NTN's Goal of a Carbon-neutral Society

Environment-contributing Products

Development of environment-contributing products

"We shall contribute to international society through creating new technologies and developing new products." Under this corporate philosophy, we are committed to environmentally friendly manufacturing. We are especially focused on developing technologies that help to prevent global warming.

The components we manufacture, such as bearings and driveshafts, contribute to reducing environmental impact by improving the energy efficiency of vehicles and machinery. We refer to all of these as "environment-contributing products." Among them are products that are already widely used, as well as new products that achieve even better environmental performance as a result of our technologies.

NTN is also developing products that utilize renewable energy such as solar and wind power, helping to reduce CO_2 emissions.

We quantify the degree to which such products contribute to the environment using our own standards. NTN will continue its pursuit of its corporate philosophy by developing and supplying products that make an even greater contribution to the environment.

Evaluation of environment-contributing products

NTN compares and evaluates the environmental performance of current products using the performance levels of 1997 as a baseline. Environment-contributing products are classified into five grades from "S-eco" to "D-eco" according to their degree of environmental contribution, based on standards established for each product.

Classification	Grade	Definition
Environment-contributing products	S-eco (Super eco)*	Products classified according to environmental factor standards specified for each product in line with global technology standards
	A-eco (Advanced eco)	
	B-eco (Brilliant eco)	
	C-eco (Creative eco)	
	D-eco (Diffused eco)	Products that help to reduce energy loss in finished products, with the same performance level as that of around 1997

*Green energy products are S-eco grade

Calculation Methods for Environmental Factors and Eco-Efficiency

To quantify the degree to which our products contribute to the environment, we use environmental factors and eco-efficiency as defined in formulas 1 and 2 below.

$$\text{Environmental factors} = \frac{\text{Eco-efficiency of developed products}}{\text{Eco-efficiency of benchmark products}^{*1}} \cdots ①$$

$$\text{Eco-efficiency} = \frac{\text{Product value}^{*2}}{\text{Environmental impact}^{*3}} \cdots ②$$

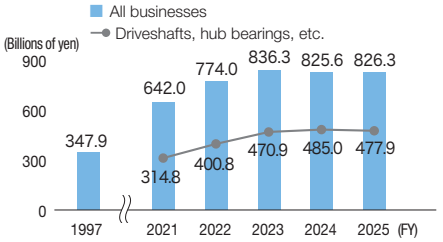
*1 D-eco products: Products that help reduce energy loss in finished products while providing performance equivalent to that of products from around 1997.
*2 Values are quantified using the QFD method, including the contribution of finished products to CO_2 emissions reduction.
*3 To evaluate contributions to climate change mitigation, environmental impact is calculated based on CO_2 emissions generated from raw material extraction through production, using the LCI calculation tool developed by the Japan Auto Parts Industries Association.

Achievements

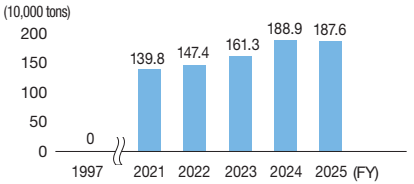
In FY2025, our flagship products—driveshafts and hub bearings—and our green energy products contributed to the reduction of approximately 1.88 million tons of CO_2. This demonstrates that the development of our environment-contributing products is achieving results.

Sales of products making a high environmental contribution in the S-eco to B-eco range grew to account for approximately 55.9% of total sales in FY2025.

Trends in net sales

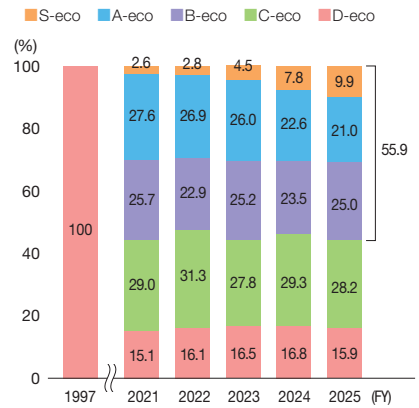


Contribution to CO_2 reduction*



Calculation standard:
Japan Auto Parts Industries Association (JAPIA) Life Cycle Inventory (LCI) Calculation Guidelines (Consumer Use-Phase LCI Calculation Tool)
*Applicable to S to C-eco products

Trends in composition of environment-contributing products by grade (Driveshafts, hub bearings, etc.)



Carbon neutrality

Respond to climate change

In response to climate change, the NTN Group aims to achieve carbon neutrality throughout its supply chain by FY2050 and has set targets for reducing Scope 1 and 2 emissions by FY2030 and FY2035. To that end, we are proactively working on a variety of measures, including the promotion of energy-saving activities and the introduction of renewable energy. In FY2024, we established a new working group to develop and promote measures for reducing domestic Scope 3 emissions as an initial step toward reducing CO_2 emissions across the supply chain. We will work closely with suppliers and others to promote activities toward achieving carbon neutrality by FY2050.

*Note: NTN calculates and reports only energy-derived carbon dioxide (CO_2) emissions from among GHG emissions.

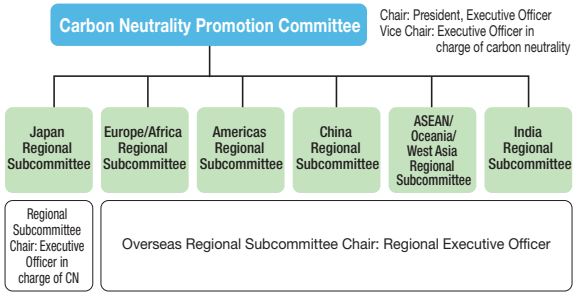
NTN's carbon neutrality targets

CO_2 emission reduction targets (Scope 1 and 2)	●50% reduction by FY2030 (compared to FY2018) ●Achieve carbon neutrality by FY2035
CO_2 emission reduction targets (Scope 3)	●Achieve carbon neutrality by FY2050

Promoting carbon neutrality activities

To promote carbon neutrality activities throughout the NTN Group, we established the Carbon Neutrality Strategy Promotion Department in April 2023, and in July of the same year, we established a company-wide Carbon Neutrality Promotion Committee as well as regional subcommittees to create a global promotion structure. The Carbon Neutrality Promotion Committee, chaired by the President, Executive Officer, meets twice a year online, connecting the Head Office with locations around the world to share best practices, deploy them globally, and encourage mutual learning.
The regional subcommittees are chaired by the Executive Officers responsible for each region, and by holding regional subcommittee meetings four times a year, they examine measures and initiatives suited to the actual conditions of each region and report the results to the Carbon Neutrality Promotion Committee.

Carbon neutrality promotion system



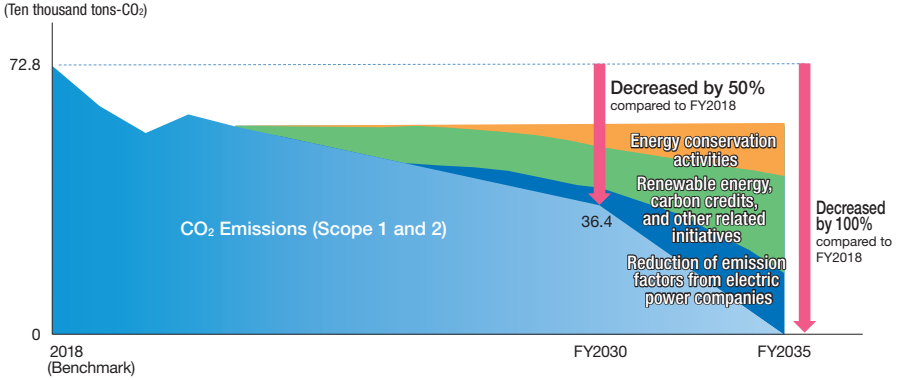
Carbon Neutrality Promotion Committee



Progress management based on the carbon neutrality roadmap

The NTN Group has developed carbon neutrality roadmaps as a framework for effectively advancing its carbon neutrality initiatives. Based on these roadmaps, we closely follow the status of our activities at each stage and manage progress toward our targets. The roadmaps are created by each region and each business site, showing specific measures and timelines in detail, and we are promoting initiatives toward achieving carbon neutrality through coordinated efforts across the Group.

NTN Global CO_2 emission reduction roadmap (by reduction activity)

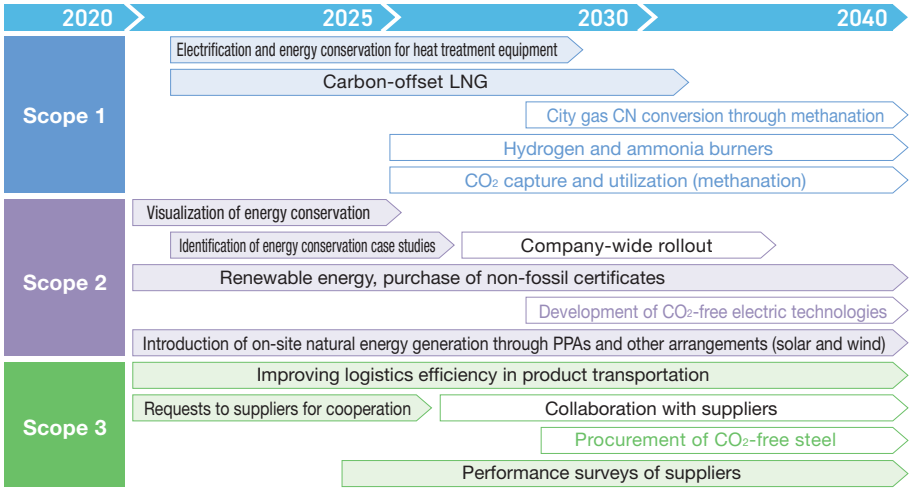


NTN's Goal of a Carbon-neutral Society

Reduction measures for each scope

This shows the overall picture of initiatives in each scope. We are promoting internal initiatives to reduce CO_2 emissions, including electrification, energy conservation, and the introduction of natural energy generation, while collaborating with external organizations to accelerate these efforts.

Promoting in-house initiatives while accelerating activities through collaboration with external parties



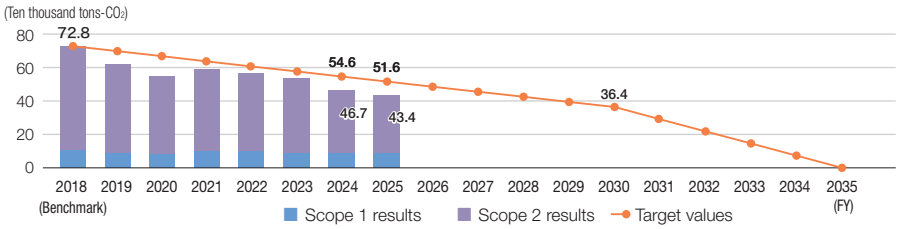
*Shaded items are in progress, and items shown in colored fonts are initiatives by external organizations

CO_2 emission results

The FY2025 results were Scope 1: 77,935 tons (domestic: 43,749 tons, overseas: 34,186 tons), Scope 2: 355,850 tons (domestic: 167,447 tons, overseas: 188,403 tons).

For Scope 2, domestic business sites are calculated using market-based emission factors, while overseas business sites are calculated using location-based emission factors.

CO_2 Emissions (Scope 1 and 2)

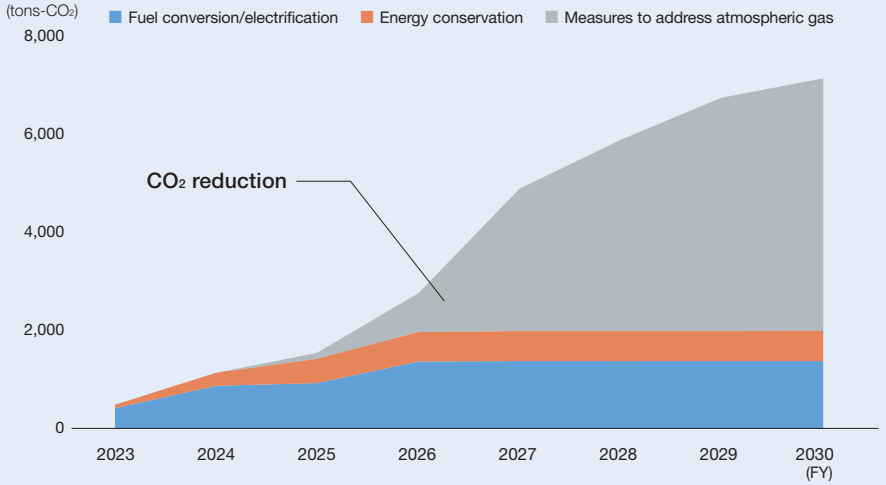


Scope 1

Energy-saving measures for heat treatment equipment

To reduce CO_2 emissions from heat treatment facilities, we are promoting three measures: fuel conversion and electrification, energy conservation, and atmospheric gas control. All newly introduced heat treatment furnaces since 2017 are electric furnaces. Additionally, high-efficiency insulation materials have been introduced to minimize heat loss from the outer walls of the heat treatment furnaces, thereby reducing fuel consumption. We are also reducing CO_2 emissions by implementing measures to control furnace atmospheres in furnaces dedicated to conventional quenching.

Overall picture of initiatives for heat treatment equipment (domestic)



In FY2025, energy-saving measures for heat treatment equipment reduced CO_2 emissions by 405 tons, bringing the cumulative reduction since FY2023 to 1,537 tons.

Domestic Scope 1 emissions decreased by 1,847 tons, from 45,596 tons in FY2024 to 43,749 tons in FY2025. The reduction of 405 tons achieved through energy-saving measures for heat treatment equipment was equivalent to approximately 22% of this year-on-year decrease.

It should be noted that changes in domestic Scope 1 emissions are affected by multiple factors, including production volume, equipment operating conditions, and various emission reduction measures.

Scope 2

Energy Reduction at Production Sites

To reduce CO_2 emissions from our operations, we are working to identify and visualize energy losses and reduce energy consumption.

The results of energy-saving measures at domestic business sites are compiled into a database, and best practices are also deployed and shared with overseas business sites. We are also enabling overseas business sites to register information in the database, thereby promoting bidirectional information sharing.

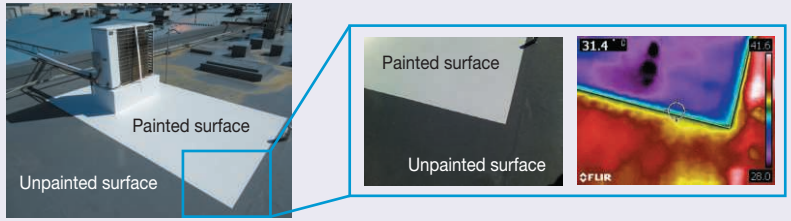
Additionally, since FY2023, we have introduced internal carbon pricing as an investment decision indicator for new capital investments, promoting low-carbon management.

Examples of Energy Reduction Measures

Improving Cooling Efficiency by Applying Heat-Shielding and Thermal-Insulation Coatings to Outdoor Air-Conditioning Units

- Applied heat-shielding and thermal-insulation coatings to outdoor air-conditioning units and the surrounding areas
- Improved cooling efficiency during summer and reduced electricity consumption
- Lowered the temperatures of the outdoor units and the intake air by more than 10°C
- Reduced electricity consumption by 20%

CO_2 Reduction
0.6 tons-CO_2/year
(per air-conditioning unit)



Reducing Electricity Consumption by Upgrading Water-Soluble Coolant Chiller Units

- Reduced electricity consumption by upgrading water-soluble coolant chiller units to energy-saving models
- Promoted energy savings by upgrading chillers for water-soluble coolant equipment supplying 90 grinding machines
- Electricity consumption: reduced by 44%



CO_2 Reduction
144 tons-CO_2/year

Scope 3

Initiatives to improve calculation accuracy

The NTN Group aims to achieve carbon neutrality, including supply chain emissions (Scope 3), by FY2050. To promote CO_2 reduction across the supply chain, we have newly established a working group responsible for planning and implementing reduction measures, and are actively advancing related initiatives. Among all Scope 3 categories, Category 1: "Purchased goods and services" accounts for the largest share of emissions. The majority of these emissions stem from the procurement of raw materials such as steel and semi-finished products including forgings and machined components. Therefore, we first conducted an emission survey targeting steel manufacturers, taking into account differences in production methods. We are also conducting similar surveys of suppliers of semi-finished products, reviewing the emission factors used, and promoting global initiatives to more accurately assess and reduce emissions based on actual conditions.

Specific initiatives for collaboration with suppliers and logistics optimization

- **Procurement of CO_2-free steel materials**
  - Gathering information and promoting reviews
- **Requesting our suppliers to work toward carbon neutrality**
  - Sharing the background to our efforts to achieve carbon neutrality as well as our targets
  - Introducing energy conservation case studies
  - Collecting and visualizing CO_2 emissions data in dashboards
- **Enhancing efficiency during product transportation**
  - Reducing transportation distances by optimizing distribution routes
  - Enhancing loading efficiency by expanding the use of modular packaging
  - Reducing the number of containers by increasing the loading ratio of export containers
  - Reuse and recycling (repair) of wooden pallets

CO_2 emissions in logistics (Domestic)

