



# BIDGELY'S CX 2.0 PLATFORM

Next-Generation Customer Engagement Through Energy Intelligence & Hyper-Personalization

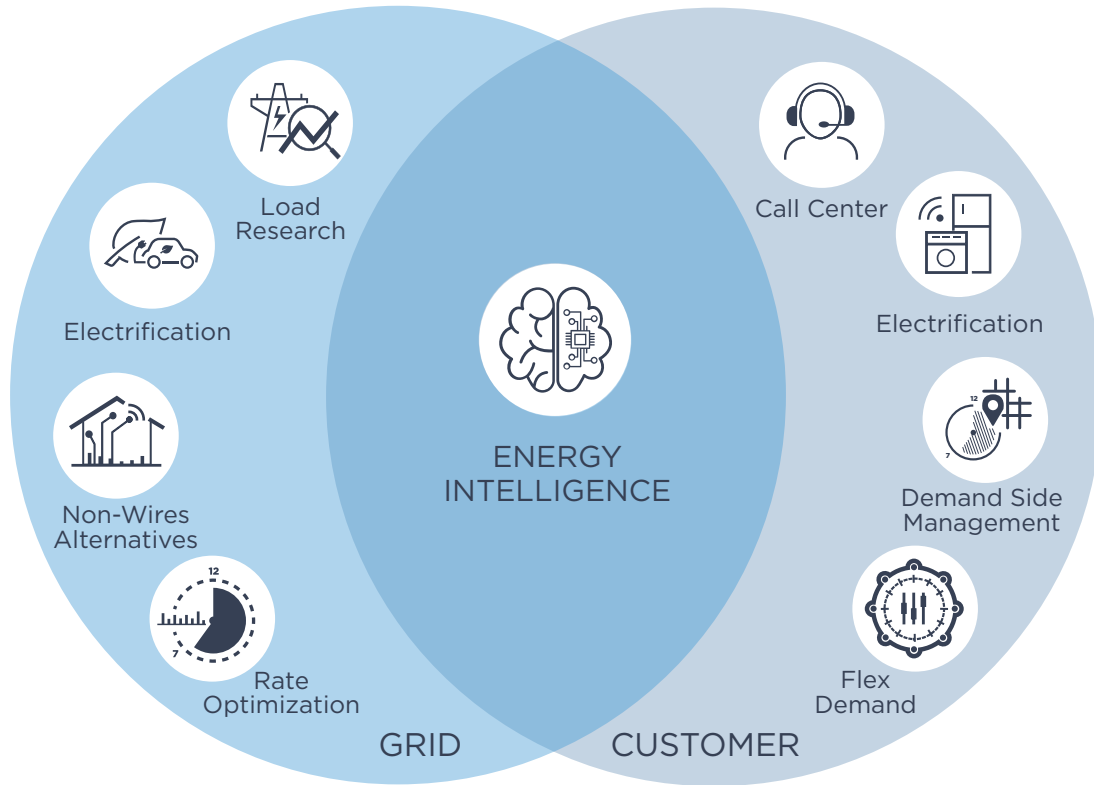
## A CX Platform Ready for Next-Generation Energy Customers

The next-generation energy customer is here. "Ratepayers" are transforming into energy partners, bringing to the grid their solar panels, EVs, and other distributed energy resources and participating in load shaping through demand response, efficiency, time of use, and more.

As customers and the grid come together, energy utilities need next-generation CX solutions — CX 2.0 — that leverage detailed usage insights to connect customers with outcomes such as decarbonization, electrification, flex demand, non-wires alternatives, distributed energy resources management, and more.

Bidgely's CX Platform uses behind-the-meter energy intelligence about each customer's appliances and behavior to deliver hyper-personalized experiences and Next Best Interactions that build trusted partnerships with customers and drive utility program performance.

# NEXT-GENERATION ENERGY LANDSCAPE



## GRID OUTCOMES DELIVERED BY BIDGELY

**EV Integration:** detection, planning, customer engagement to shape charging patterns for every EV in your territory

**Smarter Segmentation & Targeting:** 360° view of your customer to drive marketing for programs, products, & services

**HVAC Electrification:** see and engage inefficient or fossil-fuel intensive heating/cool to drive grid decarbonization

**Bottom-Up Rate Design:** using your full population to analyze, optimize, & develop rates

**Distribution Grid Planning:** bottom-up analysis for each of your grid assets from transformers to substations

**Theft Detection:** AI finds theft at the premises level with greater accuracy and reduced resource demand

**Automated Load Research,** inclusive of your full population

**More Accurate Forecasting:** bottom-up forecasting by customer segment or by grid asset

**Real-Time Measurement & Verification:** for improved performance & agile program management

**Non-Wires Alternatives:** Avoid or delay costly investments in grid infrastructure by shifting demand

## CUSTOMER OUTCOMES DELIVERED BY BIDGELY

**Next-Gen Billing:** give customers control & clarity with appliance-level usage insights & alerts

**EV Owner Engagement:** Behavioral & managed load-shift

**Hyper-personalized recommendations** lead to increased participation in utility programs and marketplaces

**Heat Pump Adoption:** target, engage, motivate customers to embrace heat pumps to meet decarb goals and help them save

**TOU Rate Adoption:** Enroll best-fit customers & maximize benefits of TOU pricing for them

**Peak Load Shift:** engage customers across their appliances to redefine load curves

**Higher CSAT:** deliver better experiences through hyper-personalized across channels

**Increased Energy Savings** for Medium to Low consumption Customers

**TOU Rate Coaching:** educate and motivate customers to align their usage to rates that makes sense for them

**Empowered CSRs for More Positive CX:** 360° customer view for better support, upsell, and reduced call handle times

**Smarter Segmentation & Targeting:** drive marketing for programs, products, & services at the individual customer level

ENABLED BY: **BIDGELY'S SUITE OF ANALYTICS & ENGAGEMENT SOLUTIONS**

Smart Alerts	Gas Engagement	Web Portal	DSM Targeting
SMB Engagement	Grid Analytics	Evaluation, Measurement & Verification	Theft Analytics
Analytics Workbench	CARE (Call Center)	Load Research	Rate Design
Next-Generation HERs	EV Journeys	Lead Generation	Behavioral Demand Response
	EV Analytics		

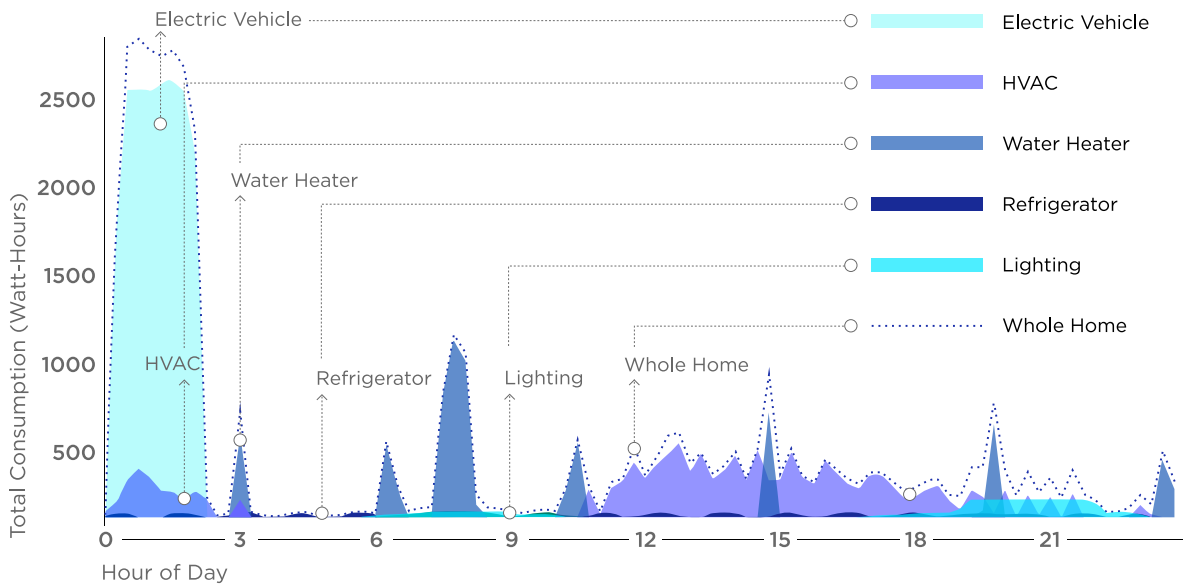
**AI-Powered Disaggregation Enables Greater Relevancy**

The foundation of Bidgely's CX solutions platform is our UtilityAI™ technology, which uses artificial intelligence (AI) and advanced analytical models to disaggregate and itemize meter data across 11 appliance categories, such as heating/cooling, EVs, always-on power, and much more.

These insights are backed by 16 data science patents (approved or in progress) and are available without installed hardware, opt-in dependency, or third-party data sources.

**BIDGELY'S AI-POWERED DISAGGREGATION**

- behind-the-meter visibility
- 11 appliance categories
- 30M+ homes to learn from
- 40 global utilities
- 16 energy-focused patents
- No hardware required
- Infinitely scalable



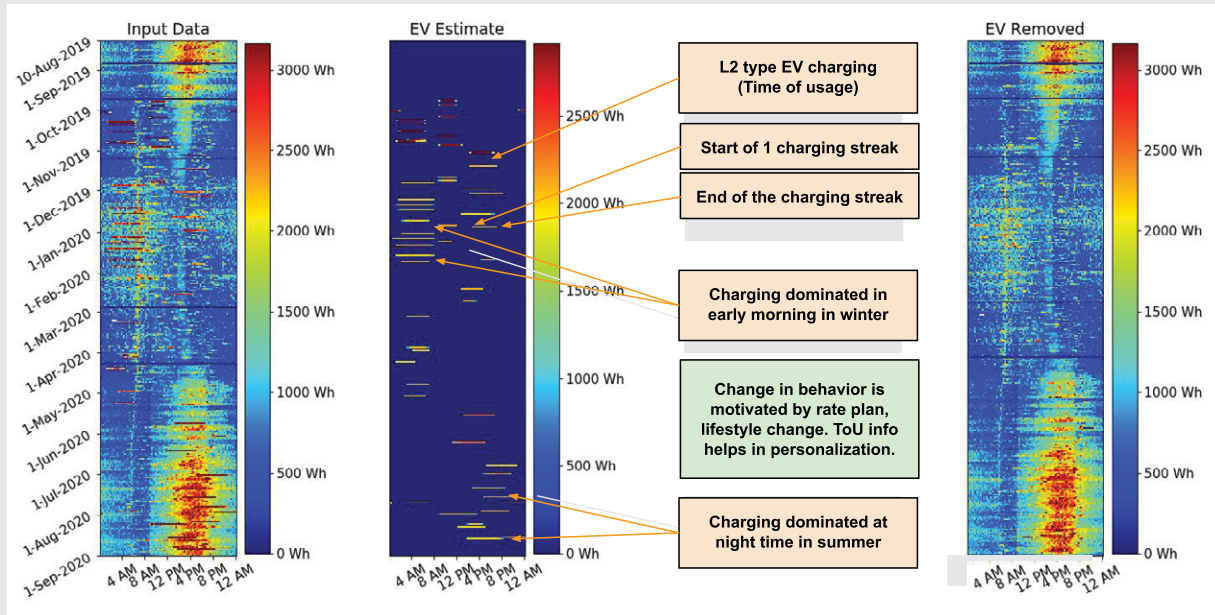
*Bidgely's advanced appliance-level disaggregation, based on AI-enabled data science and backed by 16 patents, can give energy providers deep behind-the-meter visibility into the needs of each customer.*

# Disaggregation in Action

As an example of the power of AI-powered Disaggregation for engaging today's customers, let's consider electric vehicle (EV) extraction from meter data.

EVs draw more power than virtually any other residential appliance. There are three main types of EV chargers: L1, L2, and L3. L1 chargers draw lower power whereas L2 and L3 chargers draw much higher power and run for relatively short periods of time.

The series of heatmaps in the figure below shows how Bidgely's UtilityAI™ disaggregation technology is able to identify L2 charger consumption extracted out of total energy and the resulting residual energy.



Extraction of EV estimates from raw energy consumption

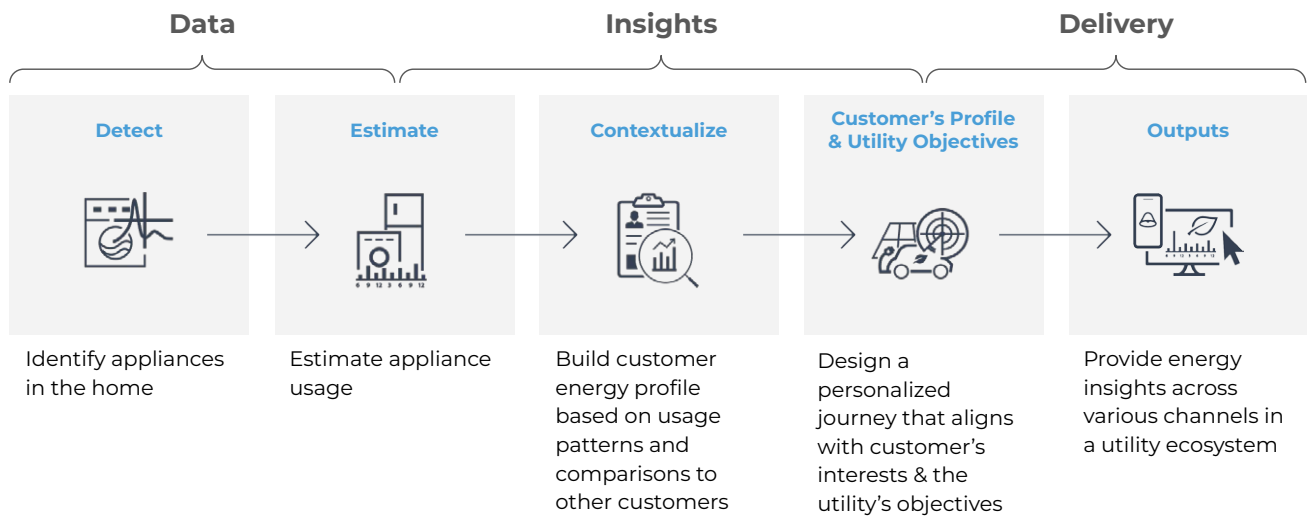
## Understand Your Customers More Completely

With Bidgely's disaggregation, insights are derived from actual customer behavior, expressed through meter data. As customers engage with the unique appliances in their homes and with Bidgely's omni-channel solutions over time, a richer profile of each customer emerges.

AN ACCURATE & ACTIONABLE ENERGY PROFILE			
CONSUMPTION PROFILE	APPLIANCE PROFILE	ANALYTICAL INSIGHTS	ENGAGEMENT PROFILE
<b>Month : June</b> * Monthly Consumption: 1200 kWh * Group: High consumption * Heating: 0.0 kWh * Cooling: 756 kWh * ... * Always ON: 98 kWh	<b>Heating:</b> * Time of use * Size/type * Always on component * Variable component * Level of efficiency * ... <b>Cooling:</b> * Time of use * Size/type * Always on component * Variable component * Level of efficiency	* Self/Similar home comparison * Self/Seasonal similar home comparison * Usage behavior (e.g. max/min, overall trends) * Bill projection * Bill analysis * Budget alerting * Vacation insights * Best rate/tariff * TOU behavior insights * PV-related insights * ..... <b>PROPNESITY PROFILE</b> * Propensity to enroll in utility programs * Propensity for value-added products & services (EV chargers, solar PV, etc.) * .....	* Email & Web * Opens * Clicks * Call Center * Calls * ..... <b>DWELLING PROFILE</b> * Meter ID * Size of home * # of rooms * Age of home * # of occupants * ..... <b>LIFESTYLE PROFILE</b> * Active hours * Lifestyle type: stay at home, office goer, late nighter, etc. * Vacation profile * .....
<b>Month : July</b> * Monthly Consumption: 1560 kWh * Group: High consumption * Heating: 0 kWh * Cooling: 987 kWh * ... * Always ON: 102 kWh	* ... <b>Pool-Pump:</b> * Time of use * Size/type * Always on component * Variable component * Level of efficiency	* .....	* .....
<b>Month : December</b> * Monthly Consumption: 1630 kWh * Group: High consumption * Heating: 1123 kWh * Cooling: 0 kWh	<b>Electric Vehicle:</b> * Time of use * Charger amplitude * Water Heating, Refrigeration, Lighting, Always On, etc.	* .....	* .....



Alone, UtilityAI™ insights provide a detailed look into each customer’s energy use, and when delivered across a suite of Bidgely engagement tools or embedded within customer service systems of record, the value impact for customers and utility alike grows exponentially.



## Hyper-Personalized Customers Journeys

### Relevance-Based Targeting

Legacy, top-down program strategies that deliver general messages to poorly defined groups of customers are costly, and inefficient and damage the trust customers have in their utility as an energy partner that understands them.

With disaggregation-based insights, however, utilities can engage each customer individually — as a “segment” of one—and strengthen trust.

Bidgely’s CX platform equips utilities to align the right customers to the programs that are most relevant to them and most valuable to utilities’ program objectives.

In order to deliver the most relevant engagement and highest program value, our AI-enabled customer analytics enable energy providers to identify the best customer candidates aligned to your programs based on location, appliance ownership, time of use, behavioral factors, and more, including:

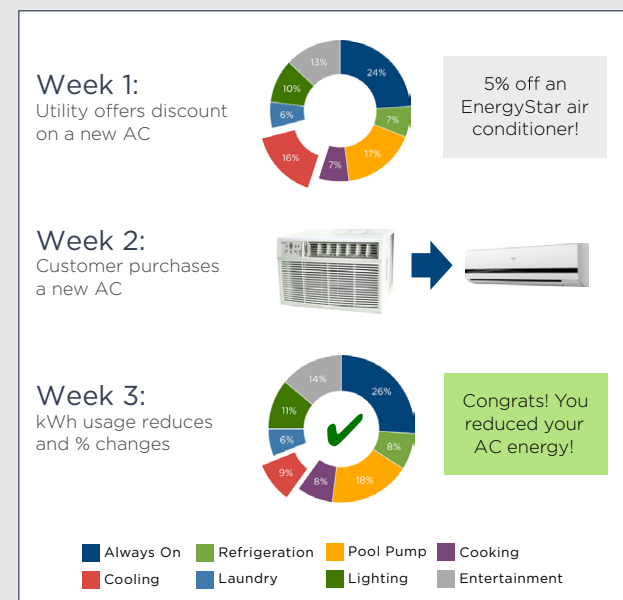
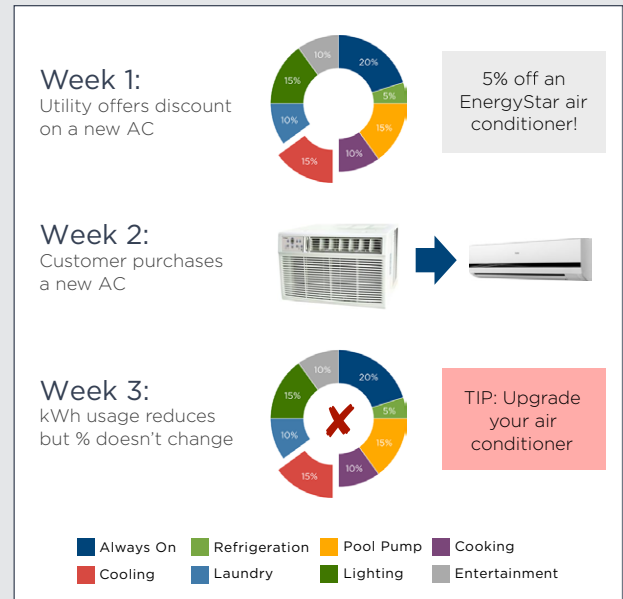
-  **Which homes have EVs and who is charging during peak hours**
-  **Which homes have inefficient or degrading HVAC systems**
-  **Which homes have pool pumps and whether they are single or variable**
-  **Insights into appliance health**
-  **And other insights not available apart from customers self-reporting.**
-  **Which homes are the most valuable candidates for Demand Response based on appliances within the home.**

Learn more about targeting and engagement by downloading Bidgely's [Analytics Workbench for Marketing & Measurement Brief](#).

### True Disaggregation Improves Engagement Value & Customer Experience

In the example to the right the utility using statistical disaggregation has no way of identifying that the customer's AC usage has reduced, and by sending an additional AC-related marketing message in week 3, the utility loses credibility.

The utility using true, AI-based disaggregation is in a much better position on a number of levels. Bidgely disaggregation can be used to individually target the homes with the most inefficient AC usage, reaching out with very focused messaging. And in the case that a customer does purchase a new AC, Bidgely disaggregation will detect the improved efficiency, and in week 3, can close the loop with the customer, reinforcing their positive energy-saving habits and building customer trust.

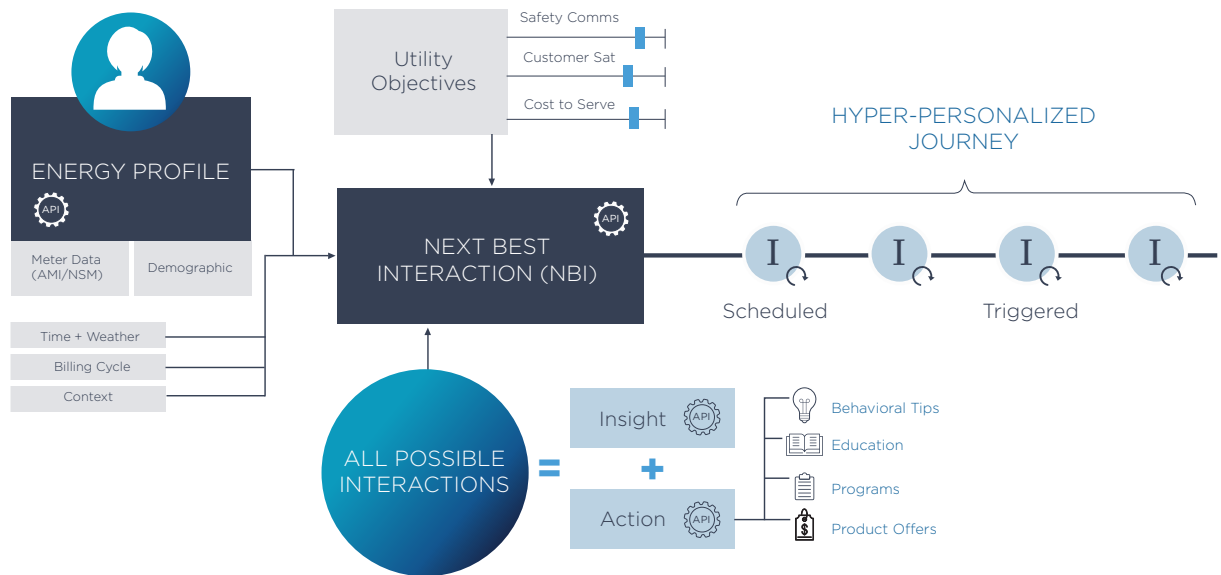


## Next Best Interactions

As customers engage over time, Bidgely uses those touchpoints to enrich their profiles and then surface optimally relevant energy insights and recommended actions. We call these recommendations “Next Best Interactions” (NBIs).

By stringing together NBIs over time through the customer’s preferred channels, energy providers are able to craft hyper-personalized journeys for each customer that drive higher levels of engagement.

## CREATING HYPER-PERSONALIZED JOURNEYS



*Bidgely's NBI logic engine drives maximum relevance across all customer journeys, touchpoints, and channels, increasing program performance, customer satisfaction, and engagement levels.*

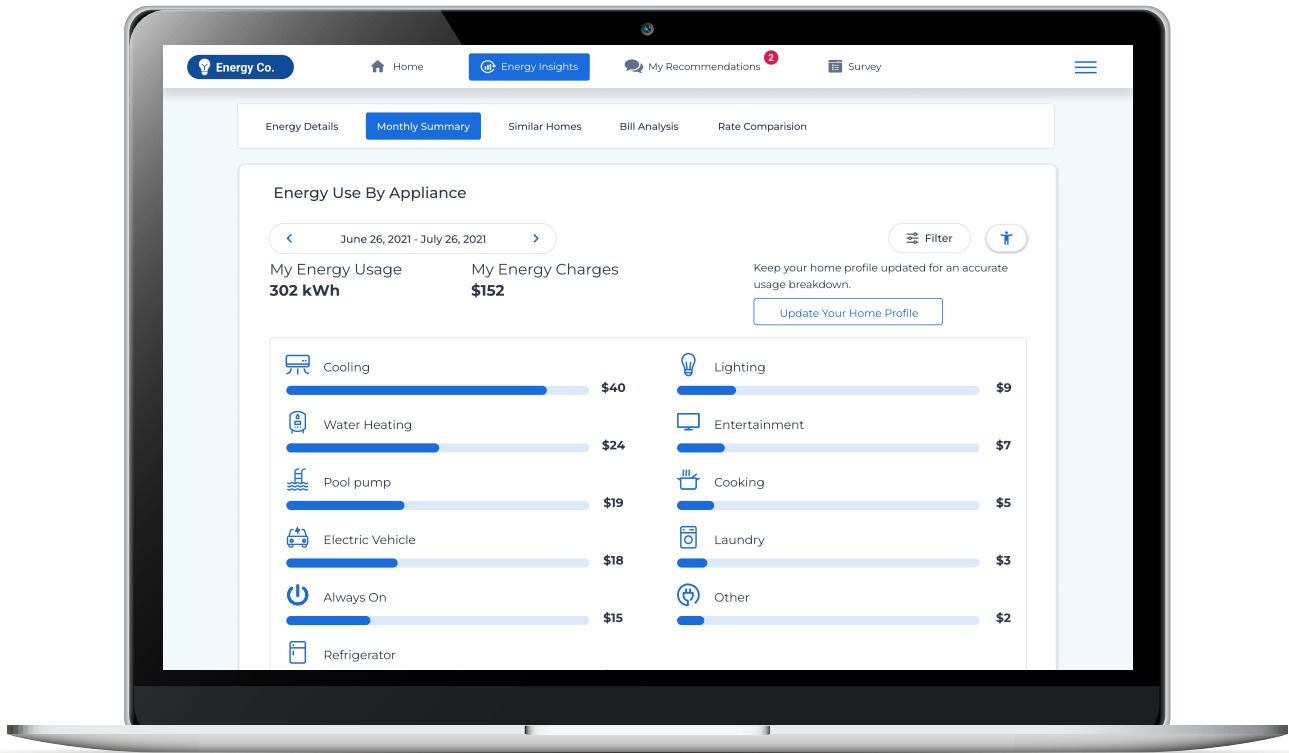
## CX 2.0 Platform Outcomes: Customer Value

Bidgely's CX Platform enables utilities to deliver experiences and outcomes that matter most to modern customers.

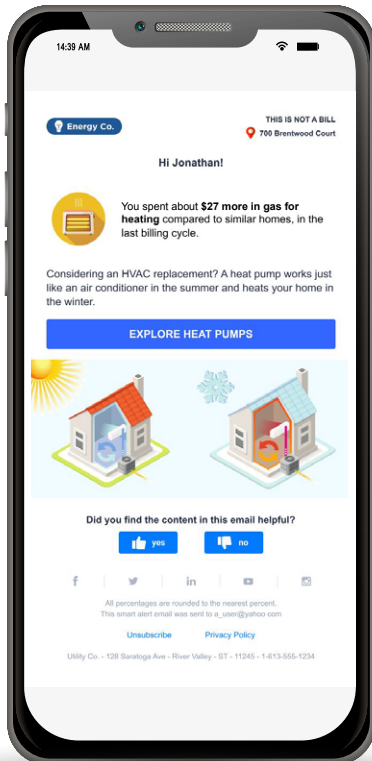
### Insight Into Consumption & Costs

Giving customers appliance-level visibility into their energy use empowers them to make informed decisions about how they use energy — and how those decisions impact their bills.

Customers also receive clear feedback about the impact of their energy efficiency decisions and investments, both on their bills and the environment.



*Bigely's UtilityAI™ disaggregation technology enables utilities to empower customers with itemized insights down to the appliance level, to make better-informed decisions about their energy usage, delivered on their preferred channels.*



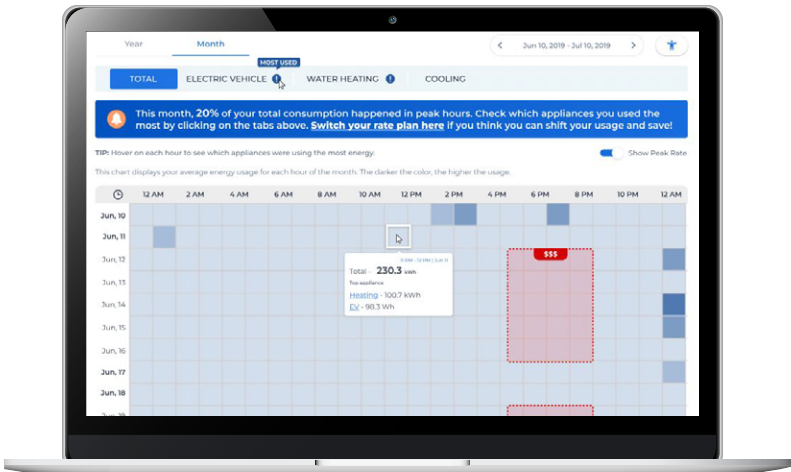
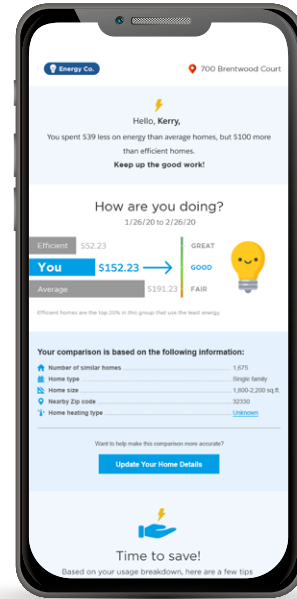
## Appliance Detection & Performance

The ability to detect a new appliance, such as an EV, or identify an inefficient, degrading HVAC can have major value for customers. Not only does flagging these changes quickly enable utilities to deliver personalized touchpoints, but it also makes it possible to present relevant offers, incentives, and rates that increase value for customers.



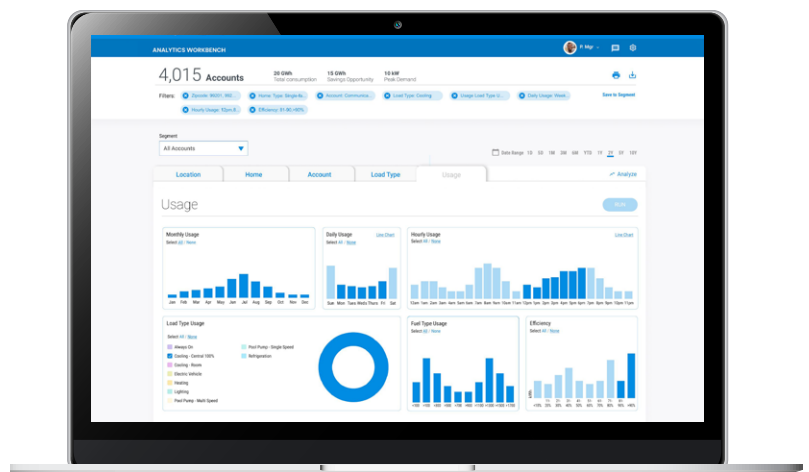
## Similar Home Comparison

Many customers want to know how their usage stacks up against others in their communities. Bidgely continues to refine and update our Similar Home Comparison logic to account for emerging Distributed Energy Resources (DER) such as solar and EVs. Customers should be praised and rewarded for these investments, not sent messages about their high use. Bidgely's platform accounts for these subtle changes in their behind-the-meter energy resources.



## Program Recommendations, Targeting & Adoption

Align programs to best-fit customers to deliver better relevance and drive better adoption. Instead of sending generic offers out across massive groups of customers who may or may not find them relevant, Bidgely enables program marketers to target individual customers with the right set of characteristics and propensity scores.



## DER Insights

Understanding the impact of DERs and how to manage them effectively are difficult enough for utilities, but customers traditionally have even less visibility and control after they've made a purchase. Bidgely's platform changes that by enabling customers to see the specific impact of these new energy resources, how they are impacting their bills, and how modifying behaviors like charging off-peak or using energy-intensive appliances when renewable energy is plentiful can make a difference.

# CX 2.0 Platform Outcomes: Grid Value

Given energy consumers' increasingly crucial role in the energy landscape, customer engagement is taking on an even greater role, helping utilities build resilient, flexible grids.

Bigdely's CX 2.0 Platform is built with these grid outcomes in mind, equipping energy providers to help customers become active, informed participants in driving grid resilience, decarbonization, electrification, and other important outcomes

## Map Behind-the-Meter Customer Assets to the Grid

Map the loads from individual customers' appliances, EVs, solar, etc. to specific grid assets such as feeders and substations to precisely visualize stress and surplus on the grid.

Disaggregation-based insights enable grid operators to do a bottom-up analysis of all of the loads occurring on its grid assets and then model the impact of shifting customers to different grid assets.



Energy loads aggregated by substation and region.



APPLIANCE	NWS REGION	OVERALL REGION
ELECTRIC SPACE HEATING	12% ownership	16% ownership
AIR CONDITIONING	79%, of which: · 30% window A/C · 70% central A/C	57%, of which: · 45% window A/C · 55% central A/C
WATER HEATING	7% ownership	19% ownership
EV CHARGING	2.5% ownership	0.7% ownership
POOL PUMP	15%, of which: · 73% single speed · 27% variable speed	6%, of which: · 89% single speed · 11% variable speed

## Non-Wires Alternatives

Visualizing grid load on a behind-the-meter level enables operators to find opportunities for non-wires alternatives (NWA) to infrastructure investment.

For example, in areas with heavy EV adoption, promoting EV Time Of Use (TOU) rates or home-based solar incentives to restructure load can help avert, or at least delay, the addition of costly grid infrastructure build-out.

NWA visualization is especially important as DERs continue to proliferate.

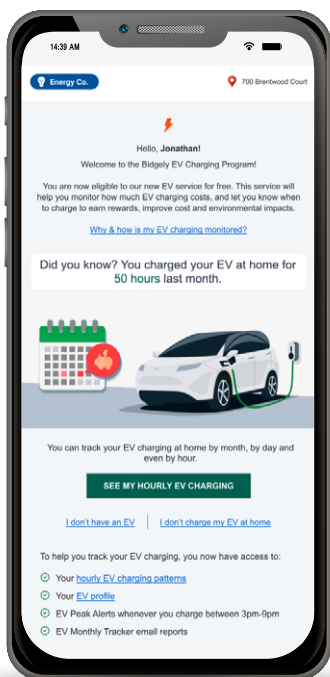
## Time-of-Use Rate

Through disaggregation-based personalization, Bidgely's CX Platform enables utilities to change their TOU approach from blunt peak shaving en masse to precision load crafting by moving specific customers and appliances load around.

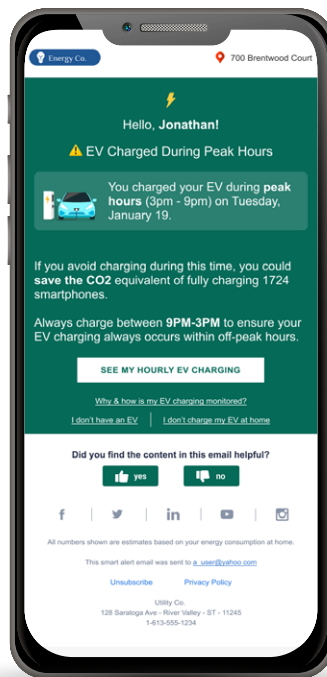
Utilities can now coach customers to optimize their usage of specific appliances—for example, EVs, HVACs, water heaters, pool pumps, or others—to maximize savings by leveraging their time of use.

## EVs & Behavioral Load Shifting

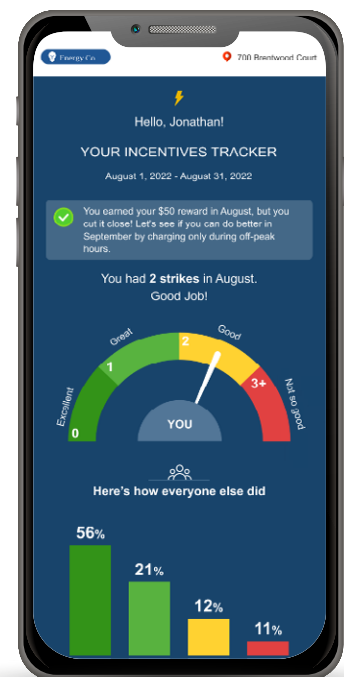
Bidgely's CX Platform enables a multifaceted approach to shift EV charging load, including TOU rates for predictable load management, educational alerts that make EV drivers more conscientious of their charging and its impact on their bill, and even opt-out gamification approaches that reward customers for not charging on-peak.



WELCOME & ENROLLMENT



PEAK CHARGING ALERT



GAMIFICATION: MONTHLY SCORE

# The Proof is in the Program Performance

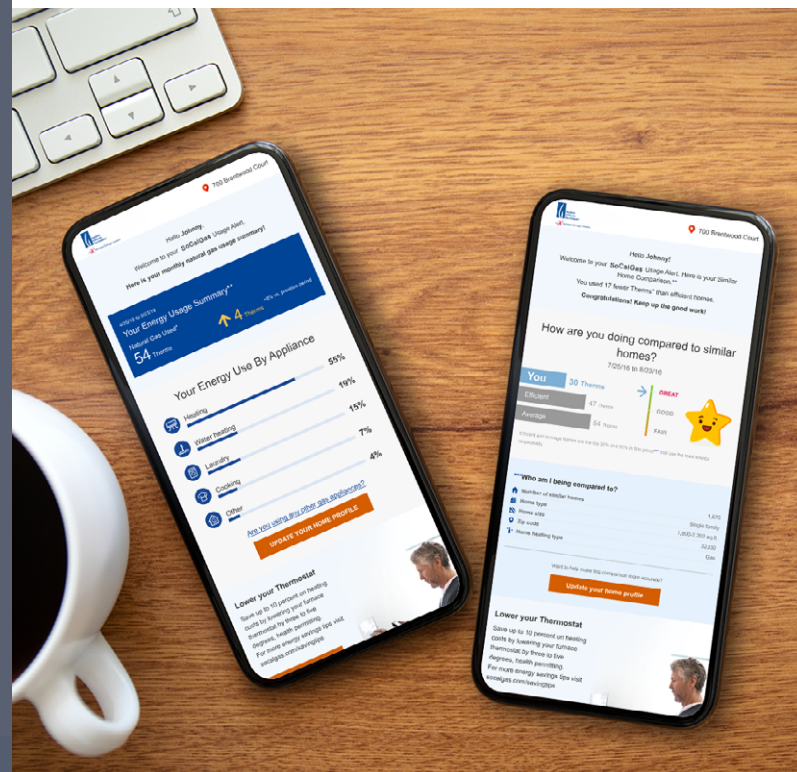
Leading utilities around the world are working with Bidgely to build customer journey-based programs that drive high CSAT and deliver exceptional engagement.

The following case studies provide a sample of some of the outcomes our utility clients are achieving.

## Energy Savings Journey: Helping New Customer Segments Save Energy

### Objective:

Southern California Gas Company (SoCalGas) had been offering home energy reports (HERs) designed to help high-consumption residential customers save energy. The program traditionally used social comparisons of total whole-home gas usage for a given month against that of efficient and average usage neighbors. But by 2019, the utility had deployed AMI meters to 100% of its customers and understood that utilizing the power of AI and data would empower them to build on their HER program and expand it to the next level. SoCalGas wanted to test its hypothesis that energy savings can be achieved by treating average consumption customers through digital-only channels can serve as a vehicle to deliver cost-effective savings.



### Solutions:

- AI-powered Gas Engagement solution from Bidgely
- Digital HERs targeting medium- to low-consumption residential customers

### Approach:

- Target medium-consumption customers (405,000 customers)
- Outbound monthly summary, itemized HERs, and similar home comparison reports with personalized recommendations.
- Machine learning from more than 50 billion smart meter reads made possible consumption disaggregation of AMI gas meter reads and allowed the generation of accurate appliance-level insights for all customers.

## Results:

- SoCalGas exceeded its energy savings goals
- 565,000 therms saved in the first program year
- 0.5% energy savings rate within the first 4 months
- 50% repeat email open rates
- 81% “like” ratings from customers
- Less than 3.5 months to launch

While traditional paper-based home energy reports (HERs) target high-consumption residential customers, this partnership introduced a first-of-its-kind digital-only program to improve customer engagement and expand savings for medium-consumption users. Read the [press release](#).



**0.5%** ENERGY SAVINGS RATE WITHIN FIRST 4 MONTHS



**286K** THERMS SAVED FOR 405K MIDDLE CONSUMPTION CUSTOMERS



**50%** REPEAT EMAIL OPEN RATES



**<3.5** MONTHS TO LAUNCHED

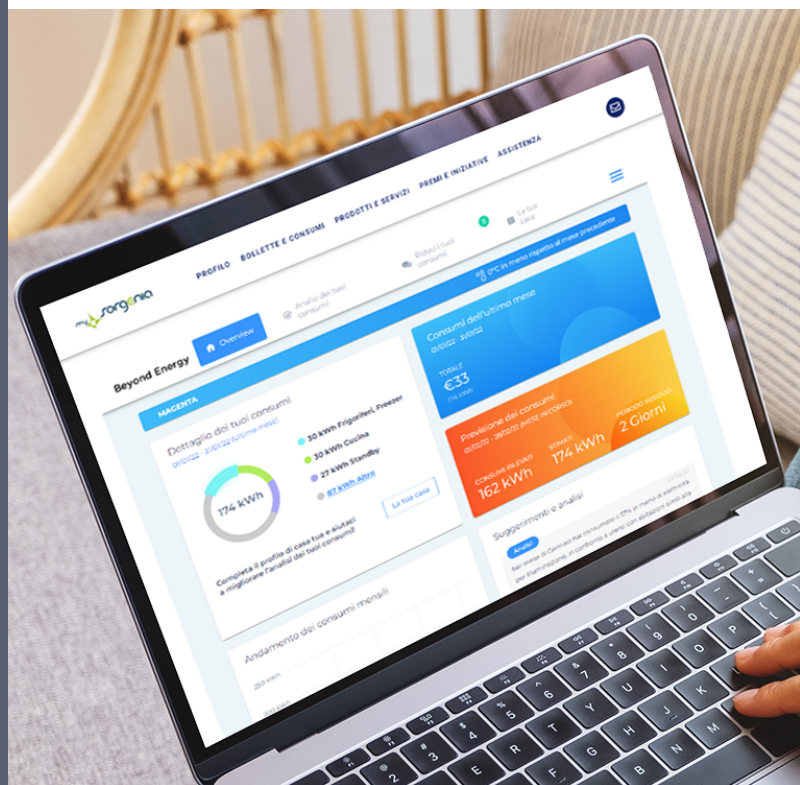
## Customer Retention Journey: Keeping Customers Happy and Engaged Through Personalized Insights

### Objective:

Sorgenia, an electric and gas retailer based in Milan Italy, represents nearly 3% of Italian energy capacity and supplies 500,000 households and businesses in the highly competitive Italian energy market. Sorgenia sought to enhance its customer-facing web portal and MySorgenia mobile app by adding functionality to help residential customers—regardless of meter type—better understand how they use energy, manage their consumption, and live more sustainably. Read the full [case study](#).

### Solutions:

- Sorgenia and Bidgely collaborated to design Beyond Energy, a web- and app-based digital energy consulting service powered by Bidgely’s energy analytics.



## Approach:

- Give customers appliance-specific itemized energy bills.
- Give personalized energy savings and sustainability advice to every customer.
- Deliver consumption forecasts and daily consumption trend reports routinely to smart meter customers.
- Leverage similar home comparisons by the appliance to allow customers to better gauge their use of energy.
- Deliver mid-bill projections to reduce high-bill shock.

## Results:

- 45,000-and-counting customers have participated in the Beyond Energy program
- 46% open rate for Beyond Energy communications
- 4 out of 5 satisfaction rate
- Reduction in high-bill calls
- Promotion of Sorgenia's full range of programs, products, and services

## Connected Customer Engagement Journey: Building a Single Source of Truth Across Channels

### Objective:

NV Energy sought real-time customer account integration to ensure that any changes in customer data—disaggregation analytics, survey answers, home audit results, call center outcomes, etc.—would be reflected immediately in the customer record. This “single source of truth” approach would ensure that the customer always sees up-to-date information that NV Energy business units were all working from the same data. For example, call center agents would view the same energy data and usage insights that customers see to assist in call resolution, and field auditors would use the data and insights to better prepare for in-home energy assessments. Read the full [case study](#).



## Solutions:

- UtilityAI™-powered online “Insights Dashboard” to give NV Energy customers:
  - Appliance disaggregation information
  - Personalized energy-saving tips
  - Similar home comparison insights
  - Next-gen Home Assessment Survey
- Bidgely HERs 2.0 (paper & digital)
- Customer CARE call center portal
- Bidgely Analytics Workbench

## Approach:

- Roll out online “Insights Dashboard” portal in 2017.
- NV Energy then expanded the Insights Dashboard Home Energy Assessment’s value proposition by making it the foundation of its in-home services program where it could be used as a walk-through piece when an energy auditor is in a customer’s home.
- In 2018, rollout of “In-Home Energy Assessment” as an online, tablet-based tool that replaces traditional paper and pen for in-home energy audits.
- In 2018, introduced paper UtilityAI HER 2.0
- In 2019, expansion to digital + paper HER 2.0.
- In 2019, rolled out Bidgely’s Customer CARE call center tool to help CSRs better serve customers.
- In 2019, introduced proactive program targeting alerts to customers with potential appliance issues and offers for solutions.

## Results:

- 13 GW savings in the first year of HERs.
- 40 GW savings in the first three years.
- 1.8x energy savings among paper+digital recipients over paper-only.
- 50% email open rates.
- 80% energy audit completion rate



# EV Load-Shift Journey: Engaging Customers to Manage EV Demand

## Objective:

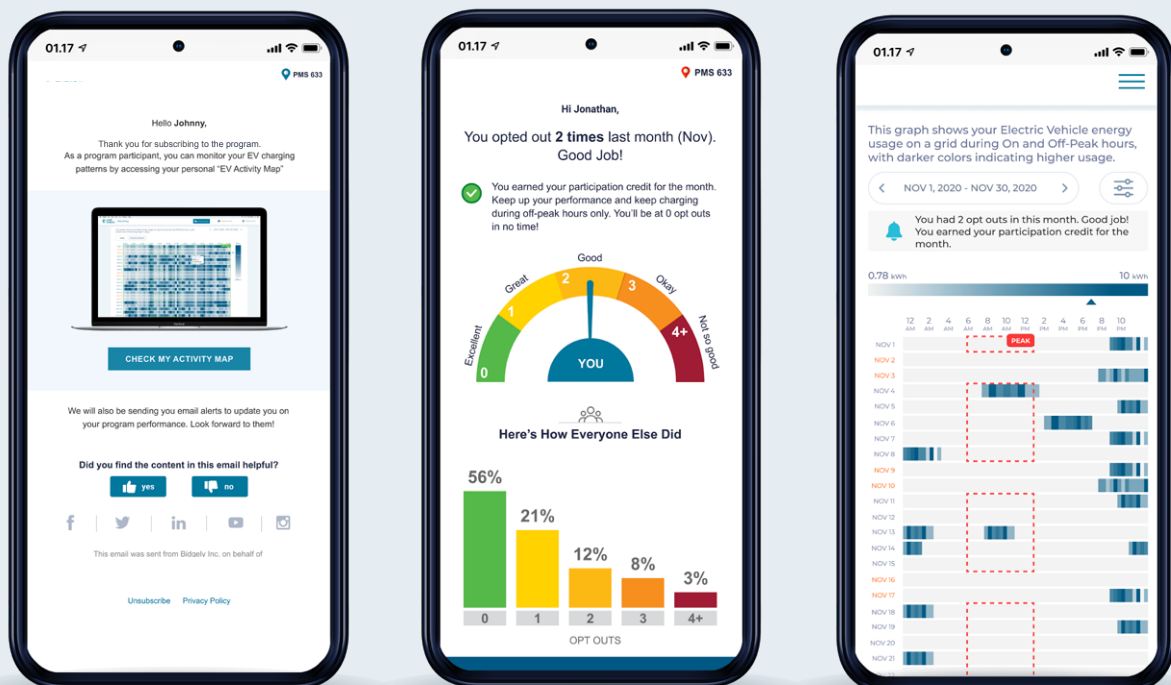
A large investor-owned utility (IOU) in the Southeastern U.S. wanted to develop a reliable way to shift EV charging load to off-peak hours in anticipation of growing transportation electrification across its service territory.

## Solutions:

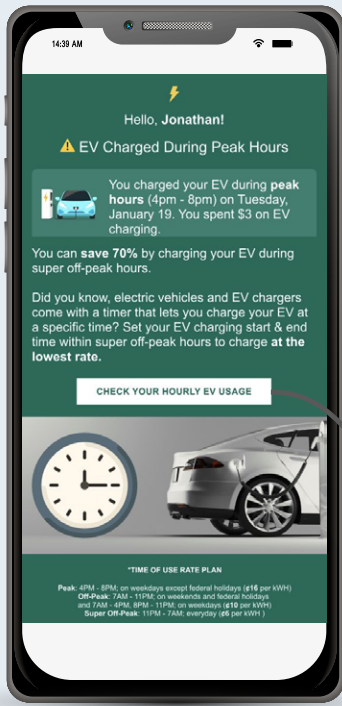
- Analytics Workbench for EV detection
- Behavioral load shifting alerts
- Mobile-responsive web app for behavioral-based load shifting

## Approach:

- Identify EV owners through meter data disaggregation.
- Recruit into EV program.
- Track charging behavior and eligibility for incentives through ongoing personalized email alerts and web portal for customers in program.
- \$20 Incentive if household stays below 3 strikes/month.
- Strike alerts + monthly recap sent to all participants.

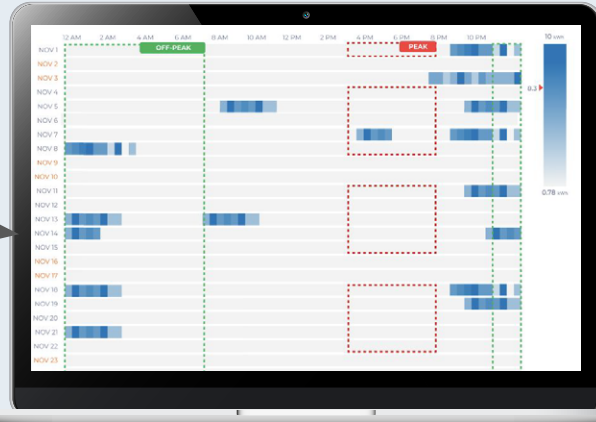






### Peak Charge

After a customer charges during their peak window they are notified.



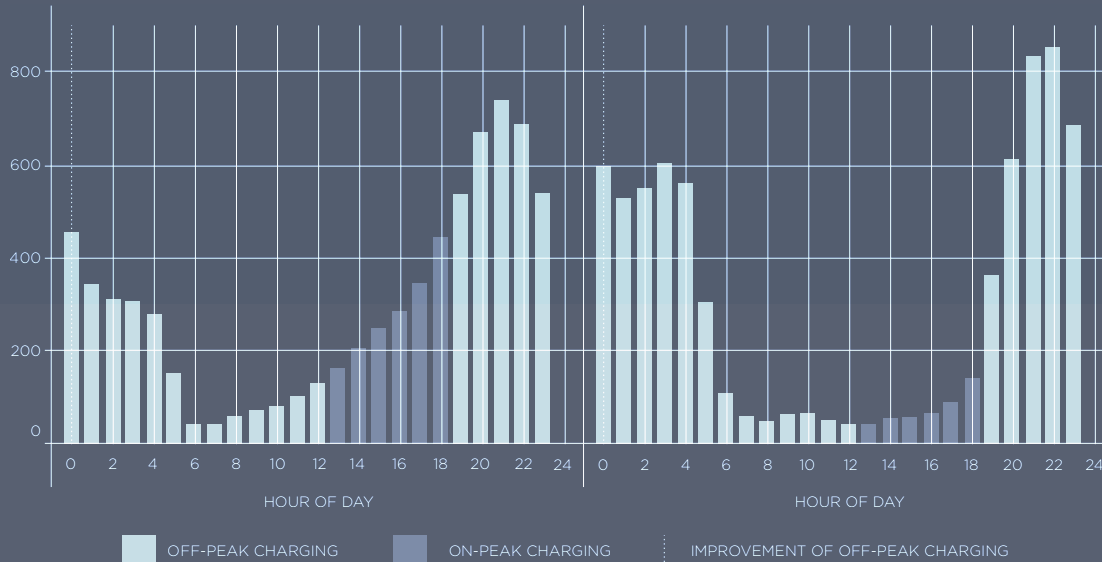
Activity Map

### Results:

- 90% EV detection accuracy
- 71% email open rate with 55% click-through
- 70% kWh reduction in on-peak charging
- 16% reduction of households charging on peak
- 100% “thumbs-up” rating

BEFORE TREATMENT

AFTER TREATMENT



## Ready to Upgrade Your CX?

Whatever is driving your utility's investment in CX, Bidgely can enhance the value of interactions with your customers with behind-the-meter energy intelligence, personalized insights and NBIs, and a suite of modern, connected delivery solutions.

Find out why IDC has named Bidgely a leader in its [MarketScope: Worldwide Digital Customer Engagement Solutions for Utilities 2021 Vendor Assessment](#).

For additional support, Bidgely's [Playbook for Building a Customer Experience 2.0 Platform](#) outlines 10 practical criteria utilities can use to evaluate their CX investment options and ensure their solutions deliver data-driven relevancy.

To speak with a Bidgely representative about building or enhancing your CX platform, [contact us](#).

