

CONNECTING WORLDS – ENERGY

# WINNING THE RACE FOR CUSTOMERS AND MARGIN.

How digital technology is creating new opportunities for Energy Retailers.

equator

utiligroup  
An ESG Company



# FOREWORD.

**Digital technology is empowering customers to have insight and control over the services they use.**

In response, the energy sector is changing quickly so that customers can self-serve through applications, social media and connected devices. The basis of energy competition is evolving from price and service quality comparison towards the long-term financial benefit of energy demand reduction, flexibility and optimisation across newly relevant products such as smart heating or electric cars. Those companies that digitize rapidly and most effectively, will have the right foundation to compete in the next era.

As part of growing its value to energy providers, Utiligroup is working in collaboration with Equator - the leading digital transformation agency - to create new leadership in servicing energy customers and providing solutions for these new needs. Our first joint paper sets out the opportunity and risk for Energy Suppliers as they pivot towards the digital revolution. Time is pressing to make the changes demanded by consumers, and together, we will introduce new solutions that will help deliver this vital transformation.

**The energy future is now.**



**Mark Coyle**  
Chief Strategy Officer  
Utiligroup

**utiligroup**  
An ESG Company



# CONTENTS.

Summary	4
Competitor landscape	5
A journey of constant change	7
The connected energy customer	9
The digital divide	14
Where should providers focus their energy	16

# SUMMARY.

**TO CREATE A SUSTAINABLE, DIFFERENTIATED AND VALUABLE ENERGY SUPPLY BUSINESSES TAKES MORE THAN SIMPLY WRESTLING WITH THE CHALLENGES OF TODAY.**

## **YESTERDAY**

New entrants and competition.

## **TODAY**

Significant market consolidation and cost-to-serve reduction.

## **TOMORROW**

Creating value from smart enabled, data-rich, fully connected consumers.

**The energy sector is still coming to terms with the seismic shift in competition and the impact of aggressive customer acquisition by challenger brands during a period of intense regulatory, political and social change. It's little wonder that most players are still distracted by these impacts, opportunities and risks to their business.**

To create sustainable, differentiated and valuable energy supply businesses takes more than merely wrestling with the challenges of today. However, there will never be a better time to get it right. When else has new technology (the Smart Meter) been mandated to be fitted in every home in the UK to provide the data we need to excel? Also, how often do businesses see their product (electricity) take the place of one of the most precious commodities on the planet (petrol)?

The opportunity is enormous, and predictably, technology is the answer. The companies that will thrive are those building propositions and capabilities that will see them retain and monetize the customers they have today and continue to acquire more from their competitors by responding to the new smart enabled; convenience addicted consumer.

However, when working capital is at a premium, how do we build for tomorrow if today is a challenge itself?

To date, suppliers have been deploying basic smartphone apps, customer portals and paperless offers to reduce the cost to serve, but the real world is already light years ahead of that. In four to five years, competition may well come from digital giants, as well as mainstream car manufacturers where customers will be able to manage all aspects of their household energy via their smartphones and car dashboards.

There is broad recognition across the industry of the critical role that data will play in its successful evolution. Yet with a vast array of technologies available, there can be confusion about the next steps on a digital journey.

With the massive amount of data collected, energy suppliers will be infinitely better armed. With this knowledge, along with accurate tracking of demand, they will be able to ensure they provide energy on a real time consumption basis. As rational as this sounds, the industry still needs to embrace this step-change to accommodate and create services that integrate with consumers on a daily basis.

Connected home technologies are advancing fast, and energy providers are at different stages of digital maturity. In this paper, we look at the emerging trends, the likely customer of tomorrow and the new supply chain at work. We also introduce the ecosystem that suppliers need to create to be relevant to a tech-savvy, smart-enabled consumer.

**Finally, to help meet your challenge, we look at how to seed that into your business without tying up precious working capital or wrestling with the scalability of cost.**

# ENERGY SECTOR DISRUPTION BY CHALLENGER BRANDS IS YESTERDAY'S NEWS.

Nimble challenger brands have been gradually chipping away at the UK market share – but in some ways, that’s old news.

One in five of us is now supplied by an independent energy retailer, and there’s a lot of choice. A quick online comparison in August 2019 showed a choice of 250+ energy plans from more than 50 suppliers.

Many of these challengers are not shackled by large sales forces and expensive call centres. The more innovative suppliers are keeping costs low by communicating with customers using scalable digital channels, meaning they can compete on price while offering more straightforward, transparent products for customers.

Today, we have different types of energy companies all striving to achieve the same things; the ability to differentiate themselves by getting closer to their customers, making vital operational efficiencies through technology and delivering fast, convenient and value-adding services.

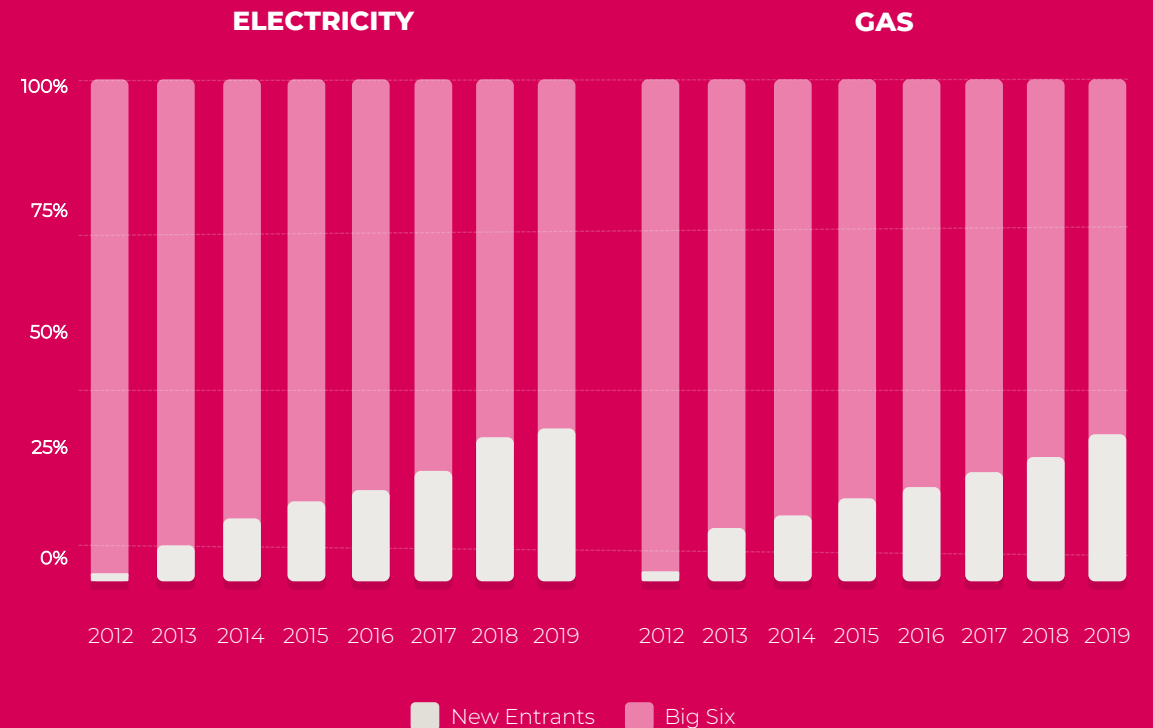


**The need to create new ways to have deeper, more connected relationships has never been greater.**

# 30%

Of us are expected to have our energy supplied by a challenger brand by the end of 2019.

## UK ENERGY SECTOR MARKET SHARE



# NEW ENERGY: AN ERA OF CONTINUOUS DISRUPTION AND OPPORTUNITY.

The next wave of energy sector disruption is building pace, despite market consolidation. Market exits and price commoditisation, smart meters, smart homes, smartphones, Electric Vehicles, local storage, big data, net-zero emissions – all adds up to a new energy landscape.

Energy providers of all sizes realise the necessity to increase choice and value for customers, particularly as pricing becomes clustered following market-wide price caps.

With smart meters rolling out across the country, data can begin to work much harder. Every day Electric Vehicles are replacing petrol, and with the UK's target of net-zero carbon dioxide emissions by 2050, one thing is for sure: energy retailers need to adapt to the new age – and they need to do it fast – as new market entrants from further afield, industry convergence and even consumers themselves are driving change.

**New opportunities exist to create customer value by using technology to create deeper, more connected digital experiences.**



The standards already set by UBER, Amazon, Skyscanner and even the some of the Fintech banks, mean that customers now expect a fantastic digital experience. There are some underlying 'megatrends' that will put all energy suppliers under pressure to become more digital.

## HOW TECH IS INFLUENCING THE NEW ENERGY EXPERIENCE

**95%**

of purchases will be facilitated by eCommerce by 2040.

### GLOBAL CONNECTIVITY

**30%**

of the mobile utility workforce now uses augmented reality.

**10.8bn**

in 2019, £10.8bn will be spent on smart home devices in the UK.

**38%**

of people will leave a website if the layout or design is unattractive

### ENERGY

**73%**

would choose a digital-only service for a discount on their energy bill.

**50%**

of energy providers will become 'convenient lifestyle providers' by 2020.

### SMART ENERGY TECH AMONGST BRITS

**35%**

understand our energy use better as a result of having a smart meter.

**3x**

on average we check our smart meters 3 times a week.

**72%**

of Brits manage their energy using tech.

**35%**

of us already use an app to manage our home.

# A JOURNEY OF CONSTANT CHANGE.

**The International Energy Agency says one billion homes and 11 billion smart appliances could participate in connected energy systems by 2040.**

With the massive amounts of data being collected, energy suppliers will be infinitely better armed.

This knowledge, along with accurate tracking of electricity demand, means we will be able to ensure energy is provided on a real consumption basis. As rational as that sounds, the industry needs to embrace this step-change in order to accommodate and create services that integrate and interact with the consumer on a daily basis.

Connected home technologies are advancing fast and energy providers of all sizes are at different stages of digital maturity.

There is broad recognition across the industry of the critical role that data will play in its successful evolution. Yet with a vast array of technologies available, there can be confusion for some players about the next steps on their digital journey.

In four or five years' time competition may well come from digital giants, as well as mainstream car manufacturers where the customer will be able to manage all aspects of their household energy via their smartphones and car dashboards.



# CONSUMERS NOW DEMAND SEAMLESS DIGITAL EXPERIENCES.

To be relevant in today's connected world, energy retailers will need to invest in their digital offerings and seek inspiration from outside of energy retail, such as leading companies in consumer goods, insurance, telecoms and hospitality sectors.

Customers now expect the digital experience to provide greater personalization, advisory information and instant resolution to service issues.

**The door is open for energy providers to offer a more immersive customer experience that creates opportunity and new value.**

We now use our smartwatch to help monitor our sleeping patterns and health on a daily basis. Trust in these tools, apps and data is already there. Importantly although much of this data is 'critical' in nature, customers are not exposed to much of it unless intervention or action is required. The technology looks after everything and alerts us only if need be. Creating a passive, but advisory home energy ecosystem can help customers lower their bills, take control of consumption and reduce their environmental impact without asking them to 'engage' or change behaviour.

One thing that is absolutely key to creating this new value is to focus on the customer and make sure that energy becomes an intrinsic but simple part of their daily routine. Instead of being admin and cost, the new energy supplier will deliver savings, peace of mind and comfort just by being configured from the get-go.

**The key to creating new value is to focus on the customer, quietly contributing to their daily routine.**



# MEET AMY, THE CONNECTED CUSTOMER.

To bring the new energy opportunity to life, let's imagine the daily routine of a connected energy customer called Amy.

Amy is in her mid-thirties. She lives with a young family in a relatively modern three-bedroom family home. The family moved into the house about three years ago and inherited the incumbent supplier.

With pressure on her time and a lifestyle that isn't 9-5, Amy needs self-service where and when she can engage. The quicker and simpler this is made, the better for her. She is income constrained, so financing and technology purchases need to fit in with her financial life too. Last year she went online to compare prices and signed up to an energy provider who offered a tariff specifically for EV owners as she'd recently changed to an EV to save on fuel bills on her daily commute. They also fitted a free smart meter.

Her supplier organised a smart home assessment which helped her connect her smartphone app with a new EV charger that they'd recently installed. As part of the assessment, Amy recognised that her heating system was relatively inefficient, and her washing machine was using more energy than expected.

Her energy supplier was able to offer her a good price on a replacement which she could buy simply on their website and pay for through her monthly Direct Debit.



**Amy's connected energy ecosystem positively effects her daily routine.**

# THE CONNECTED CUSTOMER.



## 7AM

### THE DAY BEGINS

Amy wakes at 7 am as the lights in her bedroom come on, mimicking the sunrise and kickstarting a series of events that make the start of her day more relaxed. Her coffee machine turns on, the heating already set to her ideal temperature. The solar tiles that make up her roof are already collecting electricity from the rising sun and, despite the chill outside, her house is warm and running almost cost-free as her home storage battery has kept the house supplied overnight. Loading her washing machine as she leaves for work, she tells it to have the clothes ready for when she gets home later, knowing the machine will find the cheapest time of day to draw from the grid, thanks to advances in smart meter and smart tariffs.



## 8AM

### LEAVING FOR WORK

Amy unplugs her electric car and drives to work, assured that it charged at the lowest possible cost by drawing smartly from the grid at the cheapest time, topping up from the house battery where needed. Her smart home does all her thinking for her, locking up, setting the home security, and closing curtains to keep in the warmth.



## 9AM

### ARRIVING AT WORK

As she arrives at work, Amy plugs in the vehicle, which charges during the lowest demand point during the day - all her EV charging costs appearing on her consolidated energy bill.

## Innovative energy providers will help automate the new energy ecosystem and create new opportunities as a result.



# 1PM

### IN-APP NOTIFICATION

Cold and icy weather is driving high electricity demand in the evenings so Amy gets a notification that her washing machine will now come on at 1.30pm. Amy also gets a discount on her energy bill because she's set her preferences to 'Highest Economy'.



# 6PM

### LEAVING WORK

It's been a poor weather day - the solar tiles have seen little action - and her home battery needed to be topped up from the grid during low demand times.

Ordinarily, Amy has no plans for a Tuesday and her smart energy platform would use her car battery as part of her evening energy demand. But this evening she is attending an event some distance away.

As her calendar is known to the platform, it knows she needs her car battery fully charged - and quickly - as soon as she gets home. This is taken straight away from the home battery on a fast charge when she plugs her car in.



# 11PM

### BEDTIME

Back home with her vehicle at half charge and her home battery drained, her platform knows that the car needs charged by the morning and to do so from the grid off peak.

The good news is that tomorrow's a sunny day so it holds off using the grid to charge the home battery - the sun's got that! And because Amy is away overnight tomorrow, it's going to sell the excess energy back into the grid at peak demand times, saving Amy even more money on her energy.

# HERE'S HOW THE CLEVER STUFF WORKS...

Thanks to open APIs and connected systems, Amy has a genuinely smart home energy platform. It simply makes the best decisions for her because it knows about:

- Her whereabouts
- Her calendar and where she's meant to be and when
- The weather for the next 72 hours
- Her smart appliances and other smart home gadgets, their demands and schedules
- Her car and its demands and needs
- And, what the grid's demands are and what it is offering

In simplistic terms, Amy's energy provider built an app that:

- Connects her diary and ensure its populated with locations
- Connects her car and its GPS
- Connects all her appliances
- Lets Amy select preferences from 'High Economy' to 'High Flexibility'

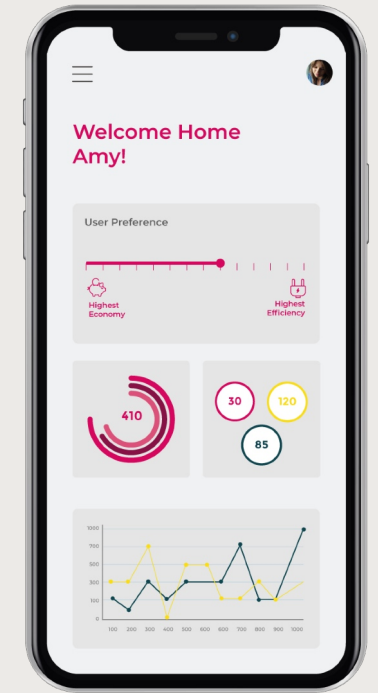
The User Preference element of her app means the platform will either prioritise economy for some loss of convenience (such as charging the car in the middle of the night vs immediately) or it will prioritise flexibility and control over financial or environmental savings.

**Amy's energy experience is almost effortless and touch-free.**

When energy providers are designing their digital ecosystem, one thing they need to consider is that by 2025 the smartphone will be passé to some degree.

It will no longer be the centre of our digital lives. Instead, assuming we let it happen, every device will be as smart and connected as the next. Our car, TV, alarm clock, watch, and so on are all omni-connected, and any alerts, interactions or capabilities in our solution would exist across the platform. This is already happening with things like Google Home, Android Auto and Android TV. This is where Apple has fallen behind, and even Amazon is going to struggle.

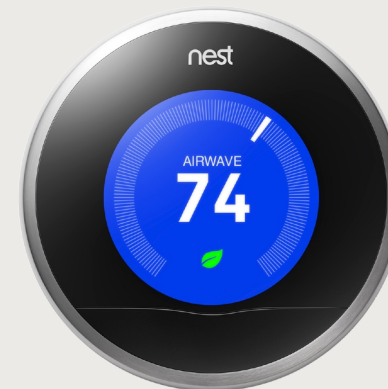
With existing technologies like Nest and Home, the trend is towards less active interactions, and even in the last year, we have seen these technologies become more smart and self-aware and less bothersome to use.



## AI IS THE DIGITAL ENABLER

**Artificial Intelligence-powered decision making is what will make all this a palatable reality for consumers.**

If we are to build a world where the utility manages your car, home solar, appliance use and so on, this has to happen in a low-touch environment where the only inputs are lifestyle choices, and the critical consumable output is how much money the customer is saving.



**Customers will choose suppliers with the best user experience. One that offers the maximum flexibility with the minimum effort.**

A system that, when it offers you decisions, offers informed choices...

- Is it cheaper to take a self driving Uber than take your car this evening?
- When it detects your washing machine is using more energy than normal, it raises a service ticket or offers you new machines which have a lower lifetime cost.
- It dynamically changes its choices due to environmental factors (like weather, traffic, number of people to consider)

It must connect to the most commonly used systems like Google (Nest / Home / Waze), Audi, BMW, Volvo (cars), Sanofi (home automation), Tesla (batteries), LG (appliances), the DCC, Chargepoints, the Met Office and the Highways Agency to name but a few.

In the next couple of years, the costs of AI will come down considerably whilst the capabilities will only get better. In the meantime, energy providers should be assessing their digital readiness, planning their roadmap and sourcing delivery partners that know the industry and have user experience know-how.

**In the new energy world, dominant providers will be those with the most intelligent, user-friendly platforms.**

# BIGGER PICTURE BENEFITS.



**Although her consumption is down, Amy now spends more with her energy supplier than she did a couple of years ago.**

**The deeper relationship between consumer and supplier enables money saving and environmentally sustainable behaviours that Amy values.**

On the commercial side, Amy is now sourcing more than energy from her provider, because she values their advice and they have provided digital tools that make it easy and convenient.

Each month Amy pays her energy provider a simple Direct Debit payment which includes her:

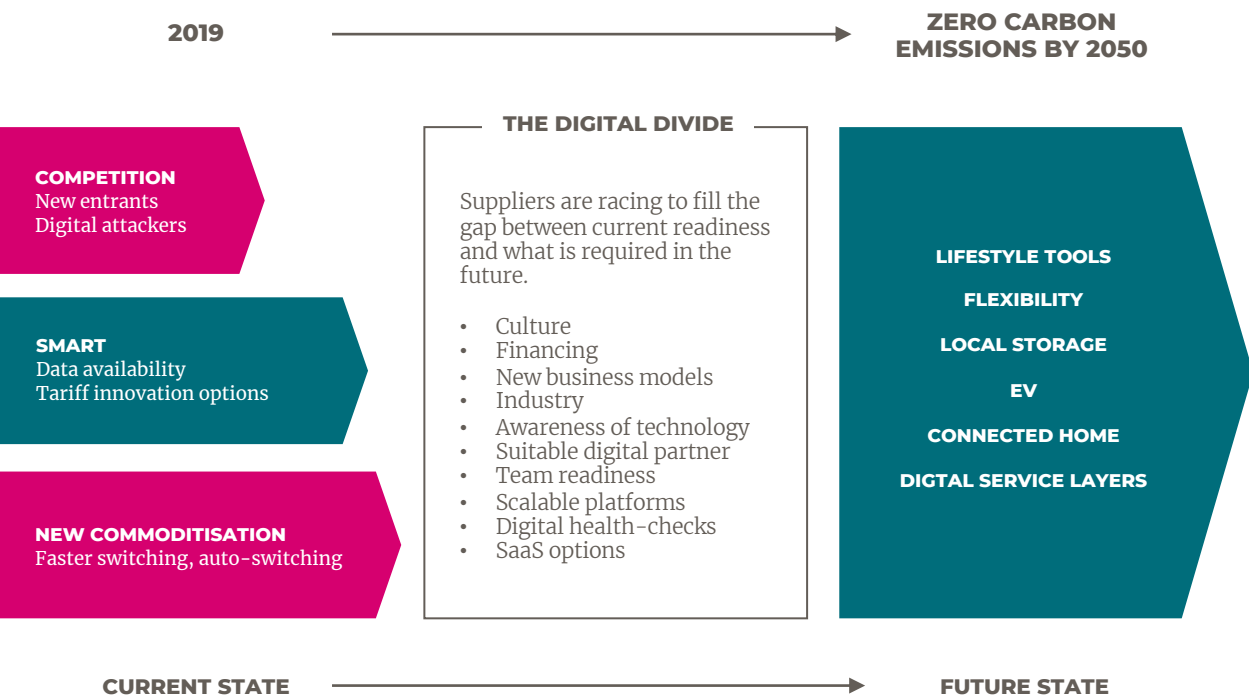
- **Energy pack: paying for the energy she consumes**
- **EV pack: including rental of her high-speed charger**
- **Smart Heat pack: including her storage heating**
- **Smart Store pack: for her in-home battery storage**

While she pays £250 a month to her energy supplier, her car fuel costs have been cut dramatically, she has a hassle-free heating system with no maintenance issues and her carbon footprint is lower than it was before.

# AN EMERGING DIGITAL DIVIDE.

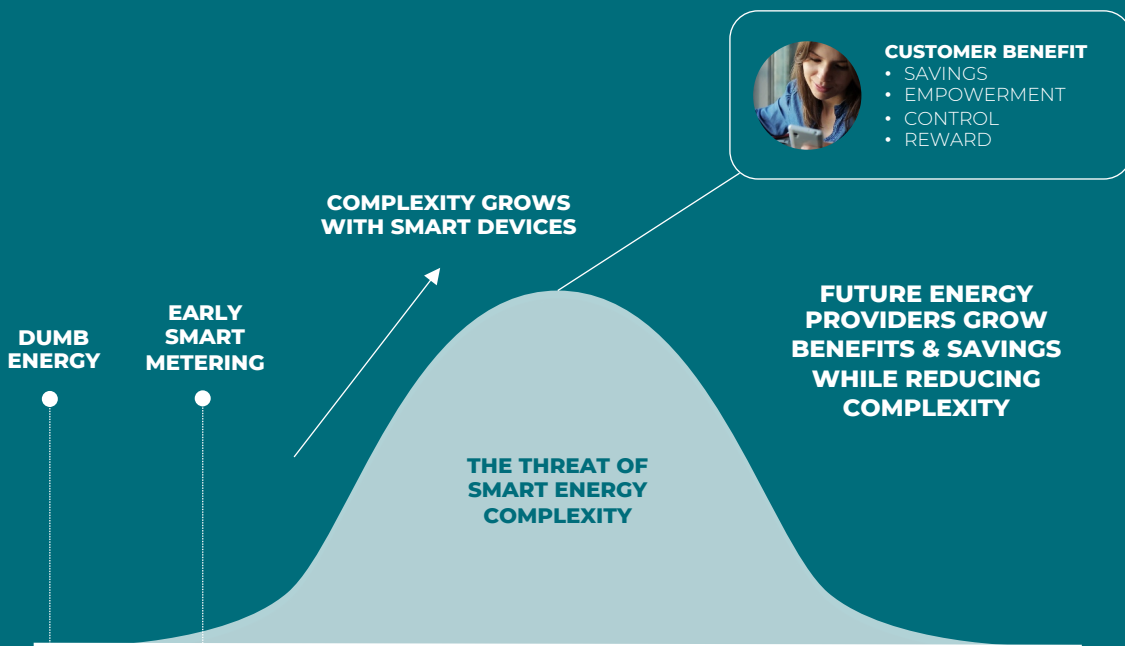
If carbon neutral electricity is to become a reality, Amy's customer experience may need to become our new norm.

With faster switching, and auto switching picking up pace, it won't be long before energy is recommodified, and switching happens automatically. To mitigate these risks energy providers must work hard to make sure they are digitally ready for the future. Providing customers with clever, ambient tools then help them save money and reduce their environmental footprint.



# READY? THE RACE IS NOW ON.

The role of the energy provider is to make life simpler for customers, while creating new earning opportunities.

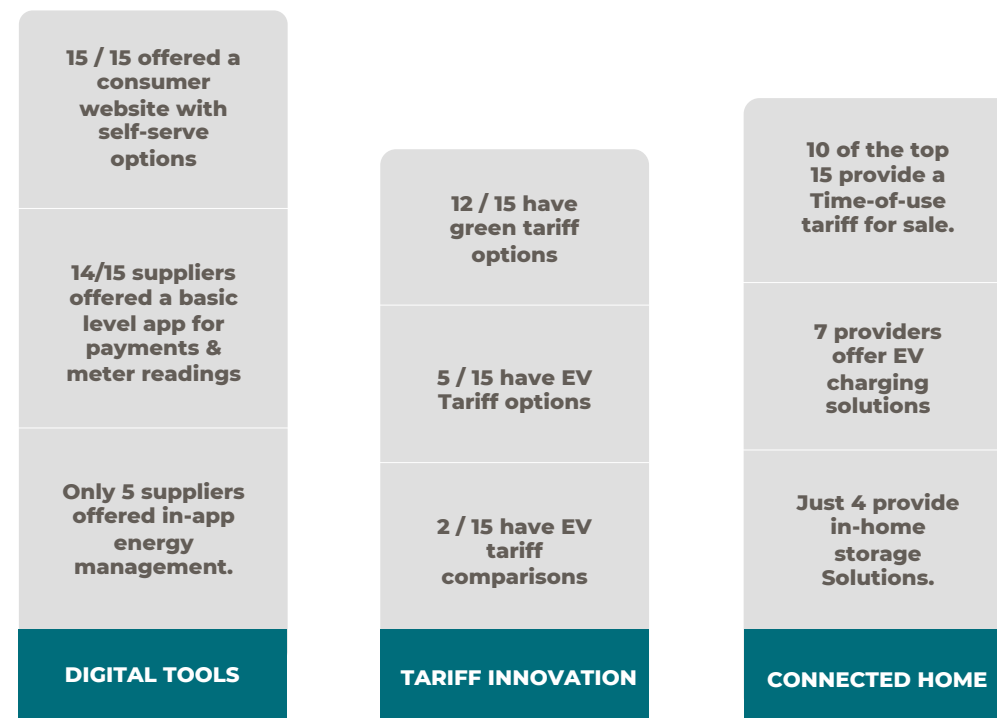


From a pre-digital experience the complexity in energy swells. The role of the new energy service provider is to avoid it reaching the 'complexity peak' and introduce a mitigation path of service simplicity through integration, abstraction, automation and personalisation.

Based on Ofgem customer number figures, we assessed the future-readiness of the Top 15 UK energy suppliers by considering several assessment criteria over three main areas: Digital Tools, Connected Home and Tariff Innovation.

The suppliers who are most 'ready' for the next generation customers were a mix of big six and larger independents. In general, those in the 1m+ customer bracket are more ready than the smaller suppliers. In order to move away from price-led propositions, suppliers - big and small - will need to invest in connected digital experiences which will help create new sources of value and allow them to develop richer relationships with customers.

**There is a definite readiness gap - even within the top 15 suppliers - especially around EV and connected home technology and even smart-enabled energy management using digital tools.**





**Energy customers are ready - new income streams are now a real opportunity.**

# WHERE SHOULD PROVIDERS FOCUS THEIR ENERGY?

As customers start to self-supply part of their energy from their own generation, or that of neighbours, the traditional business model of the tariff being 100% of demand no longer applies. Opening up new revenue streams helps part-substitute the fall in traditional retailer earnings.

If providers decide not to innovate, we will likely see penetration from the tech giants, or new areas of competition like car manufacturers – all of which will compress and commoditise traditional energy suppliers and impact prices further. The result will be that energy suppliers of all sizes will become highly commoditised and the ability to generate value for customers will become more limited – consolidation will inevitably accelerate.

The race is on. Energy providers should be building their strategies to mitigate these risks and capitalise on the opportunity created by connected homes, smart data and lifestyle technology. Energy providers who choose to embrace these changes, finance themselves appropriately and invest sensibly, will reap the rewards of long-term, engaged customers that generate multiple sources of revenue.

**The starting point for energy supplier C-suite teams is often:**

1. Finding a suitable digital partner
2. Carrying out a digital health check / assessment of digital readiness
3. Development of a digital roadmap
4. Budget allocation of OPEX and CAPEX requirements
5. Integration of front end-tools with middle / back office to streamline costs

Energy providers can unleash new value from connecting this energy ecosystem. The door is now open...



## **Utiligroup and Equator are collaborating to extend the value provided to energy providers.**

Utiligroup can now bring the benefits of natively digital customer engagement and management as part of their leading single-source platform - bringing together sector expertise, specialist focus and pioneering SaaS solutions, as a high-scale operational platform.

Utiligroup is the market leading provider of software as a service to the UK competitive energy sector. Our expert solutions unleash competitive leadership that achieves lean, smarter service to unlock customer focus and innovation. We underpin leadership at scale for over forty energy Suppliers, metering financiers and agents. Utiligroup expert value spans feasibility assessment, market entry, automated operations, smart metering, industry change and data insight. Our smart metering software provides secure interaction for more than seventy companies including innovators identifying new customer benefits through data. We make energy smarter for everyone through more competitive choice, better service, the benefits of smart technologies and the ability to embrace the profound range of industry changes proactively.

**Find out more at [utiligroup.com](http://utiligroup.com).**

Equator is a top 5, independent digital transformation agency. With over 180 digital experts, we enable businesses to innovate faster, operate more seamlessly and build stronger relationships. We achieve this by creating visionary, connected experiences that strategically combine data, technology, creativity and marketing.

**Find out more at [eqtr.com](http://eqtr.com)**

**utiligroup** **equator**

## **REFERENCES**

- [www.nasdaq.com/article/uk-online-shopping-and-e-commerce-statistics-for-2017-cm761063](http://www.nasdaq.com/article/uk-online-shopping-and-e-commerce-statistics-for-2017-cm761063)
- <https://www.ofgem.gov.uk/data-portal/gas-supply-market-shares-company-domestic-gb>
- <https://www.ofgem.gov.uk/data-portal/electricity-supply-market-shares-company-domestic-gb>
- <https://www.mckinsey.com/industries/electric-power-and-natural-gas/our-insights/the-digital-utility-new-opportunities-and-challenges>