



# ComEd Electric Homes New Construction Program Impact Evaluation Report

Energy Efficiency/Demand Response Plan:  
Program Year 2022 (CY2022)  
(1/1/2022-12/31/2022)

Prepared for:

ComEd

**FINAL**

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## Introduction

This report presents the results of the impact evaluation of the Electric Homes New Construction Program for the program year January 1 to December 31, 2022 (CY2022). The program was designed to provide incentives to builders for the construction of energy efficient all-electric homes. The program targets single-family homes, duplexes, townhomes, 2-4 flats, or accessory dwelling units.

## Program Savings Detail

Table 1 summarizes the incremental energy and demand savings the Electric Homes New Construction Program achieved in CY2022. The electrification savings are those resulting from fuel switching measures.<sup>1</sup> There are no savings allocated to income eligible participants.

**Table 1. 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)	CY2020 Net Carryover Savings	CY2021 Net Carryover Savings	Verified Net Savings†
Electric Energy Savings - Direct‡	kWh	98,380	0.87	85,475	0.80	0	0	68,380
Electric Energy Savings - Converted from Gas§	kWh							
Electric Energy Savings - Indirect from Fuel Switching (through Electrification)	kWh	709,364	0.77	544,458	0.80	0	0	435,567
Total Electric Energy Savings#	kWh	807,744	0.78	629,933	0.80	0	0	503,947
Secondary Water Savings	kWh	955	1.01	961	0.80	0	0	769
Summer Peak*† Demand Savings	kW	21	0.84	18	0.80	0	0	14

\* Ex ante and verified gross savings exclude gross carryover savings from CY2020 and CY2021.

† The “Verified Net Savings” in row one (Electric Energy Savings - Direct) excludes carryover savings as they do not apply to this program.

‡ The Electric Energy Savings - Direct includes primary kWh savings from efficient measures (includes efficiency savings from fuel switching measures but excludes the fuel switching savings), 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 from fuel switching measures excluding direct efficiency savings calculated from net electric savings from an increase in kWh consumption and decrease in gas consumption from fuel switching (kWh equivalent).

# Total Electric Energy Savings is the sum of the Electric Energy Savings - Direct, the Electric Energy Savings Converted from Gas, and the Electrification Savings from fuel switching.

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

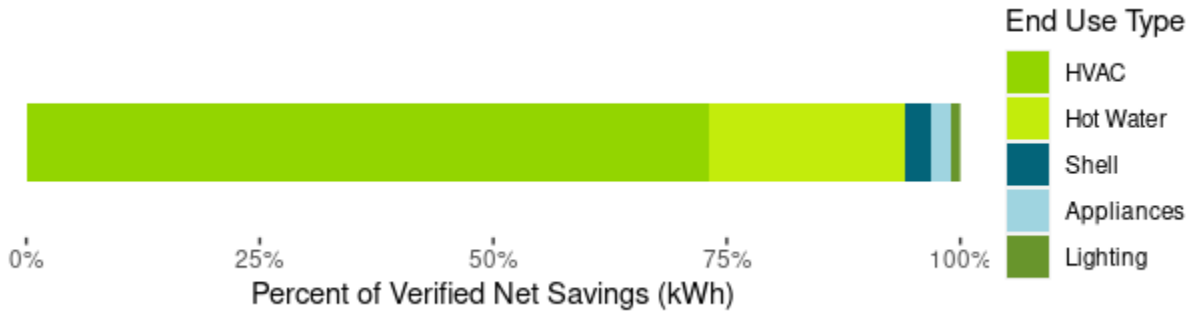
Note: The program-level NTG values are calculated as verified net/verified gross. The program-level analysis typically used measure-level deemed NTG values, which are listed here: <https://www.ilsag.info/evaluator-ntg-recommendations-for-2022>.

Source: Evaluation team analysis

<sup>1</sup> The evaluation team will determine which electrification savings from fuel switching will be counted toward ComEd’s electric savings goal while producing the portfolio-wide Summary Report. 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.”

Figure 1 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 gas savings converted to kWh.

**Figure 1. Verified Net Savings by End Use Type – Electric**



Source: Evaluation team analysis

## Cumulative Persistent Annual Savings

Table 2 shows the cumulative persisting annual savings (CPAS) for the measures installed in CY2022.

**Table 2. 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	2028
CY2022 Program Total Contribution to CPAS	629,933	7,643,365					503,947	503,947	503,947	503,947	503,947	503,947	503,947
Historic Program Total Contribution to CPAS‡						153,748	153,748	153,748	153,748	153,748	153,748	153,748	153,748
Program Total CPAS	629,933	7,643,365	0	0	0	153,748	657,695	657,695	657,695	657,695	657,695	657,695	657,695
CY2022 Program Incremental Expiring Savings§								0	0	0	0	0	0
Historic Program Incremental Expiring Savings								0	0	0	0	0	0
Program Total Incremental Expiring Savings#								0	0	0	0	0	0

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh)†	CPAS Verified Net kWh Savings										
			2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
CY2022 Program Total Contribution to CPAS	629,933	7,643,365	503,947	503,947	503,947	491,499	485,417	483,409	480,700	477,635	127,945	14,667	14,667
Historic Program Total Contribution to CPAS‡			153,748	153,748	153,748	153,748	153,748	153,748	153,748	153,748	12,788		
Program Total CPAS	629,933	7,643,365	657,695	657,695	657,695	645,247	639,165	637,157	634,448	490,423	127,945	14,667	14,667
CY2022 Program Incremental Expiring Savings§			0	0	0	12,447	6,082	2,008	2,709	3,065	349,690	113,277	0
Historic Program Incremental Expiring Savings			0	0	0	0	0	0	0	140,960	12,788	0	0
Program Total Incremental Expiring Savings#			0	0	0	12,447	6,082	2,008	2,709	144,025	362,478	113,277	0

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh)†	CPAS Verified Net kWh Savings										
			2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
CY2022 Program Total Contribution to CPAS	629,933	7,643,365	14,667	13,290	0	0	0	0	0	0	0	0	0
Historic Program Total Contribution to CPAS‡													
Program Total CPAS	629,933	7,643,365	14,667	13,290	0	0	0	0	0	0	0	0	0
CY2022 Program Incremental Expiring Savings§			0	1,378	13,290	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Savings			0	0	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#			0	1,378	13,290	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