Development of the HTS Group Medium-to-Long-term Environmental Targets 2030/2050

The HTS Group is fully aware of the importance of achieving the SDGs, the universal goals for the international community toward 2030. We developed the medium-to-long-term environmental targets 2030/2050 for the Group in reference to the global CO_2 reduction targets set by the Paris Agreement and the TCFD Guidance, etc. issued by the Japanese government with the aim of contributing to the realization of sustainable society required of global companies.

Medium-to-Long-term Environmental Targets

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

FY2030 target (base year: FY2013)
Aim to **reduce** CO_2 emission **by 30%** compared to the base year

FY2050 stretch target (base year: FY2013)
Try to **reduce** CO_2 emission **by 80%** compared to the base year

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

* 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)

Approach toward the Achievement of the Medium-to-Long-term Environmental Targets

The HTS Group will carry out the following initiatives for the Medium-to-Long-term Environmental Targets.

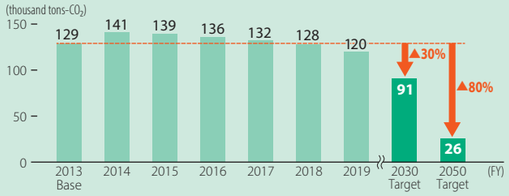
Reduce vehicle fuel and promote efficient transportation
1) Improve vehicle fuel efficiency
2) Promote modal shift
 [1] Shift to rail transportation
 [2] Shift to sea transportation
3) Promote container round use
4) Improve transportation efficiency
5) Improve vehicle operation efficiency through active use of SSCV

Reduce the electricity and fuel consumption in buildings
1) Improve the operation of facilities and equipment which uses power
2) Increase energy efficiency
3) Increase the forklift utilization rate through operational improvement
4) Reduce heating fuel
5) Expand renewable energy
 (Including review of power procurement method)
6) Introduce energy management system

Common matters
1) Strengthen environmental management
2) Sharing (joint use of facilities/equipment)
3) Promote low-carbon logistics system
4) Participate in emissions trading
5) Introduce/use carbon pricing
6) Open innovation toward decarbonization
7) Next-generation logistics by use of AI and IoT

HTS Group CO_2 emissions

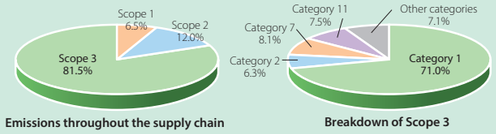
Trend of HTS Group CO_2 emissions



*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.



Emissions throughout the supply chain　　Breakdown of Scope 3

For details of the categories, please visit our website.
https://www.hitachi-transportsystem.com/en/profile/csr/environment/plan.html

Risks and Opportunities Associated with Climate Change

HTS listed disclosure items required by TCFD and items related to risks and opportunities associated with external climate change, and assessed their impacts on our business. Based on such assessment, we identified risks and opportunities associated with climate change currently faced and to be faced in the future by the Group.

		Expected risks/opportunities
Transition risks	Policy and legal risks	• 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 GHG* emissions
	Technology risk	• Risk of increasing GHG emission reduction cost and losing customers due to delay/failure in introducing environmental technology
	Market risk	• Risk of losing customers due to inadequate response to customers who prefer low-carbon or carbon-neutral transportation
	Reputation risk	• Risk of losing corporate reputation due to insufficient efforts against climate change and for information disclosure
Physical risks	Acute risk	• Risk of logistics operation being suspended due to intensifying wind and flood damage caused by extreme weather
	Chronic risk	• Risk that deterioration of working environment due to a rise in average temperature makes it difficult to secure human resources
Opportunities	Resource efficiency	• Opportunity to reduce energy consumption by vehicles and GHG emission with advanced environmental technology • Opportunity to introduce efficient logistics operations using Smart Logistics and shared logistics services
	Products and services	• Opportunity associated with diversification of business activities
	Resilience	• Opportunity associated with energy diversification

*GHG: Greenhouse gas

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

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.

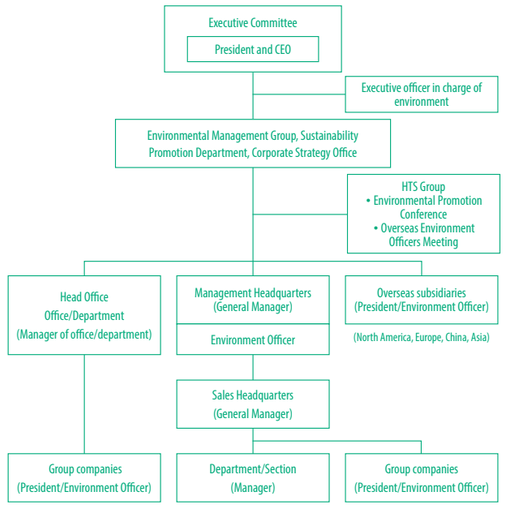
■ Material Issues in the environmental field

Material issues identified in the environmental field are as follows.

(1) Carbon (low carbon)
(2) Stopping pollution
(3) Renewable energy

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."



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.
In FY2019, we started reviewing the management systems with the aim of improving the management level, continuing to raise employees' awareness and reducing environmental load.

■ 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 (FY2019)

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: FY2019) **84**

■ 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 to ensure proper operation management in each site.
In FY2019, we conducted research on four countries and regions (the U.S., the Netherlands, South Korea, and Taiwan).

■ 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.In FY2019, Hitachi Transport System Central Japan, Co., Ltd., our group company, independently acquired "Eco Stage II" Certification, and the entire Group has worked to improve the environmental management level.
In addition, as of April 2020, we have earned "Green Management Certification" at 26 of our truck transport sites and eight of our warehouses. Building on these management systems, we are committed to ongoing reduction of environmental load.

Eco Stage II Certification

Green Management Certification

Consideration for Disposal and Emission

Manufactured Capital | Natural Capital | Objective 3 | Objective 4

KPI

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

and others

Financial Impacts (Example)

- Reduction in future environmental tax due to reduction in environmental load
- Rise in cost due to an introduction of advanced eco-friendly vehicles

We are working to reduce CO_2 emissions and wastes generated by supply chain, with an aim to offer the eco-friendly next-generation logistics solutions expected by society.

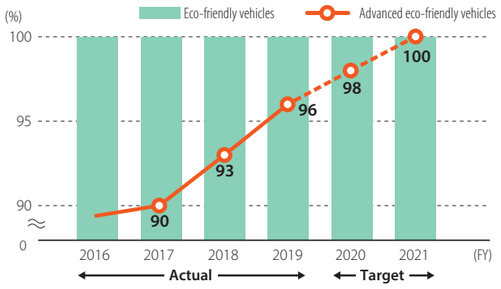
Energy Saving and Global Warming Countermeasures of Vehicles

The HTS Group strives to reduce CO_2 emission 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. We will further promote the shift to the advanced eco-friendly vehicles with better environmental performance 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, 2020)



*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)

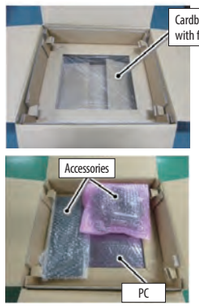
Increase of vehicle fuel efficiency by vehicle type (driving distance/fuel consumption) [Target for CO_2 emission reduction]

Target: compared to FY2018 +1%
Result: compared to FY2018 +0.4%

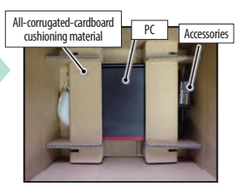
Design/Development of Eco-friendly Packaging

We are working to improve packaging technology and contribute to reducing environmental load including reduction of packaging-related materials and wastes while meeting customers' diverse needs.
For example, our site engaging in PC kitting service previously used cardboard cushioning materials with follow-up films for PCs in different sizes and cushioning film for their accessories, but achieved plastic-free all-corrugated cardboard packaging by improving the shape of dividers and holding method. These efforts were recognized, and we received "Electric Equipment Packaging Award" at the Japan Packaging Contest 2019.

Before improvements



After improvements



Received both "Logistics Award" and "Electric Equipment Packaging Award" at the Japan Packaging Contest 2019
(Japanese version only)
https://www.hitachi-transportsystem.com/jp/news/20190902-1.html

Introduction of double-trailer trucks

VANTEC CENTRAL LOGISTICS CORPORATION, our group company, introduced two sets of 21-meter long double-trailer trucks and started operation under the "Project to promote CO_2 emissions reduction measures in the transport sector" which is a joint project by the Ministry of the Environment and the Ministry of Land, Infrastructure, Transport and Tourism. The company has continued this project since FY2019 and will verify safety and driving management through actual operation to further improve logistics efficiency.

Increase Energy Efficiency

Manufactured Capital | Natural Capital | Objective 4

KPI

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

and others

Financial Impacts (Example)

- Improvement in profitability due to a reduction in energy consumption
- Rise in cost due to an introduction of high efficiency facilities and equipment

We will steadily carry out initiatives to improve energy/resource efficiency and also work on decarbonization from a long-term perspective to realize low-carbon business processes.

Energy Saving and Global Warming Countermeasures Implemented in Buildings

The HTS Group is proactively introducing 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.

	FY2019
Number of sites with LED lighting fixtures	New sites: 3 Existing sites: 5
CO_2 emissions suppressed with LED lighting fixtures	141.2 t-CO_2

Scope: HTS, domestic/overseas group companies

TOPICS

Smartphone Application Helps to "Fill in the Empty Space" of Trucks

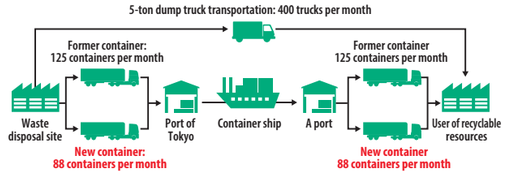
Mobile TMS*1 of VANTEC CORPORATION, our group company, received "Logistics Environmental Impact Mitigation Technology Development Award" in the "21st Logistics Environment Awards." Previously, information such as truck operation plans and load volume records cannot be easily shared or confirmed as they were managed manually, which brought about a situation where "empty space was being transported," having caused transport inefficiency. In order to solve it, VANTEC developed a smartphone application enabling to share real-time information such as driver work management and loading status at arrival/departure points using edge AI*2. VANTEC was able to increase the loading ratio by consolidating goods and reducing empty space on the loading platform based on the real-time information on the operating status and load capacity of trucks, and accordingly we achieved transportation which "fills in the empty space" with the loading ratio in a specific site increasing approximately 7% year on year. As a result, VANTEC was able to reduce CO_2 emissions by approximately 48 tons from a year earlier.
In addition, as this application automatically registers arrival/departure time of trucks, the length of standby time at each site is visualized. VANTEC used this data to optimize the truck operation plans with cargo owners, and reduced standby time.

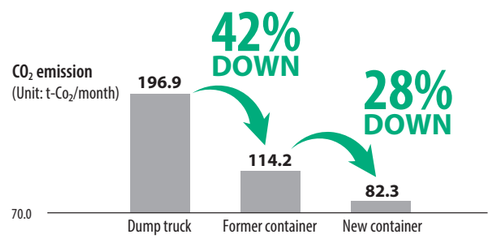
*1 TMS: Transport Management System
*2 Edge AI: Non-cloud based AI installed on the edge close to sites, such as automobiles, industrial robots, and smartphones, for real-time forecasting and analysis.

Please see the news release.
(Japanese version only)
https://www.vantec-gl.com/japanese/news/pdf/2020061001_JP.pdf

Promotion of Modal Shift

We contribute to the reduction of CO_2 emission by further promoting modal-shift to the sea transport in transporting recyclable materials such as waste plastics segregated from wastes.
We had been implementing a modal shift to transportation with trucks and ships using special containers for recyclable materials. In FY2019, we introduced self-developed new containers and achieved further efficiency improvement and CO_2 reduction. This initiative was recognized, and we received "Logistics Environment Special Award" in the "21st Logistics Environment Awards."





Please see the news release.
(Japanese version only)
https://www.hitachi-transportsystem.com/jp/news/20200706.html