

ComEd Income-Eligible Energy Efficiency Electrification



November Working Group Meeting

11/14/22

Meeting Agenda

Monday, November 14, 2022

1:00 – 1:05 pm	Welcome, Agenda Overview
1:05 – 1:20 pm	Multifamily Implementation Progress Report
1:20 – 1:35 pm	Single Family Implementation Progress Report
1:35 – 1:45 pm	Elevate Pilot
1:45 – 1:55 pm	BlocPower Project Overview
1:55 – 2:10 pm	EEE Communications Research
2:10 – 2:30 pm	EEE Market Research

Reminders

- You can access past meeting materials and future meeting Zoom links here: <https://www.mwalliance.org/come-income-eligible-energy-efficiency-electrification-working-group>
- Next meeting is December 12
- Let Molly know if you have requests for future meeting agenda items
- Meeting notes will be sent out next week



MULTIFAMILY ELECTRIFICATION

November 14, 2022

Electrification-Ideal Building Characteristics

Below are the ideal characteristics of potential participant buildings. A building does not need ALL of these to apply.

- Building qualifies as **income eligible**
- Building has **in unit, gas** heating, cooling, cooking, and/or water heating
 - Preference is that the units has **at least two** of these options available
- Building equipment is **near end of life**
 - Property owner is ready to make a capital investment
 - Property owner recently bought the building and intends on owning the building long term, or is seeking to increase the property value prior to a sale
- **Building is a low-rise** (3 floors or less)
- **Resident** pays utility bills
- Property owner is **innovative** and willing to invest in new technologies and trends
 - has general awareness/interest in heat pumps, electrification, or decarbonization
 - has decarbonization / electrification goals
 - Has an interest in marketing properties as efficient, sustainable, etc
- Weatherization – the EEE program can benefit regardless of if a building has been weatherized. However, buildings that have not been weatherized are in need of Wx in conjunction to electrification.

Update

- MF Bill Impact Calculator is still being collaborated on with the MN CEE team to account for variability in MF buildings
- Customer leads are coming in from partners. KEEP THEM COMING!
- Have a 3 building 321 unit property, a 6 unit, 3 Flat, and a 60 unit all in consideration of Electrification funds.
- Training of staff to take over my work

2023 Program

- Starting with a great pipeline of projects and spend.
- MF SEM may also identify electrification opportunities.
- Larger goals and spend will need eyes on projects sooner to ensure the targets are met as Trade allies are swamped and product is not as readily available as I'd like.

MEEA EEE MEETING

November 14, 2022

What's cookin'?

Variable	Progress to	Notes
Contractor	●	<ul style="list-style-type: none"> Anura has signed Participation Agreement Measure pricing pending
	●	<ul style="list-style-type: none"> 6 customers scoped, 4 head nods Still concerned about pipeline, but Anura's on it
In-field QAQC	●	<ul style="list-style-type: none"> Hosted a training with CMC CMC is designing observation form, plan, and scorecard
	●	<ul style="list-style-type: none"> Salesforce is live with new measures! Data file concerns; sending comments back
Bill impact preview	●	<ul style="list-style-type: none"> In use in field!
	●	<ul style="list-style-type: none"> Project docs: customer aux, audit report, customer acknowledgement Outreach: talking points, flyer (pending ComEd approval), contractor FAQs
2023 Planning	●	<ul style="list-style-type: none"> Strong focus on customer education tools Expanding contractor base Engaging community partner Coordination with other IC partners



ComEd ET – Elevate IE Building Electrification Update

11/14/2022

Pipeline Update – 71 units+

Single Family (at least 33 units to be complete)

- 16 Heat pumps installed, 11 Hot Water Heater upgrades complete, 11 Electric Services including new branch loads completed for full electrification operation
 - 4 of 5 appliance packages ordered
- Construction scheduled for next 18 single family homes, 4 started last week.
- 29 single family homes in preliminary analysis (pre-audit). Expecting 50-70% conversion rate.






Multifamily (at least 38 units to be complete)

- **16-unit multifamily property in contract negotiation – waiting signature and scheduling**
- **22-unit multifamily property in Maywood –received bid and drafting grant agreement.**
- 16 units across 2 buildings with owner financing with CIC – Collecting contractor bids
- 6 unit, Chicago owner, Elevate and Franklin assessed on 11/9. Could start this year.
- 6 unit, Elgin owner, Interested in assessment
- 18 unit, Energy analysis on Bickerdike - Nuestro Hogar furnace retrofit opportunity

Thank You

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comedSM
AN EXELON COMPANY

Energy Efficiency

October 31, 2022

Energy Efficient Electrification Communication Research

ILLUME Advising

The majority of respondents were **female**, **income-eligible renters**.



INCOME

- 84% of respondents were considered income-eligible
- 9% of respondents were not IE
- 7% did not disclose



GENDER

- 65% of respondents identified as female
- 24% identified as male



HOME TYPE

- 50% reported living in an apartment
- 42% of respondents had a single-family detached home



HOME-OWNERSHIP

- 64% of respondents were renters
- 34% were homeowners



EDUCATION

- 51% of respondents had a college- or graduate-level degree
- 18% had a high school diploma or less



COOLING SYSTEMS

- 52% only have room or window units
- 37% have central air conditioning
- 9% of respondents do not have any cooling

Key Findings – Message Content

Owners and renters have different needs and orientations to energy

Level of Information needed concerning projected monthly gas and electric bill savings:

- Most respondents indicated they either wouldn't need any additional information about their projected monthly gas and electric bill savings (21%) or would only need a simple explanation (35%)
- 27% indicated they would require an in-depth explanation of the bill savings calculation
- **Homeowners (38%) were significantly more likely than renters (19%) to indicate they would need an in-depth explanation of the bill savings calculation**

Contextual information most desired by respondents:

- If it will save money on their utility bills (59%)
- **How safe the new equipment will be (50%)**
- How energy efficient the new equipment will be (48%)
- **Why ComEd would offer a program like this to customers (47%)**

Key Findings – Message Content

Customers have different orientations to safety, but electric is considered safer among those who prefer it

- Both owners (60%) and renters (70%) indicated that their **home being safe and healthy to live in was a priority**
- Renters (47%) were significantly more likely than homeowners (21%) to indicate that safety was the **most important** priority
- Proponents of **electric heating** (26%, n=38) were **somewhat more likely** to indicate **safety as motivation for their preference** compared to proponents of **gas heating** (20%, n=46)
- Proponents of **electric cooking** (19%, n=31) were **significantly more likely** to indicate **safety as motivation for their preference** compared to proponents of **gas cooking** (4%, n=80)

While proponents of electricity are more likely to **identify safety as motivation**, some customers orientation to electric heat may include associations to **electrical fires, or of space heaters plugged into dangerously overloaded power strips or wall outlets**

Key Findings – Communication Timing

The value of priming messages: Increasing awareness of electrification technologies early is imperative

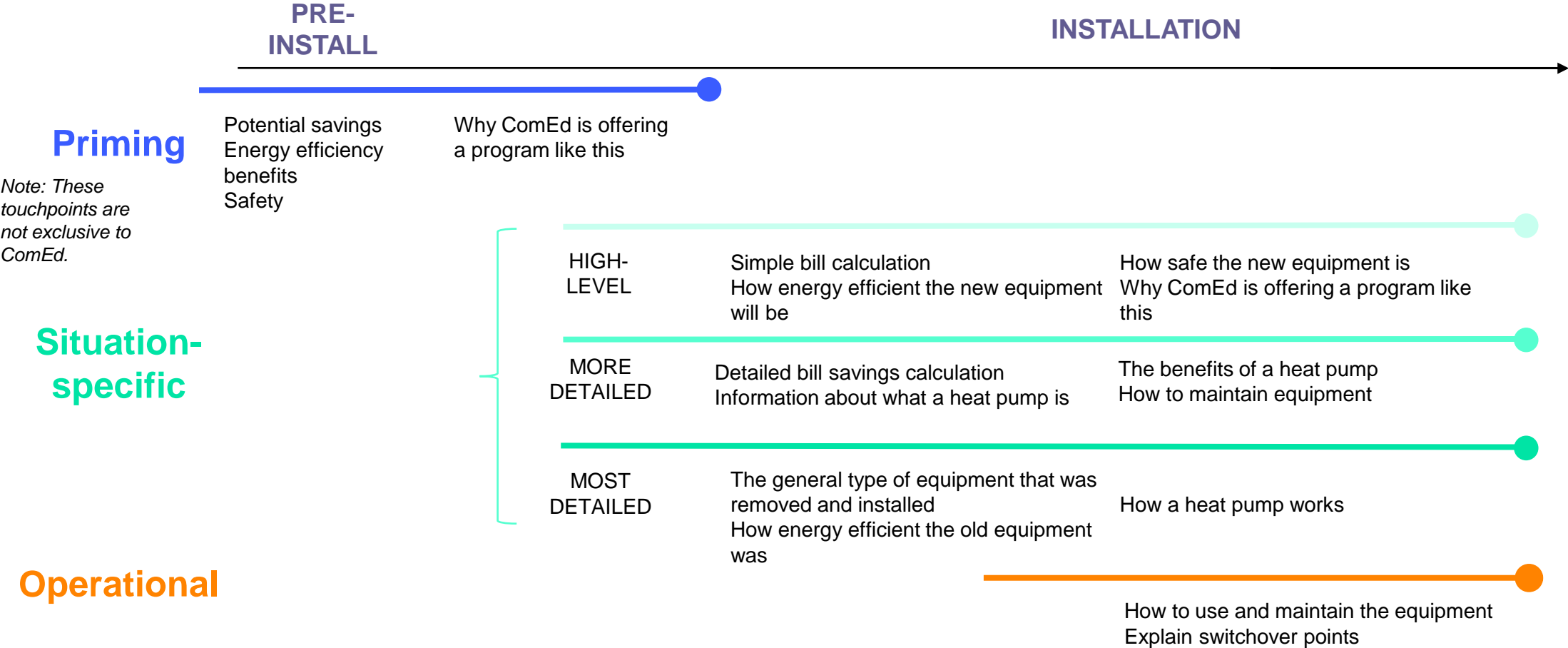
Respondents expressed low levels of awareness with terms related to electrification

- **57%** of survey respondents indicated they were familiar with the term **energy efficiency**
- **22%** were familiar with either **fuel switching or electrification**
- **21%** indicated they had heard of a **heat pump**
- **47%** expressed interest in **why ComEd would offer a program like this to customers**

Messages prior to an electrification audit , including **priming messages** will be especially important to **demystify and familiarize** people with the terms and equipment related to electrification, and help to quell any suspicions as to **why their electric company is incentivizing them to go electric.**

Recommended communication touchpoints

Multiple touchpoints contribute to stronger engagement and greater understanding.



Recommendation - Priming messaging

Safety messaging will need to promote the benefits, and contend with the beliefs

Recommendation #1: Utilize current messaging about safety from the draft audit report* in priming message channels

- Identify opportunities to layer priming messages onto existing marketing collateral
 - Priming messages should focus on **equipment safety**
 - The “**Benefits of Electrification**” as described in RI’s draft audit report* can be utilized in priming messages
 - “Switching to electricity, or electrification, reduces harmful emissions for healthier air quality in our homes.”
 - “Energy-efficient electric appliances are safer because there is no combustion process, and thus no carbon monoxide in the home.”
 - Additional safety related priming messages may need to contend with some customers’ orientations to the dangers of electric/space heating
 - Visuals of heat pumps in homes will be helpful

Recommendation - Priming messaging

Bill Savings are a motivator, but some will question ComEd's intent

Recommendation #2: Utilize current messaging about bill savings from the draft audit report* in priming message channels

- Identify opportunities to layer priming messages onto existing marketing collateral
 - Priming messages should also focus on **potential bill savings, and why ComEd is offering these programs.**
 - The **“Benefits of Electrification”** as described in RI's draft audit report* can be utilized in priming messages
 - “They are reliable and offer low operating costs.”
 - “By participating in ComEd's Energy Efficiency Electrification offering an average family of four could save hundreds of dollars on their electric bills and completely eliminate their natural gas or propane bills.”
 - Additional priming messages will need to contend with some customers uncertainty as to why ComEd would be offering a program like this

Recommendation – Audit report Feedback

Recommendation #3: Add additional information to the audit report to provide clarification on why ComEd is offering the program, offer visuals of the equipment to be installed, and how to maintain and operate equipment.

The draft of the audit report to be delivered to customers includes sections focusing on:

- **The benefits of electrification:** Safety benefits, Financial benefits
- **Financial benefit summary:** Including potential bill impacts
- **Information about the proposed equipment:** Including the equipment that will be replaced

The audit report should also incorporate:

- **The benefits of electrification:** Why ComEd is offering a program like this
- **Information about the proposed equipment:** Pictures of heat pumps
- **Information about the proposed equipment:** Information about how to maintain and operate the equipment

ComEd Home Energy Savings Program
ENERGY EFFICIENCY ELECTRIFICATION REPORT

APPLICANT INFORMATION

Customer Information

Contact Name
Mailing Address
Service Address (if different)
Telephone
Email

Service Provider Information

Contracting Company Name
Contact Name
Telephone
Email
Address

Benefits of Electrification

ComEd is committed to helping improve the energy efficiency, health and safety, and comfort of your home. This report provides a customized project plan and recommends improvements for your home that will help lower your overall energy costs.

Switching to electricity, or electrification, reduces harmful emissions for healthier air quality in our homes. Natural gas or propane-fueled appliances can release carbon monoxide, formaldehyde, and other pollutants into the air, which can be toxic to people and pets.

Energy-efficient electric appliances are safer because there is no combustion process, and thus no carbon monoxide in the home. They are also reliable and offer low operating costs.

By participating in ComEd's Energy Efficiency Electrification offering an average family of four could save hundreds of dollars on their electric bills and completely eliminate their natural gas or propane bills. High-efficiency electric appliances consume far less electricity than standard models. When installed into weatherized homes they will provide comfort and energy savings all year long, for years to come!

Recommendation - Situation-Specific messaging

Recommendation #4: Layer the information in the audit report so that customers can dig as deep as they need to until they feel satisfied with their understanding

- **The highest level of situation specific messages should present a simple presentation of the potential bill impacts, including** projected electric bill impacts, projected gas bill impacts, and net impacts. **It should also include** information on how energy efficient the new equipment will be, how safe the new equipment is, why ComEd is offering a program like this, and pictures of a heat pump
- **More detailed situation specific messages should focus on** a more detailed calculation of utility bill impacts, the benefits of a heat pump, and **operational messages, including** how to maintain a heat pump and explain switchover points
- **The most detailed situation specific messages should focus on** information about the equipment that was removed, and information about how heat pumps work

Note: Our research and recommendations focus on the contextual information that people will need to understand the bill impact calculations and did not investigate the specific components of the bill impact calculation that should be included.

Recommendation – Channel Considerations and Trust

Recommendation #5: Build trust through consistent messaging across channels and actors

Involve multiple actors in communicating relevant information as there is no single, uniformly trusted authority. ComEd should work with landlords, contractors, EESPs, and others to ensure that the information provided is consistent.

- The same message should be delivered directly by the EESP performing the work, assessors, and ComEd communications
- Codify language related to **equipment safety**, the efficiency of the new equipment, the benefits of a heat pump, and **why ComEd is offering these programs**, for assessors and EESPs to use when discussing EEE projects with customers
- Ensure that assessors and EESPs inform customers of the behavioral component of their projected energy savings, if any

Given that ComEd is a trusted source of energy savings information, communication regarding potential bill impacts should come directly from ComEd via multiple channels, including

- Email
- Direct mail/flyers/door hangers
- Potentially text messages or direct outreach

Questions?

WE'VE GOT ANSWERS

Contact



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Beneficial Electrification Research – Residential Customers

Foundational Research Highlights

ComEd Customer Insights
August 23, 2022

There is sizable potential to increase the adoption of electric products among residential customers

Current Electric vs. Gas-Powered Penetration Among Residential Customers (Self-Stated)



Electric



Gas

8%
All Electric
Building*

Building

75% Air conditioning

58% Central Air
15% Window/portable unit
1% Heat Pump

19% Electric Heat

12% Baseboard
7% Heat Pump

29% Electric Water Heater

30% Electric Stove/Cooktop

27% Electric Clothes Dryer

Yard

9% Electric Lawn Mower

Transportation/Renewables

2% EVs

3% Private Solar

3% Community Solar

Building

73% Gas Heat

63% Forced Air
6% Radiator
4% Radiant Floors

62% Gas Water Heater

75% Gas Stove

44% Gas Clothes Dryer

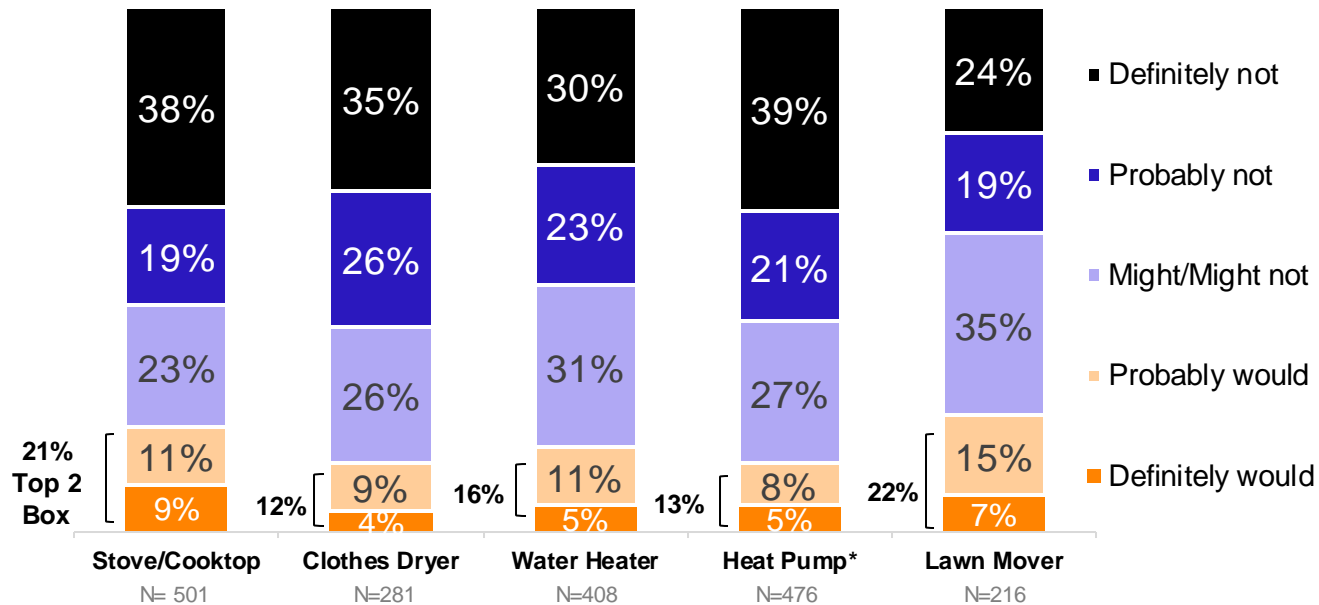
Yard

35% Gas Lawn Mower

Among non-adopters of electrified products, about 1 in 10 say they are highly likely to switch to electric options

Likelihood to Replace Gas with Electric

Among those with Gas for each product



Timing to Replace Among Those Likely to Switch

Timing	Stove/Cooktop	Clothes Dryer	Water Heater	Heat Pump*	Lawn Mover
Within 12 months	55%	52%	50%	47%	56%
Within 2-4 years	26%	36%	29%	27%	30%
Within 5+ years	8%	2%	15%	16%	11%
Not Sure	10%	10%	6%	10%	3%
	N= 115	N=36 **	N= 70	N=71	N=51

*Replace Gas Heat or Gas Heat & Central AC w/ Electric Heat Pump

** Small base size

Key Barriers to Switching

(Among Those Not Likely to Switch)

- Not interested/happy with current system
- Being familiar/comfortable with gas/prefer gas
- Costs/gas more affordable/expensive to convert
- Already have gas hook up/would need electric connection
- Newer purchase/under warranty/no need to replace
- For cooking, better control with gas (top barrier)
- For dryers, more efficient/dries clothes better
- For heat pumps, reliability and heat quality concerns
- For heat pumps and water heaters, lack of familiarity/unknown
- For lawn movers, convenience issues: dealing with cord & charging, yard size and battery run time (top barrier)
- For renters, owner's responsibility

Lack of familiarity with electrification, costs and habits are key barriers



BARRIERS TO ADOPTION OF ELECTRIFICATION

Key barriers among all customer groups:

- **Lack of familiarity with terminology and benefits of electrification**
- **Lack of familiarity with products that can be electrified**
- **Cost of entry and ownership**
- **Habits of using gas-powered products**
- **Not needing to replace products until they falter**
- **Negative reviews** of electric options
- **Aesthetics**, particularly for heat pumps and solar panels
- **Renters** complained about the **lack of having any say in the process**
- **EV-related concerns**: lack of charging infrastructure, range anxiety, slow charging, lack of parking access
- **Some expressed skepticism about clean energy**

ComEd's Role in Driving Electrification



Better charging infrastructure is required for increasing EV adoption, especially among multi-family homeowners and renters who lack parking access

Educate customers how electric options can be more cost & energy efficient and why the technology's performance is better

ComEd can offer **incentives and rebates, checklists, an electrification journey outline, realistic cost saving goals, and education and support** to drive adoption of electrification



To become a trusted resource, ComEd must come across as providing unbiased information

1

Trustworthy sources for electrification/product information

Majority of the participants considered **word of mouth, Google searches, third party reviews, blogs, and Consumer Reports** as trustworthy sources. **ComEd does not come to mind**

2

What participants want/need to know prior to pursuing electrification

Before pursuing electrification, non-adopters want to know the **cost of ownership, cost of entry and efficiency of electric products vs fossil fuel products**

3

Providing both pros and cons is essential to establishing trust

Customers want **unbiased information** on the **costs/savings potential, available rebates/incentives, efficacy and benefits of products**

4

Partner/Link with trusted resources, such as ENERGY STAR or HGTV

ENERGY STAR home upgrade helps educate consumers and is building content on its site, promoting it's 2023 launch of **NextGen Certified Homes & Apartments (2023)**. **HGTV personalities**, such as Mike Holmes, are **respected home advisors**



Key Findings Among Early Adopters

- 1 Useful sources for product awareness**
Early adopters leverage **YouTube videos, sales representatives, contractors, and existing users** as a trustworthy source to get product information
- 2 Reasons for product adoption**
Easy installation and air conditioning capabilities cited as **primary reasons to adopt heat pumps**. **Willingness to protect environment** was a common reason for purchasing solar panels and EVs
- 3 Hesitations for product adoption**
Financial concerns, fewer existing users, aesthetics, lack of knowledgeable contractors, unfamiliarity with product, and limited product styles cited as common hesitations by early adopters in adopting solar panels, heat pumps, or EVs
- 4 Time required for product adoption**
The adoption time for larger electrified products (Solar panels, heat pumps, EVs) ranged from **several months to several years** across the products. Heat Pump and EV owners conducted initial product research for **at least 2 years**
- 5 What early adopters would have done differently**
Early adopters feel that they could have done a **more thorough research** regarding the product and **switched to eco-friendly options earlier**



How Should We Talk to Customers about Electrification?

How Should We Talk to Customers about Electrification?

- ✓ **Avoid use of terms like decarbonization, electrification, and beneficial electrification** as they are not part of residential customers' vernacular or everyday life
 - SMUD: Go electric. Save money and benefit from converting to all-electric living. Live electric, drive electric, build electric
- ✓ **Address costs barriers, both costs of entry (purchase cost and the costs of preparing their home) and costs of ownership (fuel costs, efficiency, service/maintenance) front and center** to convince consumers that electric options can save them money compared to gas options
 - **Energy Star, Great River Energy and SMUD are developing one-stop online tools for consumers to learn and navigate the process:** learn about the benefits, find certified models, calculate potential savings, learn about rebates and incentives, find equipment manufacturers and service providers
 - **Lead with a cost-saving message.** Include environmental benefits as secondary emotional benefits



How Should We Talk to Customers about Electrification? (continued)

- ✓ **Ongoing staged customer education will be required. Not only are customers unaware of our internal/industry terminology, they need to learn about each of the product categories**
 - Given the breadth of electrification options, there is **a lot to communicate**, and customers will be more likely to read **smaller bites** of information
 - **Our past Grid Modernization Communications Tracking study demonstrated the importance of ongoing communications**, otherwise customers forget over time.
 - It may be a **long journey to actual purchase**. Customers are **resistant to replacing products until they falter**.
 - And **when it does break, customers need a replacement fast, so upfront education is needed** to pave the way for making “electrified” products a viable option in the consideration set

- ✓ **Consider the audience. Renters are not viable targets for home electrification messages, or EVs, if no access to garage parking. Financial Assistance will be key for Income Eligible customers**
 - There is a **small segment of consumers who are skeptical of clean energy** because of the belief that there is a negative impact to the environment from the manufacturing process or the transportation of parts and products. This may be a tough audience to electrify



Appendix

Quantitative Research: Objectives & Methodology



Objectives

Conducted an online survey among residential customers to:

- **Measure current electrification penetration (self-stated)**
 - Home: space heating/cooling, water heating, cooking, clothes dryer, lawn mower
 - Transportation/Renewables: EV, private solar, community solar
- **Determine likelihood to switch from gas-powered to electric-powered products (space heat/cooling, water heating, cooking, clothes dryer, lawn mower, EV) or likelihood to adopt solar**
 - Among those likely to switch, determine expected timing to replace
 - Among those unlikely to switch, identify key barriers to electrification
- **Identify key reasons for deciding to chose electric over gas among early adopters of electrification products**
 - Space heating/cooling, water heating, cooking, clothes dryer, EV
- **Assess differences in results based on home ownership, single-family (SF) vs multi-family (MF) building structure, access to garage/assigned parking, and customer demographics, including Income Eligible customers**



Methodology

- **Online survey of 672 residential customers conducted from April 12 - April 18, 2022**
- Survey participants were from an online survey panel and were screened to be ComEd customers
- The data was weighted by region, ethnicity and age to bring the sample characteristics into closer alignment with the actual distribution of ComEd customers.
- **Limited Income was defined by income and household size based on 250% FPL**

Qualitative Research: Background, Scope and Intended Use of Results



Background

- The **new Illinois 2021 Clean Energy Jobs Act (CEJA)** provided comprehensive **legislation for decarbonization of the electric power sector**, working to **reduce carbon emissions and air pollution** in the state of **Illinois**
- There is an opportunity for **ComEd to educate customers** about the **Clean Energy future**, **what it is**, **what it means** for them, and **how they can participate** as well as to **ideate and develop** ways to help customers **electrify their home** and their **transportation**, and **decarbonize their lives**
- In a bid to take a **step forward towards cleaner energy** and **reduce the dependence on fossil fuels**, a **probing qualitative research was conducted** to understand the **views of intended users on electrification**
- This research comprised of **online focus groups** and **in-depth interviews with a mix of Non- and Early Adopters**



Scope

- Understand **customers' views on clean energy, and electrification**
- Understand the **barriers to adoption** and **how ComEd can help in overcoming these barriers**
- Understand the **path to electrification for selected products** [EV, Solar panels, EE heat pump, IE weatherization]
- Understand whether **education, trade-in programs, incentives, third party influencers/ spokespersons**, may play a role in helping ComEd customers adopt eco-friendly initiatives, particularly electrification
- Narrative review (primary positives and negatives across groups)



Intended Use of Results

- To discover **insights** to use in the **ideation phase of the BE Innovation Team's work** to help residential customers in **single-family homes and multi-dwelling units**, including those who are **income-qualified, decarbonize their lives**
- To guide development of **initial Marketing messages** to be tested in another phase of research
 - Develop a **foundational word bank to draw from**

Qualitative Research: Methodology

Conducted In-depth Interviews and Focus Group Discussions



- A total of **8 In-Depth interviews and 3 focus group discussions (FGDs)** were conducted online between April 18-22, comprising:
 - **6 in-depth interviews with Early Adopters** of Electrification (EV, Solar panels, EE heat pump rebate participants)
 - **2 in-depth interviews with IE Weatherization Participants**
 - **3 online FGDs with Non-Adopters of Electrification**
 - Separate Multi-family homeowners, Single family homeowners and Renters
- **A total of 24 customers were interviewed.** All interviews were conducted via **phone and online platform** that supported **video of the moderator and participants, discussion of research topics, sharing of stimuli for evaluation, as well as feedback on specific messaging**
- Some of the key discussion topics include **barriers to electrification/ eco-friendly activities**, the actions that **ComEd could potentially take to help its customers adopt more electrification options**, narrative review (primary positives and negatives across groups)



Customer Recommendations for ComEd

COMED'S ROLE IN DRIVING ELECTRIFICATION (1/2)

- ✓ **Share information** on ways to save on AC bills and different electrification programs via email, direct mail, billing inserts, newsletters
- ✓ **Provide education and support** on the transition from fossil fuel to electrified products
- ✓ **Conduct TV campaigns and offline events** at community (rotary, homeowner association, etc.) and school events to talk about electrification options
- ✓ **Advertise incentives/ discounts/ rebates** via multiple sources including discounts that can be realized via other entities (Costco and Home Depot)
- ✓ **Offer a check-list** of product requirements to ask company/contractors
- ✓ **Update search engine optimization** to have ComEd listings appear higher in web search results
- ✓ **Offer in-store signage/point of sale information** on electric products through ComEd
- ✓ **Leverage social media (Facebook, Instagram, etc.)** to make messaging more fun and approachable (could be gamified) and provide information in small bites, reducing information overload



Customer Recommendations for ComEd (continued)

COMED'S ROLE IN DRIVING ELECTRIFICATION (2/2)

- ✓ Offer **trade-in programs** with pickup and proper disposal of old product
- ✓ Provide **cost savings** by partnering with dwelling landlords to offer savings program to renters
- ✓ **Comparator services** that enables efficiency comparison across different products (such as heat pumps, central AC etc.)
- ✓ **Assist in electrification journey** by clarifying where to start, what are the things to consider
- ✓ **Include HGTV brand / personalities** to cover electrification or arrange programs on how to modify the house or do different things
- ✓ Offer **Hotline services**, wherein customers can call and consult regarding the particulars in their home

