The HTS Group Environmental Management

Environmental Policy

The HTS Group is promoting "business activities with less environmental load" based on the following four policies. As for measures against global warming, we are working to enhance green logistics including collaborative logistics and modal shift together with our partner companies.

1. Reduce Environmental Load Generated at All Our Places of Business
Reduce consumption of electricity, gasoline and LP gas and recycle waste, etc.

2. Provide Logistics/Services with Less Environmental Load
Contribute to customers through CO_2 emission reduction and resource recycling.

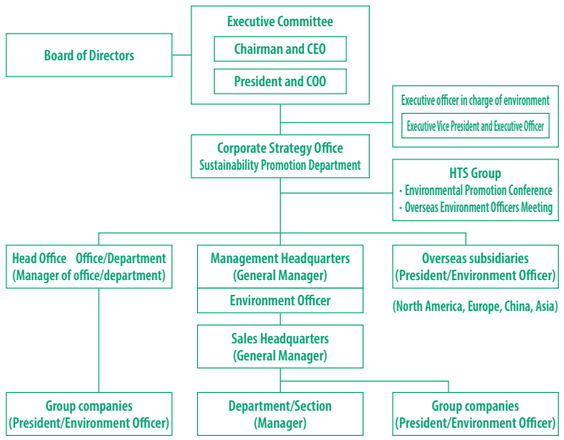
3. Improve Eco-Mind Level and Enhance Eco-Management System
Increase global environmental awareness. Observe environmental laws/ordinances and company regulations.

4. Promote Symbiosis with Nature and Environmental Communications
Preserve biodiversity and ecosystem. Maintain environmental collaboration with customers and local communities.

Environmental Management Structure

Since the establishment of a department dedicated to environmental issues in the head office in August 1992, we have worked on reducing environmental load and are currently promoting group-wide activities toward the global "environment-conscious business operations."
Under the supervision of the Board of Directors and the Executive Committee, Sustainability Promotion Department, Corporate Strategy Office chaired by Executive Vice President and Executive Officer in charge of environmental issues, is responsible for overall environmental management work and oversees the entire group.

Environmental Management Structure



Strengthen Environmental Management

We utilize management systems to understand and monitor actual data. In overseas, we conduct research on important environmental laws and regulations for the purpose of managing environmental load and legal compliance.

Holding Environmental Promotion Conference

We share environmental information in Japan and overseas to improve environmental awareness and the management level.

Number of environment conferences held (FY2021)

Domestic: Environmental Promotion Conference 2 times
Overseas: Environment Officers Meeting 2 times

Performance of internal environmental audit

We perform internal audit to prevent or promptly correct violations of the environmental compliance and improve the management level.

Number of sites subjected to internal environmental audits (Japan: FY2021) 107

Ensuring compliance in overseas offices

We identify important environmental laws and regulations related to "Transport and Warehouse Business" in overseas sites and conduct research on their outline in 29 countries and regions from FY2017 to ensure proper operations management in each site. In FY2021, we completed research on Germany and France, bringing the total number of researched countries and regions to 20.

Third-party certification initiatives

The Group seeks third-party certification and Sustainability Promotion Department has acquired the "Eco Stage" certification. From FY2017, we have upgraded the certification level to "Eco Stage II" which is equivalent to ISO14001.

Efforts to Raise Environmental Awareness

We are working to raise the environmental awareness of employees by promoting environmental activities linked to VC activities. In FY2021, we started new programs including holding "Green Action Workshop" on the theme of environmental protection and "Environment Prize in VC Award" to recognize initiatives contributing to reducing environmental load.


Green Action Workshop

The HTS Group Medium-to-Long-term Environmental Targets 2030/2050

The HTS Group developed the medium-to-long-term environmental targets 2030/2050 in FY2020 to contribute to the realization of sustainable society, and are striving to reduce CO_2 emissions. Amid the accelerating movements to realize a decarbonized society around the world, the Group updated the medium-to-long term environmental targets 2030/2050 developed in FY2020 with more aggressive targets in FY2021.

Medium-to-Long-term Environmental Targets

Reduction of CO_2 emissions (Scope 1 and 2 in Japan*1)

FY2030 target (base year: FY2013)
Aim to reduce CO_2 emissions by **50%** compared to the base year

FY2050 target
Strive to achieve **Net Zero** Carbon*2

● Scope of emission: CO_2 emitted from energy consumption by the Group through its business operation
● Type of energy: Electricity, fuel for vehicle, etc.

*1 Definition of scope
Scope 1: Direct emissions from in-house energy (fuel, etc.) use (e.g. CO_2 released by company vehicles)
Scope 2: Indirect emissions from the use of energy supplied by other companies (e.g. CO_2 released by a third party power plant due to electricity use in the company's facility)
Scope 3: Indirect emissions by supply chain other than Scope 1 and 2 (total of 15 categories including transportation outsourcing and business trip of employees)
*2 Net Zero Carbon: To balance emissions of CO_2, one of greenhouse gases, and its absorption/removal.

Decarbonization Promotion Project – Initiatives to Reduce CO_2 Emissions

The HTS Group has launched a decarbonization promotion project to achieve the medium-to-long-term environmental targets and is working proactively on initiatives in five areas.

Five areas

1. Energy saving
Introduction of high-efficiency equipment, etc.

2. Electrification
Introduction of electric vehicles, fuel cell vehicles, etc.

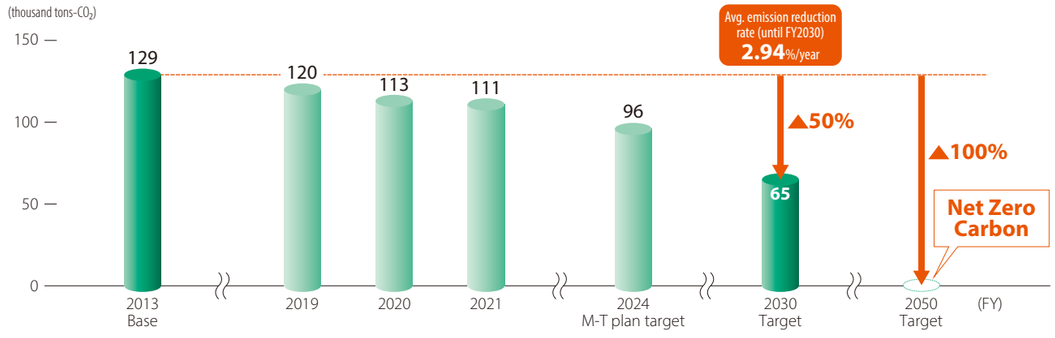
3. Procure renewable energy
Purchase of green power, etc.

4. Energy creation
Introduction of solar panels, etc.

5. Emissions trading
Purchase of environmental value certification

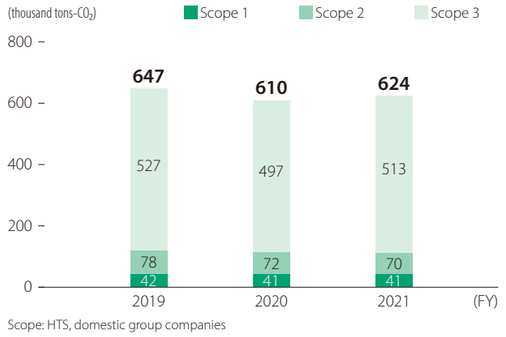
Trend of HTS Group CO_2 Emissions*

*Total of Scope 1 and 2 Scope: HTS, domestic group companies



CO_2 emissions throughout the supply chain

We started to calculate "Scope 3" from FY2017 to identify and reduce CO_2 emissions from the entire supply chain.



Scope: HTS, domestic group companies

Third-party certification on CO_2 emissions data

For greenhouse gas (GHG) emissions in FY2020, the HTS Group acquired a third-party certification based on ISO14064-3:2019 through an assessment by a certification body LRQA in FY2021. We will continue to secure the reliability of our calculated data by obtaining a third-party certification and also work to expand the scope to "Scope 3."

*Scope: CO_2 emissions in scope 1 and scope 2 (domestic)

For details about environmental information, please visit our website.
https://www.hitachi-transportsystem.com/en/profile/csr/environment/

Please visit our website for details about CO_2 emissions data in Scope 3.
https://www.hitachi-transportsystem.com/en/profile/csr/environment/plan.html

Climate Change Initiatives — Response to the Task Force on Climate-related Financial Disclosures (TCFD) —

Basic Policy on Climate Change

As the HTS Group's corporate philosophy is "to deliver high-quality services that will help make the world a better place for people and nature for generations to come," we position climate change response as one of our highest priority management themes and identifies "Contribute to decarbonized society" as one of the material issues. We also defined "Contribute to decarbonized/recycling-oriented society" as one of the business objectives to promote initiatives to address climate-related risks and opportunities and reduce CO_2 emissions. In addition, we announced our endorsement of the TCFD recommendations in September 2021 and are now promoting climate change initiatives and information disclosure based on the recommendations.

Governance

The Board of Directors provides guidance and supervises climate change initiatives included in the highest priority items of the Group's management such as management strategies and business plans (e.g. target setting and determination of specific climate change responses such as energy-saving investments and budget allocation for greenhouse gas (CO_2) emission reduction) through Chairman and CEO who is responsible for climate change initiatives.

The executive officer in charge reports to the Board of Directors the progress of the climate change initiatives annually or as needed.

Sustainability Promotion Department, Corporate Strategy Office in the head office oversees overall environmental management work under the supervision of Executive Vice President and Executive Officer, Chief Strategy Officer (CSO) who is responsible for sustainability strategy. The Environmental Promotion Conference comprised of the Group's environment officers including CSO is held semiannually to confirm the achievement level of climate change responses including reduction of energy consumption and CO_2 emissions, as well as determine necessary corrective measures and discuss measures to be taken in the future. Based on the decisions at the Environmental Promotion Conference with the CSO's approval, the progress of climate change initiatives and the proposed strategy in the future are reported to the Executive Committee semiannually or as needed.

Meeting bodies/ Departments	Roles
Board of Directors	• Provides guidance and supervises initiatives to address management issues related to climate change • Approves reduction targets/ measures/budgets
Executive Officer	• Understands the progress of initiatives to address management issues related to climate change, and reports to the Board of Directors
Sustainability Promotion Department	• Oversees overall environmental management work, holds Environmental Promotion Conference, and reports/proposes to the Executive Committee based on decisions at the Committee
Environmental Promotion Conference	• Confirms the achievement level of measures related to climate change, determines corrective measures, and discusses proposed measures

Governance system ➡ **P77** (environmental management structure)

Risk management

In consideration of all management risks identified, Sustainability Promotion Department, Corporate Strategy Office in the head office has selected risks and opportunities related to "Contribute to decarbonized society," one of the material issues, and has identified items having large financial impacts as material risks and opportunities. Sustainability Promotion Department is responsible for developing and executing plans to address them with approval of the Executive Committee and supervision by the Board of Directors.

Metrics and targets

Reduction targets of medium-to-long-term greenhouse gas (CO_2) emissions

The Group sets the medium-to-long-term targets for reduction of CO_2 emissions to address climate change risks and opportunities.

➡ **P78**

Greenhouse gas (CO_2) emissions

➡ **P78** (Trend of HTS Group CO_2 emissions)/ **P91** (ESG Data)

Strategy

The Group uses a scenario analysis to identify and assess climate-related risks and opportunities that are expected to affect our medium-to-long-term business activities and also assess resilience and examine response measures.

(1) Scenario analysis process

The Group has performed scenario analyses according to the following procedures (➡ **P80** upper) . Under the scenario that assumes the goal of the Paris Agreement is achieved (1.5℃ /2℃ scenario) and the one that assumes that no new policies are implemented but each country's announced policies are achieved (4℃ scenario), we have assessed financial impacts of identified climate-related risks and opportunities based on the information such as the trend of key parameters.

Step1	Step2	Step3	Step4
Identified material climate-related risks and opportunities	Draw up climate change scenarios (1.5℃/2℃ scenario, 4℃ scenario)*	Assessed the financial impacts under each scenario	Assessed strategic resilience for climate-related risks and opportunities and examined additional response measures

(2) Assessment of climate-related risks and opportunities and financial impacts

We performed scenario analysis for nine items identified as our material climate-related risks and opportunities and assessed potential quantitative/qualitative financial impacts. We also examined resilience of our current response measures and future measures. As the Group is examining and implementing response measures to reduce risks and seize opportunities that may have significant financial impacts, we have confirmed that they are sufficiently resilient at present.

❶ Transition risks (1.5°C scenario / Less than 2°C scenario)

Types	Period	Potential risks	Potential impacts on business and response measures
Policy and legal	Long-term	• Risk of increasing tax burden (e.g. carbon tax, fuel tax) in relation to climate change and risk of rising cost due to tightening or introduction of regulations on CO_2 emissions	Impact: Cost increase due to carbon pricing Measures: Develop and implement systematic environment strategies toward decarbonization (1. Introduce renewable energy, 2. Introduce non-fossil fuel vehicles (e.g. EV/FCV), 3. Procure green power, and 4. Introduce Internal Carbon Pricing (ICP))
Technology	Mid-term	• Risk of increasing CO_2 emission reduction cost and losing customers due to delay/failure in introducing environmental technology	Impact: Medium-to-long-term cost increase or earnings decrease due to delay in introducing renewable energy and low carbon vehicles Measures: Introduce advanced technologies toward decarbonization (1. Introduce renewable energy, 2. Introduce non-fossil fuel vehicles, and 3. Promote DX and IoT in warehouse operations)
Market	Mid-term	• Risk of losing customers due to inadequate response to customers who emphasize low-carbon or carbon-neutral transportation	Impact: Earnings decrease due to increase of customers who emphasize climate change initiatives (e.g. customers whose targets were certified by the Science Based Targets (SBT) initiative) Measures: Promote decarbonization measures in logistics services and strengthen information disclosure to stakeholders
Reputation	Mid-term	• Risk of losing corporate reputation due to insufficient climate change initiatives and information disclosure	

❷ Physical risks (4°C scenario)

Types	Period	Potential risks	Potential impacts on business and response measures
Acute	Short-term	• Risk of logistics operation being suspended due to intensifying wind and flood damage caused by extreme weather	Impact: Cost increase due to repairment or recovery of facilities damaged by wind and flood Measures: Strengthen BCP measures against hazard risks including wind and flood damage (1. Decentralize business sites, 2. Install solar power generation system/storage batteries, etc. and 3. Relocate sites to low-risk regions)
Chronic	Mid-term	• Risk that deterioration of working environment due to a rise in average temperature makes it difficult to secure human resources	Impact: Cost increase due to creation of a pleasant workplace Measures: Promote worker-friendly logistics operation (1. Promote automated/ labor-saving/unmanned operations and 2. Provide a pleasant working environment)

❸ Opportunities

Types	Period	Opportunities	Potential impacts on business and response measures
Resource efficiency	Mid-term	• Opportunity to reduce energy consumption by vehicles and CO_2 emissions with advanced environmental technology • Opportunity to introduce efficient logistics operations using Smart Logistics and shared logistics services	Impact: Decrease in energy cost due to efficiency improvement in logistics services Measures: Reduce energy cost by promoting decarbonization measures (1. Promote energy-saving measures, 2. Introduce renewable energy, 3. Introduce non-fossil fuel vehicles, and 4. Promote modal shift)
Products and services	Long-term	• Opportunity associated with diversification of business activities	Impact: Revenues increase due to diversification of business activities Measures: Provide logistics services using the Company's unique Smart Logistics (1. Smart Warehouse, 2. SCDOS, and 3. SSCV)
Resilience	Long-term	• Opportunity associated with energy diversification	Impact: Cost decrease due to introduction of solar power generation system Measures: Reduce electricity procurement cost by introducing renewable energy and secure electric power source in case of emergency

* Reference scenario: 1.5℃ scenario: IEA Net Zero Emissions by 2050 Scenario
2℃ scenario: IEA Sustainable Development Scenario/IPCC RCP2.6
4℃ scenario: IEA Stated Policies Scenario/IPCC RCP8.5

(3) Transition plan to achieve 1.5°C target

The Group has incorporated the five initiatives toward the realization of the medium-to-long-term environmental targets (energy saving, electrification, procurement of renewable energy, energy creation, and emissions trading) in the Mid-term Management Plan "LOGISTEED2024" and will promote CO_2 emission reduction measures to limit the temperature increase to 1.5℃ above pre-industrial levels.

Consideration for Disposal and Emission

Manufactured Capital | Natural Capital

To contribute to a recycling-oriented society, we are working to reduce or avoid resource consumption in supply chains and prevent environmental pollution.

KPI
- Ownership ratio of vehicles in compliance with environmental standards
- Recycling rate and others

For KPI results, etc. in FY2021, please visit our website.
https://www.hitachi-transportsystem.com/en/profile/csr/pdf/sustainability_2021htskpis.pdf

Energy Saving and Global Warming Countermeasures of Vehicles

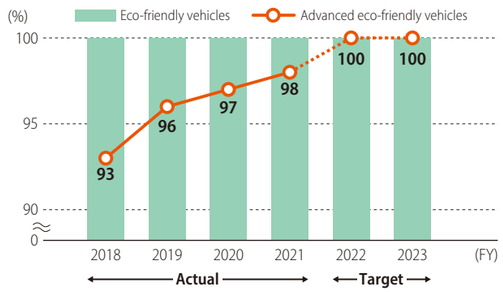
The HTS Group strives to reduce CO_2 emissions generated by vehicle fuel through such initiatives as the introduction of the advanced eco-friendly vehicles and improvement of transportation including promotion of eco-friendly driving.

Making the shift to eco-friendly vehicles and encouraging eco-friendly driving

We are promoting the shift to eco-friendly vehicles (highly fuel-efficient, low-pollution vehicles). We achieved the eco-friendly vehicle ownership ratio of 100% at the end of FY2016, except for certain special vehicles. In FY2021, we introduced an electric truck in a sales office of our group company Hitachi Transport System Metropolitan Co., Ltd. in Noda City, Chiba Prefecture.

We will further promote the shift to the advanced eco-friendly vehicles in order to reduce air pollutant emissions and will also promote eco-friendly driving, etc. to reduce environmental load.

HTS Group eco-friendly vehicle ownership ratio (domestic)
(As of March 31, 2022)



*1: Totals shown are business and personal vehicles combined (excludes special vehicles).
*2: Eco-friendly vehicles are as follows: hybrid, natural gas, and electric, as well as highly fuel-efficient vehicles certified by the government (vehicles meeting a specified standard), and low emissions vehicles.

Vehicle fuel efficiency (domestic)

Increase of vehicle fuel efficiency by vehicle type (driving distance/fuel consumption)
[FY2021 target and result for CO_2 emission reduction]

Target: compared to FY2020 **+1.76%**

Result: compared to FY2020 **+0.4%**

Effective Use of Resources

Design/development of eco-friendly packaging

We are working to improve packaging technology and to reduce environmental load including reduction of packaging-related materials and wastes while meeting customers' needs. In FY2021, we received "METI Minister's Award" and "Technical Packaging Award" at the "Japan Packaging Contest 2021" hosted by Japan Packaging Institute. "METI Minister's Award" is awarded to the best product at the contest, and our packaging was recognized as the best product from a comprehensive perspective, satisfying many requirements for packaging, including protectiveness and functionality, while giving consideration to economic efficiency and eco-friendliness.

Award-winning case/Award titles	Main effect
Development of packaging materials for domestic transport of large equipment/ METI Minister's Award (Japan Star Award)	· Loading ratio: up 70% · CO_2 emissions: down 43% · Reduction of cushioning material waste and others
Redesigned under-tray of washing machine/ Technical Packaging Award	· Cardboard waste: down 25% and others

Co-awarded "METI Minister's Award" and "Technical Packaging Award" at the Japan Packaging Contest 2021
https://www.hitachi-transportsystem.com/jp/news/20210907.html (Japanese version only)

Visualize CO_2 Emissions and Reduction

Support decarbonization in customers' business with SCDOS

As part of SCDOS, our DX service to support optimization of customers' supply chain, we started to offer "CO_2 emission visualization function" from FY2021. This service enables to accurately understand and visualize CO_2 emissions and reduction in the supply chain by centrally managing and monitoring customers' various data, contributing to customers reducing CO_2 emissions and to the realization of a recycling-oriented society and decarbonization.

For more information about SCDOS, please visit our website.
https://www.hitachi-transportsystem.com/en/logisteed-cafe/service.html#scdos

Increase Energy Efficiency

Manufactured Capital | Natural Capital

To address climate change and realize a decarbonized society, we will steadily advance initiatives to improve energy efficiency and reduce CO_2 emissions.

KPI
- Reduction of electricity consumption per floor space in "buildings"
- Development of new customers/routes for modal shift and others

For KPI results, etc. in FY2021, please visit our website.
https://www.hitachi-transportsystem.com/en/profile/csr/pdf/sustainability_2021htskpis.pdf

Energy Saving and Global Warming Countermeasures Implemented in Buildings

Energy saving of forklifts

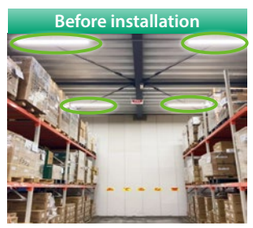
The HTS Group introduced 14 lithium-ion forklifts in FY2021. Forklifts are indispensable in logistics operation in warehouses, etc. and generally powered by lead battery, but we are trying to reduce energy consumption by shifting to lithium-ion batteries with long cycle life and high charging efficiency. We will continue to work on energy saving of forklifts by expanding the use of lithium-ion batteries.

Installment of solar panels on the roof of logistics centers

VANTEC KYUSHU LOGISTICS CORPORATION, our group company, has installed solar panels on the roof of its logistics center in Fukuoka Prefecture. The center expects that the introduction of solar power generation will reduce CO_2 emissions by 56 tons per year.

Power saving by using human detection sensor

Chukyo Logistics Center in Aichi Prefecture is working on power saving by using human detection sensor. To reduce power consumption by lights in the storage room when it is unmanned, we installed supplemental lights with a human detection sensor between storage shelves which light when the sensor detects the presence of workers picking up or storing products, achieving both workers' safety and power saving.



Green○: fluorescent light

Red○: human detection sensor (supplemental light)
Green○: fluorescent light

Introduction of LED lighting fixtures

The HTS Group is proactively installing LED lighting fixtures in new logistics centers and offices. We are also replacing existing fluorescent/mercury lights with LED lighting fixtures in the existing facilities and will continue until the replacement is completed in all facilities.

	FY2021
Number of sites with LED lighting fixtures	New sites: 3 Existing sites: 12
CO_2 emissions suppressed with LED lighting fixtures	799 t-CO_2

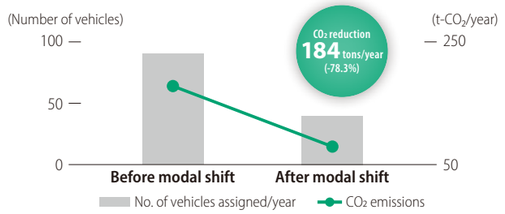
Scope: HTS, domestic/overseas group companies

Promotion of Modal Shift

To reduce CO_2 emissions and solve issues such as driver/vehicle shortages, we have been proactively promoting a modal shift from trucks to rail and ocean transport in Japan and overseas with an aim to "develop new customers/routes."

In FY2021, we proposed and promoted a modal shift to the use of coastal vessels for the transport of products of a hygiene products manufacturer from its factory in Kyushu to logistics sites in Kanto, which enabled us to deal with driver/vehicle shortages and reduce CO_2 emissions by approximately 80% over a year compared to truck transport. As a recognition for such efforts, we received the "Award of Modal Shift Initiative Excellent Business Operator (effective usage category) in 2021" hosted by Japan Association for Logistics and Transport.

CO_2 reduction effect of modal shift
Award-winning case (effective use category)



Received the "Award of Modal Shift Initiative Excellent Business Operator (effective usage category) in 2021"
https://www.hitachi-transportsystem.com/en/news/20211126.html