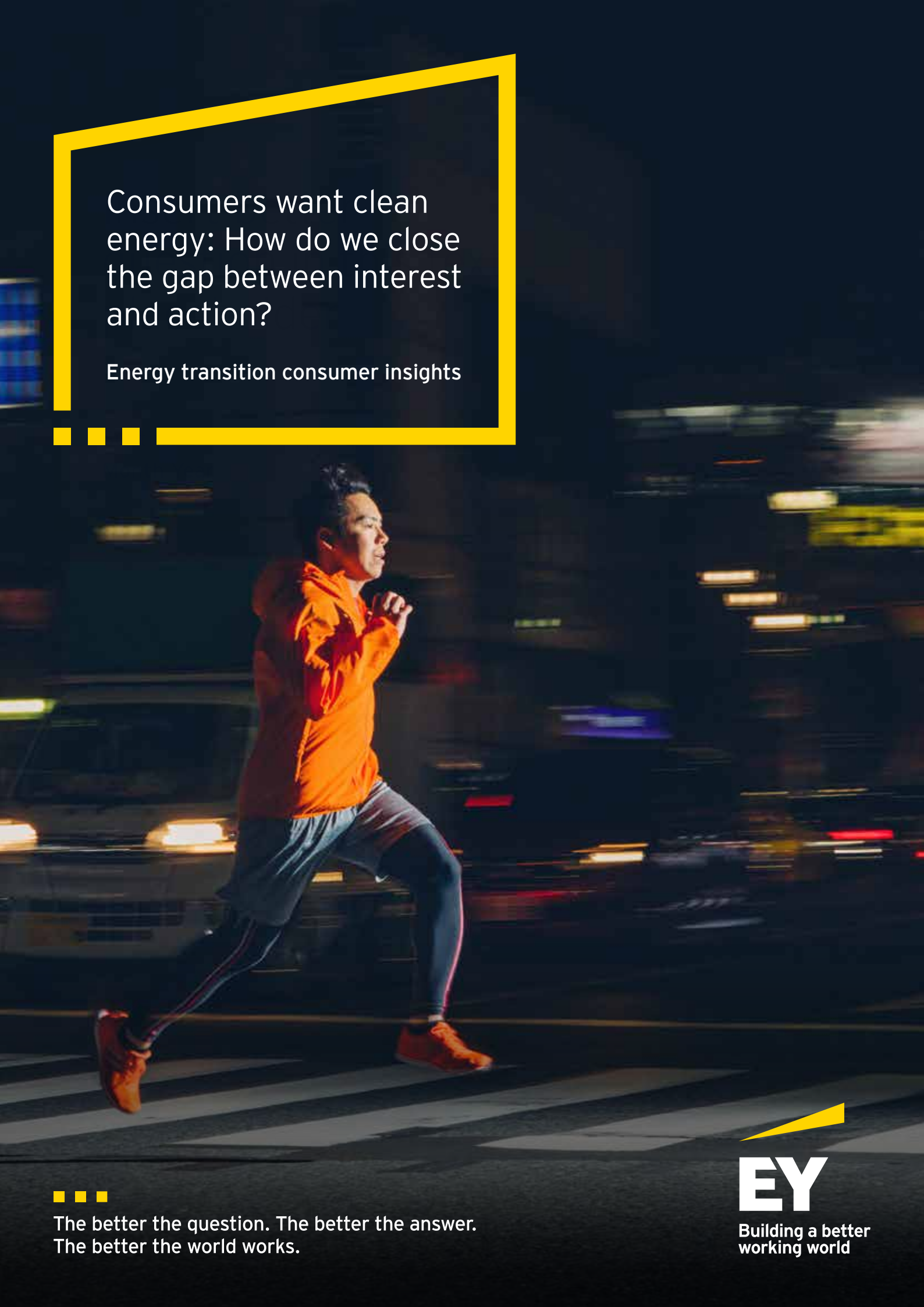
Consumers want clean energy: How do we close the gap between interest and action?

Energy transition consumer insights



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

Building a better working world

Introduction

> “Addressing the consumer apathy dilemma is now urgent and will make or break the energy transition.

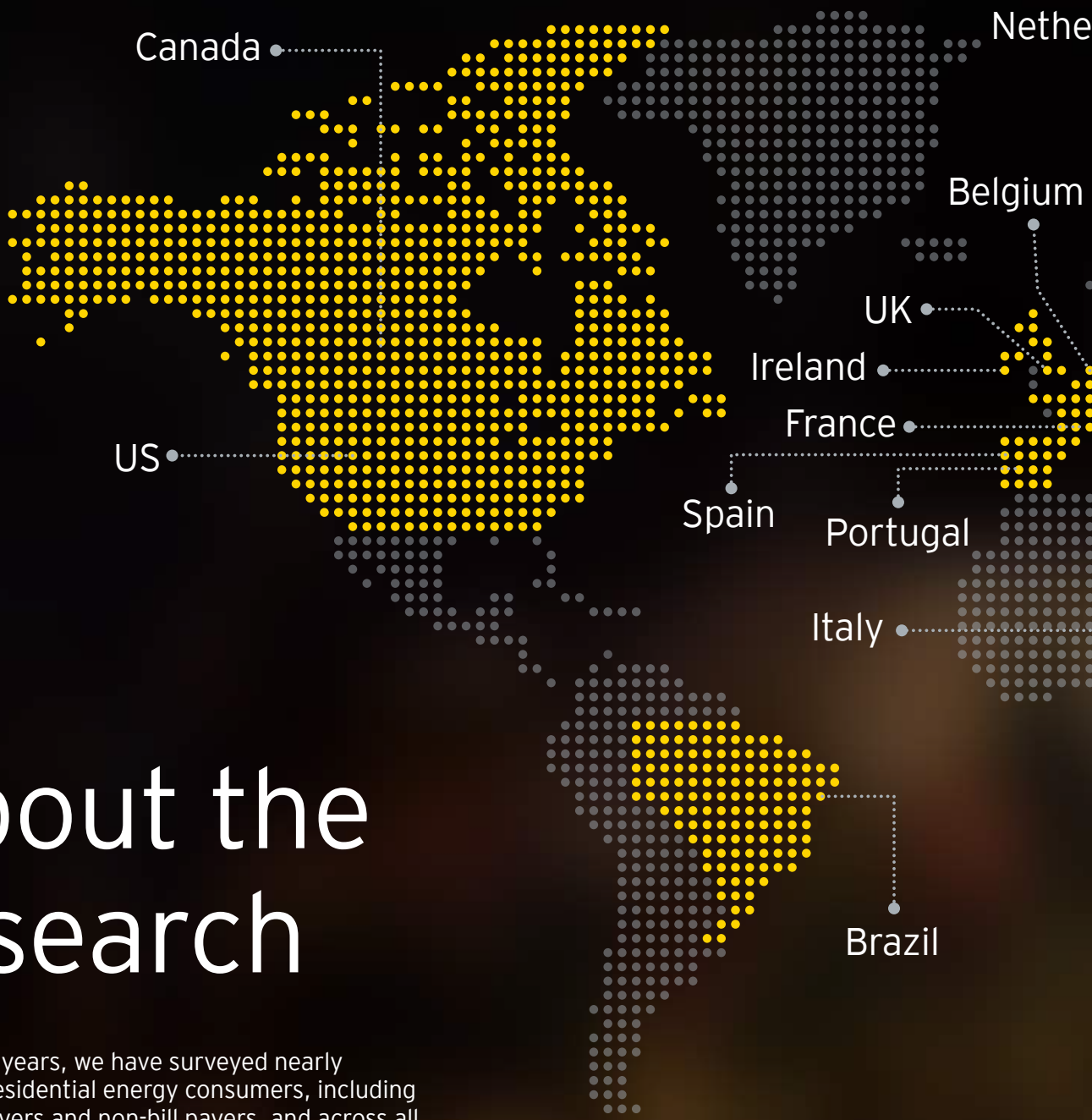
Greg Guthridge

EY Global Energy & Resources Customer Experience Transformation Leader

Consumer action will be the driver of success of the energy transition. Seventy percent of the outcomes of the energy transition depend on people changing their energy consumption, behaviors and lifestyles.[1] But consumer fatigue is setting in, stalling confidence and stagnating progress. Our research reveals just 30% of consumers say they can do more than they currently are to make sustainable changes. This leaves two thirds of energy consumers unwilling to spend more time and money. Addressing the energy apathy dilemma is now urgent and will make or break the energy transition.

While the supply side of the energy transition is booming, we need a fundamental shift in how we engage and activate sustainable consumer behavior. Current approaches aren't working well enough, or fast enough, to address the enormous challenge we face – affecting a generation of change in just a decade or two. Achieving success will take a village. It will depend on energy providers, government and the broader energy ecosystem working together to pull every lever available.

Energy providers can galvanize this change, transforming energy consumer engagement by first transforming themselves. Now is the time for ambitious moves. A monumental uplift in resetting the relationship can activate engagement across the full spectrum of consumers and accelerate the development of consumer-centric capabilities across the energy ecosystem. Consumers will lead the way to the new energy future, but only if providers can guide the journey through redefining the access, appeal and affordability of energy. Providers that get it right will reap the benefits of shaping an entirely new energy experience.



About the research

Over three years, we have surveyed nearly 100,000 residential energy consumers, including both bill payers and non-bill payers, and across all ages and income levels.

The resulting energy transition consumer insights are designed to help energy providers, regulators, policymakers and other stakeholders make consumer-centric decisions about strategy, investment, operational priorities and their approaches to the energy transition. With the right insight, consumers can be empowered to play their central role in the energy transition, and providers can unlock new customer experiences and growth to deliver sustainable long-term value.

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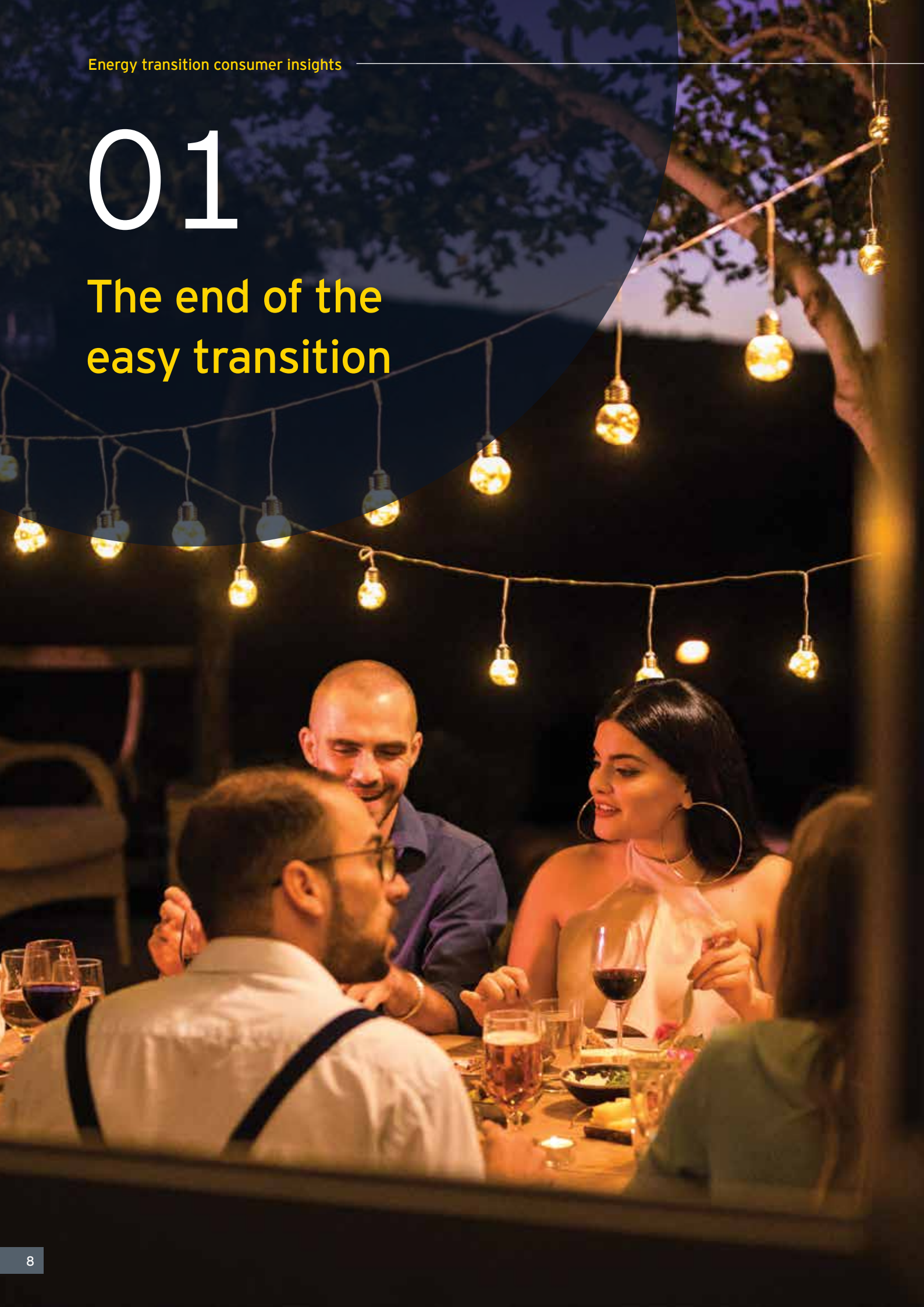
The end of the easy transition



Why engaging energy consumers is more difficult — and important — than ever

The good news is that, **according to EY research**, the world's progress to a clean energy system is accelerating faster than many anticipated. The bad news is that energy consumers are tiring of the journey just as the path gets more difficult.

Our latest energy transition consumer insights reveal that energy apathy is setting in. Three-quarters of consumers say they've done as much as they can to be sustainable, and less than one-third (31%) say they are willing to invest more time and money in sustainable energy actions.

Consumer exhaustion comes as we enter a new – much harder – phase of the energy transition, all while dealing with higher energy prices, geopolitical volatility and growing concerns around energy equity. Governments, businesses and consumers are making tough trade-offs to balance economic, environmental and equity priorities. Already we've seen policy backtracking, including in the UK and Canada where green policies have been delayed or watered down. In the boardroom, progress is ebbing too. EY research has revealed a decline in corporate ambition around emission reductions, a lengthening of timelines and a decrease in climate actions.[2]

A two-speed energy transition is emerging

For consumers, affordability pressures are likely behind much of the resistance to do more. For 84% of people we surveyed, energy is a budgeted household expense, and 67% say they can't absorb a bill increase of 10%. Consumers continue to be interested in new energy products and services such as rooftop solar and electric vehicles (EVs), but two-thirds say they won't invest in them in the next three years.

There is a rising disconnect between government and policy focus areas and consumer engagement. Heat pumps are a good example. More governments are introducing policies to encourage the replacement of gas boilers with electric heat pumps, which, if broadly adopted, could cut CO_2 emissions by 2030 by an amount equivalent to that generated by all cars in Europe.[3] But only 11% of consumers say a heat pump is their first choice of investment in energy products and services planned over the next three years.

A two-speed energy transition is emerging, according to the EY Energy Consumer Confidence Index (ECCI), a measure designed to understand and track consumers' confidence in the energy market. Consumers who can afford new solutions are realizing the benefits of lower bills and added capabilities, but those not able to invest don't see the value. Consumer confidence in a fair and equitable energy system has also fallen to worrying levels. Results around other factors such as complacency, hesitancy and skepticism highlight a growing consumer divide.

Consumer behavior will make or break the energy transition

The problem is that broad consumer action is the single biggest success factor of the energy transition. Seventy percent of energy transition outcomes will depend on consumers changing their consumption, behaviors and lifestyles.[4] Half of consumers' impact on the energy transition comes directly from shifts in home energy use and transportation.

If we are to achieve climate goals, engaging consumers must become a priority. To date, much of the focus of the energy transition has been on the supply side — investing in new energy assets and infrastructure upgrades. It's time to give equal attention to the demand side. Our research warns that wavering consumer confidence could become a major handbrake that stalls progress. There simply is no energy transition unless consumers lead the way.

02

Who is today's energy consumer?

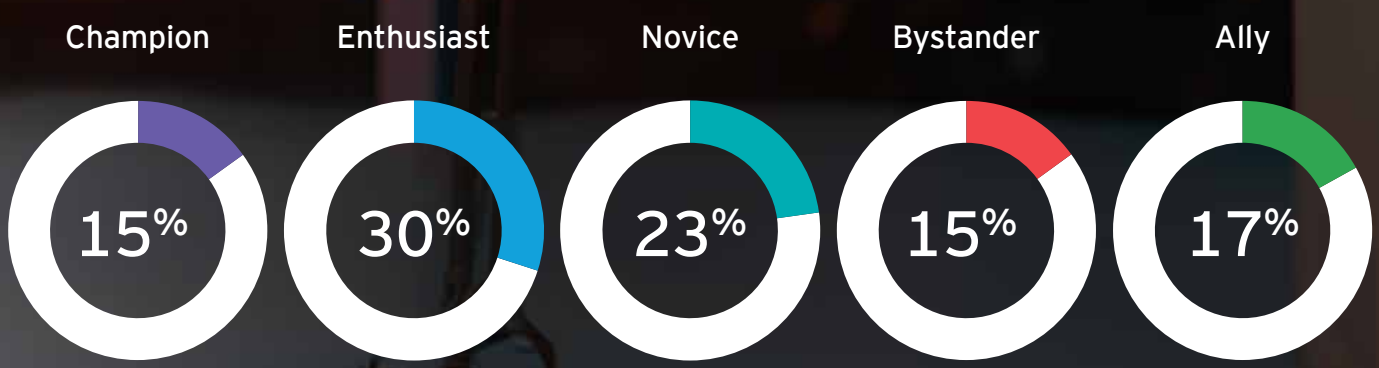
We're all omnisumers — but participation spans "will, want to and won't"

Growing adoption of new energy technologies and solutions means we are all omnisumers – participants within a dynamic energy ecosystem across a multitude of places, solutions and providers — but in different ways. Our research identifies five "ecoEnergy" profiles:

- **EcoEnergy Champions** and **EcoEnergy Enthusiasts** are receptive and highly engaged, have made significant changes to their lifestyles to be more sustainable, and are twice as likely to pay a premium for green products and services.
- **EcoEnergy Novices** are resistant, if only because they are largely energy agnostic and have the lowest levels of literacy around the actions they can take, and the investments they can make, to save money and energy.
- **EcoEnergy Bystanders** are resistant to aspects of the energy transition and have the lowest confidence in the value they see is being delivered.
- **EcoEnergy Allies** are most likely to feel they are prevented from engaging in the energy transition by their living situation or income. They told us that today's energy products and services don't fit their needs.

Together, Novices and Bystanders make up over one-third of consumers and are the "frozen middle," resisting change due to a mix of indifference, skepticism and inertia. Activating these consumers requires companies to rethink traditional approaches around targeting early movers. More sophisticated engagement strategies and targeted value propositions (beyond sustainability) can appeal to the full spectrum of omnisumers.

Consumer respondents by profile



EcoEnergy Energy profiles

Champion

Actively engaged in new energy options and advocates for sustainability

- 55% own their homes.
- 69% are willing to pay more for sustainable solutions.
- Higher proportion of Millennials and Gen Z.
- First movers, willing to take risks and try new solutions.

Engagement approach

- Cultivate as advocates and align with values.
- Help them be at the leading edge with regular innovations.

Enthusiast

Conscious of energy usage and aware of sustainable options

- 51% own their homes.
- 53% are willing to pay more for sustainable solutions.
- Higher proportion of Millennials and Gen X.
- Optimistic about the energy transition.

Engagement approach

- Reward and amplify positive engagement.
- Create exclusivity and visible outcomes to build prestige.

Novice

Not interested and just want easy energy solutions

- 31% are renters.
- Higher proportion of Boomers and Gen X.
- Don't know or care about sustainable actions and investments.

Engagement approach

- Use the crowd and social pressures to influence.
- Make it easy to take action.

Bystander

Skeptical of sustainability and energy providers

- Only 10% are willing to pay more for sustainable solutions.
- Higher proportion of Boomers and Gen X.
- High interest in home solar and battery storage.

Engagement approach

- Tap into tradition aligning with a trusted brand or group.
- Offer hands-on experiences to prove a solution's worth.

Ally

Dependent on energy providers for support and information

- 80% are doing everything they can to be sustainable.
- Say they need solutions better suited to their situation.
- Trust government and energy provider for support.

Engagement approach

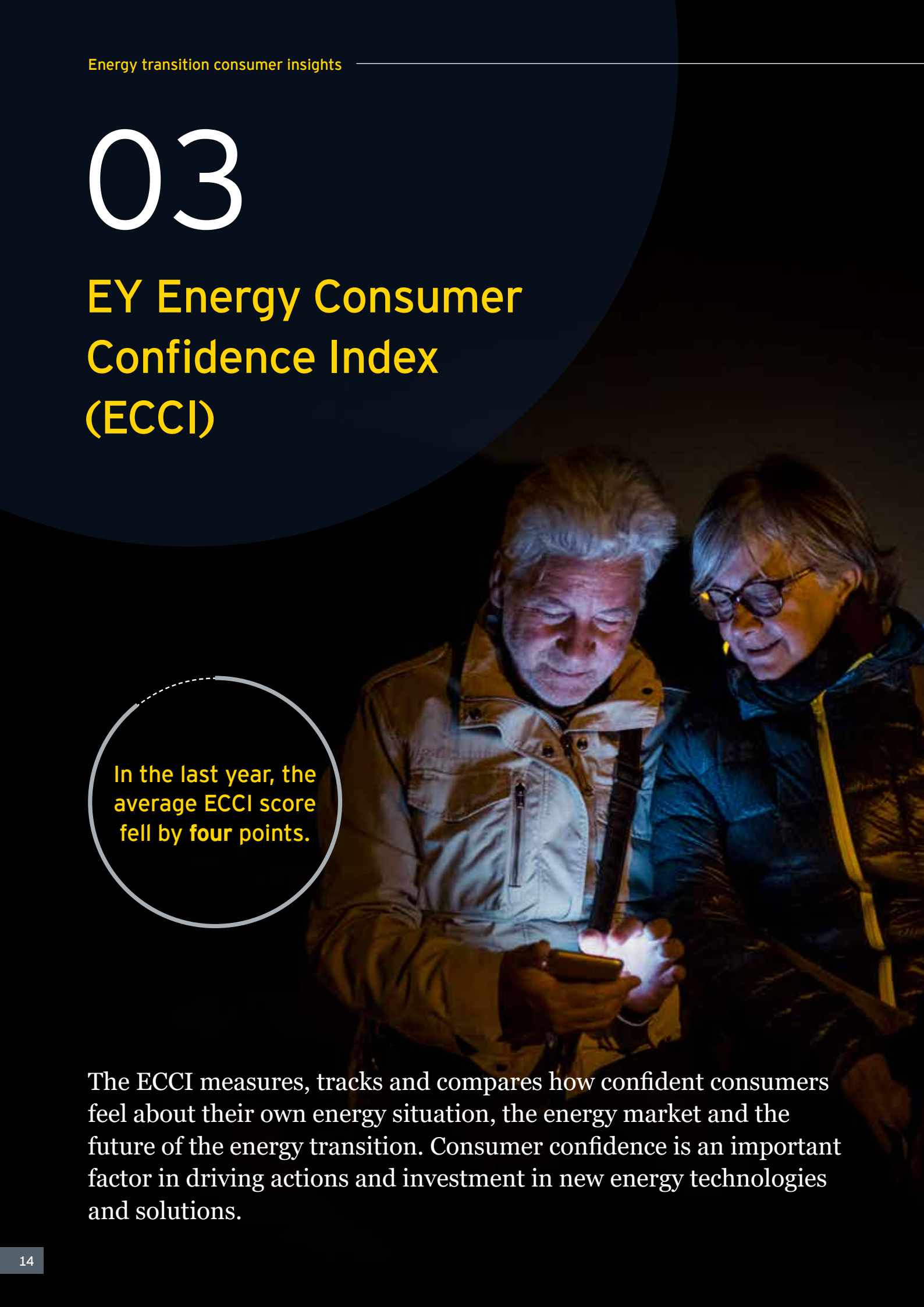
- Focus on messaging and solutions that reduce costs.
- Engage through community groups and local support systems.

What is your ecoEnergy profile?

Take our **quiz** and explore your role in the energy transition.

03

EY Energy Consumer Confidence Index (ECCI)



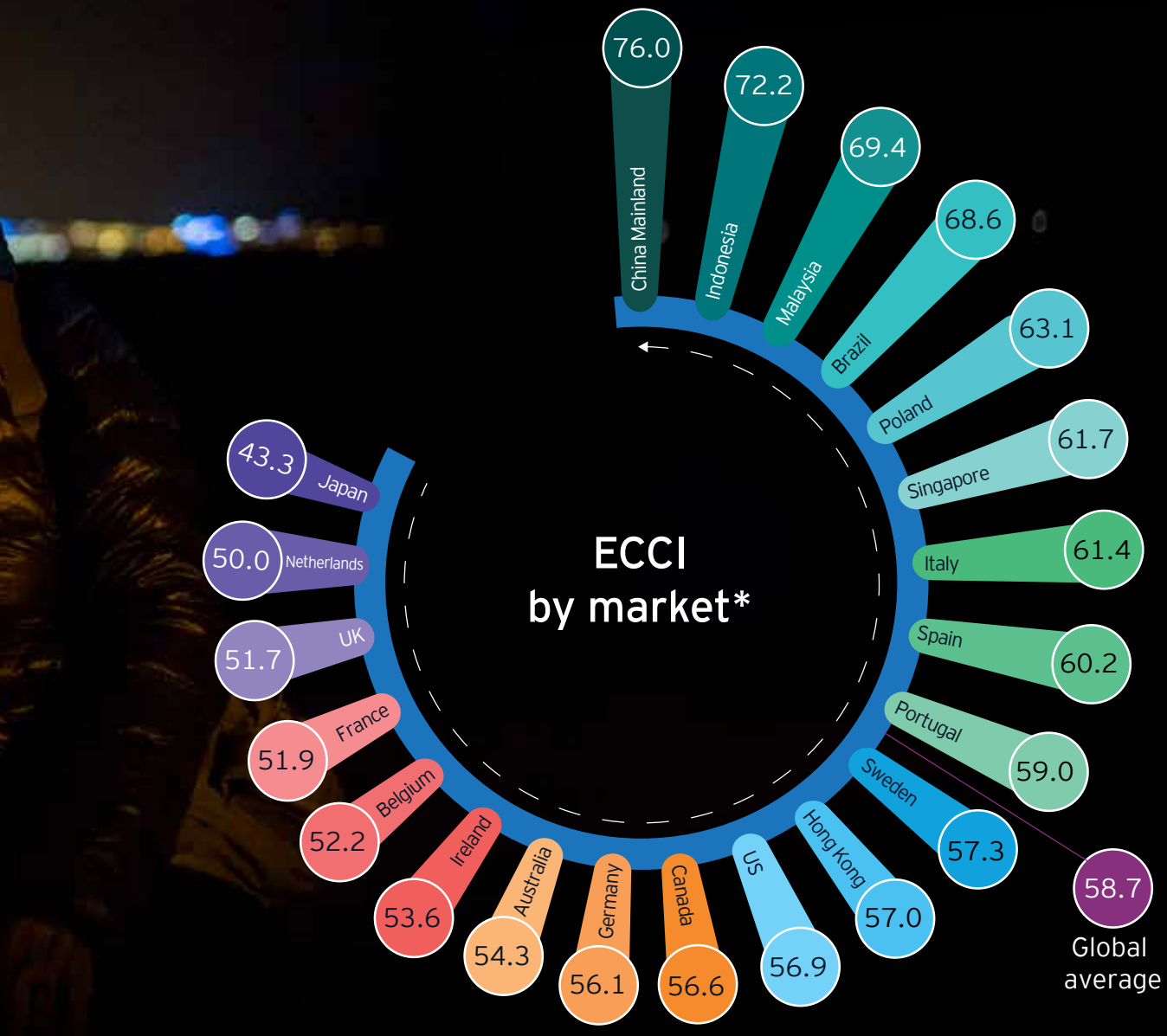
In the last year, the average ECCI score fell by **four** points.

The ECCI measures, tracks and compares how confident consumers feel about their own energy situation, the energy market and the future of the energy transition. Consumer confidence is an important factor in driving actions and investment in new energy technologies and solutions.

The ECCI incorporates consumer confidence across eight factors:

- The **stability** of energy providers' business
- The **value** created by providers for consumers and their community
- The ability to **access** clean energy options
- Access to **affordable** energy
- Regulator/government support for an **equitable** energy transition
- **Skepticism** about improvement in personal wellbeing
- **Complacency** around the ability to invest more time and money
- **Hesitancy** that personal actions make a difference

In the past year, the average ECCI score fell by four points. Scores declined in nearly all markets, with the largest drops seen in markets that have faced significant market and price volatility, including Australia, the Netherlands and the UK. Even those most advanced in their energy transition journeys (as measured by the World Economic Forum Energy Transition Index[5]) are experiencing wavering confidence, likely due to higher energy prices, inflation and, for some groups, a feeling of being left behind. We saw the biggest drops in confidence in factors of value, accessibility and equity.



*A normalized ECCI score is created to enable comparison across markets and demographics.

04

Building providers fit for the energy future

Providers must define their path forward

The energy provider of the future will bear little resemblance to the energy provider of today. We often think in terms of commodity and non-commodity energy solutions, but in the future, there will be no commodity – everything that an energy provider offers will be about adding value beyond the electron or molecule. This will require a dramatic shift in customer and operational capabilities if providers are to engage all consumers and bring them through the upcoming decade of disruption.

While every provider will change, the nature of this change will differ depending on each company's market, regulatory pressure and ambitions. We believe four main roles will emerge:

1. Specialized Solution Provider – offering an extended range of energy-related products and services to different customer segments (either directly or through partners) that create revenue growth potential

2. Energy Platform Orchestrator – focused on optimizing energy demand and enabling energy flexibility through customer-owned distributed energy resources to create value for the consumers, the grid and the overall energy system

3. Energy Transition Advocate – actively supporting awareness and adoption of clean energy solutions through incentives, connections and processes

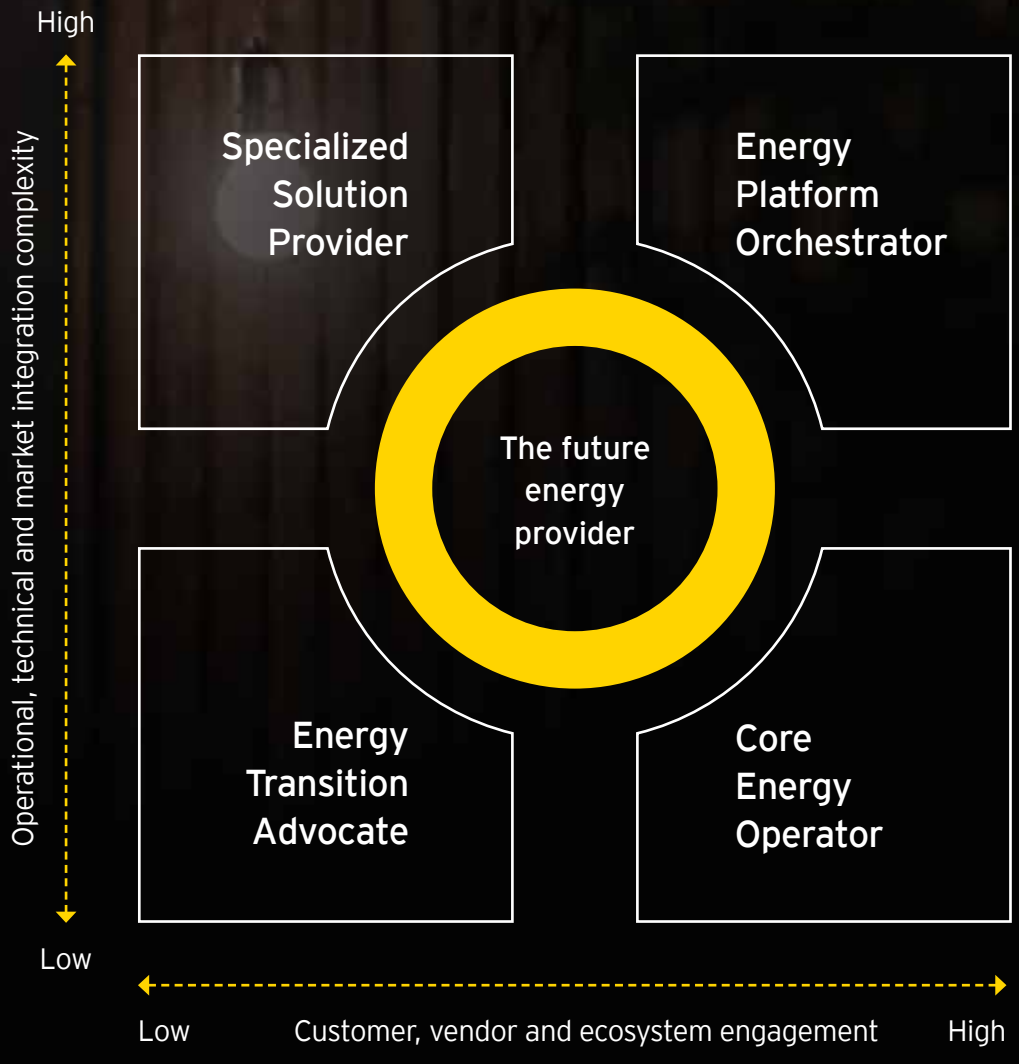
4. Core Energy Operator – energy-focused, with a range of rate and program options to support customers and grid needs

While energy providers are well positioned to play each of the four roles, other participants are beginning to slide into them as well. Energy aggregators, home solar and battery providers, automotive companies and technology providers, among others, are increasingly capturing parts of the energy experience.

Every role offers opportunities for success, but each requires different capabilities. Energy Platform Orchestrators and Specialized Solution Providers focused on optimizing customer and grid outcomes will need sophisticated multiprogram and multiproduct capabilities, and the ability to integrate with complex energy markets and ecosystems.

Meanwhile, those focused on their core obligation to serve consumers will look to support government and regulatory initiatives. An Energy Transition Advocate will need to build a broad set of relationships and facilitate energy experiences that span multiple providers. Core Energy Operators will need to keep pace with demands for digital solutions and simple rates and programs. Of course, many energy providers will choose to play multiple roles at the same time or for different groups of customers. Depending on market structures, companies may find that stacking roles creates opportunities to create additional revenue or enhance grid flexibility.

Emerging roles for energy providers



Incentive to engage

Providers are focused on optimizing customer and grid outcomes while earning additional revenue and enhancing profitability.

Obligation to serve

Providers are focused on delivering social mandates, and supporting government and regulatory objectives.[1]

05

Accelerating to meet the age of action

Reinventing the basics boosts trust with consumers and confidence in the energy system.

Priorities to create a consumer-centric energy system

Over the next decade, the energy transition will impact every consumer. The moves that energy providers make today can shape that experience for the better or worse. We are entering the age of action.

The energy transition will unfold in different ways around the world, but every market will see a completely new energy system emerge. Regardless of a provider's regulatory environment or stage of progress, three fundamental priorities will be critical to succeed: reinventing the basics; onboarding the new; and scaling for outcomes. The challenge for providers is that the rapid pace of change means that these are not sequential steps – we must do everything, all at once.

1. Reinventing the basics

Our research reveals a common starting point for energy providers to re-engage consumers: getting the basics right. But maintaining the fundamentals of the energy experience is becoming harder amid rising prices, increasing weather events and the proliferation of energy tariffs, products, services and incentives.

Digging into a new toolbox of digital technologies can help. The growing sophistication of smart metering, analytics and artificial intelligence (AI) can give consumers the choice and control they expect. Energy providers are better positioned than ever to offer proactive engagement during outages and emergencies, scale demand management programs and offer innovative new rates that help consumers lower bills. And new digital tools can give consumers the choice and control they expect.

Reinventing the basics boosts trust with consumers and confidence in the energy system. For energy providers, it's the first step in increasing customer satisfaction, a more flexible grid and new sources of revenue. Key steps can help them get started:

- **Drive intelligent simplification and automation.** Consider where process simplification, robotic process automation and digital enhancement can unlock value through an enhanced employee and consumer experience.
- **Enable "one and done," "set and forget" and ongoing experiences.** Recognize that different consumers want different experiences at different times. Design a range of experiences focused around pre-emptive and proactive engagement in the moments that matter.
- **Expand the toolbox to address reliability and affordability.** Leverage incentives and technology advances to position energy-efficient products and services (solar, batteries, intelligent water heating, etc.) as solutions for reliability and affordability challenges.

Innovative payment options overcome affordability options

The zero-interest payment options common in other sectors have come to energy. Australia's AGL energy partnered with FinTech Plenti to enable customers to buy and install home solar and batteries with no upfront costs, instead spreading interest-free payments over five years. Extra discounts are on offer for customers who commit to AGL's virtual power plant. We've seen a similar approach in the US, where Duke Energy helps consumers assess which energy solutions will save them money, estimates a new monthly bill and organizes local contractors to do the upgrades. The goal is that the money customers save on energy bills will largely cover the cost of the upgrades, which can be paid back over 12 years.

2. Onboarding the new

With better basics in place, providers can focus on new capabilities, partnerships and technologies focused on creating a seamless end-to-end experience for every consumer. As more people adopt new energy solutions, energy providers will become advisors at every step, through awareness, purchase, installation, use, maintenance and, finally, recycling, refurbishing or removing products at the end of their life. Even companies that choose to be Core Energy Operators will need to manage the huge influx of connections of new consumer energy technologies and orchestrate an increasingly complex set of energy tariffs and programs.

An inclusive energy transition will depend on new programs and incentives that make it easier and cheaper for vulnerable consumers to access sustainable energy solutions.

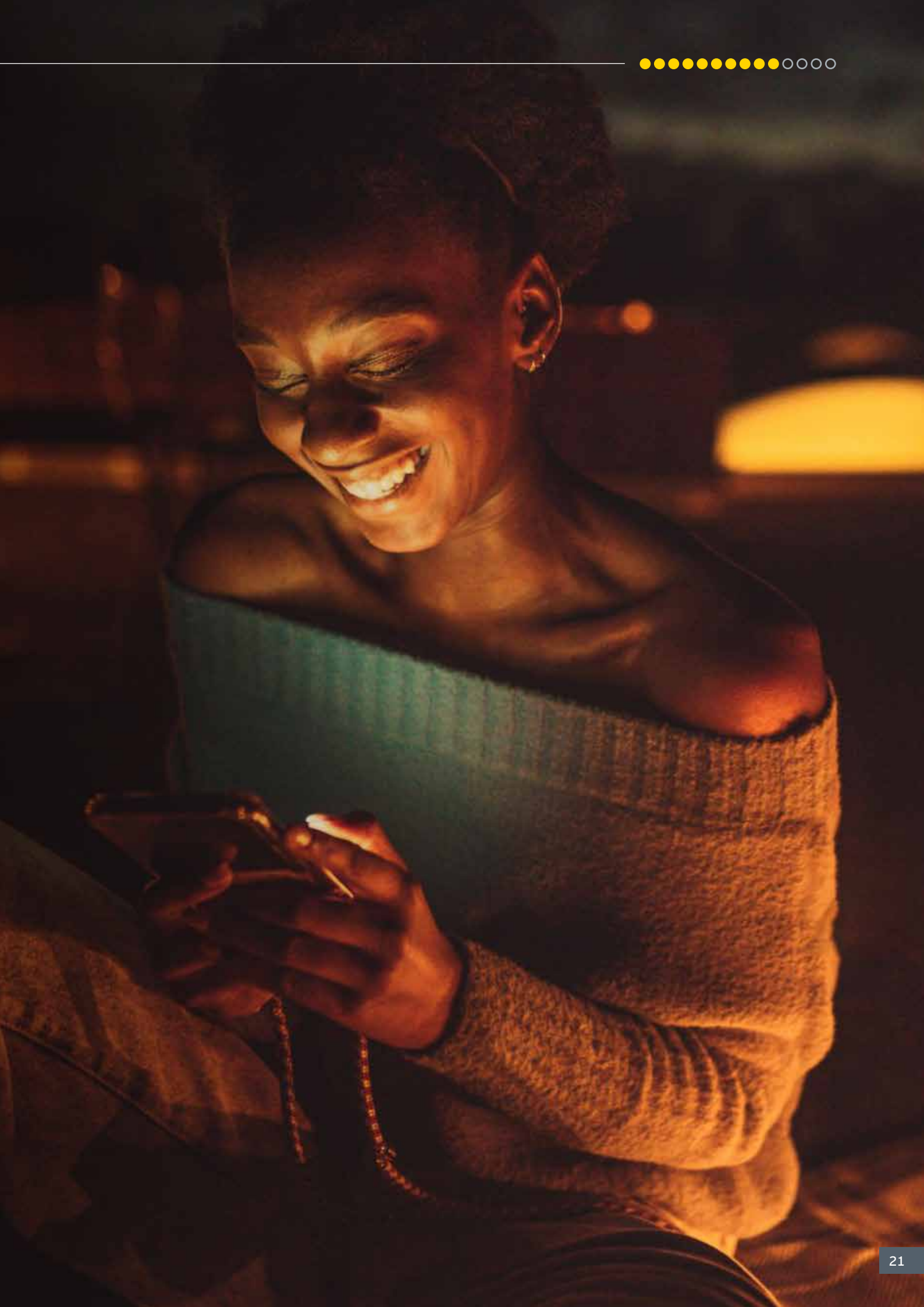
An inclusive energy transition will depend on programs and incentives that make it easier and cheaper for vulnerable consumers to access sustainable energy solutions. Building community connections and human-focused design approaches can help providers overcome local challenges to participation. Working closely with regulators, nonprofit groups, financiers and even equipment manufacturers can drive equitable solutions.

Key steps can help providers build the competencies, technologies and collaborations to onboard the new approaches:

- **Enable effortless experiences end to end.** Become a consumer champion, driving the development of an energy ecosystem that overcomes the energy solution adoption hurdles (e.g., permitting, financing and installing) for every consumer.
- **Tap into grassroots engagement.** Engage and understand consumers in their homes and communities. Work with grassroots networks to design and promote programs that appeal to, and meet the needs of, a diverse range of energy bill payers, other consumers, participants and influencers.
- **Industrialize consumer personalization.** Develop the ability to tailor marketing, sales and services across channels based on effective but manageable customer groupings. While there's much buzz about achieving a "segment of one," for most energy providers, this level of customization is overly complex and costly. The path to success is automated, cost-effective industrialized personalization.

BlocPower delivers electrification for all

Brooklyn-based BlocPower is focused on helping low- and moderate-income consumers and property owners electrify. With its own software to analyze the potential of energy efficiency and electrification, and flexible financing solutions, the company manages projects that replace buildings' fossil-fuel-powered heating and cooling with sustainable electric systems. With backers including Microsoft and Jeff Bezos, BlocPower has partnered with Georgia Power to help more residents, local businesses and not-for-profits reap the benefits of electrification.[6]



3. Scaling for outcomes

The next decade will see much testing, learning and pivoting within the sector. Staying flexible amid an unfolding energy transition is important, but a structured approach to scaling new competencies, solutions, operating models and technologies is critical for success.

As digital self-service increases, and programs, products and services expand, customer service agents must become adept at navigating technology and influencing behavior. Teams managing products and channels will operate within much faster innovation cycles, continually creating new value-added features and functions that broaden the appeal of solutions without increasing costs.

Some energy providers are taking steps toward a scaled customer-centric future with highly automated technology platforms and empowered universal agents that own customers' issues end to end. This approach is a preview of the shifts that come with scale — barriers between IT and business functions must fall to create tightly integrated, agile teams.

For energy providers that take on the role of Energy Platform Orchestrator, seamlessly managing consumer energy usage and enabling greater flexibility and control will require embracing the complexity of an ever-expanding set of market and device integrations.

AI offers huge opportunities to reset the customer relationship. Already, 69% of energy consumers surveyed are comfortable with generative AI (GenAI) being part of their energy experience (the number jumps to 85% for Gen Z). But only 56% would be willing for their provider to use personal information to enable AI tools. Making the most of the technology will also require energy companies to overcome persistent challenges around accessing consistent, quality data, and to meet high consumer expectations around ethical AI use.

Key steps can help providers scale for outcomes:

- **Plan for a GenAI-enabled future.** Develop potential GenAI use cases and applications, evaluating build, buy and ally decisions against the quickly evolving ecosystem. Start trials with employees before moving to consumers.
- **Align business ambitions with technology planning and delivery.** Identify and build the technology needed for future energy experiences, including cloud and as-a-service platforms. Remove gaps and misalignments that will hinder success.
- **Set a "North Star" operating model.** Define and commit to your new operating model for the energy transition. Centralizing support functions, digital and AI management, growing product management capabilities, and collapsing front- and back-office operations all offer opportunities. Setting the North Star will rally your organization, anchor the change ahead and accelerate progress.

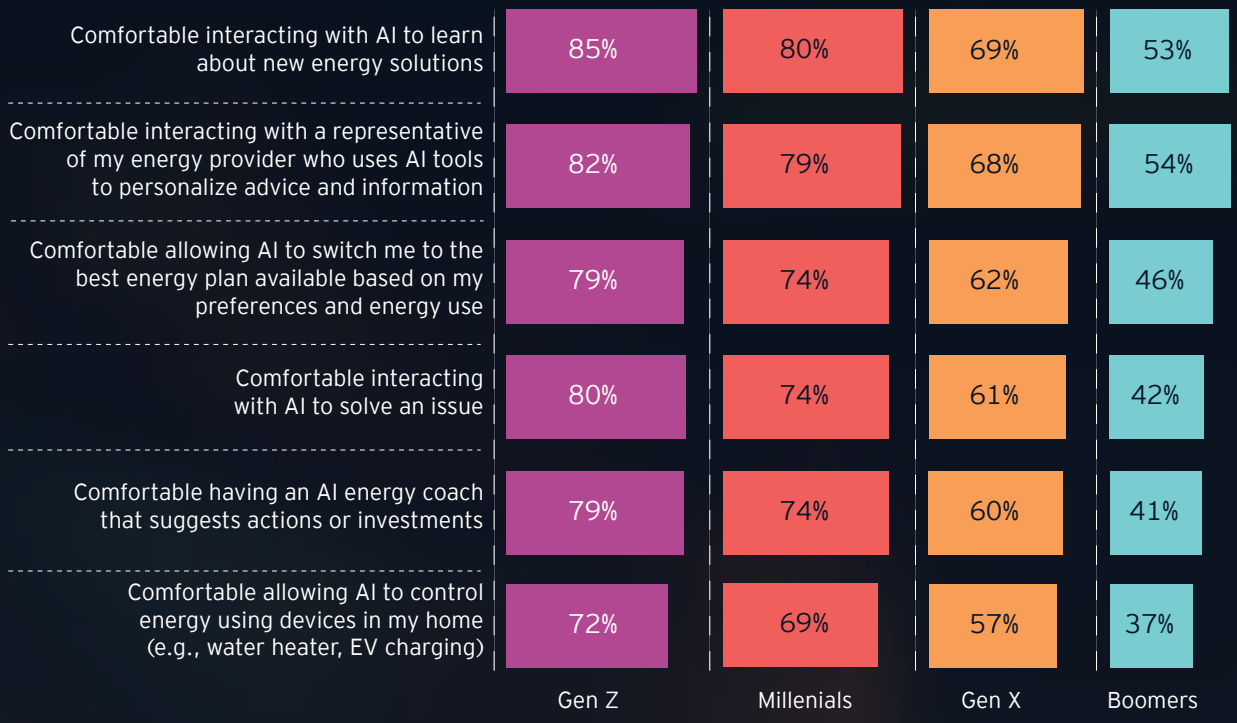
Home batteries are a win-win in Vermont

The people of Vermont are a resourceful bunch, and now a home battery scheme is giving the state's energy consumers control over their own power while helping build the resilience of the grid.

Green Mountain Power's battery program subsidizes customers' home batteries in return for the ability to use them in times of peak demand (customers can override the company's commands if they need to). The online network of around 4,500 batteries across 3,000 homes is complemented by rooftop solar, EV chargers and heat pumps. With a growing set of distributed assets to optimize the grid, Green Mountain Power is better equipped to balance supply and demand, including through proactive responses to forecast weather events — for example, charging devices to 100% ahead of big storms or precooling buildings before the day heats up. And with support to optimize their energy use, customers are rewarded with lower bills and more reliable power. The success of the program means similar initiatives are being considered across North America.

AI opportunities

AI, and GenAI in particular, leapt forward in our collective consciousness in recent years. An EY survey in the US found that 54% of organizations are already using GenAI technologies. Some energy providers lead the way often starting with use cases that improve the employee experience and automate manual work. Our research shows that consumers are ready for AI to be part of their energy experience, particularly to learn about new energy solutions and receive personalized advice.



How GenAI is improving customer satisfaction for Octopus Energy

The UK's Octopus Energy consistently tops customer satisfaction ratings, through a laser focus on meeting changing consumer demands with tailored tariff options explained in easy-to-understand language. For example, Cosy Octopus is designed for those with heat pumps, Outgoing Octopus is an option for consumers with solar and batteries, and Octopus Go is made for people with EVs. Now the company is using GenAI to further improve the consumer experience — and already seeing positive results. After months of trials and testing, CEO Greg Jackson announced that Octopus is using the technology to respond to about one-third of consumer emails — and **achieving an 80% satisfaction rate, compared with 65% achieved by emails written by skilled, trained people.** GenAI allows for the company to create more personalized communication, which is still reviewed by staff before sending.

06

Why it's time to reimagine the three "As" of energy

Every action an energy provider takes must be done with an eye on reimagining the three central pillars of the energy experience — access, appeal and affordability.

Access

More than physical availability, access includes education, awareness, choice, data and insights. Engaging consumers requires overcoming limited awareness and sagging confidence amid a more complex energy landscape.

26%

of consumers have a good understanding of terms such as renewable energy and sustainability.

44%

of consumers say energy providers are among their most trusted sources around energy, sustainability, and purchasing energy products and services.

33%

of consumers are confident they can access clean energy options. Renters and people on low incomes are two to three times less likely to be planning to invest in new energy solutions.

Appeal

Traditionally, energy providers put little thought into making energy appealing, taking a one-size-fits-all approach focused on price or sustainability. But increasing appeal means considering diverse factors, including convenience, control, comfort and hidden motivations, that are the complicated drivers of human behavior.

77%

of consumers want their energy provider to offer low-cost energy options alongside high-end products and services.

74%

of consumers offset positive energy actions with negative behaviors, e.g., buying a smart thermostat, but using more energy because it's easier to control.

34%

of consumers purchase new energy products and services to gain greater control, and 29% say they do so for convenience.

18%

of consumers would adopt new energy products and services if it was easier to purchase and install them.

Affordability

When forced to trade off elements of their energy experience, affordability stands out among consumers' needs and values. Addressing affordability concerns requires providers to take a broader definition of the issue, considering consumers' wider financial wellbeing and outlook, lifestyle impacts, potential trade-offs, and the time and energy they must invest in their energy experience.

30%

of consumers are confident that their energy will remain affordable.

69%

of consumers prefer a subscription model or fixed rate pricing.

49%

of consumers are interested in pre-pay energy options.

Time to take charge

Change is accelerating exponentially across the world's multiple energy transitions. Disruption to the energy industry is increasing and at the heart of this is the consumer.

People have shouldered much of the burden of the changes to the energy system, left to navigate painful processes to adopt new technologies, make sense of confusing incentive programs, and decipher increasingly complex energy tariffs — often while absorbing rising energy prices. It is no wonder that consumers' confidence and enthusiasm is faltering. But they have not lost hope in the energy transition. Our research shows consumers are ambitious about the potential of change but want partners to help. This creates an opportunity for energy providers to reshape themselves as trusted advisors on their energy transition journey, making change easier, faster, broader and deeper.

But this position is not assured. Energy providers must commit now to the new business models, capabilities and skills required to build a more sophisticated approach to consumer engagement. And they won't be able to do it alone — as the saying goes, it takes a village. Now is the time for providers to take the lead in creating a more connected, collaborative energy ecosystem where governments, regulators and other industries come together to make a collective, renewed commitment to consumers. A holistic, consumer-centric approach to the energy transition is how we accelerate progress toward a fairer, greener and better energy system that delivers more value for everyone.

How EY can help

The energy consumer experience has never been more important or more challenging. As energy providers, regulators and other stakeholders work to transform for the future, EY Customer Experience Transformation professionals are here to help. Our extensive experience partnering with energy providers spans programs to help shape customer experience strategies, help enable digital transformations, implement new customer engagement platforms, identify sustainable growth strategies, and support effective employee engagement and change management. We're focused on helping energy providers and the broader energy ecosystem harness innovative technologies and agile ways of working to help empower their workforce, engage increasingly diverse customers and drive long-term value.

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