Climate Change



Climate change is beginning to have a serious impact on our lives every year. To mitigate the impact of climate change, the Nippon Paint Group will work to reduce greenhouse gas (GHG) emissions and minimize business risks caused by climate change.

Report based on the Task Force on Climate-related Financial Disclosures (TCFD) recommendations

In September 2021, our Group expressed its support for the TCFD recommendations (final report). For Maximization of Shareholder Value (MSV), we are working to enhance climate change-related measures and information disclosure.

Governance

The Board of Directors supervises climate-related issues by themselves, formulates the Group's strategies, policies, and action plans for ESG initiatives at the executive level including climate-related issues, and holds the ESG Committee to evaluate and promote their progress, chaired by the Representative Executive Officer & Co-President.

The Representative Executive Officer & Co-President reports the progress of ESG initiatives, including activities on climate-related issues, to the Board of Directors at least four times a year. As an example of climate-related decision-making, in July 2020, the ESG Committee identified six materialities and decided to set climate change as a top priority within the materialities.

Strategies

We have identified climate-related risks and opportunities that are critical to the strategies of our Group, and are working to assess their financial impact. In light of the increasing interest in climate change countermeasures in recent years, there are concerns that the global warming tax will be raised, resulting in increase in operating energy costs and additional costs related to capital investment and technology development for decarbonization.

In addition, in the event of increase in the severity and frequency of floods and other events caused by extreme weather, there is a risk of sales decline due to the damage on our plants resulting in the suspension of production.

Global warming, on the other hand, is of interest to the entire society, including our Group's major customers. While global warming entails physical and regulatory risks, it can be linked to business opportunities to expand our business by strategically addressing it. Specifically, such opportunities include expanding sales of products that improve ship fuel efficiency, help reduce CO₂ emissions at automobile manufacturing plants, and mitigate the rise of road surface temperature.

Risk management

The ESG Committee, commissioned by the Board of Directors, formulates our Group's strategies, policies, and action plans for ESG and sustainability initiatives, including climate change issues, and evaluates and promotes their implementation. For the identification of risks, the ESG Committee and its subordinate organization, the Global Working Team1, determine the importance of risks based on evidence, scope, and business opportunities and time frame, with the criteria of factors directly related to our operations (the amount of raw materials used, energy, water and CO₂ in the manufacturing processes) and external factors (users' needs for usage and needs for product features).

Once identified and assessed, risks and opportunities and their action plans are proposed to the ESG Committee. The Committee discusses and decides relevant companywide targets and action plans, and submits them to the Board of Directors. Our Group's partner companies formulate business plans in line with the company-wide targets and action plans above.

Metrics and targets

We will accelerate responses to climate change by conducting activities to reduce CO₂ emissions based on the net zero targets and the carbon neutral policy of the







government of each country and contributing to net zero in our operating regions around the world. As concrete measures, we will focus on reducing emissions per unit in emerging countries, where markets are expanding, by introducing renewable energy and replacing equipment with

Estimated financial impact of carbon tax

Our Group consumes a large amount of energy, especially in the manufacturing processes, such as cooling water required in the process of dispersing and stabilizing pigments and other raw materials. We have identified the carbon tax as the greatest risk that could directly affect our operations, and anticipate cost increase due to the rise of the carbon tax prices. Therefore, we have started considering the sourcing of renewable energy as a workaround. The carbon tax has already been introduced in some countries, and it is expected that the tax rates will be gradually raised to achieve the net zero targets of each country. According to the International Energy Agency (IEA), there is a report that carbon prices in developed countries will increase to 100 USD/tCO₂ in 2030 if a shift to decarbonization proceeds worldwide. IEA also estimates that if CO₂ emissions in 2030 remain unchanged from the 2020 levels, the impact would be around 2.5 billion yen. There are concerns that carbon prices will have an even greater impact on operating costs, given the potential increase in emissions associated with future business expansion of our Group.

Framework comparison between "TCFD" and "Our responses to CDP Climate Change 2021 Questionnaire" '2

	Governance	Strategies	Risk management	Metrics and targets
	Disclose the organization's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Recommended disclosure item	 a) Describe the board's oversight of climate-related risks and opportunities. 	 a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term. 	 a) Describe the organization's processes for identifying and assessing climate-related risks. 	 a) Disclose the metrics used by the organization to assess climate- related risks and opportunities in line with its strategy and risk management process.
	Cl.1b	C2.1a, C2.2a, C2.3, C2.3a, C2.4, C2.4a	C2.1, C2.2, C2.2a	C4.2
	 b) Describe management's role in assessing and managing climate-related risks and opportunities. 	b) Describe the impact of climate- related risks and opportunities on the organization's businesses, strategy, and financial planning.	 b) Describe the organization's processes for managing climate-related risks. 	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
	C1.2, C1.2a	C2.3a, C2.4a, C3.1, C3.3, C3.4	C2.1, C2.2	C6.1, C6.3, C6.5
		c) Describe the resilience of the organization's strategy, taking into consideration different climate- related scenarios, including a 2°C or lower scenario.	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	c) Describe the targets used by the organization to manage climate- related risks and opportunities and performance against targets.
		C3.2	C2.1, C2.2	C4.1, C4.1b, C4.2

*2 Items covered in the CDP's questionnaire that correspond to the recommended disclosure items in the TCFD recommendations are highlighted in gray color.



energy-saving and electrified models. We will also consider renewable energy introduction targets (power generation targets). We currently calculate Scope 3 emissions from our operations in Japan and have taken steps to calculate them from our operations around the world.



Prevention of global warming

Our Group is committed to the prevention of global warming in Japan mainly through efforts to reduce energy use.

In FY2020, both energy use and CO₂ emissions (Scope 1 and 2) decreased from the previous fiscal year due to production adjustment and telecommuting in response to COVID-19 while per unit emissions increased. Emissions increased in FY2017 and FY2019, mainly due to the expansion of the scope of data collection.

Efforts for net zero emissions

The following are examples of our Group's initiatives to achieve net zero CO₂ emissions.

- Replacement of air conditioning equipment and compressors with the latest energy-saving models
- Improvement of efficiency by reviewing operation methods of freezing/refrigeration units
- Adoption of LED lighting in offices and plants
- Energy conservation at manufacturing plants (improvement of paint dispersion processes, turning off unused lighting and manufacturing equipment, etc.)
- Energy conservation in offices (strict control of AC thermostat settings, turning off unused office equipment)

We will continue to consider measures such as

replacement of production facilities to improve manufacturing and production efficiency. Specifically, we will consider and implement the following measures.

- Sourcing of renewable energy
- Adoption of energy-saving equipment at existing facilities
- Investment in renewable energy generation
- Estimating the financial impact of carbon pricing such as the carbon tax
- Decarbonization of new plants and the Head Office buildings
- Adoption of EVs and fuel cell vehicles (FCV)
- In addition to the above, we are considering and implementing sales of products and setting research themes that contribute to mitigation of climate change



• Intensity of emissions from fuel use (Scope 1 carbon intensity)



Intensity of emissions from electricity use (Scope 2 carbon intensity)









Energy used • Intensity of energy use

*3 Coverage of data collection:

FY2016 to FY2018: Nippon Paint Automotive Coatings (NPAC), Nippon Paint Industrial Coatings (NPIU), Nippon Paint (NPTU), Nippon Paint Surf Chemicals (NPSU), Nippon Paint Marine Coatings (NPMC) (April-December for FY2016) FY2019 to FY2020: NPAC, NPIU, NPTU, NPSU, NPMC, AS Paint (ASP), AS Resin (ASR), and Nippon Paint Anti-Corrosive Coatings (NAC)

