

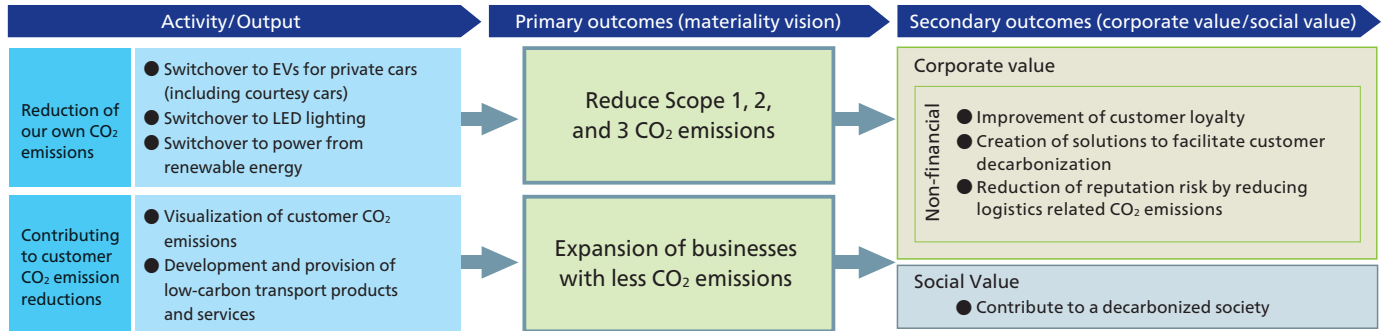
Addressing Climate Change

Why we are working on this project

CO₂ emissions are unavoidable due to the nature of the logistics business. Therefore, reducing these emissions is the most effective way to address climate change. The NIPPON EXPRESS GROUP has positioned the reduction of CO₂ emissions as an important issue which it is actively addressing. In addition, as there is a growing requirement from customers to reduce CO₂ emissions during the transportation of cargo (customer Scope 3 emissions), the NIPPON EXPRESS GROUP has positioned this as an issue to be addressed for sustainable business growth.

Based on this recognition, we will strive to reduce CO₂ emissions from our own operations. At the same time, we will work to provide products and services that contribute to the reduction of CO₂ emissions by our customers. In this way, we will contribute to the conservation of the global environment, which is a prerequisite for the survival of our business, as we pursue opportunities for business growth.

Overall picture of the materiality vision and initiative goals (value structuring tree)



Progress of Initiatives

1. Reduction of our own CO₂ emissions

Emission Reduction Activities in FY2022

Nippon Express Co., Ltd. has moved up its original 2030 target of reducing CO₂ emissions by 350,000 tons (equivalent to a 30% reduction from FY2013 level) to FY2023. It has been working to reduce CO₂ emissions in its own operations by introducing environmentally friendly vehicles and switching to LED lighting in its warehouses.

CO ₂ Reductions Target/Results (Nippon Express Co., Ltd.)	Switchover to LED Lighting Target/Results (Nippon Express Co., Ltd.)	Results Based on Introduction of Eco-Friendly Vehicles (Group companies in Japan)
FY2023 target	FY2023 target	FY2022 Results
350,000 t-CO ₂	100%	Vehicles conforming to the new long-term regulations, post-new long-term regulations, or post-post-new long-term regulations: 10,466
FY2022 Results	FY2022 Results	LPG trucks: 73
404,438 t-CO ₂	83.5%	Hybrid vehicles: 2,132
		CNG trucks: 33
		Electric vehicles: 22

Establishment of Group CO₂ Reduction Targets

In order to contribute to the achievement of the global goal of limiting the global average temperature rise to 1.5°C compared to pre-industrial levels, we have set the following new reduction targets.

Medium- to Long-term CO₂ Emission Reduction Targets

FY2030 Target	Aim to reduce the NIPPON EXPRESS GROUP's CO ₂ emissions by 50% from 2013 levels (Scope 1 and 2)
FY2050 Target	Contribute to the realization of a carbon-neutral society through the NIPPON EXPRESS GROUP as a whole (Scope 1, 2, and 3)

Although there are many challenges that the Group will face as it attempts to achieve these targets, we will continue to promote initiatives. including the introduction of EV vehicles, switchover to LED lighting, and promoting the switchover to renewable energy sources, in order to contribute to the realization of a decarbonized society.

Submission of letter of commitment to SBTi

In order to contribute to a sustainable society and bring an enriched life to future generations through logistics, the NIPPON EXPRESS GROUP has been promoting controls on climate change with the aim of achieving the 1.5°C target. In order to accelerate those efforts, we have recently submitted a letter of commitment to the SBT Initiative (SBTi)*, which certifies that corporate greenhouse gas emission reduction targets are scientifically consistent with the targets set by the Paris Agreement. Moving forward, we will make further efforts to set and achieve targets consistent with the 1.5°C goal set by the Paris Agreement.

* SBTi (Science Based Targets initiative)
A joint initiative established by four organizations: CDP, the United Nations Global Compact, World Resources Institute (WRI), and the World Wide Fund for Nature (WWF).

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2. Contribute to Customer CO₂ Emission Reductions

In response to the growing demand from customers to reduce CO₂ emissions, the NIPPON EXPRESS GROUP has positioned initiatives to address Scope 3 emissions, which account for more than 95% of the Group's CO₂ emissions, as a key issue for sustainable business growth in addition to efforts to reduce Scope 1 and 2 emissions.

The NIPPON EXPRESS GROUP is promoting activities to solve this issue through both CO₂ emission visualization and emission reductions. As a comprehensive logistics company we provide a wide variety of services aimed at the reduction of CO₂ emissions across a wide range of business fields.

CO₂ Emission Visualization

In order to engage in low-carbon transportation and provide value to customers in a way that is visible to them, it is important to visualize CO₂ emissions associated with transportation services.

The NIPPON EXPRESS GROUP offers EcoTrans Navi for domestic transportation use and NX-GREEN Calculator for international transportation use as tools for visualizing CO₂ emissions.

CO₂ Emission Reductions

Reduction of Emissions Intensity

The NIPPON EXPRESS GROUP has established a system to develop and provide low-carbon transportation products that contribute to the reduction of Scope 3 emissions. Specifically, the NIPPON EXPRESS GROUP is developing and studying low-carbon transportation products and other options where aircraft utilize SAF^{*1} and ships utilize SMF^{*2}, aiming to start offering these options in 2023.

We will engage in procurement activities for SAF and similar fuels because of their limited availability in the market.

*1 SAF (Sustainable Aviation Fuel): A type of aviation fuel made using either renewable materials or waste products that meet Sustainability criteria

*2 SMF (Sustainable Marine Fuel): A type of marine fuel made using either renewable materials or waste products that meet Sustainability criteria

Reduction of Emission Activity Amount

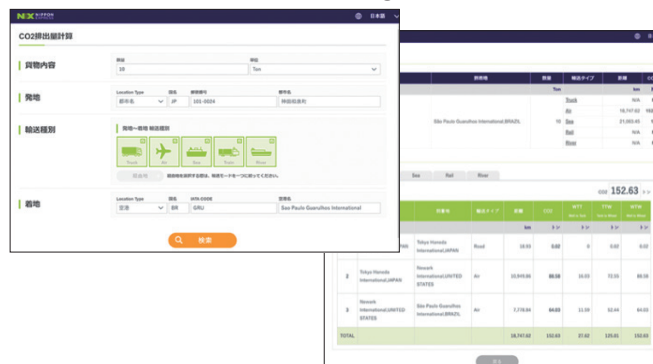
The Group is promoting a modal shift from truck-centered transport to rail, ship, and other forms of transport that have less of an environmental burden through cooperation between client companies and logistics providers, joint delivery, where products are collected at joint delivery centers, divided into categories, accumulated for each delivery destination, and then delivered together in batches, and transportation efficiency by improving loading rates through the use of Protect BOX and other products that are general-purpose pallet size that supports multimodal transport.

TOPICS Offering NX-GREEN Calculator, a tool for customers to calculate the CO₂ emissions generated during international deliveries Supports three languages: Japanese, English, and Chinese

NX-GREEN Calculator is a tool that calculates and visualizes CO₂ emissions from origin to destination simply by entering the origin-destination, number of pieces, freight volume, and transportation mode type. It can be used for each type of transportation mode (air, sea, road, and rail deliveries) used for international transport.

CO₂ emissions can be calculated through detailed calculation of the distance between departure and arrival points around the globe as well as city names and global zip codes. NX-GREEN Calculator is also equipped with functions for calculating emissions of each stage of a detailed transport route by specifying transit points and functions for calculating emissions for multiple deliveries at once based on transportation data for a certain period of time.

NX-GREEN Calculator screen image



Please see our website for more information on NX-GREEN Calculator.

<https://www.nipponexpress-holdings.com/en/press/2023/08-Mar-23-1.html>

TOPICS Receives Award for Best Company Working on Modal Shift in the Implementation Category at the Awards Ceremony for Excellent Business Entities Working on Modal Shift

The NIPPON EXPRESS GROUP is promoting a modal shifts, switching from truck-centered transport to transport using railways and ships.

At the 9th Awards Ceremony for Excellent Business Entities Working on Modal Shift held by the Japan Association for Logistics and Transport in 2022, the NIPPON EXPRESS GROUP received the award for Best Company Working on Modal Shift in two categories: Implementation and Effective Utilization.



Director and Executive Officer Kenji Kato (right) receives award from Junichiro Ikeda, Chairman, Japan Association for Logistics and Transport (left)

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Initiatives on TCFD Recommendations

Policy on Addressing Climate Change

The NIPPON EXPRESS GROUP will actively work to reduce CO₂ emissions to help limit the atmospheric temperature increase to +1.5°C above the level of the Industrial Revolution in order to bring an enriched life to future generations through logistics. We view this initiative as a critical management item that is necessary for our Group to achieve sustainable growth and increase corporate value. We believe that by responding to these social changes, we will be able to minimize risk and create new business opportunities.

In May 2022, the NIPPON EXPRESS GROUP declared its support for the Task Force on

Climate-related Financial Disclosures (TCFD*) recommendations, and in June 2022, based on the recommendations, the Group disclosed information in accordance with the TCFD disclosure framework. We are working to further expand the content of our disclosures based on the revisions made to the TCFD recommendations in October 2021.

* TCFD: The Task Force on Climate-related Financial Disclosures is an international initiative established by the Financial Stability Board in 2015 to encourage companies to disclose information about the financial implications of the risks and opportunities that climate change presents to their businesses



1. Governance

Roles of Management and Board of Directors

In order to promote Sustainability management, the NIPPON EXPRESS GROUP is engaged in Sustainability management through the Sustainability Promotion Division, which was established within NIPPON EXPRESS HOLDINGS, INC.. In addition, the Sustainability Promotion Committee, which is responsible for promoting Sustainability of the NIPPON EXPRESS GROUP, is chaired by the President and CEO and is comprised of Company's executive officers. It promotes general Sustainability initiatives, including climate change issues. The Board of Directors discusses Sustainability management initiatives once a quarter. (See page 37 for details)

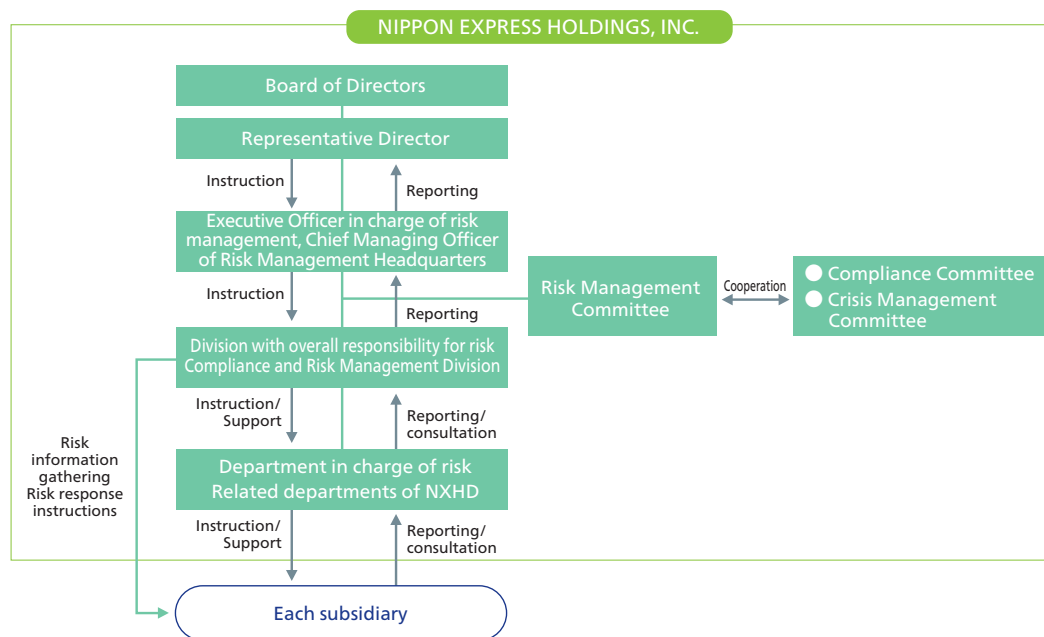
2. Indicators and Targets

Recognizing climate change as a global social issue, our Group has set as medium- and long-term CO₂ emission reduction targets for the entire Group with the goal of reducing the Group's own emissions by 50% by 2030 and contributing to the realization of a carbon-neutral society by 2050. We will continue to implement various measures to achieve the 2030 and 2050 targets. Furthermore, in May 2023, we submitted a letter of commitment to the SBT Initiative (SBTi) in order to conform with the 1.5°C target set by the Paris Agreement. (See page 42 for details)

3. Risk Management

Our Group established the Risk Management Headquarters and the Compliance and Risk Management Division to promote risk and crisis management for the entire Group, enhancing risk management. In addition, climate change risk is identified as a key issue in our environmental analysis for

the realization of our long-term vision, and the Risk Management Committee, which meets annually, monitors the status of identifying and addressing risks, including climate change risk, and confirms the impact on our Group's business from a long-term perspective.



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4. Strategy

In the NIPPON EXPRESS GROUP Business Plan 2023, our Group has set the establishment of ESG-oriented management for sustainable growth and improve corporate value as an initiative to realize our long-term vision. We are implementing measures to reduce CO₂ emissions to achieve the 1.5°C target. (For details, see [P.43](#)). In order to enhance our business resilience, we are also working to understand the various risks and opportunities that might be anticipated to result from climate change.

■ Identification of Climate-Related Risks and Opportunities

With logistics as its core business, the NIPPON EXPRESS GROUP operates logistics-related businesses on a global scale. In order to understand the impact of climate change on our various businesses, we identify risks and opportunities in accordance with TCFD categories.

■ Scenario Analysis

Scenario analysis is conducted for each climate-related risk and opportunity identified to assess the impact caused by climate change. In addition to the 1.5°C scenario that our Group is aiming for, a 4°C scenario was used as the scenario for analysis^{*1}, in which decarbonization efforts do not proceed from the current level.

Additionally, we conducted a detailed analysis of things that are particularly affected by climate change. In 2023, we conducted a review of carbon costs analyzed in 2022, as well as a detailed analysis of physical risks (acute risks) and opportunities (products and services) ([see next page for details](#)). Our Group plans to continue examining measures correlated with risks and opportunities other than those covered in this detailed analysis, and further evaluate the quantitative impact.

Risk classification	Risks and Opportunities	Business impact ^{*2}		Response	
		1.5°C Scenario	4°C Scenario		
Transition risk	Legal, regulatory	Risk of increased costs due to introduction of carbon tax and other regulations	High	Low	Set CO ₂ emission reduction targets and promote emission reduction efforts
	Technology, markets	Risk of increased costs for introduction of eco-friendly vehicles	Moderate	Low	Systematically introduce eco-friendly vehicles based on market trends
		Risk of reduced demand for products and services that emit CO ₂	Low to moderate	Low	Advance initiatives to reduce CO ₂ and enhance environmentally friendly products and services
	Reputation	Risk of increased cost of capital financing due to lower valuation resulting from insufficient climate change measures	Low	Low	Enhance environmentally friendly products and services
Physical risks	Acute	Risk of suspension of business activities due to weather related disasters such as torrential rain, flooding, and typhoons	Low	Low	Asset liquidation, decentralization of locations, modal shift
		Risk of increased costs associated with damage to company assets due to weather-related disasters	Low	Moderate	Strengthen BCP countermeasures
	Chronic	Risk of increased illness and decreased employee productivity due to rising outdoor temperatures	Low	Low	Increase, enhance cooling equipment
		Risk of relocation of logistics facilities, capital expenditures and increased insurance premiums associated with relocation of logistics facilities due to sea level rise	Low	Low to moderate	Asset liquidation, decentralization of locations
		Risk of reduced logistics due to climate change impact on customer businesses	Low	Low to moderate	Inventory storage for supply and-demand adjustment, building a broad customer base
Opportunities	Resource efficiency	Opportunities to reduce fuel costs, delivery work hours, and carrier procurement costs through improved transportation and delivery efficiency	Moderate	Low	Enhance environmentally friendly products and services
	Products, services	Opportunities to increase revenues through environmentally friendly services ^{*3}	High	Low	
	Resilience	Opportunities to stabilize business and ensure reliability by diversifying means of transportation and delivery	Moderate	Moderate	

*1: For the 1.5°C scenario, see IEA Net Zero Emissions by 2050 Scenario (NZE), IPCC Special Report (SR15), etc. (When information for the 1.5°C scenario is not available, it is supplemented by information for the 2.0°C scenario.) For the 4°C scenario, see IEA Stated Policies Scenario (STEPS), IPCC RCP8.5, etc.

*2: The financial impact on the Group under each scenario is rated on a three-point scale of high (more than ¥10 billion), moderate (¥1 billion to ¥10 billion), and low (less than ¥1 billion). The 1.5°C scenario is at 2030 and the 4°C scenario is at 2050.

*3: Some environmentally-friendly services include products where SAF are utilized by aircraft (see next page for details).

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1. Transition risk (carbon costs)

In 2022, based on the assumption that CO₂ emissions in 2022 would be reduced by 35%^{*1} compared to 2013 levels, the calculation indicated that the risk of an increase in costs due to the introduction of regulations such as carbon taxes under the 1.5°C scenario is high. However, this year we have set a 2030 target (50% reduction of CO₂ emissions by 2030 compared to 2013 levels) and recalculated the carbon cost assuming that the reduction target will be achieved, resulting in a financial impact rated at “moderate”.

2. Physical risk (acute)

Regarding physical risks (acute), we calculated the risk of business suspension due to weather disasters such as heavy rains, floods and typhoons, and the risk of cost increase due to damage to our own assets for some sites in Japan. It was found that the risk of suspension of business activities due to weather disasters is limited and that the risk of damage to our own assets is also ¥0.72 billion within the scope of this calculation.

This estimate does not take into account disruption of critical infrastructure and similar issues caused by flooding. In the future, the Group plans to expand the scope of calculation, etc., and continue evaluation and confirmation.

3. Opportunities (Products, services)

The NIPPON EXPRESS GROUP has established a system to develop and provide low-carbon transportation products designed to reduce Scope 3 emissions. In particular, the use of SAF is important as a measure to reduce CO₂ emissions in the aviation field. As a result, our Group is actively promoting such initiatives (See [P.43](#) for details). Therefore, in 2023, we estimated the financial impact of the opportunity to increase revenues from the sale of air transportation products using SAF. As a result, we expect a revenue opportunity of between ¥3.22 billion and ¥6.45 billion. The Group will focus on this area and continue to consider other services in order to take advantage of market changes due to decarbonization and to gain a competitive edge.

■ Transition Plan to Achieve 1.5°C Target

In order to contribute to the realization of the global goal of limiting the global average temperature rise to 1.5°C compared to pre-industrial levels, the NIPPON EXPRESS GROUP has set medium- to long-term targets: Reducing CO₂ emissions by 50% compared to 2013 levels (Scopes 1 and 2) by 2030 and achieve carbon neutrality by 2050 (Scope 1, 2 and 3). The Group has also submitted a letter of commitment to SBTi and promotes initiatives to reduce CO₂ emissions. In order to reach these targets, we are actively introducing environmentally friendly vehicles, including EV vehicles, switching to LED lighting, and promoting the switchover to renewable energy in a systematic manner. Moving forward, in order to accelerate the initiatives of each Group company, we will clarify the indicators and targets of each company and set incentives.

Category	Evaluation Item	Business impact
Transition risk	Risk of increased costs due to introduction of carbon tax and other regulations ^{*2}	<ul style="list-style-type: none"> • Calculation for 2022 (35% reduction compared to 2013 levels): ¥9.0 billion to ¥11.0 billion • Calculation for 2023 (50% reduction compared to 2013 levels): ¥5.93 billion to ¥6.98 billion
Physical risks	Risk of increased costs associated with damage to company assets due to weather-related disasters ^{*3}	<ul style="list-style-type: none"> • Business impact at 70 sites, equivalent to 30% of our total floor space at warehouses in Japan and overseas^{*4} • ¥0.72 billion
Opportunities	Opportunities to increase revenues through environmentally friendly services (Trial calculation of the introduction of SAF-related transport products ^{*5})	<ul style="list-style-type: none"> • ¥3.22 billion to ¥6.45 billion

*1: CO₂ emissions in fiscal 2030 are set to achieve the reduction target (35%) for the transportation sector in the Global Warming Countermeasures Plan

*2: It is assumed that the NIPPON EXPRESS GROUP'S FY2030 CO₂ emission reduction target (50% less than 2013 levels) will be achieved. Carbon tax and electricity unit prices are based on the 2022 version (latest version as of March 2023) of Net Zero 2050 (scenario of 1.5°C or less) from the Network for Greening the Financial System (NGFS) (Carbon tax price in 2030 of approximately ¥12,500 and an electricity unit price of approximately ¥10.0/kWh)

*3: 70 of the Company's key warehouses are included in the calculation. Information related to flood damage is obtained from hazard maps provided by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), and it is assumed that flooding would be caused by the overflow of rivers that are located near our locations.

*4: 70 locations were selected, mainly among warehouses in Japan that would be significantly impacted (equivalent to 30% of the total floor space of warehouses in Japan and overseas).

*5: The results of trial calculation show the financial impact for a single year, assuming a SAF adoption rate of 15% in 2030, taking into account market trends and the achievement of the Group's Scope 1, 2, and 3 reduction targets.