background-color: #0056b3; color: white; padding: 5px; text-align: center;">Subscribe to eNewsletter</div> <div style="text-align: center;"> <p>E-Newsletter</p> </div>
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FREQUENTLY ASKED QUESTIONS

Frequently asked questions (FAQs) are grouped by the following subject areas; you can jump to any section by clicking on one of the topics below:

- General FAQs
- Commercial & Industrial Programs FAQs
- Residential Programs FAQs
- Contractor Specific FAQs
- Questions

General FAQs

Why are some energy efficiency programs now managed by the utility companies? (updated October 28, 2021)

The transition of the administration of certain energy efficiency programs from NJCEP to the utilities occurred in accordance with the mandates from the Clean Energy Act of 2018. These new programs allow the utilities to work directly with customers to achieve energy savings. The Board considered the following in establishing this transition:

- Programs that rely heavily on the use of contractors will be handled at the utility level, where the utility companies can build strong relationships and lead co-branded advertising and marketing efforts.
- Utilities will handle programs that rely on customer data or advanced metering infrastructure (AMI) to streamline customer data access layers and minimize the sharing of data to protect customer privacy.
- Utilities are well-suited to deliver certain energy efficiency programs, such as those that are based on existing customer relationships and that rely on utility data and systems.
- Utility administration works best for programs that can leverage utilities' knowledge of energy consumption, customer demographics, workforce infrastructure, and existing customer relationships within their service territories. Utility access – and increased customer access – to energy use data enables the design of more personalized services and programs, targeted outreach, and individualized solutions for customers.
- Utilities can offer flexible financing options such as on-bill repayment.
- Customers may have more "brand awareness" and direct communication with their utility, facilitating the broader adoption of energy efficiency measures.



Current Program Updates





BPU Program Updates: Progress to Goals (PTG) Report as of August 2022 – FY23

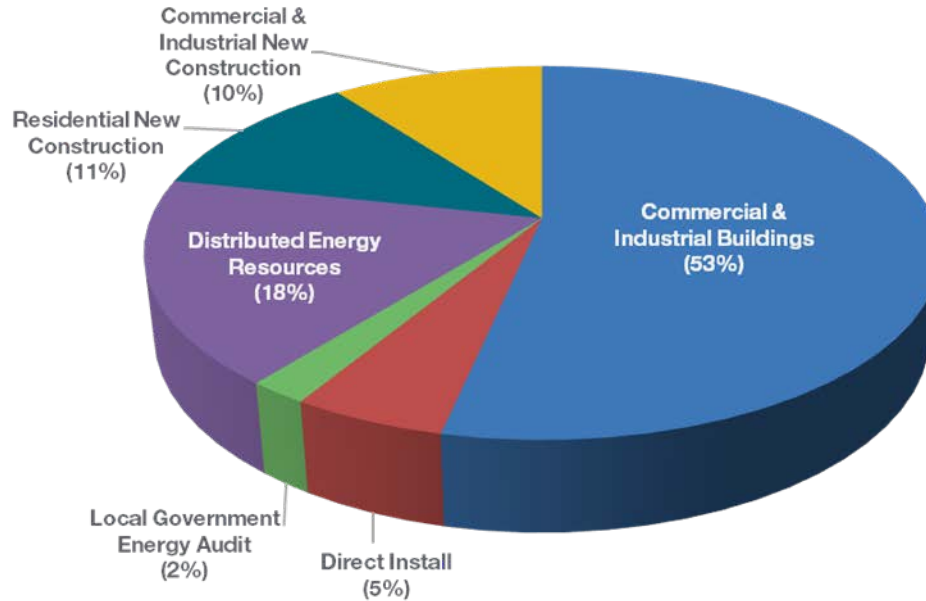


Note: The results presented here are preliminary and are subject to change.

Budget Break-down by Program

FY23 TRC Managed Programs

Incentive Budget: \$117,415,104



Energy Efficiency Programs FY23

NJCEP/TRC Managed - Closed/Closing Out, Transitioned to Utilities

- Residential Products & HVAC
- Residential Existing Homes
- C&I Buildings (existing buildings)
- SmartStart Retrofit
- Pay for Performance Existing Buildings
- Direct Install

NJCEP/TRC Managed - Open

- New Construction
Was: Residential New Construction, SmartStart New Construction, Pay for Performance New Construction, CTEEP New Construction
- Large Energy Users
- Local Government Energy Audit
- Distributed Energy Resources
- School & Small Business Stimulus Program (federally funded)

BPU/Utility Managed

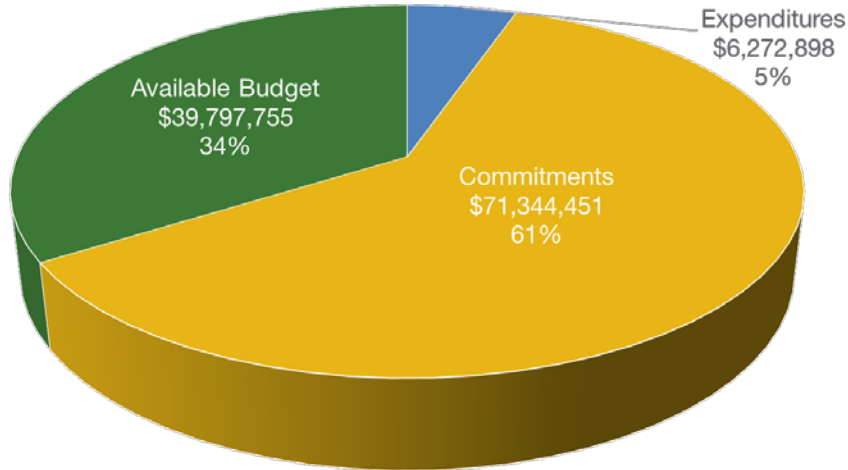
- Comfort Partners



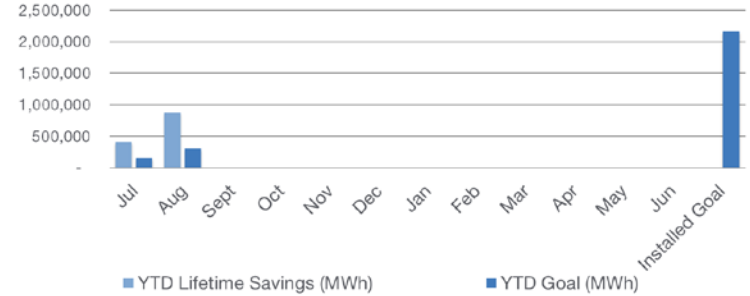
Progress Towards Goals – TRC Managed Programs

FY23 TRC Managed Programs

Incentive Budget: \$117,415,104



FY23 Overall Progress Towards TRC Managed Program Goals
YTD Lifetime MWh Savings

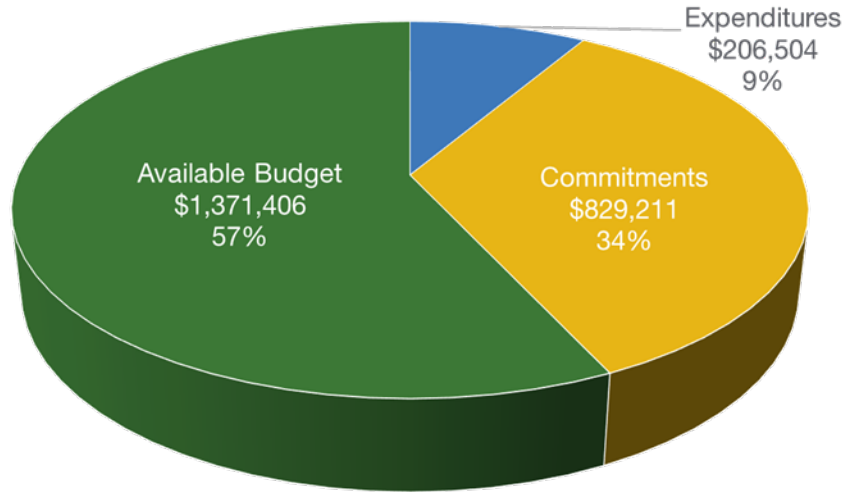


FY23 Overall Progress Towards TRC Managed Program Goals
YTD Lifetime MMBtu Savings



Local Government Energy Audit (LGEA)

FY23 Incentive Budget: \$2,407,121



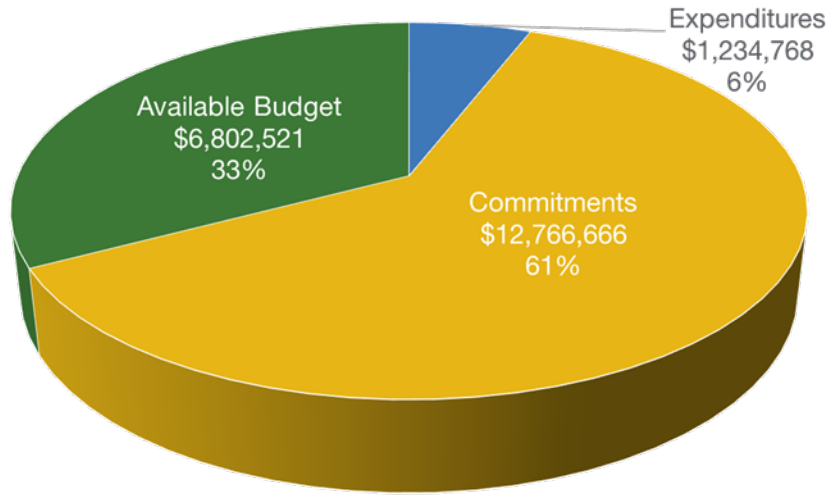
Program Highlights

- Received: 46 applications this month 46 YTD
- Approved: 96 applications this month 107 YTD
- Audited approximately 611,112 square feet
- Held 5 Exit Meetings for 31 sites (including additional scopes)
- Delivered Final Audit reports on 45 sites (6 entities)

Distributed Energy Resources

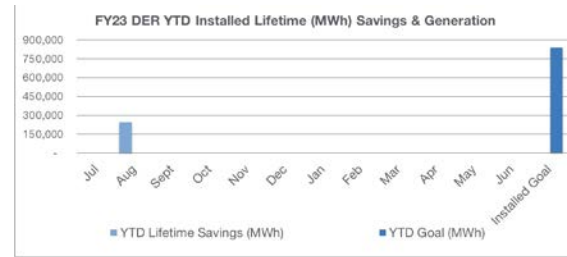
CHP and Fuel Cells

FY23 Incentive Budget: \$20,803,955



Program Highlights

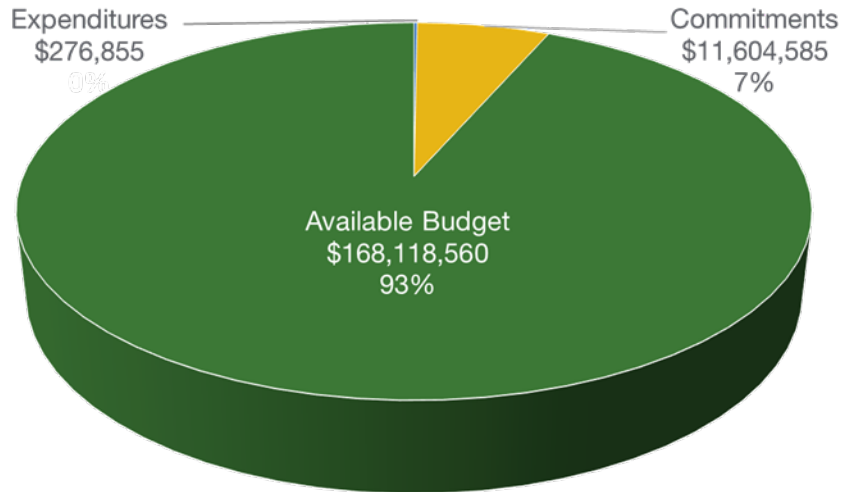
- Received: 0 applications this month 0 YTD
- Approved: 0 applications this month 1 YTD
- Completed: 0 installations this month 0 YTD



Note: For July and August PTG, the goals for this program were set at zero since no projects were anticipated to be completed during these months.

School & Small Business Stimulus Program

FY23 Incentive Budget: \$180,000,000



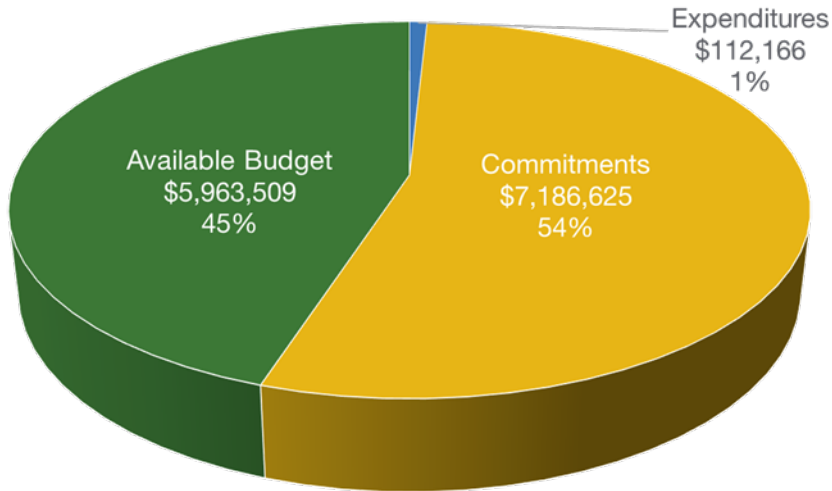
Program Highlights

- Received: 19 applications this month 34 YTD
- Approved: 18 applications this month 35 YTD
- Completed: 1 installation this month 2 YTD

New Construction Programs

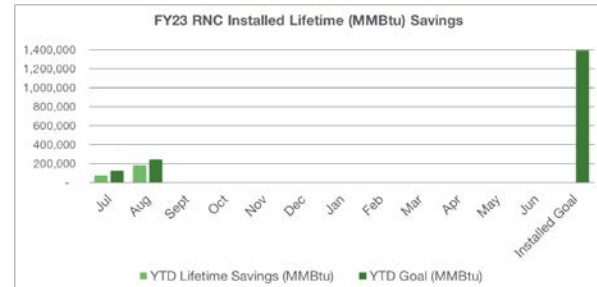
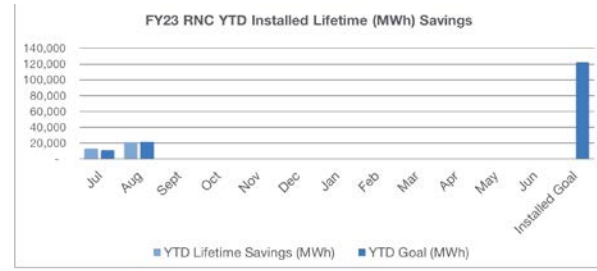
Residential New Construction

FY23 Incentive Budget: \$13,262,300



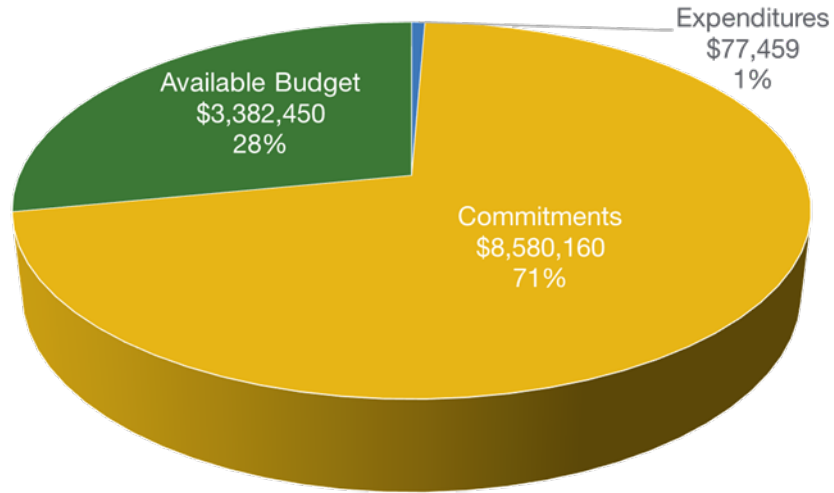
Program Highlights

- Site Registrations Received/Enrolled: 401
- Site Registrations Approved: 356
- Incentive Applications Received: 87
- Completed Payments Made: 147
- Registrations in the queue for processing: 63



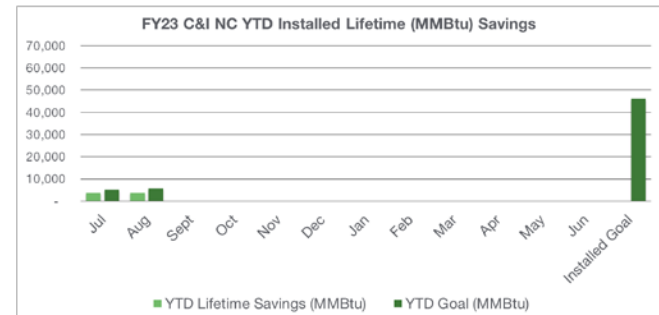
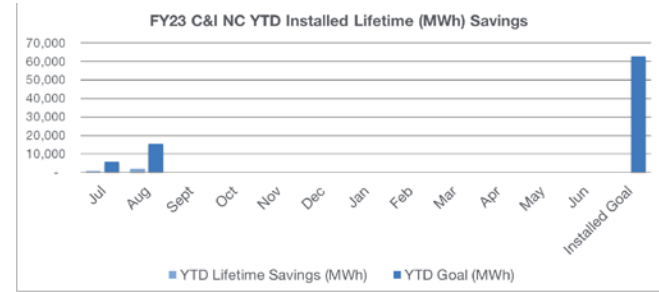
New Construction Programs (cont.)

C&I New Construction: P4P NC and C&I NC FY23 Incentive Budget: \$12,040,069



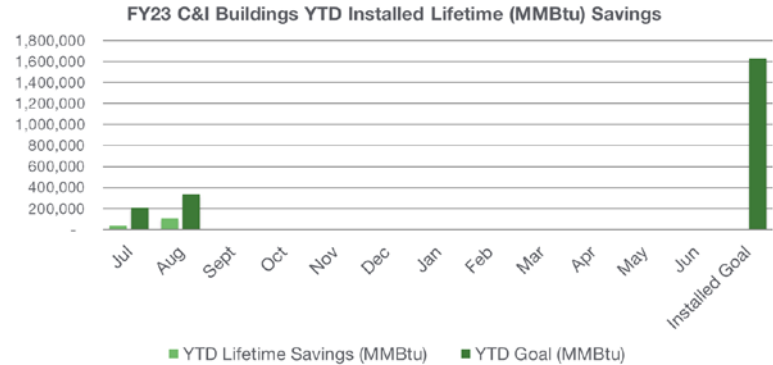
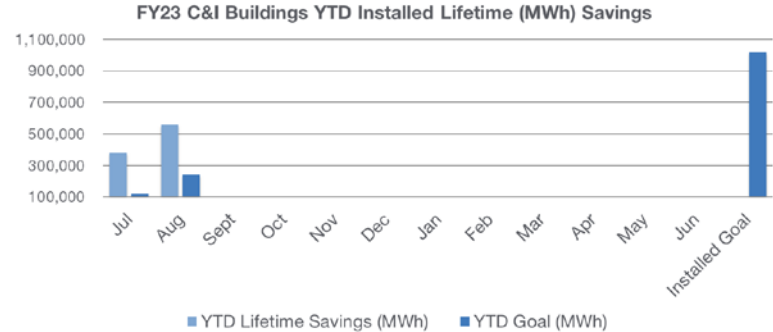
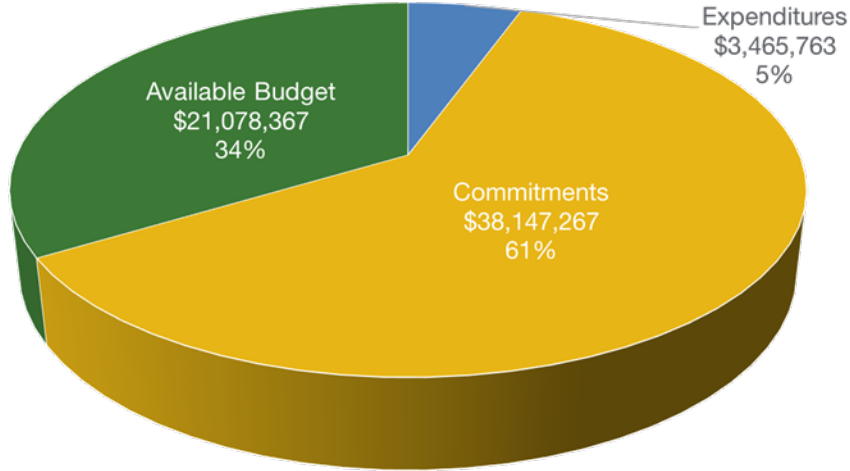
Program Highlights

- Received: 5 enrollments this month 12 YTD
- Approved: 5 projects this month 17 YTD
- Paid: 4 applications this month 7 YTD



Commercial & Industrial Programs

C&I Buildings: Retrofit, CTEEP, P4P EB, LEUP FY23 Incentive Budget: \$62,691,396



C&I Buildings – Program Highlights

Large Energy User Program

- Received: 0 applications this month 2 YTD
- Approved: 0 Final Energy Efficiency Plans this month 0 YTD
- Paid: 3 applications this month 3 YTD

Retrofit *(Close-Out Program: transitioning to Utilities)*

- Received: 0 applications this month 0 YTD
- Approved: 5 applications this month 6 YTD
- Paid: 34 applications this month 56 YTD

Pay for Performance Existing Buildings *(Close-Out Program: transitioning to Utilities)*

- Received: 0 applications this month 0 YTD
- Approved: 0 Energy Reduction Plans 2 YTD
- Completed: 0 projects this month 0 YTD

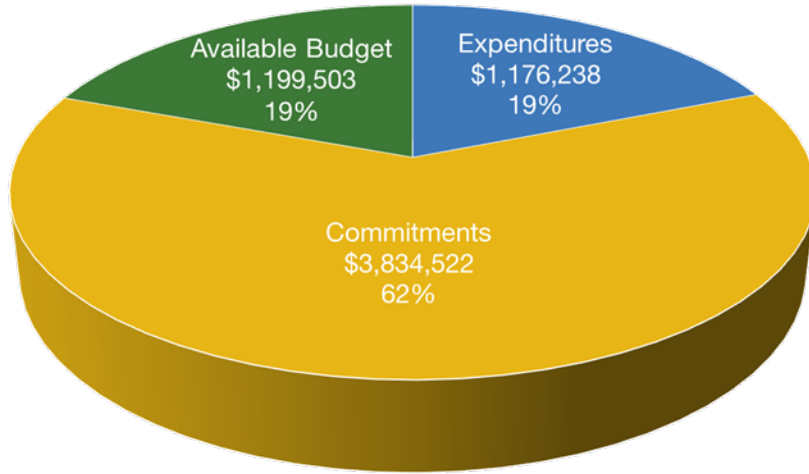
CTEEP *(Close-Out Program: transitioning to Utilities)*

- Received: 0 new enrollments this month 0 YTD
- Approved: 0 applications this month 0 YTD
- Paid: 3 applications this month 4 YTD
- Held: 0 scoping session meetings with customers this month 0 YTD



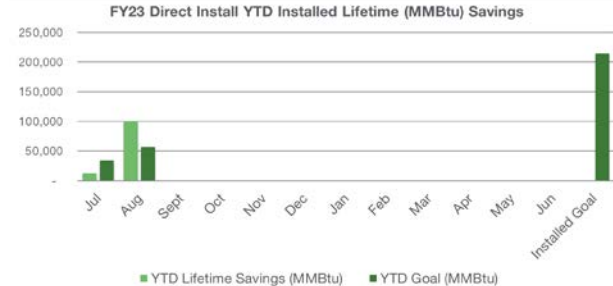
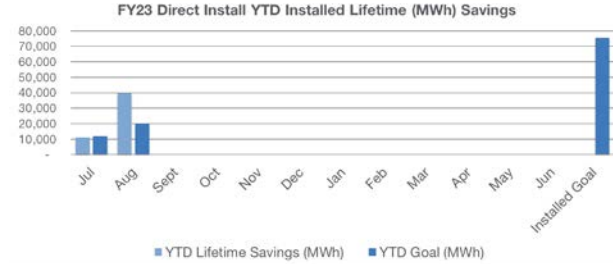
Direct Install *(Close-out Program: transitioning to Utilities)*

FY23 Incentive Budget: \$6,210,263



Program Highlights

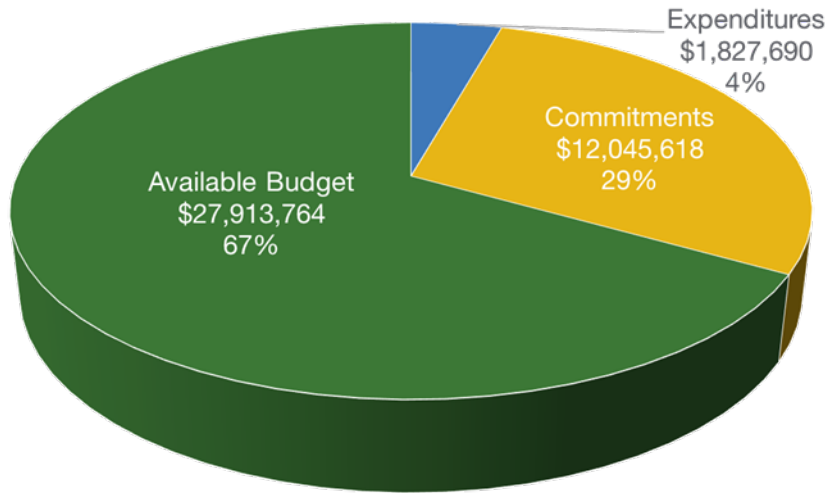
- Received: 0 enrollments this month 0 YTD
- Approved: 0 applications this month 0 YTD
- Paid: 11 applications this month 30 YTD



Comfort Partners

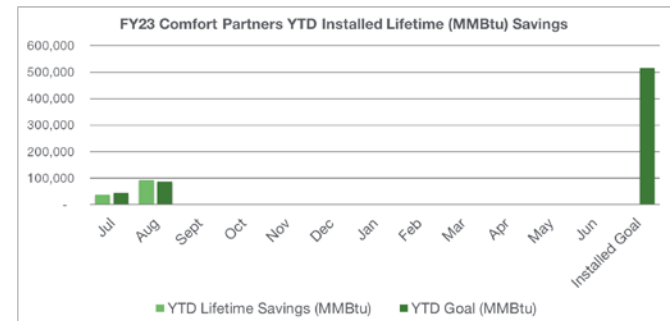
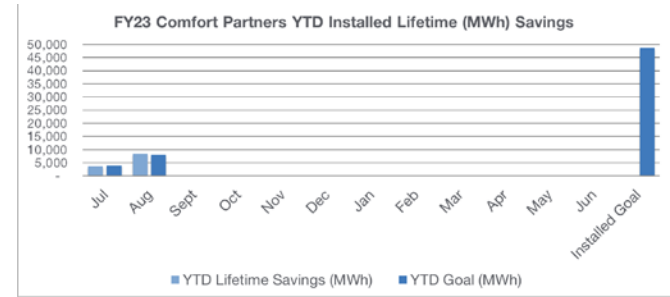
BPU/Utility Managed


FY23 Incentive Budget: \$41,787,072



Program Highlights

- Completed: 335 projects this month 550 YTD



The background features abstract green geometric shapes, including triangles and polygons, in various shades of green, creating a modern and dynamic look.

Utility Updates

NJ Energy Efficiency Stakeholder Meeting

September 15, 2022

Reminders

- ▶ All of the utilities have launched the programs transitioning from NJCEP
- ▶ Reach out to utilities where you may be interested in doing business.
 - ▶ Explore the information they have posted and reach out if you have questions.
 - ▶ Sign up for any contractor updates if that is available.
 - ▶ Build your understanding of utility specific elements (e.g. financing options, online forms)
 - ▶ Some programs have specific contractor requirements and may require Participating Contractor Agreement
- ▶ Contact info for all utilities is captured NJCEP Transition page

Utilities appreciate your patience during this transition
Committed to updating FAQs and materials to provide clarity to
customers and contractors

Program Updates

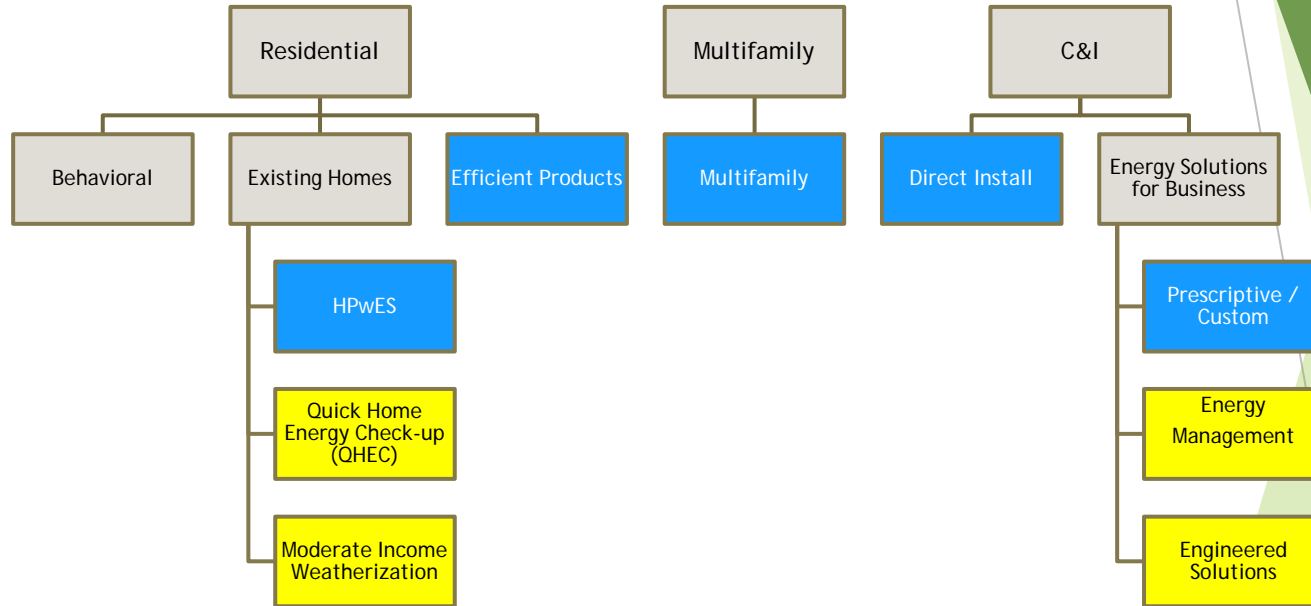
- ▶ Recurring joint utility calls booked to provide program updates and secure feedback on programs
 - ▶ PSE&G in-person Residential Trade Ally networking event scheduled for October 20 (location TBD). Look for “Save the Date” arriving after Labor Day
 - ▶ Upcoming contractor meetings will continue to review and discuss the DOE Cooling standard changes that will be effective on January 1, 2023
 - ▶ Utilities coordinating and will communicate more information on implementation impacts this Fall
 - ▶ HPwES contractors - generally held 3rd Thursday of every other month
 - ▶ Next meeting scheduled for October 20th
 - ▶ HVAC contractors-
 - ▶ Next meeting scheduled for Thursday November 3rd
 - ▶ Reach out to your utility if you are interested in attending future meetings
 - ▶ Contractors do not need to wait for meetings if they have questions

Presence at the NJCEP Conference



- ▶ The following utilities plan to have exhibit space at the event. Please come meet our team and learn more about our programs:
- ▶ New Jersey Natural Gas
- ▶ PSE&G
- ▶ Elizabethtown Gas
- ▶ Jersey Central Power & Light
- ▶ South Jersey Gas

Program Structure



Core Programs shown in blue but yellow boxes may have cross utility impacts too.

Efficient Products

- ▶ HVAC
 - ▶ Furnaces, Boilers, AC, Heat Pumps, Water Heaters
 - ▶ Equipment must meet minimum efficiency standards
 - ▶ Rebates and access to 0% financing
 - ▶ Extra rebate and longer financing terms for LMI customers
- ▶ Appliances
 - ▶ Rebates for qualifying ENERGY STAR certified clothes washers, clothes dryers, refrigerators, air purifiers, room air conditioners
- ▶ Retail products
 - ▶ Discount on smart thermostats, LEDs, smart strips, conservation kits, etc
 - ▶ All customers have access to utility online marketplace
 - ▶ Some products also available with instant discounts in stores
 - ▶ Conservation kits- distributed at no cost in partnership with foodbanks, community organizations, schools
- ▶ Appliance Recycling- EDCs only

Contact your local utility for more specific information on rebates and terms and conditions

Home Performance with ENERGY STAR

- ▶ For customers seeking whole house solutions
 - ▶ Consider the building shell AND the equipment
- ▶ Audit by a participating contractor with Building Performance Institute (BPI) certification
- ▶ Customers can access rebates and financing
 - ▶ Value of rebate tied to energy savings modeled through SnuggPro software. Must achieve at least 5% energy savings and then climbs in increments of 1% energy savings to a max rebate of \$5,000
 - ▶ Financing (OBRP or third party)
 - ▶ Up to \$10K OBRP - 7 year term
 - ▶ \$10K-\$15K OBRP-10 year term
- ▶ Customers/contractors can work with either gas or electric utility on a comprehensive projects. Savings and costs will be shared through a Statewide Coordinator System

Contact your local utility to find participating contractors

Moderate Income Weatherization

- ▶ Moderate Income Weatherization
 - ▶ For Low to Moderate Income (LMI) customers
 - ▶ Targets market above Comfort Partners eligibility- 251% to 400% of Federal Poverty Limit (FPL)
 - ▶ No costs to customers for
 - ▶ Comprehensive audit
 - ▶ Up to \$6,000 in qualifying energy savings measures
 - ▶ Focus on seal-up and insulation but can include other measures
 - ▶ Up to \$1,500 for required health and safety measures
 - ▶ Customer education

Streamlined eligibility screening including allowing automatic eligibility based up on participation in other income-based programs or customer self-certification based on census tract

Quick Home Energy Check-up (QHEC)

- ▶ No-cost home energy assessment program offered by all utilities
- ▶ Installation of energy saving products during the visit
 - May include ENERGY STAR® certified LED bulbs, water heater pipe wrap(s), efficient-flow showerheads, faucet aerators, smart power strips, etc.
 - Recommendations for other programs and information on incentives
 - Good for homeowners and renters
- NJNG also offers a \$49 QHEC+ option that includes comprehensive audit and installation of smart thermostat purchased off their marketplace

**Consider one for your own home and help us spread the word
about this great program**

Behavioral

- ▶ Use third party software companies to create personalized comparison feedback on energy usage to customers (vs. similar homes, their own history). May include
 - ▶ Home Energy Reports (HERs) and (eHers)
 - ▶ Online portal
 - ▶ High Usage Alerts (HUA)
- ▶ Information influences customers who receive the information and energy savings can be measured
 - ▶ Treatment Group
 - ▶ Opt out approach
 - ▶ Control Group
- ▶ Opportunity to promote other programs
 - ▶ Some utilities can customize based on what we know about the customer or vendor info (E.g. Low-Income customers get Comfort Partners and Energy Assistance messaging)

Recap of LMI Programs/Enhancements

- ▶ Energy Efficient Products Program*
 - ▶ HVAC extra rebate and longer financing
 - ▶ Extra \$200 for each piece of qualifying HVAC equipment
 - ▶ OBRP/Financing repayment extended from 7 to 10 years
 - ▶ Free products
 - ▶ Conservation kits with community partners
 - ▶ PSE&G to launch an on-line offer center
- ▶ Moderate Income Weatherization Program*
- ▶ Behavioral Program
 - ▶ Some utilities have focused messaging
- ▶ New metrics on Overburdened Communities (OBC)

Streamlined eligibility screening-
Other qualifying program or self-certify in LMI census tract



New Construction Program Update

New Construction Program Update

- Stakeholder Meeting held July 22nd, recording on website: NJCleanEnergy.com/Policy-Updates
- Comments received (deadline July 29th)
- Comments have been reviewed
- Ongoing discussions with Staff re: program changes /responses to comments

Next steps

- Finalize program design
- Release for public comment as Compliance Filing update



Benchmarking



Benchmarking Update

September 7th - Board approved CEA benchmarking program

Updated website:
NJCleanEnergy.com/Energy-Benchmarking

Sign up for Energy Efficiency listserv for updates (bottom of page)

CEA Benchmarking

CEA Benchmarking

About

Covered Buildings

Report

Utility Data

FAQs & Assistance

New Jersey joins an increasing number of states and municipalities across the United States in establishing benchmarking programs to measure the energy and water performance of buildings. New Jersey's Clean Energy Act of 2018 states the following:

- No later than five years after the date of enactment of P.L. 2018, c.17 (C.48:3-87.8 et al.), the board shall require the owner or operator of each commercial building over 25,000 square feet in the State to benchmark energy and water use for the prior calendar year using the United States Environmental Protection Agency's Portfolio Manager tool.

Following stakeholder input, intensive research and design based on best practices, and expert guidance, the New Jersey Board of Public Utilities ("Board" or "BPU") has approved the Benchmarking Program for Commercial Buildings on the September 7, 2022 Board Agenda. Commercial buildings over 25,000 square feet will be required to benchmark their energy and water usage annually, beginning in 2023. This website will be updated regularly to reflect program developments ahead of the Oct 1, 2023 deadline.

Commercial buildings over 25,000 square feet are required to benchmark their energy and water usage by October 1, 2023, using data from the 2022 calendar year. Building owners of Covered Buildings will be notified by July 1, 2023 of the October 1, 2023 submission deadline.

Stay Engaged

Sign up for the Energy Efficiency listserv to receive updates on the Benchmarking Program.



Benchmarking Implementation

Next Steps - Implementation

Date	Action
Sep 2022 - Oct 2023	BPU develops benchmarking regulations
	BPU and the New Jersey Institute of Technology (NJIT) develop benchmarking certification program
	BPU conducts outreach and training webinars with building owners and operators
	BPU and NJIT develop training materials on Portfolio Manager
Jul 01, 2023	BPU notifies building owners and operators of upcoming benchmarking submission deadline
Aug 01, 2023	Regulated utilities provide data access services
Oct 01, 2023	First benchmarking data submission deadline for building owners and operators for calendar year 2022



Working Group Updates

Working Groups



Four Energy Efficiency Working Groups were identified in the June 10, 2020 Board Order to refine the programs through the transition. The current working groups are as follows:

- **Workforce Development Working Group**
- **Equity Working Group** (Comfort Partners Committee and Multifamily Committee)
- **Marketing Working Group**
- **Evaluation, Measurement, and Verification Working Group** (Technical Reference Manual Committee and NJ Cost Test Committee)

Workforce Development Working Group



- Develop recommendations for establishing coordinated and collaborative workforce development and job training pathways statewide
- Focus on providing economic opportunities for underrepresented and socially or economically disadvantaged individuals



Equity Working Group



- Develop recommendations to integrate equity metrics and approaches in energy efficiency and peak demand reduction programs
- Collaborate with Supplier Diversity Development Council to encourage supplier diversity
- Encourage contractor coaching/mentoring of diverse enterprises

Comfort Partners Committee: Oversee Comfort Partners Program and utilities' day-to-day operations

Multifamily Committee: Design and manage delivery of multifamily sector with goals of equitable access and adequate program support

Marketing Working Group



- Promote the programs, overall state brand (utilized by all program administrators), and the larger benefits of participation in EE and PDR programs. Engage in a collaborative effort in branding, messaging, and promotion of all utility- and State-led programs, including in the provision of program materials in Spanish and languages other than English. Staff shall leverage State resources to promote general awareness of EE and other clean energy opportunities in NJ while the utilities shall market specific programs and initiatives to customers in a more targeted fashion

Evaluation, Measurement, & Verification Working Group



- Provide guidance and input on the planning and monitoring of EM&V plans (including activities, methodologies, budgets, priorities), policies, procedures, guidelines, requirements for program administrators (including data to be tracked and reported, such as GHG emissions reductions, BTU savings, local worker job-hours, supplier diversity), methods to account for strategic electrification, and schedules.
- Provide recommendations on development of a standard, transparent, and replicable approach for EM&V across the state, according to which the State and utilities will be held to the same accountability standards such as the frequency and transparency of reporting and vendor procurement requirements.
- Share associated data, track best practices from other jurisdictions, emerging EM&V approaches and facilitate the necessary stakeholder processes related to the State's EM&V policies.

NJ EE Stakeholder Meeting: TRM 2022 Addendum Updates

9/15/22

NJ Technical Reference Manual 2022 Addendum (2022 Addendum)

- Changes triggered by reinstatement of Federal Energy Independence and Security Act (EISA) Lighting Backstop
- Changes triggered by A5160
- General changes based on early review by Statewide Evaluator (SWE)
 - Residential water heating
 - Commercial HVAC full load hours
 - Residential and Commercial lighting measure life
 - Early review changes based on available secondary research from neighboring states

Federal EISA Lighting Backstop

- EISA Backstop reinstated
- Sets a minimum efficacy for General Service Lamps (GSL) at 45 lumens/watt
 - Effectively requires all GSLs to be LEDs
- Expanded GSL definition includes
 - Standard “A” lamps
 - Certain types of reflector lamps
- Rule issued May 8, 2022
- Full enforcement at retail level on August 1, 2023



NJ Assembly Bill 5160 (A5160) – P.L. 2021, c. 464

- Establishes minimum energy and water efficiencies for lighting, appliances and water saving measures
- Affects baselines for:
 - State-regulated General Service Lamps
 - Commercial foodservice equipment
 - Commercial dishwashers
 - Water saving devices
- Effective January 18, 2023

A5160 Treatment of GSLs

- Act makes a distinction between General Service Lamps (GSL) and State-regulated GSLs
 - GSLs are lamps regulated by Federal EISA GSL standards
 - State-regulated GSLs are “specialty lamps”
 - Includes small diameter reflector lamps, decorative “flame” lamps, globe lamps etc.
- Act imposes the EISA backstop on State-regulated GSLs
 - Minimum efficacy of 45 lumens/watt
 - Effectively requires all State-regulated GSLs to be LEDs
- Combination of Federal EISA Backstop and A5160 covers most screw in lighting types

A5160 Treatment of Commercial Foodservice Equipment, Dishwashers and Air Purifiers

Measure	A5160	Current Energy Star Spec
Commercial Dishwasher	Estar v 2.0	Estar v 3.0
Commercial Ovens	Estar v 2.0	Estar v 2.2
Steam cooker	Estar v 1.2	Estar v 1.2
Fryer	Estar v 2.0	Estar v 3.0
Air purifier	Estar v 2.0;	Estar v 2.0;
Insulated Food Holding Cabinets	Estar v 2.0	Estar v 2.0

- Savings are reduced for dishwashers, ovens, and fryers
- Savings eliminated for steam cooker, air purifier and insulated food holding cabinets unless measures exceed current Energy Star specs

A5160 Treatment of Water Saving Measures

- Maximum flowrates established for
 - Low flow showerheads (2.0 gpm)
 - Faucet aerators
 - Private restrooms (1.5 gpm)
 - Public restrooms (0.5 gpm)
 - Kitchens (1.8 gpm)
- Affects qualifying measure efficiency in retrofit applications

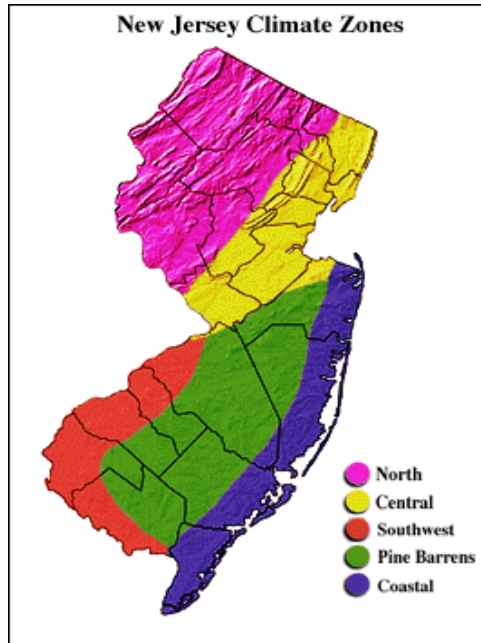
2022 Addendum General Changes

- Revisions to baseline residential hot water use affecting:
 - Storage water heaters
 - Instantaneous water heaters
 - Combination boilers
- Baseline consumption assumptions now in line with Technical Reference Manuals (TRMs) in neighboring states
 - Calculated per NY TRM with updates for NJ cold water temperature
- Drops hot water savings by approximately 40%

New Jersey Climate Adjustments

- NJ 2020 Protocols (TRM) based on NY TRM using LaGuardia weather data
- 2022 Addendum updated NY values using NJ weather data
- Measures affected are:
 - Air conditioners
 - Heat pumps
 - Chillers
 - Boilers
 - Furnaces
 - Boiler controls
 - Smart thermostats

New Jersey Climate Regions

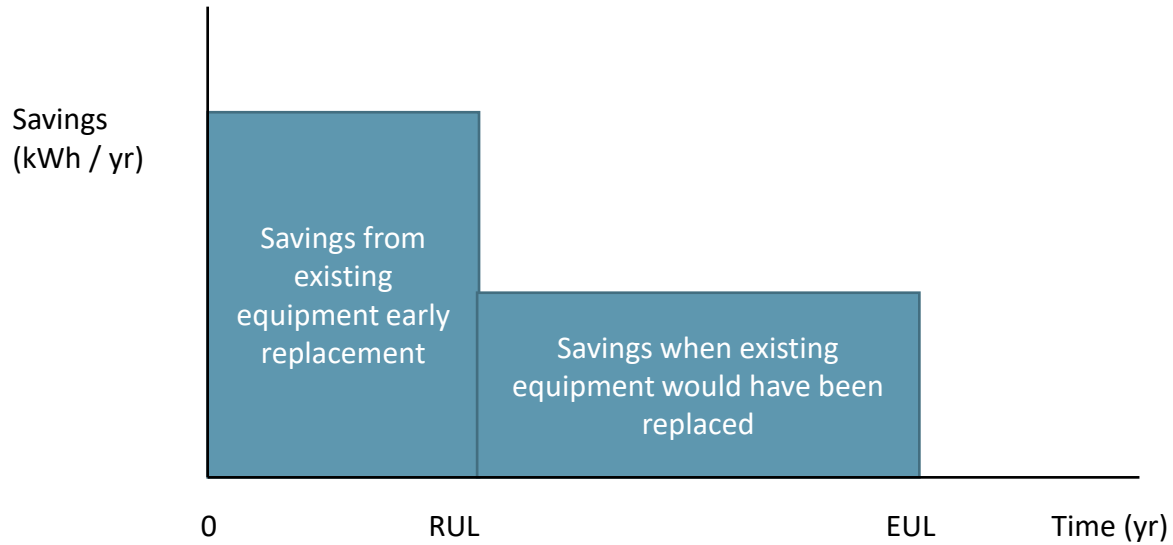


- State divided into 5 climate regions based on analysis by State Climatologist at Rutgers
- Representative cities assigned to each climate region
- Heating and cooling full load hours recalculated for each building type and climate region
- Results weighted to statewide level
- Adjustments vary by building type
 - In general, cooling savings decreased, heating savings increased

Measure Life Adjustments to Residential and Commercial Lighting

- ◎ 2022 Addendum uses an "adjusted measure life" (AML) to account for dual baseline
 - Existing lighting systems have a remaining useful life (RUL) before burnout
 - First baseline is existing lighting system until the end of the RUL period
 - Second baseline is the code or standard practice defining what would have been installed when the existing lighting system would have been replaced
 - Second baseline savings persist through the end of the measure life (EUL)

Dual Baseline Savings Calculations for Early Replacement



Dual Baseline for Replace on Failure

- LEDs have different (longer) measure lives than the standard lighting systems
- First baseline is current standard practice
 - Based on current mix of non-LED and LED systems
- Second baseline is future standard practice when current standard lighting system would need to be replaced
 - Future mix of non-LED and LED systems based on forecast

Adjusted Measure Life (AML)

- Lifetime savings are the sum of the savings relative to each baseline
 - For early replacement
 1. Savings from existing equipment replacement through RUL
 2. Savings when existing equipment would have to be replaced from RUL to EUL
- AML is calculated as the lifetime savings / first year savings
- AML is a single measure life value that accounts for savings changes over time

AMLs Adopted for Residential and Commercial Lighting Systems

- Residential
 - Measure life in 2020 Protocols (TRM) was 15 yrs
 - Reduced to 4 yr AML based on Maryland study
 - Will likely fall in future updates as new research is incorporated
- Commercial
 - Measure life in 2020 Protocols (TRM) was 15 yrs
 - Reduced to 8 yr AML based on Connecticut study
 - Driven primarily by rapid market adoption of LEDs outside of the efficiency programs, not by EISA or A5160 which address screw in lamps
 - AMLs are falling as market adoption of LEDs continues to increase

Secondary Energy Savings Metrics

- Energy (kWh and therm) and demand (kW) savings for Annual Reports are calculated using NJ 2020 Protocols (TRM) and 2021 Protocols (TRM) Addendum
 - Additional calculations for measures not included in the 2020 Protocols (TRM) or 2021 Addendum are documented in the Joint Utility Coordinated Measure List (CML)
 - CML will be posted to the NJ BPU website
- Annual reports will also include a Secondary Energy Savings Metric.
- Secondary Energy Savings Metrics are calculated according to the revisions in the 2022 Addendum

Timing of 2022 Addendum Changes

- General changes in 2022 Addendum apply to Triennium 1 measure installations for
 - Residential water heating measures
 - Commercial HVAC full load hours
 - Residential and Commercial lighting measure life
- A5160 changes take effect January 2023
 - Impacts FY 2023 savings
- Full enforcement of EISA backstop at retail level takes effect August 2023
 - Impacts FY 2024 savings
- Comprehensive review and update of the NJ TRM currently underway that will incorporate these changes



Clean Energy Conference



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New Jersey Clean Energy Conference

October 3 & 4, 2022 | Harrah's Conference Center | Atlantic City, NJ

General Q&A



To submit questions in advance for next month:
EnergyEfficiency@bpu.nj.gov

Items of Interest



Next Meetings



Energy Efficiency Stakeholder Meetings

NJCleanEnergy.com/StakeholderGroups/Energy-Efficiency

3rd Thursday of the Month, 1-2:30pm

October 20, 2022

[no November meeting]

December 15, 2022



More Information

VISIT

NJCleanEnergy.com

NJCleanEnergy.com/StakeholderGroups/Energy-Efficiency

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THANK YOU

