19th Annual Global CEO Survey: Power and utilities industry key findings

Growing in complicated times / Addressing greater expectations / Transforming: technology, innovation and talent / Measuring and communicating success

Redefining business success in a changing world

Power and utilities industry key findings





69
power and utilities executives interviewed in 32 countries



About the 19th Annual Global CEO Survey

In this year's survey, global business leaders voice fresh concerns about economic and business growth. At the same time, they see a more divergent and multi-polar world where technology is transforming the expectations of customers and other stakeholders. In *Redefining business success in a changing world*, we explore how CEOs are addressing these challenges. We surveyed 1,409 CEOs in 83 countries and a range of industries in the last quarter of 2015, and conducted face-to-face interviews with 33 CEOs.

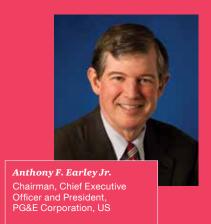
Today's business leaders have a tough job finding growth and delivering results year in, year out. But they know an even tougher task lies ahead: to prepare their organisations for a more complex future where customers and other stakeholders increasingly expect them to do more to tackle society's important problems.

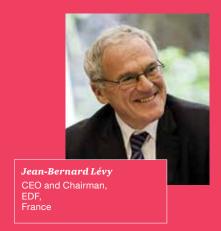
To equip themselves for this challenge – and to build trust and ensure long-term success – CEOs are focusing on three core capabilities. Firstly, they're focusing even more strongly on customer needs as well as drawing on their organisational purpose – what their companies stand for – to define a more comprehensive view of how their business operates within society. Secondly, they're harnessing technology, innovation and talent to execute strategies that meet greater expectations. And finally they're developing better ways to measure and communicate business success.

About the Power and utilities industry key findings

This report looks in more detail at the views of 69 power and utilities CEOs in 32 countries, as well as drawing on in-depth interviews with:







19th Annual Global CEO Survey: Power and utilities industry key findings



Power and utilities CEOs face a radically changing business environment that's being re-shaped by major forces, with climate change and technological advances at the top of the list. Regulation and changing consumer expectations are having a dramatic impact on business strategy, while new technology is affecting everything from the grid to alternative power sources to consumer outreach. With energy transformation in full swing, power and utilities companies need to rigorously track risk and communicate the wide-reaching impact they have on individuals, communities, and even whole economies.

Growing in complicated times

Energy transformation is radically changing the business environment for power and utilities companies

Today's CEOs in every industry faces a business environment that's becoming increasingly complicated to read and adapt to.

Worries about a range of factors, from over-regulation and geopolitical uncertainty to the availability of key skills are on the rise. Power & utilities CEOs have many of the same concerns, but they are magnified by the immense changes sweeping the industry. As the energy market becomes increasingly digital, decentralised, and technology-disrupted, it's becoming more difficult to guarantee growth. That poses very real risks – but there are real opportunities to redefine the business too. That's reflected in power and utilities CEOs' views on how the market has changed over the past three years; 68% say there are more threats, but 62% see more opportunities.

It is striking to note that CEOs' level of concern around both the speed of technological change and shifts in consumer spending and behaviours has risen sharply since 2013 (see Figure 1). That reflects the importance of two factors – the changing role of the customer and technological advances – which together with regulation are re-shaping the industry's future.

The future of power and utilities affects everyone and it's very uncertain

That future has a far-reaching, long-term impact. Power and utilities companies are different from most other types of businesses, in that their fundamental purpose has an enormous enabling effect for the entire economy, as well as a significant impact on daily life.

...we're very aware that we're at a turning point in the energy industry. The industry is changing very fast, and we need to change with it.

Jean-Bernard Lévy CEO and Chairman, EDF. France As Jean-Bernard Lévy, CEO and Chairman, EDF, France, puts it: "...we're very aware that we're at a turning point in the energy industry. The industry is changing very fast, and we need to change with it. That's motivating! It's an exciting area, where daily life, the economy, geostrategic considerations, regulations, etc., intersect. It's the world's future. Providing everyone with electricity is a very fulfilling mission."

Power and utilities companies are in business for the long haul: 93% say they focus on long-term profitability, rather than short-term gains – that's more than any other industry sector.

Power and utilities CEOs are more optimistic about the global economy than their peers in other industries – 39% expect it to improve, versus just 27% of CEOs overall. That's not translating into higher confidence levels, though. Just over a quarter of power and utilities CEOs (28%) say they are very confident of revenue growth over the next twelve months, compared to 35% of CEOs overall. And while 41% are confident of growth over three years, that still lags behind 49% of CEOs across industries.

As we've shown in other research, many power and utility companies are now operating in conditions where the traditional core revenue stream is much more uncertain. For the first time ever, the potential for a power utility company's business model to become eclipsed and left stranded is a real one.

Regulation and government actions will profoundly influence the industry's future

The power and utilities industry is facing a wide range of threats, but sector CEOs are particularly concerned about over-regulation – 86% say it could threaten growth – as well as government responses to debt and deficits (71%) and an increasing tax burden (67%).

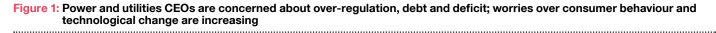
Government ownership is still the norm in many countries; one-third of the power and utilities companies we surveyed have some form of government-backing. And the industry remains highly regulated in most countries. So it's not surprising that stakeholders most likely to influence power and utilities' companies business strategies are governments and regulators, and that this percentage is much higher than for CEOs across our sample (84% vs. 69% overall).

Compared to other industries, power and utilities CEOs are also more likely to say that their strategy is influenced by local communities.

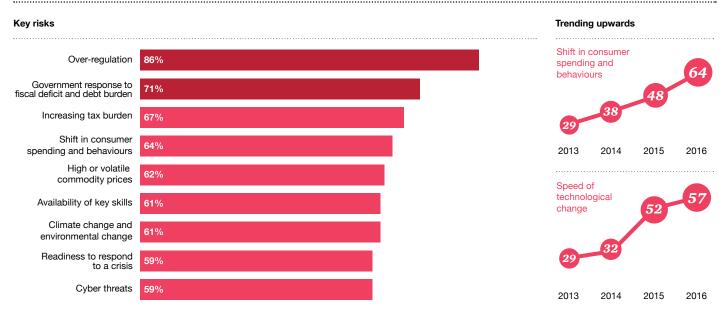
Jean-Bernard Lévy describes how local communities are getting more involved in power generation and distribution: "Today, local communities want to consume and produce locally. They are forging alliances with large cities and connecting home energy systems to the power grid."

93%

of power and utilities CEOs focus on long-term profitability, rather than short-term gains



Q: How concerned are you about the following potential economic, policy, social and business threats to your organisation's growth prospects?



Base: All respondents (Power and utilities, 2016=69, 2015=73, 2014=66, 2013=56) Source: PwC, Annual Global CEO Survey data

Customers have become integral to power and utility company strategy and their expectations are changing dramatically

What may surprise those outside the industry itself is that customers are now nearly as influential as regulators - 83% of power and utilities CEOs say they have a high or very high impact on their organisation's strategy. In the past, many sector companies were monopolies that didn't interact closely with their end customer. That's changed dramatically in recent years, as sector CEOs know. New technology and the evolution of the smart grid mean that customers will continue to have more reasons to communicate with their utility providers. At the same time, deregulation has armed customers with the power of choice – so keeping them satisfied is critical to keeping them engaged and loyal to a trusted energy supplier.

Anthony F. Earley Jr., Chairman, Chief Executive Officer and President, PG&E Corporation, explains: "The level of customer service has changed. People can go online and buy almost anything almost instantaneously, and they expect that kind of convenience when dealing with their utility. Fewer people either walk into a utility office to pay their bills or put a stamp on an envelope to mail them; they want real time access. They also want real time access to what's going on with their system. What drives customers nuts is having an outage and not knowing the cause. We work hard to get them that information."

Building customer relationships requires strong communications efforts. Power and utilities companies are concentrating most on improving how they get the word out on their environmental impact (62%) and the impact they have on wider communities (61%). Earley describes how his company handles outreach:

"We focus on how to better communicate with our customers so they understand the complexities of the US energy infrastructure. We've recently spent time talking about investments we are making in the grid, and not only from a big picture scale, but on a community scale. We advertise in communities and meet with community leaders about what we are doing. We're proud of the sustainability report we publish, which catalogs different initiatives, including renewable energy, environmental programs, electric vehicles, and helping the agricultural sector deal with the drought in California."

Finding the right "way to play" in the new, customer-focused energy marketplace

PwC's Strategy& recently studied some of the world's most successful companies, noting that a key part of their success was committing to an identity and aligning their entire organisation around that. This approach enables a business to define a compelling and distinctive customer value proposition that's aligned with its purpose, a business strategy focused on that proposition, and an operating model and differentiated capabilities that can effectively deliver on the proposition.

For power and utilities companies, this means confronting energy transformation head-on and linking a coherent strategy for transforming the business with solid execution. We've discussed some options for how power and utilities companies can achieve this in very different future market models in our publication *The road ahead: Gaining* momentum from energy transformation. How power and utilities companies define their purpose and the capabilities needed to support it will be profoundly influenced by factors like the extent of competition and customer choice, access to fuel, the nature of existing infrastructure, the degree of electrification and degrees of interconnectedness or isolation from neighbouring territories. And, of course, a crucial factor will be the pace of global technological change.

Customer expectations have changed tremendously during my career. I've been in this business over 30 years, and when I started, the standard approach was to get a customer's service back within a couple of days. Today, if it takes more than a couple of hours, customers are not happy, because their lives depend on having electricity. Just think of all the handheld devices, which require a specified tolerance band for voltage and frequency. In the old days, it didn't matter much whether you were exactly accurate or not.

Anthony F. Earley Jr. Chairman, Chief Executive Officer and President, PG&E Corporation, US

Figure 2: Customers are influencing power and utility company strategy nearly as much as government and regulators

Q: What impact do the following wider stakeholder groups have on your organisation's strategy? Respondents say high or very high impact.



Base: All respondents (Power and utilities, 69) Source: PwC, 19th Annual Global CEO Survey

Transforming: technology, innovation and talent

Technology is radically changing the industry

From new energy storage technologies to the smart grid, 1 power and utilities CEOs need to keep up – 59% say their companies are making significant changes in how they use technology to help them assess wider stakeholder expectations and respond to them better (compared to 51% for all respondents) (see Figure 3). In some cases, that may even mean new business models.

Keeping up – and moving ahead -- takes a lot of people power. Jean-Bernard Lévy told us that "To meet these new expectations, we're leveraging our R&D and our 2000 researchers, who are developing innovations for the smart grid, new energies, carbon storage, and more. We're also developing new offers, with household management services like the Linky metre, EDF & Moi and e-equilibre."

Pressure to reduce reliance on fossil fuels and cut carbon and other types of emissions has fuelled a move towards alternative power generation. Technological advances have been an enabler for the shift, as grids become smarter and able to manage more distributed and variable sources of power. Anthony F. Earley Jr. sees his US-based company on the front lines of the shift: "California is on the leading edge of transforming the energy mix in this country. Today, over 50 percent of the electricity we generate comes from sources that emit no greenhouse gasses, including hydroelectric, solar, and nuclear, and that number continues to increase."

Technology is also opening the door to new entrants, new partnerships and new ways to reach stakeholders

Technology is also the enabler for some radical shifts happening in the industry. In our work on energy transformation, we've discussed few possible market scenarios for power and utilities companies. In some of these, new entrants could radically disrupt the energy market's status quo. Industry CEOs are starting to take notice; 48% are concerned that new entrants could threaten growth, and 49% plan to make significant changes in how they partner and who they partner with to adapt to changing stakeholder expectations.

Connecting technologies will play an important part in reaching out as well, with customer relationship management (CRM) systems (61%) and R&D and innovation (58%) standing out. Big data analysis (55%) and social media communications and engagement (55%) are also popular ways for power and utilities CEOs to reach their stakeholders.

With so much digitalisation going on in the sector, data security is becoming more important than ever. Cybersecurity is on CEOs radars – 61% are concerned about cyberthreats. In our recent client roundtable on digital utility transformation,² participants expressed concerns that the industry may still not be taking cybersecurity seriously enough.

To make these changes in the grid, we'll need many partners. Technology developers are crucial. Every day, somebody develops a new way to use energy more efficiently or to supply it in a different way.

Anthony F. Earley Jr. Chairman, Chief Executive Officer and President, PG&E Corporation, US

Figure 3: Power and utilities CEOS are changing how they use technology to meet stakeholder expectations

Q: To what extent are you making changes in the following areas in response to changing stakeholder expectations?

How we use technology to assess and deliver on wider stakeholder expectations

How we manage our brand, marketing and communications

How we partner and who we partner with

How we define and manage risks

How we maximise societal value of our R&D and innovation

How we minimise social and environmental impacts of our business operations

How we measure success and what we hold ourselves accountable for

How we develop new 'ethical' products and services

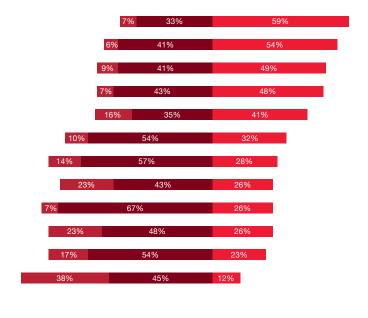
Workforce rights and wellbeing

Our values, ethics and code of conducts

How we minimise social and environment impacts of our supply chain

How we manage our tax affairs

No change at all



Base: All respondents (Power and utilities, 69) Source: PwC, 19th Annual Global CEO Survey

¹2016 Utilities Industry Trends,

PwC's Strategy& ² PwC, Global power and utilities roundtable discussion paper, "Digital utility transformation" 2015

Measuring and communicating success

Understanding risk and innovation better

There are a wide range of areas that companies are looking to measure more accurately, a critical first step in meeting stakeholder expectations. For power and utilities companies, the most important of these is risk (see Figure 4). Today, risk is dynamic, spread over the globe (with little time to plan and prepare) and has greater, more farreaching impact. As executives rush to develop new strategies, products and services—and implement structural changes to stay competitive—factoring in the implications and interdependencies of risk and regulation into decision-making can be daunting. CEOs need to balance risks with opportunities and maintain an overview of wideranging financial and non-financial data in order to measure and assess risk accurately.

Businesses must also have the controls and processes in place to be able to communicate dependable and consistent information and messaging across a huge range of channels.

We've already flagged the importance of technology in a changing sector, so it's not surprising to see that innovation is another area that power and utilities CEOs want to measure better (see Figure 4). Innovation is notoriously hard to measure. But with innovation becoming a core capability, power and utilities companies will need to get better.

Communicating more on impact, purpose and strategy

The top priorities for communication are somewhat different, though. When it comes to getting the word out, power and utilities CEOs are most likely to say their company needs to do more to communicate their environmental impact (62%) and impact on local communities (61%). In both areas, the sector is well above the overall average, reflecting the need to share stories around the progress being made. Power and utilities CEOs are also singling out business strategy (54%) for attention. As many power and utilities companies take a hard look at their core business model and strategy, it will be critical to communicate their intentions and gain buy-in.

Success means more than just profit

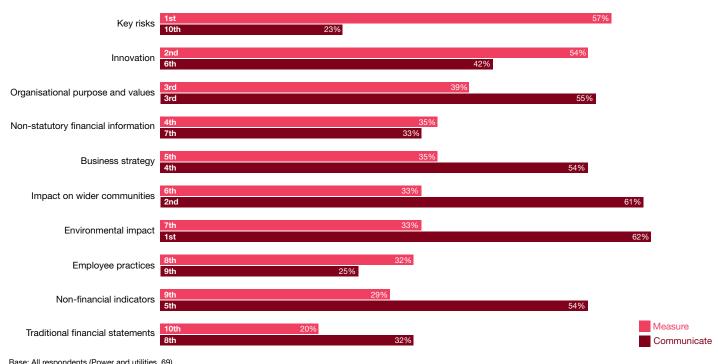
Eighty-four percent of power and utilities CEOs say their company already reports on both financial and non-financial matters, more than across the sample as a whole (72%). In five years' time, 87% think that the most successful organisations in their sector will be doing this. And 86% of power and utilities CEOs say that business success in the 21st century will be defined by more than just financial profit – again, that's more than across the sample as a whole (72%) and reflects the importance of the sector to individuals, communities and entire economies.

Today, when you join a company like this one, the first thing that you receive along with your employment contract is an overview of all the commitments that the company has with its stakeholders, with the community, the so-called code of conduct, ethics, ethical behaviour and which, in our case, also because of our American governance model, requires that every year or two we reflect on this, so there is a culture of progress. For example, we have an annual process of ethical reflection with all our employees.

Wilson Ferreira Jr. CEO, CPFL Energia, Brazil

Figure 4: Power and utilities CEOs are seeking to better measure key risks, innovation and communicate more on their impact on communities and the environment

Q: In which of the following areas do you think business should be doing more to measure/communicate impact and value for wider stakeholders?



Source: PwC, 19th Annual Global CEO Survey

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Explore the data

See for yourself what else power and utilities CEOs told us about leading in complicated times.

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Acknowledgments

PwC gratefully acknowledges the contribution to *Redefining business success in a changing world: Power and utilities industry key findings* provided by the CEO who participated in our in-depth interview programme, listed below. Watch the CEO video interview for more great insights.

Anthony F. Earley Jr.,
Chairman, Chief Executive Officer
and President,
PG&E Corporation, US
Watch the full interview

Jean-Bernard Lévy, CEO and Chairman, EDF, France Wilson Ferreira Jr.
CEO,
CPFL Energia,
Brazil
Watch the full interview

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