Through innovations, the Nippon Express Group pursues the creation of value for customers and society and the resolution of social issues.

**Strengthen Global Partnerships**

**Our View on the Creation of Innovations Through Collaboration and Co-creation**

By taking measures such as proactive involvement in national policies for the formation of a safe society, the Nippon Express Group uses advanced technologies in facilitating the automation, energy saving and streamlining of its logistics sites.

We pursue improvements in our productivity without compromising the advantages of the sites that are optimized to suit our client companies.

In addition, we pursue cooperation beyond organizational borders and strengthen cooperation among R&D functions within the Group to facilitate trial use of advanced technologies with a view toward overall optimization.

Our mission is not only to accumulate and share knowledge obtained from the trial use of advanced technologies, but also to communicate the needs of the logistics industry to manufacturers and vendors and stimulate the development of new technologies.

**Joint Logistics**

Recently, efforts for a modal shift in the logistics industry that involves reducing greenhouse gas emissions, saving energy in distribution operations and developing sustainable logistics systems have attracted attention.

In 2017, we commenced joint logistics with four beer companies in Hokkaido. In 2018, we began undertaking transportation along a route between Kansai/Chugoku and Kyushu. In this way, we are proceeding aggressively with a joint modal shift from truck-based transportation to railroad-based transportation with dedicated trains.

Joint logistics can reduce CO₂ emissions by about 1,500 tons annually, which should equate to nearly 74% of CO₂ emissions from truck-based transportation.

**Pursuing Business Through Partnerships**

As part of our commitment to the use and research of advanced technologies, we participate in the accelerator program from Plug and Play Japan, a Japanese arm of the US company based in Silicon Valley. Without adhering rigidly to existing business domains, we are moving forward on open innovations with venture companies equipped with advanced technologies in an effort to facilitate reform adapting to the needs of the times.

**Contribute to Sustainable and Tough Infrastructure Development**

**Developing Cutting-Edge Logistics Technologies**

Through many different governmental working groups such as a committee taking part in a national project to encourage automated truck platooning*, the Nippon Express Group is committed to the creation of new logistics services to support society in the future.

We are proactive about the use of advanced technologies to innovate logistics sites, and we are considering the use of material handling equipment and cargo-handling robots to streamline operations and save manpower at our warehouses and distribution centers.

* Official name: Committee for Research, Development and Verification for Incorporating an Advanced Automatic Driving System into Society (Verification for Incorporation of Truck Platooning into Society).

**Nighttime Unattended Operations for Shipment Preparation**

In July 2019, the New Sapporo Logistics Center successfully commenced nighttime unattended operations to prepare shipments by using automatic forklifts and automatic vertical conveyors.
Cooperative Demonstration of Level 4 Automatic Operation
In August 2019, a joint experiment for the demonstration of Level 4 automatic operation was performed in a limited area in cooperation with UD Trucks Corp., HOKUREN Federation of Agricultural Cooperatives and the Hokkaido prefectural government with the aims of ascertaining the many different issues involved in eliminating a shortage of truck drivers and securing transportation capacity for farm products. This involved operating a truck on public roads, unprecedented for this type of test in Japan.

Supporting the Development of a Crawler-Type AGV
We supported the development of a remote-controlled, crawler-type automatic guided vehicle (AGV), aiming to save energy and ensure greater safety at work sites such as terminals where workers use different routes depending on the time of day. In addition, we are analyzing the effectiveness of manned truck platooning for reducing driver workloads and considering partial computerization of roll calls and inspections to achieve labor savings.

Providing Special Transport Services
Fine arts transport and heavy haulage and construction are among some of Nippon Express’ transport services requiring specialized skills and a wealth of experience as well as special facilities and equipment.

We regard it as an important social responsibility to maintain and improve the quality of specialized transport services that Nippon Express is uniquely qualified to provide, and we remain committed to this principle.

Transporting Works of Art
The Fine Arts Business Division transports articles for display at exhibitions held in Japan and overseas and entire collections when art galleries and museums relocate. The numerous exhibits that come from overseas as well as treasures and Buddhist statuary from temples and shrines around Japan are all culturally/historically important, and many have been designated National Treasures or Important Cultural Properties. We work closely with relevant parties when transporting goods, paying particular attention to ensure that the value of goods being handled is not diminished in any way during transport.

Transport of Heavy Equipment and Construction of Plant Facilities
The Heavy Haulage & Construction Division is involved in the transport and installation of heavy equipment and the construction of plant facilities, and thus helps build or maintain important social infrastructure in a variety of locations both in Japan and overseas. These business operations are essential to society, ensuring a high level of compatibility between transporting and building, and adding real value to goods.

Pharmaceutical Logistics
We are also revolutionizing pharmaceutical logistics and helping enhance the value of medicinal products and people’s health through transportation by developing a unique network to allow for adaptation to business continuity plans (BCPs), joint logistics and round-trip use of vehicles for the supply of pharmaceutical products, in addition to quality control in accordance with Japan’s GDP guidelines (standards for the proper distribution of pharmaceutical products).