

Sustainability Transformation: How to accelerate ESG goals in the energy sector

The push to decarbonize means the energy and utilities sector is now undergoing the biggest transformation of a mature industry ever seen. Carbon-free power is more decentralized and intermittent – meaning consumers are increasingly becoming producers themselves.

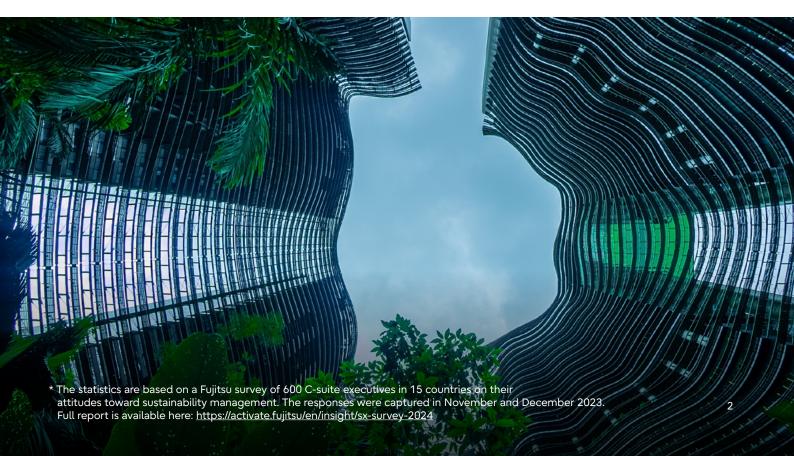
In such a volatile environment, Environmental, Social and Governance (ESG) frameworks and net zero goals are useful ways of ensuring that organizations are aligned within a sustainability agenda. But in order to meet challenges, they must have a clear strategy in place, supported by the right data and governance to manage the transformation.

For the second year, Fujitsu has partnered with FT Longitude, a Financial Times company, to understand how C-suite executives are responding to sustainability pressures.

We found that although overall confidence in being able to meet sustainability objectives fell from 70% in 2022 to only 66% in 2023, respondents from the energy sector are actually far more confident, with 77% believing they will hit targets within the timeframes.*

Even still, only a third of respondents within the energy and resource sectors reported having set out a sustainability strategy which is delivering tangible benefits today. Establishing an actionable strategy is vital to remaining on track and delivering on ESG goals, but it's a complex task. That's where Fujitsu can help, with a team of experts dedicated to enabling energy and utilities sector companies to accelerate their Sustainability Transformation (SX).

Access the full FT Longitude Report here.



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The ESG ask for energy and utilities companies

The ESG goals set by energy and utilities companies are many and varied. From community engagement initiatives to the adoption of more sustainable technologies – almost every aspect of an organization is affected. Of course, two of the biggest concerns that underpin most transformational goals are environmental impact and creating more sustainable practices. Fujitsu research found that almost 80% of executives in the energy sector cited sustainability as their number one priority.* This is perhaps unsurprising, as many are already working towards their countries' net zero decarbonization targets.

The role of <u>Scope 3</u> emissions means that energy and utility providers face an even greater challenge around reducing emissions. That's because, although they are responsible for reducing them, they do not directly generate them. Scope 3 emissions are indirect – they refer to emissions generated throughout the value chain, including those from consumers. Companies must therefore not only change their own behaviors – either by reducing carbon emissions, changing their business models, or choosing carbon-free options – but encourage this behavior change in customers, too.

In the UK, the Low Carbon Contracts Company (LCCC) is the nominated party to run the certifications for the Low Carbon Hydrogen production and Carbon Capture Utilization and Storage (CCUS), with data provided from the Transport and Storage Companies (T&SCo) to a Central Data Service (CDS).

"A key component of the CDS is to provide one single source of immutable, trusted truth. This would create a Trusted Data Platform for Net Zero 2050, ensuring data integrity, reducing risk and highlighting the importance of traceability across the supply chain when tracking Scope 1, 2 and 3 emissions. Fujitsu experience in **green** ammonia certification make us best placed to unlock your robust data strategy." – Dominik Ferrara, Fujitsu Blockchain & Sustainability Specialist.

Full report is available here: https://activate.fujitsu/en/insight/sx-survey-2024



^{*} The statistics are based on a Fujitsu survey of 600 C-suite executives in 15 countries on their attitudes toward sustainability management. The responses were captured in November and December 2023.

The role of data

The challenge around data stems largely from the way it has traditionally been stored. Most energy and utilities companies report that data is kept in silos, made up of diverse sources and systems, and across potentially vast geographies. This means that they can struggle to get a clear overview of their organizations and can't accurately predict where the biggest issues are, or which solutions would be the most impactful.

As well as illustrating a business's current position, data has additional roles. It is used in establishing business resilience, helping to mitigate risks, and assessing SX maturity and progress. When approaching SX, organizations can put their data to two distinct uses: protecting their business today and understanding their ongoing journey towards the goals of tomorrow. Data is therefore the key to any transformation strategy.



Predicting business resilience

After the COVID pandemic, businesses universally realized the need to establish a clear continuity plan. In the face of an unforeseen disaster, the importance of accessible data with which to better plan for the future became even more transparent.

To energy and utility providers, this will not be a foreign concept, as many have historically used data to predict and respond to times of peak energy usage. Providers are accustomed to using data to establish baselines, deliver the best results for consumers, and measure the effectiveness of responses. This is equally true within the context of an SX strategy.



Approaching transformation

The pressure to switch to carbon-free energy sources means that companies must soon overhaul business models. That's no small ask - and not one which is possible without a clear understanding of your baselines.

It can feel like a huge challenge, but our research shows that organizations who are leading in sustainability are achieving better business performance, too. Those identified as leaders in Sustainability Transformation experienced an average revenue growth over 12 months of 5%, compared to other organizations which grew only 1%.*

Regardless of industry, many companies struggle with starting out on their transformation journey. As the energy network becomes more distributed, data needs to be shared in a controlled way, so that the right areas of organizations have the information they need to make the correct investment decisions. Without critical information on how to make the leap, the road to sustainability can seem unclear - but this is what robust, clean data reporting can provide: an image of the path ahead.

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SX: From compliance to sustainable business

Digital Transformation and sustainability inextricably linked



Leverage sustainability data-driven opportunities and insights to drive positive ESG impacts and increase overall business resilience.

ntelligent

Compliant

Business value grows with deeper sustainability performance insight

Informative / Manual / Backward looking

Automated data acquisition and processing, coupled with the standardization of sustainability reporting capabilities, ensures alignment with pertinent reporting frameworks and initiatives. Resulting in enhanced sustainability reporting, reflecting corporate transparency and accountability.

Predictive / Partially-automated / some decisions

Enhanced data integrity and the provision of customize sustainability-centric data visualization across all business units fostering an organizational culture that integrates sustainability considerations into both tactical and strategic decision-making processes. Ensuring, a balanced focus on environmental, social, and financial impacts, aligning with corporate commitment to sustainable business practices.

Transformative / Fully automated / All decisions

Deployment of AI-enabled 'what-if' scenario planning and climate risk modelling to generate customize recommendations for management actions. A strategic approach to capitalize on sustainability-related opportunities and effectively mitigate associated risks, demonstrating proactive and responsible corporate governance.

Integrity

Advanced sustainability disclosure

- Streamline ESG reporting through automation
- Ensure robust and sovereign data from sustainability-related sources
- Provide investor and regulator confidence by easing non-financial disclosure manual processes

Intelligence

Informed decision-making acceleration

- Immediate insight into progress made against set sustainability targets
- Trusted, single-point-of-truth dashboard for all ESG data
- Gain a competitive edge through a clear path to value chain decarbonization

Innovation

Achieving a sustainable business model

- Live data insights empower the highest efficiency when designing services, products, packaging and systems
- Thrive in the transition to a low carbon economy and achieve resilience to climate-related risks through Al-powered risk modelling
- Embrace emerging technology to advance climate adaptation and mitigation alongside further ESG use cases across the organization, value chain and society

Fig.1: An example of a sustainability maturity matrix

If the first stage of the curve describes implementing better data strategies, the next stage of the journey – data-driven decision-making – essentially puts that data to good use. The data is used to find potential <u>solutions and technologies</u> able to address the challenges you've identified.

These technologies might be leveraged against carbon goals, tracking, and measuring emissions; they might manage sustainability reporting and compliance; protect the wellbeing of workers; or even bring transparency to complex supply chains, as is the case with our customer, tex.tracer.

This transparency platform monitors the supply chain in the fashion industry. Fujitsu worked with the customer to develop a blockchain-based platform which allows brand owners, retailers, and consumers alike to have confidence in the history of a garment – with the ability to scan a QR code to view its journey.

Knowing which tool could solve which SX challenge can be overwhelming – especially with significant investment on the line. Fujitsu digital twin technology helps you model scenarios and assess the impact, taking the risk out of investing. It has previously been used to great effect to solve sustainability challenges in smart cities.

Case studies

Sustainability Transformation in action

Fujitsu has a strong reputation as a provider of SX solutions, tailored to individual organizations' needs – whether that's monitoring supply chains, as with tex.tracer, or helping to get the most out of data.

That was the ask from Meridian Energy. The national sustainable energy supplier needed help optimizing the vast amount of data collected over the course of its operations, analyzing that data, and then effectively deploying the findings.

We built a cloud-based platform that allowed Meridian to access data-led insights and construct use cases. The result was measurable cost savings, a reduction in downtime, more advanced analytics, and an improved ability to predict future issues.

"If we find something wrong in time, we can fix it for maybe NZD1,000 instead of NZD300,000. For the business, that's a massive victory," explains Yanosh Irani, Head of Data and Performance at Meridian Energy.

Likewise, when Botanical Water Technologies (BWT) developed a new source of drinkable, sustainable, plant-based water, it needed a way to secure trading activity. Together with the customer and through Fujitsu Track and Trust service, Fujitsu developed a platform which uses blockchain technology to ensure end-to-end transparency and traceability of processes.

"We have been impressed by the buy-in Fujitsu has shown right up to C-level – they understood the significance of this innovation and provided a team that can deliver," says Terry Paule, Co-Founder and CEO at Botanical Water Technologies.



Communication:

the need for internal and external progress

A governance challenge for many companies is the lack of robust education surrounding ESG targets. Research has long shown the existence of a talent and skills gap which particularly affects the field of sustainable expertise, with only 1 in 8 global employees possessing one or more relevant skills.

This is a problem, in part because the better educated an organization is on sustainability objectives and actions, the easier it is to deliver assurance to all your stakeholders – including the decision-makers. Introducing a framework such as Fujitsu YES Check can help employees visualize their roles within the wider context of the organization's sustainability drive, therefore helping to bring the workforce together in service of the future.

These behavioral change methodologies can also help address external communication issues – which is a key focus for many organizations. The move from established monopolies to a wider field of providers means that attracting customers is now more important than ever before. However, this introduces some risk.

Talking openly about ESG progress can result in allegations of greenwashing and ethics-washing – but keeping silent is no longer an option.

Global events such as the cost-of-living crisis, growing environmental concerns, and natural disasters all feed the pressure from consumers to accelerate the transition to cleaner energy sources. A higher level of public scrutiny follows, as people are increasingly environmentally conscious and educated around sustainability initiatives.

Data can keep businesses safe, providing verifiable figures that demonstrate progress. With the right data in hand, you can prove that you're not engaging in marketing hype or greenwashing, but actively fulfilling your role as a responsible business for the planet and society.

We are developing an ESG platform to fulfill this need for actionable, reliable data. It works to provide clean data, with reporting that is clear and understandable. It will enable the collection and combination of previously-siloed data to present a full picture of your organization that you can act upon with confidence.



Creating sustainable outcomes to business challenges

Energy and utilities companies must focus on sustainability to attract customers who are increasingly sustainability-minded, protect their own revenue streams, and reduce future disruption. The business case for any SX progress is better business continuity, while better reporting and data transformation can similarly protect an organization's reputation.

However, the ESG goals already in place prove that companies also want to do the right thing for society and the planet. Now, it's just about knowing how to get started.

At Fujitsu, we help organizations build their SX strategies. We believe that becoming a more sustainable company begins with implementing the best digital solutions. Tools like our ESG platform are being designed to support organizations by accelerating the road to sustainability and addressing business challenges.

The steps to meeting ESG goals:

1. Clean your data

Only with trusted data can organizations fully understand the road ahead and accurately protect their businesses from future challenges.

2. Leverage the expertise of consultants

Our experts have worked with multiple customers in the energy and utilities industry to deliver measurable results against their business and ESG goals – and they're ready to help you too.

3. Adopt sustainable technologies

As companies work towards a sustainable future, every opportunity for SX should be taken, and the goal should be to embed sustainability processes within all business decisions and models. Whether you're addressing a large operational challenge or a small technical issue, we can work with you to find a sustainable solution that helps you progress towards your ESG goals.



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Shany is a Senior Sustainability Consultant within Fujitsu Digital Transformation Practice, and the Sustainability Lead for the UK's Manufacturing, Utilities and Services Industry.

Shany focuses on merging her customers' sustainability and corporate ambitions, and is passionate about the behavioral change elements needed for lasting sustainability transformation. She specializes in the intersection between law, technology and sustainability.







We believe that Sustainability Transformation is the right way for energy and utilities businesses to move forward. It's not only right for the planet, but for people and business prosperity too. By intelligently adopting SX solutions, we can protect revenue streams, drive operational efficiencies, and reduce disruption in existing operating models, all while safeguarding the planet and doing the right thing for society.

