

The Fujitsu Group Environmental Vision

“ Fujitsu Climate and Energy Vision ”

The Fujitsu Group has reassessed its social role in light of the escalating global commitment to achieving carbon neutrality. The Group has elected to fast-track its previous commitment to achieve “zero CO₂ emissions within the Group by FY2050”, instead bringing forward committed Vision by 20 years to FY2030. The Group has set the additional target of reaching net-zero greenhouse gas emissions ^{(*)1} throughout the value chain by 2040.

^{*1} Net-zero greenhouse gas emissions: Reducing greenhouse gas emissions by at least 90% in the target year in comparison to the base year, and re-absorbing remaining emissions (of 10% or less) from the atmosphere through direct air capture (DAC) technologies or by planting trees.

The Importance of Responding to Climate Change

The Intergovernmental Panel on Climate Change (IPCC) Special Report “Global Warming of 1.5° C” articulated the need to limit warming to 1.5 ° C above pre-industrial levels and to achieve carbon neutrality by 2050. With social roles expanding and additional demands placed on companies to tackle climate change, in October 2021 the Science Based Target Initiative (SBTi) ^{(*)2} launched the world’s first Net-Zero Standard for companies to set net-zero strategies. In order to resolve issues related to climate change, the Fujitsu Group decided to revise its previous commitment to “zero CO₂ emissions by 2050”, pursuing instead a more ambitious vision that requires the Group to look beyond social trends and become the very embodiment of a leading SX company that delivers carbon neutrality.

The Fujitsu Group Environmental Vision comprises three pillars, namely, Value chain: Achieve net-zero emissions, Mitigation: Contribute to a carbon-neutral society, and Adaptation: Contribute to climate change adaptation measures. The Fujitsu Group will be quick to leverage advanced DX technologies to tackle its own net-zero strategies, and will make the resulting expertise available as Fujitsu Group solutions for customers and society. In so doing, the Group aims to leverage its own business activities to contribute to climate change mitigation and adaptation.

*2 Science Based Target Initiative (SBTi): An initiative jointly established by the United Nations Global Compact, the World Resources Institute (WRI), and other organizations in 2015. It encourages companies to set GHG emission reduction targets consistent with science-based evidence to the level required by the Paris Agreement, validating targets that comply with criteria including indirect emissions not only within the company but also in the supply chain.

Concept



Value chain: Achieve Net-zero Emissions



Mitigation: Contribute to a Carbon-Neutral Society



Adaptation: Contribute to Climate Change Adaptation Measures

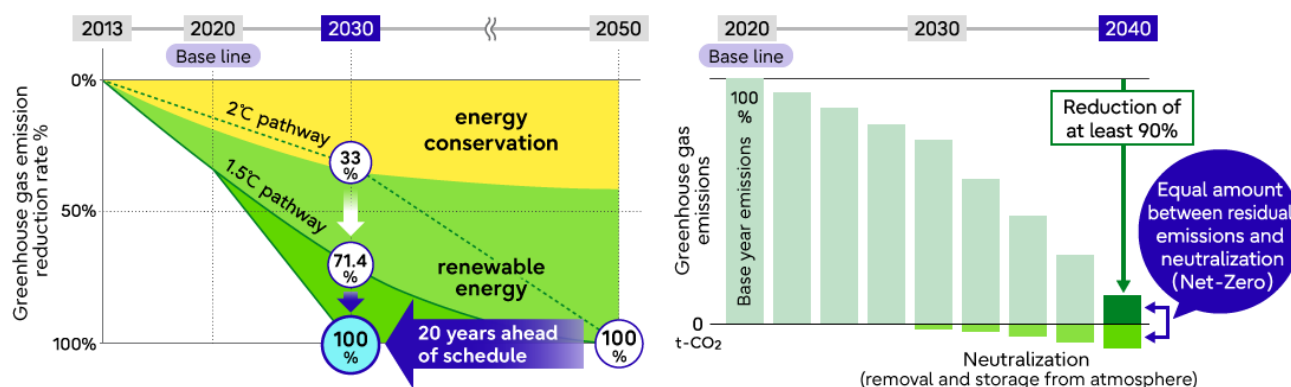
Three pillars of the Fujitsu Climate and Energy Vision

Achieving Net-zero Emissions in the Fujitsu Group Value Chain

In August 2017, the Fujitsu Group's 2 °C-aligned greenhouse gas emission reduction target earned its SBTi validation. In April 2021, the Group obtained validation for its 1.5 °C ambition level (*3), which increased the target from 33% reduction in emissions to 71.4% throughout its business sites by FY2030, against a baseline of FY2013.

To accelerate the move toward carbon neutrality, the Group set a target to achieve net-zero emissions from the Group's business activities by FY2030, and from the entire value chain by FY2040, thus earning Net-Zero Target validation from SBTi in June 2023.

*3 1.5° C: According to a report by the Intergovernmental Panel on Climate Change (IPCC), a 1.5 °C increase in average temperature increases the risks of extreme weather, sea level rise, adverse health effects, food shortages, and water scarcity. The United Nations Framework Convention on Climate Change Conference of the Parties (COP) states that the increase in the global average temperature shall be limited to less than 1.5 degrees Celsius above pre-industrial levels in order to avoid the worst effects of climate change.



Emission reduction of Fujitsu Group
(Scope 1 and 2)

Emission reduction throughout the value
chain (Scope 3)

Roadmap to Net-Zero

Contributing to a Carbon-neutral Society

The Fujitsu Group contributes to the decarbonization of society by creating ecosystems with customers in a variety of industries and business types. Digital transformation (DX) is crucial to achieving this goal. By integrating advanced AI and other leading-edge digital technologies into a framework that transcends business, industry, and regional boundaries, the Group will reduce greenhouse gas emissions. This will be achieved through, for example, the optimal use of resources and energy across all social systems.

Contributing to Climate Change Adaptation Measures

We will leverage advanced forecasting technologies, incorporating sensing, high-performance computing (HPC) simulations, AI, advanced ICT and other digital technologies to effectively reduce greenhouse gas emissions. These technologies will be used to develop solutions for building resilient social infrastructure, ensuring a stable supply of agricultural products, and mitigating food loss. Through these efforts, we aim to minimize the harm caused by climate change to society and our customers.

Environmental Targets

The Fujitsu Group participates in the following initiatives with the aim of making the Fujitsu Climate and Energy Vision—its medium- to long-term environmental vision—a reality.

Net-Zero Target Validation Gained from Science Based Targets (SBTi)

In August 2017, the greenhouse gas (GHG) emission reduction targets set by the Fujitsu Group for emissions from its business facilities and value chain was approved by the Science Based Targets initiative (SBTi) as meeting the science-based level of ambition criteria. The SBTi was established in 2015 jointly by a number of organizations, including the World Resources Institute (WRI) and UN Global Compact. It encourages companies to set GHG emission reduction targets consistent with science-based evidence to the level required by the Paris Agreement, with the aim of limiting the global average temperature increase caused by climate change to 1.5 degrees above pre-industrial levels.

In April 2021, we updated our target from 33% reduction against the base year FY2020 to 71.4% by FY2030 and received acknowledgment of our 1.5 °C-aligned strategy from SBTi. Furthermore in June 2023, we decided to further advance our existing target and aim for net-zero by FY2040. We also received Net-Zero Target validation from the SBTi.



"Science Based Targets" logo

Net-Zero Target

- To reduce GHG emissions at our business sites (Scope 1, 2) and from the entire value chain (Scope 3) by at least 90% by FY2040 against a baseline of FY2020 (*1).

*1 Less than 10% of residual emissions are removed and stored by technologies that directly capture CO₂ from the atmosphere or through absorption by afforestation and other means.

Global Collaboration with the Climate Group through RE100

In July 2018, the Fujitsu Group became Japan's first Gold Member of RE100 ^{(*)2}, an initiative which aims to significantly expand the adoption of renewable energy on a global scale. At the time, the Fujitsu Group pledged to use renewables to provide at least 40% of the electricity consumed across all global sites by 2030, and 100% by 2050.

RE100 is an initiative led by international NGO The Climate Group in partnership with CDP and consists of companies committed to source 100% of their electricity requirements from renewable sources.

While we received SBTi's Net-Zero Target validation, we also moved up our previous target date for 100% renewable electricity from 2050 to 2030. This action accelerated our efforts to reach carbon neutrality by 20 years. To achieve this target, we will continue to roll out activities based on the corporate action plan. As Fujitsu Group we will expand our procurement of renewable energy-sourced electricity for data centers outside Japan and other sites in Japan as well as around the globe. We will achieve this by considering the most appropriate means for each region. At the same time, we will invest in new power sources, including PPAs ^{(*)3}. This way we will contribute to the spread of renewable energy in society as a whole.

*2 RE100 is an initiative led by The Climate Group, an international NGO, in partnership with CDP, and is made up of companies that aspire to obtain 100% of the electricity they use from renewable sources.

*3 PPA stands for Power Purchase Agreement, under which consumers (primarily businesses who wish to use renewable electricity) enter into a long-term contract with a power producer or retail electricity provider to purchase electricity generated from renewable energy sources.




"RE100" logo

TCFD-Based Information Disclosure

The Task Force on Climate-Related Financial Disclosures (TCFD) was established by the Financial Stability Board at the request of the G20 with the objective of reducing the risk of instability in financial markets due to climate change. The task force announced its recommendations in June 2017, asking companies and organizations to identify and disclose the risks and opportunities arising from climate change. The Fujitsu Group announced its support for the TCFD recommendations in April 2019 and is making every effort to disclose information in line with those recommendations to investors and other stakeholders. Disclosures are provided via media such as financial statements, CDP (*1) questionnaires, the Integrated Report, and websites.

(*1) CDP: An international nonprofit organization that conducts environmental surveys of more than 18,700 companies worldwide and acts on behalf of institutional investors with a combined US\$130 trillion in assets. (As of August 2023).

Item		Response status	Reference
Governance	Oversight structure under the Board of Directors for climate-related risks and opportunities	<ul style="list-style-type: none"> In the Fujitsu Group, the Sustainability Management Committee shares the risks and opportunities arising from climate change, deliberates on medium- to long-term issues, and formulates policy. To date, matters such as the results of analyses using multiple climate change scenarios (including 1.5 °C), policies to achieve net-zero GHG emissions targets and increase the use of renewables, and materiality (including climate change and other environmental challenges) have been reported to the Board of Directors at meetings of the Executive Management Council. The Risk Management & Compliance Committee regularly reports to the Board of Directors on the most serious risks identified for the group as a whole, including climate risks. The Fujitsu Group has also developed an environmental management system (EMS) based on the ISO 14001 standard. The results of EMS activities are reported to the Board of Directors at meetings of the Executive Management Council. 	<ul style="list-style-type: none"> Sustainability Management in the Fujitsu Group > Corporate Governance > Environmental Management Systems > Risk Management >
	Role of management in assessing and managing climate-related risks and opportunities	<ul style="list-style-type: none"> Fujitsu's CEO, in the role of Chair of the Sustainability Management Committee and the Risk Management & Compliance Committee, bears ultimate responsibility for all decisions made and all business conducted. The Board of Directors are responsible for oversight based on reports received from the Executive Management Council. The Chief Sustainability & Supply Chain Officer (CSSO) bears the highest level of responsibility for sustainability, and in that role proposes reforms to the Board of Directors and to senior management and conducts business that relates to sustainability. As of FY2022, ESG indicators that include consideration of climate change issues were added to the evaluation indicators for bonuses paid to Executive Directors. 	

Strategy	Short-, medium- to long-term climate-related risks and opportunities	<ul style="list-style-type: none"> Based on analyses of climate change scenarios, the Fujitsu Group identifies the risks and opportunities relating to climate change and considers and promotes appropriate responses. Developing services and IT products that contribute to climate change mitigation and adaptation offers opportunities for increased sales, while factors such as physical and regulatory risks have an impact on the operating costs of Fujitsu's operations and supply chain. 	<ul style="list-style-type: none"> Response to Environmental Risks > The Fujitsu Group Medium/Long-term Environmental Vision >
	Impacts on business, strategy, and financial planning	<div> <div> <p>Major risks</p> <p>Stronger regulation (carbon tax, etc.), Stronger competition in low-carbon technologies, Insufficient responses to customer needs</p> </div> <div>➔</div> <div> <p>Risk responses</p> <p>Ongoing reductions in greenhouse gas emissions, Increased use of renewable energy, Information disclosure aimed at ensuring transparency in climate change strategy, etc.</p> </div> </div> <div> <div> <p>Major opportunities</p> <p>Supplying products/services to tackle climate change, Proposing new uses of digital technology, etc.</p> </div> <div>➔</div> <div> <p>Opportunity responses</p> <p>Services for climate change mitigation/adaptation(CO₂ emissions calculation, visualization, etc.), Energy-efficient products (HPC, 5G virtualization base stations, etc.)</p> </div> </div> <p>Note: See the CDP responses (C 2.3, 2.4)  for details.</p>	

	Resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	<ul style="list-style-type: none"> • In 2021, the Fujitsu Group conducted scenario analyses out to 2050 using 1.5°C and 4°C scenarios, focusing on businesses likely to be impacted by climate change. • As a result of our analysis with respect to Fujitsu's risk responses and its ability to seize opportunities by helping customers to resolve issues, our assessment showed that Fujitsu's business strategy was resilient in the medium- to long-term. 	
Risk Management	Climate-related risk identification and assessment process	<ul style="list-style-type: none"> • Group-wide risk management is conducted by the Risk Management & Compliance Committee. This committee conducts matrix analysis of the results of the risk assessments by each department in terms of impact and likelihood of occurrence. It then identifies and assesses those risks and reports its findings to the Board of Directors. 	<ul style="list-style-type: none"> • Response to Environmental Risks > • Environmental Management Systems > • Risk Management >
	Climate-related risk management process	<ul style="list-style-type: none"> • Fujitsu monitors risks using environmental management systems that are based on the ISO14001 standard. The Sustainability Management Committee is responsible for managing the progress of climate change measures. 	
	Status of integration with organization-wide risk management	<ul style="list-style-type: none"> • The Risk Management & Compliance Committee identifies and assesses risk for the entire company, including climate change risk. It collaborates with the Sustainability Management Committee to identify, analyze, and assess risks, and then formulates and implements recurrence prevention measures. 	

★ Indicators assured by third party

Metrics and Targets	Metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process	<ul style="list-style-type: none">The Fujitsu Group recognizes the importance of reducing greenhouse gas (GHG) emissions and adopting renewable energy sources in addressing climate-related risks. We also believe that the deployment of innovative energy-saving technologies implemented by our company will lead to the acquisition of climate-related opportunities. We therefore use our GHG emissions and our rate of renewable energy adoption as indicators. We have set SBTi certification and RE100 targets as medium- to long-term goals and established the "Environmental Action Plan" for short-term goals. We are monitoring those indicators, managing the progress of our strategies, and conducting risk management.	<ul style="list-style-type: none">The Fujitsu Group Medium/Long-term Environmental Vision >Fujitsu Group Environmental Action Plan >																										
	GHG emissions for Scope 1, 2, and 3	<table><tr><th colspan="4">GHG emissions</th></tr><tr><th colspan="2">Scope</th><th>Baseline year (FY2020)</th><th>Result (FY2023)</th></tr><tr><td colspan="2">Scope 1</td><td>66 kT-CO₂</td><td>64 kT-CO₂</td></tr><tr><td colspan="2">Scope 2 (Market-based)</td><td>499 kT-CO₂</td><td>266 kT-CO₂</td></tr><tr><td colspan="2">Scope 3 (Across all categories)</td><td>4,966 kT-CO₂</td><td>3,646 kT-CO₂</td></tr><tr><td rowspan="2">Key categories</td><td>Category 1 (Purchased goods and services)</td><td>1,192 kT-CO₂</td><td>1,086 kT-CO₂★</td></tr><tr><td>Category 11 (Use of sold products)</td><td>3,470 kT-CO₂</td><td>2,283 kT-CO₂★</td></tr></table>		GHG emissions				Scope		Baseline year (FY2020)	Result (FY2023)	Scope 1		66 kT-CO ₂	64 kT-CO ₂	Scope 2 (Market-based)		499 kT-CO ₂	266 kT-CO ₂	Scope 3 (Across all categories)		4,966 kT-CO ₂	3,646 kT-CO ₂	Key categories	Category 1 (Purchased goods and services)	1,192 kT-CO ₂	1,086 kT-CO ₂ ★	Category 11 (Use of sold products)	3,470 kT-CO ₂
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	Targets used by the organization to manage climate-related risks and opportunities and performance against targets	Climate-related targets and performance				
		Item		Targets		Performance (FY2023)
		Reduction in own GHG emissions*1	Medium term	100% reduction by 2030*2	SBT Net Zero certification	41.6% reduction
		Reduction in GHG emissions in the value chain*3	Long term	90% reduction by FY2040		28.1% reduction
		Renewable energy usage rate	Medium term	100% renewable energy by FY2030	RE100 membership	42.7%★ deployment
*1: vs. 2020, *2: Scope 1 + Scope 2,*3: Scope 1, 2 and 3						

Governance

The Fujitsu Group has established a Sustainability Management Committee, chaired by the CEO. This committee examines medium- to long-term issues, formulates policy, shares the business risks and opportunities of climate change and decides how to address those risks and opportunities, and manages the company's progress. It also reports on the results of its activities to the Board of Directors at meetings of the Executive Management Council. In October 2020, the committee made a key decision by revising the Fujitsu Group GHG reduction target (SBT) from 2.0°C to 1.5° C. In April 2021, the new target was validated as 1.5° C-aligned to the SBTi. In October 2021, the results of scenario analyses using two external scenarios, one for 1.5° C and the other for 4°C, were reported to the Sustainability Management Committee. The findings prompted lively discussion among the committee members on topics such as the need to discuss management strategies, the selection of key solutions, and the measurement of impacts once solutions are provided.

Within the company-wide risk management regime and with oversight by the Board of Directors, the Risk Management & Compliance Committee, chaired by the CEO, conducts risk analysis and implements responses for the entire Group, including on issues relating to climate change. This committee is also the ultimate decision-making body for risk management and reports regularly to the Board of Directors regarding major risks that have been identified, analyzed, and assessed. The Fujitsu Group has also developed environmental management systems (EMS) based on the ISO 14001 standard, and the results of EMS activities are reported to the Board of Directors at meetings of the Executive Management Council.

To further strengthen governance relating to climate change, in April 2022 we added ESG-related third-party evaluations (DJSI^(*2)) and CDP climate change program^(*3) as assessment indices for the bonuses paid to Executive Directors. As of FY2022, these indices will apply to their bonuses. (Executive compensation consists of base compensation, bonuses, and performance-linked stock compensation.).

(*2) Dow Jones Sustainability Index (DJSI): This is a share index published by S&P Dow Jones of the United States that analyzes companies with respect to their corporate economic, environmental, and social performance, and selects companies with superior corporate sustainability.

(*3) CDP climate change program: A program run by CDP to survey and assess corporate climate change initiatives and publish the results of those surveys.

Strategy

Climate Change Risks and Opportunities

We have identified the risks and opportunities of climate change for the Fujitsu Group, and considered our responses, by analyzing the business impacts of climate change using external scenarios for 2°C of global warming in FY2018, and for warming of 1.5 °C and 4°C in FY2021. Our aim is to address the transitional and physical risks that negatively impact Fujitsu operations and supply chains, and to identify the climate-related risks faced by customers so that we can better make proposals that create value and grasp the business opportunities on offer.

Risks

Risk type		Term	Details	Key responses
Transition	Policy/Regulation	Short- to long-term	<ul style="list-style-type: none"> Increased costs due to stronger laws and regulations relating to greenhouse gas emissions and energy use (carbon taxes, energy-saving policies, etc.) Risk of lost corporate value if such laws or regulations are violated 	<ul style="list-style-type: none"> Ongoing reductions in greenhouse gas emissions (increased use of renewable energy, comprehensive energy savings) Strict compliance with laws and regulations through EMS
	Market	Medium- to long-term	<ul style="list-style-type: none"> Surging electricity prices with the shift to a carbon-neutral world (widespread electrification, etc.) 	<ul style="list-style-type: none"> Reduced electricity consumption by formulating internal company standards and developing innovative technology, etc.
	Technology	Medium- to long-term	<ul style="list-style-type: none"> Risk of missing out on business opportunities if we fall behind in fiercely competitive technology development (energy savings, low-carbon services, etc.) and cannot meet market needs 	<ul style="list-style-type: none"> Promote innovation and develop products/services that address customers' climate change issues
	Reputation	Short- to long-term	<ul style="list-style-type: none"> Increased cost of responding to demands from stakeholders (investors, customers, etc.) Negative impacts on ratings and sales due to delays in responding to external demands 	<ul style="list-style-type: none"> Formulation and promotion of our Medium/Long-term Environmental Vision and Environmental Action Plan Proactive information disclosure to ensure transparency in our climate change strategy
Physical (Natural disasters etc.)	Chronic/Acute	Short- to long-term	<ul style="list-style-type: none"> Increased cost of responding to changing rainfall/weather patterns, higher average temperatures, higher sea levels, droughts, etc. Increased recovery costs when operations, including supply chains, stop due to increasingly severe abnormal weather events 	<ul style="list-style-type: none"> Implement measures such as greater multi-sourcing, stronger BCP measures, and conducting surveys of suppliers' business continuity systems Assess potential water risks and undertake monitoring

Opportunities

Opportunity type	Term	Details	Key responses
Products/services	Short- to long-term	<ul style="list-style-type: none"> Increased sales by developing and supplying products and services that are highly energy-efficient 	<ul style="list-style-type: none"> Development and supply of high-performance, energy-saving 5G virtualization base stations, high-performance, low-energy supercomputers, etc.
Market	Short- to long-term	<ul style="list-style-type: none"> Seizing new market opportunities for climate change solutions created using ICT 	<ul style="list-style-type: none"> Development and supply of measures to calculate and visualize CO₂ emissions in supply chains and more efficiently search for new materials in the shift to zero emissions
Resilience	Short- to long-term	<ul style="list-style-type: none"> Increased sales through new products and services for resilience enhancement 	<ul style="list-style-type: none"> Development and supply of disaster prevention information systems and AI predictive water management systems to forecast river levels during floods

Scenario Analysis

Premise

In FY2021, the Fujitsu Group conducted scenario analyses out to 2050 using scenarios for 1.5 °C and 4°C of global warming. The analyses studied businesses likely to be impacted by climate change in the following areas: Sustainable Manufacturing (sectors studied: petrochemicals, automotive, foods, electronic device-related businesses), Trusted Society (sectors studied: public sector, transportation, energy-related businesses), and Hybrid IT (sector studied: datacenter-related businesses).

Scenario selection	<ul style="list-style-type: none"> 1.5°C, 4°C scenarios <p>*Established with reference to information published by the IPCC, the IEA, government agencies such as the Ministry of the Environment and the Japan Meteorological Agency, and various private research organizations.</p> <p>For the main reference scenarios, RCP 8.5 and RCP 2.6 are used as physical scenarios, and IEA NZE 2050 (Net Zero Emissions by 2050 Scenario) and IEA STEPS (Stated Policies Scenario) are used as transition scenarios.</p>
Target businesses	<p>Opportunity-focused analysis: Addressing climate-related risk in client industries</p> <ul style="list-style-type: none"> Sustainable Manufacturing (sectors studied: petrochemicals, automotive, foods, electronic device-related businesses) Trusted Society (sectors studied: public sector, transportation, energy-related businesses) <p>Analysis of both risks and opportunities: Addressing climate-related risk in Fujitsu businesses and client industries</p> <ul style="list-style-type: none"> Hybrid IT (sector studied: datacenter-related businesses)
Period covered	<ul style="list-style-type: none"> 2050

Scenario Analysis

Premise

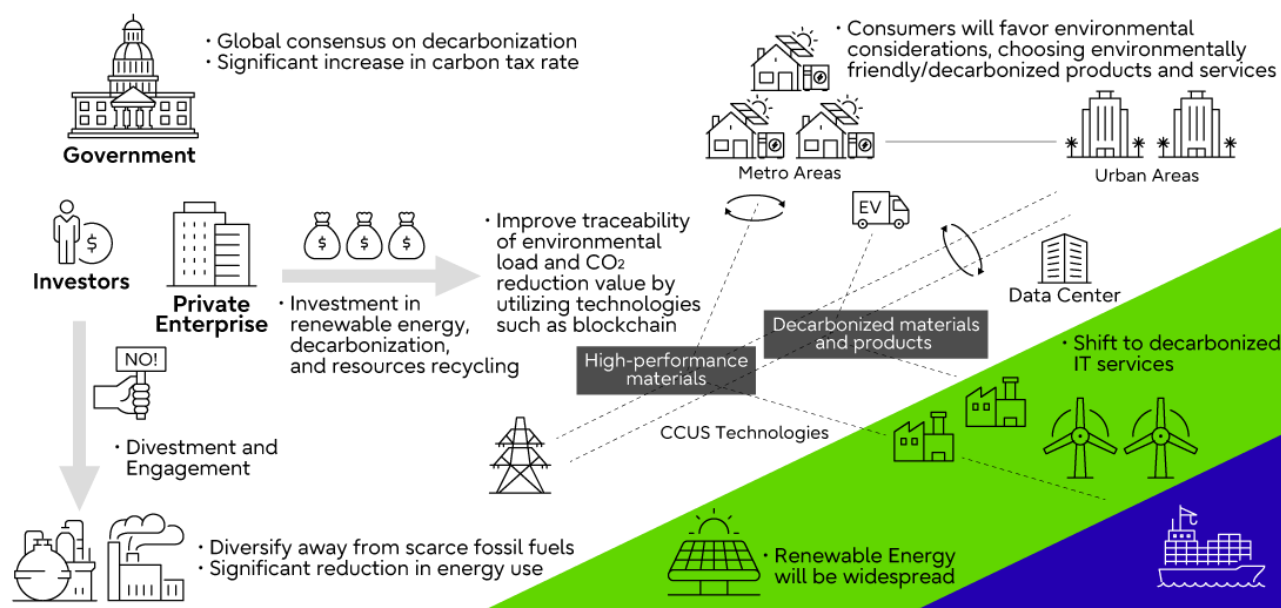
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Period covered	<ul style="list-style-type: none"> 2050

Analysis Steps and Details

The analysis was conducted in 4 steps: assessment of risk severity, definition of scenarios, evaluation of impacts on business, and discussion of countermeasures.

We began by organizing the risks and opportunities for the target businesses based on data such as the TCFD recommendations and external reports. We also conducted workshops to look at the qualitative aspects of business impacts stemming from each risk and opportunity item from the perspectives of Fujitsu and industry generally. We rated the severity of each risk or opportunity as “High”, “Medium” or “Low”. We then considered the future changes in each of the items classified as having a “High” severity and defined our scenarios using data from agencies such as the IPCC, IEA, and the Ministry of the Environment, together with the evidence provided in various reports. Specifically, we held an executive input session to consider global outlooks for 2050 given temperature rises of 1.5° C and 4°C, and then went on to consider the global outlook for each of the target industries, using tools such as Five Forces analysis. (See below for the 1.5° C global outlook.)



Global outlook of a 1.5° C “carbon-neutral world in 2050”

To look at the impacts on business, we then tentatively calculated the qualitative gap between the scenarios and our existing strategies and plans with respect to risks and opportunities. For Hybrid IT (sector studied: datacenter-related businesses), we discussed how the impacts of climate change on business would affect our Profit and Loss Statement, specifically looking at which financial indicators would be impacted and in what ways. We then summarized those impacts by developing calculation logic for each impact. Both internal and external data and information were used to confirm the positive (opportunities) and negative (risks) impacts on operating profit in 2050. For example, the calculations for the 1.5 °C scenario showed rising costs due to changes in power prices, but also revealed that there will be increased demand for carbon-neutral datacenters and for datacenters generally due to increased communications traffic as the uptake of smart devices accelerates. Overall, the calculations showed that the negative financial impacts of risks will be outweighed by the positive financial benefits arising from opportunities, ultimately leading to a net positive financial impact on operating profits.

Our analysis of Sustainable Manufacturing (sectors studied: petrochemicals, automotive, foods, electronic device-related businesses) and Trusted Society (sectors studied: public sector, transportation, energy-related businesses) focused on the business opportunities arising from climate change, assuming the potential to establish new climate change-related markets and concluding that the net impact on sales in 2050 would be positive.

Finally, we held a workshop in which we organized the trends in each industry that had been identified when defining the scenarios and the direction of measures to deal with the business impacts requiring emphasis. In specific terms, during the group work we reviewed the current initiatives and gathered views on the directions that future initiatives should take, taking into account the expectations on Fujitsu in the medium- to long-term.

Analysis Results

Because we were able to confirm that the study and development directions for our business unit offerings are aligned with the opportunities shown in the scenario analyses, and that countermeasures for the identified risks are also being prepared, our assessment was that Fujitsu's businesses are strategically resilient from a medium- to long-term perspective.

Our current themes and areas are "Carbon Neutrality" and "Resilient Supply Chains" in the Sustainable Manufacturing area, and "Sustainable Energy & Environment" and "Sustainable Transportation" in the Trusted Society area, and we are progressing with the development of our offerings.

<Opportunity
Analysis>Main Risk and
Opportunity ItemsPolicy/regulation, markets,
technology, reputation

Natural disasters

Target businesses : Sustainable Manufacturing

Sectors studied	Risk severity assessment (both 1.5°C and 4°C)	Scenario definitions	Countermeasure considerations (in part)
Petrochemical businesses	<p><Policy/regulation, markets, technology, reputation></p> <p>Proliferation of ICT in recycling-based business platforms in the shift to carbon-neutrality</p> <div>Carbon pricing</div> <div>Emissions targets</div> <div>Energy-saving measures</div> <div>Key product/Service price variations</div> <p><Natural disasters></p> <p>Increased damage to factories/supply chains due to heightened risk of natural disasters</p> <div>Flooding/Changing weather patterns</div> <div>More severe abnormal weather events</div>	1.5°C scenario	
		Switch to environmentally friendly products that use carbon-neutral materials throughout the supply chain, increasing portfolio reform, increased demand for greater traceability and more efficient R&D	<ul style="list-style-type: none"> Visualization of CO₂ emissions throughout the supply chain, support for strategies and policies aimed at carbon-neutrality Eco-friendly materials development solutions that use materials informatics Management visualization with an ESG pivot, formulation and implementation of SX measures through data-driven management
		4°C scenario	
		Increased demand for resilient factories and supply chains due to increasingly severe natural disasters	<ul style="list-style-type: none"> Support for risk event simulation and timely provision of risk information Rapid solutions through data-driven management (review of manufacturing systems, suppliers, SCM, etc.)

Automotive businesses	<p><Policy/regulation, markets, technology, reputation></p> <p>Stronger regulation of internal combustion engines; widespread adoption of electric vehicles, move toward carbon-neutrality in the entire product life cycle</p> <table><tr><td>Carbon pricing</td><td>Emissions targets</td></tr><tr><td>Key product/Service price variations</td><td>Proliferation of next-generation technology</td></tr><tr><td colspan="2">Changes in investor sentiment</td></tr></table>	Carbon pricing	Emissions targets	Key product/Service price variations	Proliferation of next-generation technology	Changes in investor sentiment		1.5°C scenario	
	Carbon pricing	Emissions targets							
	Key product/Service price variations	Proliferation of next-generation technology							
	Changes in investor sentiment								
<p><Natural disasters></p> <p>Increased damage to factories/supply chains due to heightened risk of natural disasters</p> <table><tr><td>Flooding/Changing weather patterns</td></tr></table>	Flooding/Changing weather patterns	<p>Increased demand for services such as MaaS and greater supply chain traceability to help reduce environmental impacts through the entire life cycle</p>	<ul style="list-style-type: none">• Visualization of CO₂ emissions throughout the supply chain, support for strategies and policies aimed at carbon-neutrality• Support for EV demand (e.g., circular management of EV batteries)• Management visualization with an ESG pivot, formulation and implementation of SX measures through data-driven management• Process automation services using digital technology, from design through to manufacturing and maintenance						
Flooding/Changing weather patterns									
	4°C scenario								
	<p>Faster rollout of internal combustion engines, increased demand for advanced technology. Also, increased demand for enhanced business continuity and stability in raw materials procurement in the face of more severe natural disasters</p>	<ul style="list-style-type: none">• Support for risk event simulation and timely provision of risk information• Rapid solutions through data-driven management (review of manufacturing systems, suppliers, SCM, etc.)• Engineering outsourcing service which contributes to acceleration of development processes/technology and selection of management resources							

Food-related businesses	<p><Policy/regulation, markets, technology, reputation></p> <p>Increased awareness of ethical consumption, promotion of resource recycling and biodiversity, etc.</p> <p>Key product/Service price variations</p> <p>Proliferation of next-generation technology</p> <p><Natural disasters></p> <p>Increased damage to agriculture due to heightened risk from natural disasters and temperature rises</p> <p>Higher average temperatures</p> <p>More severe abnormal weather events</p>	1.5°C scenario	
		<p>Changed consumer awareness leading to increased demand for measures to deal with food waste and support for smart agriculture, certificates of origin, and environmentally friendly packaging materials</p>	<ul style="list-style-type: none"> • Visualization of CO₂ emissions throughout the supply chain, support for strategies and policies aimed at carbon-neutrality • Support for greater traceability throughout the value chain (supply-demand optimization, help with changes in consumer behavior) • Management visualization with an ESG pivot, formulation and implementation of SX measures through data-driven management
		4°C scenario	
		<p>Increased demand for "resilient agriculture" to cope with issues of stable food supply resulting from natural disasters</p>	<ul style="list-style-type: none"> • Support for risk event simulation and timely provision of risk information • Rapid solutions through data-driven management (review of manufacturing systems, suppliers, SCM, etc.)

Electronic device-related businesses	<p><Policy/regulation, markets, technology, reputation></p> <p>Energy savings in factories and growth in the market for products for EVs; potential for fundamental manufacturing reforms, such as 3D printers and the "buy local" movement</p> <div> <div>Carbon pricing</div> <div>Emissions targets</div> <div>Key product/Service price variations</div> <div>Proliferation of next-generation technology</div> <div>Changes in investor sentiment</div> </div> <p><Natural disasters></p> <p>Increased damage to factories/supply chains due to heightened risk of natural disasters, water shortages</p> <div>Flooding/Changing weather patterns</div>	1.5°C scenario	
		<p>Proliferation of energy/labor-saving technologies. Increased demand from radical changes to business models (demand chains, etc.)</p>	<ul style="list-style-type: none"> • Visualization of CO₂ emissions throughout the supply chain, support for strategies and policies aimed at carbon-neutrality • Process automation services using digital technology, from design through to manufacturing and maintenance • Management visualization with an ESG pivot, formulation and implementation of SX measures through data-driven management
		4°C scenario	
		<p>Increased demand for higher labor productivity in production sites and the construction of factories and supply chains capable of handling the risks posed by natural disasters</p>	<ul style="list-style-type: none"> • Process automation services using digital technology, from design through to manufacturing and maintenance • Support for risk event simulation and timely provision of risk information • Rapid solutions through data-driven management (review of manufacturing systems, suppliers, SCM, etc.)

Target businesses : Trusted Society

Sectors studied	Risk severity assessment (both 1.5°C and 4°C)	Scenario definitions	Countermeasure considerations (in part)
Public sector, transportation, energy-related businesses	<Policy/regulation, markets, technology, reputation> The values by which we select cities and services, such as environmental concerns, will change as we shift to carbon neutrality <div>Carbon pricing</div> <div>Emissions targets</div> <div>Key product/Service price variations</div>	1.5°C scenario	
		Increased demand for quantifying and visualizing new values, such as environmental concerns, and the digitalization of urban and energy infrastructure	<ul style="list-style-type: none"> Services/solutions related to prediction and regulation of the energy supply-demand balance using real-time data as green energy is used to transition to a carbon neutral society
	<Natural disasters> Increased damage to cities, buildings, and infrastructure due to heightened risk from natural disasters <div>Flooding/Changing weather patterns</div> <div>More severe abnormal weather events</div>	4°C scenario	
		Increased demand for resilient urban infrastructure	<ul style="list-style-type: none"> Construction of Digital Twin platforms, enhanced use of simulations, optimization of urban infrastructure that caters for population flows and individuals, support for resilience in transport and logistics, disaster prevention/minimization

<Risk & Opportunity Analysis>

Target businesses : Hybrid IT

Sectors studied	Risk severity assessment (both 1.5°C and 4°C)	Scenario definitions	Countermeasure considerations (in part)
Datacenter-related businesses	<p><Policy/regulation, markets, technology, reputation> Traceability of environmental values, datacenter electrification, and the adoption of smart technology will all progress</p> <div> <div>Emissions targets</div> <div>Key product/Service price variations</div> </div> <div> <div>Proliferation of next-generation technology</div> <div>Changes in customer sentiment</div> </div>	1.5°C scenario	
		Energy savings and environmental concerns become the standard for service selection by customers, and carbon neutrality in datacenters themselves becomes a source of competitive strength	<ul style="list-style-type: none"> Highly energy-efficient datacenters
		4°C scenario	
		Increased demand for resilient datacenters. Disaster risk for Fujitsu-owned datacenters is also increasing and countermeasures are needed	<ul style="list-style-type: none"> Disaster recovery center services in case disasters occur Resilient earthquake-proof datacenters equipped with every security measure

*The above scenario analyses are intended to verify the strategic resilience of Fujitsu businesses based on an assumed hypothesis and are positioned as one simulation that takes into account future uncertainties.

Risk Management

As part of our company-wide risk management system, we have established the Risk Management and Compliance Committee to identify, assess and manage risks across the entire Fujitsu Group, including those related to climate change. To conduct company-wide risk assessments on a regular basis, the committee prepares tools, distributes them to each Risk Management & Compliance Officer and gathers responses. The departments in charge of each risk across the company utilize these tools to conduct assessments on items such as the impact and likelihood of occurrence related to risk threats and the status of countermeasures, and they also provide responses regarding those risk threats. Climate change-related risk assessments are conducted by all relevant departments, using information collected from across the company, based on the expertise of each department in areas such as policy, reputation, natural disasters, the supply chain, and products and services. The Risk Management and Compliance Committee conducts an integrated matrix analysis of the assessments returned by each department with respect to impact severity and likelihood, and then identifies high-priority risks at the company-wide level. The results of this analysis are reported to the Board of Directors.

The Sustainable Management Committee shares the business risks, opportunities, and countermeasures resulting from climate change, and manages their progress. The Fujitsu Group has also established environmental management systems based on the ISO 14001 standard. Under these systems, we monitor regulatory compliance and other risks.

Metrics and Targets

In 2017, the Fujitsu Group obtained 2°C-aligned certification from the SBTi for its GHG emissions reduction targets, and in 2021 we were granted 1.5°C-aligned certification for our revised targets. To accelerate our efforts towards carbon-neutrality, we set new targets to achieve net-zero emissions from our business activities by FY2030 and net-zero emissions through our entire value chain by FY2040 and were granted net-zero certification by the SBTi. In line with the SBT updates, we have also revised our RE100 renewable energy target, bringing our target of 100% renewables by 2050 forward by 20 years and aiming to achieve 100% renewable energy by FY2030.

Against our target of 100% Scope 1 and 2 GHG reductions in our own emissions by FY2030, in the current year we achieved a reduction for FY2023 of 41.6% on FY2020 levels. Against our target of a 90% reduction (on FY2020 levels) in GHG emissions throughout the value chain (scope 1, 2 and 3 emissions) by FY2040, we also achieved a 28.1% reduction in FY2023.

We boosted our use of renewable energy up to 42.7% in FY2023 towards our target of 100% renewable energy use by FY2030.