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January 15, 2025

**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, 2024 through May 31, 2025**

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, 2024 through May 31, 2025.

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](mailto:megan.mcdevitt@exeloncorp.com).

Sincerely,

Rosemary Chiavetta, Secretary  
January 15, 2025  
Page 2

Enclosures

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

**Program Year 16  
(June 1, 2024–May 31, 2025)**

**For Pennsylvania Act 129 of 2008  
Energy Efficiency and Conservation Plan**

**For:**



**Prepared by:**

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January 15, 2025

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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 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 or peak demand that is attributable to an EE&C program. Depending on the program delivery model and evaluation methodology, the net savings estimates might differ from the gross savings estimates as a result of 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 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 TRM<sup>1</sup> provides algorithms and assumptions to calculate annual savings, and Act 129

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<sup>1</sup> 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, <https://www.puc.pa.gov/filing-resources/issues-laws-regulations/act-129/technical-reference-manual/>

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 might 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 16 (PY16) 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 PY16. 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 PY16 energy efficiency programs will be reported in the final annual report to be filed on September 30, 2025.

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 2 p.m. to 6 p.m. EDT on non-holiday weekdays from June to 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 Order<sup>2</sup> 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.

**Figure 1. Carryover Savings from Phase III of Act 129**



Source: SWE Phase III Report<sup>3</sup>

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 PY16 on June 1, 2024, PECO has claimed:

- 156,703 MWh/yr of reported gross electric energy savings (PYRTD)
- 31.21 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:

- 1,073,260 MWh/yr of reported gross electric energy savings (RTD)

<sup>2</sup> 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.

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

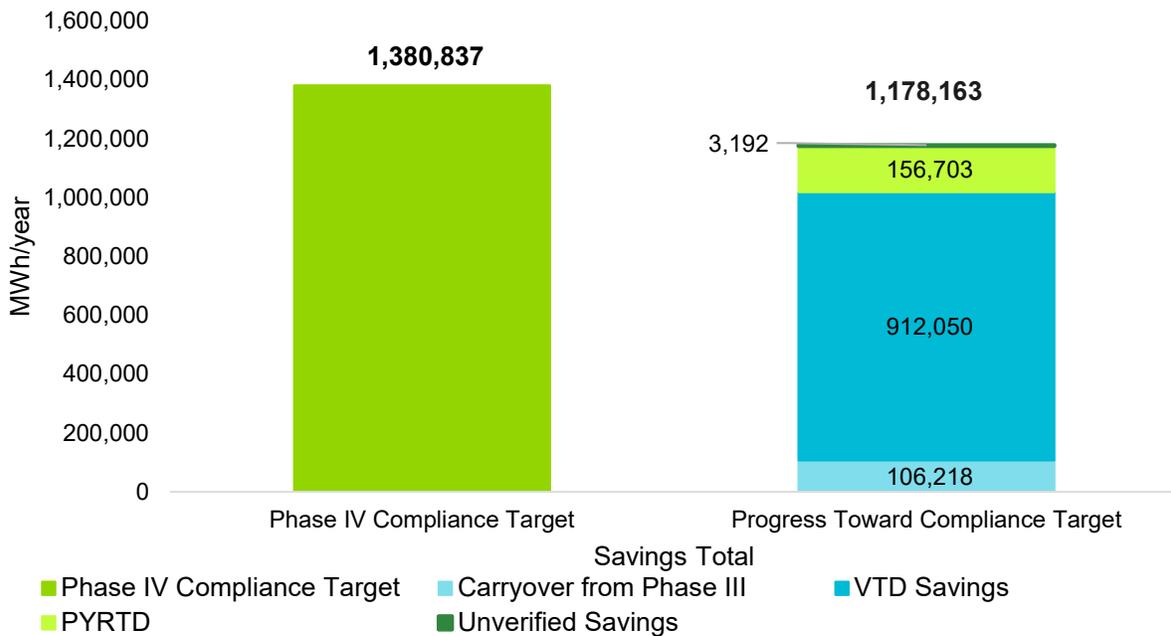
- 196.41 MW/yr of reported gross peak demand savings (RTD) from energy efficiency programs
- 1,071,945 MWh/yr of gross electric energy savings (PSA),<sup>4</sup> this total includes verified and residual unverified gross savings from previous Phase IV program years and the PYTD reported gross savings from PY16
- 199.09 MW/yr of gross peak demand savings (PSA)<sup>4</sup> from energy efficiency programs

Including carryover savings from Phase III, PECO has achieved:

- 1,178,163 MWh/yr of PSA+CO energy savings recorded to date in Phase IV
  - This value represents 85.3% of the May 31, 2026, energy savings compliance target of 1,380,837 MWh/yr
- 199.09 MW/yr of PSA demand savings recorded to date in Phase IV
  - This value represents 77.8% of the May 31, 2026, demand 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.

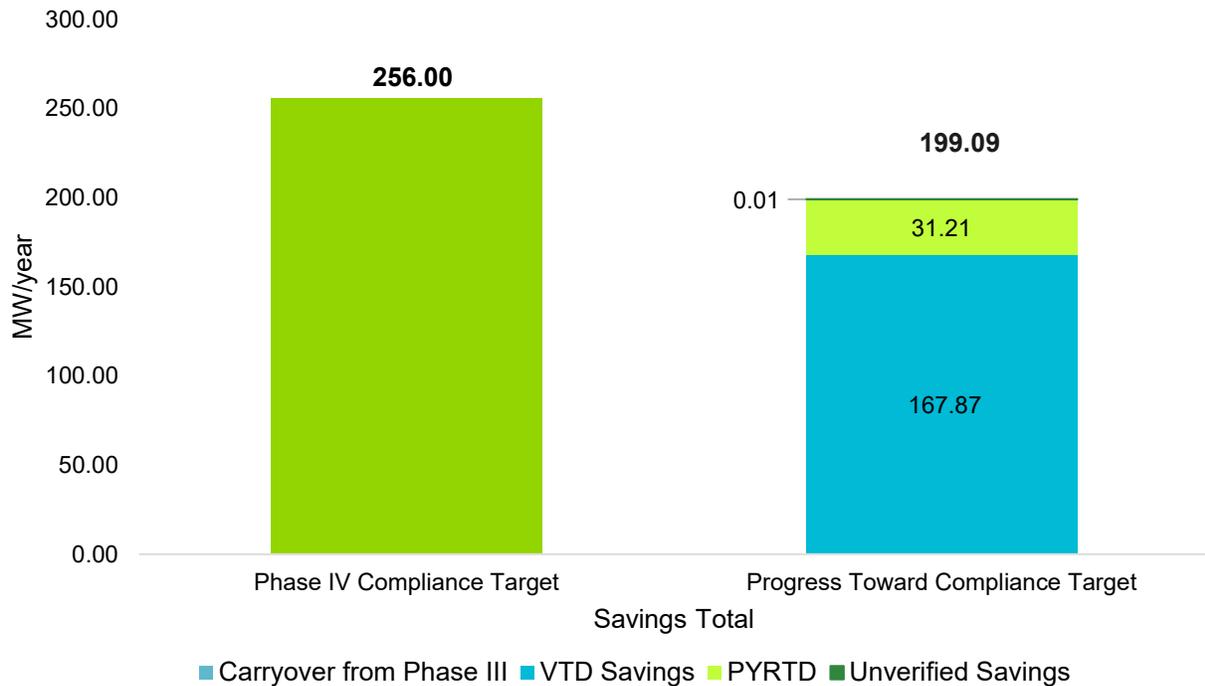
**Figure 2. Performance Toward Phase IV Portfolio Energy Compliance Target (MWh)**



Source: Guidehouse analysis

<sup>4</sup> PSA and VTD energy and demand savings include PY15 SWE adjustments.

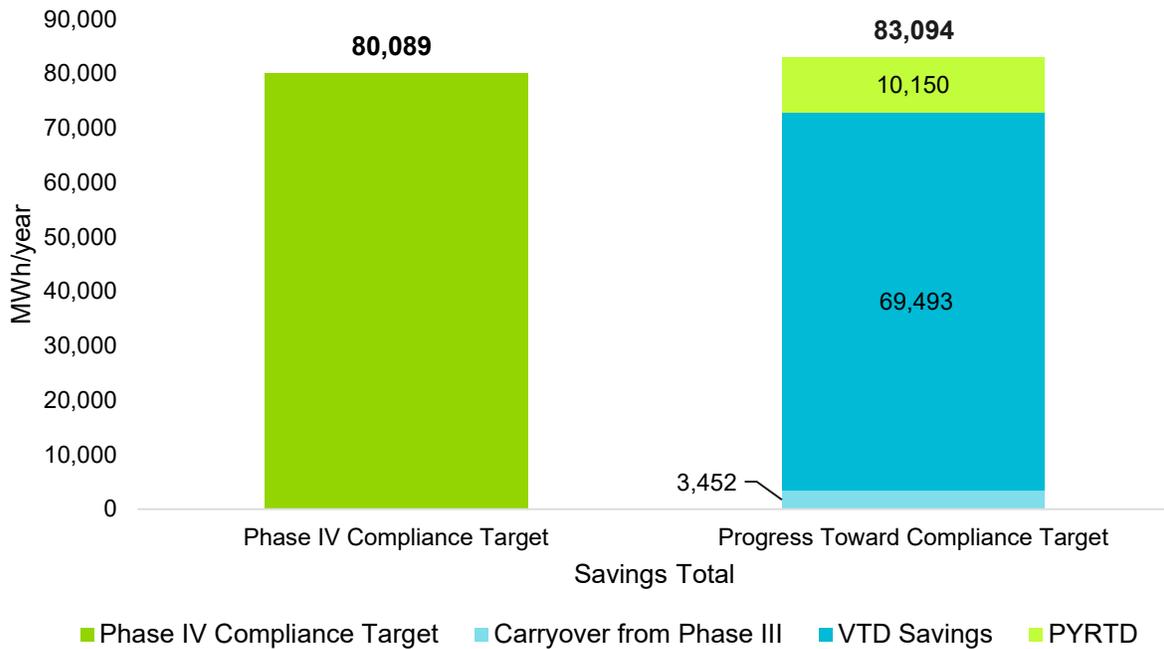
**Figure 3. Performance Toward Phase IV Portfolio Demand Compliance Target (MW)**



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 99.4% of the Phase IV low-income energy savings target, excluding carryover savings. 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 PY16. 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.

**Table 1. PY16 Summary Statistics by Customer Segment**

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 <sup>1</sup>	514,802	38,347	2,176	561	355	231	17	<b>556,489</b>
PYRTD MWh/yr	40,836	8,128	47,463	32,640	13,054	11,629	2,954	<b>156,703</b>
PYRTD MW/yr	8.84	1.13	10.48	5.77	2.66	2.34	-	<b>31.21</b>
Incentives <sup>2</sup> (\$1,000)	3,622	2,353	8,291	3,602	2,463	1,680	677	<b>22,688</b>

<sup>1</sup> Excludes kits and upstream measures from participants.

<sup>2</sup> 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.

**Table 2. Phase IV Summary Statistics by Customer Segment**

<b>Parameter</b>	<b>Residential (Non-IE)</b>	<b>Income- Eligible</b>	<b>Small C&amp;I (Non- GNI)</b>	<b>Large C&amp;I (Non- GNI)</b>	<b>Small C&amp;I (GNI)</b>	<b>Large C&amp;I (GNI)</b>	<b>Municipal Lighting</b>	<b>Total</b>
Number of participants <sup>1</sup>	698,516	32,742	15,735	3,504	1,936	951	62	<b>753,446</b>
PSA MWh/yr	250,555	67,074	361,562	278,302	48,678	56,433	6,149	<b>1,068,752</b>
PSA MW/yr	46.61	6.88	76.90	47.39	10.40	10.90	0.01	<b>199.08</b>
Incentives <sup>2</sup> (\$1,000)	22,733	23,123	69,872	34,211	9,958	7,609	1,294	<b>168,801</b>

<sup>1</sup> Excludes kits and upstream measures from participants.

<sup>2</sup> Incentive totals also include Giveaway Costs as listed in the tracking data.

Source: Guidehouse analysis

## 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 PY16, PECO expects to implement the EE&C plan as filed.<sup>5</sup>

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.

Guidehouse is finalizing the PY16 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 PY16 evaluation activities.
- **Income-Eligible Program:** Guidehouse is reviewing first and second quarter data and developing sampling plans and survey instruments in support of PY16 evaluation activities.

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<sup>5</sup> PECO, *PECO Program Years 13 to 17 Act 129 – Phase IV Energy Efficiency and Conservation Plan*, filed June 19, 2024, <https://www.puc.pa.gov/pdocs/1834379.pdf>

- **Residential HER Program:** Guidehouse is developing the evaluation plan in support of PY16 evaluation activities.
- **Income-Eligible HER Program:** Guidehouse is developing the evaluation plan in support of PY16 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 PY16 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. 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 (P4TD) 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, P4TD participation is equal to the maximum participation observed by program year during Phase IV.
- Master metered buildings with a single account number are counted as a single participant, even if the program serves multiple units.
- Measures within the kits distributed through the Income-Eligible Single-Family component and the Residential In-Home Assessment component are counted individually, as well as measures distributed through the Residential Rebates and Marketplace Point of Purchase delivery channel. 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 PY16 and Phase IV, and Table 4 provides participation for the Point of Purchase delivery channel and kits.

**Table 3. Participation by Program Component**

Program and Component	PYTD Participation	P4TD Participation
Rebates and Marketplace	7,379	52,830
Appliance Recycling	606	20,492
In-Home Assessment <sup>1</sup>	2,886	12,945
New Construction	1,006	6,906
Multifamily <sup>1</sup>	608	2,323
Multifamily Income-Eligible <sup>1</sup>	567	14,851
<b>Residential Total</b>	<b>13,052</b>	<b>110,347</b>
Single-Family <sup>1</sup>	3,846	27,476
Appliance Recycling <sup>2</sup>	421	4,810
<b>Income-Eligible Total</b>	<b>4,267</b>	<b>32,286</b>
<b>Residential HER Total</b>	<b>501,845</b>	<b>550,187</b>
<b>Income-Eligible HER Total</b>	<b>34,010</b>	<b>39,429</b>
Downstream	446	2,832
Midstream	2,459	15,819

Program and Component	PYTD Participation	P4TD Participation
Small Business Direct Install	392	2,375
New Construction	18	171
<b>Non-Residential Total</b>	<b>3,315</b>	<b>21,197</b>
<b>Portfolio Total</b>	<b>556,489</b>	<b>753,446</b>

<sup>1</sup> Excludes kits

<sup>2</sup> The Residential Appliance Recycling component restarted with its new implementer (CMC) in the first quarter of PY16.

Source: Guidehouse analysis

**Table 4. Participation by Program Component (Point of Purchase and Kits)**

Program and Component	PYTD Participation*	P4TD Participation*
Residential Rebates and Marketplace - Point of Purchase	209,477	4,843,719
Income-Eligible Single-Family - Kits	74,259	737,829
Residential In-Home Assessment - Kits	264,712	979,137
Residential Multifamily - Kits	-	18,858
Residential Multifamily Income-Eligible - Kits	-	47,265
<b>Portfolio Total</b>	<b>548,448</b>	<b>6,626,808</b>

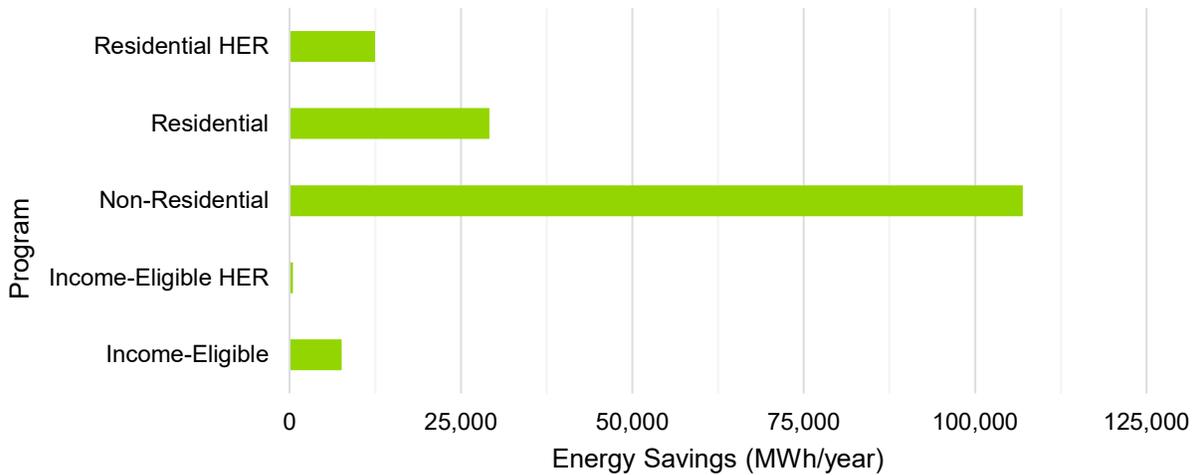
\* Represent total number of units delivered

Source: Guidehouse analysis

## 5. Summary of Energy Impacts by Program

Figure 5 summarizes the PYTD reported gross energy savings by program for PY16. The energy impacts in this report are presented at the meter level and do not reflect adjustments for transmission and distribution losses.

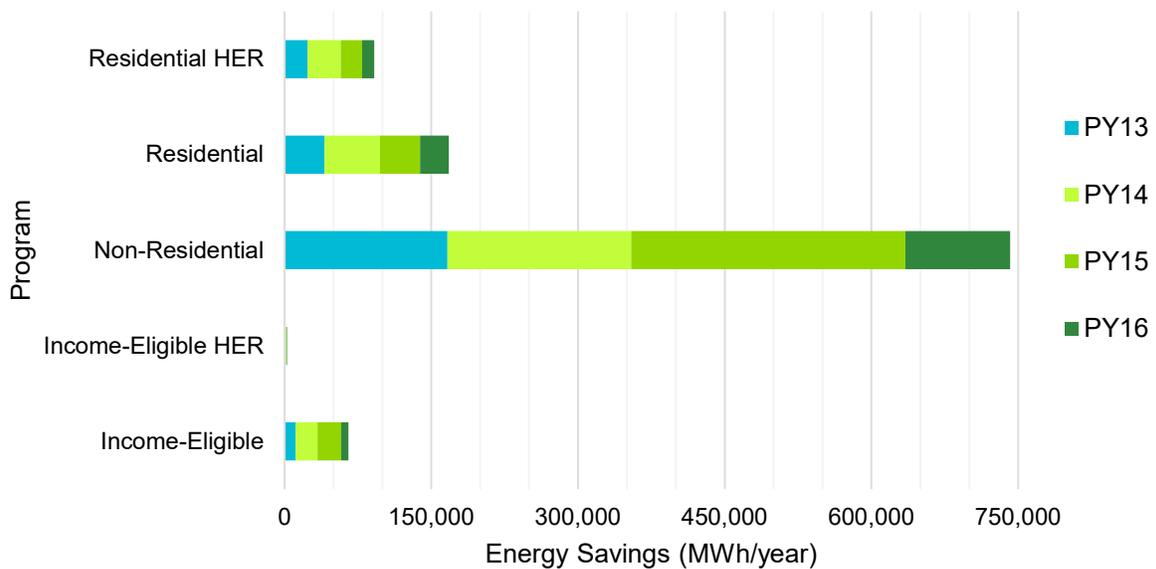
**Figure 5. PYRTD Gross Energy Savings by Program**



Source: Guidehouse analysis

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.

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

<b>Program and Component</b>	<b>PYRTD</b>	<b>RTD</b>	<b>VTD</b>	<b>PSA</b>
Rebates and Marketplace	19,693	108,779	80,483	100,176
Appliance Recycling	473	19,113	20,005	20,478
In-Home Assessment	3,840	19,509	14,964	18,804
New Construction	2,107	10,040	7,974	10,082
Multifamily	1,006	7,487	5,151	6,157
Multifamily Income-Eligible	2,018	13,347	10,027	12,044
<b>Residential Total</b>	<b>29,138</b>	<b>178,275</b>	<b>138,604</b>	<b>167,742</b>
Single-Family	7,509	64,387	55,130	62,639
Appliance Recycling	110	2,703	2,669	2,779
<b>Income-Eligible Total</b>	<b>7,619</b>	<b>67,089</b>	<b>57,799</b>	<b>65,418</b>
<b>Residential HER<sup>1</sup> Total</b>	<b>12,488</b>	<b>92,135</b>	<b>79,148</b>	<b>91,636</b>
<b>Income-Eligible HER<sup>1</sup> Total</b>	<b>513</b>	<b>2,470</b>	<b>1,667</b>	<b>2,180</b>
Downstream <sup>2</sup>	50,102	321,261	262,059	315,353
Midstream	45,691	340,080	312,967	358,658
Small Business Direct Install	7,611	43,568	34,844	42,454
New Construction	3,542	28,382	24,963	28,504
<b>Non-Residential Total</b>	<b>106,945</b>	<b>733,290</b>	<b>634,833</b>	<b>744,970</b>
<b>Portfolio Total</b>	<b>156,703</b>	<b>1,073,260</b>	<b>912,050</b>	<b>1,071,945</b>

<sup>1</sup> Savings 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 (instead of 6 months) of PY16.

<sup>2</sup> PY15 had 3,192 MWh of unverified savings which is included in PSA.

Source: Guidehouse analysis

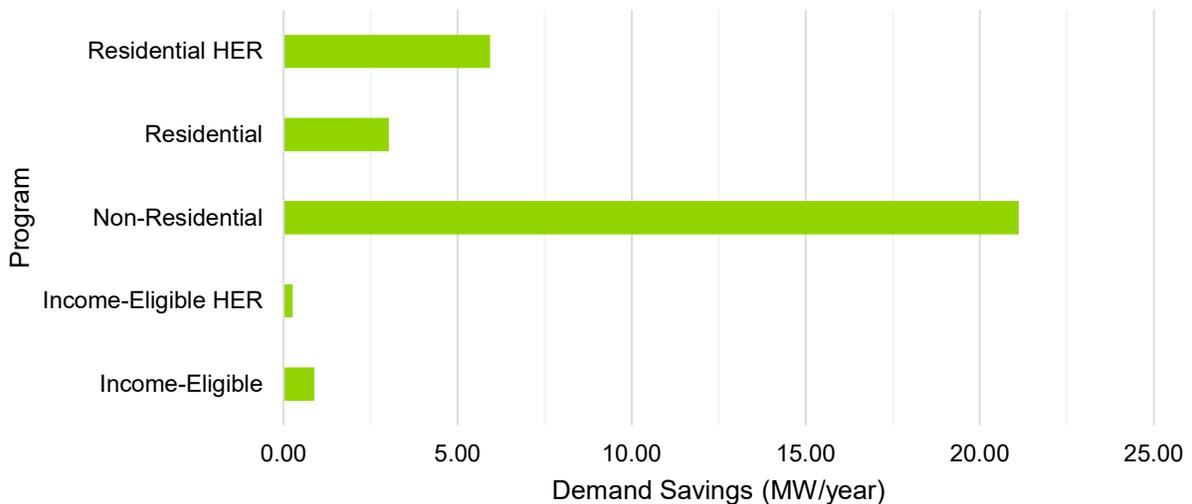
## 6. Summary of Peak Demand Impacts by Program

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

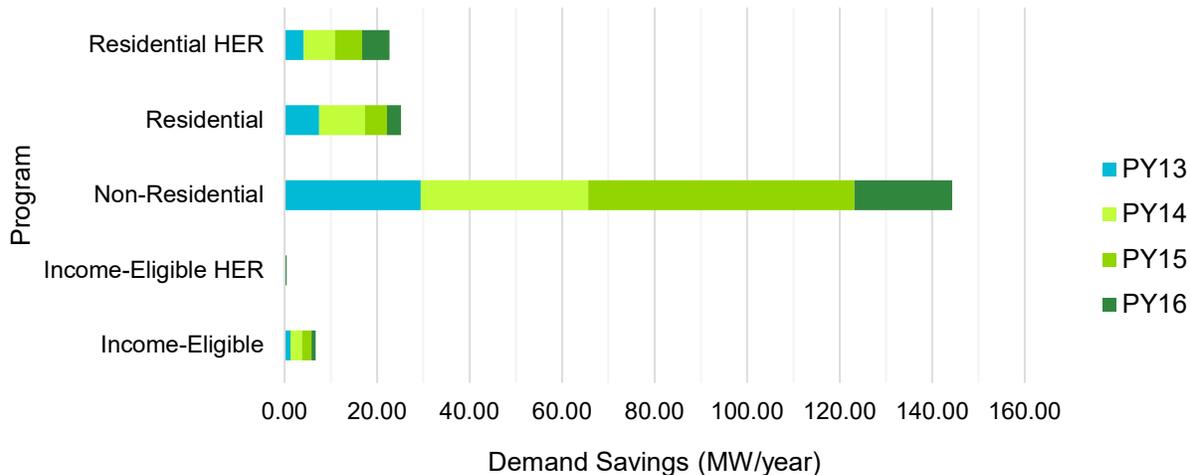
Figure 7 summarizes the PYRTD reported gross peak demand savings by energy efficiency program for PY16 at the system level with the application of line loss factors. PYRTD is also the Act 129 Phase IV PSA gross peak demand savings in this report.

**Figure 7. PYRTD Gross Peak Demand Savings by Program**



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.

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

Program and Component	PYRTD	RTD	VTD	PSA
Rebates and Marketplace	1.67	14.67	13.24	14.91
Appliance Recycling	0.16	4.04	4.09	4.25
In-Home Assessment	0.28	1.78	1.39	1.67
New Construction	0.52	3.21	1.54	2.06
Multifamily	0.13	1.07	0.75	0.88
Multifamily Income-Eligible	0.26	1.58	1.14	1.40
<b>Residential Total</b>	<b>3.03</b>	<b>26.35</b>	<b>22.14</b>	<b>25.16</b>
Single-Family	0.84	6.35	5.18	6.02
Appliance Recycling	0.04	0.67	0.64	0.68
<b>Income-Eligible Total</b>	<b>0.88</b>	<b>7.02</b>	<b>5.82</b>	<b>6.70</b>
<b>Residential HER<sup>1</sup> Total</b>	<b>5.93</b>	<b>18.89</b>	<b>16.79</b>	<b>22.72</b>
<b>Income-Eligible HER<sup>1</sup> Total</b>	<b>0.26</b>	<b>0.58</b>	<b>(0.08)</b>	<b>0.18</b>
Downstream <sup>2</sup>	8.59	56.71	45.39	53.99
Midstream	10.06	72.11	65.85	75.91
Small Business Direct Install	1.99	9.96	7.47	9.46
New Construction	0.48	4.79	4.50	4.98
<b>Non-Residential Total</b>	<b>21.12</b>	<b>143.57</b>	<b>123.21</b>	<b>144.34</b>
<b>Portfolio Total</b>	<b>31.21</b>	<b>196.41</b>	<b>167.87</b>	<b>199.09</b>

<sup>1</sup>Savings 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 (instead of 6 months) of PY16.

<sup>2</sup> PY15 had 0.01 MW of unverified savings which is included in PSA.

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 PY16. 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 template<sup>6</sup> for Phase IV. So far in PY16, 59% 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 PY15:

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

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

Program	Incentives	Non-Incentives Costs	Total Cost
Residential	\$4,288	\$3,456	\$7,744
Income-Eligible	\$2,346	\$752	\$3,098
Residential HER	\$0	\$1,185	\$1,185
Income-Eligible HER	\$0	\$42	\$42
Non-Residential	\$16,054	\$5,454	\$21,508
<b>Common Portfolio Costs<sup>1</sup></b>			<b>\$5,134</b>
<b>Portfolio Total</b>	<b>\$22,688</b>	<b>\$10,890</b>	<b>\$38,712</b>
<b>SWE Costs<sup>2</sup></b>			<b>-</b>
<b>Total</b>	<b>\$22,688</b>	<b>\$10,890</b>	<b>\$38,712</b>

<sup>1</sup> Common Portfolio Costs include EDC administrative costs, marketing, and EM&V.

<sup>2</sup> SWE costs are outside the 2% spending cap.

Source: Guidehouse analysis

Table 8 shows program-specific and portfolio total finances since the inception of Phase IV. Thus far in Phase IV, over 60% of all EE&C Plan expenditures have been incentives to participants and trade allies.

<sup>6</sup> Energy Efficiency and Conservation Plan Template, September 9, 2020, <https://www.puc.pa.gov/pcdocs/1676672.docx>. PA PUC.

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

Program	Incentives	Non-Incentives Costs	Total Cost
Residential	\$24,855	\$20,839	\$45,694
Income-Eligible	\$23,093	\$6,626	\$29,719
Residential HER	\$0	\$6,969	\$6,969
Income-Eligible HER	\$0	\$229	\$229
Non-Residential	\$120,852	\$39,721	\$160,573
<b>Common Portfolio Costs<sup>1</sup></b>			<b>\$37,074</b>
<b>Portfolio Total</b>	<b>\$168,800</b>	<b>\$74,384</b>	<b>\$280,258</b>
<b>SWE Costs<sup>2</sup></b>			<b>-</b>
<b>Total</b>	<b>\$168,800</b>	<b>\$74,384</b>	<b>\$280,258</b>

<sup>1</sup> Common Portfolio Costs include EDC administrative costs, marketing, and EM&V.

<sup>2</sup> SWE 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 PY16 will be presented in the final annual report to the PA PUC on September 30, 2025, 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.

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

Cost-Recovery Sector	Rate Classes Included	PYTD Spending (\$1,000)	P4TD Spending (\$1,000)
Residential	R + RH, CAP	\$13,528	\$97,703
Small Commercial	GS	\$15,120	\$108,859
Large Commercial	PD, HT + EP	\$9,365	\$72,154
Municipal	SLE, SLC, AL, TLCL	\$699	\$1,543
<b>Portfolio Total</b>		<b>\$38,712</b>	<b>\$280,258</b>

Source: Guidehouse analysis

## Appendix A. Greenhouse Gas Emissions

Table A-1 represents estimated first-year emissions reductions (tons of CO<sub>2</sub>) resulting from PECO’s PY16 EE&C programs. PYRTD energy savings were multiplied by an emissions factor of 822 lbs CO<sub>2</sub>/MWh; this value was taken from the Exelon 2023 Sustainability Report<sup>7</sup>.

**Table A-1. PYRTD First-Year Emissions Savings**

Program and Component	Emissions Savings (Tons CO <sub>2</sub> )
Rebates and Marketplace	8,094
Appliance Recycling	194
In-Home Assessment	1,578
New Construction	866
Multifamily	414
Multifamily Income-Eligible	829
<b>Residential Total</b>	<b>11,976</b>
Single-Family	3,086
Appliance Recycling	45
<b>Income-Eligible Total</b>	<b>3,131</b>
<b>Residential HER Total</b>	<b>5,133</b>
<b>Income-Eligible HER Total</b>	<b>211</b>
Downstream	20,592
Midstream	18,779
Small Business Direct Install	3,128
New Construction	1,456
<b>Non-Residential Total</b>	<b>43,954</b>
<b>Portfolio Total</b>	<b>64,405</b>

Source: Guidehouse analysis

<sup>7</sup> Exelon Sustainability Report 2023, <https://www.exeloncorp.com/sustainability/interactive-sustainability-report?year=2023&page=1>