



Overview of ComEd's Efficient Choice Pilot Evaluation

Q2 IL SAG Meeting

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Pilot Overview

ComEd's Efficient Choice Pilot is an online website that encourages customers to make energy efficient choices without incentives

- The website provides information about appliances, consumer electronics, and HVAC measures.
- The website is intended to influence visitors to make more efficient purchases.
 - Products are rated based on their efficiency using the “Enervee Score”.



Pilot Evaluation Goals

Key Evaluation Questions:

1. Can the Efficient Choice program / website be evaluated?
2. What are the claimable net savings of the Efficient Choice website?

Evaluation Approach

The evaluation approach centered around customer surveys and collecting proofs of purchase.

Step 1: Engineering Analysis

- Analyzed unit energy savings (kwh/unit) for clothes washers, dryers and refrigerators

Step 2: Customer Population

- Enervee provided website visitor counts and contact information

Step 3: Web Surveys

- Field surveys to determine purchase rate
- Request proof of purchase to determine the efficiency rate
- Use survey responses to determine NTG ratio

Step 4: Calculate Savings

- *Verified Gross Savings = UES x Customer Population x Purchase Rate x Efficiency Rate*
- *Verified Net Savings = Verified Gross Savings x NTG*

Sampling Design

The sample design was developed to evaluate measures at 90/40 and the pilot at 90/25.

- The sample design drove the minimum number of proofs of purchase required to be collected per measure.
- The ComEd team decided to focus marketing on three measures, rather than all measures, to increase the chances of collecting sufficient proofs of purchase for evaluation.
 - Evaluation focused on refrigerators, clothes washers and clothes dryers.

Findings and Results

The Efficient Choice website can be evaluated and Guidehouse estimated 205.5 MWh of verified net energy savings in CY2021.

- 93.7% of the net savings come from refrigerators, clothes washers and clothes dryers.
- Guidehouse used results from refrigerators, clothes washers and clothes dryers to extrapolate savings for other measures on the Efficient Choice website. These other measures are estimated to be 6.3% of total net savings.
- 2 out of 3 customers indicated they received a rebate through the ComEd Appliance Rebates Program after visiting the Efficient Choice website.
 - These savings were subtracted from the net savings to avoid double counting.

Your Guides

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Appendix - Results

Measures	Annualized Customer Population	Energy Savings (kWh/unit)	Peak Demand Savings (kW/unit)	Gas Savings (therm/unit)	Purchase Rate	Efficiency Rate	NTG Ratio
Refrigerators	23,620	321.06	0.05	0.00	9.7%	27.3%	0.63
Electric Dryers	8,550	160.00	0.02	0.00	8.4%	28.4%	0.61
Washers	10,834	67.03	0.01	4.60	13.0%	26.2%	0.62
Televisions	1,212	149.90	0.13	0.00	10.0%	84.7%	0.63
Room Air Conditioners	1,068	17.70	0.02	0.00	10.0%	84.7%	0.63
Dishwashers	759	18.15	0.00	0.39	10.0%	84.7%	0.63
Air Purifiers	165	158.75	0.02	0.00	10.0%	27.3%	0.63
Freezers	428	43.78	0.01	0.00	10.0%	27.3%	0.63
Dehumidifiers	105	131.67	0.03	0.00	10.0%	27.3%	0.63
Sound Bars	25	44.00	0.00	0.00	10.0%	84.7%	0.63
Monitors	36	29.80	0.00	0.00	10.0%	84.7%	0.63
EV Chargers	24	21.10	-0.28	0.00	10.0%	84.7%	0.63

Appendix - Results

End Use Type	Research Category	Ex Ante Gross Savings (kWh)	Verified Gross Realization Rate	Verified Gross Savings (kWh)	NTG*	Verified Net Savings (kWh)
Appliance	Refrigerators	NR	N/A	200,695	0.63	126,438
Appliance	Electric Dryers	NR	N/A	32,660	0.61	19,923
Appliance	Washers	NR	N/A	74,605	0.62	46,255
Consumer Electronics	Televisions	NR	N/A	15,415	0.62	9,557
Appliance	Room Air Condition	NR	N/A	1,604	0.62	994
Appliance	Dishwashers	NR	N/A	1,913	0.62	1,186
Appliance	Air Purifiers	NR	N/A	717	0.62	445
Appliance	Freezers	NR	N/A	513	0.62	318
Appliance	Dehumidifier	NR	N/A	379	0.62	235
Consumer Electronics	Sounds Bars	NR	N/A	93	0.62	58
Consumer Electronics	Monitors	NR	N/A	91	0.62	56
Miscellaneous	EV Chargers	NR	N/A	43	0.62	27
	Total†	NR	N/A	328,728		205,492