

A woman and a young girl are looking at a futuristic display in a museum or exhibition space. The woman is wearing a black t-shirt and the girl is wearing a white shirt. They are both smiling and looking at the display. The background is filled with colorful, glowing geometric shapes and patterns.

# How can AI amplify energy wellbeing in an era of competing priorities?

■ ■ ■  
The better the question. The better the answer.  
The better the world works.



Shape the future  
with confidence

# Introduction



**Greg Guthridge**

EY Global Industrials & Energy Customer Experience Transformation Leader

“  
Energy wellbeing is about more than satisfaction. It is the integrated experience of how energy makes people think, feel, believe and act — and ultimately enables personal prosperity, sustainability and happiness.”

Energy affordability is in the spotlight, but there is a story behind the headlines. The changing energy system and technology advances are also influencing consumers' overall energy wellbeing and reshaping what they expect from providers.

Rising prices mean consumers are squeezed. In many regions, increased energy costs have outpaced inflation and income gains. As I write this introduction – in April 2026 – the conflict in the Middle East is adding to existing global tensions, exacerbating already challenging conditions for consumers. While the long-term impacts of the current situation are unknown, the impact on energy affordability, security, sustainability and economic growth is once again a key focus for governments, businesses and consumers.

Of course, the energy industry is no stranger to volatility. Since the EY Navigating the Energy Transition research program began in 2020, we've seen how consumer engagement and expectations have changed through the COVID-19 pandemic, ongoing geopolitical tensions, inflationary pressures, transformational technology innovation and an ever-evolving energy

system. Responses to this year's survey were gathered before the current Middle East conflict but, even then, consumers were reporting that energy costs were fundamentally impacting their lives. And their message was clear: They expect energy providers to help, not just with stop-gap measures but with purposeful support that will contribute to their long-term wellbeing.

We live in a world where ongoing energy disruptions can feel overwhelming. Our news feed is full of stories of price rises, resource inadequacy and soaring demand from data centers and manufacturing. It would be understandable if energy consumers reacted with frustration, anxiety and uncertainty. But our survey found consumers are engaged, interested and ready to take action to cut bills and gain greater control over their energy experience, in ways that suit them.

Now it's up to energy providers. With more tools, technology and innovation than ever before, they have an opportunity to deliver on consumers' expectations through exceptional experiences that go beyond affordability. They are poised to amplify energy wellbeing.

# Our research program

Over six years, our ongoing consumer research program has surveyed around 120,000 residential energy consumers and more than 2,400 mid-sized to large businesses. Most recently, we surveyed 17,200 consumers across 20 markets to understand how new energy solutions, digital technologies and rising energy prices are impacting expectations and behaviors.

These consumers are energy decision-makers driving investments in energy products and services, managing energy use and interacting with energy providers. Their perspectives, along with those we've gathered across six years of research, highlight the evolution in consumer energy needs and values — and shine a light on how our emerging energy future will be defined by an empowered consumer with more choice and control.

**6** years  
Continuous research

**120k+**  
Residential consumers

**2.4k+**  
Large- and medium-sized businesses

**20**  
Regulated and non-regulated markets

**7**  
Business sectors

## Global energy consumer research 2026

**20**  
markets

**17,200**  
respondents

Australia

Germany

Japan

Portugal

Belgium

Greece

Malaysia

Spain

Brazil

Hong Kong

Netherlands

Sweden

Canada

Ireland

New Zealand

UK

France

Italy

Poland

US



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# Energy goes from mild to wild

The past couple of years have seen a new energy landscape take shape, defined by relentless growth. In 2024, electricity demand outpaced that of GDP for the first time in three decades, a trend projected to continue to 2030.<sup>1</sup> Accelerating demand, exacerbated by the proliferation of data centers, as well as broader electrification trends and decarbonization commitments, are pushing the energy system and many energy providers to their limits. Surging demand has driven a renewed focus on energy security, particularly amid growing geopolitical uncertainty, extreme weather events and more sophisticated cyber threats.

Innovation is also driving energy toward an inflection point. Investment in energy generation, storage, efficiency and intelligence hit a record level of US\$3.3t in 2025.<sup>2</sup> But despite more investment, technology, options, data and insight, only 23% of consumers feel their energy provider creates value for themselves and their community. While the industry surges ahead to rapidly build out infrastructure and manage rising demand, the customer experience is not keeping pace. Instead, rising prices, increasing complexity, reliability concerns and a feeling of powerlessness permeate the energy experience.

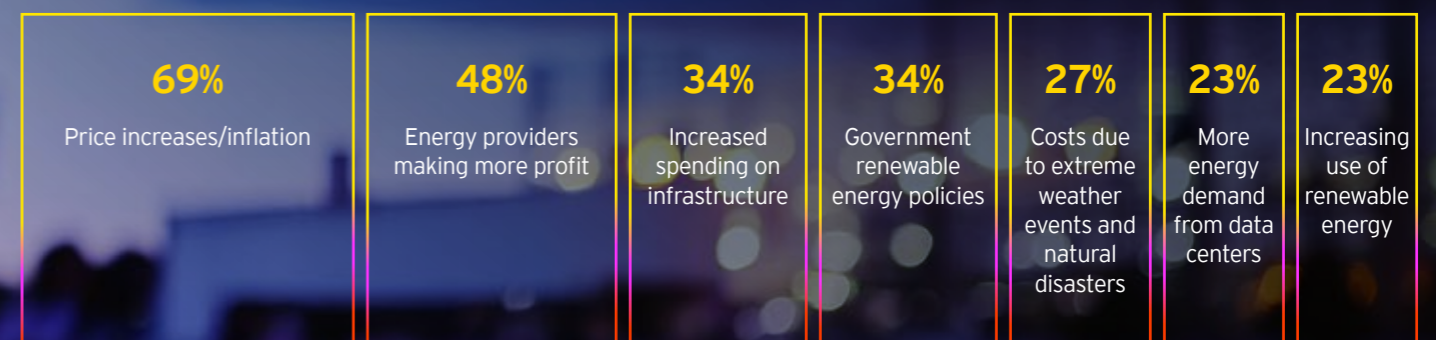
## High prices push consumers to their limit

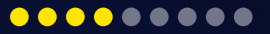
Energy consumers are stretched. Eighty-seven percent of those surveyed say they are spending more on energy than ever before. In the EU, household electricity prices increased 36% from 2019 to 2026 (beyond inflation of 22%), while in the US, electric, gas and water bills now account for 6.3% of household income, up from 4.5% in 2020.<sup>3</sup>

More than half (58%) of the consumers surveyed have changed discretionary spending behavior to pay for the

hike in energy bills. And while the majority (69%) blame general price increases and inflation for the rise, they also call out energy providers' enhanced profits, extreme weather events and growing demand from data centers. Consumers in the US, Ireland and Malaysia – where data centers are a significant contributor to demand growth – are 50% more likely to blame data centers for rising energy costs than respondents in other parts of the world.

## Consumers reported reasons for energy cost increases:





## Affordability goes beyond income

While consumers are struggling to absorb price increases, and businesses are balancing growth challenges with decarbonization commitments, regulators and energy providers are burdened with reshaping a century-old business model. Policymakers and providers are under pressure to protect consumers while also supporting a wave of energy-driven innovation. And consumers are looking for change: Only 27% feel the evolving energy system is improving their overall wellbeing. In this perfect storm, effort is needed by all sides to build a more affordable and equitable energy future.

Certainly, part of the answer to the energy affordability challenge lies in regulatory, market and broader business model changes. Optimizing resource planning and capital investments, as well as improving operating performance, will support providers in better managing costs. And, as data centers and other businesses are at the heart of the highest electricity demand growth seen in 25 years,<sup>4</sup> innovative approaches to equitably manage the cost of growth will become more important.

Many energy providers are already focusing on these areas, exploring new large-load rate classes and interconnection cost sharing, and working with regulators and markets to help make the systemic changes that support equitable, stable energy costs in an era of demand growth.

But there is also a need to directly address energy affordability. Our survey found that only 45% of consumers can be considered energy secure. Globally, 23% of respondents report they are in energy poverty today, and an additional 32% say they are vulnerable, expecting to face challenges in the next year.

Many of the programs and services offered by energy providers and governments to support consumers today are based on income. But we believe that tackling the problem starts with a broader definition of energy affordability. Our research suggests that a consumer's ability to pay their energy bill, and their perception of energy affordability, are determined by a much broader set of factors. With that in mind, we developed the EY Energy Vulnerability Score (see inset box) as a way of exploring perceived energy cost changes, the multiple challenges that may make it difficult for consumers to pay their bills now and in the future, and current and perceived behavioral and economic trade-offs.

For example, younger energy consumers and those with more people in their household are more likely to have a higher Energy Vulnerability Score and face greater challenges. Broadening the definition of affordability helps providers shape appropriate support and tailor to the real needs of consumers. Today's consumers say generic advice is no longer enough – they expect providers to offer proactive help, including:

- 1 **Rewards to shift energy use** – “Offer me greater rewards to reduce or shift when I use energy.”
- 2 **Personalized advice** – “Tell me what incentives, rebates and programs are right for me.”
- 3 **Recommended rates** – “Recommend the energy rates that will lower my bill based on my usage.”
- 4 **Simplified bills** – “Make it easier to understand my energy costs.”
- 5 **Streamlined energy solution journeys** – “Make it easier to purchase and install energy products and services.”

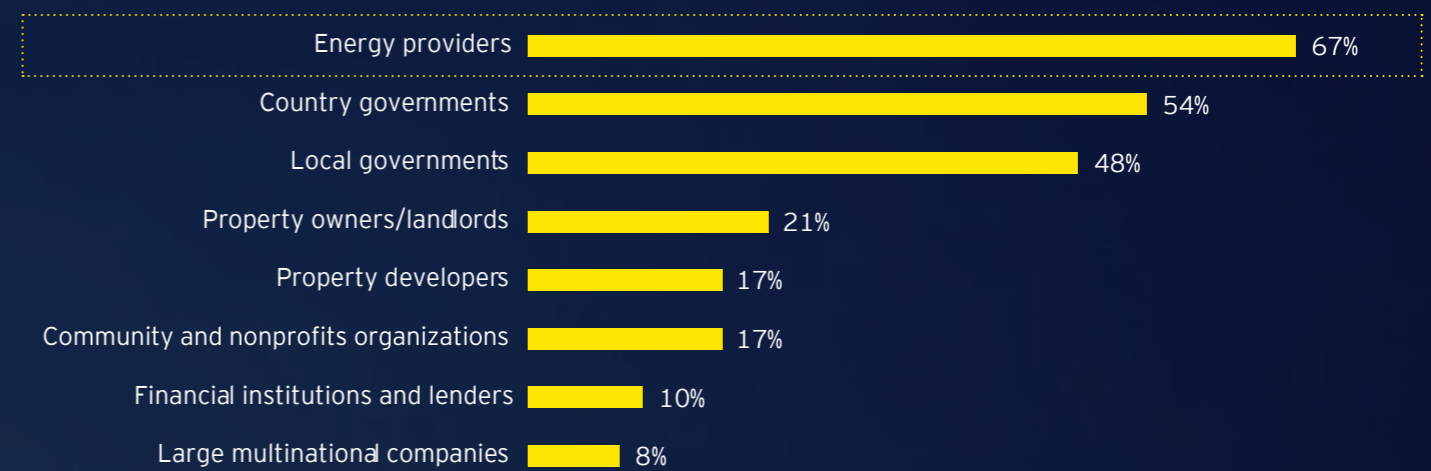


## Embracing the energy awakening

The good news is that consumers are more engaged than ever. In the past year, our survey shows that 77% are more interested in solutions to lower energy costs than they were 12 months ago. Seventy-six percent are more interested in monitoring usage and taking action to reduce consumption, and 75% are more interested in reviewing and understanding the energy bill than they were last year. And nearly half (48%) are also more interested in generating their own electricity at home than they were 12 months ago.

But this consumer awakening also brings increasing expectations of energy providers. Sixty-seven percent say energy providers should take the lead in helping consumers manage and reduce their energy costs, but more than two-thirds (69%) feel their provider is not doing so.

### Consumer preference to take the lead in helping manage or reduce their energy costs:



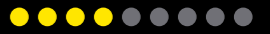
## Make-or-break moment for energy providers

This is a make-or-break moment for energy providers. Persistent affordability pressures are already affecting consumer trust and satisfaction in some markets. In the US, the JD Power residential utility studies that have tracked customer satisfaction for over 20 years recorded the lowest scores ever in 2025.<sup>5</sup> Meanwhile, feelings of powerlessness are on the rise. Our survey found that 79% of consumers say they can't do more to manage and reduce their energy costs.

With consumer trust, satisfaction and engagement making up the foundation of providers' business and social license,

this is an urgent call to action. Amid intensified regulatory scrutiny, energy providers must empower consumers and reinvent the relationship, or face the consequences of rising fatigue and frustration.

These are already surfacing in some markets. Consumers in countries with significant data center growth are voicing concerns around the use of local resources and the impact on energy costs. And while providers and governments are responding, the trajectory is clear: As energy demand and cost pressures continue to rise, so too will the need for bolder, innovative consumer solutions.



## EY Energy Vulnerability Score

We developed the Energy Vulnerability Score to understand a broader set of factors that influence which consumers are most impacted by rising energy costs.

The score is calculated by combining eight factors, together reflecting consumers' perception of energy costs, actions, decision-making and behaviors:

- 1 | **Energy spend trend** – perception of increasing energy costs
- 2 | **“Bad news” bills** – experience managing unexpectedly high energy bills
- 3 | **Energy management** – active management of the home environment to lower energy costs
- 4 | **Lifestyle trade-offs** – shifts in spending on discretionary items due to energy costs
- 5 | **Payment behavior** – level of challenge to regularly pay energy bills
- 6 | **Energy sacrifice** – shifts in spending on essentials due to energy costs
- 7 | **Payment prioritization** – trade-offs to not pay other bills due to energy costs
- 8 | **Future confidence** – expected challenge of paying future energy bills

Each factor was found to significantly correlate with others and, together, offer a holistic view of energy vulnerability. Some highlights include:

**Income isn't everything.** Even some people with higher incomes who have never had challenges paying their bills are anxious about being able to do so in the future.

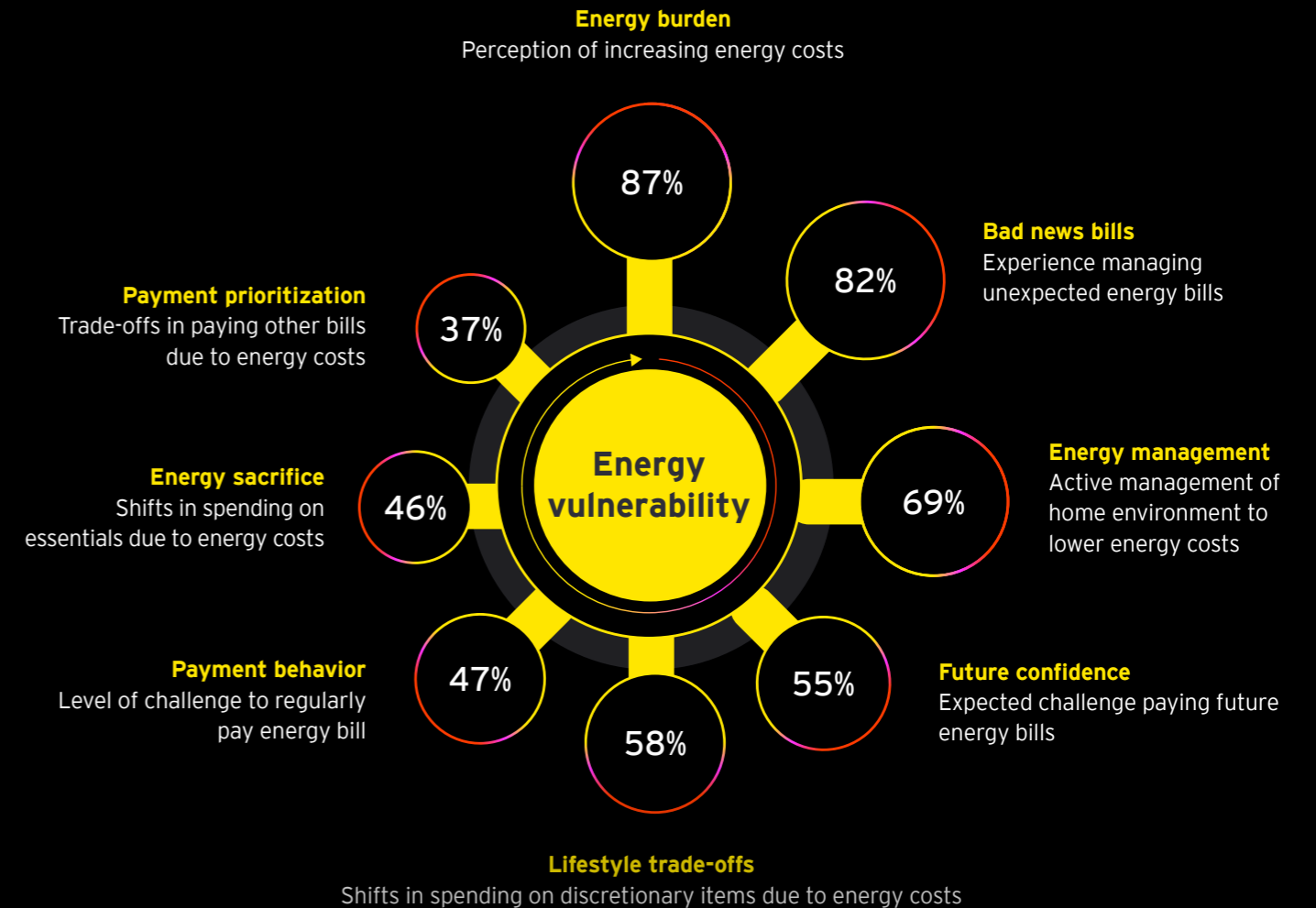
**Energy vulnerability goes beyond the bill payer.** While most energy providers usually only have a relationship with, and insights into, the bill payer, our survey found that as the number of people in a household increases, so too does vulnerability.

**Wallet share can be more important than price.** In some regions with higher energy prices, such as Belgium and Germany, consumers record lower energy vulnerability scores than those with much cheaper energy, such as the

US. Wallet share, as well as price volatility, is a major driver of vulnerability.

**Consumers don't like surprises.** Our previous research found that for most (84%) households, energy is a planned budgeted expense. Consumers plan their lifestyles around an energy “anchor price,” and when bills increase beyond that point, lifestyle, satisfaction and ability to pay are impacted. In fact, our survey found that receiving a surprise energy bill in the past year has a major impact on energy vulnerability.

These findings highlight the multifaceted nature of energy vulnerability. Providers that develop deep consumer insights and tailored holistic support packages that consider demographic information, economic indicators and behaviors can help consumers stay ahead of affordability pressures.



A woman wearing a dark winter jacket, a colorful striped beanie, and glasses is holding a smartphone. She is standing in front of a large Ferris wheel at night, which is illuminated with vibrant, multi-colored lights (blue, green, yellow, pink). The scene is dark, with the Ferris wheel's lights providing the primary illumination. The overall mood is modern and tech-oriented, suggesting energy and digital connectivity.

# Welcome to the era of energy wellbeing

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Energy is now central to everyday life. Renewables, solar and batteries, as well as electric vehicles (EVs), give consumers new ways to take control — to adopt leading technology, be more energy-independent or make a positive environmental impact. At the same time, digital technologies on the grid, in our home and on smartphones enable unprecedented insights and options to control and automate energy use. Meanwhile, the rising cost of living is impacting consumers' day-to-day decisions, and the overall amount of money spent on energy is rising in many regions.

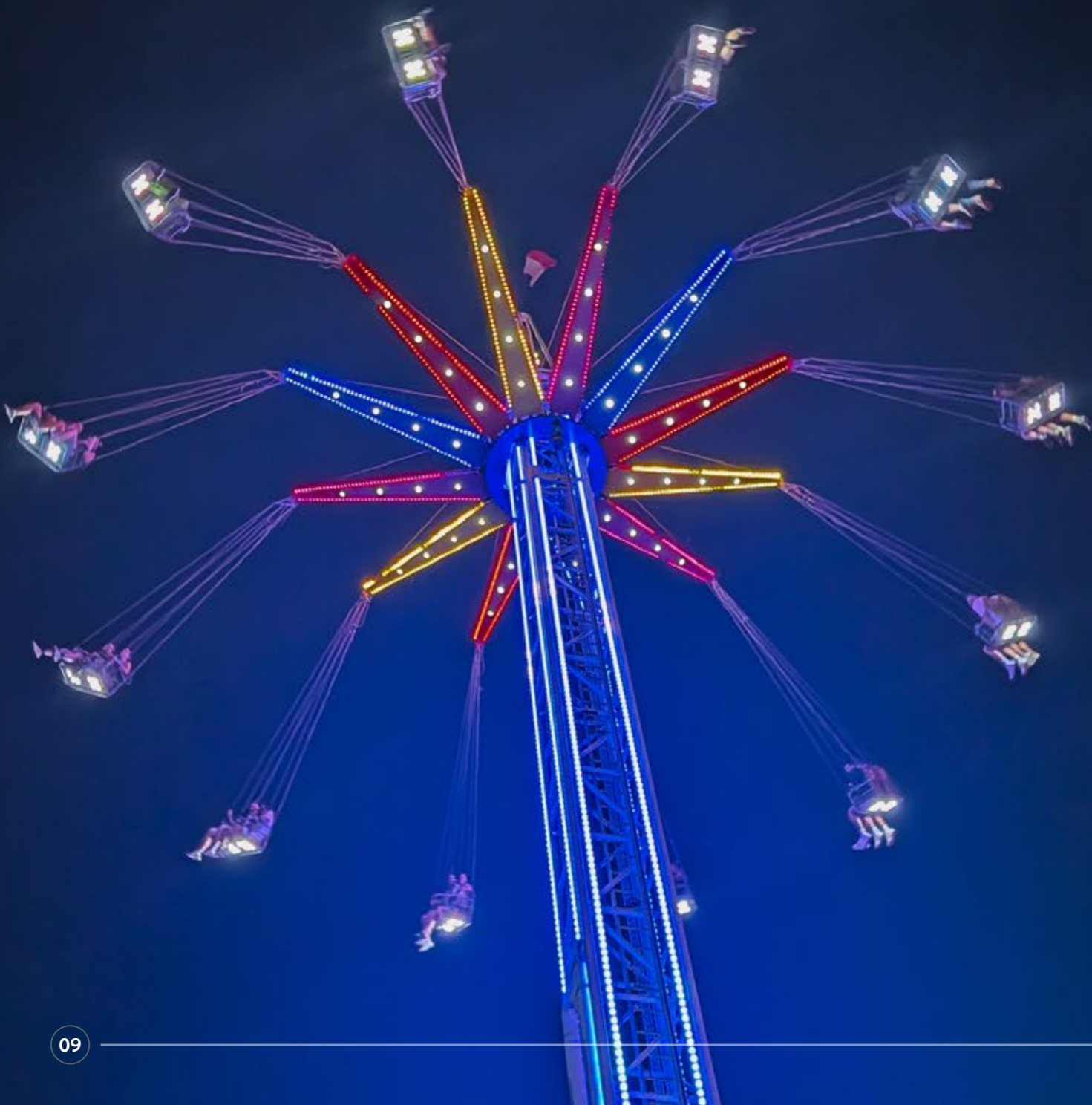
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The result, as shown across the six years of our research, is a more engaged, aware energy consumer. As energy costs rise, consumers are tuned into this shift – and more anxious.

For energy providers it is a clear inflection point from a transactional mindset to bringing value to consumers lives. Success requires reinventing the entire energy experience

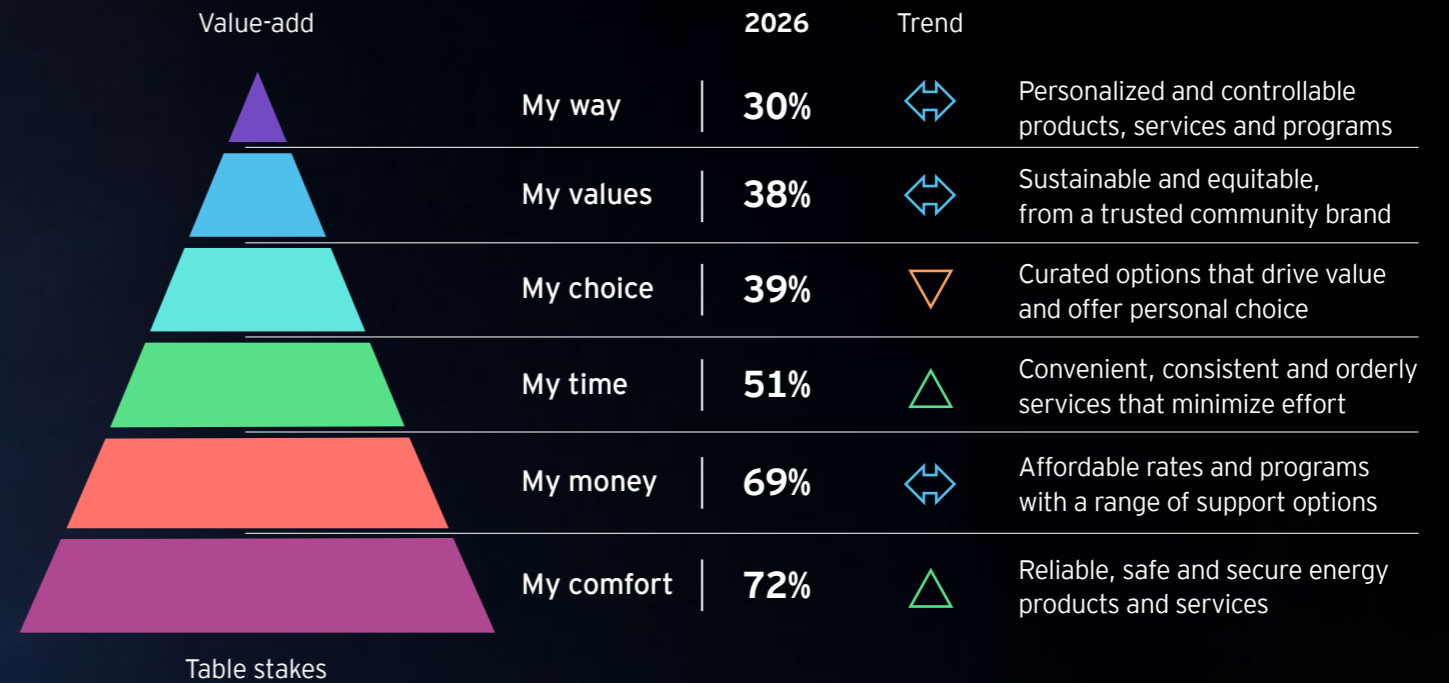
around consumer wellbeing. They must consider all components that impact the energy experience – including affordability and energy vulnerability. It's only by taking this holistic approach that providers can improve consumer satisfaction today, while easing anxiety and bolstering confidence in the energy future.



## Energy basics aren't so basic anymore

Over the six years that we've tracked consumer perceptions of the energy experience, reliability and affordability have remained foundational elements. But our latest results show

an even greater emphasis on affordability, as well as service and values.



% of consumers who rank priority in their top three  
 \* Three-year trend from the EY global energy consumer research program

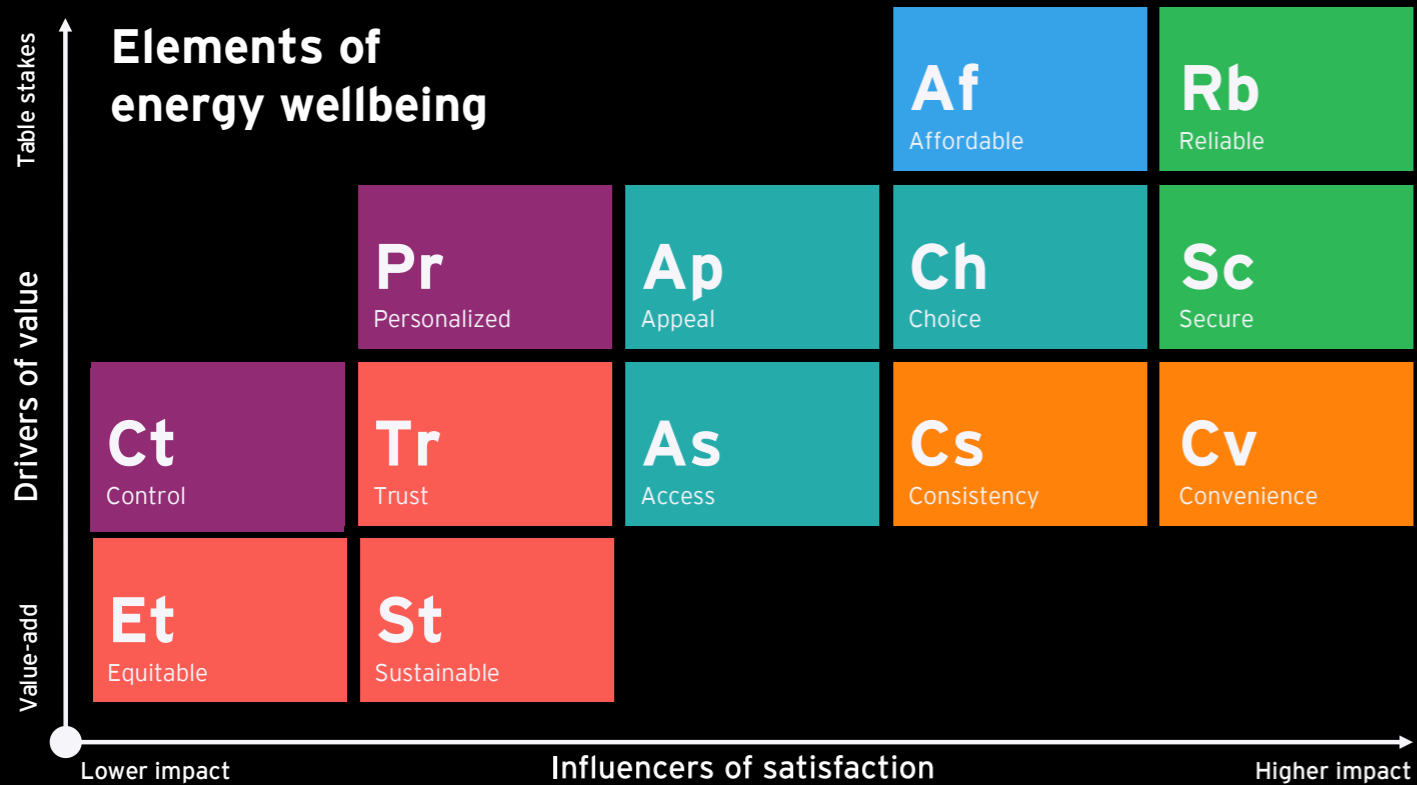
The prioritization of affordability is no surprise, given rising prices. The focus on service highlights how expectations around effortless engagement have increased, perhaps because interactions with providers have become more frequent. Our survey showed that consumers' interactions with energy providers in the past 12 months increased 25% compared with five years ago.

Despite rising costs, consumers still want providers to deliver on sustainability ambitions. Two-thirds of consumers say they are either more or just as interested in sustainable energy investments or actions as they were in 2023. But they also say they are doing all they can, and are unable to invest more time and money in energy sustainability.

Even the fundamentals of energy are being redefined as expectations and behaviors shift. For example, our data

shows that personal privacy and security are more important to consumers as the use of digital and connected devices increases. Reliability, which has been an area of focus for energy providers for a long time, is also seeing a shift. For the first time in our research, the majority (74%) of consumers tell us they prefer to use digital channels rather than talking to someone on the phone to manage outages and emergencies – up from just 37% three years ago. And more than half of consumers (70%) say they expect more support from providers in these situations.

What's clear is that energy wellbeing is complex. Different elements interact and influence it, with some seen as foundational while others add real value to the energy experience. Even delivering the basics of energy is no longer straightforward. The challenge for energy providers? Consumers want it all.



Energy Wellbeing    ● My way   ● My values   ● My choice   ● My time   ● My money   ● My comfort

**Reliable**  
75% believe power outages will increasingly have a greater negative impact on them.

**Appeal**  
77% want low-cost energy options alongside high-end energy solutions.

**Affordable**  
67% want their energy provider to take the lead in helping them manage or reduce energy costs.

**Choice**  
60% want their energy provider to offer two or three tailored energy options.

**Secure**  
The No. 3 concern when taking part in an energy management program is around security and privacy.

**Access**  
42% struggle to access energy products and services that are right for them.

**Convenience**  
The No. 1 factor consumers consider when using a provider's digital channels is ease of use.

**Trust**  
Energy providers remain the No. 1 trusted source for guidance on energy, sustainability, and information on energy products and services.

**Consistency**  
82% have been surprised by a high bill in the past year.


**Personalized**  
The No. 3 complaint about today's digital energy experience is a lack of personalization.

**Equitable**  
50% don't feel that the evolution of the energy system is fair and equitable.

**Control**  
85% would sign up for an energy management program if they remained in control.

**Sustainable**  
79% believe it is their energy provider's responsibility to offer sustainable energy options.



A group of people are riding a roller coaster, with their arms raised in excitement. The background is filled with blurred, colorful lights in shades of yellow, green, red, and blue, suggesting a night-time setting. The overall mood is one of joy and thrill.

# Three priorities for energy wellbeing

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For many providers, the push to improve energy wellbeing comes at a time of competing priorities. Amid rising prices, sustained pressure on cost to serve, advancing technology and demand growth, it can be difficult to know where to focus resources.

Our research helps cut through this complexity, revealing three priorities that together can make the biggest impact on energy wellbeing: agile operations, digital enablement and energy empowerment. Providers that act on these components can create a simpler, more affordable energy experience that gives consumers choice and control, and builds trust and satisfaction.

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01

## Building agile operations

Energy providers are in the midst of the most significant change experienced in decades. Yet many report this transformation is happening to them, rather than being strategically driven by them. Within an environment of constant disruption and increasing customer and operational complexity, it can be difficult to take control and build the agility required to respond, adapt and innovate with confidence.



Artificial intelligence (AI) is one of the major transformative forces reshaping the energy industry and will be a key enabler to the agility required to manage volatility. Energy providers, though sometimes slow adopters of technology, have moved to adopt AI across the business, with most companies already piloting and scaling AI in customer operations.

But realizing true agility, and making the most of AI's potential, will require providers to rethink the fundamentals. The traditional customer operating model is simply not fit for a more complex, AI-enabled, customer-centric future. Energy management programs, new rates and tariffs are expanding, while non-commodity products and services have complicated

## Breaking down operational silos

For many energy providers, processes and workflows are fragmented across the organization. While this may have made sense in the past, breaking down these silos is now critical: Creating great energy experiences means taking a systemic approach to simplification and consolidation.

Technology can help, creating cross-enterprise visibility and an end-to-end approach that allows employees to work together to seamlessly resolve customer issues. When intelligent process automation reduces manual work, and AI provides contextual support, teams are empowered to solve more complex problems, improving both customer and employee satisfaction. This also creates new opportunities to consolidate processes and empower teams to solve issues without passing them to other experts in the organization.

Reimagining the operating model can also help break down silos that hinder agility. For example, instead of front- and back-office teams, Octopus Energy combines both capabilities into customer-focused teams that "own" certain customer segments, resolving issues within the team.<sup>6</sup>

processes and workflows that cross organizational lines. Energy providers are struggling to manage the integrated planning, operational execution and customer support for new solutions such as EV charging, rooftop solar, demand response and broader electrification momentum. Marketing, sales, customer support, new connections, energy trading, grid planning and network management are colliding.

While every energy provider will need to consider its own market context and organizational history, all face the same challenge: rethinking the foundations of operations while also evolving the underlying culture that has served many organizations well for years.

It's a model that's gaining traction, with other providers testing similar approaches, including establishing specialized teams for products or specific segments of customers (e.g., small and medium-sized businesses). For many providers, it's also time to review ownership of channels, digital and AI, which have been developed in silos, creating disjointed experiences and slowing innovation.

Some vertically integrated energy providers are also considering how to simplify, streamline and improve how they manage critical customer experiences, such as new connections and service upgrades. Others are exploring approaches that bring grid planning and energy management programs together.

While there is no single "right" operating model, the future energy provider will need to prioritize approaches that simplify operations, consolidate processes and empower employees – bringing ownership, accountability, delivery and ongoing improvement together in a model where technology and operational execution are closely linked.

## Why empathy is the new workforce superpower

In a more digital, AI-enabled energy world, the new superpower is human empathy. As the role of technology grows, so too does the need for a human touch. We already see the impact on the energy provider workforce, which is morphing as simpler interactions are digitized and more complex ones emerge. Employees now spend more time developing and managing automations, fine-tuning self-service experiences, tweaking proactive communications and driving root cause analysis to drive efficiencies.

Providers that recognize empathy as an organizational superpower can optimize performance and experience. For example, during the COVID-19 pandemic, a Canadian provider empowered customer service agents with the flexibility to customize customer payment arrangements.

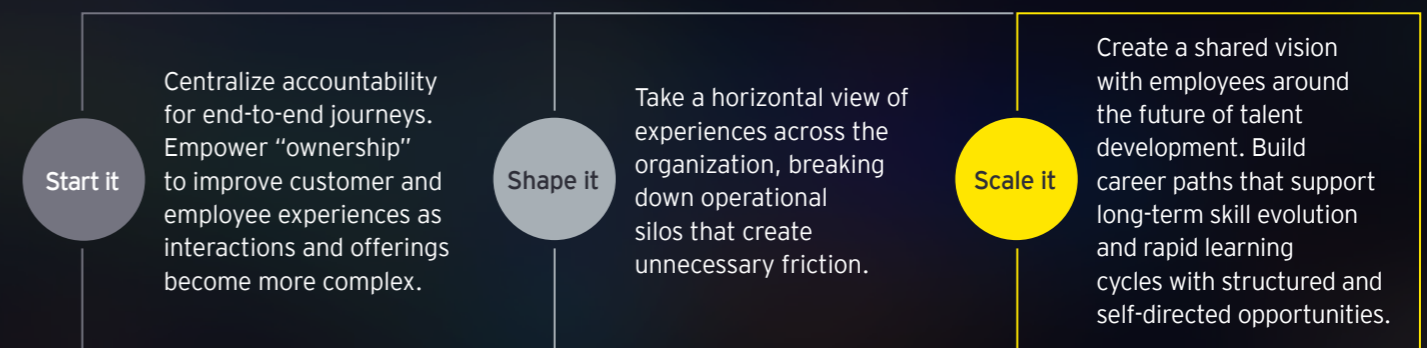
The approach, supported by specialized empathy training, was so successful in improving both customer satisfaction and revenue collection that the provider has now made it standard practice.

Realizing the potential of empathy to add value calls on providers to evolve how employee performance is measured and rewarded. Instead of focusing on metrics that may damage the customer experience – for example, reducing average handling time – many energy providers are now measuring first-contact resolution and the customer effort score, which can improve customer satisfaction. As AI and automation grow, energy providers will need to continue to adjust KPIs so that speed and automation are not rewarded at the expense of customer and employee experience.

## Agile career paths

In the longer term, the shifting energy experience has profound implications for the energy provider workforce. Traditional talent models – such as hire, train, promote – were built for a world of linear career paths, where talent moved from front-office roles to more complex back-office positions and then into management. But in a flatter, digital

operating model, those predictable trajectories are giving way to a need for friction finders and problem solvers – people who bring data-driven curiosity and human empathy to improve both customer interactions and operational performance.





02

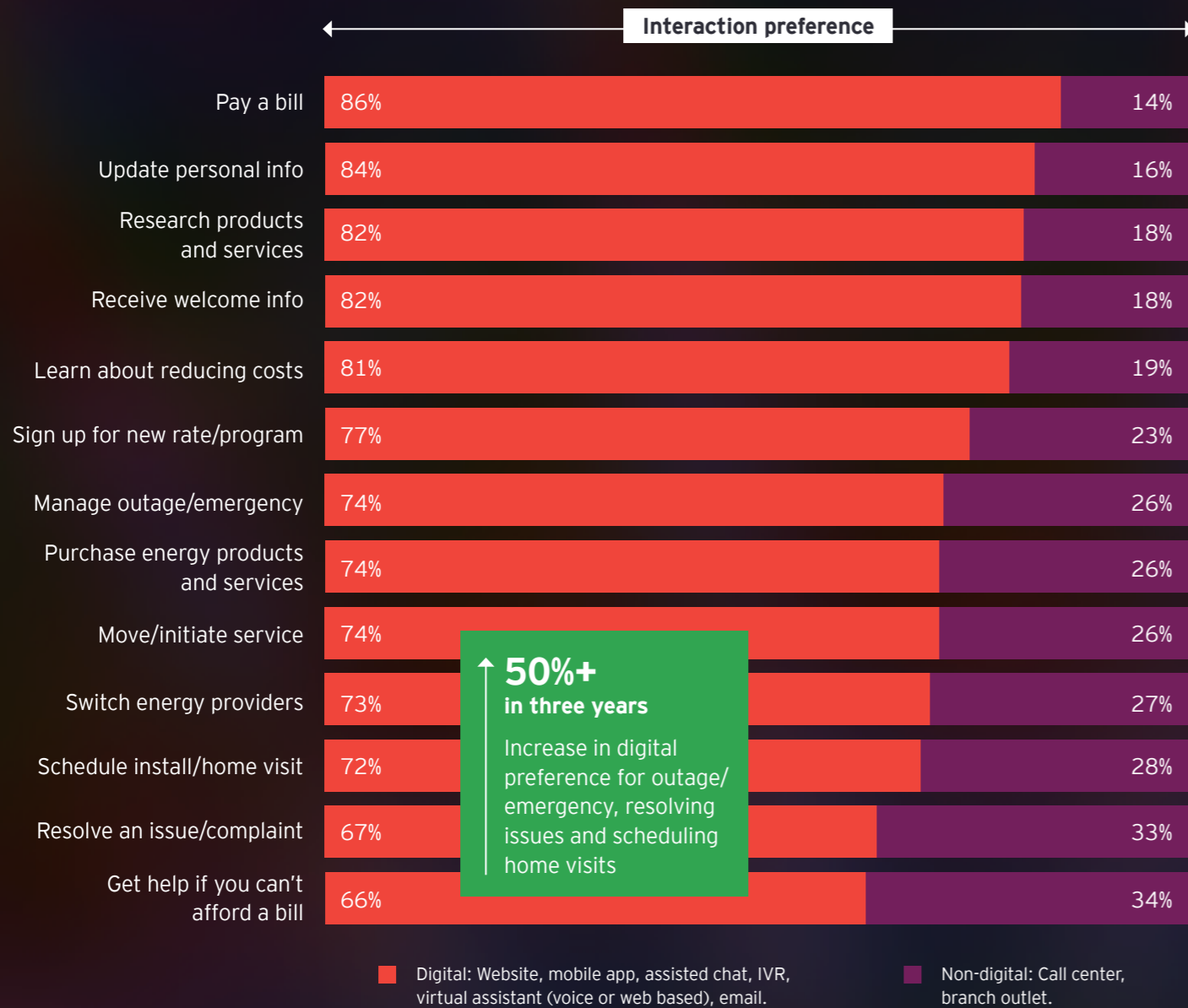
## Digital is dead; long live digital

If you believe the hype around AI, within a couple of years, none of us will even use our energy provider's app or website — our personalized AI agents will do it all for us. But, while this future is on the horizon, in the meantime, digital channels and integrated omnichannel experiences have never been more important.

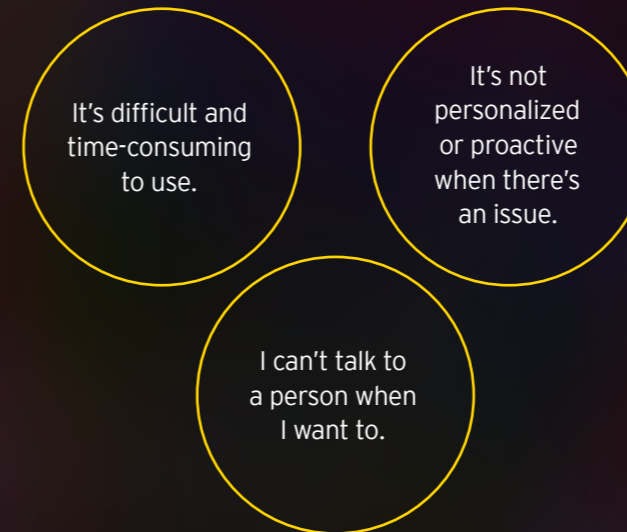


Our research saw a significant spike in consumers' digital preferences during the COVID-19 pandemic, and this has continued to climb. Over the past three years, most of this increased interest has been focused on those interactions where digital has so far lagged, such as management of outages and emergencies, issue resolution and the scheduling of home visits.

For the first time in our research, the majority of consumers are saying they prefer digital-first for all interactions with their energy provider – and by a large margin. Sixty-nine percent of consumers now say they opt for digital channels to interact with their energy provider anytime they can, and 82% have used these channels in the last year.



This represents a structural shift to digital-led interaction. However, most consumers are still frustrated by their experience using providers' digital channels. Key complaints include:



So, while consumers are looking for a digital-led experience, many energy providers have work to do to simplify and personalize their digital experiences while also creating seamless hand-offs to a person when needed.

It sounds counterintuitive, but voice interaction is a key opportunity to improve the digital experience. While not always thought of as a digital channel, interactive voice response (IVR) is being quickly transformed by AI. In California, PG&E's new generative AI (GenAI) voice assistant has increased customer satisfaction with IVR by 22% and improved call containment by 6%. The multilingual solution can provide outage information and text customers with links to specific online resources – connecting the digital and phone experiences into a more integrated omnichannel self-serve platform.<sup>7</sup> As voice AI capabilities mature, opportunities are expanding to create human-like interactions and self-serve options.

### Customers demand more from digital

Customers want simple, easy-to-use digital channels that deliver tailored and proactive engagement, with the human touch when needed. Done well, these channels are powerful tools to strengthen energy wellbeing: giving customers personalized, actionable insight, greater control and more convenience. The biggest opportunity is the primary interaction between customers and providers – billing and payments.

AGL, an Australian energy provider, gives customers the ability to access insights into their energy usage, costs and projected bills in their app and web portal. This helps customers avoid bill surprises, while a chatbot makes it easier to add support programs to their account.

It's an example that illustrates consumers' higher expectations around digital channels. Our survey shows customers want to access near real-time usage and costs, as well as billing information. One-quarter are interested in

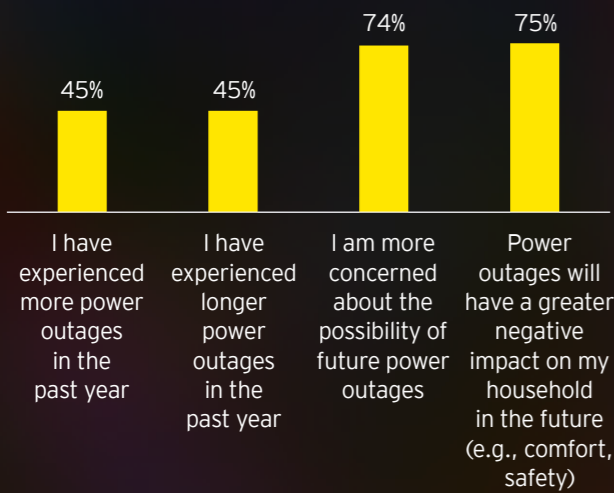
expanded capabilities, including the ability to monitor and control devices, get tailored advice and notifications on energy solutions, and automate energy use through home energy management preferences.

Providers that embrace this opportunity – empowering customers through new technologies, home upgrades and smart automation – can reap the rewards. In the UK, Octopus Energy's Zero Bills homes and British Gas Free Energy programs see the providers working with housing developers to build or retrofit homes with the latest solar panels, heat pumps, home batteries and smart energy management technologies to make energy free for customers. The providers then optimize home energy consumption and production, giving customers control and insights to manage their own behavior. While not everyone can take advantage of these programs, they point to a future energy experience that is more affordable, digital and innovative.



## Digitizing energy resilience

Our survey found that nearly half (45%) of consumers believe they have experienced more, and longer, power outages in the past year than previously. Even those who have not had an issue are worried about anticipated outages and emergencies. Seventy-four percent are more concerned about future power outages, with 75% saying outages will have a bigger impact on their household.



Outages and emergencies have always been make-or-break moments for energy providers, but 70% of consumers now expect more support during these situations. At the same time, extreme weather events, wildfires and supply-side challenges put additional pressure on energy providers. During 2024, the average US consumer experienced 11 hours of electricity interruptions on average – double the average in 2014.<sup>8</sup> Other countries, including Australia, Brazil, Spain and Portugal, have also experienced an unprecedented number of major events that have impacted energy reliability.

In a big shift from our previous surveys, 74% of consumers now say digital is their preferred channel during outages and emergencies, rather than speaking to a person. Consumers expect providers' digital channels to deliver across seven areas during these events:

- 1 **Restoration** – information on when service will be restored
- 2 **Reason** – explanation of the service interruption
- 3 **Repetition** – ongoing and regular notifications and updates
- 4 **Resumption** – a summary of the event once service is returned
- 5 **Response** – information on the provider's response
- 6 **Range** – information about which customers are impacted
- 7 **Remediation** – advice to stay safe and manage the interruption

Some energy providers offer proactive, personalized messaging before storms, including around charging devices and EVs. Enphase, a US-based provider of home EV charging and battery solutions, has gone further: Its Storm Guard feature automatically charges customers' EVs and home batteries ahead of storms that could cause outages.<sup>9</sup> With 40% of consumers already owning or thinking of getting backup home battery power, there is a growing opportunity for providers to engage customers directly in integrated resilience approaches.

## Consumers get AI-savvy

AI is a double-edged sword when it comes to energy affordability. The growth of AI and the associated energy demand from data centers are huge challenges for providers, but the technology's rapidly advancing capabilities represent a significant opportunity.

In the future, AI agents may work together to optimize consumer energy costs, manage the end-to-end experience and handle provider interactions. In the meantime, consumers are already embracing the potential of AI to create a better energy experience for themselves. Our survey shows that 61% of consumers use AI for energy-related tasks, including automating energy use, resolving issues and managing smart devices to reduce costs. Thirty-four percent plan to increase their use of AI to

manage energy in the future. In many ways, consumers are moving faster than energy providers to create the future energy experience.

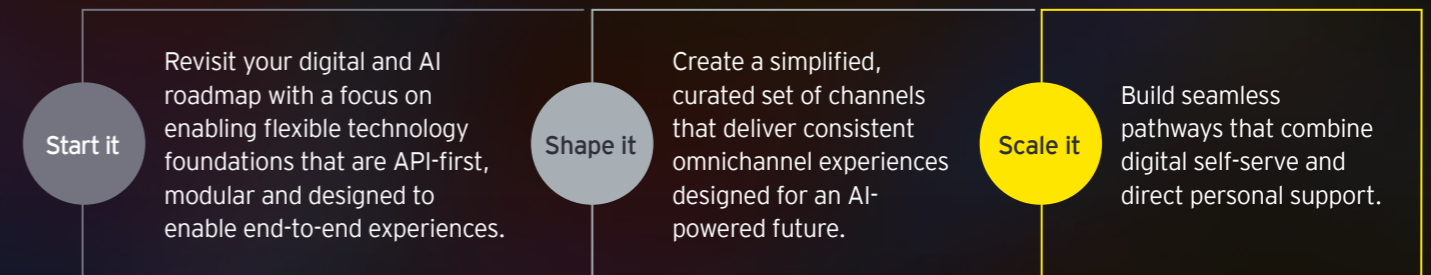
Energy providers leading the way have adopted innovative AI solutions. For example, in Hong Kong, China Light and Power Hong Kong Limited has created a family of agents to support customers and customer service agents, including by drafting customer communications, surfacing knowledge for customers, recommending products and suggesting training for customer service agents.<sup>10</sup> They are also piloting a Community Watch & Care program that uses smart meter data and AI tools to help identify potential changes in the routines of elderly people living alone and proactively notify caregivers.<sup>11</sup>

## Getting the AI-human balance right

Creating value from AI requires first addressing anxiety and skepticism about the technology. Consumers tell us they are worried about how to use AI easily, the accuracy of its information, and data privacy and security.

When providers build integrated AI-enabled energy experiences, they are asking consumers to engage differently. Interacting with intelligent, immersive interfaces can be conversational and human-like – or intrusive and complex. EY research shows the most successful AI

experiences go beyond understanding what a consumer is trying to do in a specific moment, to understand how they feel. Emotional context is incredibly important for energy providers – 76% of our survey respondents only interact with their energy provider when something goes wrong. When consumers are anxious, want privacy or seek personalized advice, AI is welcome. But, for consumers who are angry or frustrated, AI interactions tend to erode trust rather than improve the experience.<sup>12</sup>



03

# Energy empowerment

As consumers explore more options to reduce energy costs and variability, providers can win hearts and minds by empowering them with curated choices and innovative options.

Opportunities are growing to capitalize on rising consumer interest in energy products and services, including heat pumps, energy-efficient appliances and insulation. Since 2023, our survey shows that the number of people planning to invest in these solutions has increased by up to 20%, but they continue to cite the same barriers holding them back: cost, knowledge and effort.



## Breaking down adoption barriers

Energy providers' efforts to make it easier to purchase and adopt energy products and solutions still miss the mark, according to consumers. In fact, the innovative financing, streamlined rebates and partnerships that have expanded options may also have added more confusion and friction. Consumers don't know what energy products and services are right for them or how they actually reduce costs. They also say the level of effort required to purchase, install and get permits is a major hurdle.

Some energy providers and third parties are taking the lead in cutting the complexity for consumers. US-based technology company Symbium has created an AI-driven service, which allows homeowners and contractors to see potential home upgrades, scope out projects, and instantly apply for and receive permits. While the company largely works with local governments, it's an example of what's possible when providers take ownership to actively break down adoption barriers.<sup>14</sup>

## The untapped potential of energy flexibility

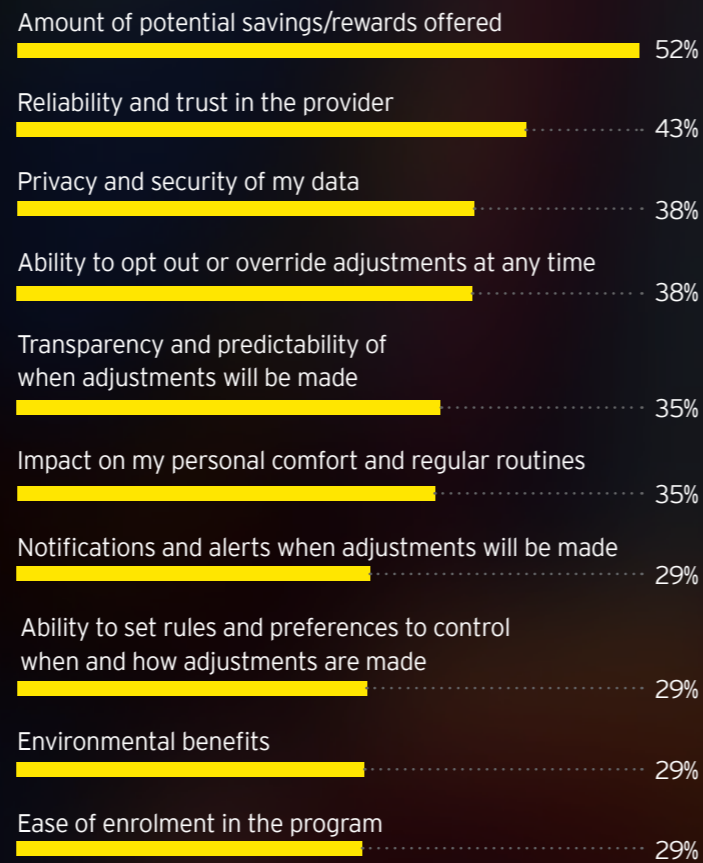
Five years ago, EY's research identified the rise of the energy omniscuser – a more empowered and engaged type of consumer taking greater control over their energy experience. As smart metering expands across electricity, gas and water, providers have an opportunity to support omniscusers with real choices around rates, tariffs and energy management programs. These programs can not only help consumers cut bills and control costs but also deliver benefits to the system, including greater resilience and decreased network costs. According to the International Energy Agency (IEA), flexibility can improve system efficiency by up to 30% and reduce emissions, and even simple options such as dynamic rates can help consumers lower their costs by 5% to 15%.<sup>15</sup>

But control, as well as cost, is a key factor driving interest in energy management programs, according to our survey. Of the 83% of consumers who would sign up to at least one type of energy management program if available, more than 40% are interested in programs that offer the most control. These include longer-term energy efficiency programs (e.g., use less energy over a longer-term defined period) and indirect demand response, where consumers act (e.g., turn off or adjust appliances) based on signals from providers.

Consumers are less keen on programs where providers take control, citing concerns about savings, trust and data privacy. Only 19% are interested in direct demand response programs, and just 10% are interested in managed EV charging options. Twenty-two percent said they would not enroll any of their home devices in an automated energy management program, even if it saved them money. And even those consumers willing to participate in these programs are only comfortable adding devices that use the least energy. When we asked

consumers to assume they had a smart home with solar, battery storage, an EV, and controllable heating and cooling, only 19% would give control of their EV charger, 21% the home battery, and 34% the home heating and cooling.

Key factors consumers would consider when signing up for an automated energy management program:



Another challenge is that flexibility can also mean volatility, variability and surprises for consumers. Our survey shows that, if given a choice, most consumers would prefer the predictability of fixed-rate options, levelized payment plans and subscription-based models.

While younger and more vulnerable consumers are twice as likely to sign up for automated energy management programs, Gen Z and millennials are also much more interested in subscriptions, prepay solutions and split

payments than older generations. Gen Z consumers are also twice as likely to prefer nonmonetary incentives, such as reward points, for participating in energy management. Older consumers would opt for bill credits. This complex set of preferences highlights that achieving flexibility depends on a nuanced approach to designing compelling programs, products and incentives that goes beyond simply introducing dynamic rates.

## Earning the right to automate energy management

Energy management adoption faces a challenging consumer paradox. Consumers want easy-to-use, set-and-forget energy solutions but are hesitant to give up control – and many don't trust their energy provider to help reduce their costs.

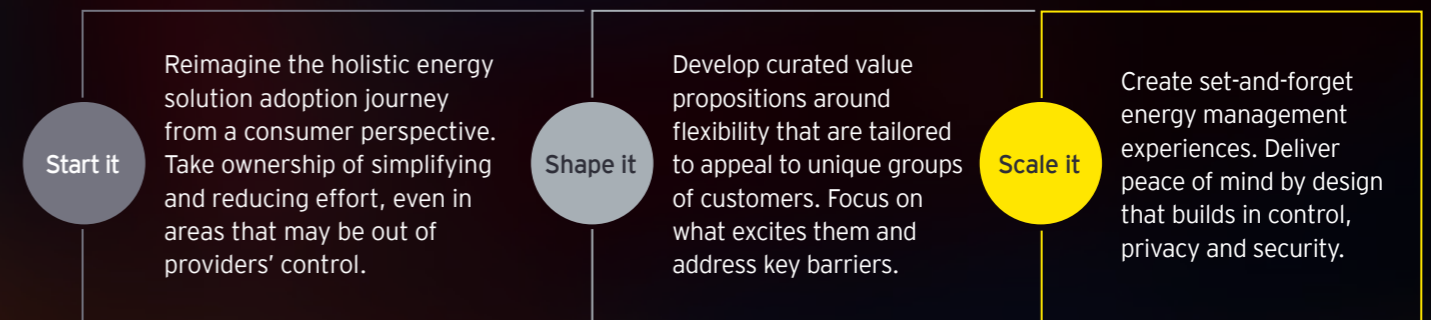
Some energy providers in the Nordics and the Netherlands are addressing the challenge through a focus on empowering consumers with real-time data, smart home automation, transparent pricing and savings. Providers including Tibber, Greenely and Zonneplan offer dynamic pricing, app-based automation and control over devices such as thermostats, EV chargers, home batteries and solar panels. They also emphasize the potential to cut bills by 20% to 40%.

For many energy providers and regulators, energy management and flexibility are seen as a key solution to help manage increasing energy demand and affordability pressures. But while consumers are interested too, they need more convincing that the benefits outweigh potential risks.

This means earning consumers' trust in a crowded market. Our survey found energy providers are still consumers' top choice for energy management, but their lead over energy management and technology companies is narrow.

Creating winning value propositions around energy management requires a focus on what different consumers really care about. Lower bills are table stakes now. Consumers also need to be able to control their energy experience in a way that's easy and that matches their lifestyle and level of comfort. They want meaningful incentives and rewards. And customers must be assured that flexibility doesn't mean sacrificing reliability, privacy or billing transparency.

Providers that can deliver on these expectations through thoughtful and tailored approaches can empower consumers with the choice and control that are key to addressing energy wellbeing and affordability pressures.



# Welcome to the future

Envisioning the agentic energy experience

Within energy, six intelligent agentic omni-experiences support consumers:

**Personal energy shopper**

Tailored energy rates, programs and advice about products and services

**Service aid**

Simple natural language interactions to complete service requests

**Energy advisor**

Personalized insights on energy usage and ways to save

**Intelligent invoicing**

Pre-emptive customer service built around the key thing customers care about: the energy bill

**Outage and emergency engagement**

Proactive event management and personalized messaging

**Energy management**

Actionable energy insights and preference-based device automation

A dramatically different energy experience is on the horizon — with AI at its core. As of January 2026, 37% of consumers in OECD countries recorded using GenAI in the previous three months, a figure that rose to 68% for Gen Z.<sup>13</sup> Meanwhile, energy providers are ramping up their own use of AI, scaling the technology across the enterprise.

As AI adoption grows and capabilities evolve, every aspect of the energy experience will be disrupted. What could the agentic energy future look like for energy consumers and employees?

## “Please work with my personal energy assistant.”

Consumers engage with GenAI-enabled interface agents in almost all aspects of everyday life – to research and purchase new products and services, get support, and manage their usage and spend. They regularly interact with agents from multiple service providers directly and through their own agentic personal assistants.

Providers are focused on delivering exceptional customer experiences, enabled by consistent AI-driven engagement rather than distinct channels. Almost all interactions are digital, with experiences tailored to meet customer preferences. Voice-enabled AI is now a key channel, offering both human-like conversations and easy access to a person if desired.

With more consumers using agents to manage their energy experience, providers have built parallel processes and workflows to optimize increased agent-to-agent interactions. These are particularly popular for product and service research, price comparisons, sign-ups, moves and complaints.

Energy providers and other companies also offer agentic energy assistants tasked with helping consumers reduce consumption and costs, choose products and services, and monitor billing and payments. Their presence highlights a key area of competition in the future energy experience – orchestrating energy management across multiple devices and providers, and advising consumers of their best energy options. This is attracting more third parties and aggregators that cut out energy providers, engaging directly with consumers, particularly those with smart technologies.

Consumer preferences have polarized toward low-cost energy-only options, enabled by agentic assistants that continually switch to offers with the best rate or fixed-price deals, and providers with appealing bundled subscriptions. Automated energy management is often included in offers, sometimes with add-on device warranties or innovative financing options.



## A day in the life of a consumer

It's 2032 and Jody is moving house. The last time she moved, dealing with her energy provider was time-consuming, confusing and stressful. This time, she's asked her agentic personal assistant to help. The agent is proactively moving all home services to Jody's new place, comparing available options by analyzing websites and interacting with other agents. The agent's suggested choices reflect Jody's personal preferences – she likes low prices but prefers predictable bills, and has an EV. Since the new home doesn't have a high-speed EV charger, the agent has factored this into the decision process.

During their daily catch-up, Jody's assistant shares two energy options: one that offers the lowest overall cost of electricity, and a second option that comes in at about the same cost but also includes an EV charger and backup battery at a set energy management subscription price. Jody opts for the subscription pricing and feels good about her choice when a storm knocks out the power not long after she moves in – and finds her energy management AI had pre-emptively fully charged the battery and her EV.

## The rise of the experience orchestrator

When AI and autonomous agents handle almost all everyday tasks, the energy provider workforce evolves – into teams of empowered energy experience orchestrators.

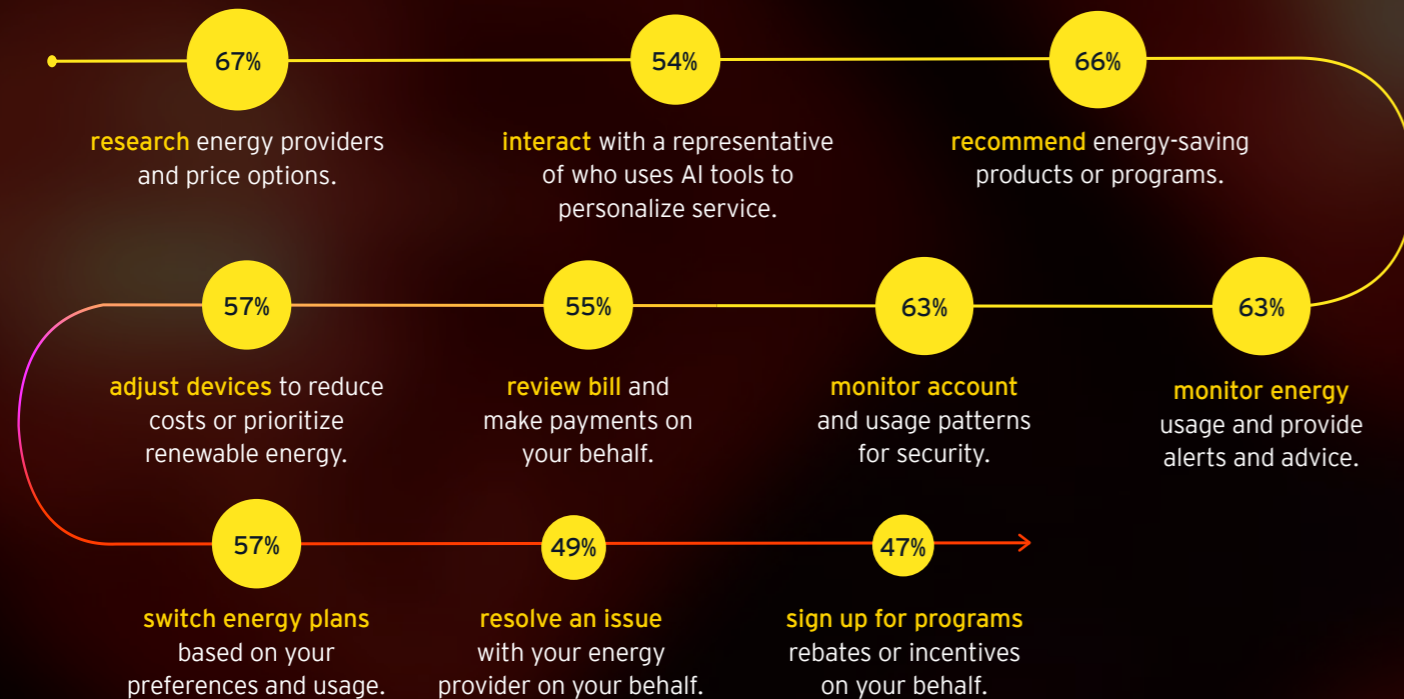
continual improvements and are supported by “copilots” that act like colleagues – suggesting next best actions, sharing knowledge and helping solve problems and innovate.

Energy experience orchestrators own outcomes for specific customer groups and manage groups of agents (human and machine). They use skills that draw on analytics knowledge, problem-solving and empathy to optimize agentic performance and deliver exceptional customer experiences that they “own.” Orchestrators have the systems expertise to know how multiple agents interact and understand the actions taken by provider- and customer-managed agents. They leverage predictive analytics and reporting to drive

As roles have shifted, so too have performance metrics. Success is now measured by how easily customers can interact with providers, how successful their interactions are, and satisfaction levels. In a customer-centric culture, employees are incentivized differently, rewarded for solving problems and improving the customer experience, and are empowered to make the decisions that deliver better outcomes.

Current consumer interest in aspects of the agentic energy experience:

Sequenced by increasing levels of AI autonomy



## A day in the life of an employee

It's 2032, and Amit is starting his day as an experience orchestrator at an energy provider. Amit used to dread opening his inbox and seeing a flood of emails to sort through, but things have changed. He checks in with his copilot to see if anything urgent requires his attention. The copilot gives a visual overview of bot performance, queue exceptions ready for review by human team members, and the level of customer satisfaction in interactions. The copilot points out that satisfaction has dropped, as has the rate of first-time resolution for moves completed through the intelligent voice AI. The agent-to-agent completion rate for connection upgrade requests also has a larger queue of exceptions than normal.

Amit knows they've been fine-tuning the connection upgrade instant approval criteria and integration with the government permitting. He uses a root cause analysis bot to review the exceptions and can immediately see that a recent change to permitting data requirements is not being captured by the customer-facing bot. He programs the bot to have it request the new required information, runs some automated tests and updates the bot. Once that's taken care of, it's time for a quick coffee before his daily team huddle.

# Building better energy wellbeing

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Energy wellbeing is under more pressure than ever before. Just as consumers become more dependent on energy, and our energy system evolves toward a cleaner, more decentralized future, we face dramatic increases in demand, rising pressures around security, and growing affordability challenges. At the same time, AI is quickly shaping a fundamentally new energy experience for customers and employees.

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The convergence of these factors highlights the complexity of the energy wellbeing challenge. A singular focus on affordability will not be enough to drive sustainable improvements. A whole set of elements must come together in new ways to meet the moment. And while there is no one formula for success, one thing is clear: Today's experience is not fit for the future.

With energy now central to consumers' lives, providers have an opportunity to make the most of this increased interest and engagement. Consumers want more control over their energy costs – and AI-enabled solutions make this possible in ways that once seemed fanciful. Providers that embrace the potential of digital and AI solutions, supported by broader organizational transformation, can offer the innovative products and services that help amplify energy wellbeing.

Consumers' expectations are clear: They want a fundamentally different energy future that is automated, easier and more affordable. Now it's up to energy providers to deliver.



# Get in touch



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# References

- [https://iea.blob.core.windows.net/assets/b73798cb-e452-42b9-9d8a-07542de7a041/Electricity\\_2026.pdf](https://iea.blob.core.windows.net/assets/b73798cb-e452-42b9-9d8a-07542de7a041/Electricity_2026.pdf)
- <https://www.iea.org/news/global-energy-investment-set-to-rise-to-33-trillion-in-2025-amid-economic-uncertainty-and-energy-security-concerns>
- <https://www.wateronline.com/doc/average-household-utility-costs-rise-in-last-five-years-0001>
- <https://www.eia.gov/pressroom/releases/press582.php>
- <https://www.jdpower.com/business/press-releases/2025-us-electric-utility-residential-customer-satisfaction-study>
- <https://kraken.tech/case-studies/octopus-energy>
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- <https://www.eia.gov/todayinenergy/detail.php?id=66744>
- <https://support.enphase.com/s/article/what-is-storm-guard>
- <https://www.linkedin.com/feed/update/urn:li:activity:7431895721961807875/>
- <https://www.clp.com.hk/en/community/CommunityWatchandCareServicePilotProgramme>
- <https://www.ey.com/content/dam/ey-unified-site/ey-com/en-gl/services/consulting/documents/ey-gl-human-signals-ai-ax-empathy-demand-next-generation-ai-powered-services-10-2025.pdf>
- <https://www.oecd.org/en/about/news/announcements/2026/01/ai-use-by-individuals-surges-across-the-oecd-as-adoption-by-firms-continues-to-expand.html>
- <https://symbium.com/about/our-story>
- <https://www.iea.org/reports/the-value-of-demand-flexibility>

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