Welcome to the waiting room. We'll begin shortly.

Welcome

Luke Miller

Senior Associate,
Policy and Programs

Things to Note

- This webinar is being recorded
- In NEEP's ongoing effort to improve accessibility to both our work and events, we have enabled the closed captioning, the control to disable this feature is located in the lower right corner
- The slides and recording will be sent to all attendees
- All lines will remain on mute—please type in your questions in the Q&A at any time
- Chat will be available for comments, discussion, and collaboration
- Antitrust statement: Participants shall comply with competition law requirements and shall not enter into any discussion, activity or conduct that may violate any applicable competition law
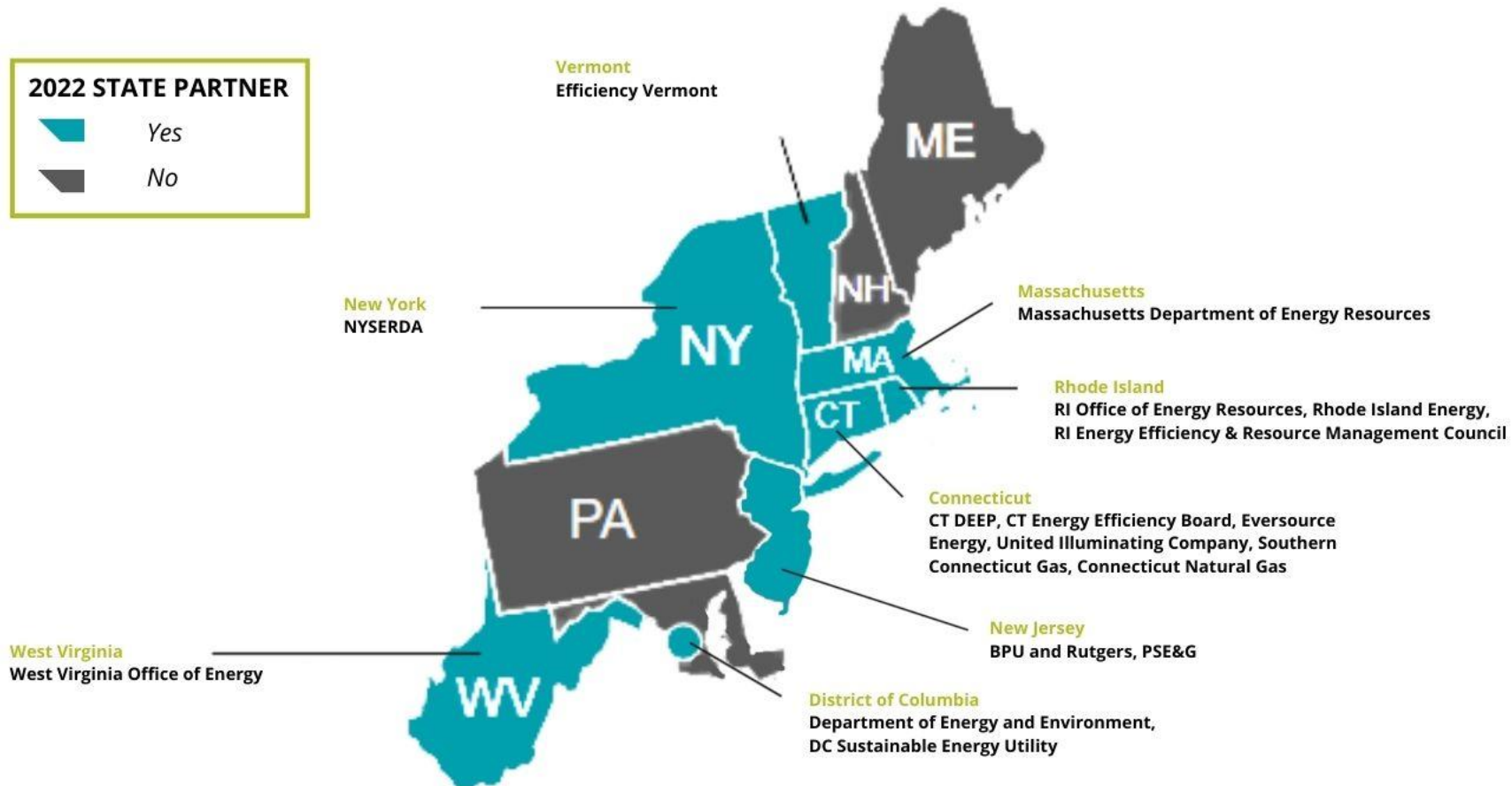
ALLIES NETWORK

Funders

Northeast Energy Efficiency Partners (NEEP)

State Partnerships

NEEP works closely with our State Partners on the successful application of policies, programs, and technologies, and brings knowledge of what strategies work (and don't work) to advance the state's and region's clean energy goals.

2022 STATE PARTNER
- Yes
- No

Vermont
Efficiency Vermont

New York
NYSERDA

Massachusetts
Massachusetts Department of Energy Resources

Rhode Island
RI Office of Energy Resources, Rhode Island Energy, RI Energy Efficiency & Resource Management Council

Connecticut
CT DEEP, CT Energy Efficiency Board, Eversource Energy, United Illuminating Company, Southern Connecticut Gas, Connecticut Natural Gas

New Jersey
BPU and Rutgers, PSE&G

West Virginia
West Virginia Office of Energy

District of Columbia
Department of Energy and Environment, DC Sustainable Energy Utility

NEEP Heating Electrification Workshop 2023
NEXT WEEK!

HEATING ELECTRIFICATION WORKSHOP 2023

ALL SYSTEMS GO

OCTOBER 24 & 25 | New Haven, CT

Unlocking the Power of Energy Data

Utility Data Access and Future Energy Efficiency Planning

Luke Miller

Senior Associate, Policy and Programs

IRA Implementation and Data Access

- Good use of data can enhance energy efficiency programs
  - Education; customer behavior
  - Improved equity outcomes
- IRA funding requires a data access plan
  - Opportunity to create lasting data infrastructure
  - Involving utilities
- Establishing data security and sharing practices invests in future programs
  - Data access will lead to better informed and executed building decarbonization programs

Key Elements of a Successful Data Access Plan

- Security and safety of energy consumption data

- Consent, notification, and revocation process

- Eligibility of third parties

- Data aggregation and anonymization

- Quality and accessibility of the data (quality/frequency)

- Oversight and enforcement

DOE Requirements

- Security information
  - Encryption, secure access, guidelines, and security incident response protocols
- Customer consent process
  - Consent, notification, revocation prior to program
- Disclosure of energy consumption data use: primary or secondary
  - Primary: essential legal functions (e.g., regulatory reporting)
  - Secondary: outreach, marketing

Third-party Engagement With Customer Data

- Eligibility requirements and oversight
  - Guidelines for any parties handling customer data
    - DOE's 2015 Voluntary Code of Conduct
    - Existing eligibility criteria from utilities, regulators, or other programs (CA, NY, TX)
  - Choose which regulatory authority oversees third-party implementers
    - Utility contracts with third parties, state examples (CA, NH, TX)

Takeaways

- Form a Data Access Working Group
  - Data access and security will involve coordination and collaboration (utilities, third-party implementers, and other stakeholders)

- Develop secure data protection and access protocols
  - Safely transfer data to relevant stakeholders

- Implement a benchmarking strategy
  - Assess building energy usage over time

- Design rules governing data aggregation and anonymization
  - Compile customer data and permit third-party use without compromising customer privacy

- Outline the customer consent, notification, and revocation process
  - Customers are informed of data sharing and can decide whether to participate

With IRA, there is a lot of pressure on state energy offices and their contractors

1. Find
2. Reach
3. Enroll
4. Install
5. Analyze

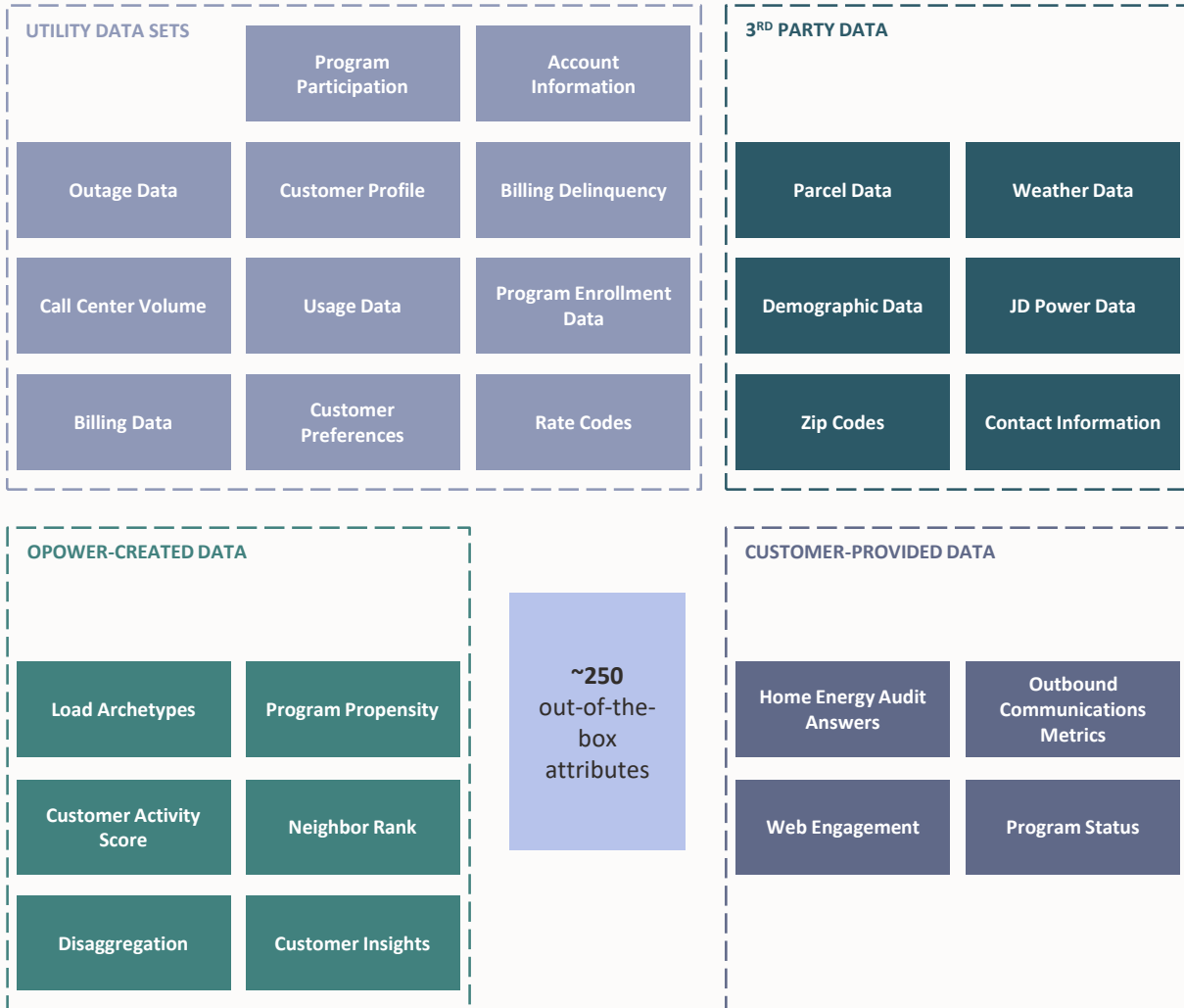# There are a lot of potential challenges without the right data

It will be hard to:

- Locate the right customers

- Determine home eligibility

- Verify Income

- Get interval data for HOMES for measured and modeled approaches
  - Not many states have Green Button Connect to verify program outcomes

- Fulfill program and legal requirements

Without seamless customer and usage data we will be left with inefficient and ineffective programs

Utilities have the data to help find and engage customers and verify program performance
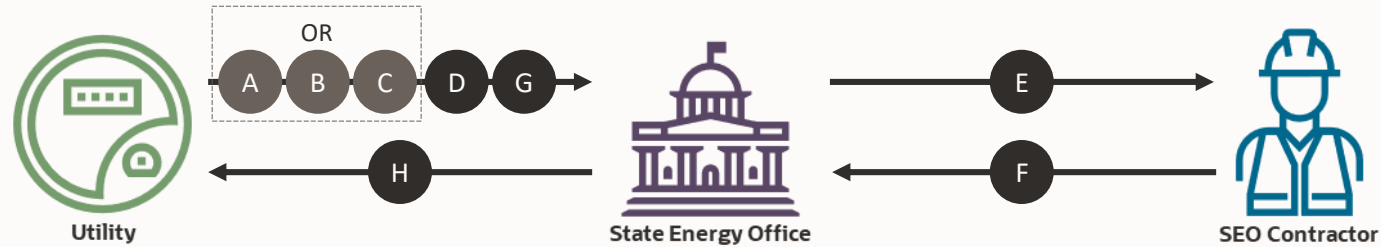
UTILITY DATA SETS

	Program Participation	Account Information
Outage Data	Customer Profile	Billing Delinquency
Call Center Volume	Usage Data	Program Enrollment Data
Billing Data	Customer Preferences	Rate Codes

3RD PARTY DATA

Parcel Data	Weather Data
Demographic Data	JD Power Data
Zip Codes	Contact Information

OPOWER-CREATED DATA

Load Archetypes	Program Propensity
Customer Activity Score	Neighbor Rank
Disaggregation	Customer Insights

~250 out-of-the-box attributes

CUSTOMER-PROVIDED DATA

Home Energy Audit Answers	Outbound Communications Metrics
Web Engagement	Program Status

Select key data from lefthand side of the page

- Customer utility and account number
- Premise attributes
  - Building address
  - Dwelling type
  - Year built
  - MF home # units
  - Renter/Owner occupied
  - # people in household
- Measured savings approach – 12 months of utility usage prior to upgrade, post upgrade
- Modeled savings approach – 12 months of utility usage prior to upgrade

  .

There are multiple options for data sharing between Utilities and SEOs and their 3rd Party Contractors

Activity	Data exchanged
SEO marketing of programs to Customers	A. From Utility to SEO: customer premise attributes for <u>all customers</u>
	B. From Utility to SEO: customer premise attributes + advanced insights (affordability, disaggregation, etc.) for <u>all customers</u>
	C. From Utility to SEO: customer premise attributes for <u>targeted customers</u> based on advanced insights like eligibility and likelihood to participate
SEO sharing with Contractors for home energy assessments and project installation	D. From Utility to SEO: pre-install usage data for program participants
	E. From SEO to SEO Contractor: customer premise attributes + pre-install usage data for program participants
	F. From SEO Contractor to SEO: updated home energy assessment + completed measures for program participants
SEO validation of project savings (measured projects only)	G. From Utility to SEO: post-install usage data for program participants for measured programs
Utility tracking of participants	H. From SEO to Utility: updated home energy assessment + completed measures for program participants

Value in what utilities provide to states to support IRA programs

Identify customers who would benefit from IRA programs

- Get customer premise data from utility
- Perform segmentation and targeting based on customer attributes available to the SEO

Present SEO IRA rebate information

- Host web portal with rebate information
- Perform marketing, education and outreach to get customers to enroll in programs

Capture customer authorization for data sharing with SEO and 3rd Parties

- Verify customer has current utility account when they authorize data sharing

Approve registration of 3rd Party Contractors for access to customer data

- Accept/reject 3rd Parties that sign up for data access
- Ensure that 3rd Parties are aware of data management policies

Get data for modeled or measured savings calculations

- Get customer usage data from utility
- Provide data to 3rd Party Contractors

Track completed customer measures

- Send completed measures to utility

Successfully finding, reaching, and removing barriers to enrollment will be super important in meeting IRA goals
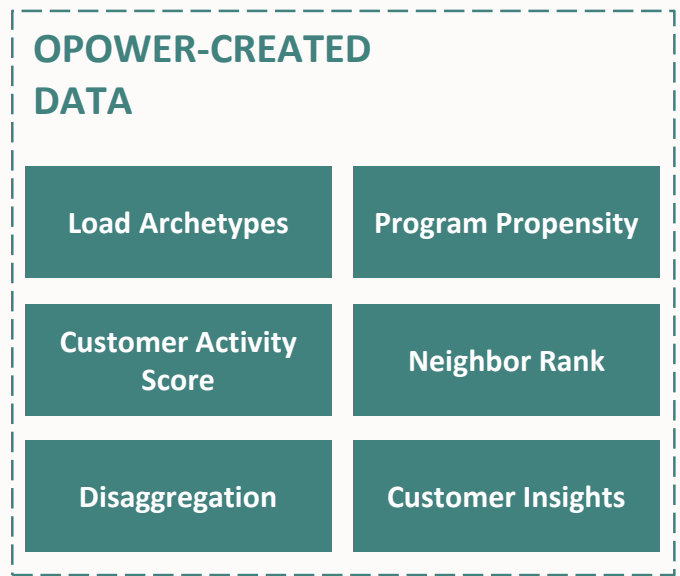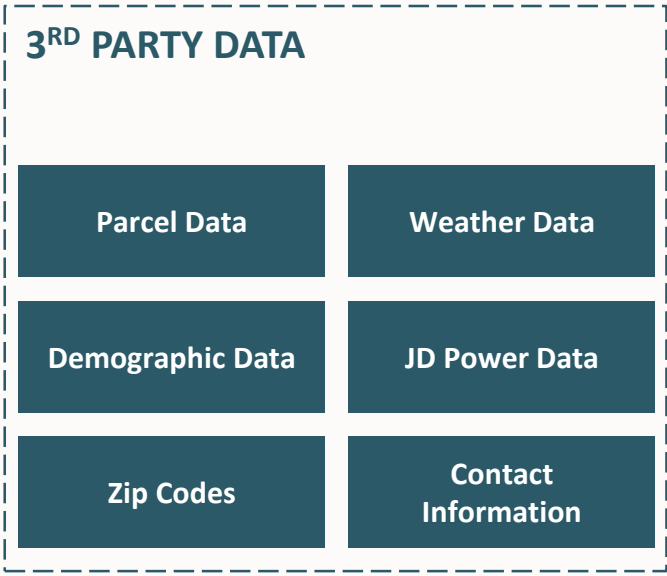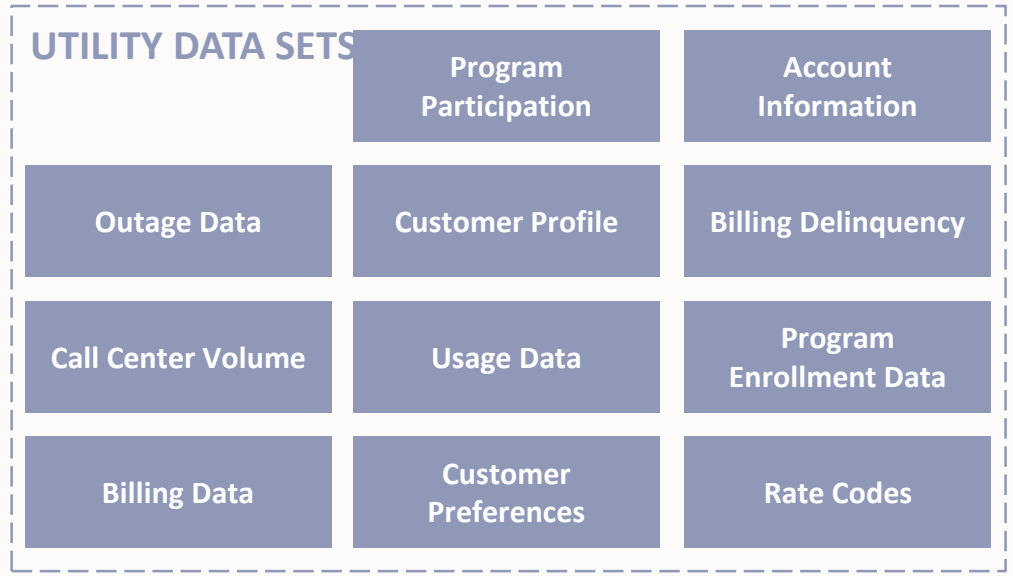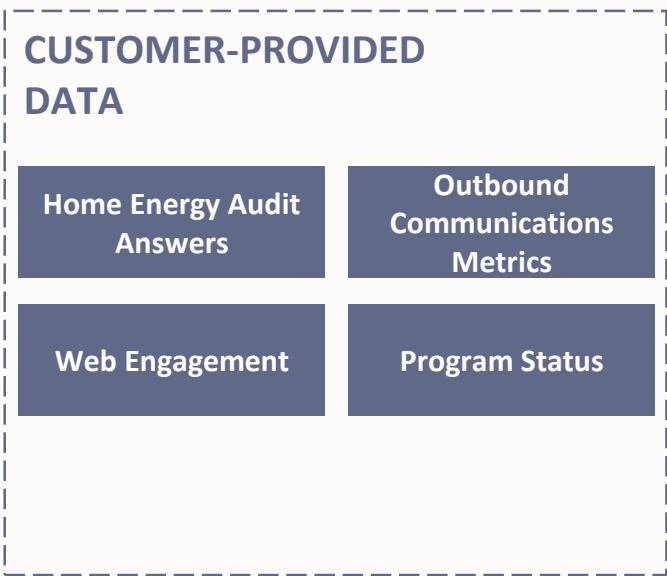

1. Find

2. Reach

3. Enroll

Find

Data is ingested from multiple sources, including from utilities

Data is layered to find high-likelihood customers for rebate programs

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Find

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Data is layered to find high-likelihood customers for rebate programs

Homeowners & Renters

Older homes
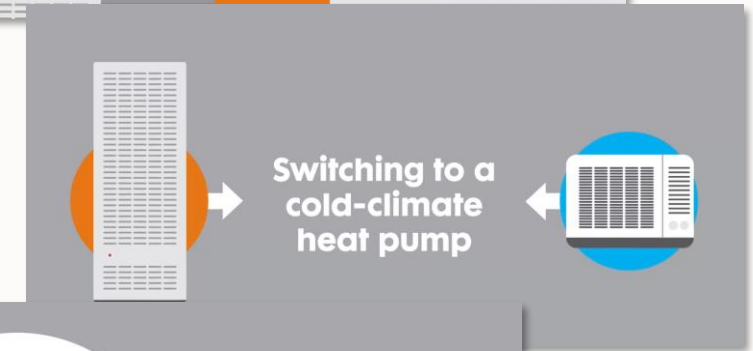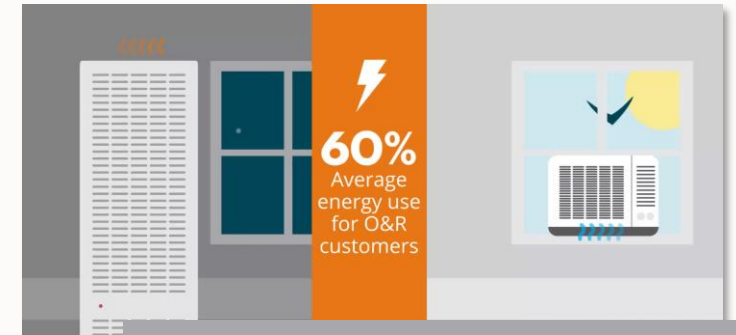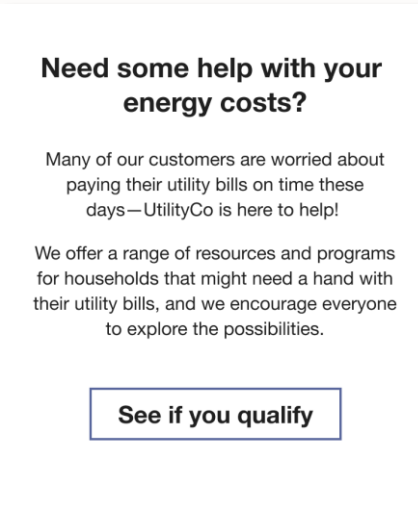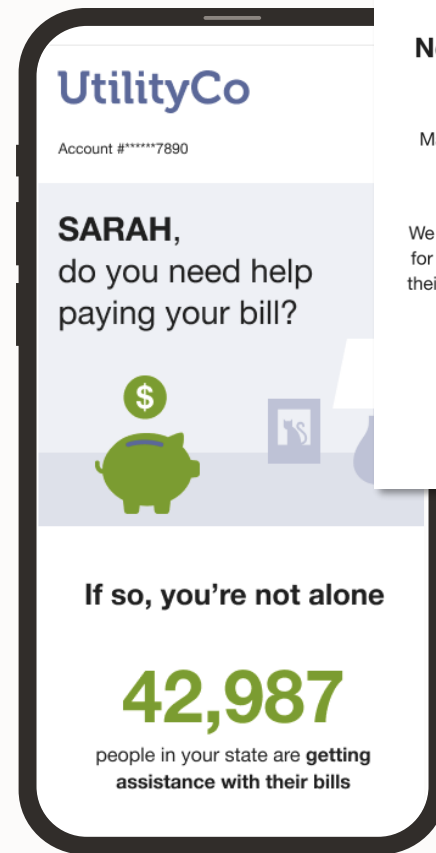
High heating usage

Lower income

Have not previously participated in the targeted program

Reach

Customers receive personalized communications across channels that matter to them that alert them of program offerings

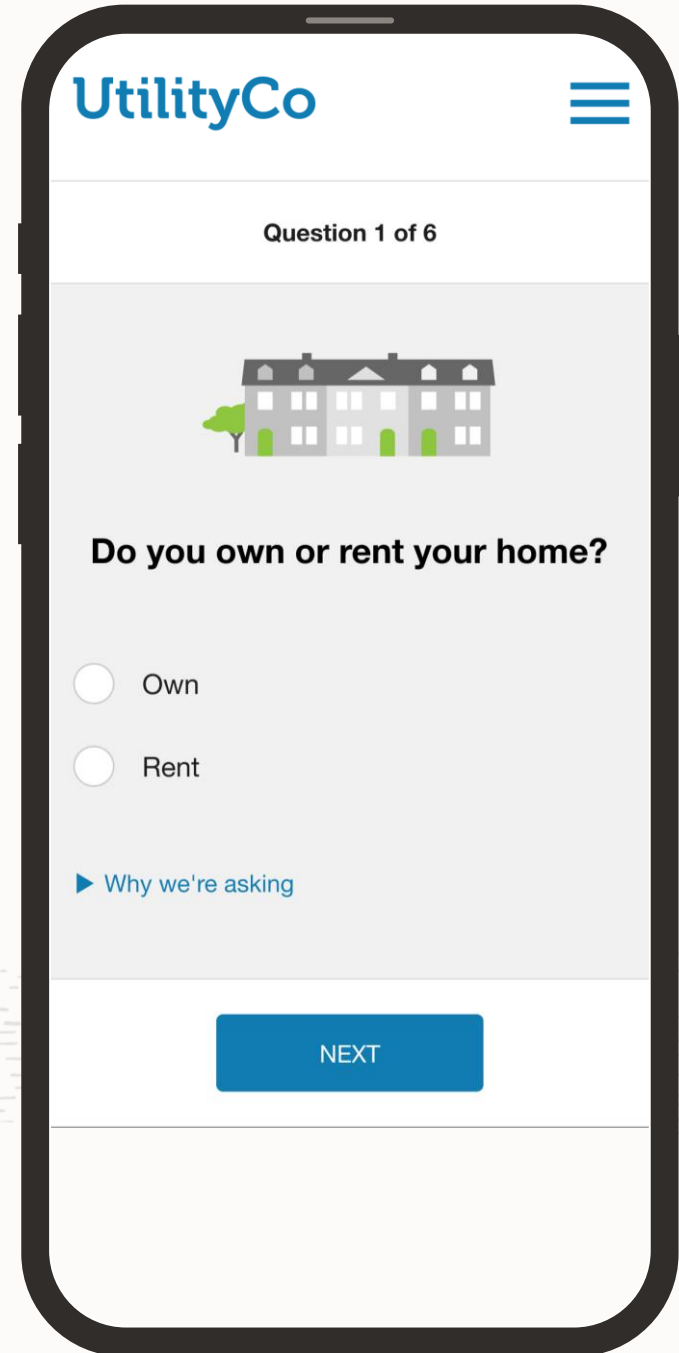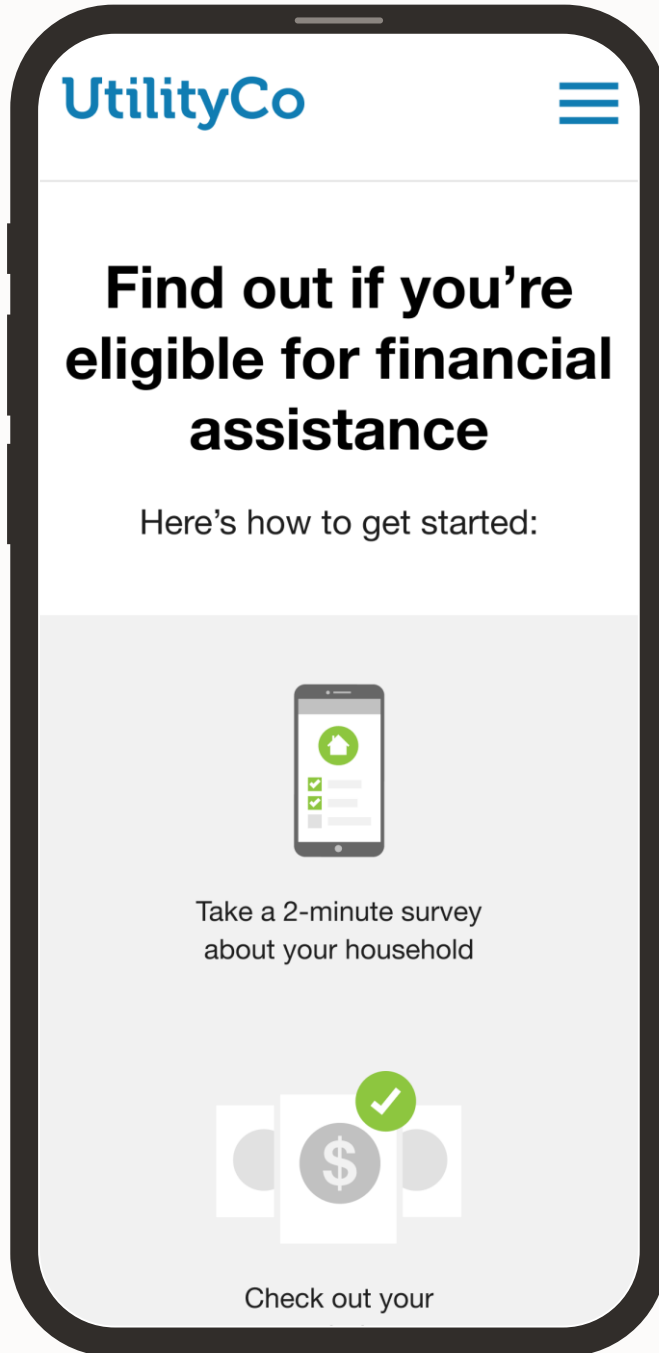Customers answer common program eligibility questions

Customers get an individualized list of programs/rebates they're eligible for. Customers can browse and find more information on each of the programs.

UtilityCo

Account #******7890

SARAH,
do you need help paying your bill?

If so, you're not alone

42,987

people in your state are **getting assistance with their bills**

Need some help with your energy costs?

Many of our customers are worried about paying their utility bills on time these days—UtilityCo is here to help!

We offer a range of resources and programs for households that might need a hand with their utility bills, and we encourage everyone to explore the possibilities.

See if you qualify

60% Average energy use for O&R customers

Switching to a cold-climate heat pump

saves on both heating and cooling.

Schedule a home energy assessment
Save up to $460 per year
19955 neighbors do this
HIDE DETAILS ▲

Why?

Most homes have many opportunities to save energy and money, but it may be hard to decide where to start. You could save up to 30% on your energy bill by making upgrades identified in your home energy audit. We can help you start saving right away when you sign up for a home energy assessment.

READ MORE →

What you can do next

Switch to Advanced LED lightbulbs for better quality light that uses 75% less energy.

SKIP   LEARN MORE

Reach

Customers receive personalized communications across channels that matter to them that alert them of program offerings
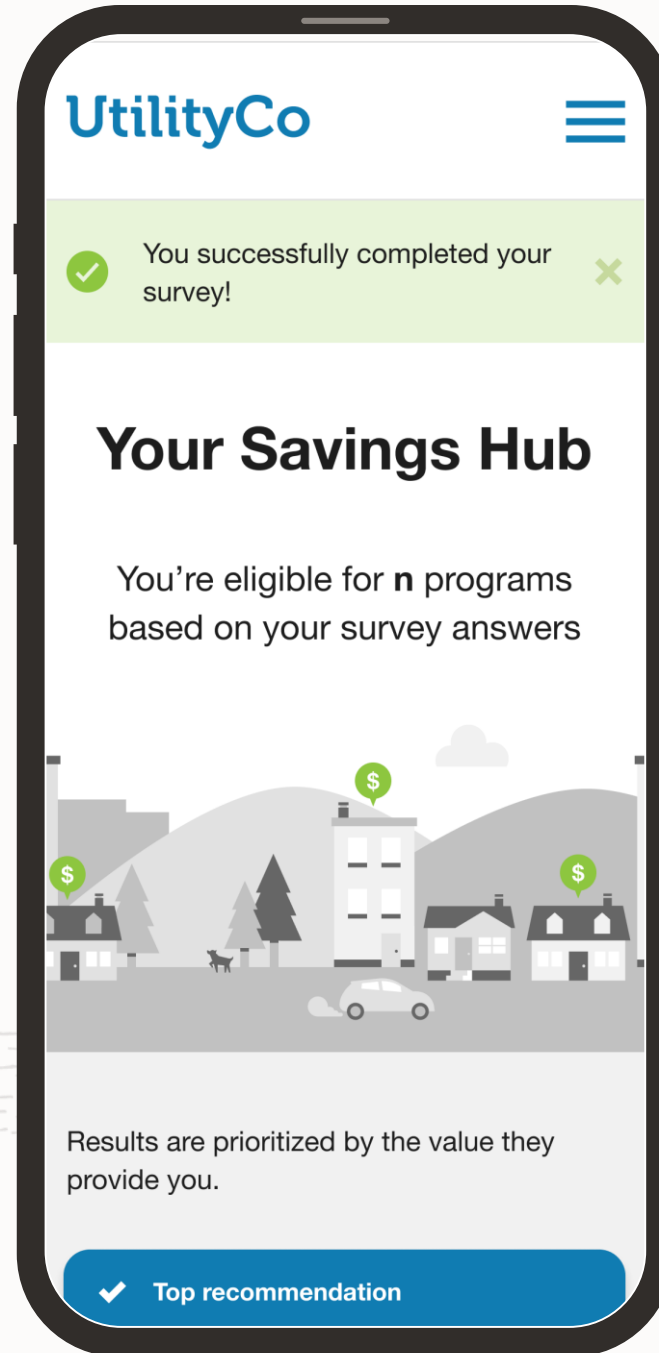
Customers answer common program eligibility questions

Customers get an individualized list of programs/rebates they're eligible for. Customers can browse and find more information on each of the programs.

UtilityCo

Find out if you're eligible for financial assistance

Here's how to get started:

Take a 2-minute survey about your household

Check out your

UtilityCo

Question 1 of 6

Do you own or rent your home?

◯ Own

◯ Rent

▶ Why we're asking

NEXT

Reach

Customers receive personalized communications across the channels that matter to them that alert them of program offerings

Customers answer common program eligibility questions

Customers get an individualized list of programs/rebates they're eligible for. Customers can browse and find more information on each of the programs.

UtilityCo

You successfully completed your survey!

Your Savings Hub

You're eligible for **n** programs based on your survey answers

Results are prioritized by the value they provide you.

✔ **Top recommendation**

For programs where enrollment is the first step, customers can kickstart the enrollment process

- Contact the Community Action Agency or affiliated organization in your area. You can call 211 for no-cost assistance.
- The application is also available to download and complete here.

Required documentation

- Proof of gross income from all sources for every household member for 4 consecutive weeks within the 3 months prior to the application date
- A current utility bill (or copy) in your name
- Social security cards for all household members

FREQUENTLY ASKED QUESTIONS

▶ What does primary heat source mean?

▶ Will CEAP pay my entire bill?

▶ How will I know when the discount has been applied to my bill?

▶ If I receive assistance from CEAP this winter can I receive financial assistance again next winter?

APPLY NOW

A Building Lens

Colleen Morris

Calico Energy
CEO

A Building Lens

- Building focused policies (BEPS, benchmarking)

- Federal Incentives for building owners
  - 179D (measured >25%)
  - HUD's Green and Resilient Retrofit Program
  - Home Efficiency Rebate Program (mf measured >15%)

- DOE's IRA 50121 Data Access Guidelines
  - EPA guidance and assistance for buildings data

- Other Initiatives
  - NYSERDA's IEDR, NH, ME
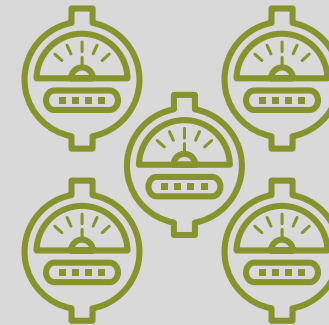
The Problem

residential commercial

Single Family Residential

Multifamily Residential
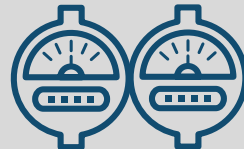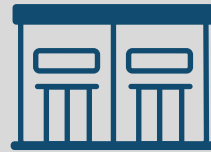
Mixed Use Commercial and Residential
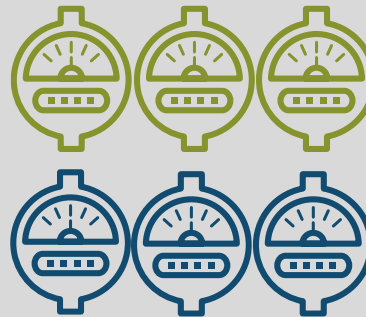
Multitenant Commercial

Owner-Occupied Commercial

CALICO ENERGY
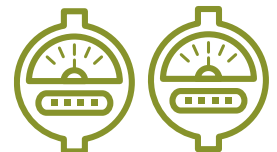
Utility Considerations

- Manual vs Automated

- Built vs Bought

- Product vs Custom

- Buildings Eligible
    - Mandated vs Elected
    - Building / Customer types

CALICO
ENERGY

Stakeholder Considerations

- **This is a new use case:**
  - Existing utility data structures / tools do not automatically support this use case
  - Commercial buildings (policy language) ≠ commercial customers (utility language)

- **It takes some work, no matter what kind of solution is implemented:**
  - Rolling up meters / accounts to buildings for aggregation
  - Ensuring ongoing accuracy as meters / tenants change
  - Users are often non-customers / account holders

- **Utility commissions / regulators play a role for IOUs:**
  - Guidance around costs and cost recovery
  - Connecting / leveraging data for other programs / metrics

- **Alignment (or lack of) across localities / regions is impactful:**
  - Variation across locations increases complexity for both utilities and users
  - Balance uniformity for users with utility-side implications
  - Best practices / standards exist

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Thank You for Attending Today's RSS

We look forward to seeing you again