FUJITSU

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Fujitsu collaborates with twelve suppliers to exchange Product Carbon Footprints, reducing CO_2 emissions

Fujitsu has launched a decarbonization initiative with global suppliers, enabled by a data exchange on CO_2 emissions through Product Carbon Footprints (PCFs). The data exchange is making CO_2 emissions in Fujitsu's supply chain more visible, supporting efforts to achieve carbon neutrality. The initiative is part of the company's efforts to achieve a net-zero target[1] across its entire value chain by 2040.

Challenge

- The existing CO_2 calculation methods and standards could not precisely reflect cooperative reduction efforts.
- Supplier engagement and collaboration needed to be enhanced, specifically for enabling decarbonization initiatives.
- While suppliers did see the value of working together on carbon reduction, some had underlying concerns about how this might work in practice — particularly the sharing of sensitive environmental data with other parties.

Solution

- Fujitsu's ESG Management Platform that securely exchanges and leverages CO_2 emission data from suppliers throughout supply chains.
- The system meets both global and domestic standards, allowing more companies to participate in the initiative.
- Security and governance features to ensure that data access and use is tightly controlled.

Outcome

- A clearer view of CO_2 emissions within specific companies and across their supply chains
- Detailed action plans for cutting CO_2 emissions can be formed from analyzing the data.

"What we have achieved with the project is a small but good step forward for Fujitsu and our supplier companies aiming for carbon neutrality, and also for us as an offering provider."

Ai Ajima, Supply Chain Platform Enablement Div., Global Supply Chain Unit, Fujitsu

2040

Fujitsu Group's goal of achieving net-zero CO_2 emissions in its value chain

Why supplier engagement was needed to reduce CO_2 emissions

CO_2 emissions of purchased goods and services from our suppliers (Scope 3, Category1) account for approximately 27% of all emissions across Fujitsu's value chain (3.9 million tons). This suggests that strengthening collaboration with our suppliers is crucial for achieving our decarbonization goals.

However, the existing calculation methods for companies to adopt, had an issue to solve. This established approach relies on estimations and there was a growing demand for greater accuracy.

Today, more companies are using the Product Carbon Footprint (PCF), which calculates the amount of CO_2 emissions on a product-level. PCF is increasingly recognized as a global standard, PACT has published guidelines, including the PACT Methodology2, as a global standard for calculating PCF. The data is regarded as accurately reflecting a company's CO_2 reduction efforts compared to the traditional method[3], where company activity data is multiplied with coefficient to the industry average CO_2 emissions equivalent. Fujitsu is also keen to use PCF data as much as possible.

Demonstrating the value of Product Carbon Footprints to suppliers

Fujitsu Global Supply Chain Unit Director, Ai Ajima, was the project leader. She assembled suppliers in February 2024 to explain the details of the initiative and the importance of data collaboration to make it a success:

The companies were all those that supply parts and modules for components that make up information and communication devices manufactured in Fujitsu factories. Ajima and her team asked them to share the following:

1. Product Carbon Footprint (PCF) for their products sold to Fujitsu.
2. PCF data for devices purchased from companies in their upstream tiers.

As soon as Ajima and her team launched their ambitious journey, they realized that collecting PCF data was more challenging than they had imagined. "It is an interesting and important initiative, but we just don't have enough people for the job" one supplier initially told Ajima, "The calculation method is complex, and above all, we don't have the data available."

They conducted one-on-one interviews to determine whether the company had available data and whether they could obtain any required data from their upstream suppliers.

"It was no easy task for any supplier, because you need sufficient human resources and knowledge.", Megumi Hanai, who took part in the negotiation says. "We tried hard to thoroughly explain why we need the data and what they can gain by tapping into it. We tried to carefully go through the process, which was necessary for some to have their good understanding."

This gave an initial total of twelve suppliers[4] a deeper understanding of the initiative's benefits, and the confidence to participate in data sharing. Fujitsu will explore the idea of growing this community in the future.

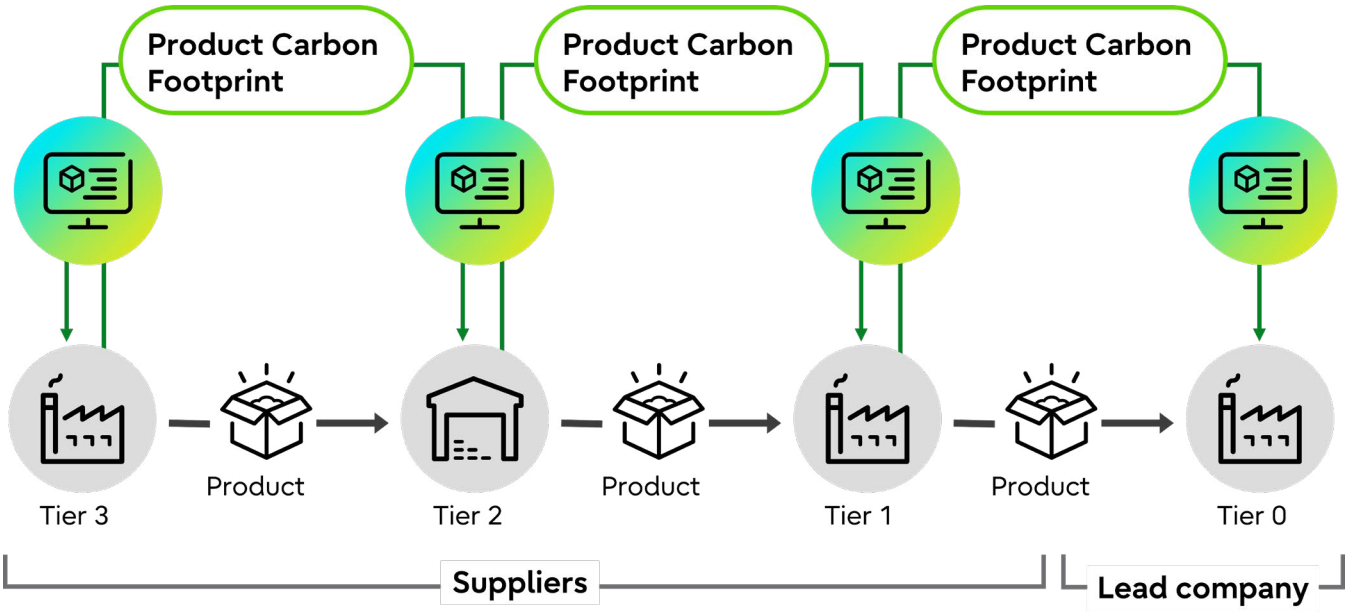

Figure 1: Fujitsu Uvance "ESG Management Platform"

27%

The percentage of total emissions across Fujitsu Group's value chain in FY2023, attributed to suppliers (Scope 3, Category 1)

ESG Management Platform meeting both global and domestic standards

CO_2 emission data is integrated with the Fujitsu Uvance solution, the ESG Management Platform.

The Software as a Service offering complies with the PACT (Partnership for Carbon Transparency) Methodology, initiated by an organization consisting of members from the World Business Council for Sustainable Development. The system is also conformant to Japan's Green x Digital Consortium CO_2 Visualization Framework.

Ajima says she recognized the need, when creating the new approach with suppliers, to adopt the organization-based PCF calculation methodology, the existing calculation method prevalent in Japan for a smooth transition.

"We needed it to help them step forward in the transitional phase of shifting to PCFs," she says.

The dual compliance enabled more companies to participate in the initiative.

Ajima also says she found that some suppliers saw the product-based calculation method for PCFs as a hurdle. That is why the ESG Management Platform was equipped with a PCF calculator function.

Several features were added to help the suppliers, including a capability that enables the exchange of data with other system products via APIs.

She also stressed that whenever a rule changes, it will be incorporated into the system by a Fujitsu administrator, making it easier for user companies to adapt to the changes.

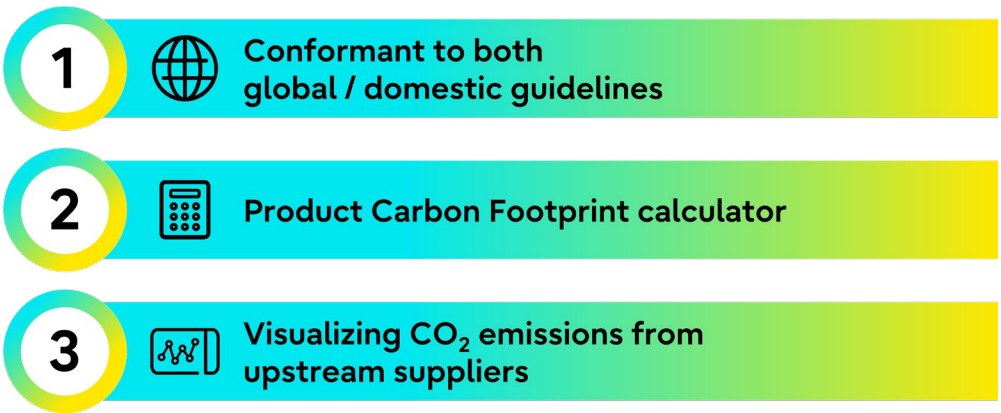

Figure 2: Three strengths of ESG Management Platform

Industry:
Manufacturing

People:
124,000

Location:
Japan

Website:
fujitsu.com

About us

Our Purpose is to make the world more sustainable by building trust in society through innovation. With Fujitsu Uvance, we will help customers build a resilient supply chain and contribute to a Net Positive world.

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Number of suppliers participating in this data collaboration project

Addressing concerns about data confidentiality

Integrating data from upstream suppliers was another challenge. There was a concern among some companies that providing sensitive data externally could lead to the leakage of confidential information. To address these concerns, developers have strengthened access privileges to each piece of data, allowing suppliers to share data with greater confidence.

"It's a technological strength of SaaS which we have leveraged, using our expertise in this field, to build and deliver a valuable solution." says Ajima.

In October 2024, twelve suppliers successfully linked approximately 30 of CO_2 emissions data through the platform and shared them with Fujitsu.

Towards net zero and beyond

Having PCFs compiled from each supplier means that emissions across the company's value chain have become more visible and accurate.

"We have learned many lessons that we need to address in the future. What we have achieved with the project is a small but significant step forward for Fujitsu and our supplier companies aiming for carbon neutrality. And also for us as an offering provider," Ajima says.

By being able to observe, analyze and forecast CO_2 emissions data more accurately, companies can plan more detailed countermeasures to ensure CO_2 reduction — and measure its trajectory as these countermeasures are implemented.

Fujitsu expects to increase the countermeasures in place addressing these. Simulating the effects of renewable energy could be one example.

"We would like to accelerate our efforts to achieve net-zero by 2040. We hope to create a successful cycle of visualizing emissions, identifying hotspots where issues exist, and providing technical support to address the problems," says Ajima.

Fujitsu expects to combine this emissions data with other available data, such as financial and non-financial indicators, to develop new products and assess their business impact — as well as strengthen cooperation with our suppliers to achieve the goal of making the world net zero through the power of technology.

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[1] Net zero CO_2 emissions: Balancing residual emissions with the same amount of neutralization. Fujitsu aims to reduce CO_2 emissions by more than 90% by 2040. The remaining emissions of 10% or less are planned to be removed and stored via technologies that directly capture CO_2 in the atmosphere and then absorbed through afforestation.

[2] PACT Methodology: Guidance indicating the methodology for calculating and exchanging CO_2 emission data. The PACT Methodology builds on existing frameworks and standards to provide guidance on accounting, verification, and exchange of cradle-to-gate PCFs with the aim of creating more accurate emissions data.

[3] Organization-based PCF calculation methodology: Recognized as a transitional calculation method in the "Green x Digital Consortium CO_2 Visualization Framework" powered by JEITA (Japan Electronics and Information Technology Industries Association).

[4] Twelve participants include: Accton Technology Corporation, KAGA FEI Co., Ltd., NEXTY Electronics Corporation, Schneider Electric, Hakuto Co., Ltd., Furukawa Electric Co. Ltd., MiTAC Holdings Corporation and Lumentum Holdings Inc.