

The Accenture logo, featuring a stylized greater-than sign (>) above the word "accenture" in a lowercase, sans-serif font.

accenture

A close-up of a wind turbine's nacelle and blades at night, illuminated with red lights against a dark, starry sky.

ACCENTURE UTILITIES

TAKING TAKING CHARGE CHANGE

Empowering utilities and energy service
providers to lead the change





Changing on demand

Businesses have always had to reinvent themselves to better serve an evolving society, but the current energy transition is unlike anything that has come before.

Unlike past transitions which were influenced primarily by changes to supply, this energy transition will be driven by demand.

Citizens, businesses, and governments are all aligned on the need for clean, reliable, affordable energy, and their demands will land at the feet of utilities as both established and emerging industries look to develop solutions for a world fast-approaching net zero.

Coping with the unfamiliar intensity of change and taking charge of the unfolding transitions by scaling the progress made to date is a new challenge, and one that calls for a focus on technology and sustainability.

Embracing change and the possibility that technologies promise not only increases operational efficiency, stability, and safety, but also attracts the tech-savvy talent needed to solve complex problems, and investors who assess the societal, environmental, and financial risks of every opportunity.

The urgency of these changes is undoubtedly uncomfortable for electric, gas, and water utilities. However, we believe that organizations that put digital and sustainability at the core of their business, will deliver greater value to all stakeholders in a new, net zero world.

So, let there be change.

Stephanie Jamison

Senior Managing Director, Global Utilities Lead



As we accelerate towards net zero, utilities that weave digital and sustainability into their DNA will be at the forefront of the industry transition. These companies will be in the best position to deliver 360° value to their customers, employees, and shareholders as they evolve to become utilities+: the connected, collaborative leaders taking charge of the energy transition.

Digitalization will trigger total industry reinvention

There's never been a better time to be in the utility industry.

Even in the most conservative energy scenarios, electricity will more than double from ~20-25% of the energy mix to at least 50%; and the more common view is that electricity will be ~75% (triple its current share) by 2050.¹

This change is the result of the renewables expansion led by large European utilities and selected North American players. The ongoing digital enhancement of assets, processes, and products has had a profound effect: variable renewables now account for over 20% of the electricity mix in both Europe and the US, with much higher figures in many individual markets.

Green energy majors are set to deliver high single-digit EPS growth (compound annual growth rate) to 2030, outperforming the rest of the sector and continuing to grab more share of the sector's market cap.²

At the same time, leading system operators have taken on the challenge to transform a synchronous system into a variable one that can accommodate larger shares of wind, solar and nuclear power through variable and distributed renewables.

Water utilities are also transforming to deliver on the goal of net zero water. Water UK has outlined a plan to save the emissions of 10 million tonnes of greenhouse gas by 2030, a full two decades ahead of government targets.³ In Australia, Melbourne Water is lowering emissions by using sewage by-products (such as biogas and biosolids) as a resource and generating renewable energy as they aim to reach net zero by the end of this decade.⁴ Gas infrastructure and supply companies are taking similar steps as the energy sector converges, blending in renewable gas and evaluating the potential to adapt both blending and dedicated infrastructure gas infrastructure for hydrogen.

There has been tremendous progress, and yet there is still much to be done to digitally transform these key systems to drive business, economic, social, and environmental value, and impact.

With many corporations and governments turning to utilities to lead into uncharted territory, particularly in growth markets where the transition journey is just starting, now is the time for utilities to take charge and accelerate the shift towards net zero.

Green is the new black

To pivot to the supply of sustainable services and solutions while growing their market share, utilities will be challenged to upgrade existing infrastructure and strengthen core offerings, while building upon a commodity business to expand service offerings that create new value and enable the energy transition—all while investing in the creation of new value pools.

Finding that balance requires significant capital. Although ongoing digital transformation can continue to release value and fully realize the promise of human potential, most utilities will also require external investment.

That means building a responsible business around a new kind of value that lies at the intersection of digital technologies and sustainability; using applied intelligence to unlock value beyond profit alone and deliver 360° value: value which has a positive impact for all stakeholders, the environment, and society at large.

Given that modern funds now assess the environmental, societal, and financial aspects of every opportunity, it is critical that utilities are ESG (Environment, Society, Governance) compliant if they're to attract the capital they need.

Global ESG-data driven assets hit \$40.5 trillion in June 2020.⁵

Utilities are well placed to generate this new type of value. For example, large renewable assets not only present the promise of long-term revenue, but also create sustainable jobs and help reduce greenhouse gas (GHG) emissions.

The challenge is building a responsible business capable of delivering 360° value tomorrow without losing sight of the immediate needs of today; a business that delivers sustainable value and impact to every stakeholder.

The era of electrification: E becomes I

For many, the answer to ESG is electrification: it contributes to lowering emissions, drives job creation, and attracts investors who recognize the opportunity to upgrade aging infrastructure and outdated industries.

Much like the fourth industrial revolution which saw a wave of new products and services prefaced with an “I” to indicate their intelligence, we expect the widespread electrification of everything from trucks and factories to cities—so “E” will become the new “I”.

While this move to electrification is an opportunity to deliver 360° value, it will also place new demands on today's utilities, who are expected to decarbonize their own operations while empowering governments, organizations, and entire industries to do the same.

Taking charge to lead in the era of electrification will challenge executive leaders to balance today's demands with tomorrow's by reinventing their business, forging new alliances, and exploring new partnerships across industries.

It will dare today's utilities to take center stage and become tomorrow's energy service providers.

Electrification could drive \$600b transmission spending by 2050.⁶

As cutting-edge technologies mature and reveal the true power of applied intelligence, entirely new possibilities and models emerge at an exponential rate. And when these intelligent systems extend across industries and geographies, such as industrial clusters or cities, it is possible to decarbonize and reduce cost at scale—while generating sustainable stakeholder value.

From gas infrastructure providers and regulated retailers to water boards, hydrogen pipeline operators and start-ups, the models, products, and partnerships that electrification make possible will inspire utilities to reinvent themselves and progress beyond recognition as net zero approaches.





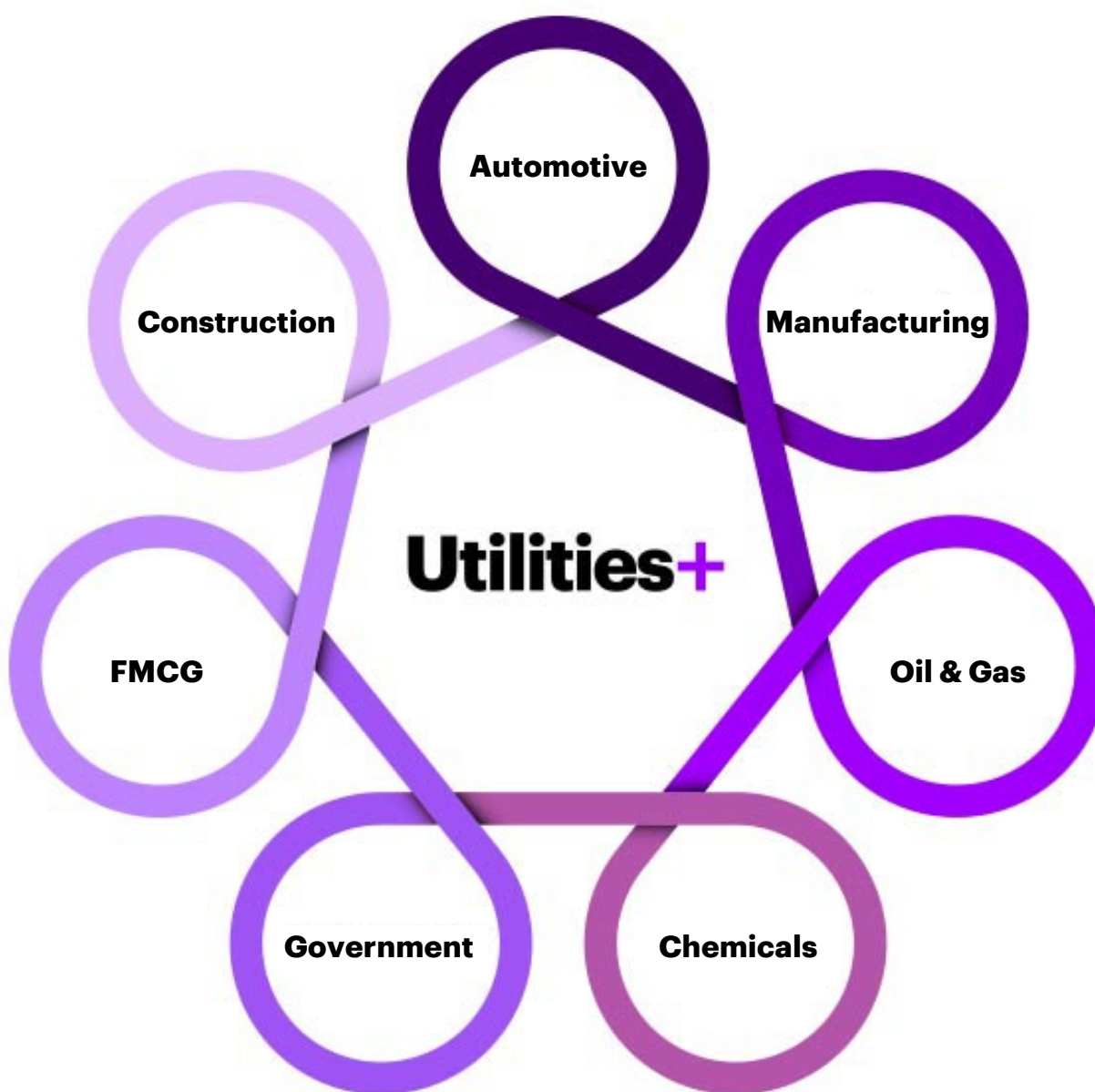
Utilities+: a new role



Utilities are uniquely positioned to take charge and play a more central role on the path to net zero, but it will require more capabilities, a broader, more diverse set of partners, and entry into new sectors like transport and the industrial sector; an evolution that we express using the concept of **Utilities+**.

By forming partnerships to build the capabilities they need to reinvent their businesses, utilities+ will be able to take a collaborative, central role, bringing their best to serve the future market as a new breed of energy service providers to both emerging and established industries.

For example: Utilities + Automotive + O&G Retail = eTransport
Utilities + Chemicals + Manufacturing = eIndustrials
Utilities + Technology + Logistics = eCities





Utilities are taking charge



Having acknowledged their great responsibility in transforming the system, today's leaders can think about how best to position their organizations to take center stage to help both established and emerging industries to deliver on the promise of net zero.

Assess your options: Explore new value pools and models

New value models can unlock up to 25% CAGR compared to traditional commodity growth levels of 1%.⁷

Accenture New Energy Consumer report

The first strategic step is for the CFO to measure the value pools available against the cost of pursuing new possibilities as regulations shift and empower utilities to develop collaborative partnerships that power new service-based offerings.

Example: Engie Impact

Engie Impact applies data analytics, multi-disciplinary expertise, and global reach to customers, developing tailored roadmaps with a holistic view across resources: energy, water, waste, and carbon.

Set your course: Define and pursue a clear vision

Having understood the scale of the opportunity at hand, as well as the expected needs of future consumers, utility leaders can set a course to take charge of their future, and embed a culture at every level that attracts a new type of talent.

Example: Sorgenia

We empowered Sorgenia to take a Cloud-first approach,⁸ which improved efficiency and lowered costs, while also delivering a reduction in emissions by reducing the power consumption of the company's data center.

Map the ecosystem: Find opportunities to collaborate

Assessing the current market will also reveal opportunities to collaborate rather than to compete: a core skill in a future that will see alliances created for collective benefit. Rather than trying to overcome skills gaps and compete with tech-led competitors, forming partnerships allows both organizations to leverage one another's expertise, quickly.

93% of utilities have agreements in place to share critical assets with other utilities to some, or to a greater extent.⁹

Accenture Digitally Enabled Grid report

Example: Volkswagen And Edf

Volkswagen and EDF is a good example of a utility company finding an opportunity to collaborate and enter a new segment, with the French company providing electric vehicle customers with guaranteed renewable energy offerings aligned to 2050 decarbonization goals.

Empower your teams: Retain unique expertise and attract new skills

3 in 10 people within the energy sector say they would consider leaving their current organization in the next 3 years.¹⁰

What can utilities+ do to tempt top digital talent away from the world's tech schools and other start-ups as they graduate? Firstly, teams need to be equipped with the tools and technology they need to excel, but more broadly, it means building a progressive, people-led culture that attracts talent and investment.

Example: Enel X

People are so important to Enel that they have formed Enel X, a separate organization with a stronger tech profile, standalone branding, and a stronger focus on purpose.

Pursue system value: Consider financial, environmental, and societal impact

Purpose and profit have become part of the same equation, and it's important that investments match intent. By assessing their impact across enterprise operations, the supply chain, community engagement and customer enablement, utilities+ can find ways to improve efficiency and take greater steps towards true sustainability.

Example: Pacific Gas & Electric (PG&E)

Pacific Gas & Electric (PG&E) is investing US\$130 million to develop 7500 EV charging stations across the US, 15% of which will be placed in underserved communities.¹¹

Reposition with purpose: Brand values drive real value

Organizations that live by a clearly defined set of values with sustainability at the core will continue to succeed, as consumers can hold them accountable. Earning the trust of stakeholders will require a new narrative that starts with the CEO, one that is linked to both purpose and the business experience delivered. By building a powerful brand platform, utilities+ can earn the permission they need to effect change.



In conclusion

Empowering utilities to take charge

Embracing change, whether seismic or small, is a daunting process, particularly for those that have built an entire industry on stable reliability.

However, while we are certain of our net zero destination, many cities and countries are looking to utilities+ to lead them through the energy transition.

Given that electricity is set to become the largest part of the energy mix, it is vital that utility leaders adapt and evolve their businesses, extending the zero carbon expansion set in motion by several large utilities and leading energy, gas and water system operators.

By focusing on opportunities to lower carbon emissions, such as the decarbonization of industrial clusters and demand-side optimization, utilities+ can start to find the balance between strengthening existing infrastructure and offerings and investing in the creation of new value pools.

Matching these net zero ambitions with significant investment will empower utilities+ to generate 360° value as they step into a new role at the center of a dynamic network of emerging, evolving, and established industries.

The future is bright, particularly for those companies that take charge by weaving digital and sustainability into every fibre of their organization as they reinvent themselves, their understanding of partners, and the industry itself.

So, let there be change.

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