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PECO 2301 Market Street S15 Philadelphia, PA 19103

January 16, 2024

VIA E-Filing

Rosemary Chiavetta, Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street, 2nd Floor Harrisburg, PA 17120

Re: PUC Docket No. M-2020-3020830 Phase IV Energy Efficiency and Conservation Program Semiannual Report for June 1, 2023 through May 31, 2024

Dear Secretary Chiavetta:

In accordance with Section IV.F.2 of the Commission's Opinion and Order Letter dated March 25, 2021 (Docket No. M-2020-3020830), enclosed is PECO's ("PECO" or "the Company") Phase IV Semiannual Energy Efficiency & Conservation Report for the period June 1, 2023 through May 31, 2024.

PECO is providing a copy of the report to the Act 129 Statewide Evaluator (NMR Group) and is also posting the report on the PECO website.

Thank you for your assistance in this matter and please direct any questions regarding the above to Megan McDevitt, Senior Manager, Retail Rates at 267-533-1942 or via email: megan.mcdevitt@exeloncorp.com.

Sincerely,

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Rosemary Chiavetta, Secretary January 16, 2024 Page 2

Enclosures

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Semi-Annual Report to the Pennsylvania Public Utility Commission Phase IV of Act 129

Program Year 15 (June 1, 2023–May 31, 2024)

For Pennsylvania Act 129 of 2008 Energy Efficiency and Conservation Plan



Prepared by:

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January 15, 2024

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Acronyms

C&I	Commercial and Industrial
CSP	Conservation Service Provider, Curtailment Service Provider
EDC	Electric Distribution Company
EDT	Eastern Daylight Time
EE	Energy Efficiency
EE&C	Energy Efficiency and Conservation
EM&V	Evaluation, Measurement, and Verification
GNI	Government/Education/Nonprofit
HER	Home Energy Report
HVAC	Heating, Ventilating, and Air Conditioning
ICSP	Implementation Conservation Service Provider
IE	Income-Eligible
IMC	Incremental Measure Cost
IMP	Interim Measure Protocol
kW	Kilowatt
kWh	Kilowatt-Hour
LED	Light-Emitting Diode
LIURP	Low-Income Usage Reduction Program
M&V	Measurement and Verification
MF	Multifamily
MW	Megawatt
MWh	Megawatt-Hour
NPV	Net Present Value
NTG	Net-to-Gross
P4TD	Phase IV to Date
PA PUC	Pennsylvania Public Utility Commission
PSA	Phase IV to Date Preliminary Savings Achieved; equal to VTD+PYRTD
PSA+CO	PSA Savings plus Carryover from Phase III
PY	Program Year—e.g., PY13, from June 1, 2021, to May 31, 2022
PYRTD	Program Year Reported to Date
PYTD	Program Year to Date
PYVTD	Program Year Verified to Date
RTD	Phase IV to Date Reported Gross Savings
SF	Single-Family
SWE	Statewide Evaluator
TDR	Tracking Database Ratio
TRC	Total Resource Cost
TRM	Technical Reference Manual
VR	Verification Ratio



VTD	Phase IV to Date Verified Gross Savings
VTD+CO	Phase IV to Date Verified Gross Savings plus Carryover from Phase III

Types of Savings

Gross Savings: The change in energy consumption and/or peak demand that results directly from program-related actions taken by participants in an energy efficiency and conservation (EE&C) program, regardless of why they participated.

Net Savings: The total change in energy consumption and/or peak demand that is attributable to an EE&C program. Depending on the program delivery model and evaluation methodology, the net savings estimates may differ from the gross savings estimates due to adjustments for the effects of free riders, changes in codes and standards, market effects, participant and nonparticipant spillover, and other causes of changes in energy consumption or demand not directly attributable to the EE&C program.

Reported Gross: Also referred to as ex ante (Latin for "beforehand") savings. The energy and peak demand savings values calculated by the electric distribution company (EDC) or its program implementation conservation service providers (ICSPs) and stored in the program tracking system.

Verified Gross: Also referred to as ex post (Latin for "from something done afterward") gross savings. The energy and peak demand savings estimates reported by the independent evaluation contractor after the gross impact evaluation and associated measurement and verification (M&V) efforts have been completed.

Verified Net: Also referred to as ex post net savings. The energy and peak demand savings estimates reported by the independent evaluation contractor after application of the results of the net impact evaluation. Typically calculated by multiplying the verified gross savings by a net-to-gross (NTG) ratio.

Adjusted Database Savings: Energy and peak demand savings resulting from adjustments made to the reported gross savings to align the inputs and algorithms with the technical reference manual (TRM) and interim measure protocols (IMPs). The independent evaluation contractor calculates these savings as an interim step in determining the verified gross savings.

Tracking Database Ratio: The ratio of reported gross savings divided by the adjusted database savings.

Verification Ratio: The ratio of adjusted database savings divided by the verified gross savings.

Annual Savings: Energy and demand savings expressed on an annual basis, or the amount of energy and/or peak demand an EE&C measure or program can be expected to save over the course of a typical year. Annualized savings are noted as MWh/yr or MW/yr. The Pennsylvania TRM¹ provides algorithms and assumptions to calculate annual savings, and Act 129

¹ Pennsylvania Public Utility Commission, *Technical Reference Manual; State of Pennsylvania Act 129 Energy Efficiency and Conservation Program & Act 213 Alternative Energy Portfolio Standards*, dated August 2019, reissued February 2021, <u>https://www.puc.pa.gov/filing-resources/issues-laws-regulations/act-129/technical-reference-manual/</u>.



compliance targets for consumption reduction are based on the sum of the annual savings estimates of installed measures or behavior change.

Lifetime Savings: Energy and demand savings expressed in terms of the total expected savings over the useful life of the measure. Typically calculated by multiplying the annual savings of a measure by its effective useful life (EUL). The total resource cost (TRC) test uses savings from the full lifetime of a measure to calculate the cost-effectiveness of EE&C programs.

Program Year Reported to Date (PYRTD): The reported gross energy and peak demand savings achieved by an EE&C program or portfolio within the current program year. Program year to date (PYTD) values for energy efficiency will always be reported gross savings in a semiannual or preliminary annual report.

Program Year Verified to Date (PYVTD): The verified gross energy and peak demand savings achieved by an EE&C program or portfolio within the current program year as determined by the impact evaluation findings of the independent evaluation contractor.

Phase IV to Date (P4TD): The energy and peak demand savings achieved by an EE&C program or portfolio within Phase IV of Act 129. Reported in several permutations described here:

- Phase IV to Date Reported Gross Savings (RTD): The sum of the reported gross savings recorded to date in Phase IV of Act 129 for an EE&C program or portfolio.
- Phase IV to Date Verified Gross Savings (VTD): The sum of the verified gross savings recorded to date in Phase IV of Act 129 for an EE&C program or portfolio, as determined by the impact evaluation finding of the independent evaluation contractor.
- Phase IV to Date Preliminary Gross Savings Achieved (PSA): The sum of the verified gross savings (VTD) from previous program years in Phase IV where the impact evaluation is complete plus the reported gross savings from the current program year (PYTD).
- Phase IV to Date Preliminary Gross Savings Achieved + Carryover (PSA+CO): The sum of the verified gross savings from previous program years in Phase IV plus the reported gross savings from the current program year plus any verified gross carryover savings from Phase III of Act 129. This value is the best estimate of an EDC's progress toward the Phase IV compliance targets.
- Phase IV to Date Verified Gross Savings + Carryover (VTD+CO): The sum of the verified gross savings recorded to date in Phase IV plus any verified gross carryover savings from Phase III of Act 129.

Note that all values in the report are summed prior to rounding. Therefore, table totals may not equal the sum of all rows.



1. Introduction

Pennsylvania Act 129 of 2008, signed on October 15, 2008, mandated energy savings and demand reduction goals for the largest electric distribution companies (EDCs) in Pennsylvania for Phases I (2008 through 2013), II (2013 through 2016), and III (2016 through 2021). In late 2020, each EDC filed a new Energy Efficiency and Conservation (EE&C) plan with the Pennsylvania Public Utilities Commission (PA PUC) detailing the proposed design of its portfolio for Phase IV. Stakeholder input informed the updates to these plans, which were subsequently approved by the PA PUC in 2021.

Implementation of Phase IV of the Act 129 programs began on June 1, 2021. This report documents the progress of the Phase IV EE&C accomplishments for PECO in Program Year 15 (PY15) and the cumulative accomplishments of the Phase IV programs since inception. It also documents the energy savings carried over from Phase III. The Phase III carryover savings count toward Phase IV EDC savings compliance targets.

This report details the participation, spending, and reported gross impacts of the energy efficiency programs during the first 6 months of PY15. Compliance with Act 129 savings goals is ultimately based on verified gross savings. PECO retained Guidehouse Inc. (Guidehouse) as an independent evaluation contractor for Phase IV of Act 129. Guidehouse is responsible for the measurement and verification (M&V) of the savings and calculation of verified gross savings. The verified gross savings for PY15 energy efficiency programs will be reported in the final annual report to be filed on September 30, 2024.

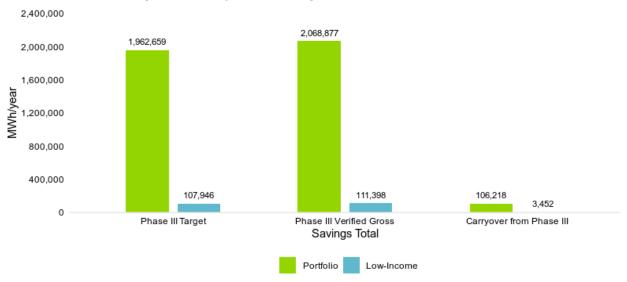
Phase IV of Act 129 includes a peak demand reduction goal for PECO. Unlike previous phases of Act 129, Phase IV peak demand reduction targets must be met through coincident demand reductions from energy efficiency measures. The Act 129 peak demand reduction definition is non-holiday weekdays from 2 p.m. to 6 p.m. in June, July, and August. As in prior phases, compliance with Act 129 peak compliance goals is assessed at the system level, so all coincident peak demand impacts are adjusted for line losses.



2. Summary of Achievements

2.1 Carryover Savings from Phase III of Act 129

The PA PUC's Phase IV Implementation Order² allowed EDCs to carry over verified savings above the Phase III portfolio and low-income savings goals and apply those savings toward Phase IV compliance targets. PECO has 106,218 MWh/yr of portfolio carryover savings and 3,452 MWh/yr of low-income carryover savings from Phase III toward its Phase IV energy reduction targets. Figure 1 compares PECO's Phase III verified gross savings total to the Phase III compliance target to illustrate the carryover calculation.





Source: SWE Phase III Report³

Phase III did not include a peak demand reduction target from energy efficiency, so there are no carryover savings toward the Phase IV peak demand reduction target.

2.2 Phase IV Energy Efficiency Achievements to Date

Since the beginning of PY15 on June 1, 2023, PECO has claimed:

- 167,907 MWh/yr of reported gross electric energy savings (PYRTD)
- 34.34 MW/yr of reported gross peak demand savings (PYRTD)

Since the beginning of Phase IV of Act 129 on June 1, 2021, PECO has achieved:

• 708,948 MWh/yr of reported gross electric energy savings (RTD)

² Pennsylvania Public Utility Commission, *Energy Efficiency and Conservation Program* Implementation Order, at Docket No.M-202-3015228, (Phase IV Implementation Order), entered June 18, 2020.

³ PA SWE, *SWE Annual Report Act 129 Phase III and Program Year 12*, March 31, 2022, <u>https://www.puc.pa.gov/pcdocs/1746475.pdf</u>.



- 132.30 MW/yr of reported gross peak demand savings (RTD) from energy efficiency programs
- 713,144 MWh/yr of gross electric energy savings (PSA),⁴ this total includes verified gross savings from previous Phase IV program years and the PYTD reported gross savings from PY15
- 132.11 MW/yr of gross peak demand savings (PSA)⁴ from energy efficiency programs

Including carryover savings from Phase III, PECO has achieved:

- 819,362 MWh/yr of PSA+CO energy savings recorded to date in Phase IV
 - This value represents 59.3% of the May 31, 2026, energy savings compliance target of 1,380,837 MWh/yr.
- 132.11 MW/yr of PSA demand savings recorded to date in Phase IV
 - This value represents 51.6% of the May 31, 2026, energy savings compliance target of 256.00 MW/yr.

Figure 2 and Figure 3 show PECO's EE&C plan progress toward the Phase IV energy conservation and peak demand reduction compliance targets.

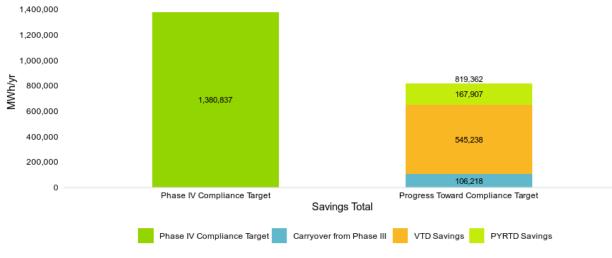


Figure 2. Performance Toward Phase IV Portfolio Energy Target (MWh)

⁴ PSA and VTD energy and demand savings do not account for PY14 SWE adjustments.



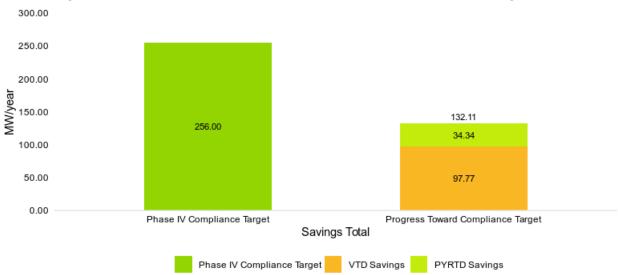


Figure 3. Performance Toward Phase IV Portfolio Compliance Target (MW)

Source: Guidehouse analysis

The Phase IV Implementation Order directed EDCs to offer conservation measures to the Low-Income customer segment based on the proportion of electric sales attributable to low-income households. The proportionate number of measures targeted for PECO is 8.8%.

The PA PUC also established a Low-Income energy savings target of 5.8% of the portfolio savings goal. The Low-Income savings target for PECO is 80,089 MWh/yr and is based on verified gross savings. Figure 4 compares the PSA+CO performance to date for the Low-Income customer segment to the Phase IV savings target. Based on the latest available information, PECO has achieved 73.7% of the Phase IV Low-Income energy savings target. The low-income carveout energy savings are achieved through the Income-Eligible Program, the Income-Eligible Home Energy Report (HER) Program, and contributions to the income-eligible customer segment of the Residential Multifamily program component.



Figure 4. EE&C Plan Performance Toward Phase IV Income-Eligible Compliance Target (MWh)

Source: Guidehouse analysis

2.3 Phase IV Performance by Customer Segment

Table 1 presents the participation, savings, and spending by customer segment for PY15. The Residential, Small C&I, and Large C&I segments are defined by EDC tariff and the Residential Low-Income and Governmental/Educational/Nonprofit sector (GNI) were defined by statute (66 Pa. C.S. § 2806.1). The Residential Low-Income segment is a subset of the Residential customer class; the GNI segment includes customers who are part of the Small C&I or Large C&I rate classes. Guidehouse removed the Low-Income and GNI segments savings, spending, and participation values from the parent Residential, Small C&I, and Large C&I sectors in Table 1.

Parameter	Residential (Non-IE)	Income- Eligible	Small C&I (Non- GNI)	Large C&I (Non- GNI)	Small C&I (GNI)	Large C&I (GNI)	Municipal Lighting	Total
Number of participants ¹	242,240	27,622	3,686	541	431	190	14	274,724
PYRTD MWh/yr	30,478	11,436	77,558	27,992	7,690	12,288	465	167,907
PYRTD MW/yr	7.18	0.99	17.37	4.98	1.69	2.13	-	34.34
Incentives ² (\$1,000)	2,816	4,693	17,064	4,666	2,712	2,210	103	34,263

Table 1. PY15 Summary Statistics by Customer Segment

¹ Includes pilot participants; excludes giveaways and upstream lighting from participants.

² Incentive totals also include Giveaway Costs as listed in the tracking data.

Source: Guidehouse analysis

Table 2 summarizes plan performance by sector since the beginning of Phase IV.

Parameter	Residential (Non-IE)	Income- Eligible	Small C&I (Non- GNI)	Large C&I (Non- GNI)	Small C&I (GNI)	Large C&I (GNI)	Municipal Lighting	Total
Number of participants ¹	649,987	45,796	10,085	2,410	1,202	576	44	710,100
PSA MWh/yr	178,721	46,142	227,126	199,700	24,273	34,005	3,177	713,144
PSA MW/yr	34.68	4.66	47.87	33.43	5.10	6.37	0.01	132.11
Incentives ² (\$1,000)	15,927	16,580	44,087	24,045	4,703	4,229	617	110,187

Table 2. Phase IV Summary Statistics by Customer Segment

¹ Includes pilot participants; excludes giveaways and upstream lighting from participants.

² Incentive totals also include Giveaway Costs as listed in the tracking data.



3. Updates and Findings

3.1 Implementation Updates and Findings

This section summarizes PECO's EE&C plan and program implementation updates, as well as findings available at the time of this report's writing. In PY15, PECO expects to implement the EE&C plan as filed.

PECO's EE&C plan is implemented through a customer-centric portfolio of offerings to meet its customers' energy-saving needs, regardless of customer rate class. In Phase IV, PECO offers five customer programs:

- Residential
- Residential HER
- Income-Eligible
- Income-Eligible HER
- Non-Residential

Within each program, PECO offers distinct program components. Programs and program components are defined as follows:

- **Programs:** A mix of measures and treatments for customers structured to include interactions with multiple market actors across the value chain through various program components. The PECO portfolio is organized into five programs.
- **Program components:** Program components tailor service delivery to the needs of each customer class. For example, the Residential program offers rebates, a marketplace platform, in-home assessments, appliance recycling, and other service components.
- **Pilots:** Savings and costs for the pilots are reported as part of the following program components:
 - The Residential Comprehensive Projects Pilot is reported as part of the Residential Rebates and Marketplace program component and the Residential In-Home Assessment program component.
 - The Health and Safety Pilot is reported as part of the Income-Eligible Single-Family program component.
 - The Non-Residential Comprehensive Projects Pilot is reported as part of the Non-Residential Downstream program component.

Guidehouse is finalizing the PY15 evaluation plan and sampling plan for each program and component. The team will interview PECO staff and CSPs and review program tracking databases and project files. These activities inform the design of participant surveys exploring customer satisfaction and experience and the verification of measure installations for specific components per the evaluation plan. Guidehouse's progress on each program is summarized as follows:



- **Residential Program:** Guidehouse is reviewing first and second quarter data and developing sampling plans and survey instruments in support of PY15 evaluation activities.
- **Income-Eligible Program:** Guidehouse is reviewing first and second quarter data and developing sampling plans and survey instruments in support of PY15 evaluation activities.
- **Residential HER Program:** Guidehouse is developing the evaluation plan in support of PY15 evaluation activities.
- **Income-Eligible HER Program:** Guidehouse is developing the evaluation plan in support of PY15 evaluation activities.
- Non-Residential Program: Guidehouse is reviewing first and second quarter data and developing sampling plans and survey or interview guides in support of PY15 evaluation activities.



4. Summary of Participation by Program

Participation is defined differently for certain programs and program components depending on the program delivery channel and data tracking practices. The nuances of the participant definition vary by program and are summarized by program in the following bullets. Participants are defined as a unique account number by program, program component, customer segment, and program year, with the following notes and exceptions:

- For residential new construction, participation is defined as the count of unique job identifiers by program year.
- Phase IV to date participant counts are additive across program years for all program components, except for the Residential HER program and the Income-Eligible HER program. For the HER programs, Phase IV to date participation is equal to the number of unique households that have participated across all program years during Phase IV.
- Master metered buildings with a single account number are counted as a single participant, even if the program serves multiple units.
- Account numbers are not tracked for the Residential Rebates and Marketplace Upstream Lighting delivery channel and Income-Eligible Single-Family Giveaways. Participation for those delivery channels is calculated as the sum of rebated measures. These are summarized separately in Table 4.

Table 3 provides the current participation for PY15 and Phase IV, and Table 4 provides participation for upstream lighting and IE giveaways.

Program and Component	PYTD Participation	P4TD Participation	
Rebates and Marketplace ¹	23,213	53,575	
Appliance Recycling	1,199	19,836	
In-Home Assessment ²	1,441	8,442	
New Construction	782	4,646	
Multifamily ²	603	850	
Multifamily Income-Eligible ²	132	13,235	
Residential Total	27,370	100,584	
Single-Family ²	5,103	19,345	
Appliance Recycling ³	110	3,746	
Long-Term Savings	17	183	
Income-Eligible Total	5,230	23,274	
Residential HER Total	214,671	550,187	
Income-Eligible HER Total	22,647	44,940	
Downstream	333	1,942	
Midstream	3,754 10,031		
Small Business Direct Install	680 1,313		
New Construction	39	122	

Table 3. Participation by Program Component



Program and Component	PYTD Participation	P4TD Participation	
Non-Residential Total	4,806	13,408	
Portfolio Total	274,724	732,393	

¹ Excludes upstream lighting participants.
 ² Excludes giveaway participants.

³ PECO suspended the appliance recycling program as of August 15, 2023.

Source: Guidehouse analysis

Table 4. Participation by Program Component

Program and Component	PYTD Participation	P4TD Participation
Residential Rebates and Marketplace – Upstream Lighting	14,439	4,194,699
Income-Eligible Single-Family – Giveaways	14,419	354,775
Residential In-Home Assessment – Giveaways	-	96,609
Residential Multifamily – Giveaways	-	18,858
Residential Multifamily Income-Eligible – Giveaways	-	47,265
Portfolio Total	28,858	4,712,206



5. Summary of Energy Impacts by Program

Figure 5 summarizes the PYTD reported gross energy savings by program for PY15. The energy impacts in this report are presented at the meter level and do not reflect adjustments for transmission and distribution losses.

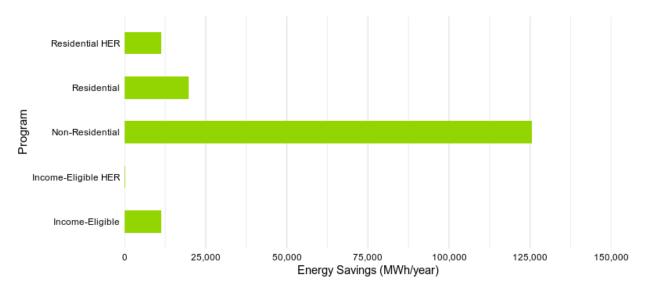


Figure 5. PYRTD Reported Gross Energy Savings by Program

Figure 6 presents a summary of the PSA gross energy savings by program for Phase IV of Act 129. PSA savings include verified gross savings from previous program years and the PYTD savings from the current program year.

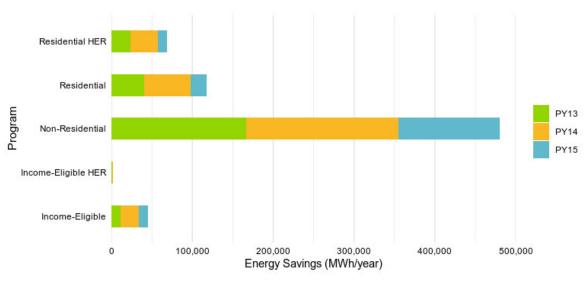


Figure 6. PSA Energy Savings by Program for Phase IV

Source: Guidehouse analysis

Table 5 summarizes energy impacts by program through the current reporting period.

Program and Component	PYRTD	RTD	VTD	PSA
Rebates and Marketplace	14,996	71,281	55,067	70,063
Appliance Recycling	1,018	18,612	18,786	19,804
In-Home Assessment	1,347	8,810	6,743	8,091
New Construction	1,418	5,959	4,584	6,003
Multifamily	647	5,768	3,945	4,592
Multifamily Income-Eligible	213	9,733	8,559	8,772
Residential Total	19,638	120,162	97,686	117,324
Single-Family	11,070	45,685	30,775	41,845
Appliance Recycling	97	2,423	2,372	2,469
Long-Term Savings	83	480	385	468
Income-Eligible Total	11,250	48,588	33,532	44,782
Residential HER ¹ Total	11,272	69,109	57,602	68,874
Income-Eligible HER ¹ Total	132	2,171	1,903	2,035
Downstream	26,944	213,657	186,281	213,224
Midstream	81,080	212,502	143,276	224,356
Small Business Direct Install	9,971	22,874	12,391	22,362
New Construction	7,620	19,884	12,567	20,186
Non-Residential Total	125,614	468,917	354,515	480,129
Portfolio Total	167,907	708,948	545,238	713,144

 Table 5. Energy Savings by Program Component (MWh/Yr)

¹Savings for the Residential HER and the Income-Eligible HER programs are reported with a one-month lag. Therefore, for these two programs, the reported savings in this report are representative of the first 5 months of PY15 instead of 6 months.

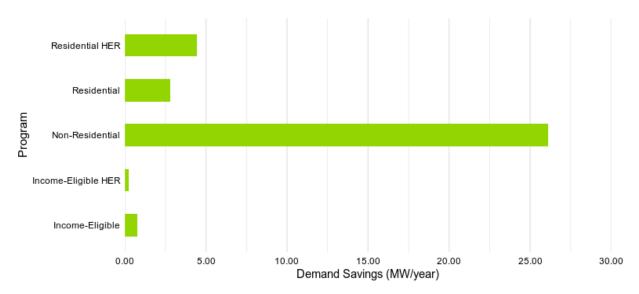


6. Summary of Peak Demand Impacts by Program

Act 129 defines peak demand savings from energy efficiency as the average expected reduction in electric demand from 2 p.m. to 6 p.m. EDT on non-holiday weekdays from June to August. This report presents the peak demand impacts from energy efficiency at the system level, meaning they reflect adjustments for transmission and distribution losses. PECO uses the following line loss percentages or multipliers by sector:

- Residential = 1.0799
- Non-Residential = 1.0799

Figure 7 summarizes the PYRTD reported gross peak demand savings by energy efficiency program for PY15 at the system level with the application of line loss factors. PYRTD is also the Act 129 Phase IV PSA gross peak demand savings in this report.





Source: Guidehouse analysis

Figure 8 presents a summary of the PSA gross peak demand savings by energy efficiency program for Phase IV of Act 129.



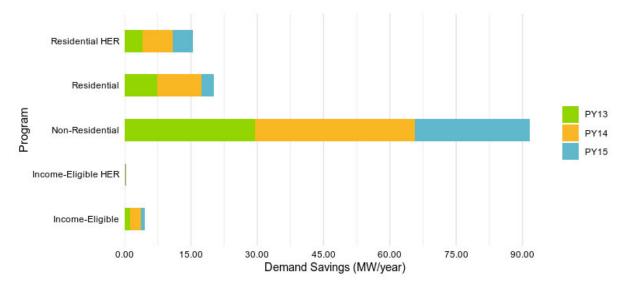


Figure 8. PSA Gross Peak Demand Savings by Energy Efficiency Program for Phase IV

Source: Guidehouse analysis

Table 6 summarizes the peak demand impacts by program through the current reporting period.

	-		• •	
Program and Component	PYRTD	RTD	VTD	PSA
Rebates and Marketplace	1.93	11.70	10.07	12.00
Appliance Recycling	0.20	3.87	3.85	4.05
In-Home Assessment	0.18	1.08	0.81	0.99
New Construction	0.37	2.22	1.23	1.60
Multifamily	0.08	0.85	0.59	0.68
Multifamily Income-Eligible	0.03	1.05	0.89	0.91
Residential Total	2.79	20.77	17.43	20.23
Single-Family	0.73	4.32	3.18	3.90
Appliance Recycling	0.02	0.56	0.55	0.57
Long-Term Savings	0.00	0.03	0.02	0.03
Income-Eligible Total	0.75	4.91	3.75	4.50
Residential HER ¹ Total	4.44	13.85	10.93	15.37
Income-Eligible HER ¹ Total	0.23	0.57	0.05	0.28
Downstream	4.69	39.06	31.75	36.44
Midstream	18.01	45.13	29.05	47.07
Small Business Direct Install	2.29	4.62	2.30	4.59
New Construction	1.13	3.39	2.50	3.63
Non-Residential Total	26.13	92.20	65.60	91.73
Portfolio Total	34.34	132.30	97.77	132.11

Table 6. Peak Demand Savings by Program (MW/Yr)

¹Savings for the Residential HER and the Income-Eligible HER programs are reported with a one-month lag. Therefore, for these two programs, the reported savings are representative of 5 months of PY15 instead of 6 months. *Source: Guidehouse analysis*



7. Summary of Finances

This section summarizes the expenditures associated with PECO's portfolio and the recovery of those costs from ratepayers.

7.1 Program and Portfolio Financials

Table 7 shows program-specific and portfolio total finances for PY15. The columns in Table 7 and Table 8 are adapted from the list of program cost elements in the PA PUC's EE&C plan template⁵ for Phase IV. So far in PY15, 67% of all EE&C plan expenditures have been incentives to participants and trade allies. Program-specific and portfolio total finances since the inception of Phase IV are the same as those reported for PY14:

- Incentives includes rebates, point-of-sale buydowns, kits, and direct install materials and labor.
- EDC materials, labor, and administration includes costs associated with an EDC's employees.
- ICSP materials, labor, and administration includes the program implementation contractor and the costs of any other outside vendors an EDC employs to support program delivery.

Program	Incentives	Non-Incentives Costs	Total Cost
Residential	2,809	2,330	5,139
Income-Eligible	4,742	1,111	5,853
Residential HER	-	902	902
Income-Eligible HER	-	11	11
Non-Residential	26,712	6,444	33,156
Common Portfolio Costs ¹			5,739
Portfolio Total	34,263	10,797	50,800
SWE Costs ²			-
Total	34,263	10,797	50,800

Table 7. PYTD Financials (\$1,000)

¹ Common Portfolio Costs include EDC administrative costs, marketing, and EM&V. Common costs include FCM revenue. In the first half of PY15 net dollar savings from FCM auctions was \$147,474.

² Statewide Evaluation costs are outside the 2% spending cap.

Source: Guidehouse analysis

Program-specific and portfolio total finances since the inception of Phase IV are shown in Table 8. Thus far in Phase IV, nearly 59% of all EE&C Plan expenditures have been incentives to participants and trade allies.

⁵ Energy Efficiency and Conservation Plan Template. https://www.puc.pa.gov/pcdocs/1676672.docx. PA PUC. September 9, 2020



Program	Incentives	Non-Incentives Costs	Total Cost
Residential	16,506	13,945	30,451
Income-Eligible	16,666	4,799	21,466
Residential HER	-	4,910	4,910
Income-Eligible HER	-	172	172
Non-Residential	77,015	26,554	103,568
Common Portfolio Costs ¹			27,352
Portfolio Total	110,187	50,380	187,919
SWE Costs ²			-
Total	110,187	50,380	187,919

Table 8. P4TD Financials (\$1,000)

¹ Common Portfolio Costs include EDC administrative costs, marketing, and EM&V.

² Statewide Evaluation costs are outside the 2% spending cap.

Source: Guidehouse analysis

Cost-effectiveness testing for Act 129 EE&C programs is performed using the total resource cost (TRC) test. Benefit-cost modeling is conducted annually using verified gross and verified net savings once the results of the independent impact evaluation are completed. TRC test results for PY15 will be presented in the final annual report to the PA PUC on September 30, 2024, along with a more granular breakdown of portfolio costs.

7.2 Cost Recovery

Act 129 allows Pennsylvania EDCs to recover EE&C plan costs through a cost recovery mechanism. PECO's cost recovery charges are organized separately by four customer sectors to ensure the electric rate classes that finance the programs are the rate classes that receive the direct energy and conservation benefits. Cost recovery is necessarily tied to the way customers are metered and charged for electric service. Readers should be mindful of the differences between Table 9 and Section 2.3. For example, the Low-Income customer segment is a subset of PECO's residential tariff(s) and is not listed in Table 9. EE&C Plan Expenditures by Cost Recovery Category

Program	Rate Classes Included	PYTD Spending (\$1,000)	P4TD Spending (\$1,000)
Residential	R + RH, CAP	14,626	69,427
Small Commercial	GS	25,306	67,715
Large Commercial	PD, HT + EP	10,719	49,952
Municipal	SLE, SLC, AL, TLCL	149	825
Portfolio Total		50,800	187,919

Table 9. EE&C Plan Expenditures by Cost Recovery Category

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