## The NTN Group Target Year for Carbon Neutrality

● Reduce CO2 emissions in business activities → 50% reduction by the fiscal year 2030 (compared to the fiscal year 2018) (Scope 1 and 2) Achieve carbon neutrality by the fiscal year 2035 ■ Reduce CO<sub>2</sub> emissions in business activities ⇒ Achieve carbon neutrality by the fiscal year 2050

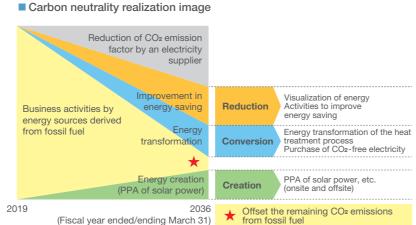
## Carbon Neutrality Strategy Promotion Dept. Launched

Based on the activity result of the carbon neutrality promotion project from July 2022 to March 2023, the "Carbon Neutrality Strategy Promotion Dept." was launched in April 2023. It inherits the projects, establishes the global promotion system, and shifts to the execution phase, including the mid-to-long-term issues.

## With the Goal of Target Year for Carbon Neutrality

The NTN Group is working on the following priority measures for the purpose of steadily promoting an action plan for achieving carbon neutral targets.

- (1) Reduce CO<sub>2</sub> emissions generated by processing machines and heat treatment equipment by visualizing the energy used in the manufacturing process, and reduce CO<sub>2</sub> emissions by improving the efficiency of energy used in utilities such as air, air conditioning, and lighting. [Reduction]
- (2) Reduction of CO<sub>2</sub> emissions by energy conversion of heat treatment equipment [Conversion
- (3) Reduction of CO<sub>2</sub> emissions derived from fossil fuels by purchasing CO2-free electricity [Conversion]
- (4) Reduction of CO<sub>2</sub> emissions derived from <sub>2019</sub> fossil fuels through renewable energy power generation such as solar power PPA [Creation]



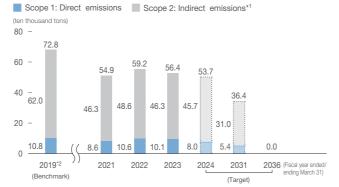
## CO<sub>2</sub> emissions reduction results

The NTN Group is working on CO2 reduction in the whole of the company's business activities and aiming to reduce CO<sub>2</sub> by 50% compared to the fiscal year 2018 by fiscal year 2030 and achieve carbon neutrality by fiscal year 2035. We receive a third-party verification to ensure no problem in the calculation method of CO2 emissions. For Scope 2, the calculation uses emission factors<sup>\*1</sup> of the market-based approach for domestic business sites and emission factors<sup>2</sup> of the location-based approach for overseas business sites. We are also considering emission factors of the market-based approach to calculate the emissions of overseas businesses.

\*3 Please refer to the website for the CO2 emissions verification opinion from https://www.ntnglobal.com/en/csr/idea/carbon-neutrality.html#anchor02

Please refer to the website for Environmental data of each site Japan:https://www.ntnglobal.com/en/csr/environment/sitereport-japan.html Overseas:https://www.ntnglobal.com/en/csr/environment/sitereport-overseas.html





\*1 Calculated using emission factors sourced from "Electric Utility Emission Factors" (Ministry of the Environment and the Ministry of Economy, Trade and Industry) in Japanese sites and calculated using emission factors sourced from "Emissions Factors 2022" (IEA) in overseas sites

\*2 Set the carbon neutral benchmark as fiscal year ended March 31, 2019.

## Reduction of CO<sub>2</sub> emissions from the burning of fuel and the use of electricity (Scope 1 and 2)

The NTN Group is working to reduce CO2 emissions (Scope 1) from fuel combustion in heat treatment facilities and boilers, etc. For heat treatment facilities, which are a major source of CO2 emissions, we have completed fuel conversion to LPG\* and city gas at major facilities as the first phase of energy-saving measures. In the future, we will not only expand the use of high-efficiency highfrequency heating equipment and electric furnaces that use renewable energy, but also consider the use of green energy sources such as ammonia and hydrogen, which do not emit CO2 during production and use, to promote carbon neutrality by utilizing a variety of energy sources.

In addition, The NTN Group is working to improve the efficiency of air, air conditioning, lighting, and other utilities as part of its efforts to reduce CO2 emissions (Scope 2) associated with the use of electricity in its production activities. We are conducting steady activities to reduce energy use by installing high-efficiency compressors, air conditioning, lighting, and other equipment, regularly taking measures to prevent air leaks, and turning off non-operating equipment.

# Promotion of Introduction of Natural **Energy Generation and Renewable**

The NTN Group is working on reducing CO2 emissions (Scope 2) by introducing self-consumption type natural energy generation to business sites based on various schemes (PPA<sup>1</sup>, lease, and self-investment). We are actively promoting the procurement of renewable energy and electricity offset with carbon credit. Reduced 477 tons of CO2 in Japan and 11,409 tons in overseas in the fiscal year ended March 31, 2023.\*2

#### ■ Natural Energy Generation Results (Fiscal Year Ended March 31, 2023)

Region	Power generation*2 (kWh)	CO2 emission reduction (tons-CO2)	
Japan	1,073,015	430	
China	11,961,519	7,348	
Total	13,034,534	7,778	

#### Actual Procurement of Renewable Energy (Fiscal Year Ended March 31, 2023)

	Site name	Energy type	Procurement (kWh)	CO2 emission reduction (tons-CO2)
-	Nagoya Sales Office	CO2-free electricity	80,982	31
	Hamamatsu Automotive Sales Office		13,077	5
	Hiroshima Automotive Sales Office		20,059	11
	NTN-AT		13,057,800	4,061
	Total		13,171,918	4,108

## An Example of the Introduction of Natural Energy Generation Equipment in Japan

NTN Mie Corp. (Japan) installed a total of 828 solar panels on the roof of a roller factory based on PPA\*1. Its operation started in April 2023, and the amount of power produced and CO2 reduction are expected to be 541,342 kWh/year and 205 tons-CO<sub>2</sub>/year<sup>2</sup>, respectively.



Roller Factory (NTN Mie

## An Example of the Introduction of Natural Energy Generation Equipment in Overseas

NTN MANUFACTURING DE MEXICO, S.A.DE C.V. (Mexico) installed a total of 1,180 solar panels on the roof of a factory based on PPA\*1. Its operation started in August 2023, and the amount of power produced and CO<sub>2</sub> reduction are expected to be 1,012,000 kWh/year and 403 tons-CO<sub>2</sub>/year<sup>\*2</sup>, respectively.

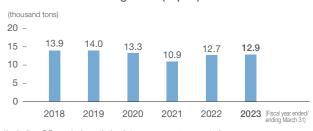
\*1 A contract to install solar power generation equipment owned by a third-party power producer on a roof or other location and purchase its electricity.

\*2 Calculated using emission factors sourced from "Electric Utility Emission Factors" (Ministry of the Environment and the Ministry of Economy, Trade and Industry) in Japanese sites and calculated using emission factors sourced from "Emissions Factors 2022" (IFA) in overseas sites.

## Reducing CO<sub>2</sub> Emissions in Logistics

The NTN Group is reducing CO<sub>2</sub> emissions (Scope 3 Category 9) during product transportation by improving logistics efficiency. Main measures include "shortening transportation distances by optimizing distribution routes," "increasing the loading ratio by expanding the use of module outer boxes," "reducing the number of containers by increasing the loading ratio of export containers" "promotion of reuse and recycling (repair) of wooden pallets," and "having carries strictly adhere to non-idling requests". CO2 emissions from the transport of domestic products in the fiscal year ended March 31, 2023, was 12.9 thousand tons-CO<sub>2</sub>/year (target: 12.8 thousand tons-CO<sub>2</sub>/year), which is slightly below the target. We will continue to promote the measures, including optimizing a truck's loading capacity to increase transportation efficiency.

#### ■ CO₂ emissions in logistics\* (Japan)



\*Including CO2 emissions during intra-company transportation

<sup>\*</sup>Liquefied natural gas