2021 CGI VOICE OF OUR CLIENTS

Energy & Utilities

The energy transition requires new investment and business models to address growing competition and pressure from stakeholders to digitize, decarbonize and increase green production.

Read on for insights into energy and utilities executives' top trends and priorities, along with recommendations for key actions they can take now to enable greater innovation and agility to navigate unprecedented change.

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External change speeds transformation

The majority of energy and utilities executives say sustainability is core to their ability to create value for customers. This reflects accelerated pressure to decarbonize, comply with ever-changing regulatory requirements, and innovate for the energy transition.

Other macro drivers affecting this industry are the need for economic growth and for value chains to adapt for de-globalization and technology advances.

As a result, end-to-end digital value chains are becoming essential.

At the industry level, the energy transition requires significant investment in new technologies and improved infrastructure. It also requires business model change to address new competition, "prosumers" and pressure to digitize the customer experience.

While executives cite significant progress in producing results from digital strategies, constraints such as budgets, cultures and legacy systems require attention.

More executives are increasing budgets for new applications and services this year, consistent with the need to improve the customer experience.

Each year, we meet with client executives from around the world to get their views on the trends affecting their organizations and industries. Through the CGI Voice of Our Clients, we analyze these findings to provide actionable insights by industry to benchmark best practices, including the attributes of digital leaders. This report summarizes the trends and priorities from our 2021 CGI Voice of Our Clients discussions with 173 energy and utilities executives, along with recommendations to accelerate their digital journeys.

About the insights

In 2021, we met with 1,695 business and IT executives. This summary shares sample insights from 173 energy and utilities clients.

Interview demographics

43% Business leaders		**57%** IT leaders	
53% C-level		**47%** Ops-level	

Over the past 6 years through the CGI Voice of Our Clients program, we've held 7,470 client discussions, collecting 1 million data points across the industries and geographies we serve. Our anonymized benchmarking data reflects insights from 5,500 client organizations located in countries representing 68% of the world's IT spend across all economic sectors.

Top trends and priorities

While utilities and oil and gas executives cite cybersecurity and the need to become digital to meet customer needs as common trends, their top trends and business priorities diverge.

Common trends

Cybersecurity

Becoming digital for customers

**Top trend:
oil and gas**

Responding to revenue pressures

**Top trend:
utilities**

Drive to carbon neutrality

Common business priorities
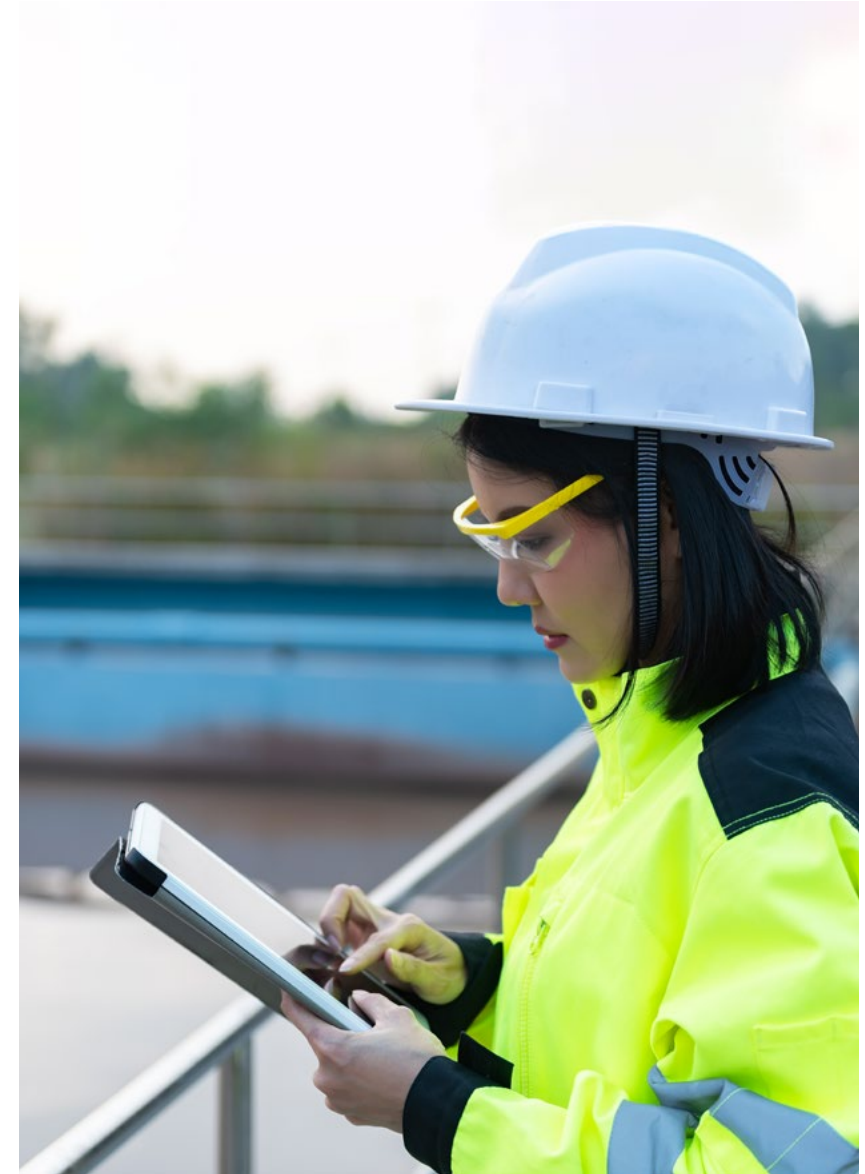
Optimizing investments and operations

Cybersecurity

**Top business priority:
oil and gas**

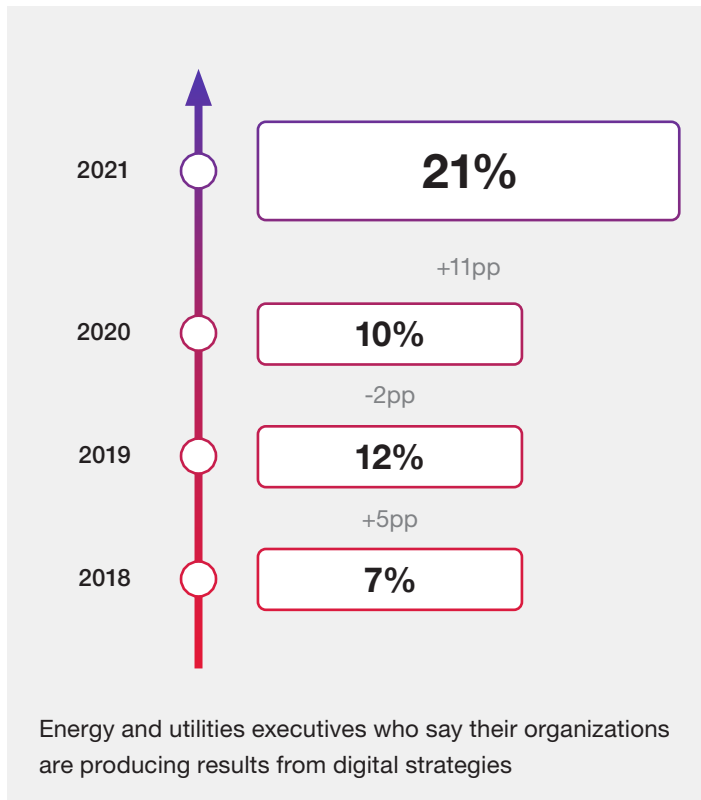Cost reduction and performance management programs

**Top business priority:
utilities**

Digitize/improve the customer experience

Top 10 insights for energy and utilities

In 2021, utilities and oil and gas executives progressed in putting digital strategies in place and in realizing results from those strategies. These leaders indicate that environmental sustainability is core to creating future value for their customers.

2021	**21%**
	+11pp
2020	**10%**
	-2pp
2019	**12%**
	+5pp
2018	**7%**

Energy and utilities executives who say their organizations are producing results from digital strategies

1 Results from digitization strategies are rising.

Energy and utilities executives increasingly see results from their digital strategies. 21% are at the "producing results" stage, up 11 percentage points year-over-year, and now outpace the all-industry average of 20%.

2 Collaboration and business-IT alignment fuel digital results.

Digital leaders in energy and utilities collaborate more efficiently and are better at aligning business and IT priorities than those just launching and building their digital strategies.

3 More digitization strategies are in place.

The number of energy and utilities executives who say they have a digitization strategy increased to 87%, up from 68% in 2020. 64% cite external pressure from customers on their digital strategies.

4 Environmental sustainability is core to value creation.

70% of executives feel strongly that environmental sustainability is core to how they will create future value for customers — well above the all-industry average of 51%. Utilities have the highest rate at 72%, while oil and gas is 64%.

5 **Digital leaders use more cloud and managed services.**

Compared to those just launching or building digital strategies, energy and utilities leaders producing results from their digital strategies also have fewer applications in their portfolio.

6 **More are increasing budgets for new applications and services.**

42% of executives say they are increasing overall IT spend as well as investments in new applications and infrastructure, compared to 12% who are decreasing budgets and 22% who say their budgets are flat.

7 **Customer centricity continues to be an imperative.**

91% of executives cite improving the customer experience as a top business priority, rising somewhat in mentions since 2018 (87%).

8 **Drive to carbon neutrality is a new top trend for utilities.**

This year, Net Zero rises as a trend, ahead of cybersecurity and becoming digital for customers.

9 **Importance of data and mobility continues.**

Data and predictive analytics continue to be among top priorities and areas for innovation investment within the next 3 years. The top innovation investment area is client-centric digital transformation and mobility. Digital employee tools and mobile solutions are cited among top digital initiatives.

10 **Constraints to business priorities include budgets and culture.**

For energy and utilities executives combined, among top-cited constraints to achieving business priorities are budget constraints and the culture of the organization.

Digital leaders in energy and utilities

Both industries show accelerated progress with 21% producing results from digitization strategies. Of these digital leaders, some common attributes emerge. The table compares responses to questions from the digital leaders to those from executives whose organizations are still building or launching digital strategies.

Common attributes of digital leaders	Executives producing results from digital strategies	Executives building or launching digital strategies
Collaborate more efficiently	**46%**	39%
Are better at aligning IT and business priorities	**61%**	49%
Are more sensitive to data privacy laws and regulations	**64%**	46%
Use managed services and partners more	**87%**	55%
More often run a secure IT environment	**77%**	32%
Feel strongly that environmental sustainability is core to creating value for customers	**78%**	70%

Even digital leaders, however, must overcome the limits of their legacy infrastructures, with 19% rating the degree to which legacy systems pose challenges to their digitization strategies as "high."* (33% for oil and gas and 14% for utilities)

* 8–10 on scale of 1–10, where 10 is high

Digital leaders have fewer applications. Only 27% report having more than 500 applications, compared to 33% for those building or launching digital strategies.

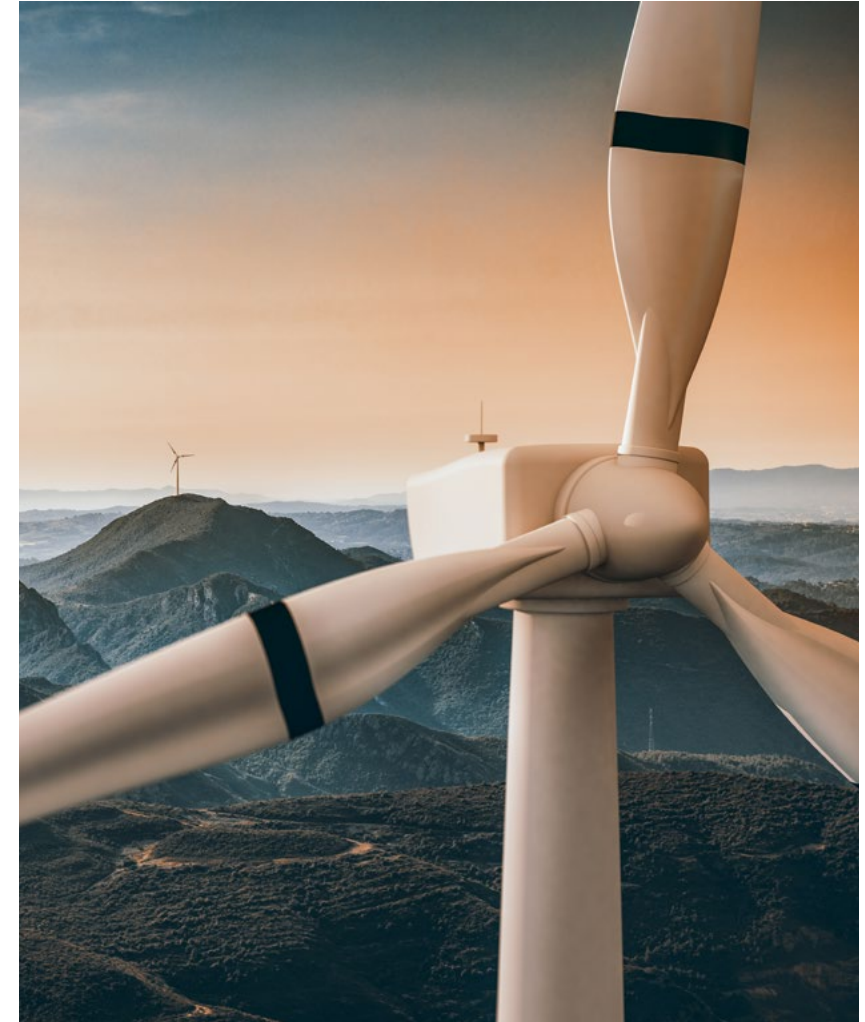# 6 recommendations for achieving your top priorities

(1) **Embrace sustainability as a key to success.** The pause in the global economy showed everyone how the planet can recover when given a chance. Momentum for sustainability and environmental, social and governance (ESG) is rising for all organizations. Energy and utility companies should focus on incorporating ESG financial management practices at pace to meet the expectations of customers, investors and regulators. They also should invest in resolving key issues, such as non-harmonized reporting practices and standards, resource-intensive data processes and a perceived lack of transparency and comparability across peer groups. This requires new business models and processes to gain acceptance from key interest groups and will drive asset investment decisions. It also requires a full ecosystem of partners to help transform the organization at pace and scale.

Case in point:

The move toward mandatory sustainable finance

Aalto University and CGI collaborated to explore and develop preliminary models for collecting and processing sustainability data within the EU as it moves toward mandatory sustainability reporting. This research led to new concepts for an EU-wide sustainability data hub, along with a reporting framework for collecting sustainability data from small to medium-size enterprises, which account for 99% of the businesses within the EU.

(+) Read more

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(2) **Continue the push toward digitization** to increase customer self-service and efficiency. The past year highlighted the value of mobile tools for both customers and employees (a top area for innovation investment) to improve agility, resiliency and customer satisfaction. While technology use is widespread across the traditional value chain, there is a lack of deep technology integration. Some initiatives just "accessorize" customer and employee touchpoints as opposed to enable a comprehensive digital enterprise. To build upon pandemic-driven progress, digital investment must remain a priority, along with an end-to-end digital value chain approach that connects customer-facing touchpoints with underlying systems and processes. Tools such as digital twins are beginning to deliver a holistic model for business and operations.

Case in point:
Monitoring and controlling renewable assets in real time
Portuguese utility Generg has been building and operating renewable power plants for more than three decades. CGI's Renewables Management System helps the company achieve real-time monitoring and remote control of their assets. RMS also enabled a seamless switch to remote working during the pandemic. An unexpected benefit is the way the RMS mobile tool has improved communications between team members.

⊕ Read more

"… because of the network infrastructure and the RMS tools, we were able to keep everyone working from home (during the COVID-19 lockdowns). Our staff was only dispatched to the field in an emergency, or for vital maintenance work."

João Sardo, wind turbine expert and international asset manager, Generg

(3) **Address cultural challenges resulting from change**, such as accelerated digitization and the integration of IT and operational technology. The pandemic required IT and business teams to work more closely together and become better aligned. Now, organizations must find ways to continue these human connections. Digital leaders set the bar for collaboration and innovation. Overcoming challenges to cultural change requires a clear corporate purpose. Connections at all levels (with customers, among employees, between business and IT and different business units, etc.) drive alignment on purpose and strategy, efficiency, innovation and, ultimately, change to the business.

⊕ Read blog: Sparking and sustaining innovation in utilities

(4) Accelerate modernization of systems and data to meet customer expectations. The industry has doubled its progress in achieving results from digital strategies; however, legacy systems continue to be a blocker. Both business and residential customers now expect 24/7 access to digital services and tools. This push-pull adds new stresses on organizations and forces business model changes. The drive toward open energy data is supported by utilities, as well as governments such as in the UK. Oil and gas companies also are collaborating on open data standards to enable innovation. Practical solutions are needed to integrate data and systems to ensure customers remain happy and do not shift to other alternatives.

⊕ Read more:
CGI helps Western Power Distribution put data at the heart of its distribution strategy

⊕ Read more:
Mobilizing the data revolution in energy

(5) Reduce IT complexity and risk. Digital leaders have more agile IT supply chains, use more managed services, migrate more applications to the cloud, and have less complex application portfolios. They're more aware of the drivers for cybersecurity, privacy and sustainability. They are adept at reducing complexity while lowering risk. As local regulations evolve in a worldwide context, data privacy compliance is of particular importance in balancing the use of the cloud to manage and protect data. This involves choosing a best-fit cloud environment (private, public or hybrid), implementing multi-cloud, cloud-native and cloud-agnostic platforms, accessing proven cloud expertise, and ensuring advanced cloud security and privacy.

Cases in point:

- Transforming business processes through outsourcing, consolidation and automation for a large European utility to improve performance, cost to serve, quality of service and customer experience.

- Assisting a global utility in accelerating their move to Net Zero, instilling business agility, adopting a value-based business-IT operating model, and deploying innovative digital and agile work methods.

- Helping a North American power company move from a monopolistic to competitive model, including redesign of business models and OT/IT infrastructure, as well as automation and cloud-based solutions.
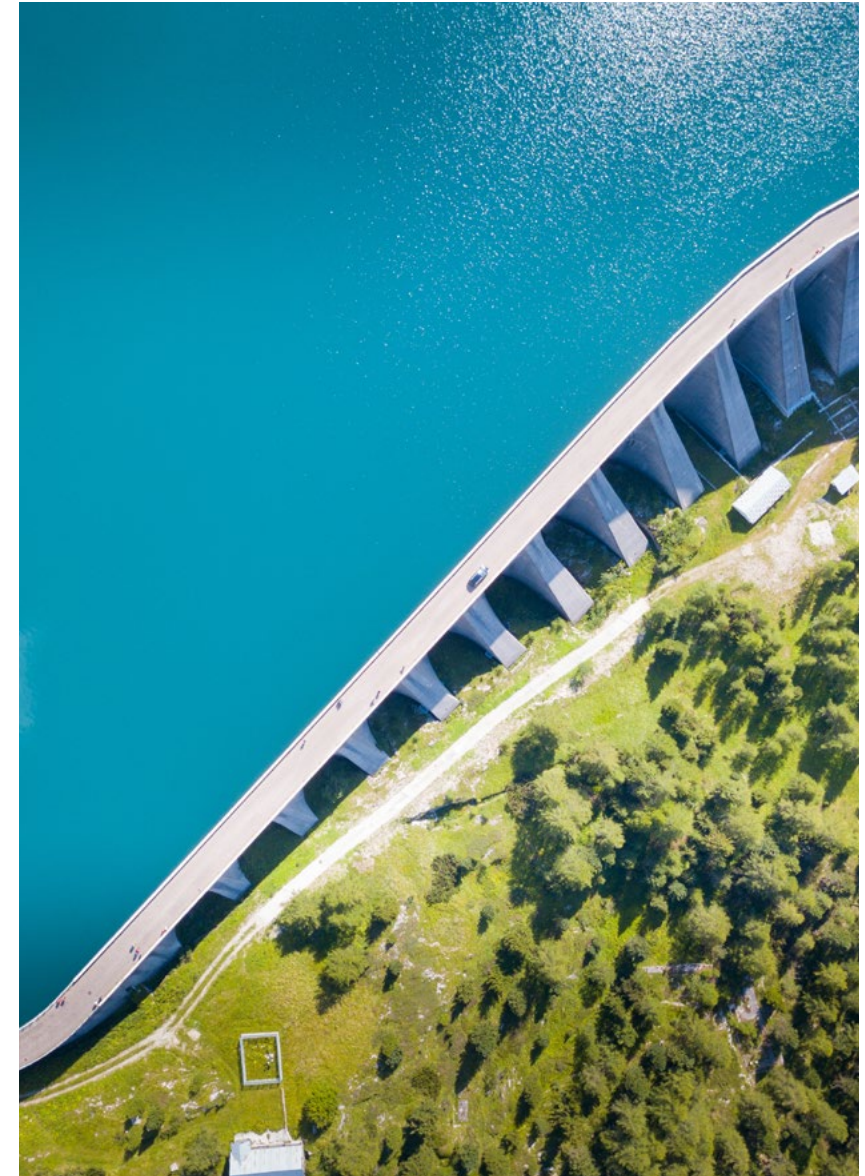
(6) **Look to advancements in other industries to optimize operations,** for example, the space industry. Earth observation data is helping to detect, manage and predict floods, fires, vegetation/forestry growth, oil spills and leaks. Industries like banking, insurance, agriculture, transportation and maritime control, as well as energy and utilities, are making space data usable, operational and integrated in the business. They are applying predictive analytics to this data via machine learning, artificial intelligence and digital twins to reduce risk, identify threats, advance decarbonization and assess environmental impacts. Some energy and utility sector innovators are beginning to do this at pace to optimize operations and drive business digitization.

⊕ Read news: European Space Agency selects CGI to develop services combining Artificial Intelligence and Earth Observation for Wildfire Mapping

⊕ Read white paper: EO4SD Lab: How Earth observation can support global sustainable development activities using cloud-based platforms

Case in point:
Using space data and AI to reduce outages
CGI is assisting a global energy company in using Earth observation data, machine learning and artificial intelligence to monitor vegetation near power lines to reduce outages through automated, digitized business processes and operations.

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About CGI

Insights you can act on

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world.

We are insights-driven and outcomes-based to help accelerate returns on your investments. Across 21 industry sectors in 400 locations worldwide, our 80,000 professionals provide comprehensive, scalable and sustainable IT and business consulting services that are informed globally and delivered locally.

For a complete set of the CGI Voice of Our Clients industry insights, and to consult with one of our experts, please visit cgi.com/voice-of-our-clients or contact us at info@cgi.com.