upligate



Utility & Customer Engagement:

Gap Analysis



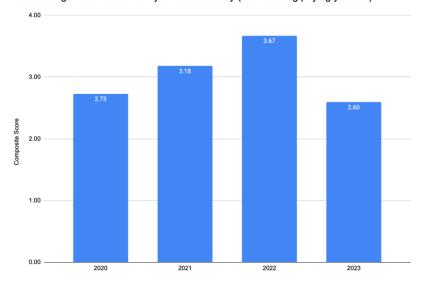


November 2023

The Problem

Utility Engagement is Not Going In the Right Direction

Composite: In the last year, how often have you used each of the following methods to contact or get information from your electric utility (not including paying your bill)?



Yet We Need Energy Customer Participation

- **Energy Efficiency Programs**
- Integrate Grid-Connected Assets
- **Enable Demand Side Flexibility**
 - DR Events
 - **VPPs**
 - Microgrids



The Question



Let's Break This Cycle:

What do Energy Customers Really Want? This Study

Gap Analysis

Perception Gaps:

What are utilities currently offering that energy customers aren't aware of?



Performance Gaps:

What do energy customers want from their utilities that they aren't providing?



This Study: Methodology





Programs: Familiarity, Interest, Who Should Provide?

Existing Programs

- High Usage Alerts
- Demand Response
- Online Home Energy Audit
- EV Charger Incentive
- EV Managed Charging
- Real-Time Energy Monitoring
- Utility Marketplace
- Smart Home Package
- Renewable Energy Rate
- Time Variable Rate
- Community Solar

New Programs

- EV Demo Days
- Neighbor Connect Program
- Clean Energy Town Hall Meetings
- Energy Punch Card
- Power Outage Backup Calculator
- Personalized Answer Center
- How-To Videos
- EV Information Hub
- Contractor Referral Network
- Home of the Future
- Single Energy Super App



Familiarity Scores:

Energy Customers Don't Even Know What Utilities Offer FINDING →

Familiarity varied...

but did not depend on if the program was actually offered

Program	Con Ed	Consumers	Georgia Power	PG&E	Overall
High Usage Alerts	3.13	2.77	3.21	3.31	3.10
Demand Response	2.58	2.26	2.68	2.49	2.51
Online Home Energy Audit	2.64	2.49	2.68	2.64	2.62
EV Charger Incentive	2.85	2.11	2.50	2.72	2.53
EV Managed Charging	2.39	2.11	2.40	2.31	2.31
Real-Time Energy Monitoring	2.84	2.63	2.72	2.79	2.74
Utility Marketplace	2.81	2.47	2.69	2.44	2.61
Smart Home Package	2.68	2.94	2.99	2.81	2.86
Renewable Energy Rate	2.77	2.73	2.81	2.81	2.78
Time Variable Rate	2.84	3.01	2.88	3.21	2.99
Community Solar	2.67	2.39	2.58	2.72	2.59

IMPLICATION →

Utilities are not doing a good job of clearly outlining programs offered



Familiarity Predictors:

Marketing
Channels are
Bias Against
Females
and Older
Customers

FINDING →

Familiarity predictors are not good news

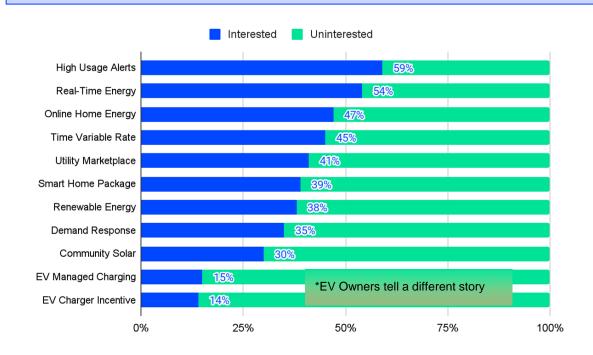
Program	Positive Predictors	Negative Predictors
High Usage Alerts	Asian, Black, Value tech	Age, Independent
Demand Response	Asian, Black, Environmentalist	Age, Female, Renting
Online Home Energy Audit		Age, Female, Independent
EV Charger Incentive	Environmentalist	Age, Female, Independent
EV Managed Charging	"Other" living, Util sat	Age, Female
Real-Time Energy Monitoring	Black, Util sat, Environmentalist	Age, Female, Renting
Utility Marketplace	Black, Util sat, Environmentalist	Age, Female
Smart Home Package	Income, Environmentalist	Age, Female, Renting, Education, Independant
Renewable Energy Rate	Black, Environmentalist	Age, Female
Time Variable Rate	Asian, Environmentalist	Condo/Apt, Independent
Community Solar	Environmentalist, Value tech	Age, Female, Renting

IMPLICATION -

Look at Communication Strategy and Channels

Familiarity Sparks Interest





IMPLICATION → This is an Awareness Challenge



New Programs:

- →Save me \$
- → Make it Easy
- →Just for Me
- → Bring it to Me

New Program Interest

Program	Average Interest Level	
Energy Punch Card	3.73	Save \$ Easy
How-To Videos	3.71	Easy For Me
Personalized Answer Center	3.66	Save \$ For Me
Power Outage Backup Calculator	3.64	Easy For Me
Single Energy Super App	3.59	Save \$ Easy For Me
Contractor Referral Network	3.51	
Home of the Future	3.42	
EV Information Hub	3.27	
Clean Energy Town Hall Meetings	3.15	
EV Demo Days	3.14	Requires Leaving the House
Neighbor Connect Program	3.12	

Positive Predictors:

- Environmentalism
- Valuing tech

Negative Predictors:

- Age
- Politically independent



The Not-So-Good News?

Interest is Highest in Programs that Don't (yet) Exist

Program	Average interest level
Energy Punch Card	3.73
How-To Videos	3.71
Personalized Answer Center	3.66
Power Outage Backup Calculator	3.64
Single Energy Super App	3.59
Contractor Referral Network	3.51
Real-Time Energy Monitoring	3.49
High Usage Alerts	3.45
Home of the Future	3.42
Utility Marketplace	3.28
EV Information Hub	3.27

Program	Average interest level
Time Variable Rate	3.27
Online Home Energy Audit	3.25
Renewable Energy Rate	3.19
Smart Home Package	3.17
Clean Energy Town Hall Meetings	3.15
EV Demo Days	3.14
Neighbor Connect Program	3.12
Demand Response	3.02
Community Solar	2.81
EV Charger Incentive	2.39
EV Managed Charging	2.20



Green = New Program Blue = Existing Program

The Good News?

Utilities Are The Answer

Existing Programs	Who Should Offer? Ist Choice	Who Should Offer? 2nd Choice
High Usage Alerts	Electric Utility	Tech Company
Demand Response	Electric Utility	Tech Company
Online Home Energy Audit	Electric Utility	Tech Company
EV Charger Incentive	Car Company	Electric Utility
EV Managed Charging	Electric Utility	Car Company
Real-Time Energy Monitoring	Electric Utility	Tech Company
Utility Marketplace	Electric Utility	Tech Company
Smart Home Package	Electric Utility	Tech Company
Renewable Energy Rate	Electric Utility	Tech Company
Time Variable Rate	Electric Utility	Other
Community Solar	Electric Utility	Government

New Programs	Who Should Offer? Ist Choice	Who Should Offer? 2nd Choice
Energy Punch Card	Electric Utility	Government
How-To Videos	Electric Utility	Tech Company
Personalized Answer Center	Electric Utility	Tech Company
Power Outage Backup Calculator	Electric Utility	Tech Company
Single Energy Super App	Electric Utility	Tech Company
Contractor Referral Network	Electric Utility	Government
Home of the Future	Electric Utility	Tech Company
EV Information Hub	Car Company	Electric Utility
Clean Energy Town Hall Meetings	Electric Utility	Government
EV Demo Days	Car Company	Electric Utility
Neighbor Connect Program	Electric Utility	Government



Key Takeaways

- Program Innovation: Look outside for inspiration
- Revisit your marketing and media strategy
- Messaging Emphasis:
 - Save Me \$
 - Make it Easy
 - Just for Me
 - Bring it to Me



Thank You!

Dan.Burak@uplight.com



Appendix



Program Descriptions: Current Programs

Program Name	Description
High Usage Alerts	A program in which you opt-in to getting alerts via, for example, text or email, when you are on track to use a higher amount of energy than normal.
Demand Response	A program that connects with your smart thermostat or other device and adjusts their energy use to manage electricity demand. Devices turn off and on automatically and you get a financial incentive for participating, for example, \$50 for enrolling in the program and \$25 for each year you participate.
Online Home Energy Audit	A website that allows you to enter info about your home and receive personalized energy efficiency recommendations. For example, given when you last cleaned your HVAC system, you might be recommended to schedule a cleaning.
EV Charger Incentive	A program through which you get paid a certain amount, for example \$250 for installing an at-home electric vehicle charger, and a greater amount, \$500, for installing this charger and allowing a 3rd party to control when you charge.
EV Managed Charging	A program where you're paid a fixed amount per month to allow a third party to control when your electric vehicle charges, while still ensuring that your vehicle has the charge you want when you want. For example, if you plug in your electric vehicle after work, they may delay charging until night time when fewer people are using electricity, and still ensure your car is charged by the morning.
Real-Time Energy Monitoring	A program in which you are shown your energy use in real time or in detailed intervals, such as hourly.
Utility Marketplace	A site where you can find and purchase energy products, view reviews, and see rebates and incentives that help make the product more affordable, such as \$70 off a smart thermostat or \$20 off a smart power strip. Enrolling in another program at the same time (e.g., Demand Response) opens up further product discounts.
Smart Home Package	A smart home device or system installation program, where you purchase smart devices, such as smart thermostats or doorbells, and receive help with the installation and setup of these devices.
Renewable Energy Rate	An electricity rate that allows you to choose what percent of your monthly electricity you would like to source from renewables, such as solar or wind. The more renewable energy you buy, the more expensive this rate is than a traditional electricity rate. On average, buying renewable electricity equivalent to all of the electricity you use in a month costs on average \$5-10 extra.
Time Variable Rate	A rate that varies over a given period of time. Often, this is a time-of-use rate, in which your energy rate varies based on the time of day. For example, energy would be more expensive during peak times (i.e., 4-9pm), and less expensive during non-peak times. On average, customers save 5-10% on a time-of-use rate compared to a normal rate.
Community Solar	A program in which you can invest an additional amount on top of your energy bill each month to fund a local community solar project. On average, it costs an extra \$15 a month to invest in enough solar to cover your monthly electricity.

Program Descriptions: New Programs

Program Name	Description
EV Demo Days	A program in your community that provides you with free test drives of select electric vehicles along with expert advice on installing EV chargers, enrolling in EV rates, and other EV-related solutions.
Neighbor Connect Program	A resource and referral program that connects people who have recently purchased major energy-related products (e.g., solar panels, heat pumps, or an electric vehicle) with others in their neighborhood who are interested in learning more about such products.
Clean Energy Town Hall Meetings	A program that provides regular in-person information sessions with energy experts from your utility, where you can ask questions about current and future clean energy technologies, electrification, and utility programs such as time-of-use rates.
Energy Punch Card	A savings incentive program where, if you save a certain amount of energy for 12 months in a row, your next month of energy is free.
Power Outage Backup Calculator	An interactive online tool that allows you to enter information about your home to receive recommendations for products and programs (e.g., solar and battery storage) that would help you weather a power outage for a given period of time.
Personalized Answer Center	An online resource that allows you to ask specific questions about clean energy technologies (e.g., solar panels, community solar, or electric vehicles) and get customized answers based on your situation. For example, you could request personalized information on the cost and payback period for installing solar panels in your home.
How-To Videos	An online resource of Youtube-style videos that feature real customers sharing their experiences and tips for saving energy, enrolling in energy programs (e.g., custom rate offerings), or buying energy-related products (e.g., smart thermostats, electric vehicle chargers, or solar panels).
EV Information Hub	An online portal that brings together all the information you need to purchase an electric vehicle (EV), including comparisons of vehicle costs and driving ranges, as well as information on buying and installing a charger and anticipated costs related to ownership and charging based on your energy rates.
Contractor Referral Network	An online resource center that provides a utility-vetted list of contractors for the installation of energy and electrification projects (e.g., solar panels, heat pumps, electrical panel upgrades, or electric vehicle charging solutions).
Home of the Future	An online virtual home that showcases new energy technologies (e.g., induction stoves, electric vehicle charging solutions, solar panels, heat pumps, and more). This resource provides explanations of how these technologies work, how much they cost, and payback times, as well as financing advice.
Single Energy Super App	A smartphone app that brings together information from across all of your energy-related devices (e.g., electric vehicles, electric vehicle chargers, solar panels, batteries, and smart thermostats) so you can review their energy use and optimize them for the cheapest and cleanest energy.

