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 CO₂ 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 of the entire world.

Medium-to-Long-Term Environmental Targets

Reduction of CO₂ emission (Scope 1 and 2 in Japan*)

<table>
<thead>
<tr>
<th>FY2030 target (base year: FY2013)</th>
<th>FY2050 stretch target (base year: FY2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aim to reduce CO₂ emission by 30% compared to the base year</td>
<td>Try to reduce CO₂ emission by 80% compared to the base year</td>
</tr>
</tbody>
</table>

*Definition of scope
Scope 1: Direct emissions in own-energy (fuel, etc.) use (e.g. CO₂ released by company vehicles)
Scope 2: Indirect emissions from the use of energy supplied by other companies (e.g. CO₂ released by a third party power plant due to electricity use in the company’s facility)
Scope 3: Indirect emissions by supplying 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
- Reduce the electricity and fuel consumption in buildings
  1) Improve the operation of facilities/equipment to reduce power use
  2) Increase energy efficiency
  3) Reduce the building in operations
  4) Reduce heating fuel
  5) Expand renewable energy
- Reduce CO₂ emissions from the entire supply chain
  1) Promote symbiosis with nature and environmental management
  2) Prevent the generation of waste during manufacturing
  3) Reduce environmental load generated at all our places of business
  4) Manage waste with consideration of energy conservation
  5) Improve whole fleet efficiency through active use of ICT

CO₂ emissions throughout the supply chain

We started to calculate “Scope 3” from FY2017 to identify and reduce CO₂ emissions from the entire supply chain.

Environmental Management Structure

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, gas, oil and other raw materials
2. Provide logistics/services with less environmental load
   - Contribute to systems through CO₂ 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
   - Promote a “green” theme and respect laws to 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 System

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”.

Risks and Opportunities Associated with Climate Change

HTS disclosed items required by TCFD and items related to risks and opportunities associated with external climate change, 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

<table>
<thead>
<tr>
<th>Risks</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate-related risks</td>
<td>Resource efficiency</td>
</tr>
<tr>
<td>Technological risks</td>
<td>Opportunity to reduce environmental load by using smaller and lighter vehicles and engines</td>
</tr>
<tr>
<td>Market risks</td>
<td>Opportunity to introduce efficient logistics operations using Smart Logistics and shared logistics services</td>
</tr>
<tr>
<td>Physical risks</td>
<td>Opportunity associated with diversified business activities</td>
</tr>
<tr>
<td>Environmental risks</td>
<td>Opportunity associated with diversified business activities</td>
</tr>
</tbody>
</table>

For details about environmental information, please visit our website.


Environmental Policy

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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 environmental conferences held (FY2019)

- Domestic: Environmental Promotion Conference twice
- Overseas: Environmental Officers Meeting twice

- 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 sites

- 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 management operation in each site.

- 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.

For details about environmental information, please visit our website.

We are working to reduce CO₂ 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 CO₂ 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 FY2019, 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)

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>2017</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>2018</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>2019</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>2020</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

(1) Totals shown are business and personal vehicles combined (excludes special vehicles).

Vehicle fuel efficiency (domestic)
Increase of vehicle fuel efficiency by vehicle type (driving distance/fuel consumption) (Target for CO₂ emission reduction)

<table>
<thead>
<tr>
<th>Year</th>
<th>Target compared to FY2018</th>
<th>Result compared to FY2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>+1%</td>
<td>+0.4%</td>
</tr>
</tbody>
</table>

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

Before introducing materials with follow-up films.

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 CO₂ 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.

<table>
<thead>
<tr>
<th>Former container</th>
<th>125 containers per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>New container</td>
<td>88 containers per month</td>
</tr>
</tbody>
</table>

| Former 5-ton dump truck transportation | 400 trucks per month |
| New container                      | 156 trucks per month |

Cost of CO₂ emission reduction by the introduction of double-trailer trucks

| Former container | 4% down |
| New container    | 11% down |


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.*2

Previously, information such as truck operation plans and load volume records cannot be easily shared or confirmed as they were managed manually, which 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.*3 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 CO₂ emissions by approximately 48% 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.


Promotion of Modal Shift
We contribute to the reduction of CO₂ emission by further promoting modal-shifting 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 CO₂ reduction. This initiative was recognized, and we received “Logistics Environment Special Award” in the 21st Logistics Environment Awards.”

Increase Energy Efficiency
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.

Financial Impacts (Example)
- Reduction of electricity consumption per floor space in “buildings”
- Development of new customers/routes for modal shift
- Rise in cost due to an introduction of advanced eco-friendly vehicles

Energy Saving and Global Warming Countermeasures Implemented in Buildings
The HTS Group is progressively introducing LED lighting fixtures in logistics centers and offices. We are also replacing existing fluorescent/moonlight lights with LED lighting fixtures in the existing facilities and will continue until the replacement is completed in all facilities.

Number of sites with LED lighting fixtures

<table>
<thead>
<tr>
<th>FY2019</th>
<th>LED lighting fixtures</th>
</tr>
</thead>
<tbody>
<tr>
<td>New sites: 3</td>
<td>New sites: 3</td>
</tr>
<tr>
<td>Existing sites: 5</td>
<td>Existing sites: 5</td>
</tr>
</tbody>
</table>

CO₂ emissions suppressed with LED lighting fixtures

141.2 t-CO₂

Source: HTS, domestic/overseas group companies

1. TMMS: Transportation Management System
2. Edge AI: An artificial intelligence deployed to the edge close to sites, such as automobiles, industrial robots, and smartphones, for real-time forecasting and analysis.

Packaging Award” at the Japan Packaging Contest 2019

Eco-friendly vehicles Advanced eco-friendly vehicles

<table>
<thead>
<tr>
<th>Year</th>
<th>Eco-friendly vehicles</th>
<th>Advanced eco-friendly vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>82.3%</td>
<td>59.4%</td>
</tr>
<tr>
<td>2017</td>
<td>82.3%</td>
<td>59.4%</td>
</tr>
<tr>
<td>2018</td>
<td>90.0%</td>
<td>66.7%</td>
</tr>
<tr>
<td>2019</td>
<td>93.6%</td>
<td>69.6%</td>
</tr>
<tr>
<td>2020</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Development of new customers/routes for modal shift

<table>
<thead>
<tr>
<th>New sites: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>New container</td>
</tr>
</tbody>
</table>

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