Environmental Strategy

We are promoting environmentally-conscious management, based on our Environmental Vision, to achieve both sustainable business growth and the development of a sustainable society. To realize our long-term target of achieving virtually zero GHG emissions (in-house emissions) by 2050 and medium-term target of a 48% reduction in GHG emissions by 2030 (compared with the fiscal year ended March 31, 2021), we will promote measures to reduce such emissions, such as the introduction of EVs and solar power generation equipment in conjunction with facility strategies in the structural reform of network operations based on climate change-related risks and opportunities. At the same time, we will expand the corporate business domain by supporting the creation of supply chains with a low environmental burden and visualizing GHG emissions in relation to customer needs, such as reducing GHG emissions related to logistics.

Overview

ACTIVITY

Basic initiative

Reduction of GHG Emissions by Promoting Green Innovation

- Introduction of EVs, solar power generation equipment, and LEDs, and promotion of measures including the reduced use of dry ice, linked to facilities strategy for structural reform of network operations, together with utilization of electricity generated from renewable energy sources, thereby steadily reducing GHG emissions

<Fiscal Year Ended March 31, 2022, to Fiscal Year Ending March 31, 2031>

- 20,000 EVs
- 810 units of solar power generation equipment
- Zero use of dry ice

Value Creation

Visualization of Customer GHG Emissions

- Development of emissions visualization tools based on ISO 14083:2023, an international standard for calculating GHG emissions in the logistics domain

Enhancement of Value Provided to Customers
(Support for Creation of Supply Chains with Low Environmental Burden)

- Contribute to reducing GHG emissions by optimizing logistics and inventory through transformation of each customer's entire supply chain

OUTPUT/OUTCOME

Environmental Vision

"Connect. Deliver the future via green logistics"

Long-Term Environmental Targets

Achieve virtually zero*1 GHG emissions by 2050

*1 In-house emissions of consolidated companies in Japan and Swan Co., Ltd. (Scope 1 and Scope 2)

GHG emissions

- Medium-term target (2031/3): –48%*2
- Short-term target (2024/3): –10%*2

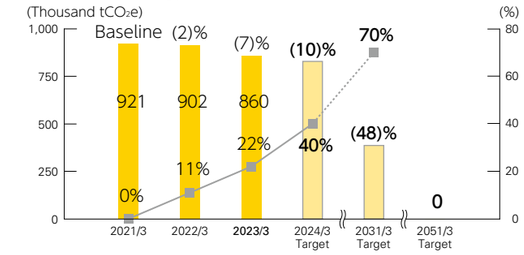
*2 Compared to fiscal year ending March 31, 2021

Percentage of Electricity Generated via Renewable Energy Sources

- Medium-term target (2031/3): 70% of total
- Short-term target (2024/3): 40% of total*3

*3 We added 10% to our original target of 30% to achieve our overall targets for reducing GHG emissions

GHG Emissions/Percentage of Electricity Generated via Renewable Energy Sources

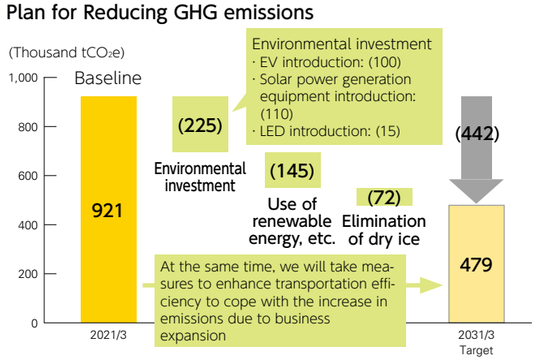


Plan for Reducing GHG Emissions to Achieve Medium-Term Targets (2030)

Key Measures

- Introduction of 20,000 EVs
- Introduction of 810 units of solar power generation equipment
- Introduction of LEDs
- 70% utilization rate for electricity generated via renewable energy sources
- Elimination of dry ice
- Increase in transportation efficiency

Plan for Reducing GHG emissions



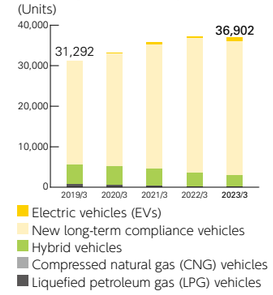
Reduction in GHG Emissions Through Promotion of Green Innovation

As one key measure for reducing GHG emissions, the Yamato Group is promoting the introduction of EVs. Our demonstration tests to date have been able to confirm effects including the reduction of GHG emissions, efficiency in pickup and delivery operations, and reducing operational burden. We have introduced 540 Hino Dutro Z BEV, ultra-low-floor walkthrough, small-sized commercial-use EVs, mainly in urban areas (as of August 2023). We will continue to engage in introducing EVs with environmental functions and practicality together with car manufacturers.

We are also promoting measures such as installation of solar power generation equipment at our bases, use of electricity generated via renewable energy sources, switching to LEDs at bases, and utilization of transportation materials that do not use dry ice.

Small-sized commercial-use EV, Hino Dutro Z BEV

The Number of Environment-Friendly Vehicles Owned (Consolidated Group Companies in Japan)



TOPIC

Issues and Countermeasures in the Logistics Industry—Initiatives Aimed at Establishing Energy Management

In promoting each measure aimed at reducing GHG emissions, creating a balance between EV operation and charging is an issue in the logistics industry. Since EV operation and solar power generation both occur during daylight hours, it is vital to create a mechanism for balance between operation and charging. Additionally, there are concerns over issues including supply shortages due to a sudden increase in demand for electricity generated via renewable energy sources and insufficient capacity in the necessary systematic power transmission. As a countermeasure, Yamato Transport is engaging in establishing energy management responsible for battery detachment, replacement, and transportation using cartridge batteries.

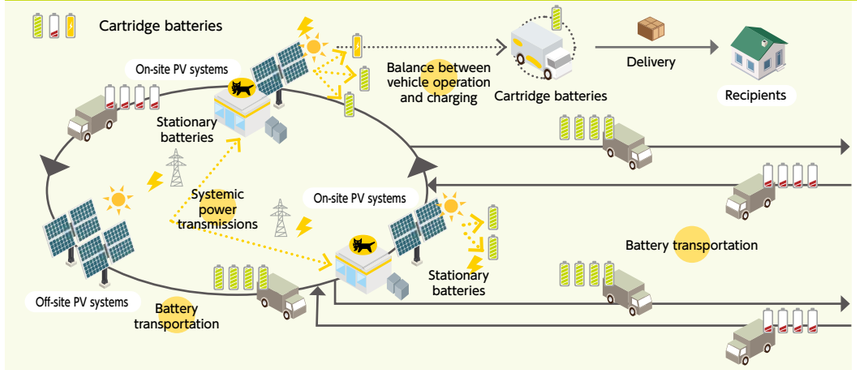
As a concrete initiative, we are promoting demonstration projects in Gunma Prefecture, which have been subsidized by the New Energy and Industrial Technology Development Organization (NEDO), a national research and development agency in Japan. These demonstration projects will include introducing EVs and solar power generation equipment, as well as a demonstration of power transmission through battery transportation. Additionally, to commercialize cartridge batteries, we are considering standardization with the Commercial Japan Partnership Technologies Corporation.

Demonstration period/Area	Fiscal Year Ending March 31, 2023, to Fiscal Year Ending March 31, 2031 (Scheduled)/Gunma Prefecture
KPIs	200 EVs by fiscal year ending March 31, 2024 (introduced 50 EVs as of March 2023)
	Conversion of all vehicles into EVs and reduction of 5,000 tons of CO_2 emissions* generated by vehicles by fiscal year ending March 31, 2027
	Conversion of all vehicles into EVs with cartridge batteries and reduction of 7,500 tons of CO_2 emissions* generated by vehicles by fiscal year ending March 31, 2031

* Within the demonstration project area, compared to the fiscal year ended March 31, 2021

Note: The prerequisite coefficient for CO_2 emissions is 0.000447tCO₂/kWh (Ministry of Environment, the emission coefficients of individual power companies, etc.; TEPCO base CO_2 emission coefficient for the fiscal year ended March 31, 2021).
Reference: https://ghg-santeikohyo.env.go.jp/files/calc/r04_coefficient_rev4.pdf (Japanese only)
https://ghg-santeikohyo.env.go.jp/files/calc/r04_coefficient_rev4.pdf

Our Vision for an Energy Ecosystem That Coordinates Electric Vehicles (EVs), Photovoltaic (PV) Systems, and Batteries



- Expansion of EV introduction
- Expansion of supply capacity for electricity generated via renewable energy sources both on-site and off-site
- Balance vehicle operation and charging by separating the chassis and battery through EVs that utilize cartridge batteries
- Duplication of electricity transmission network by transporting batteries and utilizing systemic power transmissions
- Creation of regional infrastructure for transporting batteries and responding to natural disasters
- Creation of a shared battery infrastructure for the transportation industry

Reduce CO_2 emissions
Reduce burden on electricity system
Support local communities and provide disaster relief
Stabilize transportation industry

Environmental Strategy

Visualization of GHG Emissions—Value Provision to Customers

Contribution to Reducing GHG Emissions by Transforming Customer Supply Chains

Climate change response has become a key issue at each company and Yamato Group customers have expectations, such as the reduction of logistics-related GHG emissions. To meet these expectations, the Yamato Group is supporting the reduction of customer GHG emissions by transforming their entire supply chain, including reviewing the purpose of logistics and inventory holding methods, and by visualizing GHG emissions.

Examples of Initiatives with Customers

Kubarahonke Co., Ltd. (Food Manufacturer)

By integrating supply chains that had been individually optimized for each sales channel and product and creating an optimal supply chain from the manufacturing base to the rest of the country, Kubarahonke and the Yamato Group are conducting environmentally-conscious, sustainable operations and reducing GHG emissions from product delivery.

Adastria Co., Ltd. (Clothing Seller and Manufacturer)

Adastria and the Yamato Group aim to reduce GHG emissions by reviewing the purpose of logistics and inventory holding methods in supply chains that span both Japan and overseas, from raw materials procurement to product production and omni-channel approaches to sales, creating even more effective logistics in terms of management.

Yoshinoya Co., Ltd. (Restaurant Chain)

Yoshinoya and the Yamato Group are reducing GHG emissions and surplus food and material loss by integrating and optimizing supply chains for direct sales and wholesalers.

Nihon Michelin Tire Co., Ltd. (Tire Manufacturer)

By consolidating approximately 20 warehouses into 5 and visualizing and optimizing inventory control at each warehouse, we are working to eliminate uneven distribution of inventory and reduce transportation between facilities, while utilizing networks for corporate clients and other resources to stabilize lead times for delivery of products and reducing GHG emissions. We are also minimizing waste due to expiry (reducing impact on the environment) through managing overall tire inventory by production year and shipping tires that are closer to the expiration date before others using a management system that minimizes waste by tracking the production year of all tires in the inventory.

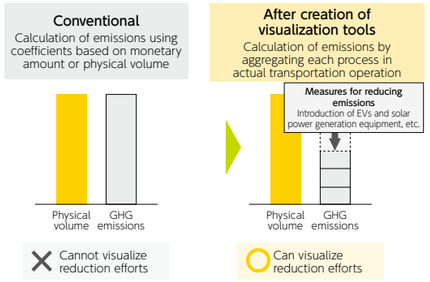
Colowide Co., Ltd. (Restaurant Chain)

We are working on building a sustainable supply chain with an even lower environmental burden, eliminating *muri* (unreasonableness), *mura* (inconsistency), and *muda* (waste), by visualizing and optimizing the entire supply chain, which was previously divided by company and difficult to view as a whole.

Development of GHG Visualization Tools Based on International Standards

Yamato Transport is advancing the development of GHG emissions visualization tools based on ISO 14083:2023, an international standard for calculating GHG emissions made by transportation that was issued on March 20, 2023. This international standard calculates GHG emissions from not only trucks for transportation but also from various methods such as air and marine transportation, as well as from terminals. Through such visualization tools, we will make even more realistic calculations for GHG emissions from transportation by Yamato Transport, which correspond to Scope 3* emissions for corporate clients. We aim to use these visualization tools globally.

* GHG emissions in the supply chain made by companies indirectly



PICK UP Increasing Need for International Standards

Climate change response is an urgent issue for the entire international society. As a result, many companies have adopted a target of virtually zero GHG emissions and are advancing various initiatives. Additionally, businesses are now required to respond on not only an individual company basis but throughout the entire supply chain, such as by making the reporting of GHG emissions related to products a condition of business transactions with suppliers. Each company and country have adopted various standards for calculating GHG emissions in the logistics industry. However, with the advancing globalization of the supply chain, the need for international standards has increased. When global calculation standards did not yet exist, the Yamato Group signed a basic agreement with the largest European home delivery company, the DPDGroup, aimed at environmental-based cooperation. We are actively engaging in measures such as participating in the formulation of ISO14083:2023, an international standard related to methods of calculating and reporting GHG emissions from transportation, leading to the development of emissions visualization tools based on international standards.

Initiatives Based on the Recommendations of the TCFD

The Yamato Group understands that revealing the risks and opportunities faced by and presented to society and the Company by climate change issues, evaluating the impacts thereof, and formulating countermeasures are essential for the sustainability of the business. We have carried out scenario analyses of Yamato Transport in the fiscal year ended March 31, 2022, based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). While enhancing the sustainability of the Group by clarifying the business impacts of climate change and engaging in countermeasures focused on issues that have a significant impact, we will enhance corporate value by holding dialogues with stakeholders.

Governance

The Yamato Group deliberates and seeks to resolve environmental issues, including climate change, based on its system for environmental management, with the Environment Committee as a decision-making body, and the Board of Directors supervising the status of execution. The president serves as chairperson of the Yamato Group Environment Committee and is the supervisor responsible for environmental management. Further, important matters, such as basic policies related to environmental issues, which include climate change discussions by the Yamato Group Environment Committee, are debated and decided on at Management Committee meetings, which operates above the Environment Committee, and Board of Directors or management meetings. Executive officers in charge of the environmental field, regional directors, and presidents of Group companies are responsible for environmental issues, in addition to being responsible for the reliable implementation, maintenance, and supervision of environmental management, including preparing necessary management resources. As a general rule, all managers and heads of frontline organizational structures are also responsible for managing environmental risks and opportunities, including climate change, as environmental managers.

Strategy

STEP 1 Assessment of Risk Importance

The Yamato Group will look ahead to the period between the fiscal year ended March 31, 2022, and the fiscal year ending March 31, 2024–which is the period of the Sustainable Medium-Term Plans 2023 [Environmental], set as the fiscal year for medium-term targets, and 2050, which has been set as the fiscal year for long-term targets, with reference to the targets formulated by the Japanese government for reducing GHG emissions. We will consider transition risks, such as the introduction of policies and regulations by the Japanese government and changes to market needs, and physical risks, such as abnormal weather brought about by climate change, and will respond to risks and opportunities by reflecting them in the Group's strategies.

We evaluated physical risks, such as the suspension of operations due to the increasing severity and frequency of abnormal weather and expanding repair costs owing to damage to and loss of facilities and equipment caused by abnormal weather, as short-term risks. Furthermore, we evaluated the transition risk of increasing costs due to the introduction of a carbon tax as a result of revised policies and laws as a medium- to long-term risk. Meanwhile, regarding opportunities, we also identified significant potential for future financial benefits, such as falling costs due to energy conversion and increased efficiency, in line with the low-carbon transition, and increasing revenues supported by customers with a heightened awareness of our proactive, environmental response to climate change mitigation and adaptation. Going forward, we will continue to assess the impact of the risks and opportunities that may arise.

STEP 2 Definition of Scenario Categories

Under scenario analysis conducted in the fiscal year ended March 31, 2022, we predicted two scenarios for Yamato Transport, based on information*1 from the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA).

*1 Includes the RCP8.5 global warming scenario created by the IPCC as well as the Net Zero Emissions by 2050 Scenario, Sustainable Development Scenario, and Stated Policies Scenario created by the IEA
*2 Referencing the 2°C scenario when no scenario exists for 1.5°C

1.5°C Scenario*2	The incurrence of costs associated with reducing GHG emissions will become necessary and we must enforce stricter regulations and higher fuel and electricity costs; however, sustainability is the key to creating and offering competitive products.
4°C Scenario	While we will continue to practice our current style of management, incurring costs to address damages from natural disasters in each area of operation will become necessary.

STEP 3 Evaluation of Business Impact for Yamato Transport

Evaluation of financial impact due to introduction of a carbon tax	Calculation of business impact in 2030 and 2050 related to settlement[s] following the full-scale introduction of a carbon tax By 2030: ¥13.3 billion By 2050: ¥25.6 billion Note: Estimated using carbon tax prices of $130 per ton (2030) and $250 per ton (2050)
Financial impact assessment regarding decreasing revenues and increasing repair costs for facilities and equipment due to abnormal weather and disasters	Trial calculation of business impact of decreased revenue due to abnormal weather, such as heavy rain resulting from increasingly severe typhoons and linear rainbands, and repair costs for damaged facilities and equipment By 2030: ¥1.9 billion By 2050: ¥3.8 billion Note: Calculated by referencing past disasters

We determine the business impact by referencing energy-related indexes, such as the carbon pricing published in the World Energy Outlook by the IEA. Furthermore, to understand changes in trends, we reference data, including the frequency of flooding, published by the Japanese Ministry of Land, Infrastructure, Transport and Tourism; the Ministry of Education, Culture, Sports, Science and Technology; and the Japan Meteorological Agency in light of climate change.

STEP 4 Direction of Countermeasures

- Implementation of measures to achieve targets for reducing GHG emissions by 2030 (48% reduction compared with the fiscal year ended March 31, 2021)
  Introduction of 20,000 low-carbon vehicles (mainly EVs), installation of 810 units of solar power generation equipment, etc.
  ⇒ Expected result: Reduction of business impact due to introduction of a carbon tax by 2030 (¥6.1 billion decrease)
- Implementation of measures to achieve targets for climate neutrality by 2050
  Introduction of low-carbon vehicles, including EVs with cartridge batteries, further installation of solar power generation equipment, improvement of usage rate for electricity generated via renewable energy sources, reinforcement of other measures, etc.
  ⇒ Expected result: Elimination of business impact due to introduction of a carbon tax by 2050
- Examination of introducing internal carbon pricing with the aim of proactive capital expenditures in low-carbon transition

- Opening of stores by utilizing hazard maps and periodic reviews of our business continuity planning manual
- Examination of disclosing information on efforts to adapt to climate change internally and to our business partners
- Testing for use of renewable energy and EVs with cartridge batteries that enhance resilience
- Reevaluation of business impact going forward while adding extra prerequisites, such as enhancing predictions for location and scale of occurrences of incidents, and continuous examination of countermeasures

Risk Management

Yamato Holdings has created a dedicated department responsible for promoting the Groupwide response to climate change. Additionally, we are promoting said response by deploying an environmental officer (president and representative director) and an environmental promotion representative to each Group company.

Indicators and Targets

We will implement measures for achieving GHG emissions reduction targets (see page 34) and create green logistics in collaboration with our business partners to reduce GHG emissions across the entire value chain (Scope 3). At the same time, we will consider the feasibility of acquiring certification for achieving the 1.5°C target of the Science Based Targets* initiative.

* Targets for reducing GHG emissions set by companies for the next five to ten years, in line with the levels required by the Paris Accords

For details on initiatives based on TCFD recommendations, please refer to our corporate website.
https://www.yamato-hd.co.jp/english/csr/environment/tcfd.html