

Daifuku Group's Disclosure of Climate Change Information

Based on the TCFD Recommendations

June 26, 2020

DAIFUKU CO., LTD.



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At Daifuku, we produced the Daifuku Environmental Vision 2020 in 2011. Since then, we have been operating an environmental certification program for our products (Daifuku Eco-Products), which is aimed for energy and resource conservation, as well as pollution control, aspiring to contribute to society through manufacturing. We are now taking this a step further. Since last fiscal year, we have been carrying out an *environmental management strategy* aimed at decarbonizing society and achieving the Sustainable Development Goals (SDGs).

As part of these efforts, in May 2019 we declared our support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD recommendations). In accordance with the framework of the TCFD recommendations, we have identified risks and opportunities that climate change creates for our businesses globally. Today, we will disclose information about the four items of (1) Governance, (2) Strategy, (3) Risk Management, and (4) Metrics and Targets.

At Daifuku, we regard *intensifying global environmental issues* as one of the important factors in the social environment surrounding the Daifuku Group. Moving forward, we will revise the Daifuku Environmental Vision to better reflect the demands of society in our management. At the same time, we will strive to improve our business activities, products and services through dialogues with our stakeholders, thereby contributing to the development of society and aiming to improve our corporate value.

Hiroshi Geshiro, President and CEO

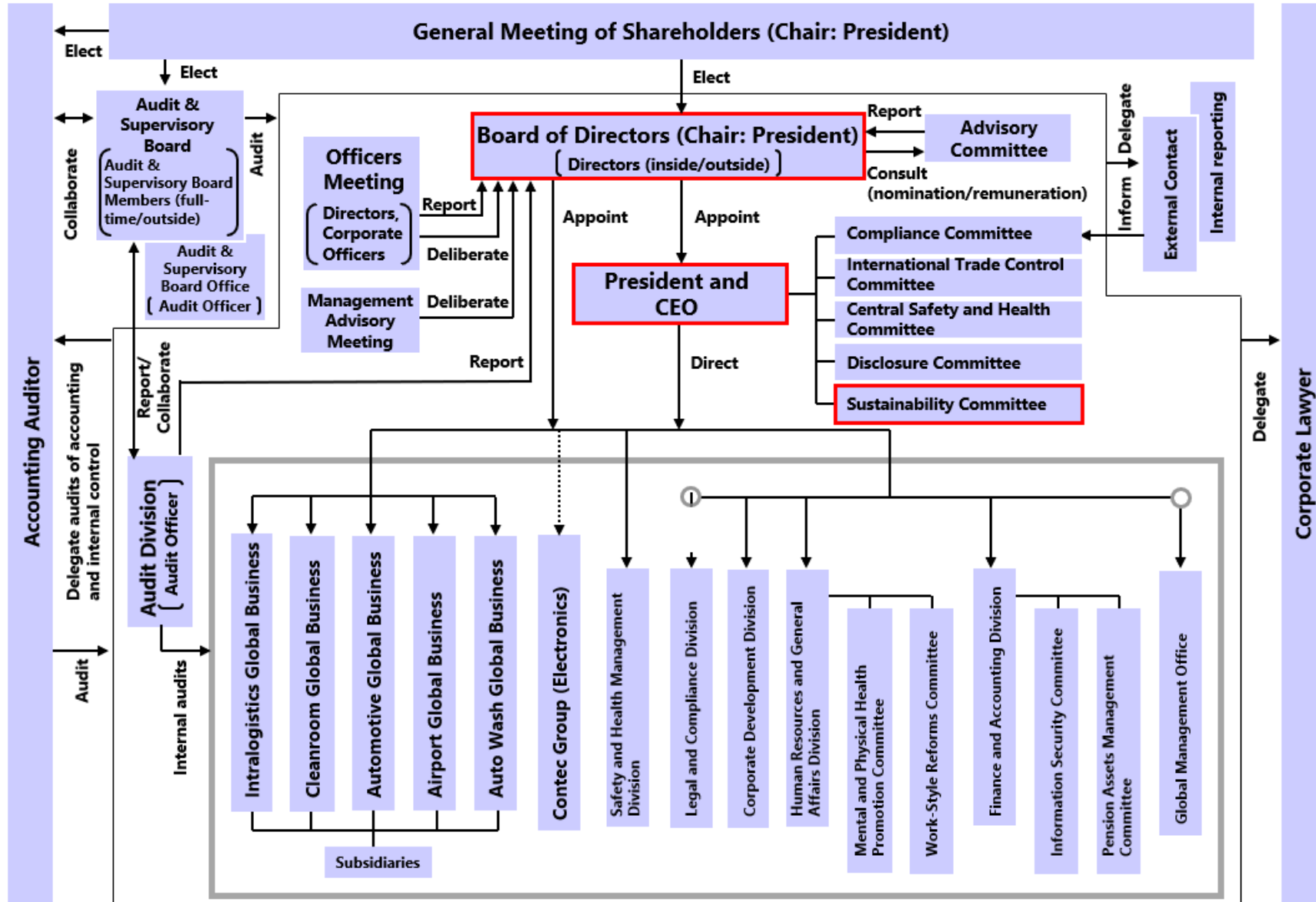
2. Overall View of the Disclosure Based on the TCFD Recommendations (The Four Core Elements and Our Initiatives)

	Daifuku Group's Initiatives
2-1 Governance	<ul style="list-style-type: none">✓ The Board of Directors set up the Sustainability Committee under the direct control of the CEO.✓ Resolutions on necessary measures are passed based on reports from the Committee.
2-2 Strategy	<ul style="list-style-type: none">✓ As a result of scenario analysis, it was found that the impact of climate change on our business performance is minor, although business costs increased.✓ On the other hand, we expect growth in demand for our products and services, which will exceed the above negative impact.
2-3 Risk Management	<ul style="list-style-type: none">✓ We have built a company-wide risk management system based on our risk management rules.✓ The Sustainability Committee manages risks in a centralized manner and reports those that have high priority to the Board of Directors.
2-4 Metrics and Targets	<ul style="list-style-type: none">✓ We are currently executing the Daifuku Environmental Vision 2020.✓ A new long-term environmental vision is being developed and is scheduled to be announced in fiscal 2020.

We have set up the Sustainability Committee (chaired by the CEO) that submits, reports, and provides information about deliberation items related to sustainable management, including those related to climate change. The Committee consists of heads of Global Business and related officers.

The Board of Directors receives reports from the Sustainability Committee and passes resolutions on necessary measures. The Board of Directors consists of eight (8) members. One of the four outside directors has experience in the management of an energy development company.

2-1. Governance (2) Corporate Governance Structure



The Sustainability Committee develops and promotes *sustainable management strategies*, which support the sustainable growth of the Group, toward achieving a decarbonized society and the Sustainable Development Goals (SDGs).

Regarding climate change, the Committee determines policies on energy conservation, resource conservation, and environmentally friendly products for the entire Group, or Group companies all over the world, responds to related laws and regulations, and discloses information to stakeholders.

We conducted a scenario analysis to assess the resilience of our business strategies against climate change risks.

- 1) We set up the secretariat of the Sustainability Committee and a working group consisting of external experts and relevant units.
- 2) We assumed a physical risk scenario and a transition risk scenario in climate change. (See the next section for details.)
- 3) In each scenario, we identified events that may occur in the future and their impact on the value chain. (See the **Table** below.)
- 4) For each impact that has been identified, we clarified the current initiatives as Daifuku's preparations and future prospects.

[Table] Scope of the scenario analysis

	Procurement	Direct Operations	Demand for Products and Services
Risk	All consolidated businesses are included in the scope. The target year is 2050, which is the same as that of the environmental vision that is being developed at present.		
Opportunity			

Physical Scenario

IPCC AR5 RCP8.5 scenario (equivalent to a rise in temperature of 4 degrees Celsius in the 21st century)

- Serious impacts concerning flooding and temperature rise
- At the end of the 21st century, the total amount of rainfall in Japan will increase by approx. 25.5%, and the number of sweltering days (days when the highest temperature is 30 degrees Celsius or higher) in the country will increase by 52.8 days, respectively, compared to the annual averages for 1986 to 2005.



Transition Scenario

IPCC SR1.5 (Keeping the rise in temperature below 1.5 degrees Celsius until the end of the 21st century)
IEA SDS (Conforming to the 2-degree Celsius target)

- Reducing net CO₂ emissions to zero by around 2050
- In developed countries, a carbon tax of approx. 6,300 yen/ t-CO₂ will be imposed in 2025 and approx. 14,000 yen/ t-CO₂ in 2040.

2-2. Strategy (3) A Result of Scenario Analysis

Legend: Opportunity Risk
 Size of the cylinder: Greatness of the impact

While business cost will increase due to climate change and the measures taken to mitigate it, we expect growth in demand for our products and services that exceeds the above negative impact.

Scenario 2050	Event		Impact	Daifuku's preparations		
Physical scenario Rising by 4 degrees Celsius	Risk	Acute Increase in heavy rains (Flooding)	<div style="background-color: #FFB6C1; border-radius: 10px; width: 20px; height: 20px; display: inline-block;"></div> Damages to incoming and outgoing goods and equipment, shutdown of our factories, etc.	There are risks, but we are prepared.	<div style="background-color: #90EE90; border-radius: 10px; padding: 5px; text-align: center;"> Safety BCP </div>	<ul style="list-style-type: none"> Ensuring purchases from two companies Continuous review of BCP (business continuity plan)
		Chronic Rise of annual average temperature	<div style="background-color: #FFB6C1; border-radius: 10px; width: 20px; height: 20px; display: inline-block;"></div> Risk of employees experiencing heat stroke in factories and other facilities, associated with high temperatures in summer			<ul style="list-style-type: none"> Improvement in work environment, development of infrastructure
Transition scenario Rising by 1.5 degrees Celsius	Opportunity	Physical Growing demand for cold chain, e-commerce, and labor conservation from customers, reflecting rising temperatures	<div style="background-color: #ADD8E6; border-radius: 10px; width: 20px; height: 20px; display: inline-block;"></div> Growing demand for our products and services for cold chain, e-commerce, and labor conservation Increase in demand for products and services	Increase in business opportunities	<div style="background-color: #90EE90; border-radius: 10px; padding: 5px; text-align: center;"> Business/Marketing strategy </div>	<ul style="list-style-type: none"> Developing a production framework in Southeast Asia in response to rising demand
		Transition Growing demand for efficiency improvement (energy conservation) from customers, reflecting tighter regulations on CO ₂ emissions	<div style="background-color: #ADD8E6; border-radius: 10px; width: 20px; height: 20px; display: inline-block;"></div> We will be able to respond to changes in customer demand. (Growing demand for products and services that help customers reduce CO ₂ emissions)			<ul style="list-style-type: none"> Helping customers reduce their CO₂ emissions with Daifuku Eco-Products
Risk	Policies, legal restraints	Tightened regulations related CO ₂ emissions	<div style="background-color: #FFB6C1; border-radius: 10px; width: 20px; height: 20px; display: inline-block;"></div> Increase in procurement and operating costs due to carbon tax, etc. --> Global CO ₂ emissions (fiscal 2018) were approx. 40,000 tons. If the carbon price is 14,000/ t (in 2040), the total amount will be 560 million yen per year.	There are risks, but we are prepared.	<div style="background-color: #90EE90; border-radius: 10px; padding: 5px; text-align: center;"> Environmental management (vision) </div>	<ul style="list-style-type: none"> Promoting reduction of our CO₂ emissions <ul style="list-style-type: none"> - Global energy management - Introduction of renewable energy equipment - Replacement of energy conservation equipment

(1) Processes of risk identification and assessment

We set up a working group including external specialists and conducted a scenario analysis.

--> See **2-2. Strategy (1) Process of Scenario Analysis.**

(2) Risk management process

- Process for managing climate-related risks

In the aspects of both business operation and products, we will specify the process of mitigating, transferring, accepting, and managing climate-related risks through the Sustainability Committee.

--> See **2-1. Governance (3) Sustainability Committee.**

- Prioritizing climate-related risks

We will be dedicated to the development and sales of environmentally friendly products with a focus on the fact that the amount of CO₂ emissions by customers resulting from their use of energy is far greater than that of our own emissions.

--> See **2-4. Metrics and Targets (2) Current Realities of CO₂ Emissions.**

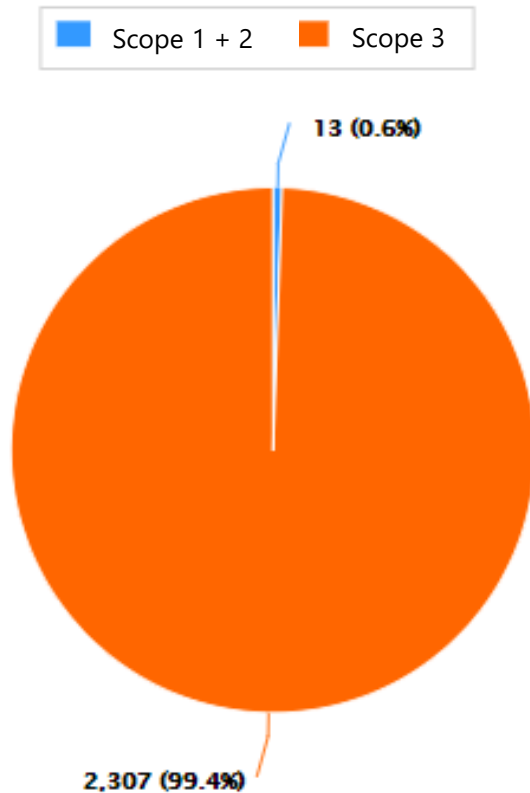
(3) Status of integration into the overall organization's risk management

At the Daifuku Group, we have built a group-wide risk management system based on our risk management rules. We position major natural disasters, including climate change, as one of top-priority risks, and the Sustainability Committee manages such risks in a centralized manner. Concerning both company-wide risks and climate change risks, we apply the views of external experts and report them to the Board of Directors as necessary.

--> See **2-1. Governance (2) Corporate Governance Structure.**

The amount of emissions resulting from customers' use of energy, as well as production and other activities of suppliers, is greater than that of our own emissions.

CO₂ emissions from the overall supply chain (Thousand tons-CO₂)



[Emissions in fiscal 2018]

Scope 1 + 2: 39,058 tCO₂ (1% of the total)

Scope 3: 2,306,839 tCO₂ (99% of the total)

Of the total Scope 3 emissions, those from "use of sold products" account for 80%.

[Areas of focus]

Development and sales of Daifuku Eco-Products (environmentally friendly products) aimed at reducing CO₂ emissions from "use of sold products"

Scope 1: Greenhouse gases emitted directly from business activities (including fossil fuels)

Scope 2: Greenhouse gases emitted indirectly from business activities (including electricity and use of heat)

Scope 3: Greenhouse gases emitted indirectly from the supply chain of business activities (including purchased products and services and use of products)

[Detailed data] <https://www.daifuku.com/sustainability/action/environment/ecology/>

We are promoting our initiatives to achieve the targets of the Daifuku Environmental Vision 2020 and developing a new vision looking ahead to 2050.

Daifuku Environmental Vision 2020

Contribute to our customers, society, and the conservation of the global environment

We will continue to be environmentally aware in every business activity and contribute to our customers, society, and the conservation of the global environment by consistently developing and providing material handling systems with low environmental impact.



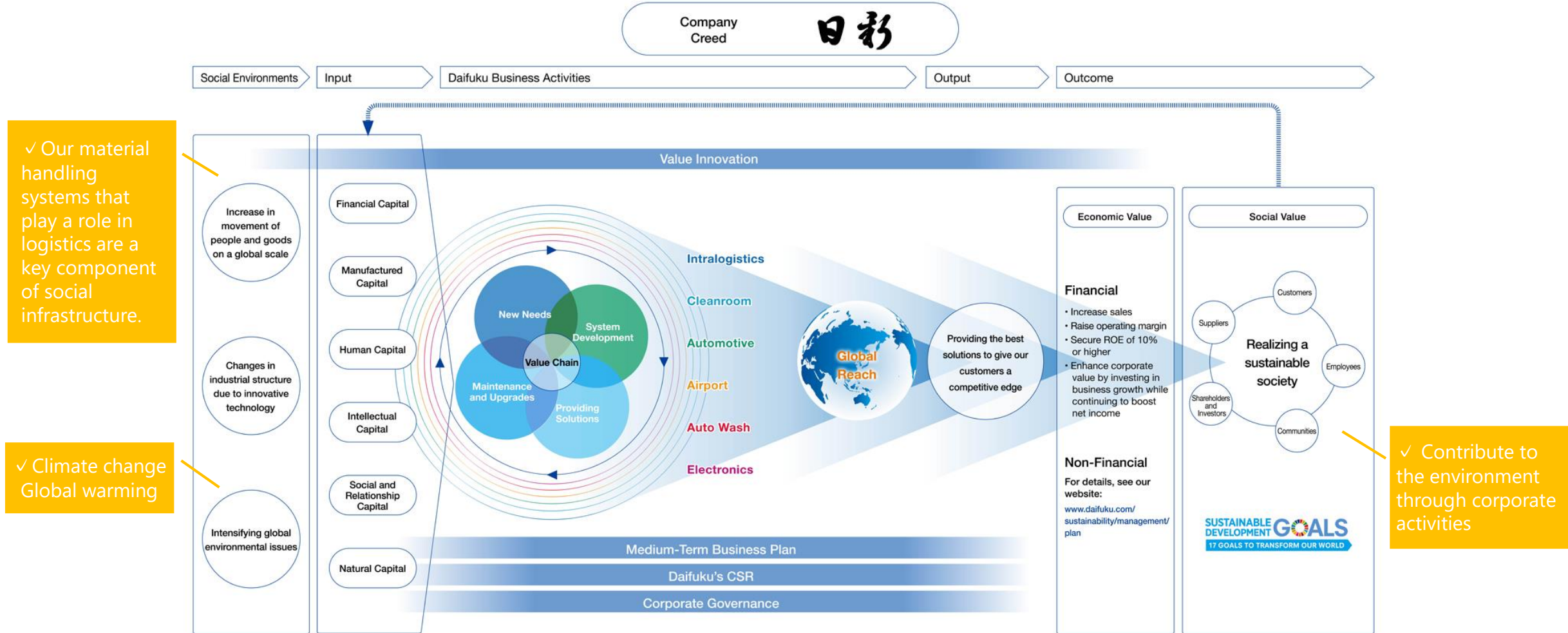
Targets related climate change

CO ₂ emission Factories and offices (compared with FY2005 levels)	Decrease by 41% or more
CO ₂ emission Factories and offices (Per unit of net sales compared with levels in FY2005)	72% or less
CO ₂ emission Product shipment (Per unit of net sales compared with levels in FY2005)	78% or less
Waste generated (Per unit of net sales compared with levels in FY2005)	72% or less
Recycling rate	99% or more
Water usage (Per unit of net sales compared with levels in FY2005)	57% or less
Daifuku Eco-Product certification	63 or more certified products
Contribution to reduced CO ₂ emission	100,000 tons or more

3. Daifuku Value Creation Model:

Contributing to the development of society and aiming to improve our corporate value

Daifuku seeks to streamline logistics and, as a material handling systems manufacturer and integrator, has been able to achieve significant growth. Under our company creed *Hini Arata*, we aim to be a Value Innovator enhancing the competitiveness of our customers and, in tandem with contributing to the development of society, take up the challenge to enhance our corporate value.





- ✓ **Forward-looking statements in this document are based on currently available information. Actual results may differ from those forward-looking statements due to various factors.**
- ✓ **Because this is the first fiscal year after our declaration of support for the TCFD recommendations, the assessment of risks and opportunities, including the scenario analysis, is limited.**