

Sustainable environment

Creating a
sustainable
vision through
technology
and innovation



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Sustainability on center stage

Global warming and biodiversity loss, poverty, lack of clean water and food. Human rights violations, inequalities in the access to healthcare and an aging population. It's clear that the world is in the midst of major environmental, social and economic crises.

In order to respond, businesses and societies know just how important it is to take drastic action, and shift from a sole profit focus to a more purposeful, sustainable business model. According to [Fujitsu's commissioned survey](#) of 1,800 business leaders across nine countries, conducted by Forrester Consulting, sustainability is now a higher priority than ever. In fact, 60% of organizations take it more seriously than they did two years ago.

Sustainability has become a priority because it's no longer simply a factor for wider social responsibility. Being sustainable can improve value for shareholders, employees, customers, the environment, and society. What's more, it can positively impact financial measures such as revenue, profit, market capitalization, improve an organization's reputation with customers and help to achieve critical legislative development goals.





Matching reality and ambition

However, the reality is while organizations are keen to improve their overall sustainability, most are yet to get started.

61% of organizations say they're advanced on their sustainability journeys, but, fewer than one in 10 has completed major sustainability imperatives such as developing sustainable supply chains (9%), achieving net zero status (2%) and preparing for environmental emergencies (7%).¹

At Fujitsu we believe that the key to closing this gap is Sustainability Transformation through digital innovation. But what exactly does this mean?

***Sustainability is now a major disruption.
Business as usual is no longer an option. ”***

**Loannis Loannou, Associate Professor of Strategy
and Entrepreneurship at London Business School**

¹<https://www2.fujitsu.com/global/vision/leadership-challenges/sustainability-transformation-survey-2022/>

Fujitsu Uvance

Looking ahead to 2030 and beyond, we've introduced a portfolio of innovative solutions that bring together diverse stakeholders across industries, working as one to tackle the societal issues we need to solve to become more sustainable.

We call this Fujitsu Uvance.
It consists of seven Key Focus Areas (KFAs):



Sustainable
Manufacturing



Consumer
Experience



Healthy
Living



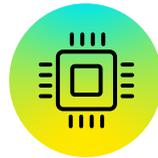
Trusted
Society



Digital
Shifts

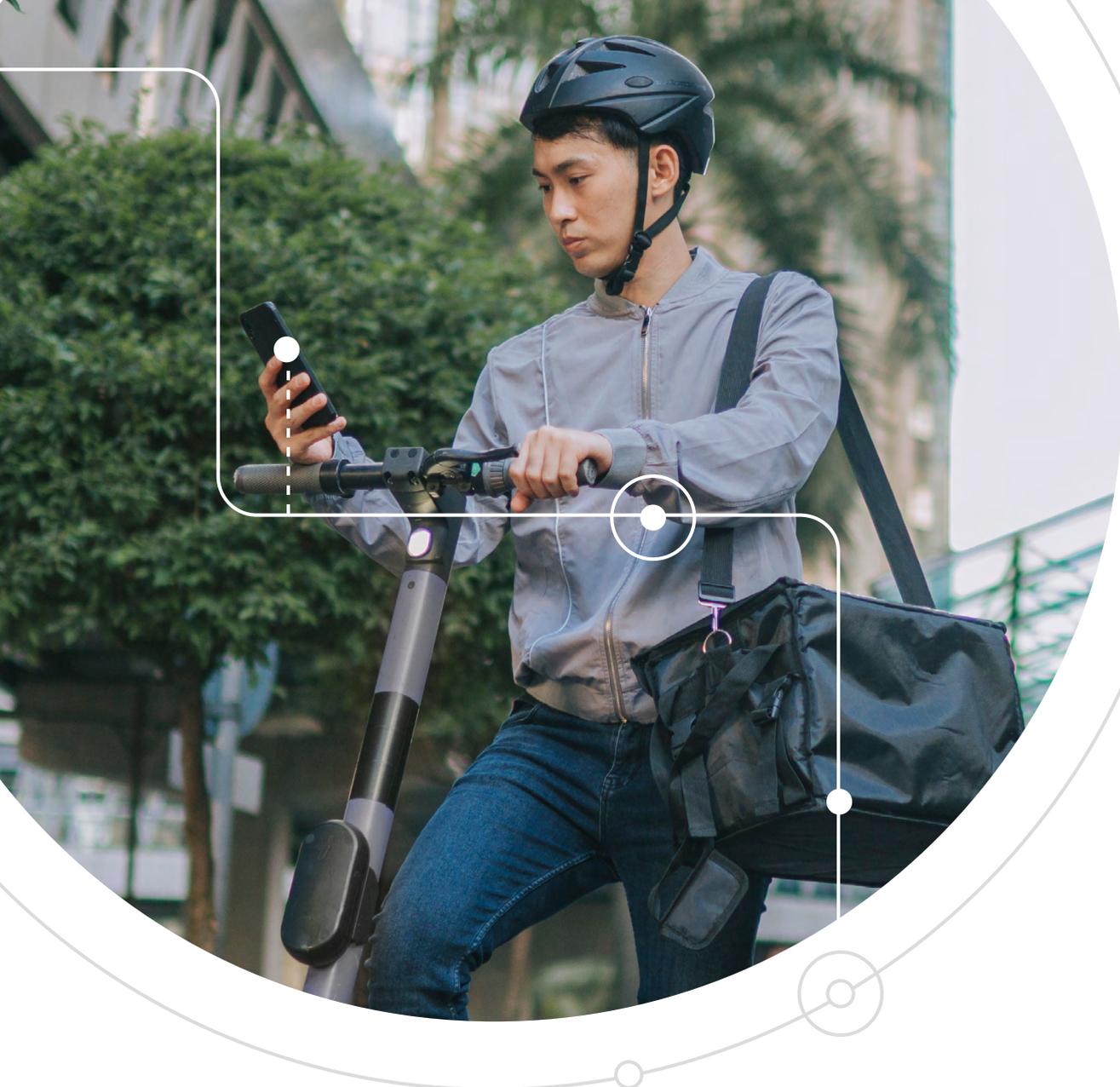


Business
Applications



Hybrid
IT





Through Fujitsu Uvance, we are dedicated to connecting companies across industry boundaries and harnessing their strengths to generate positive change for all.

In this series of three eBooks, we will explore the global issues Uvance aims to address across the seven KFAs. These are:

- Creating a sustainable environment
- Addressing sustainable economic growth
- Advancing sustainable wellbeing

We will highlight how technology and digital innovation can drive your sustainability transformation, help to achieve major societal goals, and achieve targets within common frameworks, such as Environmental, Social, and Governance (ESG) and the United Nations' Sustainable Development Goals (SDGs).

Sustainable environment

Climate change and biodiversity loss is a global issue, felt on a local scale.

Every organization has a responsibility to reduce their carbon footprint, but that's just the start. Everyone, from sole traders to small businesses to international organizations, and governments, is under increasing pressure to minimize their environmental impact. Environmental sustainability is an urgent business-critical issue, and for the first time this responsibility is a top priority for organizations to address.



Why is a sustainable environment so important?

A healthy planet is critical to the long-term prosperity of us all. If environmental challenges continue to go unchecked, the social, environmental, and economic impact of our inaction will only get worse. With all organizations relying on a healthy planet, we all must play our part. What's more, as perceptions around climate responsibility grow stronger by the day, it's critical for organizations to take it seriously, or risk significant reputational damage.



There are many factors and benefits to consider when contributing to a more sustainable environment. Here are some of the key areas to note:

Legal compliance

Now, more than ever, companies are required by law to comply with environmental regulations, such as reducing greenhouse gas emissions, managing waste and pollution, and protecting natural resources. Failure to comply with key legislation, such as the EU's Corporate Sustainability Reporting Directive (CSRD), could lead to significant fines, reputational loss, and more.

Reputation

A poor environmental record can seriously damage the reputation of an organization, resulting in a loss of customers. Companies that take environmental sustainability seriously can benefit from a significant reputational boost, and increased customer loyalty.

Cost savings

Environmentally sustainable practices don't just help businesses reduce their environmental impact, they can also reduce costs in the long run. By reducing waste, cutting energy use, and conserving resources, overall business operational costs could decrease.

Risk management

With 60% of businesses relying on natural ecosystems², the natural world has been seen as a free resource for too long. Due to biodiversity loss, it's quickly becoming apparent that is not the case. Businesses need to protect the natural world, as without it they won't have a business case at all. Environmental risks, such as natural disasters, can also have a significant impact on business operations, and taking proactive measures to mitigate these risks can help to protect the organization in the long term.

²https://www3.weforum.org/docs/WEF_New_Nature_Economy_Report_2020.pdf

Specific challenges and targets

It's critical that organizations meet the following environmental components of their ESG strategies, so they can drive positive change for the planet and its people.

- Carbon neutrality
- Clean water and water efficiency
- Efficient material use
- Carbon emissions trading compensations
- Clean supply chains
- Sustainability data and reporting

On top of this, Fujitsu can support organizations to address these challenges while working towards meeting specific UN SDGs. From responsible consumption to promoting sustainable ecosystems, this includes:

- 6 – Clean water and sanitation
- 11 – Sustainable cities and communities
- 12 – Responsible consumption and production
- 13 – Climate action
- 14 – Life below water
- 15 – Life on land

How digital transformation can help drive a sustainable environment

To drive sustainability transformation and help realize a sustainable environment, organizations need to become data-driven, human-centric and connected.

But what does this mean?

Data-driven

Data is critical to the future of every organization, as it enables new capabilities, simplifies workloads, and helps keep up with growing demands. New data technology, such as predictive AI and social digital twins can be used to help organizations become more resilient.

Data-driven strategies support behavioral change and promote more efficient energy use, helping societies mitigate the effects of climate and natural disasters through predictive analysis and planning, and enables the discovery of new, environmentally friendly energy sources through AI research support.

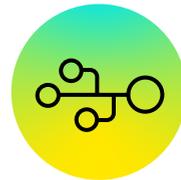
As technology improves, the use of discovery AI and quantum computing will further allow organizations to optimize operations, mobility, and processes to reduce waste and promote more environmentally friendly living and working practices.





Human-centric

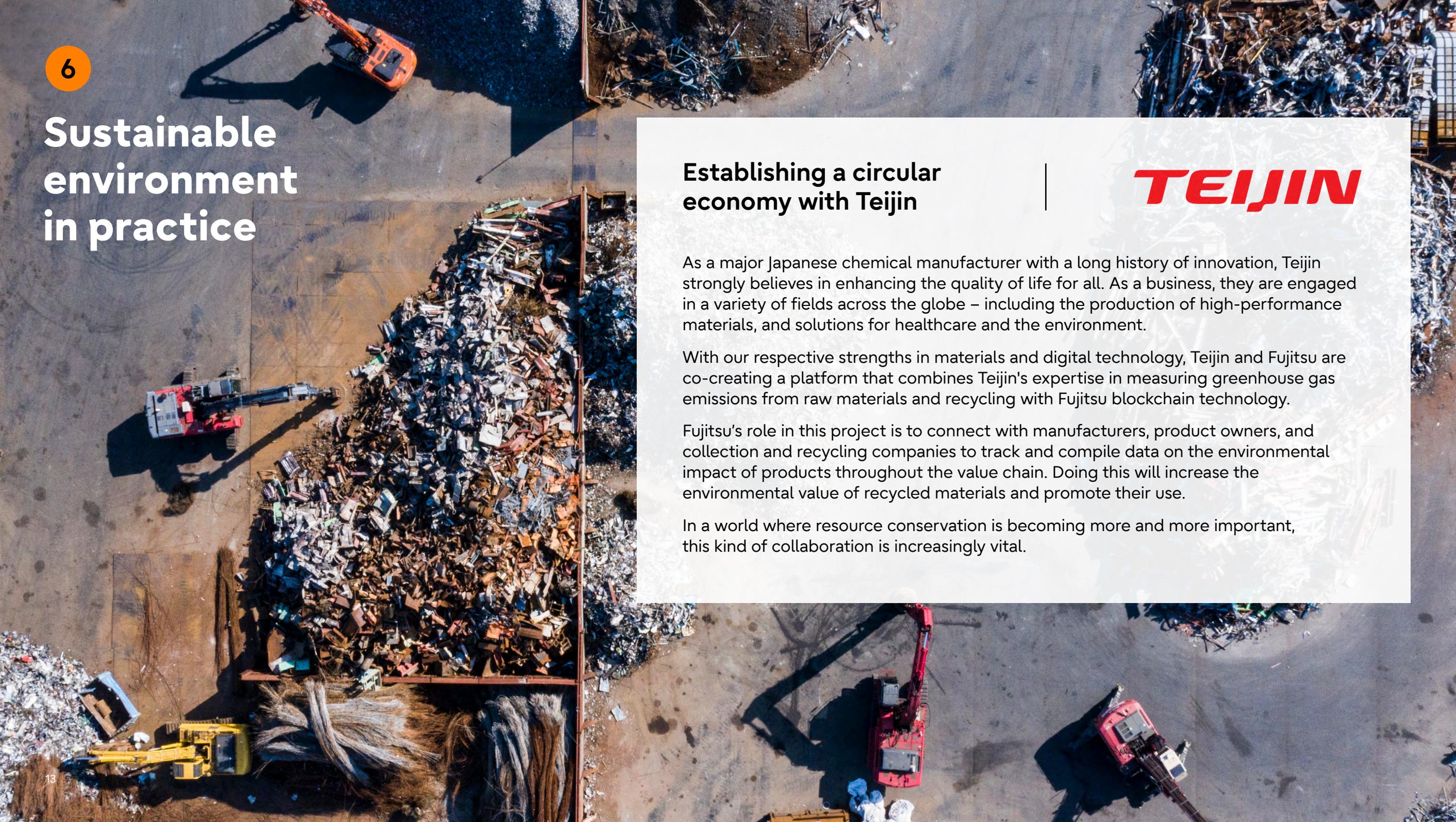
It's important to remember that any environmental sustainability efforts also depend on the people at the heart of an organization. By taking care of people and helping to create sustainable behavior, your organization's overall sustainability will advance. Technology can play a significant role in enhancing the human element. By converging elements of the physical and digital world together through technology like 5G and 6G, alongside people enablement technologies and Extended Reality (XR), organizations can foster new, healthier ways of working while reducing their carbon footprint through effective and efficient remote working practices.



Connected

A connected organization makes use of the latest technologies, including Trusted AI, blockchain, and security tech, to address environmental challenges through increased levels of trust and traceability. This can help lead to:

- **A circular economy** – one where nothing is wasted, as everything is able to be repurposed, recycled, or otherwise re-used.
- **Ethical and environmentally sound supply chains** – making use of cleaner forms of transportation, smarter manufacturing measures, and better supply chain ethics is of enormous benefit to an organization's reputation and will lead to reduced running costs in the long-term.
- **Accuracy for ESG reporting** – untrue or inaccurate claims around sustainability can lead to accusations of 'greenwashing', which will cause significant, sometimes irreversible, damage to an organization's reputation. Accurate reporting is therefore crucial.
- **Secure trading of carbon credits** – carbon credits will become an increasingly valuable resource as the world moves closer to the sustainability targets set. Being able to securely and reliably sell unused credits, or buy them as needed, could be critical to success, especially for manufacturing and logistics.



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Sustainable environment in practice

Establishing a circular economy with Teijin

TEIJIN

As a major Japanese chemical manufacturer with a long history of innovation, Teijin strongly believes in enhancing the quality of life for all. As a business, they are engaged in a variety of fields across the globe – including the production of high-performance materials, and solutions for healthcare and the environment.

With our respective strengths in materials and digital technology, Teijin and Fujitsu are co-creating a platform that combines Teijin's expertise in measuring greenhouse gas emissions from raw materials and recycling with Fujitsu blockchain technology.

Fujitsu's role in this project is to connect with manufacturers, product owners, and collection and recycling companies to track and compile data on the environmental impact of products throughout the value chain. Doing this will increase the environmental value of recycled materials and promote their use.

In a world where resource conservation is becoming more and more important, this kind of collaboration is increasingly vital.

Creating a new source of water with Botanical Water Technologies (BWT)



BWT is positively impacting water scarcity by providing a new source of drinkable, sustainable, plant-based water for communities and environmental projects. It harvests water during sugar milling and vegetable processing seasons, filters it with patented technology, and sends it where it's needed, saving trillions of liters a year in the process.

But doing this process effectively isn't easy. It requires significant levels of administration, data and tracking, in order to show the water is clean and safe to drink.

So, Fujitsu helped create a cloud-powered Botanical Water Exchange (BWX) platform. Built on the Fujitsu Track and Trust service, BWX uses blockchain technology to ensure end-to-end transparency and traceability of processes, including the refinement, sales, purchase, delivery and usage of the product.

The result has been greater transparency and security in water trading, more drinking water, less waste, and more support for water-scarce areas in need.

The Fujitsu team impressed us with their passion and ethos of sustainability. 🍅

Terry Paule, Co-Founder and CEO, Botanical Water Technologies





Mitigating the dangers of extreme weather with the UK Environment Agency



As storms and heavy rain becomes more common across the UK and Europe, the importance of effective warning systems grows. But keeping up with changing technological capabilities, while ensuring people's safety is never simple. This was the problem facing the UK's Environment Agency.

Tasked with protecting people against flooding and other extreme weather, the Environment Agency needed to upgrade its Flood Warning System (FWS) to be more sustainable, effective, and capable of reacting faster.

So, Fujitsu helped migrate the FWS to the cloud. But that was just the start. It was also upgraded to make the most of its new cloud architecture. That meant improved serviceability, without taking it offline. It meant better reporting capabilities. And it also meant faster response times, due to an increased level of automation within the system. All while making use of a cleaner cloud setup.

The result has been an increase in environmental security for UK citizens living near lakes, rivers and the coast. Which on islands like the British Isles, is most people.

Fujitsu has consistently added value to our relationship through proactive feedback and suggestions for improvements to the Flood Warning System. ||

Steve White, Delivery Manager, Environment Agency

A healthier, more sustainable environment starts here

The role of businesses, public institutions, and individuals in a cleaner, more climate-positive future has never been clearer. It's up to every organization to limit their carbon footprint by hitting climate neutrality targets as soon as possible. But that's no easy task.

Fujitsu Uvance uses technology and expertise to help organizations take a significant step towards a sustainable future. From data analysis and security to cloud-based computing that reduces your carbon footprint, we leverage all our expertise, and work with you to understand your goals and design suitable technology to match.

From consultancy to design, deployment, and managed services – we assess where you are, where you want to get to, and help you make the most of existing assets, while ensuring you're fit for future growth – with sustainability in mind at every stage.

Our expertise and vendor-agnostic approach to technology allows us to find the best solution for your specific requirements. And we can look far beyond sustainable environmental work too. We can help with major societal issues, as well as evolving industry challenges, giving organizations the tools and support they need to evolve.



Learn more about how Fujitsu Uvance can address business and societal challenges on [our website](#)



Or email us at askfujitsu@fujitsu.com
to be put in touch with one of our experts.