

# The energy provider's guide to net zero:

Managing consumer affordability  
and an affordable energy system





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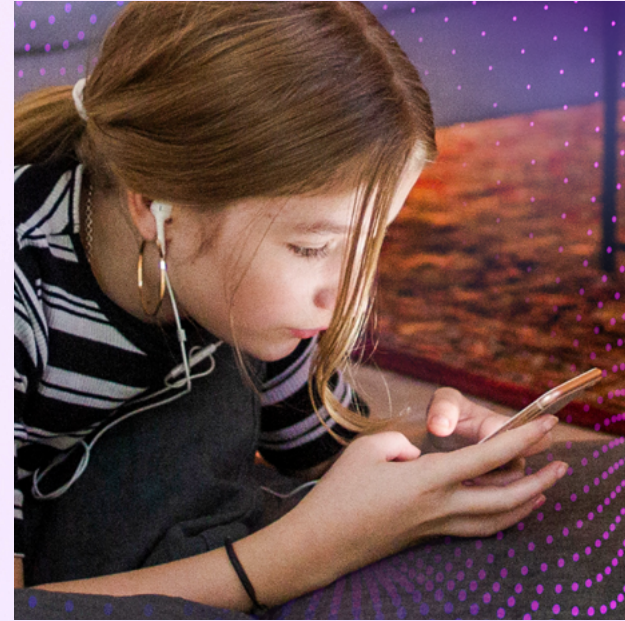
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# Foreword

As I meet with our clients around the world, affordability is top of mind for all energy provider executives.

What's made this such an urgent industry concern? We're all aware of the significant investments required to upgrade aging infrastructure and evolve it for lower carbon emissions. Additionally, we're managing more frequent and severe weather events, higher cost of capital and increasing demand. Energy, particularly electricity, is a fundamental necessity. Together, we must address transforming for net zero in a way that is affordable for all: safeguarding system reliability and business performance for energy providers, while making the transition inclusive and equitable for consumers.

Energy providers and many governments have committed to this transition, but we are falling short of effectively communicating and manifesting the benefits to consumers. As leaders in the energy sector working collaboratively with regulators and policymakers, we need to effect a transition that consumers are willing to pay toward, and that is fair, effective and sustainable. Even exciting.

This requires new approaches to consumer relationships that will see us orient the organization around consumer needs and

align communication, offers and service to individual buyers' values. Our research shows that more than 80% of consumers believe the energy transition is important, but less than half are willing or able to assume some of the cost. There's so much opportunity to close that gap.

The industry can't simply foot the bill. So as energy providers, we are faced with net zero investments that lead to either untenable costs for consumers, or untenable delays for the planet. So how do we move forward? We go beyond transformation—and reinvent business-as-usual.

Reinvention has the potential to address energy affordability challenges and facilitate a more affordable energy system. It requires a holistic review and action of the energy provider's strategy, processes and workforce. Additionally, at the heart of reinvention is an industry-leading digital core, the critical technology capability to create and empower each organization's unique reinvention ambitions. The digital core is what enables AI and generative AI, technologies that give us a deeper, richer understanding of consumers. By unlocking the value of data, we can design products and services that align with consumers' values and needs and create frictionless experiences that ease

adoption and win hearts and minds faster.<sup>1</sup>

We also need to relentlessly optimize. Using new opportunities afforded by the same digital core—comprising seven component capabilities including the right mix of cloud practices for agility and innovation; data and AI for agility and differentiation; applications and platforms for accelerated growth, next-generation experiences and optimized operations—we can do better with less across every area of the business.

This report is a guide with practical recommendations for how to rethink consumer relationships, reduce costs to improve affordability and engage with policymakers and regulators to shape an operating environment in which consumers can share in the value created by the transition.

We look forward to working with you to implement these strategies in your organization. Energy providers are uniquely positioned to ensure net-zero is affordable and on time.



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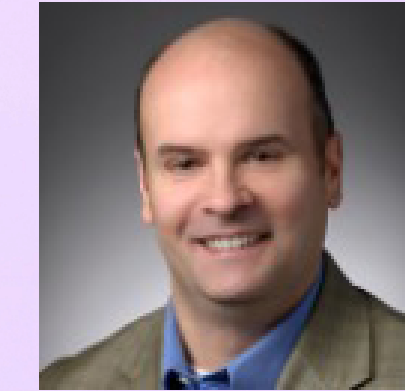
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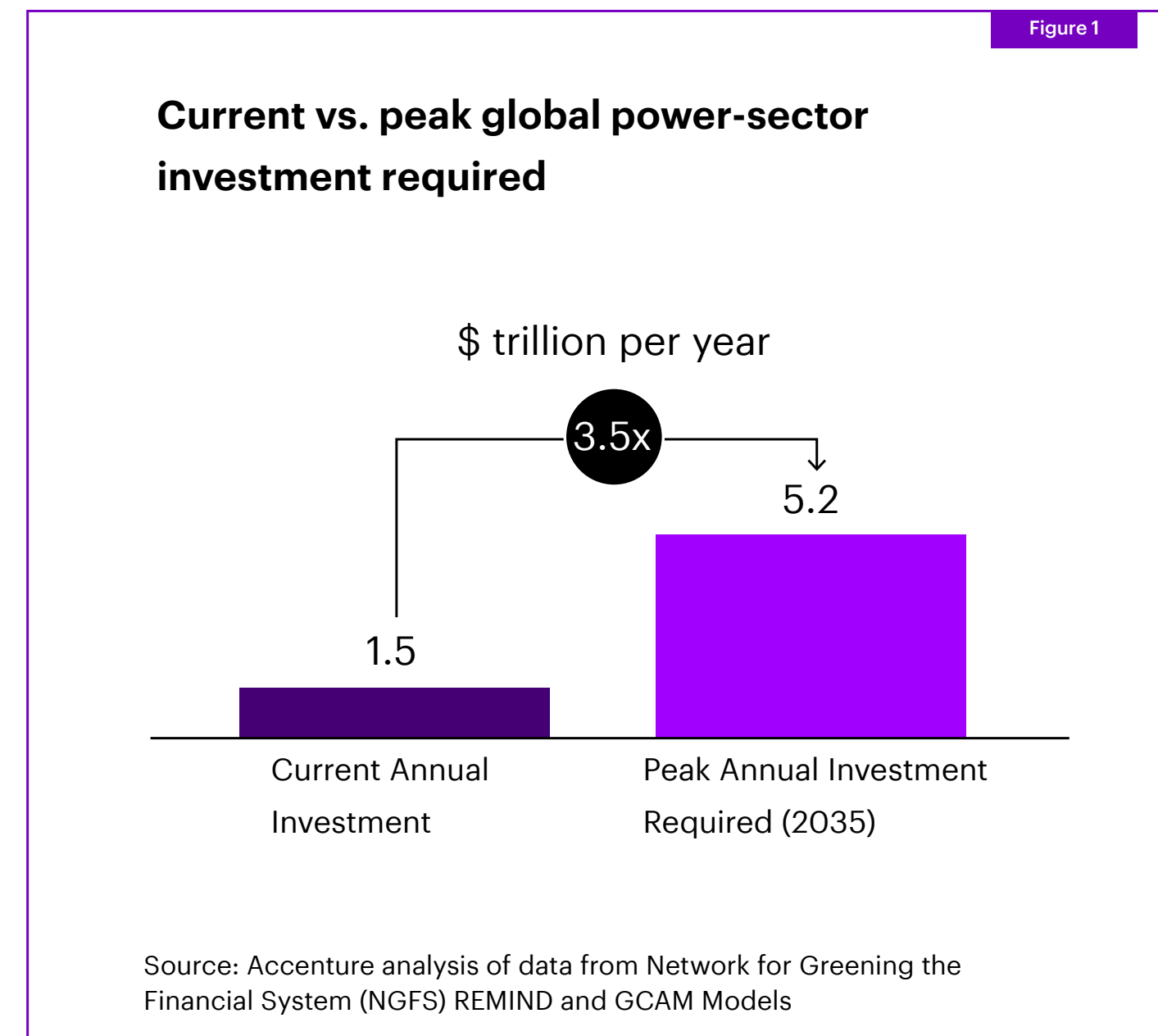
# The energy provider's dilemma: An on-time or affordable transition

The investments required to transition the (electrical) power system to net zero are colossal. By 2050, according to our analysis of data from Network for Greening the Financial System (NGFS). An investment of \$115 trillion is needed—\$53 trillion in clean power generation, \$42 trillion in transmission and distribution and \$20 trillion in interim fossil fuels and alternative technologies such as carbon capture (see Figure 1). Energy providers are unable to shoulder the investment costs alone. According to analysis, completing the required investments will more than double electricity costs as a percentage of household income. Consumers cannot afford to support this scale and pace of investment. Alternatively, keeping the transition affordable will delay achieving net-zero by 35 years according to Accenture analysis. Massive net-zero investment means energy providers are faced with the challenge of balancing an affordable transition with a timely one.

**115 T**  
Total global power-sector investments required to achieve net zero (2023 USD)

## Massive investment is required

Total global power-sector investments required to achieve net zero (2023 USD).



## Accenture quantitative analysis

Given the importance of electricity and electrification to the transition of the power system to net zero, we developed a model to assess three factors:

- The total investments required to achieve a net-zero power sector.
- The impact of net-zero investments on electricity burden—the percentage of a household income spent on electricity.
- The potential delay to net zero if investments are constrained to more affordable levels (a ceiling of 9% increases above current policy trajectories). For this analysis, we relied on data from the Network for Greening the Financial System (NGFS) using the “Current Policies” and “Net-Zero 2050” scenarios as a basis for comparison.



# A perfect storm: Consumers globally struggle to pay their energy bill

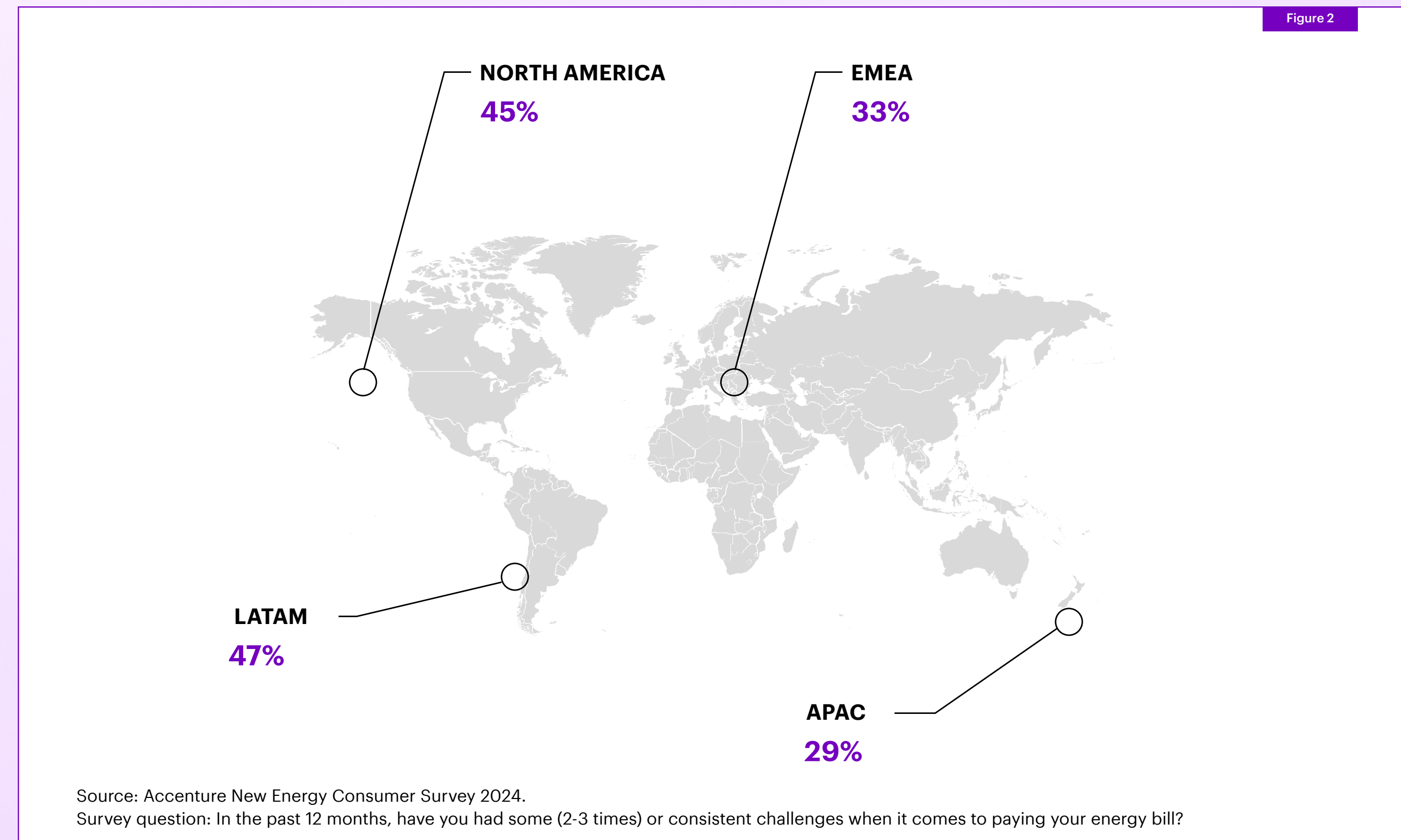
In 2022 and 2023, a combination of factors created the perfect storm for consumer energy bills to spike. Energy demand increased in the post-pandemic economic rebound. The Russia-Ukraine war caused natural gas prices to soar. Supply chain disruption, global demand for raw materials and general inflation made matters worse—further contributing to price increases. While price increases have stabilized in 2023 and 2024, they remain at record-high levels globally (see Figure 3).

As a result, consumers are struggling to pay their bills.

According to our global survey of 16,800 consumers, one in three households faced challenges paying their bill in the last 12 months (see Figure 2).

## Global view of energy affordability challenges

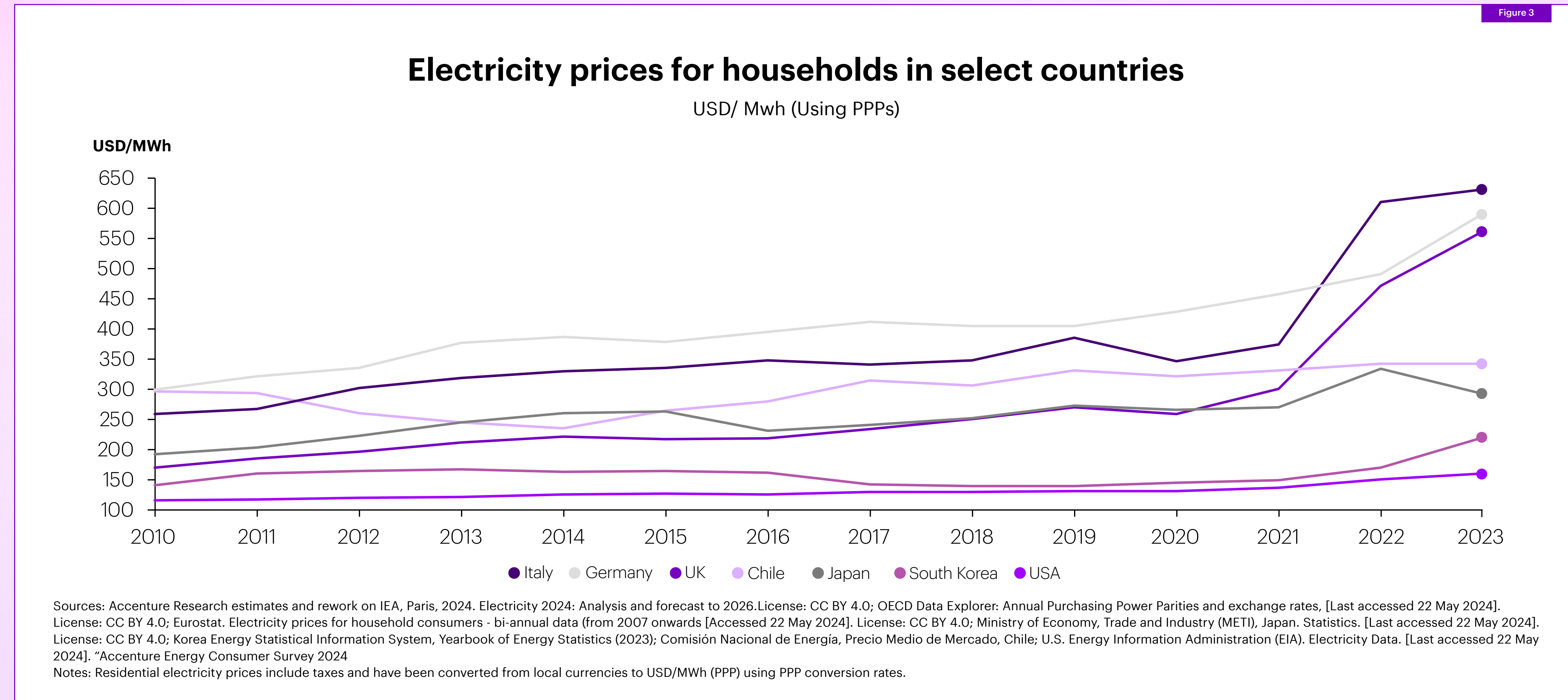
Percentage of consumers who have had some or consistent challenges paying their bill in the past 12 months.





## Electricity prices have been on the rise

Residential electricity prices have remained elevated since the 2022 energy affordability crisis, and consumers are still struggling to pay their bills.







### Accenture qualitative analysis

Since 2010, Accenture has conducted an annual New Energy Consumer Survey exploring topics spanning from energy efficiency to digital tools to improving the consumer experience. This year, we focused on energy affordability and expanded the scope to 16,800 consumers across 18 countries. We also recorded video testimonials from consumers in six countries to shed light on their needs and wants. All quotes in this report are drawn from these interviews/conversations.

All data in this report is from this survey unless otherwise indicated. We augmented the survey with quantitative analysis of the impacts of net zero on household budgets. Full research methodology can be found on [page 25](#).

“Our energy bill is one of our biggest expenses. We choose to pay monthly, so we make sure that we don't have a big bill every three months or so. We turn off switches, we turn off lights, the washing machine on shorter cycles... we have to be more frugal with our money for sure.”

– Ally, 27, Melbourne, Australia



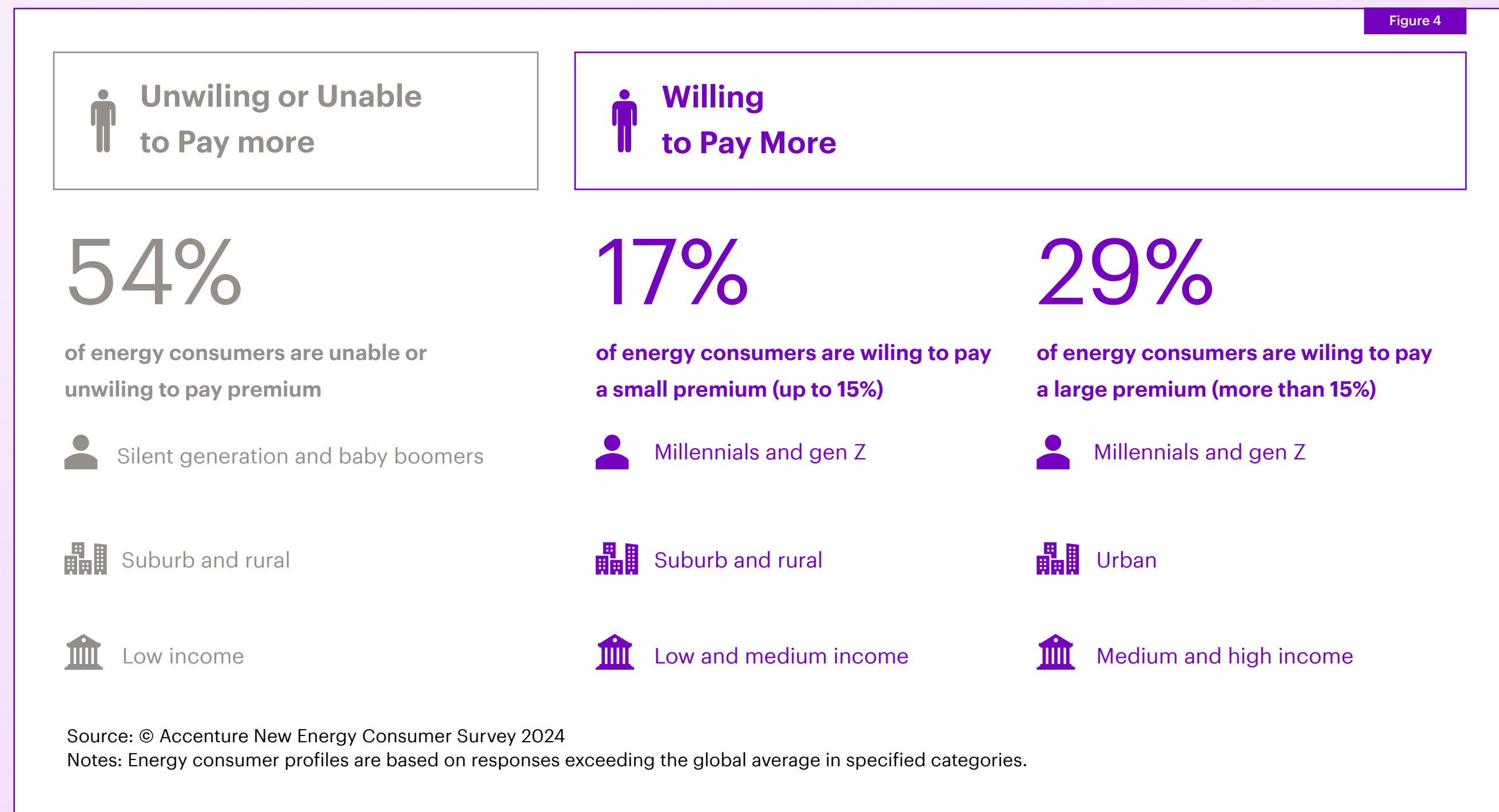
# Most energy consumers see value in net zero: Only some are willing to pay more

Most energy consumers believe that the net-zero transition is a shared responsibility—in fact, 69% believe individual consumers have a role to play. However, most are unwilling or unable to pay more on their monthly bill. While 81% of all residential consumers believe the energy transition is important, only 46% are willing or able to assume some of the cost increases required (see Figure 4). Those willing to pay more tend to be younger, have higher incomes and live in urban areas. But household income is not the only factor influencing readiness to pay a green premium for clean energy. Two out of five low-income consumers have expressed a willingness to pay more.

Our global consumer survey found that affordability and reliability are the #1 expectations of 61% of energy consumers, but only 36% were satisfied with energy providers' performance when it comes to when it comes to helping them save on their energy bill.

## Residential consumers' willingness to pay a premium for clean energy initiatives

Three profiles based on responses exceeding the global average in specified categories





## An affordable path to net zero: Energy providers can lead the charge

Everyone has a role to play in an affordable net-zero transition—consumers, communities, policymakers and regulators. But energy providers must lead the charge; they must be the orchestrators. They are responsible for managing the balance between equitable access to affordable electricity for consumers and a reliable, secure energy system capable of meeting increasing demand.

Traditional approaches won't drive the needed change. Energy providers must reinvent business-as-usual across the utility value chain. At the heart of that reinvention is an industry-leading [digital core](#). It will enable organizations to achieve their ambition in the most efficient fashion, using the right mix of cloud practices for agility and innovation; data and AI for agility and differentiation; applications and platforms for accelerated growth, next-generation experiences and optimized operations—with security by design at every level<sup>2</sup>.



We have identified five strategies that will lay the groundwork for a sustainable and affordable net-zero future for all.



# Five strategies

01/  
Meet consumers  
where they are

Adopt life-centric  
approaches to embrace  
consumer uniqueness

02/  
Always start with  
the consumer

Recenter the business  
around energy  
consumers

03/  
Relentlessly  
optimize

Reinvent cost  
and productivity  
methods

04/  
Grow the  
business

Mitigate cost pressures  
with new revenue  
opportunities

05/  
Orchestrate the  
energy ecosystem

Advocate and act  
for equitable, policy-  
enabled change



01/

## Meet consumers where they are: Adopt life-centric approaches to embrace consumer uniqueness

In the research report, Our Human Moment, Accenture identified a radical difference between how organizations define sustainability, connect with consumers and stimulate sustainable action and how individuals define and connect with sustainability. This is what we call the 'relevancy gap. While some organizations assume everyone wants to live sustainably, three in five people do not relate strongly to the idea<sup>3</sup>.

To lead in the future, energy providers will need to leverage data, artificial intelligence (AI) and ongoing consumer research to deeply understand individual needs, values and worldviews. Their outreach can be precisely tailored, using the most effective messages and channels that resonate with each consumer's unique priorities, such as caring for loved ones, home comfort or financial savings. A more sophisticated, engaged consumer relationship is vital to inspiring the level of widescale consumer action required for an affordable net-zero future.

### What energy providers can do now:

Businesses today need to adopt a broader view that allows them to see customers full lives and adapt to their ever-changing needs and priorities. We call this life centrality. Consumers should be seen as multifaceted and businesses need to understand the complex external forces that impact them (whether economic, social, cultural or beyond). A combination of human and machine intelligence allows us to understand the interplay between these forces more deeply than ever before, moving toward a generative

AI-powered "segment of one" that recognizes the uniqueness of each individual. Using our research, we have identified three consumer profiles related to ability and or willingness to fund a green premium.

### "Large Premium" Consumers

— 29% of consumers are willing to pay a substantial monthly premium on their energy bill (more than 15%). This group tends to be younger, higher-income earners living in cities. Target these consumers with individualized messages based on personal values aligned with product benefits, especially for more complex offerings like community solar (cost-savings), Electric Vehicle (EV) charging (environment-friendly) and energy storage (resilient backup power).

### "Small Premium" Consumers

— For the 17% of consumers willing to pay a small premium—people with moderate incomes, living in suburban or rural environments—focus on reducing up-front cost barriers, promoting short payback periods.

### "No Premium" Consumers

— 54% of consumers can't or won't pay more. These tend to be older, suburban or rural and lower-income. It is important to differentiate between those who cannot afford to pay more (just under half of this group) and those who don't see the value. For those who can't pay more, remove up-front costs through offerings like subsidized renewables programs and energy efficiency measures. Zero-interest financing options or "as-a-service" models can further help accelerate the benefits. For consumers who don't see the value, focus on offerings that yield short-term cost savings and enhance other values such as home comfort with little effort (demand response and smart home devices).

81%  
of consumers said they are  
interested in the energy  
transition, but only

46%  
said they are willing to  
pay more to support clean-  
energy initiatives.



- **Invest in a strong digital core and AI to inform consumer segmentation:** Understanding consumers starts with data-driven segmentation. An industry-leading digital core can enable AI and generative AI (gen AI) to deliver their full potential, helping generate deeper segmentation and insights to design, promote and scale relevant offerings. As an example, a large French energy provider partnered with Accenture to move away from dated legacy systems and reinvent the consumer experience. The company developed a 360-degree view of consumers and improved self-service channels. They unlocked the power of data to better understand what really matters to individuals and connect them with the right cost-saving clean energy programs<sup>4</sup>.
- **Promote appropriate programs, products and services to relevant consumers at the right time:** Energy providers can learn from technology-led consumer companies how to better understand and serve their customers. By becoming more sophisticated in using AI, they can promote precisely targeted programs with the right messaging. For example, Accenture partnered with ESB Networks—an Irish energy provider—to overcome a winter energy supply emergency. Developing a consumer-first set of residential and commercial consumer programs, the Irish Distribution System Operator (DSO) reduced peak usage. They rapidly grew enrollment through a multi-pronged, digital outreach campaign and helped sustain supply in a way that reduced consumer costs and emissions. According to our research, we have identified three consumer profiles related to ability and or willingness to fund a green premium.

- **Create highly tailored messaging to close the relevancy gap:** Organizations need to match sustainability messaging to consumers' realities, moving beyond industry terms and visuals of "sustainable" and "green" to focus on core human values like connection and care. By leveraging gen AI and digital tools, energy providers can deliver human-centric messaging that resonates at a personal level, compelling individuals to action.







## Strategies in action: E.ON Air Heroes

### Situation:

E.ON, the largest European energy provider, has consistently led the market when it comes to being consumer-centric and understanding how people connect with sustainability.

### Approach:

A research study by E.ON revealed that 85% of children and 81% of their parents are worried about air pollution surrounding schools.

### Impact:

In response, the company partnered with a fashion brand to design a superhero-inspired Air Heroes cape made with unique material that traps and breaks down air pollutants, connecting with people's sustainability values in a fun, unique way. Ultimately, kids wore the capes on the way to school, allowing them to become Air Heroes fighting pollution and creating cleaner air every day. And at the same time, the cape was symbolically promoting E.ON to adults<sup>5</sup>.

“... I do plan on trying to get more energy-efficient related products and services just because it helps the environment. Even though it's costly, it'll be easier in the long run, easier in the future...”

– Deilyn, 25, Hartford, United States



## 02/ Always start with the consumer: Recenter the business around energy consumers

Energy providers have long evolved from viewing consumers merely as “load” or “rate payers”, yet they have often operated according to an asset-centric rather than a consumer-centric model, where offerings and services start with the consumer. While clean energy products and services like energy efficiency offerings have seen increasing levels of adoption, many are underutilized as tools to reduce consumer costs and emissions. According to our survey, only 21% of consumers have purchased smart home technologies such as smart thermostats, an easy win to cut monthly costs and emissions. Furthermore, newer offerings with high potential—think storage, heat pumps and more—often strain to scale beyond smaller pilots. Higher-income households have adopted technologies such as solar panels, EVs and energy storage systems earlier than others. To truly connect with all consumers, energy providers need to innovate ways to meet diverse consumer needs and integrate more deeply into their everyday lives.

Energy providers can restructure their organizations to better connect with consumers and match them with the right

clean energy solutions. They should innovate to affordably decarbonize by engaging all consumers, including those who can afford green premiums, those who cannot and those who are indifferent. This strategy will help in aggressively growing adoption, cutting costs and lowering emissions, and also re-shape their business model to recognize the increasingly blurred lines between energy consumer and producer. By flexibly coordinating more distributed sources of clean energy, providers can lower costs and share the savings with consumers, creating a more sustainable and inclusive energy ecosystem.

### What energy providers can do now:

- **Organize around the consumer:** Leading energy providers are restructuring their operations around consumer needs, rather than functional competencies, breaking down traditional front, back and middle-office silos. This approach delivers basic levels of service and, more importantly, drives focus on a more sophisticated, end-to-end consumer relationship.

- **Rewire programs and services based on consumer needs:** Our research shows that 73% of consumers have already adopted at least one clean energy program or service and 87% are potential future buyers. It's time for energy providers to take a hard look at their portfolio of products and services, quickly scale cost-effective clean energy programs (for example, community renewables programs, time-varying rates) and sunset less-effective offerings. Pilots must be time-bound with clear success criteria.
- **Understand and solve for the lives of energy consumers:** Energy providers should create individualized propositions. According to our research--cost savings--not sustainability--is the most important factor for most products. Nevertheless, when addressing low-income segments, energy providers can look beyond an oversimplified correlation between a focus on cost and unwillingness to pay. 43% of low-income consumers intend to or would consider rooftop or community solar in the next two years. Energy providers should consider the specific barriers faced by low-income consumers, such as up-front costs, limited time, and higher rates of renting versus owning their own homes.





“Everything boils down to price. [...] I will change from my current supplier to solar panels if it is cheaper for me currently and in the long run.”

– Antony, 44, Huddersfield, United Kingdom

## Strategies in action: Octopus Energy

### Situation:

Octopus Energy, an award-winning energy retailer in the United Kingdom is known for creating exceptional consumer experiences.

### Approach:

The company has deployed a “consumer-forward” operating model, tearing down traditional utility internal operational silos, while offering creative and engaging products such as their “Fan Club”, “Winter Workout Program”, and “Zero Bill Home”, which give consumers the opportunity to live in low-carbon homes with a zero-cost energy bill.

### Impact:

Octopus Energy has re-defined what an energy provider can be with a positive, fun brand impact, advanced self-service capabilities and highly personalized and relevant green energy offerings that help lower monthly bills<sup>6</sup>.



## 03/ Relentlessly optimize: Reinvent cost and productivity methods

An affordable energy system delivering affordable energy is a lean operation. Historically, energy providers have managed their investments to keep costs in line with inflation. This approach is no longer viable as the costs are rising. While programs aimed at reducing operating costs through process improvements, organizational realignment, technology investments and capital project optimization have provided near-term savings, these savings tend to diminish over time.

En route to net zero, successful energy providers will completely reinvent ways of operating. This transformation includes aggressive technology reinvention, which will enable new ways of working and an overall reduction in the cost of doing business. Energy providers can deploy AI at scale across the business - supporting use cases like agent call assist, asset health monitoring, and crew scheduling optimization to name a few. An affordable net-zero future also demands substantial innovation in the capital investment planning process. Energy providers must consider practical and creative investment alternatives, such as co-locating data centers with nuclear power plants instead of constructing new transmission lines. Additionally, energy providers will work with governments and banks to secure flexible financing options such as low-cost loans, grants and subsidies. These efforts will support both company investments and consumer-facing programs, spreading costs over time to reduce the financial burden on the business and consumers.

### What energy providers can do now:

- Streamline enterprise operations through technology, AI and gen AI:** By building a robust digital core and scaling AI, energy providers can automate low-value tasks, prioritize high-value consumer interactions and streamline operations across the revenue cycle. This requires a disciplined, leadership-driven approach that emphasizes innovative, sustainable solutions over short-term cost cutting. There is a significant opportunity to improve productivity by adopting of new ways of working. There is a significant opportunity to improve productivity through the adoption of new ways of working. According to Accenture research, 31% of energy providers' working hours have a high potential to be transformed by gen AI<sup>7</sup>. According to other Accenture research, 37% of Utilities C-suite Leaders think the integration of Generative AI has completely impacted in a positive way their customer acquisition and retention strategy.<sup>8</sup>
- Embed innovation in the capital investment planning process:** Leading energy providers are challenging "status quo" investments and assessing innovative, low-cost alternatives. For example, according to Accenture analysis, Dynamic Line Rating (DLR) technologies can help increase

power capacity by 20–30%, a fraction of the cost of building new transmission and distribution lines. Clean-powered microgrids can be a costeffective and resilient capacity option in rural or remote areas.

- Access lower-cost financing for net-zero investments:** Governments—especially in the U.S. and Europe—have begun to offer grants, low-cost loans and offtake guarantees to energy providers to de-risk investments and reduce costs. For those with these options, energy providers should mobilize at speed to take advantage. For others, targeted policy advocacy is paramount. For example, the U.S. Department of Energy's Loan Program Office has created hundreds of billions of dollars in lending capacity for clean energy infrastructure, helping lower the cost of net-zero investment, enabling more than 48 million tons of emissions reduction and reducing investment risk.

**31%**  
of energy providers'  
working hours have a high  
potential to be transformed  
by gen AI.





## Strategies in action: Snam

### Situation:

Snam, an Italian energy provider, wanted to reimagine its Asset Control Room, leveraging the power of technology and innovation.

### Approach:

Snam, partnering with Accenture, developed a digital platform to deliver integrated monitoring, asset management and energy management capabilities across the company.

### Impact:

Leveraging the power of machine learning algorithms, this new platform enables quick and effective operational decision-making for more than 2,000 users across 25 processes, so that Snam can more efficiently manage its capital assets<sup>9</sup>.



## 04/ Grow the business: Mitigate cost pressures with new revenue opportunities

Energy providers have historically focused on their core business. They are often slow to invest in new verticals—clean hydrogen, carbon capture, utilization and storage (CCUS) and advanced communications infrastructure, among others. And while value-added products and services are nothing new for energy providers, those that have achieved scale are highly scrutinized and controlled by regulation (for example, regulating energy efficiency or demand response), and others have been more limited in scale.

Energy providers can maximize their existing assets and capabilities and the resulting revenue enhancements can potentially defray cost increases to consumers. Our research shows that 87% of energy consumers are interested in purchasing energy-related products and services. By expanding their focus, energy providers can develop or contribute to the development of new clean energy products, services and business verticals that cater to sustainability-aware consumers. The proceeds can help offset costs from other decarbonization efforts. In our report **“Powered for change”** we explored how energy providers can work across the industrial value chain and contribute to consumer adoption of green products that secure a green premium<sup>10</sup>.

### What energy providers can do now:

- **Build an innovative partnership ecosystem:** By partnering with startups, tech companies, investors and academic institutions, energy providers can mitigate risks associated with early-stage technologies by sharing learnings, paving the way for transformative future revenue streams. Collectively testing disruptive technologies such as clean hydrogen, carbon capture, long-duration energy storage and Small Modular Reactors (SMRs) can kickstart innovation and funding cycles that can bring down prices.
- **Innovate to rapidly test and scale new products, programs and services:** Energy providers are expanding the horizon of clean energy products, programs and services beyond “traditional” offerings (for example, energy efficiency, demand response, solar) to offerings such as home energy storage, electric heat pumps and Virtual Power Plant aggregation. The key is leveraging the strategies previously mentioned for speed, relevancy and effective go-to-market approaches. Furthermore, a strong corporate innovation

function working closely with the IT function can fund, resource, activate partnerships and drive a structured approach to test and scale cost-saving clean energy programs.

- **Create innovative revenue-sharing mechanisms:** Energy providers can earn the trust of consumers, communities and regulators by proactively proposing revenue-sharing mechanisms that can help offset the costs of net-zero investments in generation and grid infrastructure.

**87%**  
of energy consumers are  
interested in purchasing  
energy-related products  
and services.





## Strategies in action: PPC

### Situation:

Public Power Corporation (PPC), the largest electricity provider and third largest employer in Greece, has a vision to power consumers' daily lives. To accomplish this, PPC needed to become a completely digital energy provider while diversifying into adjacent, non-commodity industries, such as EV infrastructure, fiber and telecom and electronics retail.

### Approach:

To keep growing, PPC had to transition the IT department from an operational support role to being the central driver of its digital transformation. To this end, PPC partnered with Accenture to migrate to the cloud, create a centralized data warehouse and enhance security—enabling the digital agility required for growth into new markets and services.

### Impact:

PPC's compressed transformation has taken it from being a commodity supplier to a completely reinvented organization positioned for new growth. PPC has established a continuous reinvention mindset. Its emphasis on sustainability and building renewables capacity has led to 80% growth in these areas in just two years<sup>11</sup>.



## 05/ Orchestrate the energy ecosystem: Advocate and act for equitable, policy-enabled change

Traditionally, the industry's mandate has been simple: provide reliable access to energy at the lowest cost. But regulators and policymakers are increasingly demanding a broader set of outcomes from energy providers, including decarbonization, social equity, workforce development and enabling economic growth.

Energy providers are playing active roles in consortia to improve reliability and deliver clean, affordable electricity faster. Such public-private collaboration requires strategic focus, practical governance and rigorous project management.

Recently in the U.S., the state of California and major investor-owned energy providers developed a consortium to secure a \$600 million federal grant to fund a public-private partnership - upgrading 100 miles of transmission lines and deploying advanced grid enhancing technologies, ultimately offsetting investment costs to pave an affordable pathway to net zero<sup>12</sup>. Energy providers need to engage regulators with a new framework of rewards to balance clean, affordable, resilient and equitable access to energy—raising the stakes beyond existing performance-based rules.

For example, British regulator Ofgem introduced a new Accelerated Strategic Transmission Investment (ASTI) framework to support the United Kingdom's ambition to connect up to 50

Gigawatts (GW) of offshore generation to the electric grid by 2030. This innovative framework supports expedited regulatory processes, streamlined funding and additional measures to protect consumer affordability against project risk<sup>13</sup>.

### What energy providers can do now:

- **Educate the energy ecosystem on core industry challenges:** Energy providers have the expertise and responsibility to proactively educate other stakeholders—governments, regulators, advocacy groups—on core industry challenges and solutions. They can do this by providing real-world data on generation, grid modernization and consumer needs (for example, interconnection reform or rising low-income energy burden) through industry associations, conferences and peer-to-peer meetings.
- **Shape equitable policies that safeguard affordability:** While each country requires tailored policy solutions, government action is crucial and has a significant impact. Globally, governments allocated around \$900 billion to short-term energy affordability measures between 2022–2023<sup>14</sup>. Investing this amount annually would yield 20% of the \$115

trillion needed for net-zero investments by 2050. Energy providers must work with policymakers, communities and other key partners to shape new laws that advance net zero affordably and safeguard vulnerable households. Effective collaboration is essential for successful policy making, resulting in specific policy recommendations that most (but not all) stakeholders agree on.

Minnesota's Natural Gas Innovation Act (NGIA) exemplifies successful collaboration across policymakers, energy providers and other stakeholders. This landmark state law created funding and regulatory oversight for energy providers to invest in lower-carbon alternatives to natural gas, including Renewable Natural Gas (RNG), energy efficiency, power-to-hydrogen—all with safeguards for affordability<sup>15</sup>.

- **Explore new regulatory models that incentivize broader societal value:** Innovative regulatory mechanisms allow energy providers to minimize cost while maximizing societal value. These frameworks include shared savings mechanisms, performance-based regulation and revenue decoupling. To affordably decarbonize, performance-based ratemaking must be more widely adopted with more substantial financial rewards and penalties to enable accelerated progress.





**Strategies in action:**  
**Australia Capacity Investment Scheme**

**Situation:**

Australia's Capacity Investment Scheme (CIS) is a landmark framework to encourage investment in dispatchable renewable energy while maintaining consumer affordability as fossil fuel generation is retired.

**Approach:**

In November 2023, the government announced an expansion of the CIS to deliver an additional 32 GW of capacity by 2030, fill expected reliability gaps as aging coal power stations exit and deliver the Australian Government's target of 82% renewable electricity by 2030.

**Impact:**

The expanded CIS will be rolled out from 2024 to 2027, unlocking \$65 billion of investment in renewable capacity<sup>16</sup>.

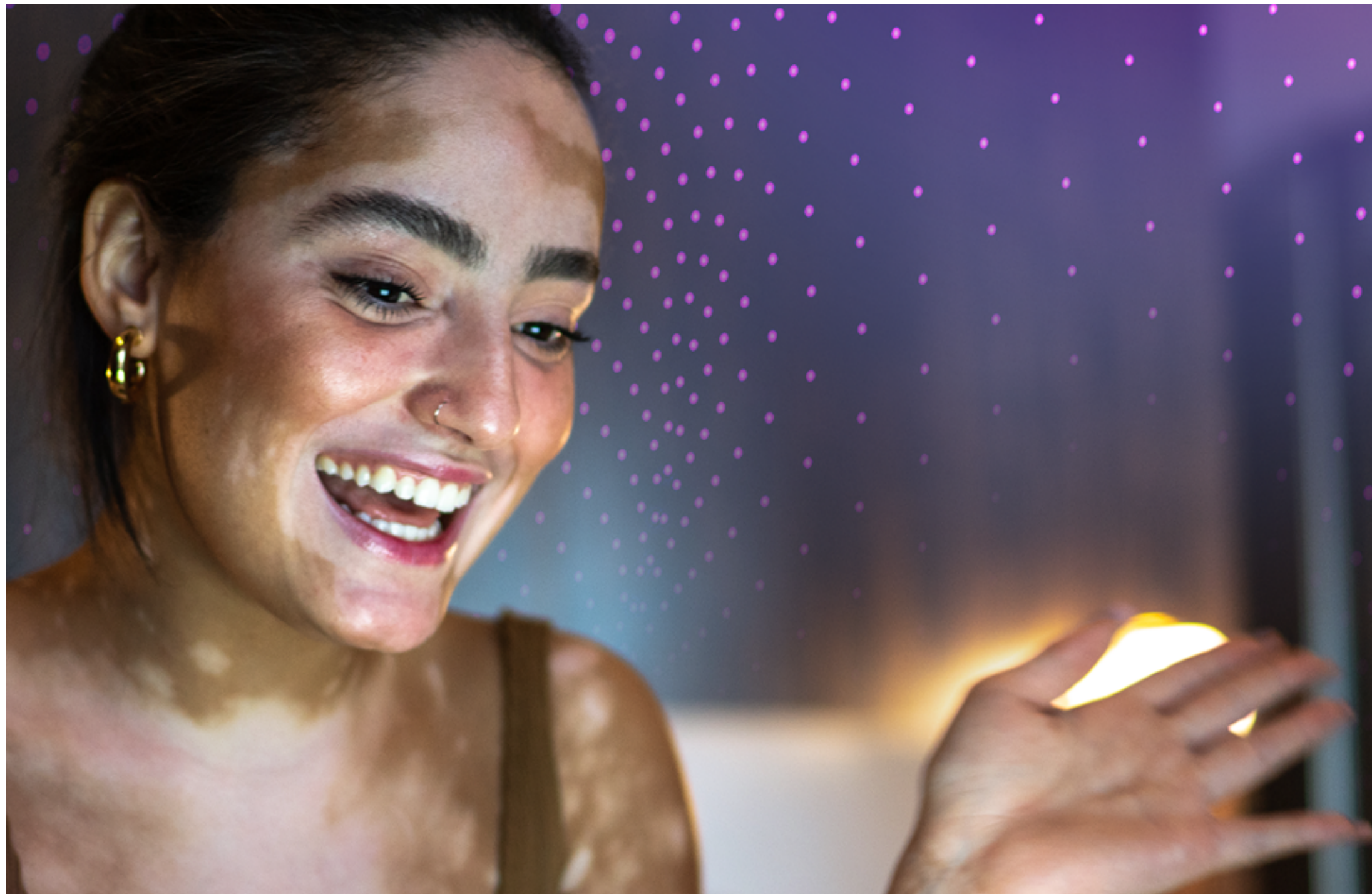
“I believe that the individual has the most important role in terms of conscience. But companies also have a role to play in encouraging these practices for the individual, in facilitating understanding of the new energy policies that could be improving and making things easier for the world.”

– Ygor, 41, Rio de Janeiro, Brazil



# Laying the foundation for resolving affordability

The five strategies outlined will not fully resolve the complex challenge of managing energy affordability for consumers and an affordable energy system for providers. But they will lay the foundation for getting closer to resolving the energy provider's dilemma. Broader economic policy and societal barriers must be addressed through public-private collaboration. Energy providers must act now. Accenture is ready to collaborate with energy providers and the energy ecosystem on this journey.



How we can help:

## **Meet consumers where they are: Adopt life-centric approaches to embrace consumer uniqueness**

Accenture can help build and/or strengthen your digital core to enable life-centric approaches to consumer experience. This establishes the foundation for the right mix of cloud infrastructure and practices for agility and innovation; data and AI for differentiation; applications and platforms to accelerate growth, next-gen experiences and optimized operations. We can help energy providers implement innovative "segment of one" experiences that resonate with consumer values.

With more than 25,000 utilities practitioners serving 325 energy providers globally, we bring deep industry expertise across the energy provider value chain to help you solve critical business challenges like consumer affordability.

## **Always start with the consumer: Recenter the business around energy consumers**

Energy providers need to start with the consumer and build outwards. Accenture can help redesign your consumer strategy and operating model, reimagine life-centric consumer experiences, rewire your portfolio of clean energy products and services and help design and implement advanced marketing and sales strategies that consider a broader consumer journey.

## **Relentlessly optimize: Reinvent cost and productivity methods**

Cost optimization is nothing new, but the tools have changed. Accenture is at the forefront of generative AI, investing more than \$3 billion over the next three years. We can help energy providers automate low-value tasks, augment higher-value interactions, optimize capital investment plans and access low-cost financing for clean energy projects.

## **Grow the business: Mitigate cost pressures with new revenue opportunities**

Energy providers must take advantage of new streams of revenue. Bringing global insight and experience, Accenture can partner with you to develop regulatory-relevant growth strategies for regulated and deregulated environments, refresh your innovation operating model or help shape a partnership strategy.

## **Orchestrate the ecosystem: Advocate and act for equitable, policy-enabled change**

Affordability cannot be solved in isolation. We help clients develop innovative regulatory and policy solutions, facilitate stakeholder engagement, support federal grant and loan pursuits and seek input from community-based organizations to drive equitable solutions.



# References

- 1 Reinventing with a digital core (July 2024) [Reinventing with a Digital Core | Tech Infrastructure | Accenture](#)
- 2 Reinventing with a digital core (July 2024) [Reinventing with a Digital Core | Tech Infrastructure | Accenture](#)
- 3 Our Human Moment (April 2023). [Our Human Moment: It's time to make sustainability more human | Accenture](#)
- 4 Case study from Accenture engagement
- 5 EonEnergy (September 2021). Cleaning up the school run: Over three quarters of parents set to implement good air habits as E.ON's research reveals eight out of ten children worry about air pollution. [Parents set to implement good air habits \(eonenergy.com\)](#)
- 6 Octopus Energy Website. Available at: <https://octopus.energy/>. [Accessed 22 May 2024]
- 7 Work, workforce, workers: Reinvented in the age of generative AI (January 2024) [Work, workforce, workers: Reinvented in the age of generative AI | Accenture](#)
- 8 Quarterly Pulse of Change (July 2024) | Accenture
- 9 Case study from Accenture engagement
- 10 Powered for change (November 2023) [Powered for Change | Accenture](#)
- 11 [Digital Utility Transformation | PPC Case Study | Accenture](#)
- 12 Department of Energy [Grid Resilience and Innovation Partnerships \(GRIP\) Program](#) (Accessed August 2024)
- 13 Ofgem. (December 2022, Accessed May 2024). Decision on accelerating onshore electricity transmission investment. [Decision on accelerating onshore electricity transmission investment | Ofgem](#)
- 14 IEA (2023) Government Energy Spending Tracker. IEA, Paris. Available at: <https://www.iea.org/reports/government-energy-spending-tracker-2>. License: CC BY 4.0.
- 15 ENP Newswire (June 2023) "CenterPoint Energy proposes innovations to advance a cleaner energy future in Minnesota." June 30, 2023: D1. Factiva, Inc. All Rights Reserved.
- 16 Australian Government – Department of Climate Change, Energy, the Environment and Water (Accessed 22 May 2024) [Capacity Investment Scheme](#)



## About research

This extensive analysis comprises multiple streams of research to explore the economic pressures residential consumers face today and how this will influence the net-zero transition.

- 2024 Accenture New Energy Consumer survey of 16,800 residential energy consumers across 18 countries and a diverse set of regions within each country to better understand current sentiment on energy affordability and the net-zero transition.
- Video testimonials from consumers in six countries to shed light on their needs and wants.
- Economic modeling to evaluate the impacts of global power-sector investments on the household electricity burden and the potential delays to net-zero resulting from affordability constraints.

The Affordability Strategies in Action case studies are based on Accenture client experience unless otherwise sourced.”

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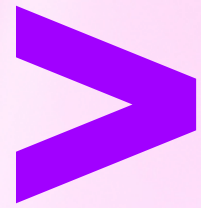
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## About Accenture

Accenture is a leading global professional services company that helps the world's leading businesses, governments and other organizations build their digital core, optimize their operations, accelerate revenue growth and enhance citizen services—creating tangible value at speed and scale. We are a talent- and innovation- led company with approximately 742,000 people serving clients in more than 120 countries. Technology is at the core of change today, and we are one of the world's leaders in helping drive that change, with strong ecosystem relationships. We combine our strength in technology and leadership in cloud, data and AI with unmatched industry experience, functional expertise and global delivery capability. We are uniquely able to deliver tangible outcomes because of our broad range of services, solutions and assets across Strategy & Consulting, Technology, Operations, Industry X and Song.

These capabilities, together with our culture of shared success and commitment to creating 360° value, enable us to help our clients reinvent and build trusted, lasting relationships.

We measure our success by the 360° value we create for our clients, each other, our shareholders, partners and communities.

## About Accenture research

Accenture Research creates thought leadership about the most pressing business issues organizations face.

Combining innovative research techniques, such as data science-led analysis, with a deep understanding of industry and technology, our team of 300 researchers in 20 countries publish hundreds of reports, articles and points of view every year. Our thought-provoking research developed with world- leading organizations helps our clients embrace change, create value, and deliver on the power of technology and human ingenuity.

This document provides only a small highlight of data collected in this survey. We have deeper consumer insights, country- and region-specific analysis and additional research to help further inform your path forward to a net-zero future. Please reach out to the Accenture authors, or your Accenture leader. We look forward to discussing the nuances of the global survey results in addition to the country-specific insights with your team.

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