

ComEd Multifamily Upgrades Program Impact Evaluation Report

Energy Efficiency/Demand Response Plan:
Program Year 2024 (CY2024)
(1/1/2024-12/31/2024)

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Introduction

The Multifamily Upgrades report includes three sections. The Multifamily Upgrades program section provides the combined total of all activities, including the Strategic Energy Management (also known as Operational Excellence, or OE) program. The Public Housing Upgrades (PH) section details results for this program component. The final section presents Multifamily Upgrades program savings excluding the Public Housing Upgrades component.

Multifamily Upgrades Program

Introduction

This section presents the results of the impact evaluation of the Multifamily Upgrades program from the program year from January 1 to December 31, 2024 (CY2024). The program was designed to provide rebates and free energy-savings products for energy efficiency upgrades at both multifamily housing and public housing units.

The program is offered jointly to customers served by ComEd, Nicor Gas, Peoples Gas, and North Shore Gas. The results for the gas utilities will be in separate reports.

Program Savings Detail

Table 1 summarizes the incremental energy and demand savings the Multifamily Upgrades Program achieved in CY2024, including the public housing component. The gas or other fuel savings are only those that ComEd may be able to claim, which excludes savings the gas utilities claim, either via joint or non-joint programs.¹ The electrification savings are those resulting from electrification measures.² Table 2 summarizes the savings achieved from income eligible participants and Table 3 summarizes savings from non-income eligible participants. Together they make up the total shown in Table 1.

Table 1. Multifamily Upgrades Total Annual Incremental Electric Savings – Total

Savings Category	Units	Ex Ante Gross Savings*	Program Gross Realization Rate	Verified Gross Savings*	Program Net-to-Gross Ratio (NTG)	CY2022 Net Carryover Savings	CY2023 Net Carryover Savings	Verified Net Savings†
Electric Energy Savings - Direct‡ kWh		37,489,953	1.00	37,643,925	0.98			36,938,406
Electric Energy Savings - Converted from Other Fuels§	kWh	17,916,108	0.99	17,658,129	1.00			17,658,129
Electric Energy Savings - Indirect from Electrification (electrification baseline)	kWh							
Electric Energy Savings - Indirect from Electrification (efficiency baseline)	kWh							
Total Electric Energy Savings#	kWh	55,406,060	1.00	55,302,055	0.99			54,596,536
Total Electric Energy Savings Including Carryover#	kWh	55,406,060	1.00	55,302,055	0.99			54,596,536

¹ The evaluation will determine which other fuel savings will be counted towards goal while producing the portfolio-wide Summary Report. According to Section 8-103B(b-25) of the Illinois Public Utilities Act, “In no event shall more than 10% of each year’s applicable annual total savings requirement as defined in paragraph (7.5) of subsection (g) of this Section be met through savings of fuels other than electricity.”

² The electrification savings counted toward ComEd’s electric savings goal were determined by the evaluation team’s analysis of portfolio verified savings. According to Section 8-103B(b-27) of the Illinois Public Utilities Act, “In no event shall electrification savings counted toward each year’s applicable annual total savings requirement, as defined in paragraph (7.5) of subsection (g) of this Section, be greater than 5% per year for each year from 2022 through 2025.”

Savings Category	Units	Ex Ante Gross Savings*	Program Gross Realization Rate	Verified Gross Savings*	Program Net-to-Gross Ratio (NTG)	CY2022 Net Carryover Savings	CY2023 Net Carryover Savings	Verified Net Savings†
Summer Peak** Demand Savings	kW	7,378	0.81	5,945	0.99			5,863
Summer Peak** Demand Savings Including Carryover	kW	7,378	0.81	5,945	0.99			5,863

N/A = not applicable (refers to a piece of data that cannot be produced or does not apply).

* The “Ex Ante Gross Savings” and “Verified Gross Savings” in row one (Electric Energy Savings - Direct) and row seven (Summer Peak Demand Savings) exclude gross carryover savings from CY2022 and CY2023.

† The “Verified Net Savings” in row one (Electric Energy Savings - Direct) and row seven (Summer Peak Demand Savings) include net carryover savings from CY2022 and CY2023 for applicable programs.

‡ The Electric Energy Savings - Direct includes primary kWh savings from efficient measures (excluding electrification savings from both electrification and efficiency baseline), secondary kWh savings from wastewater treatment, and electric heating penalties.

§ Gas savings converted to kWh by multiplying Therms * 29.31 (which is based on 100,000 Btu/Therm and 3,412 Btu/kWh). The evaluation team will determine which gas savings will be converted to kWh and counted toward ComEd’s electric savings goal while producing the portfolio-wide Summary Report.

|| Electrification savings excluding direct efficiency savings. Calculated from net electric savings from increase in kWh consumption and decrease in gas consumption from electrification (kWh equivalent). This row calculates savings using electrification baseline. The next row (Electric Energy Savings – Indirect from Electrification (efficiency baseline)) calculates the portion of converted electrification savings to traditional efficiency electric savings using an efficiency baseline, which can be claimable towards ComEd’s electric savings goal (applied to only midstream programs).³ The evaluation team determined which electrification savings are allocated toward ComEd’s electrification savings goal, and which portion of electrification are converted to traditional efficiency electric savings based on analysis of portfolio-wide verified savings.

Total Electric Energy Savings is the sum of the Electric Energy Savings - Direct, Electric Energy Savings Converted from Other Fuel, Electric Energy Savings - Indirect from Electrification (electrification baseline), and Electric Energy Savings - Indirect from Electrification (efficiency baseline). Note: This row does not include carryover gross savings, but the next row (Total Electric Savings Including Carryover) includes carryover in the gross savings, for the purpose of recalculating the gross realization rate, including carryover savings (same for the peak demand savings).

*† The Peak Demand Savings are savings occurring at coincident Summer Peak period, defined as 1:00-5:00 PM Central Prevailing Time on non-holiday weekdays, June through August. This definition is in accordance with PJM requirements.

Note: The program-level NTG values are calculated as Verified Net/Verified Gross. The program-level analysis typically used measure-level deemed NTG values, which are listed here: <https://www.ilsag.info/evaluator-ntg-recommendations-for-2024>. The NTG ratio for eligible business customers in disadvantaged neighborhoods is set to 1.00 as per the “NTG Ratio for Disadvantaged Areas” policy.⁴

Source: Evaluation team analysis

Table 2. Multifamily Upgrades Total Annual Incremental Electric Savings – Income Eligible

Savings Category	Units	Ex Ante Gross Savings*	Program Gross Realization Rate	Verified Gross Savings*	Program Net-to-Gross Ratio (NTG)	CY2022 Net Carryover Savings	CY2023 Net Carryover Savings	Verified Net Savings†
Electric Energy Savings - Direct‡	kWh	30,814,793	1.00	30,747,616	1.00			30,747,616
Electric Energy Savings - Converted from Other Fuels§	kWh	17,916,108	0.99	17,658,129	1.00			17,658,129
Electric Energy Savings - Indirect from Electrification (electrification baseline)	kWh							
Electric Energy Savings - Indirect from Electrification (efficiency baseline)								

³ ComEd Electrification Policy Resolutions for 2024 Final Draft. “...the ComEd Energy Efficiency portfolio will use the Electric Point of Sale baseline set by the TRM, without applying the additional electrification ratios, to claim Energy Efficiency savings from heat-pump projects through midstream programs once either of the electrification caps has been reached.”

⁴ Illinois Energy Efficiency Policy Manual Version 3.0, Section 7.4, available at <https://www.ilsag.info/policy/>

Savings Category	Units	Ex Ante Gross Savings*	Program Gross Realization Rate	Verified Gross Savings*	Program Net-to-Gross Ratio (NTG)	CY2022 Net Carryover Savings	CY2023 Net Carryover Savings	Verified Net Savings†
Total Electric Energy Savings#	kWh	48,730,900	0.99	48,405,745	1.00			48,405,745
Total Electric Energy Savings Including Carryover#	kWh	48,730,900	0.99	48,405,745	1.00			48,405,745
Summer Peak** Demand Savings	kW	6,716	0.78	5,269	1.00			5,269
Summer Peak** Demand Savings Including Carryover	kW	6,716	0.78	5,269	1.00			5,269

Footnotes are defined similarly as found in Table 1.

Source: Evaluation team analysis

Table 3. Multifamily Upgrades Total Annual Incremental Electric Savings – Non-Income Eligible

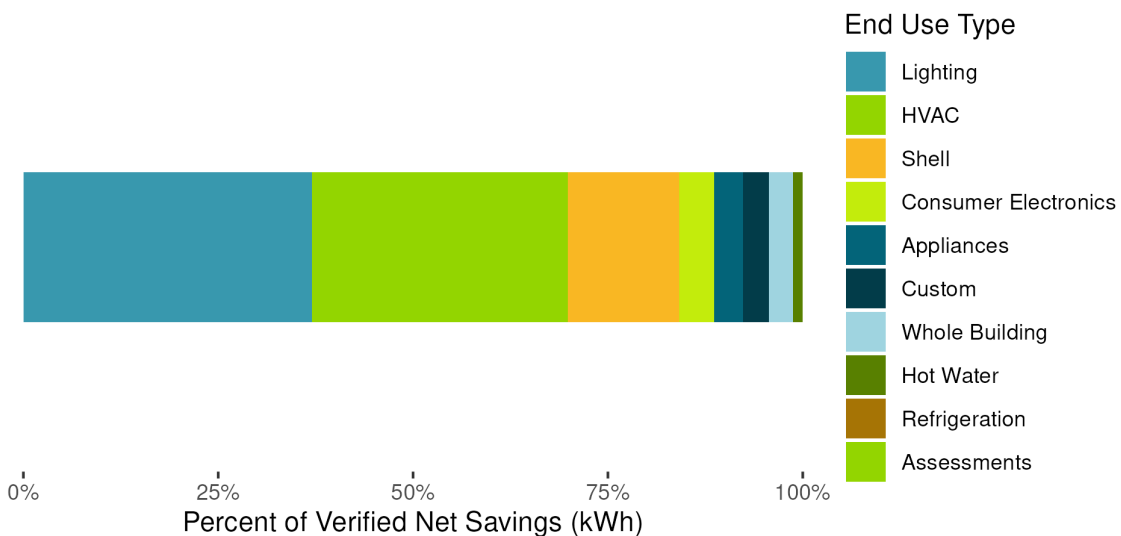
Savings Category	Units	Ex Ante Gross Savings*	Program Gross Realization Rate	Verified Gross Savings*	Program Net-to-Gross Ratio (NTG)	CY2022 Net Carryover Savings	CY2023 Net Carryover Savings	Verified Net Savings†
Electric Energy Savings - Direct‡	kWh	6,675,160	1.03	6,896,309	0.90			6,190,790
Electric Energy Savings - Converted from Other Fuels§	kWh	0		0				0
Electric Energy Savings - Indirect from Electrification (electrification kWh baseline)	kWh							
Electric Energy Savings - Indirect from Electrification (efficiency kWh baseline)	kWh							
Total Electric Energy Savings#	kWh	6,675,160	1.03	6,896,309	0.90			6,190,790
Total Electric Energy Savings Including Carryover#	kWh	6,675,160	1.03	6,896,309	0.90			6,190,790
Summer Peak** Demand Savings	kW	662	1.02	677	0.88			594
Summer Peak** Demand Savings Including Carryover	kW	662	1.02	677	0.88			594

Footnotes are defined similarly as found in Table 1.

Source: Evaluation team analysis

Figure 1 shows the electric energy savings by measure end use. It includes measure efficiency savings and secondary water kWh. It does not include other fuel savings converted to kWh.

Figure 1. Multifamily Upgrades Verified Net Savings by Measure – Electric



Source: Evaluation team analysis

Cumulative Persisting Annual Savings

Table 4 to Table 6 show the cumulative persisting annual savings (CPAS) for the measures installed in CY2024. The electric CPAS across all measures installed in CY2024 is shown in Table 4. The gas and other fuel contribution to CPAS (converted to equivalent electricity) are shown in Table 5. The combined savings are shown in Table 6.

Table 4. Multifamily Upgrades CPAS – Electric

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh)†	CPAS Verified Net kWh Savings												
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027			
CY2024 Program Total Contribution to CPAS	37,643,925	499,876,395										36,938,406	35,702,059	35,665,827	35,649,501
Historic Program Total Contribution to CPAS‡		855,934,833	18,692,635	31,612,149	44,056,835	53,407,791	78,166,192	110,961,260	104,850,955	96,960,203	86,415,116	78,387,197			
Program Total CPAS	37,643,925	1,361,921,533	18,692,635	31,612,149	44,056,835	53,407,791	78,166,192	110,961,260	147,899,666	132,662,262	122,080,943	114,036,698			
CY2024 Program Incremental Expiring Savings§		31,799,676										0	1,236,347	36,232	16,326
Historic Program Incremental Expiring Savings		104,850,955										0	7,890,753	10,545,087	8,027,919
Program Total Incremental Expiring Savings#		136,650,632										0	9,127,100	10,581,319	8,044,245

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Contribution to CPAS	35,649,501	35,306,315	35,134,537	29,909,467	19,889,074	19,866,746	18,896,951	18,780,253	17,565,391	17,565,391	17,565,391	17,238,291	5,291,499	5,291,499
Historic Program Total Contribution to CPAS‡	65,048,506	55,583,784	52,890,553	48,674,100	38,784,309	35,838,363	33,353,197	31,399,674	30,891,578	27,800,307	18,054,019	15,020,161	14,055,148	12,609,349
Program Total CPAS	100,698,007	90,890,099	88,025,090	78,583,568	58,673,382	55,705,109	52,250,148	50,179,927	48,456,969	45,365,697	35,619,410	32,258,452	19,346,648	17,900,849
CY2024 Program Incremental Expiring Savings§	0	343,186	171,777	5,225,070	10,020,394	22,328	969,795	116,698	1,214,862	0	0	327,100	11,946,791	0
Historic Program Incremental Expiring Savings	13,338,691	9,464,722	2,693,231	4,216,453	9,889,791	2,945,945	2,485,166	1,953,523	508,096	3,091,272	9,746,287	3,033,859	965,013	1,445,799
Program Total Incremental Expiring Savings#	13,338,691	9,807,908	2,865,008	9,441,523	19,910,185	2,968,273	3,454,961	2,070,221	1,722,958	3,091,272	9,746,287	3,360,959	12,911,804	1,445,799

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Contribution to CPAS	5,291,499	5,291,499	5,138,730	5,138,730	5,138,730	5,138,730	5,138,730	5,138,730	5,138,730	5,138,730	5,138,730	5,138,730	0	0
Historic Program Total Contribution to CPAS‡	9,154,417	54,632	54,632	54,632	0									
Program Total CPAS	14,445,916	5,346,132	5,193,362	5,193,362	5,138,730	5,138,730	5,138,730	5,138,730	5,138,730	5,138,730	5,138,730	5,138,730	0	0
CY2024 Program Incremental Expiring Savings§	0	0	152,770	0	0	0	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Savings	3,454,933	9,099,784	0	0	54,632	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#	3,454,933	9,099,784	152,770	0	54,632	0	0	0	0	0	0	0	0	0

† Lifetime savings are the sum of CPAS savings through the EUL.

‡ Historical savings go back to CY2018.

§ Incremental expiring savings are equal to CPAS Yn-1 - CPAS Yn.

|| Historic incremental expiring savings are equal to Historic CPAS Yn-1 – Historic CPAS Yn.

Program total incremental expiring savings are equal to current year total incremental expiring savings plus historic total incremental expiring savings.

Source: Evaluation team analysis

Table 5. Multifamily Upgrades CPAS – Other Fuel (Gas + Propane)

Savings Category	Verified Gross Savings (Therms)	Lifetime Net Savings†	CPAS Verified Net Therms Savings												
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027			
CY2024 Program Total Other Fuel Contribution to CPAS (Therms)	602,461	16,317,160										602,461	596,689	596,689	588,849
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	17,658,129	478,255,973										17,658,129	17,488,949	17,488,949	17,259,150
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§		1,149,652,330	12,959,424	32,490,632	42,016,456	44,838,469	79,779,714	99,698,648	96,098,412	88,163,788	87,213,827	84,597,109			
Program Total Other Fuel CPAS (kWh Equivalent)	17,658,129	1,627,908,303	12,959,424	32,490,632	42,016,456	44,838,469	79,779,714	99,698,648	113,756,541	105,652,736	104,702,776	101,856,259			
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)												5,772	0	7,840	
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)												169,181	0	229,798	
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#												3,600,237	7,934,624	949,961	2,616,718
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†												3,600,237	8,103,805	949,961	2,846,516

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Other Fuel Contribution to CPAS (Therms)	588,849	588,849	572,048	572,048	572,048	572,048	572,048	571,145	571,145	571,145	571,145	538,918	534,082	534,082
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	17,259,150	17,259,150	16,766,730	16,766,730	16,766,730	16,766,730	16,766,730	16,740,251	16,740,251	16,740,251	16,740,251	15,795,697	15,653,944	15,653,944
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§	74,519,615	72,379,670	71,700,356	71,676,091	69,677,016	64,010,908	58,134,038	55,080,743	54,958,578	46,163,707	37,102,324	30,279,978	27,629,087	27,169,904
Program Total Other Fuel CPAS (kWh Equivalent)	91,778,766	89,638,821	88,467,086	88,442,820	86,443,746	80,777,638	74,900,768	71,820,994	71,698,830	62,903,959	53,842,575	46,075,674	43,283,030	42,823,847
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)	0	0	16,800	0	0	0	0	903	0	0	0	32,226	4,836	0
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)	0	0	492,421	0	0	0	0	26,478	0	0	0	944,555	141,753	0
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#	10,077,494	2,139,945	679,315	24,265	1,999,074	5,666,108	5,876,870	3,053,296	122,164	8,794,871	9,061,384	6,822,346	2,650,891	459,183
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†	10,077,494	2,139,945	1,171,735	24,265	1,999,074	5,666,108	5,876,870	3,079,774	122,164	8,794,871	9,061,384	7,766,901	2,792,644	459,183

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Other Fuel Contribution to CPAS (Therms)	534,082	534,082	524,238	524,238	524,238	524,238	524,238	462,704	462,704	462,704	462,704	462,704	0	0
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)†	15,653,944	15,653,944	15,365,416	15,365,416	15,365,416	15,365,416	15,365,416	13,561,858	13,561,858	13,561,858	13,561,858	13,561,858	0	0
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§	18,372,301	7,230,278	4,256,544	1,389,561	924,249	924,249	0	0	0					
Program Total Other Fuel CPAS (kWh Equivalent)	34,026,244	22,884,221	19,621,959	16,754,976	16,289,665	16,289,665	15,365,416	13,561,858	13,561,858	13,561,858	13,561,858	13,561,858	0	0
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)	0	0	9,844	0	0	0	0	61,534	61,534	61,534	61,534	61,534		
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)	0	0	288,528	0	0	0	0	1,803,558	1,803,558	1,803,558	1,803,558	1,803,558		
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#	8,797,603	11,142,023	2,973,734	2,866,983	465,312	0	924,249	0	4,256,544	1,389,561	924,249	924,249	0	0
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†	8,797,603	11,142,023	3,262,262	2,866,983	465,312	0	924,249	1,803,558	6,060,101	3,193,118	2,727,807	2,727,807	0	0

† Lifetime savings are the sum of CPAS savings through the EUL.

‡ Fossil fuel savings (from natural gas, propane, etc.) are reported in therms. kWh equivalent savings are calculated by multiplying therms savings by 29.31.

§ Historical savings go back to CY2018.

|| Incremental expiring savings are equal to CPAS Yn-1 - CPAS Yn.

Historic incremental expiring savings are equal to Historic CPAS Yn-1 – Historic CPAS Yn.

*† Program total incremental expiring savings are equal to current year total incremental expiring savings plus historic total incremental expiring savings.

Source: Evaluation team analysis

Table 6. Multifamily Upgrades CPAS – Total

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh)†	CPAS Verified Net kWh Savings											
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		
CY2024 Program Total Contribution to CPAS	55,302,055	978,132,368									54,596,536	53,191,008	53,154,776	52,908,651
Historic Program Total Contribution to CPAS‡			2,005,803,045	31,652,059	64,102,781	86,073,291	98,246,260	157,945,906	210,659,908	200,949,367	185,123,990	173,628,943	162,984,306	
Program Total CPAS	55,302,055	2,983,935,414	31,652,059	64,102,781	86,073,291	98,246,260	157,945,906	210,659,908	255,545,902	238,314,998	226,783,719	215,892,957		
CY2024 Program Incremental Expiring Savings§											1,405,528	36,232	246,125	
Historic Program Incremental Expiring Savings											9,710,542	15,825,376	11,495,047	10,644,637
Program Total Incremental Expiring Savings#	0	0									9,710,542	17,230,904	11,531,279	10,890,762

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Contribution to CPAS	52,908,651	52,565,465	51,901,267	46,676,197	36,655,803	36,633,476	35,663,681	35,520,504	34,305,642	34,305,642	34,305,642	33,033,987	20,945,443	20,945,443
Historic Program Total Contribution to CPAS‡	139,568,121	127,963,454	124,590,909	120,350,191	108,461,325	99,863,108	91,499,000	86,492,181	85,875,659	73,989,516	55,181,846	45,325,641	41,709,737	39,804,755
Program Total CPAS	192,476,772	180,528,919	176,492,176	167,026,388	145,117,128	136,496,583	127,162,681	122,012,685	120,181,301	108,295,159	89,487,488	78,359,628	62,655,180	60,750,198
CY2024 Program Incremental Expiring Savings§	0	343,186	664,198	5,225,070	10,020,394	22,328	969,795	143,177	1,214,862	0	0	1,271,655	12,088,544	0
Historic Program Incremental Expiring Savings	23,416,185	11,604,667	3,372,546	4,240,718	11,888,866	8,598,217	8,364,108	5,006,819	616,522	11,886,143	18,807,671	9,856,205	3,615,904	1,904,982
Program Total Incremental Expiring Savings#	23,416,185	11,947,853	4,036,743	9,465,788	21,909,259	8,620,545	9,333,903	5,149,996	1,831,384	11,886,143	18,807,671	11,127,859	15,704,448	1,904,982

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Contribution to CPAS	20,945,443	20,945,443	20,504,145	20,504,145	20,504,145	20,504,145	20,504,145	18,700,588	18,700,588	18,700,588	18,700,588	18,700,588	0	0
Historic Program Total Contribution to CPAS‡	27,552,220	7,284,910	4,311,176	1,444,193	924,249	924,249	0	0	0					
Program Total CPAS	48,497,663	28,230,353	24,815,321	21,948,339	21,428,395	21,428,395	20,504,145	18,700,588	18,700,588	18,700,588	18,700,588	18,700,588	0	0
CY2024 Program Incremental Expiring Savings§	0	0	441,298	0	0	0	0	1,803,558	0	0	0	0		
Historic Program Incremental Expiring Savings	12,252,536	20,267,310	2,973,734	2,866,983	519,944	0	924,249	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#	12,252,536	20,267,310	3,415,032	2,866,983	519,944	0	924,249	1,803,558	0	0	0	0	0	0

† Lifetime savings are the sum of CPAS savings through the EUL.

‡ Historical savings go back to CY2018.

§ Incremental expiring savings are equal to CPAS Yn-1 - CPAS Yn.

|| Historic incremental expiring savings are equal to Historic CPAS Yn-1 – Historic CPAS Yn.

Program total incremental expiring savings are equal to current year total incremental expiring savings plus historic total incremental expiring savings.

Source: Evaluation team analysis

Public Housing Upgrades Component

Introduction

This section presents the results of the impact evaluation of the Public Housing Upgrades (PH) program from the program year from January 1 to December 31, 2024 (CY2024). The PH component was designed to provide free energy saving products to public housing facilities.

The PH component is offered jointly to customers served by ComEd, Nicor Gas and Peoples Gas. The results for the gas utilities will be in separate reports. Because this is public housing, all the savings are Income Eligible.

Program Savings Detail

Table 7 summarizes the incremental energy and demand savings the PH component achieved in CY2024.

Table 7. Public Housing Upgrades Total Annual Incremental Electric Savings - Total

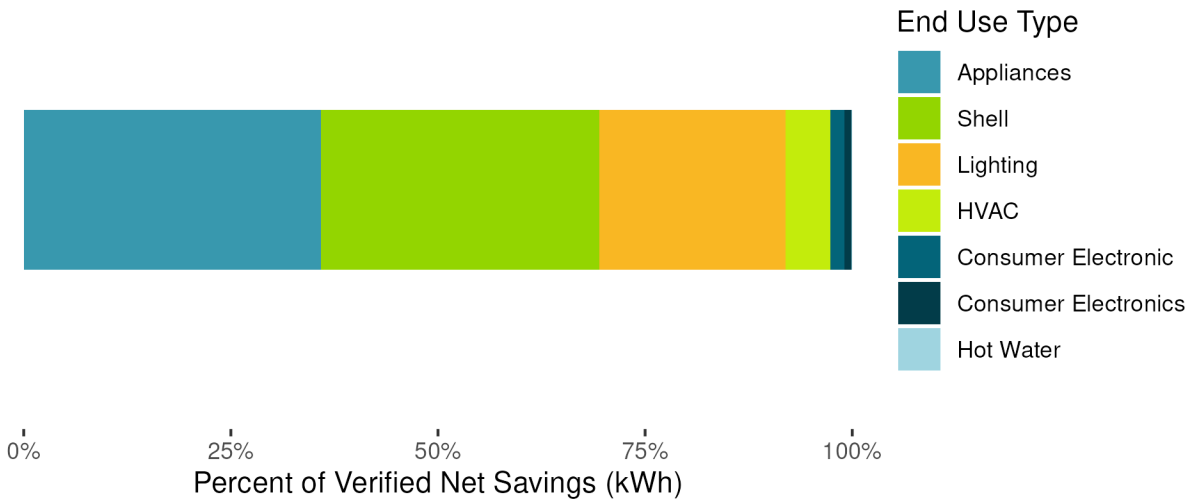
Savings Category	Units	Ex Ante Gross Savings*	Program Gross Realization Rate	Verified Gross Savings*	Program Net-to-Gross Ratio (NTG)	CY2022 Net Carryover Savings	CY2023 Net Carryover Savings	Verified Net Savings†
Electric Energy Savings - Direct‡	kWh	1,295,094	0.94	1,211,475	1.00			1,211,475
Electric Energy Savings - Converted from Other Fuels§	kWh	0		0	1.00			0
Electric Energy Savings - Indirect from Electrification (electrification baseline)	kWh	0		0				
Electric Energy Savings - Indirect from Electrification (efficiency baseline)	kWh	0		0				
Total Electric Energy Savings#	kWh	1,295,094	0.94	1,211,475	1.00			1,211,475
Total Electric Energy Savings Including Carryover#	kWh							
Summer Peak** Demand Savings	kW	799	0.40	321				321
Summer Peak** Demand Savings Including Carryover	kW							

Footnotes are defined similarly as found in Table 1.

Source: *Evaluation team analysis*

Figure 2 shows the electric energy savings by measure end use. It includes measure efficiency savings, carryover kWh, secondary water kWh, and electrification savings. It does not include other fuel savings converted to kWh.

Figure 2. Public Housing Upgrades Verified Net Savings by Measure – Electric



Source: Evaluation team analysis

Cumulative Persisting Annual Savings

Table 8 to Table 10 show the cumulative persisting annual savings (CPAS) for the measures installed in CY2024. The electric CPAS across all measures installed in CY2024 is shown in Table 8. The gas and other fuel contribution to CPAS (converted to equivalent electricity) are shown in Table 9. The combined savings are shown in Table 10.

Table 8. Public Housing Upgrades CPAS – Electric

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh)†	CPAS Verified Net kWh Savings											
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		
CY2024 Program Total Contribution to CPAS	1,211,475	21,969,421									1,211,475	1,211,475	1,210,982	1,206,354
Historic Program Total Contribution to CPAS‡		41,185,524	2,472,099	5,495,917	6,679,860	7,256,469	7,220,887	8,285,125	7,701,295	6,353,759	5,417,102	5,224,999		
Program Total CPAS	1,211,475	63,154,945	2,472,099	5,495,917	6,679,860	7,256,469	7,220,887	8,285,125	8,912,770	7,565,234	6,628,084	6,431,353		
CY2024 Program Incremental Expiring Savings§		746,334								0	0	493	4,628	
Historic Program Incremental Expiring Savings		7,701,295								0	1,347,536	936,657	192,103	
Program Total Incremental Expiring Savings#		8,447,629								0	1,347,536	937,150	196,731	

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Contribution to CPAS	1,206,354	1,176,511	1,098,957	1,041,168	951,565	929,238	927,774	927,774	616,800	616,800	616,800	507,421	465,141	465,141
Historic Program Total Contribution to CPAS‡	3,919,606	3,235,143	2,579,133	1,615,419	1,095,804	805,921	633,142	593,565	578,205	573,932	189,989	180,597	162,434	125,631
Program Total CPAS	5,125,960	4,411,654	3,678,090	2,656,587	2,047,369	1,735,159	1,560,916	1,521,339	1,195,005	1,190,732	806,789	688,018	627,575	590,772
CY2024 Program Incremental Expiring Savings§	0	29,843	77,554	57,789	89,602	22,328	1,464	0	310,974	0	0	109,379	42,280	0
Historic Program Incremental Expiring Savings	1,305,393	684,463	656,010	963,714	519,615	289,883	172,779	39,577	15,360	4,273	383,943	9,392	18,163	36,803
Program Total Incremental Expiring Savings#	1,305,393	714,306	733,564	1,021,503	609,217	312,211	174,243	39,577	326,334	4,273	383,943	118,771	60,443	36,803

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Contribution to CPAS	465,141	465,141	465,141	465,141	465,141	465,141	465,141	465,141	465,141	465,141	465,141	465,141	0	0
Historic Program Total Contribution to CPAS‡	125,631	24,739	24,739	24,739										
Program Total CPAS	590,772	489,880	489,880	489,880	465,141	465,141	465,141	465,141	465,141	465,141	465,141	465,141	0	0
CY2024 Program Incremental Expiring Savings§	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Savings	0	100,892	0	0	24,739	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#	0	100,892	0	0	24,739	0	0	0	0	0	0	0	0	0

† Lifetime savings are the sum of CPAS savings through the EUL.

‡ Historical savings go back to CY2018.

§ Incremental expiring savings are equal to CPAS Yn-1 - CPAS Yn.

|| Historic incremental expiring savings are equal to Historic CPAS Yn-1 – Historic CPAS Yn.

Program total incremental expiring savings are equal to current year total incremental expiring savings plus historic total incremental expiring savings.

Source: Evaluation team analysis

Table 9. Public Housing Upgrades CPAS – Other Fuel (Gas + Propane)

Savings Category	Verified Gross Savings (Therms)	Lifetime Net Savings†	CPAS Verified Net Therms Savings											
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		
CY2024 Program Total Other Fuel Contribution to CPAS (Therms)	0	0									0	0	0	0
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	0	0									0	0	0	0
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§						1,714,544	1,777,096	2,022,238	1,897,982	1,897,982	1,675,776	1,675,776	281,748	281,748
Program Total Other Fuel CPAS (kWh Equivalent)	0	0	0	0	0	1,714,544	1,777,096	2,022,238	1,897,982	1,897,982	1,675,776	1,675,776	281,748	281,748
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)											0	0	0	0
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)											0	0	0	0
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#											124,256	0	222,206	1,394,028
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†											124,256	0	222,206	1,394,028

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Other Fuel Contribution to CPAS (Therms)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§	282,827	288,536	288,580	277,842	277,842	266,078	265,770	265,770	254,944	239,046	239,046	239,046	239,046	222,552
Program Total Other Fuel CPAS (kWh Equivalent)	282,827	288,536	288,580	277,842	277,842	266,078	265,770	265,770	254,944	239,046	239,046	239,046	239,046	222,552
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#	-1,079	-5,709	-44	10,738	0	11,764	308	0	10,826	15,898	0	0	0	16,494
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†	-1,079	-5,709	-44	10,738	0	11,764	308	0	10,826	15,898	0	0	0	16,494

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Other Fuel Contribution to CPAS (Therms)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§	222,552													
Program Total Other Fuel CPAS (kWh Equivalent)	222,552													
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#	0	222,552	0	0	0	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†	0	222,552	0	0	0	0	0	0	0	0	0	0	0	0

† Lifetime savings are the sum of CPAS savings through the EUL.

‡ Fossil fuel savings (from natural gas, propane, etc.) are reported in therms. kWh equivalent savings are calculated by multiplying therms savings by 29.31.

§ Historical savings go back to CY2018.

|| Incremental expiring savings are equal to CPAS Yn-1 - CPAS Yn.

Historic incremental expiring savings are equal to Historic CPAS Yn-1 – Historic CPAS Yn.

*† Program total incremental expiring savings are equal to current year total incremental expiring savings plus historic total incremental expiring savings.

Source: Evaluation team analysis

Table 10. Public Housing Upgrades CPAS – Total

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh)†	CPAS Verified Net kWh Savings											
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		
CY2024 Program Total Contribution to CPAS	1,211,475	20,362,881									1,211,475	1,211,475	1,210,982	1,206,354
Historic Program Total Contribution to CPAS‡			50,808,487	2,472,099	5,495,917	6,679,860	8,971,013	8,997,983	10,307,364	9,599,276	8,251,741	7,092,877	5,506,747	
Program Total CPAS	1,211,475	71,171,367	2,472,099	5,495,917	6,679,860	8,971,013	8,997,983	10,307,364	10,810,751	9,463,216	8,303,859	6,713,101		
CY2024 Program Incremental Expiring Savings§											0	493	4,628	
Historic Program Incremental Expiring Savings										708,087	1,347,536	1,158,863	1,586,130	
Program Total Incremental Expiring Savings#	0	0								708,087	1,347,536	1,159,356	1,590,758	

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Contribution to CPAS	1,206,354	1,176,511	1,098,957	1,041,168	951,565	929,238	847,447	847,447	536,473	536,473	536,473	427,094	384,814	384,814
Historic Program Total Contribution to CPAS‡	4,202,434	3,523,679	2,867,713	1,893,261	1,373,646	1,071,999	898,912	859,335	833,149	812,978	429,035	419,643	401,480	348,183
Program Total CPAS	5,408,788	4,700,190	3,966,669	2,934,429	2,325,211	2,001,236	1,746,359	1,706,782	1,369,622	1,349,451	965,508	846,737	786,294	732,997
CY2024 Program Incremental Expiring Savings§	0	29,843	77,554	57,789	89,602	22,328	81,791	0	310,974	0	0	109,379	42,280	0
Historic Program Incremental Expiring Savings	1,304,314	678,754	655,967	974,452	519,615	301,647	173,087	39,577	26,186	20,171	383,944	9,392	18,163	53,298
Program Total Incremental Expiring Savings#	1,304,314	708,598	733,521	1,032,241	609,217	323,975	254,878	39,577	337,160	20,171	383,944	118,771	60,443	53,298

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Contribution to CPAS	384,814	384,814	384,814	384,814	384,814	384,814	384,814	384,814	384,814	384,814	384,814	384,814	0	0
Historic Program Total Contribution to CPAS‡	348,183	24,739	24,739	24,739										
Program Total CPAS	732,997	409,553	409,553	409,553	384,814	384,814	384,814	384,814	384,814	384,814	384,814	384,814	0	0
CY2024 Program Incremental Expiring Savings§	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Savings	0	323,444	0	0	24,739	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#	0	323,444	0	0	24,739	0	0	0	0	0	0	0	0	0

† Lifetime savings are the sum of CPAS savings through the EUL.

‡ Historical savings go back to CY2018.

§ Incremental expiring savings are equal to CPAS Yn-1 - CPAS Yn.

|| Historic incremental expiring savings are equal to Historic CPAS Yn-1 – Historic CPAS Yn.

Program total incremental expiring savings are equal to current year total incremental expiring savings plus historic total incremental expiring savings.

Source: Evaluation team analysis

Multifamily Upgrades Program Excluding Public Housing Upgrades Program

Introduction

This section presents the results of the impact evaluation of the Multifamily Upgrades program, excluding any savings achieved through the PH component, from the program year from January 1 to December 31, 2024 (CY2024). This includes Market Rate Multifamily, Income Eligible Multifamily (including IEMF and the Illinois Home Weatherization Program), and Strategic Energy Management (also known as Operational Excellence, or OE). The program components are designed to provide rebates and free energy-savings products for energy efficiency upgrades to privately owned income-eligible and market rate multifamily buildings.

The program is offered jointly to customers served by ComEd, Nicor Gas, Peoples Gas, and North Shore Gas. The results for the gas utilities will be in separate reports.

Program Savings Detail

Table 11 summarizes the incremental energy and demand savings the Multifamily Upgrades Program achieved in CY2024. The gas or other fuel savings are only those that ComEd may be able to claim, which excludes savings the gas utilities claim, either via joint or non-joint programs.⁵ Table 12 summarizes the savings achieved from income eligible participants and Table 13 summarizes savings from non-income eligible participants. Together they make up the total shown in Table 11.

Table 11. Multifamily Upgrades Excluding Public Housing Total Annual Incremental Electric Savings - Total

Savings Category	Units	Ex Ante Gross Savings*	Program Gross Realization Rate	Verified Gross Savings*	Program Net-to-Gross Ratio (NTG)	CY2022 Net Carryover Savings	CY2023 Net Carryover Savings	Verified Net Savings†
Electric Energy Savings - Direct‡ kWh		36,194,859	1.00	36,273,432	0.98			35,567,913
Electric Energy Savings - Converted from Other Fuels§	kWh	17,916,108	0.99	17,658,129	1.00			17,658,129
Electric Energy Savings - Indirect from Electrification (electrification baseline)	kWh							
Electric Energy Savings - Indirect from Electrification (efficiency baseline)	kWh							
Total Electric Energy Savings#	kWh	54,110,966	1.00	53,931,562	0.99			53,226,043
Total Electric Energy Savings Including Carryover#	kWh	54,110,966	1.00	53,931,562	0.99			53,226,043
Summer Peak** Demand Savings	kW	6,578	0.85	5,616	0.99			5,534
Summer Peak** Demand Savings Including Carryover	kW	6,578	0.85	5,616	0.99			5,534

Footnotes are defined similarly as found in Table 1.

Source: Evaluation team analysis

⁵ The evaluation will determine which other fuel savings will be counted towards goal while producing the portfolio-wide Summary Report. According to Section 8-103B(b-25) of the Illinois Public Utilities Act, "In no event shall more than 10% of each year's applicable annual total savings requirement as defined in paragraph (7.5) of subsection (g) of this Section be met through savings of fuels other than electricity."

Table 12. Multifamily Upgrades Excluding Public Housing Total Annual Incremental Electric Savings – Income Eligible

Savings Category	Units	Ex Ante Gross Savings*	Program Gross Realization Rate	Verified Gross Savings*	Program Net-to-Gross Ratio (NTG)	CY2022 Net Carryover Savings	CY2023 Net Carryover Savings	Verified Net Savings†
Electric Energy Savings - Direct‡	kWh	29,519,699	1.00	29,377,123	1.00			29,377,123
Electric Energy Savings - Converted from Other Fuels§	kWh	17,916,108	0.99	17,658,129	1.00			17,658,129
Electric Energy Savings - Indirect from Electrification (electrification baseline)	kWh							
Electric Energy Savings - Indirect from Electrification (efficiency baseline)								
Total Electric Energy Savings#	kWh	47,435,806	0.99	47,035,253	1.00			47,035,253
Total Electric Energy Savings Including Carryover#	kWh	47,435,806	0.99	47,035,253	1.00			47,035,253
Summer Peak*† Demand Savings	kW	5,916	0.83	4,939	1.00			4,939
Summer Peak*† Demand Savings Including Carryover	kW	5,916	0.83	4,939	1.00			4,939

Footnotes are defined similarly as found in Table 1.

Source: Evaluation team analysis

Table 13. Multifamily Upgrades Excluding Public Housing Total Annual Incremental Electric Savings – Non-Income Eligible

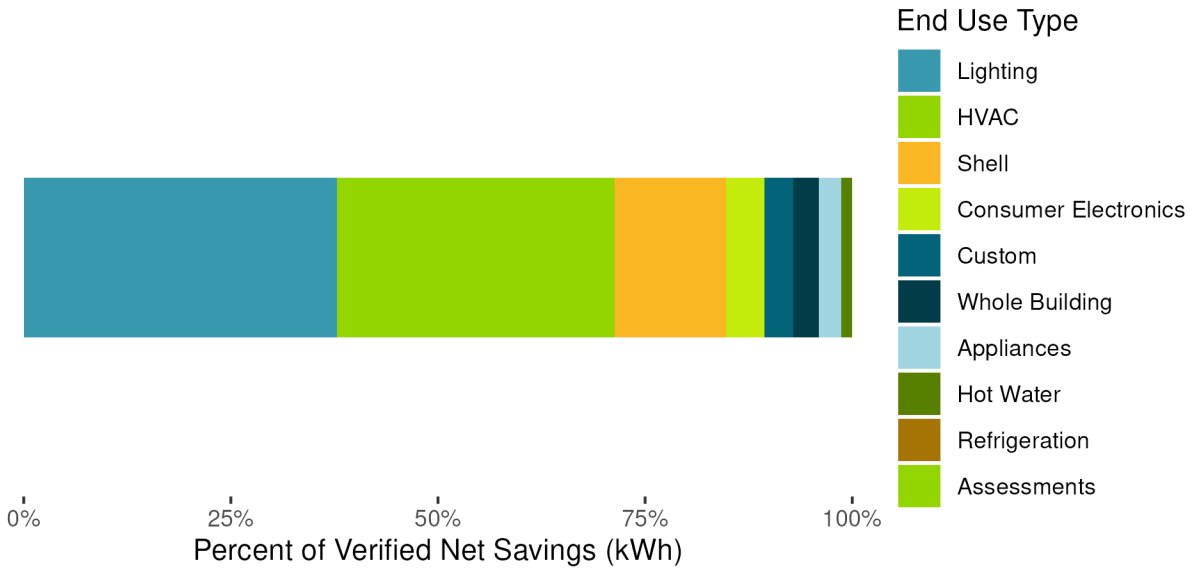
Savings Category	Units	Ex Ante Gross Savings*	Program Gross Realization Rate	Verified Gross Savings*	Program Net-to-Gross Ratio (NTG)	CY2022 Net Carryover Savings	CY2023 Net Carryover Savings	Verified Net Savings†
Electric Energy Savings - Direct‡	kWh	6,675,160	1.03	6,896,309	0.90			6,190,790
Electric Energy Savings - Converted from Other Fuels§	kWh	0		0				0
Electric Energy Savings - Indirect from Electrification (electrification kWh baseline)	kWh							
Electric Energy Savings - Indirect from Electrification (efficiency baseline)								
Total Electric Energy Savings#	kWh	6,675,160	1.03	6,896,309	0.90			6,190,790
Total Electric Energy Savings Including Carryover#	kWh	6,675,160	1.03	6,896,309	0.90			6,190,790
Summer Peak*† Demand Savings	kW	662	1.02	677	0.88			594
Summer Peak*† Demand Savings Including Carryover	kW	662	1.02	677	0.88			594

Footnotes are defined similarly as found in Table 1.

Source: Evaluation team analysis

Figure 3 shows the electric energy savings by measure end use. It includes measure efficiency savings, carryover kWh, secondary water kWh, and electrification savings. It does not include other fuel savings converted to kWh.

Figure 3. Multifamily Upgrades Excluding Public Housing Verified Net Savings by Measure – Electric



Source: Evaluation team analysis

Cumulative Persisting Annual Savings

Table 14 to Table 16 show the cumulative persisting annual savings (CPAS) for the measures installed in CY2024. The electric CPAS across all measures installed in CY2024 is shown in Table 14. The gas and other fuel contribution to CPAS (converted to equivalent electricity) are shown in Table 15. The combined savings are shown in Table 15.

Table 14. Multifamily Upgrades Excluding Public Housing CPAS – Electric

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh)†	CPAS Verified Net kWh Savings											
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		
CY2024 Program Total Contribution to CPAS	36,273,432	475,362,689									35,567,913	34,331,566	34,295,827	34,284,129
Historic Program Total Contribution to CPAS‡		814,749,312	16,220,536	26,116,232	37,376,975	46,151,322	70,945,305	102,676,135	97,149,661	90,606,443	80,998,015	73,162,198		
Program Total CPAS	36,273,432	1,290,112,001	16,220,536	26,116,232	37,376,975	46,151,322	70,945,305	102,676,135	132,717,574	124,938,009	115,293,842	107,446,327		
CY2024 Program Incremental Expiring Savings§		30,894,325									0	1,236,347	35,739	11,698
Historic Program Incremental Expiring Savings		97,149,661									0	6,543,218	9,608,428	7,835,817
Program Total Incremental Expiring Savings#		128,043,986									0	7,779,565	9,644,167	7,847,515

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Contribution to CPAS	34,284,129	33,970,786	33,876,563	28,709,282	18,778,490	18,778,490	17,810,159	17,693,461	16,789,573	16,789,573	16,789,573	16,571,852	4,826,358	4,826,358
Historic Program Total Contribution to CPAS‡	61,128,900	52,348,641	50,311,420	47,058,682	37,688,505	35,032,443	32,720,055	30,806,109	30,313,373	27,226,374	17,864,031	14,839,564	13,892,713	12,483,718
Program Total CPAS	95,413,029	86,319,427	84,187,983	75,767,964	56,466,995	53,810,933	50,530,214	48,499,570	47,102,946	44,015,947	34,653,604	31,411,416	18,719,071	17,310,076
CY2024 Program Incremental Expiring Savings§	0	313,343	94,223	5,167,281	9,930,791	0	968,331	116,698	903,888	0	0	217,721	11,745,494	0
Historic Program Incremental Expiring Savings	12,033,298	8,780,259	2,037,221	3,252,738	9,370,177	2,656,062	2,312,388	1,913,946	492,736	3,086,999	9,362,343	3,024,467	946,851	1,408,995
Program Total Incremental Expiring Savings#	12,033,298	9,093,602	2,131,444	8,420,019	19,300,968	2,656,062	3,280,719	2,030,644	1,396,624	3,086,999	9,362,343	3,242,188	12,692,345	1,408,995

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Contribution to CPAS	4,826,358	4,826,358	4,673,589	4,673,589	4,673,589	4,673,589	4,673,589	4,673,589	4,673,589	4,673,589	4,673,589	4,673,589	0	0
Historic Program Total Contribution to CPAS‡	9,028,785	29,894	29,894	29,894	0									
Program Total CPAS	13,855,143	4,856,252	4,703,483	4,703,483	4,673,589	4,673,589	4,673,589	4,673,589	4,673,589	4,673,589	4,673,589	4,673,589	0	0
CY2024 Program Incremental Expiring Savings§	0	0	152,770	0	0	0	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Savings	3,454,933	8,998,891	0	0	29,894	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#	3,454,933	8,998,891	152,770	0	29,894	0	0	0	0	0	0	0	0	0

† Lifetime savings are the sum of CPAS savings through the EUL.

‡ Historical savings go back to CY2018.

§ Incremental expiring savings are equal to CPAS Yn-1 - CPAS Yn.

|| Historic incremental expiring savings are equal to Historic CPAS Yn-1 – Historic CPAS Yn.

Program total incremental expiring savings are equal to current year total incremental expiring savings plus historic total incremental expiring savings.

Source: Evaluation team analysis

Table 15. Multifamily Upgrades Excluding Public Housing CPAS – Other Fuel (Gas + Propane)

Savings Category	Verified Gross Savings (Therms)	Lifetime Net Savings†	CPAS Verified Net Therms Savings												
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027			
CY2024 Program Total Other Fuel Contribution to CPAS (Therms)	602,461	16,317,160									602,461	596,689	596,689	588,849	
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	17,658,129	478,255,973									17,658,129	17,488,949	17,488,949	17,259,150	
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§		1,140,029,363	12,959,424	32,490,632	42,016,456	43,123,925	78,002,618	97,676,410	94,200,430	86,265,806	85,538,051	84,315,361			
Program Total Other Fuel CPAS (kWh Equivalent)	17,658,129	1,618,285,336	12,959,424	32,490,632	42,016,456	43,123,925	78,002,618	97,676,410	111,858,559	103,754,755	103,027,000	101,574,511			
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)												5,772	0	7,840	
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)												169,181	0	229,798	
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#											3,475,980	7,934,624	727,755	1,222,690	
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†											3,475,980	8,103,805	727,755	1,452,488	

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Other Fuel Contribution to CPAS (Therms)	588,849	588,849	572,048	572,048	572,048	572,048	572,048	571,145	571,145	571,145	571,145	538,918	534,082	534,082
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	17,259,150	17,259,150	16,766,730	16,766,730	16,766,730	16,766,730	16,766,730	16,740,251	16,740,251	16,740,251	16,740,251	15,795,697	15,653,944	15,653,944
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§	74,236,788	72,091,134	71,411,776	71,398,248	69,399,174	63,744,830	57,868,268	54,814,972	54,703,634	45,924,661	36,863,277	30,040,931	27,390,040	26,947,352
Program Total Other Fuel CPAS (kWh Equivalent)	91,495,938	89,350,284	88,178,506	88,164,978	86,165,904	80,511,560	74,634,998	71,555,223	71,443,885	62,664,912	53,603,528	45,836,628	43,043,984	42,601,296
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)	0	0	16,800	0	0	0	0	903	0	0	0	32,226	4,836	0
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)	0	0	492,421	0	0	0	0	26,478	0	0	0	944,555	141,753	0
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#	10,078,573	2,145,654	679,358	13,528	1,999,074	5,654,344	5,876,562	3,053,296	111,338	8,778,973	9,061,384	6,822,346	2,650,891	442,688
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†	10,078,573	2,145,654	1,171,779	13,528	1,999,074	5,654,344	5,876,562	3,079,774	111,338	8,778,973	9,061,384	7,766,901	2,792,644	442,688

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Other Fuel Contribution to CPAS (Therms)	534,082	534,082	524,238	524,238	524,238	524,238	524,238	462,704	462,704	462,704	462,704	462,704	0	0
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	15,653,944	15,653,944	15,365,416	15,365,416	15,365,416	15,365,416	15,365,416	13,561,858	13,561,858	13,561,858	13,561,858	13,561,858	0	0
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§	18,149,749	7,230,278	4,256,544	1,389,561	924,249	924,249	0	0	0					
Program Total Other Fuel CPAS (kWh Equivalent)	33,803,693	22,884,222	19,621,960	16,754,977	16,289,665	16,289,665	15,365,416	13,561,858	13,561,858	13,561,858	13,561,858	13,561,858	0	0
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)	0	0	9,844	0	0	0	0	61,534	61,534	61,534	61,534	61,534		
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)	0	0	288,528	0	0	0	0	1,803,558	1,803,558	1,803,558	1,803,558	1,803,558		
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#	8,797,603	10,919,471	2,973,734	2,866,983	465,312	0	924,249	0	4,256,544	1,389,561	924,249	924,249	0	0
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†	8,797,603	10,919,471	3,262,262	2,866,983	465,312	0	924,249	1,803,558	6,060,102	3,193,119	2,727,807	2,727,807	0	0

† Lifetime savings are the sum of CPAS savings through the EUL.

‡ Fossil fuel savings (from natural gas, propane, etc.) are reported in therms. kWh equivalent savings are calculated by multiplying therms savings by 29.31.

§ Historical savings go back to CY2018.

|| Incremental expiring savings are equal to CPAS Yn-1 - CPAS Yn.

Historic incremental expiring savings are equal to Historic CPAS Yn-1 – Historic CPAS Yn.

*† Program total incremental expiring savings are equal to current year total incremental expiring savings plus historic total incremental expiring savings.

Source: Evaluation team analysis

Table 16. Multifamily Upgrades Excluding Public Housing CPAS – Total

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh)†	CPAS Verified Net kWh Savings											
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		
CY2024 Program Total Contribution to CPAS	53,931,562	953,618,662									53,226,043	51,820,515	51,784,776	51,543,279
Historic Program Total Contribution to CPAS‡		1,954,778,674	29,179,961	58,606,864	79,393,431	89,275,247	148,947,923	200,352,544	191,350,091	176,872,249	166,536,066	157,477,559		
Program Total CPAS	53,931,562	2,908,397,336	29,179,961	58,606,864	79,393,431	89,275,247	148,947,923	200,352,544	244,576,134	228,692,764	218,320,842	209,020,838		
CY2024 Program Incremental Expiring Savings§											1,405,528	35,739	241,497	
Historic Program Incremental Expiring Savings											9,002,453	14,477,842	10,336,183	9,058,507
Program Total Incremental Expiring Savings#	0	0									9,002,453	15,883,370	10,371,922	9,300,004

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Contribution to CPAS	51,543,279	51,229,936	50,643,293	45,476,012	35,545,220	35,545,220	34,576,889	34,433,712	33,529,825	33,529,825	33,529,825	32,367,549	20,480,302	20,480,302
Historic Program Total Contribution to CPAS‡	135,365,688	124,439,775	121,723,196	118,456,930	107,087,680	98,777,273	90,588,323	85,621,081	85,017,007	73,151,035	54,727,308	44,880,495	41,282,754	39,431,070
Program Total CPAS	186,908,967	175,669,711	172,366,489	163,932,942	142,632,900	134,322,493	125,165,212	120,054,793	118,546,832	106,680,860	88,257,133	77,248,044	61,763,056	59,911,372
CY2024 Program Incremental Expiring Savings§	0	313,343	586,644	5,167,281	9,930,791	0	968,331	143,177	903,888	0	0	1,162,276	11,887,247	0
Historic Program Incremental Expiring Savings	22,111,871	10,925,913	2,716,579	3,266,266	11,369,250	8,310,407	8,188,950	4,967,242	604,074	11,865,972	18,423,727	9,846,813	3,597,741	1,851,684
Program Total Incremental Expiring Savings#	22,111,871	11,239,256	3,303,223	8,433,547	21,300,041	8,310,407	9,157,281	5,110,419	1,507,962	11,865,972	18,423,727	11,009,089	15,484,988	1,851,684

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Contribution to CPAS	20,480,302	20,480,302	20,039,004	20,039,004	20,039,004	20,039,004	20,039,004	18,235,447	18,235,447	18,235,447	18,235,447	18,235,447	0	0
Historic Program Total Contribution to CPAS‡	27,178,534	7,260,171	4,286,437	1,419,454	924,249	924,249	0	0	0	0	0	0	0	0
Program Total CPAS	47,658,836	27,740,473	24,325,441	21,458,458	20,963,253	20,963,253	20,039,004	18,235,447	18,235,447	18,235,447	18,235,447	18,235,447	0	0
CY2024 Program Incremental Expiring Savings§	0	0	441,298	0	0	0	0	1,803,558	0	0	0	0	0	0
Historic Program Incremental Expiring Savings	12,252,536	19,918,363	2,973,734	2,866,983	495,205	0	924,249	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#	12,252,536	19,918,363	3,415,032	2,866,983	495,205	0	924,249	1,803,558	0	0	0	0	0	0

† Lifetime savings are the sum of CPAS savings through the EUL.

‡ Historical savings go back to CY2018.

§ Incremental expiring savings are equal to CPAS Yn-1 - CPAS Yn.

|| Historic incremental expiring savings are equal to Historic CPAS Yn-1 – Historic CPAS Yn.

Program total incremental expiring savings are equal to current year total incremental expiring savings plus historic total incremental expiring savings.

Source: Evaluation team analysis