

# Sustainability Report

# 2022

UD Trucks Corporation



UD TRUCKS



## UD Trucks at a glance

For 87 years, UD Trucks has provided the trucks and transportation solutions the world needs today, forever challenging and innovating for a better tomorrow.

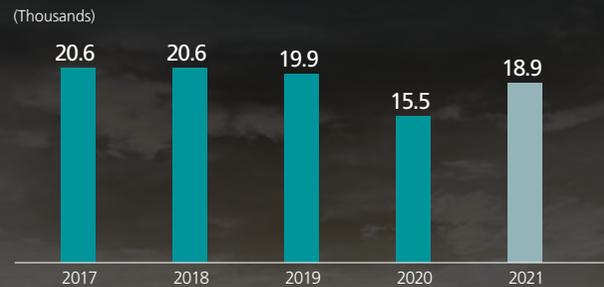
### Sales and servicing in **60** countries

UD Trucks' extensive network of dealers offers sales and servicing in roughly 60 countries. The UD Trucks Group provides 24-hour, 365-day support to commercial vehicle operators and drivers, including a telematics service connecting about 80,000 trucks around the world.



### **18,851** trucks sold globally in 2021

UD Trucks sold 18,851 trucks in 2021, meeting a wide range of local transport needs with its diverse lineup of truck models. Japan is the largest market for UD Trucks.



### **87** years of history

Founded in 1935 as a diesel engine manufacturer, UD Trucks has always been a challenger at heart, responding to the needs of customers and of the times.

### Diverse workforce of **8,122** employees

**In Japan: 6,146**   **Outside Japan: 1,976**

With employees from 41 countries working worldwide (31 nationalities based in Japan alone), UD Trucks recognizes that promoting a diverse workplace in which all employees can make the most of their abilities will lead to its continued success.

Note: Figures as of April 1, 2022.

### **165** customer centers and independent dealers in Japan

The Company's nationwide network of customer centers and dealers provides genuine parts and servicing to keep customers' trucks running and maximizing uptime.



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### About this report

UD Trucks publishes a sustainability report every year for the purpose of providing stakeholders with information about its environmental, social and governance initiatives.

### Scope of the report

This report covers the activities of UD Trucks Corporation.

### Reporting period

This report mainly covers results and activities in fiscal 2021 (January 1 to December 31, 2021). Some sections also refer to results and activities in previous fiscal years, activities in fiscal 2022, and future plans and forecasts.

**Published December 2022**



## Message from the President

# Our diverse employees around the world are helping make logistics more sustainable.

Guided by its Better Life purpose, UD Trucks is striving to grow together with its stakeholders while offering solutions through its business activities. By pursuing initiatives that are better for logistics, the planet, people, and our business, we are aiming to become the sustainability leader among Japanese commercial vehicle manufacturers.

The world is confronting all kinds of major challenges today, from climate change and resource depletion to widening economic disparities and human rights issues. It is essential to proactively address these challenges and reduce risks throughout the value chain while working to help achieve the UN Sustainable Development Goals. At the same time, the logistics industry must improve transport efficiency and address the serious shortage of truck drivers as the growing use of e-commerce sites drives up demand for delivery services.

At UD Trucks, we are keenly aware of these issues and our role as a provider of trucks and services in the industry. Accordingly, we are

developing products and technologies that realize exceptional environmental performance, help customers increase uptime, and improve driving conditions for truck drivers. For example, UD Trucks equips its flagship Quon heavy-duty truck models with its fuel-efficient GH engine and ESCOT-VI electronically controlled automatic transmission, as well as UD Active Steering, which helps reduce driver fatigue. We have also begun introducing trucks that comply with the Euro 5 vehicle emission standard in emerging countries.

As a member of the Isuzu Group, UD Trucks is now aiming to achieve net zero CO<sub>2</sub> emissions by 2050 in accordance with Isuzu Environmental Vision 2050. To accomplish this goal, ideas and contributions from all employees worldwide are more valuable than ever. Therefore, we are fostering workplaces that help employees maximize their potential while promoting diversity, equity, and inclusion.

As we work to make life better for people and

the planet, we look forward to the continued support of the Company's stakeholders.



丸山 浩二

**Kouji Maruyama**

President and Representative Director  
UD Trucks Corporation

## Our Purpose

Purpose

# Better Life

*Better Life* is our purpose, the reason why we exist. Providing the trucks and services that the world needs today, we are committed to *Better Life*—to make life better for people and the planet through sustainable transport solutions

Our desired position by 2025

The leader in sustainability among Japanese commercial truck manufacturers

Leadership in sustainability across four areas

**Better for Logistics:**

Pursuing smarter logistics to overcome challenges facing the industry

**Better for the Planet:**

Reducing emissions and waste

**Better for People:**

Creating better workplaces and supporting communities

**Better for Business:**

Building a foundation for sustainable growth

For over 80 years, UD Trucks has been providing the trucks and services the world needs today.

Now the logistics industry is facing an array of challenges, from a shortage of truck drivers and higher demand for deliveries driven by the growth in e-commerce, to environmental impacts such as climate change and resource depletion.

To overcome these many challenges, innovation and collaboration are essential for making the world a better place.

We are committed to making life better - for people and the planet. This is our purpose, and we call it *Better Life*.

Guided by our *Better Life* purpose, we aspire to be the leader in sustainability among Japanese commercial truck manufacturers by 2025.



By working to make life better for people and the planet, UD Trucks recognizes the importance of helping achieve the UN Sustainable Development Goals, which were adopted by the United Nations General Assembly in 2015.

### Engaging with Stakeholders

For UD Trucks to be a sustainability leader among Japanese commercial truck manufacturers, close communication with all stakeholders is essential, including customers, business partners, and employees. Therefore, the Company creates opportunities to engage with stakeholders and reflects their views in its management policies, business activities, and environmental, social, and governance (ESG) initiatives.



## Our Purpose

# Leadership in sustainability across four areas

### Better for Logistics:

#### Pursuing smarter logistics to overcome challenges facing the industry

Globally, the logistics industry is facing various challenges, including a shortage of drivers, increasingly strict regulations, and the need to ensure safer roads. Moreover, the growing e-commerce sector coupled with intense competition is putting pressure on logistics firms to cut costs and improve efficiency.

UD Trucks is meeting these challenges head on by staying at the forefront of innovation that helps improve vehicle efficiency, reduce environmental impacts and maximize driver comfort. To become a leader in sustainability, UD Trucks continues to develop next-generation technologies in the fields of connectivity, electromobility, and autonomous driving. At the same time, the Company is offering solutions to partners and customers to enhance their business.

► For more details, please refer to page 7.



### Better for the Planet:

#### Reducing emissions and waste

Climate change and resource depletion are some of the most pressing environmental issues facing us today. UD Trucks, together with the logistics industry as a whole, can be part of the solution to greatly minimize environmental impacts.

UD Trucks is taking steps to significantly reduce CO2 emissions and eliminate waste across its operations. Accordingly, the Company is exploring the use renewable energy and reducing the CO2 footprint of its products and sites, while collaborating with suppliers to reduce environmental impacts across the entire value chain.

► For more details, please refer to page 16.



## Our Purpose

### Better for People:

#### Creating better workplaces and supporting communities

Recognizing that people and communities are a core part of its sustainability strategy, UD Trucks helps its employees enhance their well-being while fostering a workplace culture that values diversity, personal development and a strong work-life balance. All employees are encouraged to make the most of their abilities and given the opportunity to grow professionally.

In addition, UD Trucks works closely with communities, focusing on road traffic safety seminars for local schools, disaster relief and other community outreach initiatives.

▶ For more details, please refer to page 25.



### Better for Business:

#### Building a foundation for sustainable growth

Pursuing a sustainability strategy that is Better for Logistics, Better for the Planet and Better for People helps secure the fourth area of sustainability: Better for Business. In short, this means the Company's performance and profitability. UD Trucks invests profits back into its businesses to lay a path for it to grow together with all stakeholders.

▶ For more details, please refer to page 31.



[Better for Logistics](#)[Better for the Planet](#)[Better for People](#)[Better for Business](#)

## Sustainability Activities

### Better for Logistics

UD Trucks deploys innovative in-vehicle systems to provide trucks that maximize driver comfort and driving efficiency while also helping to reduce environmental impacts. Working in partnership with truck drivers and logistics firms, the Company devises comprehensive solutions across the entire value chain. By developing next-generation technologies in the fields of connectivity, electromobility, and autonomous driving, UD Trucks is working to make logistics smarter and more environmentally sustainable.



Better for Logistics

Better for the Planet

Better for People

Better for Business

## Sustainability Activities

### Enhancing comfort and safety for drivers

#### UD Active Steering system developed for heavy-duty trucks

Japan is currently facing a shortage of truck drivers, mainly because the work can be physically demanding and often involves long hours. Drivers spend most of their working days inside a truck cab, so enhancing drivability is crucial.

With this in mind, UD Trucks developed UD Active Steering to help reduce driver fatigue and make roads safer. Available on heavy-duty Quon models in Japan, UD Active Steering is designed to improve steering precision under all kinds of driving conditions. Steering is assisted by an electric motor installed over conventional hydraulic steering gears. Attached to the motor is an electronic control unit that monitors the vehicle direction and driver's actions, while vehicle movements and road conditions are detected by numerous sensors at a rate of 2,000 times per second, providing real-time assistance to the driver. It also reduces steering wheel resistance by applying an appropriate amount of torque. This makes steering feel stable regardless of the truck's speed, payload, road conditions, and crosswinds.



#### Five benefits of UD Active Steering

- Low Speed Agility**  
 When turning at low speeds and reversing in tight spaces, additional steering torque automatically feeds into the system to allow the driver to maneuver with a light touch.
- High Speed Stability**  
 When driving at higher speeds, the weight of the steering wheel adjusts to provide superior stability.
- Rough Road Dampening**  
 UD Active Steering dampens vibrations on rough roads. Minute directional adjustments keeps the driver on course.
- Cross Wind Correction**  
 UD Active Steering virtually eliminates the steering corrections needed in crosswinds, keeping the driver on a straight course.
- Return to Center**  
 Whether turning at an intersection or reversing, the steering wheel will return to center when released, saving driving effort and bringing the vehicle into a straight line quickly and easily.



#### UD Active Steering demonstration shown online

UD Trucks strives to improve working conditions for commercial vehicle drivers and address the shortage of truck drivers in Japan. With this in mind, the Company demonstrated how the UD Active Steering system helps reduce driver fatigue and improve transport safety at the Ageo Plant's test course in July 2021. Although the event was held online due to the COVID-19 pandemic, the driving demonstrations were based on practical situations, such as driving on a winding course and uneven surface, and reversing into a parking garage. The drivers shared their impressions of the UD Active Steering system in their own words, providing viewers with practical information. Following the demonstration, the Company began offering customers opportunities to test drive trucks equipped with UD Active Steering.



## Sustainability Activities

### UD Active Steering—what drivers had to say

## UD Active Steering made driving easier, allowing us to pay closer attention to the road

Kotoh K.K.

### Hitoshi Ikeda, vehicle maintenance manager

My company transports automotive parts and equipment throughout Japan using 64 medium- and heavy-duty trucks. My job mainly involves inspecting the trucks and getting them road-ready. When purchasing a new truck model, we take the experiences of our drivers into account. We had heard a frightening incident about a driver losing control of the steering wheel when the truck got caught in a rut of an old road. Another lost control of the wheel in snowy



Hitoshi Ikeda driving a Quon heavy-duty truck.

weather. After considering such feedback along with various other factors, we decided to purchase a truck equipped with UD Active Steering.

When I first drove a truck with this steering system at a test drive event, I was surprised how the steering wheel did not wobble at all when I drove over a bumpy surface. The Quon's steering wheel also felt lighter than those of a regular four-axle heavy-duty truck.

Our first driver to try UD Active Steering, Hirokazu Harada, had many good things to say about the system (see below). Given his assessment, we will certainly consider acquiring more of these trucks in the future, because we want our drivers to be able to drive long distances with as little stress as possible.

### Hirokazu Harada, truck driver

I drive a heavy-duty truck over long distances, and road conditions constantly change. Even on the same road, I need to adjust how I drive depending on the season and weather. For example, on a snow-covered road, I need to watch my speed and be careful when using the brakes.

When driving the Quon equipped with UD Active Steering, the steering not only feels light but also stable at high speeds. Other power steering systems have made steering easier over the years, but I still needed to be

careful when driving at higher speeds. The Quon, however, is more relaxing to drive, because the steering becomes heavier as the speed increases and feels steady when I make turns. On streets in urban areas, turning at intersections is easy. Normally in a big truck, it can be difficult to make a left-hand turn properly if you steer sharply a little too quickly or too slowly, especially on a narrow street. Now I can make those turns smoothly, which gives me more time to check for oncoming bicycles and motorcycles on my opposite side.

Having UD Active Steering gives me peace of mind when driving routes where crosswinds tend to be strong. A driver shouldn't rely entirely on the steering system, of course, but if it helps detect unpredictable crosswinds, the truck really feels like a dependable partner.

In the past, I had to tightly grip the steering wheel when driving at high speeds, but now I just hold it normally to keep the truck steady, which makes driving much more comfortable. After a long day on the road, I am not nearly as tired out as before.

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## Sustainability Activities

### Level 4 autonomous driving trial with Kobe Steel

As Japan's logistics industry struggles with a chronic labor shortage, manufacturers are concerned about how the lack of truck drivers will impact their operations. To help find new solutions for these issues, UD Trucks has been focusing on developing fully electric and autonomous trucks under its roadmap for innovation, "Fujin & Raijin. Vision 2030." As part of these efforts, it has been verifying the feasibility of self-driving heavy-duty trucks used for specific applications.

For example, in 2019, the Company demonstrated a self-driving truck equipped with Level 4\* autonomous driving technology in Hokkaido together with the logistics firm Nippon Express and the Hokuren Federation of Agricultural Cooperatives. The test verified that the truck could make deliveries on a planned route.

More recently, UD Trucks concluded an agreement with Kobe Steel, Ltd., in 2022 to conduct autonomous driving trials at the steelmaker's Kakogawa Works, where transport must be reliable to keep blast furnaces operating 24 hours a day, 365 days a year. An on-site test course has been prepared to demonstrate Level 4 autonomous driving using a Quon heavy-duty truck.

\* The vehicle can fully operate in self-driving mode under predefined conditions

### Improved safety functions of Quon heavy-duty trucks

Quon heavy-duty trucks come with the Company's proprietary safety functions, including its Lane Departure Prevention function, Lane Departure Warning System, Traffic Eye Brake system, which automatically brakes to prevent collision damage, and Driver Alert System, which sends warnings based on steering irregularities. Based on advanced technologies, these systems help drivers operate the trucks safely, which keeps the road safer for everyone.

In addition to these functions, UD Trucks added UD Active Steering in 2021. This electronically controlled steering system helps reduce driver fatigue, one of the causes of traffic accidents. The Company then equipped its 2022 models with two new safety functions: Blind Spot Information System, an advanced function that detects bicycles on the left side of the truck when the driver makes a left turn, and Lane Change Support, which detects oncoming vehicles on the left side when the driver changes lanes. Both functions alert the driver via an indicator mounted on the windshield pillar of the passenger seat side of the cab. If the possibility of a collision is detected, the indicator flashes, a buzzer sounds, and a warning appears on the dashboard panel.

Pursuant to international standards set in November 2019, truck manufacturers are required to install a system for detecting blind spots in trucks weighing over eight tonnes effective from May 2024. The Blind Spot Information System is the first such system to be featured in a heavy-duty truck model in Japan, demonstrating the Company's success in complying with safety standards ahead of the industry.

### Participation in a government initiative to support the logistics industry

Recognizing that it is not only a manufacturer of trucks that are essential for commercial transportation but also a user of logistics services, UD Trucks strives to contribute to more sustainable logistics. From this standpoint, the Company is proactively endorsing the Japanese government's program for raising the productivity of trucking, and improving workplace conditions and efficiency in the logistics industry. This initiative (called the White Logistics Movement in Japan) was launched in March 2019 by the Ministry of Land, Infrastructure, Transport and Tourism.

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## Sustainability Activities

### Reducing environmental impacts

#### Improving the environmental performance of Quon heavy-duty trucks

When UD Trucks debuted its Quon model in 2004, the trucks were the world's first to feature a selective catalytic reduction system for purifying exhaust gases. Since then, the Company has been improving the fuel efficiency and environmental performance of the Quon by applying leading-edge technologies, including its ESCOT-VI 12-speed electronically controlled automatic transmission, designed to help drivers save on fuel, the Foretrack speed adjustment system, which scans and predicts road inclines, and Nenpi Coach, a system that provides drivers with fuel-saving advice.

In July 2022, UD Trucks released an 11-liter engine-powered Quon that meets new Japanese fuel efficiency standards set to go into effect from 2025. Under these new standards, fuel efficiency must be improved by over 10% compared with standards set in 2015 by the Ministry of Land, Infrastructure, Transport and Tourism.

#### Main environmental features of the 2022 Quon 11-liter engine

- **GH11 engine**

For this new engine, UD Trucks redesigned the combustion chambers and developed a new fuel injection system that combines the unique benefits of unit injector and common rail systems. Thanks to these features, new Quon trucks equipped with the Company's ESCOT-VI transmission comply with Japan's 2016 exhaust gas regulations and outperform the country's 2015 fuel efficiency standards by

about 10%. The engine also produces considerable torque from low RPM through to a wide range of speeds, providing drivers with extra power when needed.

- **ECO+ mode cruise control**

UD Trucks added a fuel-efficient ECO+ mode to its cruise control system's ECO and ECO Off modes. ECO+ is set as the default when the engine starts, and drivers can then switch between the three modes depending on how much power they need.

- **Long-lasting engine oil and tires**

The new Quon trucks run on low-viscosity engine oil that helps preserve engine life, and are fitted with low rolling resistance tires that realize better fuel efficiency.

#### New truck models compliant with Euro 5 vehicle emission standards

In September 2021, UD Trucks released Quester heavy-duty and Croner medium-duty truck models that comply with the Euro 5 vehicle emission standard for the European Union. Now available in major markets around the world,

these new models boast features that improve uptime and fuel efficiency, optimize the total cost of ownership for users, and help lower environmental impacts.

UD Trucks has released these new models in emerging markets, which have been rushing to adopt more stringent emission standards in response to worsening air quality caused by industrialization and rapid economic growth, as well as to climate change. Since the Euro 5 standard requires NOx emissions to be reduced by 43% compared with the Euro 4 standard, these Euro 5 compliant trucks will benefit efforts in these markets to tackle environmental issues and reduce related risks.

Besides complying with the Euro 5 standard, these Quester and Croner models offer substantially higher fuel efficiency because they are equipped with the Company's selective catalytic reduction system, which is highly regarded as the world's first such system for purifying exhaust gases. They also come with Nenpi Coach, a system that provides drivers with real-time advice on how to maximize fuel efficiency and optimize driving techniques.



From left, Croner and Quester model trucks

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## Sustainability Activities

### Improving operational efficiency for customers

#### Deploying vehicle telematic data to minimize vehicle downtime

Trucks are used for over 90% of all goods transported inside Japan on a tonnage basis. From that perspective, society depends on UD Trucks to help its customers keep their trucks up and running.

Toward this end, the Company deploys its original telematics service to facilitate safe truck operations for customers. Through this service, the Company collects and analyzes real-time data transmitted automatically via a telematics system installed inside the vehicle, and remotely provides users with these diagnostic results to help them operate their trucks safely. The data includes information on the vehicle's status, engine condition, fuel consumption, and location. In the event of a breakdown, UD Trucks promptly verifies the truck's condition and informs the driver of the nearest dealer, thereby minimizing vehicle downtime. The service also provides users with a fuel efficiency report, a useful tool for facilitating more fuel-efficient driving.

In addition, UD Trucks has been using various types of data collected from the trucks for the purpose of preventative maintenance. By identifying signs of potential vehicle breakdowns and averting such problems from occurring in advance through preventative maintenance, the Company aims to reduce unexpected breakdowns to maximize uptime.

### UD Road Support

A one-stop service for customers provided by the Company's call centers, the UD Road Support team is available 24 hours a day, 365 days a year, to immediately respond to enquiries and requests from truck drivers. If a truck breaks down on the road or has an accident, the team checks the vehicle's condition using data transmitted

in real time via the Company's telematics service, and shares the information with a mechanic from a dealer nearest to the vehicle. Call center staff then promptly dispatch the mechanic to repair the vehicle, and provide necessary information to the truck driver, such as the estimated time of arrival of mechanic.

#### Cold weather tests

Commercial trucks are essential for keeping society moving, so they must be durable and dependable enough to run in practically any environment. From this standpoint, UD Trucks strives to supply vehicles that consistently perform well on the road and can hold up under extreme weather and road conditions. To ensure this level of durability, the Company has been testing its vehicles in extremely cold weather since 1985. The tests are carried out every year from January to March in Hokkaido, Japan's northernmost region, in cooperation with the city of Kitami.

The tests are designed to verify that a truck can operate dependably in an extremely cold environment, where temperatures of  $-20^{\circ}\text{C}$  are not uncommon. The test results are then used to improve vehicle safety and operability. A wide range of factors are evaluated, including the truck's ability to safely start, run, and maneuver on a winding course in a cold area, the truck's operational status after been covered in water in sub-zero temperatures, and

its ability to start moving and operate on slippery road surfaces. The heating system's operability when the truck is covered in snow during freezing temperatures, and the performance of the engine and exhaust gas purifier system under low temperatures are also verified.

By checking and collecting data on these items every year, UD Trucks is working to develop highly reliable vehicles that customers can trust, even in the harshest winter conditions.



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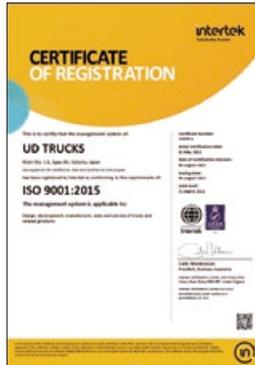
Better for Business

## Sustainability Activities

### Quality

#### ISO 9001 certification acquired

UD Trucks complies with the ISO 9001 international standard for quality management systems. The Company's Manufacturing Division acquired ISO 9001 certification in 2002, followed by the Product Development Division in 2016. Both divisions completed the transition to the revised ISO 9001:2015 standard in 2018. Outside Japan, the certification has been acquired by the Bangkok Plant in Thailand and the Pretoria Plant in South Africa. All certified workplaces thoroughly conduct a plan-do-check-act (PDCA) cycle to continuously raise quality in accordance with the standards.



#### Internal and external audits of quality management

As a rule, UD Trucks conducts an internal audit of its quality management system every year to ensure that it functions effectively. During the audits, a team of qualified audit committee members verify and evaluate whether the system is being properly implemented and complies with company rules as well as relevant laws and regulations. Likewise, the quality management system is audited every year by a third party in order to maintain ISO certification.

#### Measures for promptly dealing with quality-related issues

To minimize the impact of quality-related issues for customers, UD Trucks has established a Quality Action Group spanning across departments involved in product development, manufacturing, and aftermarket services. The group is comprised of teams that handle troubleshooting at headquarters, teams that provide technical support at dealers and customers' sites, and branch office teams that directly respond to problems in their respective areas. These teams coordinate their efforts to quickly identify root causes and implement solutions. Through this arrangement, they promptly share quality-related information and respond to issues, ultimately leading to greater customer satisfaction.

In 2022, this organization was enhanced and consolidated into a single division tasked with overseeing quality management throughout the Company. This division is working to improve quality and monitor a broader scope of relevant operations with greater precision and speed.

#### Product development quality standards

UD Truck's Product Development Division has established its own standards for quality assessments. Based on these standards, the division specifies checkpoints at each stage of product development and confirms whether targeted levels of quality are achieved across a broad range of indicators, including a truck's performance, functions, durability, and reliability. This process not only ensures higher quality but also shortens the total time required for product development.

Recognizing the growing importance of promptly and

efficiently obtaining information relevant for quality control, UD Trucks has been using wearable cameras and utilizing various other digital devices to collect maintenance and repair data on vehicles with defects. The Company has also begun using business intelligence tools to digitize analytical processes, enabling it to more effectively identify quality issues.

#### Quality assurance in manufacturing

Based on UD Truck's own quality management procedures, the Manufacturing Division conducts daily inspections of procured parts and manufactured items to check for quality defects throughout the production process and ensure targeted levels of quality. Refined through continuous improvement over several years, these quality management procedures have been adopted by all UD Trucks production plants worldwide.

In recent years, the Company has begun deploying digital tools for equipment inspections that were previously performed manually. With these tools, facilities are monitored in real time and risks of breakdowns and malfunctions are assessed and analyzed in advance. Preventative maintenance and repairs are also carried out when necessary. As part of its preventative quality control practices, the Company has been improving the traceability of parts at both the manufacturing and transport stages.

## Sustainability Activities

### Improving the skills of aftermarket service staff

UD Trucks strives to maintain and raise the quality of its aftermarket services by organizing events that enhance the skills of staff handling repair work, parts procurement, and front-office duties at its dealers. Among these events, the Company's annual Uptime Conference provides aftermarket service staff across Japan with technical support and quality-related information about new products. At the event, best practices are shared and discussions held not only among staff on the front lines of aftermarket services, but also members from the Company's divisions in charge of product development, manufacturing, procurement, and logistics.

Another event is the UD Gemba Challenge, a skills competition for aftermarket service teams from around the world. Held every two years, the event spans over a period of about six months, during which team members learn and demonstrate practical skills that are frequently required on the job. By taking on new challenges, the participants gain new knowledge and technical expertise. In 2022, 2,161 employees of the UD Trucks Group worldwide participated in the competition.

### Recalls and servicing of defects

In the event of a vehicle defect that could potentially affect customer safety or the environment, UD Trucks promptly discloses all relevant information in accordance with guidelines issued by Japan's Ministry of Land, Infrastructure, Transport and Tourism.

#### Number of vehicle defects reported in Japan

	2019		2020		2021	
	UD Trucks	Volvo Trucks	UD Trucks	Volvo Trucks	UD Trucks	Volvo Trucks
Defects resulting in recall	10	5	8	1	17	1
Defects requiring improvement	0	0	0	0	0	0
Defects requiring servicing	3	2	0	1	3	3

## Supporting our customers

### Test drive events and workshops for female drivers

Amid a shortage of drivers in Japan's logistics industry, UD Trucks began holding test drive events and workshops for female drivers in 2017, with the aim of gaining direct feedback from women in the industry. While activities were suspended in 2020 and 2021 due to COVID-19, the Company held test drives and workshops in March 2022, attracting female drivers from all over Japan. The participants drove a Quon heavy-duty truck, and were particularly impressed by UD Active Steering, which helps reduce driver fatigue and improve safety, as well as the ESCOT-VI electronically controlled automatic transmission.

In the workshops, the participants discussed various topics, including diversity and working conditions in the logistics industry, and the future development of trucks and equipment. Female engineers from UD Trucks also joined the discussions.

By applying its leading-edge technologies to develop trucks that are safe and easy to drive for women and new drivers alike, UD Trucks aims to help increase the number of drivers in the industry by promoting working conditions that are welcoming for anyone, regardless of gender or age.



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## Sustainability Activities

### Eco-driving and safe-driving seminars

UD Trucks has been holding eco-driving and safe-driving seminars for truck drivers since 2007. The eco-driving seminars are designed to equip drivers with practical skills and knowledge about how to improve fuel efficiency while driving. During the seminars, truck drivers learn and practice fuel-saving techniques for maneuvering and decelerating. The seminars also make use of the Company's telematics service, a wireless communications system for collecting and analyzing data on a truck's location and movements, enabling evaluations of vehicle speed, gear changing, and other driving-related factors. Participants have found this to be very insightful and helpful for understanding their driving habits and making improvements accordingly.

The safe-driving seminars cover a broad range of topics, including safe management systems for transport operators, the dangers of driving under the influence of alcohol, blind spots, preventing common accidents, defensive driving, and reducing human error. The programs combine lectures with hands-on training so that drivers can immediately acquire practical skills. Videos of actual accidents taken with drive recorders are also used to give participants a better sense of how accidents happen.

#### Number of seminars held annually and participants

	2019		2020		2021	
	Seminars	Participants	Seminars	Participants	Seminars	Participants
Eco-driving seminars	70 locations in Japan	1,119	10	288	29	464
Safe-driving seminars	146	4,264	46	2,053	119	7,012

UD Trucks has been holding its eco-driving and safe-driving seminars online since 2020 as part of its measures to limit group discussions and events in order to prevent the spread of COVID-19.

### Prompt customer service

UD Trucks has established a customer service call center made available with a toll-free telephone number for customers to ask questions, provide feedback and make requests. It has also prepared a guidebook explaining responses to all foreseeable inquiries to help the center's phone operators effectively deal with customer inquiries. The center's procedures and operations are regularly reviewed to ensure that it continues to provide prompt and helpful customer service. In 2021, the center handled a total of 3,215 calls compared with 3,917 in 2020.

### Partnering with independent dealers

#### Support for maintenance and repair staff

In addition to its own network of dealers, UD Trucks supplies products and services to customers through six companies that operate a total of 32 independent dealerships in Japan. While respecting the corporate traditions and local business practices of each of these dealerships, UD Trucks works closely with them towards the common goal of improving customer satisfaction, and invites them to the same training programs and events as its own dealers to help their employees acquire more skills and expertise. Every year, many maintenance and repair staff from these independent dealerships participate in the Company's Uptime Conference and UD Gemba Challenge (see page 14).

Better for Logistics

**Better for the Planet**

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## Sustainability Activities

### Better for the Planet

UD Trucks is taking steps to significantly reduce CO<sub>2</sub> emissions and eliminate waste. Accordingly, the Company is making use of renewable energy sources and reducing the CO<sub>2</sub> footprint of its products and workplaces, while collaborating with suppliers to reduce environmental impacts across the entire value chain.



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## Sustainability Activities

### Towards decarbonization

#### Reducing CO<sub>2</sub> emissions across business activities

In line with its Better Life purpose, UD Trucks regards decarbonization as an important challenge and, therefore, takes proactive steps to reduce CO<sub>2</sub> emissions throughout its operations. Since its production plants, in particular, consume large amounts of energy, the Company has been streamlining manufacturing processes and centralizing production lines and equipment, to reduce overall energy usage and associated CO<sub>2</sub> emissions. To accelerate these efforts, the Company's Ageo Plant has been purchasing electricity from renewable sources, installing LED lighting systems equipped with motion detectors for automatically turning off lights, switching to electric vehicles and forklifts while decreasing the total number of its vehicles, and upgrading to more efficient equipment in general. Outside Japan, the Bangkok Plant has recently installed solar panels on its rooftop.

Looking ahead, as a member of the Isuzu Group, UD Trucks aims to reduce CO<sub>2</sub> directly emitted from its business activities to zero by 2050 in accordance with Isuzu Environmental Vision 2050.

#### Purchasing electricity from renewables

The Ageo Plant has been purchasing electricity derived from renewable energy sources since May 2019, and increased the amount from these sources in 2020 when it replaced electricity previously supplied by its cogeneration power equipment. By using electricity from renewables instead of non-renewable sources, the plant effectively

reduced its CO<sub>2</sub> emissions by 1,215 tonnes in 2020 and another 1,100 tonnes in 2021.

In addition, the Company's training center, which is adjacent to the Ageo Plant, concluded an agreement in September 2022 to purchase electricity entirely from net zero carbon sources.

#### Installing LED lighting and efficient equipment

The Ageo Plant began replacing obsolescent lighting equipment with LED lighting systems in 2017. In 2021, it installed around 2,500 LED lights and removed about 200 fluorescent and other aging lights following a review of its lighting layout.

In addition, the Ageo Plant upgraded a compressor to a more efficient model in December 2021, thereby improving the efficiency of its operations.

#### Adopting on-site solar power

In June 2022, UD Trucks Thailand installed a solar power system on the rooftop of its Bangkok Plant with capacity to generate 1,477 megawatt hours annually. Consequently, around 25% of all energy consumed by the plant now comes from renewables, and its CO<sub>2</sub> emissions can be reduced by approximately 700 tons per year.



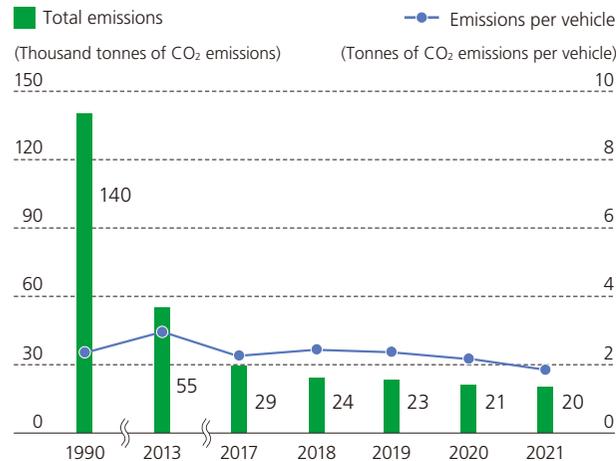
#### Saving energy with heat reflective paint

In April 2022, solar heat reflective paint was applied to the roof and exterior walls of the Gunma Parts Distribution Center, the largest of the Company's four parts distribution facilities in Japan. As a result, the indoor temperature is about 7.5°C cooler during the summer, allowing the center to significantly reduce energy for air conditioning while keeping the temperature below 30°C.

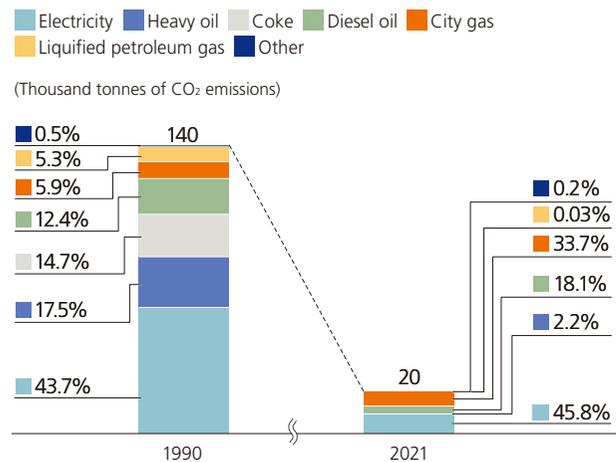


## Sustainability Activities

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



### CO<sub>2</sub> emissions by energy source



### Scope of operations

Amounts shown in the graph are combined results from the Ageo Plant and Gunma Parts Distribution Center from 2018 to 2021, and include results from other facilities up to 2017

### Reducing CO<sub>2</sub> emissions over the product life cycle

UD Trucks assesses and works to reduce CO<sub>2</sub> emissions across the entire life cycle of its vehicles, from raw materials procurement through to the disposal and recycling of parts and components. The Company places great importance on these initiatives in consideration of the fact that commercial-use trucks account for about 7% of total CO<sub>2</sub> emissions from all industries in Japan, according to the Ministry of Land, Infrastructure, Transport and Tourism, as well as the Japanese government's goal to reduce emissions under its Green Growth Strategy.

### Life cycle assessments

UD Trucks has been contributing to the formulation of guidelines on life cycle assessment (LCA) methods (including calculation methods) in Japan's auto industry as a member of a subcommittee set up by the Japan Automobile Manufacturers Association in 2021. The Company also set up its own LCA working group comprised of members from relevant divisions. Tasked with raising and solving issues, this group has been meeting periodically to review progress, share information, and specify responsibilities while collecting and analyzing data.

### Measures for reducing CO<sub>2</sub> emissions at each stage of the product life cycle

#### • Development and design

Recognizing that the majority of CO<sub>2</sub> emissions occur during the usage stage of its trucks, UD Trucks has been focusing on leading-edge technological development aimed at reducing the emissions at this stage of the product life cycle.

### ▶ Developing technologies for improving fuel efficiency

The fuel that trucks burn is not only a major expense for commercial vehicle operators but also a source of CO<sub>2</sub> emissions, which is a major contributing factor to climate change. For that reason, UD Trucks has been improving the fuel efficiency of its trucks for decades, and regards these efforts as one of its most important environmental initiatives. In Japan, trucks and buses will need to improve their fuel efficiency by an average of 13.4% by 2025 under new fuel efficiency standards enacted in 2019 (compared with the standards introduced in 2015). In July 2022, UD Trucks introduced an 11-liter engine-powered Quon heavy-duty truck model that already meets these new standards, demonstrating its commitment to better fuel efficiency going forward.

**Related** Improving the environmental performance of Quon heavy-duty trucks (see page 11)



The Quon's engine contributes to better fuel efficiency

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## Sustainability Activities

### Major technologies applied in heavy-duty trucks

<b>Vehicle</b>	<ul style="list-style-type: none"> <li>• Fuel Coach system for advising drivers on fuel-efficient driving</li> <li>• Foretrack function for predicting the road ahead based on scanned data</li> <li>• Aerodynamic designs including front bumper-fitted air dams and newly developed wind deflectors</li> </ul>
<b>Engine</b>	<ul style="list-style-type: none"> <li>• Newly designed combustion chambers</li> <li>• Multi-stage fuel injection system</li> <li>• Electronically controlled variable-speed oil pump</li> <li>• Designed to use less engine oil</li> </ul>
<b>Power train</b>	<ul style="list-style-type: none"> <li>• Direct-shift transmission for low cargo-bed trucks</li> <li>• ECO+ mode cruise control</li> </ul>

### ► Developing next-generation technologies

UD Trucks develops its products in accordance with its roadmap for innovation, "Fujin & Raijin. Vision 2030.," launched in 2018. One of the goals of this roadmap is to mass produce electric trucks by 2030. Therefore, the Company has been conducting research on hybrid electric, battery electric, and fuel cell electric vehicles. In addition to vehicle electrification, UD Trucks is also studying internal combustion engines powered by low-carbon fuels. In these ways, it is exploring diverse solutions for decarbonization in preparation for anticipated market trends and changes in environmental regulations in the countries where it sells vehicles.

### • Logistics

Since leaving the Volvo Group in 2021, UD Trucks has been building its own logistics network with a focus on reducing CO<sub>2</sub> emissions from the shipment of parts and materials from suppliers to its production plants in Japan, Thailand, and South Africa, and from the transport of its new vehicles and parts to dealers. Toward this end, the Company has been working to shorten distances from suppliers' facilities, improve the efficiency of shipping methods, and optimize shipments according to cargo volume.

### • Sales and aftermarket services

UD Trucks organizes eco-driving seminars for truck drivers in every region of Japan on a regular basis. The seminars help drivers acquire practical skills and awareness of how to maximize fuel efficiency when on the road.

**Related** [Eco-driving and safe-driving seminars](#) (see page 15)

## Sustainability Activities

### Waste reduction

#### Reducing waste at the production and disposal stages

The final disposal of a truck at a dealer's site accounts for the largest amount of waste matter during the product life cycle. For that reason, UD Trucks has established its own waste-management system and created waste sorting management standards for all of its dealers in 2014. In accordance with the standards, each dealer has installed disposal facilities and properly sorts waste materials during truck disassembly and disposal. In addition, the Company delivers service parts in returnable packages to dealers to facilitate the reuse of materials, and designs the packaging materials as simply as possible to help reduce waste.

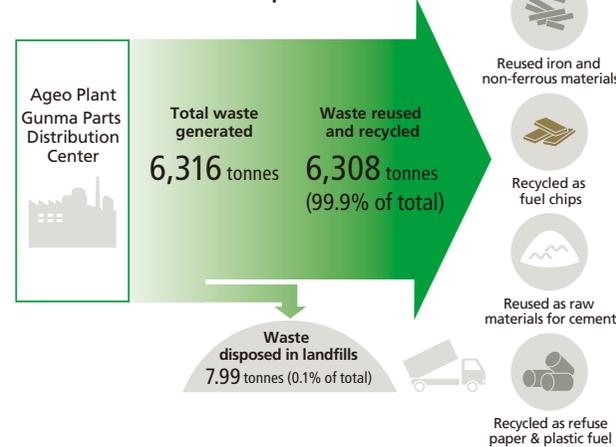
UD Trucks looks for ways to make disassembly work easier and use resources more efficiently starting from the product development stage. For example, bumpers are designed to be simply disassembled into three components, headlights can also be easily dissembled into interchangeable lens and LED units, and fenders are made from recyclable materials.

At the production stage, UD Trucks works to reduce and recycle waste matter with the goal of minimizing the amount of waste it disposes in landfills. As a result of these efforts, it has kept the proportion of landfill waste to total waste generated at this stage under 1% for several years.

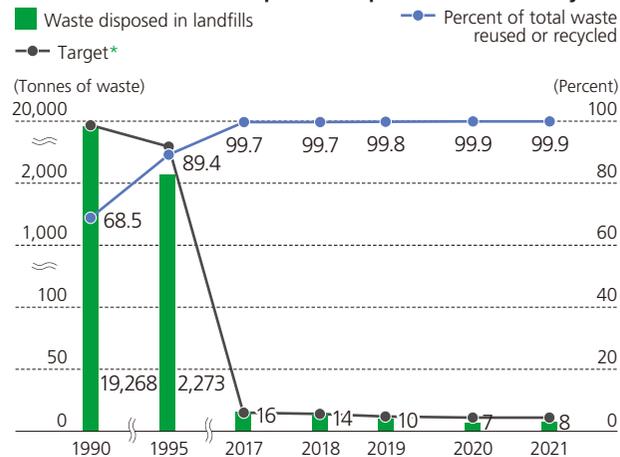
Aiming to improve its waste management system, UD Trucks partnered with a company that specializes in waste disposal in April 2015. Through this partnership, UD Trucks has been using only highly reputable disposal firms, administering and submitting all necessary reports to government agencies, and keeping records on the amount

of waste disposed in an effort to strictly comply with relevant laws and regulations.

#### Total waste reused and disposed in 2021



#### Amount of total waste disposed and percent reused or recycled



\* UD Trucks began setting ambitious targets from 2004 following initiatives for recycling and reducing waste implemented by the Japan Automobile Manufacturers Association.

#### Compliance with the Automobile Recycling Law

UD Trucks collects automobile shredder residue, air bags, and fluorocarbon from end-of-life vehicles for recycling, in accordance with Japan's Automobile Recycling Law, which went into effect in 2005.

#### Scope of operations

Amounts shown in the graph are combined results from the Ageo Plant and Gunma Parts Distribution Center from 2018 to 2021, and include results from other facilities up to 2017.

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## Sustainability Activities

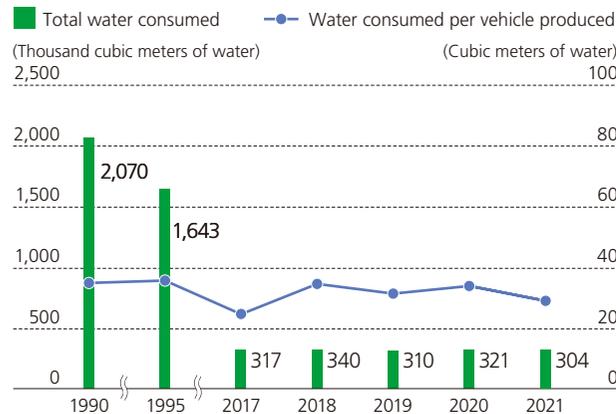
### Conserving water and preventing pollution

#### Reducing water consumption and strictly managing water and air pollutants

UD Trucks carries out routine measures to reduce the amount of water used in its operations. For example, it periodically inspects and cleans water-consuming equipment, checks for leaks, and promptly repairs equipment if leaks are discovered. It also sets company-wide goals for groundwater conservation in compliance with ISO 14001 standards, and monitors progress towards achieving those goals.

At the same time, the Company implements strict measures to prevent pollution of the air and nearby bodies of water. Specifically, it restricts the discharge of pollutants at levels lower than regulatory requirements, and regularly cleans and maintains relevant equipment.

#### Water consumption



**Scope of operations:** Amounts shown in the graph are combined results from the Ageo Plant and Gunma Parts Distribution Center from 2018 to 2021, and include results from other facilities up to 2017

#### Pollutants discharged by the Ageo Plant over a 12-month period<sup>1</sup>

Water pollutants	Items measured	Measurement unit	Regulatory limit <sup>2</sup>	Highest amount measured	Lowest amount measured	Average amount
	Total wastewater	m <sup>3</sup> /Day	—	8,026	0	893
pH	—	5.8–8.6	7.9	6.9	7.4	
Biochemical oxygen demand	mg/L	25 (20)	4.6	1.4	2.3	
Chemical oxygen demand	mg/L	160 (120)	7.5	2.6	4.4	
Suspended solids	mg/L	60 (50)	<5	<5	<5	
n-hexane	mg/L	5	<2.5	<2.5	<2.5	
Phosphorous	mg/L	16 (8)	0.6	<0.1	0.2	
Nitrogen	mg/L	120 (60)	2.9	<1	1.6	
Zinc	mg/L	2	0.2	<0.1	0.1	
Fluorine and compounds	mg/L	8	<0.8	<0.8	<0.8	

Air pollutants	Emitting equipment	Items measured	Measurement unit	Regulatory limit	Highest amount measured	Lowest amount measured	Average amount
	Drying furnace		Nitrogen oxide	ppm	230	16	7
Particulate matter			g/m <sup>3</sup> N	0.2	0.002	<0.001	0.001

#### Pollutants discharged by the Gunma Parts Distribution Center over a 12-month period<sup>1</sup>

Water pollutants	Items measured	Measurement unit	Regulatory limit	Highest amount measured	Lowest amount measured	Average amount
	Total wastewater	m <sup>3</sup> /Day	—	15.8	0	4.0
pH	—	5.8–8.6	7.2	6.3	6.7	
Biochemical oxygen demand	mg/L	80	7.1	1.3	3.4	
Suspended solids	mg/L	20	4.0	1.0	2.3	
n-hexane	mg/L	1	<0.5	<0.5	<0.5	

Air pollutants	Emitting equipment	Items measured	Measurement unit	Regulatory limit	Highest amount measured	Lowest amount measured	Average amount
	Three heavy oil boilers		Nitrogen oxide	ppm	180	66	57
Particulate matter			g/m <sup>3</sup> N	0.2	<0.001	<0.002	<0.001

Notes: 1. The pollutants were measured between April 2021 and March 2022. 2. Figures in parentheses are daily average limits.

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## Sustainability Activities

### Chemical substance management

#### Managing chemicals contained in products

UD Trucks strictly manages the chemical substances used in its products, specifically those included in the Global Automotive Declarable Substance List, in accordance with industry standards and laws concerning the production, import, management, and recycling of chemical substances. The Company manages such substances both before and during manufacturing.

At the product development and design stage, UD Trucks determines what chemical substances will be used at the manufacturing stage, including chemicals used by suppliers. It then registers relevant data with the International Material Data System, a database jointly managed by automobile manufacturers worldwide.

At the production stage, UD Trucks reports to the government each year on its usage of chemicals subject to Japan's Pollutant Release and Transfer Register, which is a system for restricting and controlling the discharge of designated chemicals into the environment. The Company also makes efforts to replace hazardous chemicals with less harmful alternatives, and properly comply with revisions to relevant laws or regulations.

#### Regulated chemical substances handled at the Ageo Plant in 2021 (Substances included in Japan's Pollutant Release and Transfer Register)

Kilograms per year

Regulation number	Chemical substance	Total volume handled	Discharged			Transferred as waste matter	Disposed or treated	Recycled	Included in finished products
			to atmosphere	to water	to soil				
53	Ethylbenzene	16,306	6,619	0	0	0	2,071	7,568	0
80	Xylene	29,540	9,378	0	0	0	2,237	17,659	0
296	1,2,4-Trimethylbenzene	2,515	1,474	0	0	0	706	0	0
297	1,3,5-Trimethylbenzene	3,909	542	0	0	0	84	3,223	0
300	Toluene	6,661	4,930	0	0	0	1,209	102	0

#### PCB contaminated items stored at the Ageo Plant in 2021

Weight (kilograms)

	Items with high concentrations <sup>1</sup>	Items with low concentrations <sup>2</sup>	Total
Ballasts	19,330	0	19,330
Transformers	0	140	140
Crossing gates	0	120	120
Insulating oil	0	27	27
Wiping cloths and other contaminated materials	0	213	213
<b>Total</b>	<b>19,330</b>	<b>500</b>	<b>19,830</b>

Notes: 1. Must be disposed of by March 31, 2023, under law.

2. Must be disposed of by March 31, 2027, under law.

## Sustainability Activities

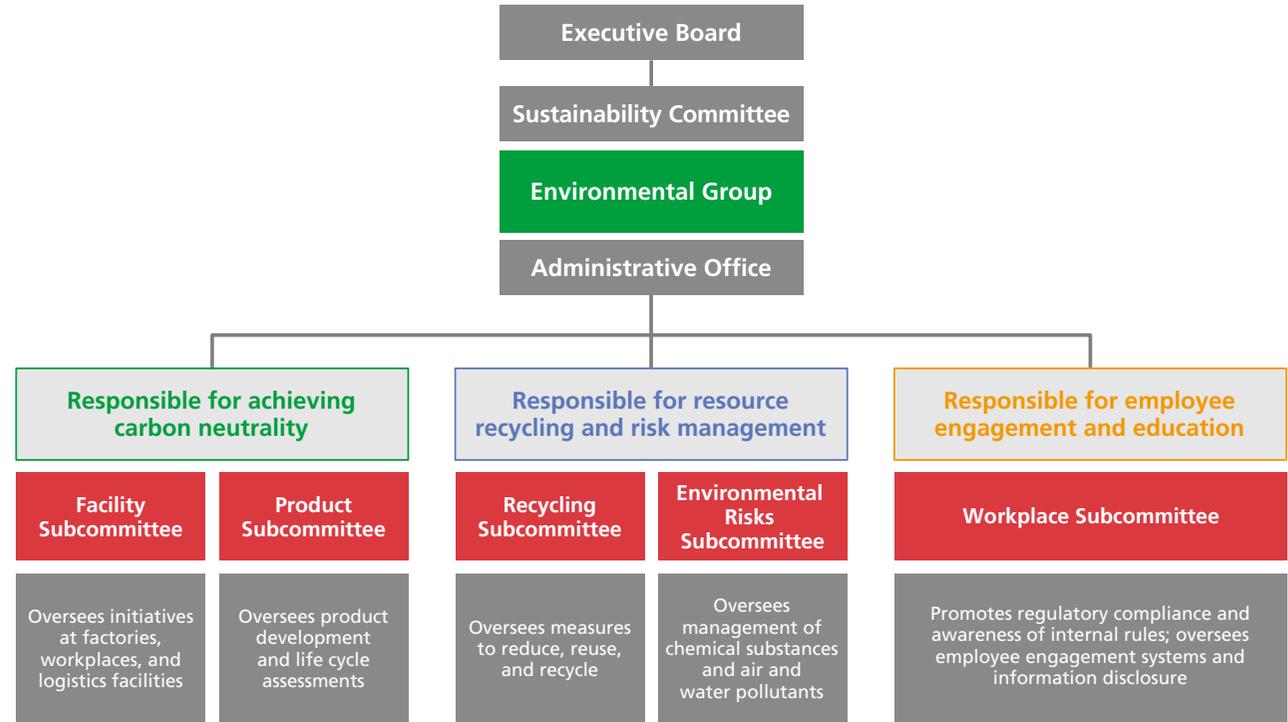
### Environmental management system

#### Environmental policy

At UD Trucks, environmental activities are an important part of our efforts to provide logistics solutions that help communities flourish, and to fulfill our Better Life purpose. Our environmental activities are based on the following principles.

- We shall work to contribute to sustainability and the success of our customers by continually reducing environmental impacts across the entire product life cycle.
- Each of us shall responsibly consider the environment wherever we conduct our business, and build trust with stakeholders based on our values.
- All of us shall work together to raise awareness of environmental impacts and regulations, help build a circular economy, and enhance the Company's environmental track record.

#### Environmental management organization



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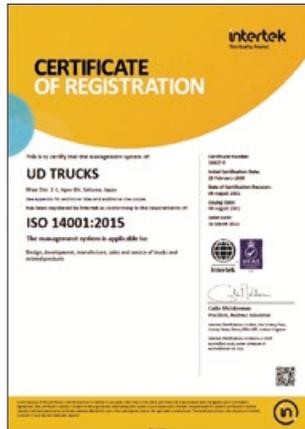
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## Sustainability Activities

### ISO 14001 certification acquired group-wide

UD Trucks complies with the ISO 14001 international standard for environmental management systems. The Ageo Plant first acquired ISO 14001 certification in 1998, followed by the Company's Product Development Division in 2002, and other divisions thereafter. All certified workplaces then completed the transition to the revised ISO 14001:2015 standard by 2018. Outside Japan, the certification has been acquired by the Bangkok Plant in Thailand and the Pretoria Plant in South Africa. Leveraging the benefits of this group-wide environmental management system, UD Trucks is currently working to achieve the objectives and targets of its environmental action plan.

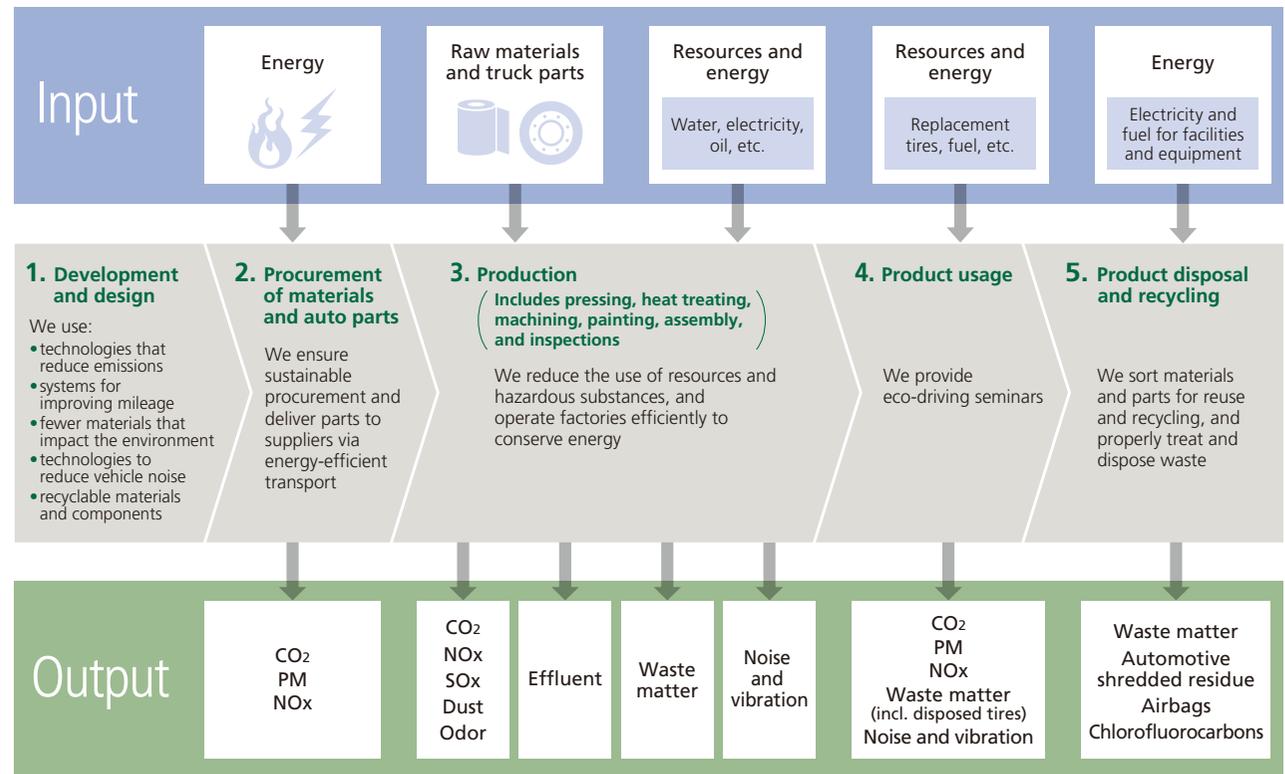


### Auditing of environmental management system

As a rule, UD Trucks conducts an internal audit of its environmental management system every year to ensure that it functions effectively. During the audits, a team of qualified audit committee members verify and evaluate

whether the system is being properly implemented and complies with company rules as well as relevant environmental laws and regulations. Likewise, the environmental management system is audited every year by a third party in order to maintain ISO certification.

### Material flow



The main environmental impacts of trucks over the entire product life-cycle are due to emissions of CO<sub>2</sub> and exhaust gases containing particulate matter (PM) and nitrogen oxide (NO<sub>x</sub>) at the product usage stage.

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## Sustainability Activities

### Better for People

UD Trucks strives to help employees improve their well-being while fostering a workplace culture that values inclusion, personal development, and a healthy work-life balance. All employees are encouraged to make the most of their abilities and given the opportunity to grow professionally.

UD Trucks also works closely with stakeholders in a wide range of community outreach initiatives, with a focus on road traffic safety seminars for local schools and disaster relief.



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## Sustainability Activities

### Fostering a workplace in which inclusion is valued and individuals can make the most of their abilities

#### Promoting diversity and inclusion in the workplace

For UD Trucks, the diversity of its employees is what makes the Company unique and will be crucial for its growth journey going forward. It aims to cultivate a culture in which each employee can play a part in making changes that ultimately improve the workplace. Toward this end, the Company maintains a fair and inclusive work environment by raising awareness among employees about all forms of discrimination, including those based on age, ethnicity, gender, sexual orientation, and religion.

To promote diversity and inclusion, the Company has been holding D&I Week every year since 2014, which features many events aimed at raising awareness. In 2021, events were held remotely due to the COVID-19 pandemic. Among them, female executives and employees held virtual panel discussions, and live sessions from various countries were streamed online to all employees worldwide.

#### Fostering an inclusive workplace regardless of gender identity and sexual orientation

To promote gender equality and the empowerment of women, a network has been created inside the Company to support female employees by organizing events, dialogues, and lectures. In 2022, an online panel discussion on LGBTQ+ issues was held during D&I Week, with 522 employees attending globally. The Company's internal rules and regulations have also been updated with gender-neutral language to make them more inclusive.



#### Promoting employment of people with disabilities

To provide an inclusive and fair working environment for people with physical and intellectual disabilities, UD Trucks holds related training sessions and seminars aimed at deepening the understanding of all employees. For example, webinars about hiring people with disabilities, including one entitled, "Creating a work environment that is inclusive of people with disabilities," were held in 2020 and 2021, with a total of 690 employees participating. In May 2022, a sign language class taught by employees with hearing impairments was held at the Company's headquarters.



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## Sustainability Activities

### Promoting job-based employment

In 2015, UD Trucks abolished the seniority system traditionally practiced in Japan and adopted a job-based employment system with the aim of promoting diverse work practices. At the same time, the Company began recruiting new graduates according to specific job positions. In these ways, management has been more

accurately matching the abilities and career plans of employees with their actual work.

The Company has also been using its internal job posting system, which it introduced in 2011, to provide fair employment opportunities to all employees. This transparent system allows individuals to pursue their career aspirations regardless of their region, workplace, or personal attributes.

### Fostering results, growth, and trust through dialogue

At UD Trucks, leaders and team members regularly engage in dialogue about a wide range of matters, such as setting work priorities, confirming progress, proposing improvements, and developing skills. Through such discussions and feedback, workplaces not only achieve results but also foster personal growth and build trusting relationships.

The Company has also been taking steps to facilitate internal communication. During the COVID-19 pandemic, interactive meetings were regularly held online, and a new digital platform was launched to allow all employees to browse, send, and share necessary information anywhere and anytime. Operational systems have also been made accessible by smartphones and tablets.

#### Employee data (as of April 1, 2022)

##### In Japan

- Number of employees **6,146**  
5,675 males 471 females
- Number of managers **983** males **60** females
- Numbers of hires in 2021  
New graduates **208** Mid-career **195**
- Number of nationalities **31**

Australia, Bangladesh, Brazil, Canada, China, England, France, Germany, India, Indonesia, Ireland, Italy, Japan, Malaysia, Mongolia, Morocco, Myanmar, Nepal, Pakistan, Russia, Senegal, Singapore, South Korea, Sri Lanka, Sweden, Thailand, the Philippines, Ukraine, United States, Uzbekistan, and Vietnam

##### Overseas

- Number of employees **1,976**  
1,474 males 502 females
  - Number of nationalities **41**
- Australia, Bangladesh, Belgium, Bosnia, Brazil, Canada, China, Columbia, Egypt, England, France, Germany, India, Indonesia, Iran, Ireland, Italy, Japan, Malaysia, Mongolia, Morocco, Myanmar, Nepal, Netherlands, Pakistan, Peru, Portugal, Russia, Senegal, Singapore, South Africa, South Korea, Sri Lanka, Sweden, Thailand, the Philippines, Ukraine, United Arab Emirates, United States, Uzbekistan, and Vietnam

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## Sustainability Activities

### Helping employees continuously learn and grow

Deploying its ample training facilities and training management system, UD Trucks provides a wide range of training programs to facilitate active learning and self-development among employees, with an emphasis on four key areas: leadership, business acumen, new technology, and entrepreneurship. This enables employees to develop and refine their expertise and capabilities while acquiring the skills they need not only for their current jobs but also for the future.

#### Leadership development programs

UD Trucks offers a variety of programs for developing leaders, including programs tailored to levels of ability and years of service, as well as programs designed for specific leadership roles. Recently, employees from Japan, China, India, Thailand, Singapore, the United Arab Emirates, and South Africa have been participating in self-discovery leadership program based on the Company's global self-directed learning method.

## Occupational health and safety

### Measures to prevent the spread of COVID-19

UD Trucks places the highest priority on ensuring the health and safety of its employees. Since the first outbreak of COVID-19 in 2020, the Company has initiated various measures to help employees stay safe and prevent infections. Among them, it has frequently monitored the health of employees, mandated mask wearing and use of hand disinfectant, and prohibited close-contact situations and crowded gatherings in poorly ventilated spaces. To help enforce these rules, the Company has issued guidelines on workplace behavior and COVID-19 countermeasures. Based on the guidelines, body temperature is checked when employees enter buildings, masks are mandatory in offices and cafeterias, seats are adequately spaced, transparent partitions have been set up between desks, door handles are regularly disinfected, and limits are set on the number of people using meeting rooms. The Company has encouraged employees to take advantage of the telecommuting system it had in place so they can work safely from home.

Beginning in July 2021, UD Trucks has been offering vaccines onsite to employees working at headquarters and workplaces in the greater Tokyo area. It has also been providing support for employee vaccinations in other countries where it operates, including South Africa, Thailand, India, and China.

### Helping employees manage stress

UD Trucks routinely provides stress assessments in the workplace to help employees manage stress. Employees are encouraged to meet with physicians or counselors if their results indicate high stress levels, and their job responsibilities may be reduced based on the advice of the physicians.

### Maintaining flexible workplaces

UD Trucks has put in place various systems and policies designed to help employees maintain a healthy balance between their working and personal lives. They include a flex-time system along with childcare and nursing leave systems. More recently, the Company initiated a telecommuting system that places no limits on the number of days employees can work at home. It has also established an anti-harassment policy and related e-learning program. Furthermore, UD Trucks is making ongoing efforts to reduce and eventually eliminate overtime work.

#### Number of employees taking maternity, childcare, and nursing care leave in 2021

	Number of employees		Actions after taking leave
	Men	Women	
Maternity leave		22	22 took childcare leave after maternity leave
Childcare leave	Men	7	2 retired
	Women	22	3 retired
Nursing care leave		0	

## Sustainability Activities

### Engaging with communities

#### Road safety instruction for elementary school students

In Saitama, where UD Trucks is based, traffic accident prevention is regarded as a major issue, especially since the prefecture has one of the highest numbers of fatal road accidents involving medium- and heavy-duty trucks in Japan. Therefore, improving vehicle safety and raising awareness of traffic safety among pedestrians are essential measures for reducing road accidents.

Recognizing its responsibility as a truck manufacturer to help prevent traffic accidents, UD Trucks has been conducting a traffic safety program for elementary school children in the city of Ageo, Saitama, since 2016. The Company makes the most of its expertise, facilities, and employees, who help run the program, and develops its own curriculum with assistance from the city's education board regarding teaching methods, materials, and targeted school grades. The program is unique for having the school children participate in activities that use actual heavy-duty trucks to demonstrate their blind spots and the space required when turning corners (specifically the different arcs taken by the front and rear wheels). The children are also given an opportunity to sit in the driver's seat of a truck to observe what drivers can actually see outside. Teachers leading the activities have commented that the children have become more aware of safety by seeing the trucks firsthand, and sitting in the driver's seat was a valuable experience for them.



#### Introducing disaster relief trucks

Natural disasters such as floods, landslides, and droughts are expected to become more severe and frequent due to climate change caused by global warming. In Ageo, Saitama, where UD Trucks is based, employees witnessed a flood first-hand in 2019 when a major typhoon caused the nearby Arakawa River to overflow, resulting in serious damage and the evacuation of around 1,000 residents. The Company then began considering how it could use its property, products, and human resources for disaster relief measures and reconstruction.

This led the Company to modify a Kazet light-duty truck

into a disaster relief vehicle that can provide evacuees with private spaces, which are difficult to secure in community evacuation centers during times of disaster. Indeed, evacuees are said to experience additional mental and physical strain due to a lack of privacy. The truck's cargo space contains two private rooms: an infant care room where mothers can change diapers and breastfeed, and a room for caring for the elderly and people with physical disabilities. The rooms are equipped with an air conditioner, refrigerator, and sink, with electricity provided by a solar panel, diesel generator, and high-capacity battery. The electricity can also be used to charge mobile phones and batteries, which are essential for emergency communications.

In addition, the Company provides a flat-bed truck for transporting disaster preparation supplies, such as sandbags.



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## Sustainability Activities

### Sponsoring the Ageo City Half-Marathon

UD Trucks has been supporting the Ageo City Half Marathon as a local sponsor since 2013. Held every autumn, the marathon has long been a popular local event in the city, with over 7,000 runners participating each year. After being suspended for two years due to COVID-19, the race was held again in November 2022. UD Trucks offered original tumblers and cookies to children participating in the race, and distributed items to runners from its booth. It also provided three buses for runners to rest in after finishing their leg of the race. More than 70 employees ran in the 2022 marathon.



### Helping promote community-based sports

In 2022, UD Trucks acquired the naming rights for the Ageo Municipal Baseball Stadium, helping fund the city's plan to promote sports as a means to activate communities and improve quality of life for local residents. Recognizing that this plan aligns with its commitment to making life better for people in line with its Better Life purpose, the Company sought to acquire the naming rights.

Besides being used for local events, the stadium hosts the prefectural qualifiers for the annual National High School Baseball Championship and professional minor league baseball games, which many city residents attend. As the naming rights holder, the Company will work with the city government to explore new ways of using the facility to bring more dynamism to the community.



### Educating the next generation of leaders

UD Trucks has an academic partnership program with Sophia University in Tokyo. The program aims to provide opportunities for students to learn about the logistics industry and multinational corporations by observing how UD Trucks operates, and to assist them with their future career options. Students are also expected to broaden their outlook while appreciating the importance of logistics for society.

In the fall semester every year, employees of various nationalities from the Company give lectures in 14 classes, each focusing on a different topic such as product development, logistics, procurement, manufacturing, sales, legal affairs, and corporate finance. Classroom lectures resumed in 2022 after mainly being held online in 2020 and 2021 due to COVID-19. Along with these lectures, the program offers a summer internship and scholarships as means to support the students.

UD Trucks and Sophia University have been renewing their partnership program agreement every three years since the program started in 2014, attesting to the university's high evaluation of the program.



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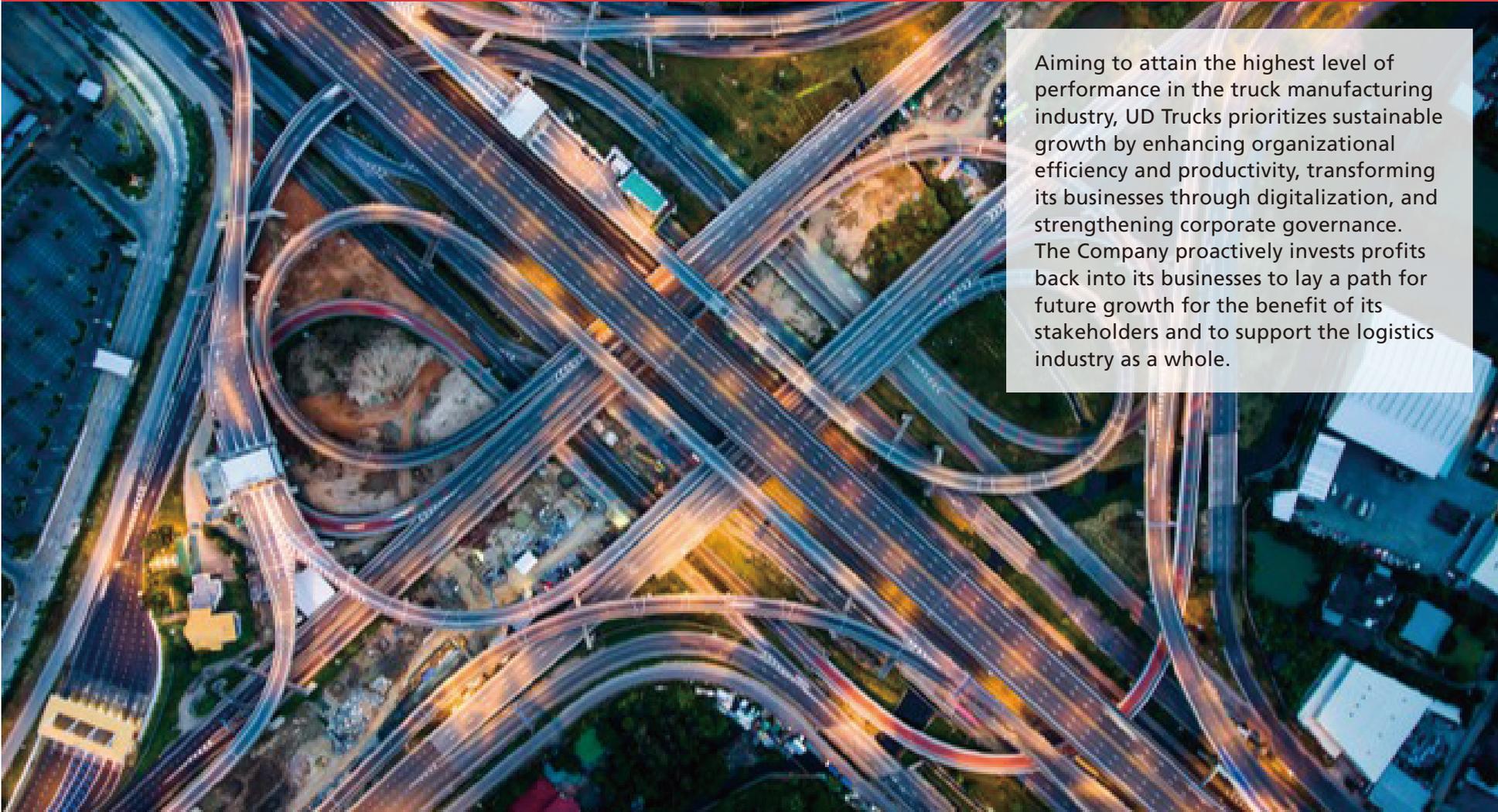
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## Sustainability Activities

### Better for Business



Aiming to attain the highest level of performance in the truck manufacturing industry, UD Trucks prioritizes sustainable growth by enhancing organizational efficiency and productivity, transforming its businesses through digitalization, and strengthening corporate governance. The Company proactively invests profits back into its businesses to lay a path for future growth for the benefit of its stakeholders and to support the logistics industry as a whole.

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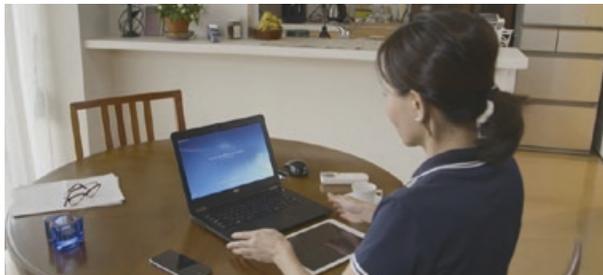
## Sustainability Activities

### Transforming businesses through digitalization

#### Promoting a digital transformation across all business activities

For UD Trucks, a digital transformation involves not just IT-related innovation, but also positive changes to its corporate culture as part of a broader business transformation. As such, a data-driven digital transformation is indispensable for advancements in logistics, higher operational efficiency and productivity, and improvements in workplace conditions. The Company has been investing in IT tools and making use of big data applications, thereby enabling its management to centralize, analyze, and facilitate the application of a wide range of data, from production planning and quality control to sales and services. This data has also been made available to employees as a means to generate new business ideas and stimulate dialogue between employees irrespective of rank or position.

In addition, UD Trucks has applied digital tools to set up a telecommuting system for its employees. This has bolstered the Company's ability to attract highly skilled workers from around the world, which is contributing to the diversity and capabilities of its workforce.



#### Using data to link the engineering and supply chains

UD Trucks is building a new system for accelerating data linkages between its engineering and supply chains. By pursuing product-related data applications and information sharing, the Company is aiming to enhance its engineering capabilities, which are crucial for manufacturing, while making its supply chain more resilient against various kinds of risks.

The engineering chain is said to account for about 80% of product costs and is a vital factor for product quality. Therefore, to raise efficiency and productivity at the product development and design stages, the Company created a digital model that integrates the Product Development Division's 3D CAD data and the Manufacturing Division's parts-related data. With the linking of this data, it is possible at the product development and design stages to detect potential problems early on, improve quality, and eliminate the need to redo processes at later stages of production.

The Manufacturing Division and Sales Division have also established a platform for centralizing data about production schedules, quality assurance, and the status of sales negotiations, enabling personnel from each division to access and share relevant product-related information.

To effectively respond to unexpected changes in the Group's operating environment, which is becoming increasingly difficult to predict, UD Trucks plans to create a system for its organizations and subsidiaries to share important data. Accordingly, the Group will broaden its use of data with the adoption of Internet of Things (IoT) platforms at factories and the application of augmented reality (AR) solutions in product development, manufacturing, sales, and aftermarket services. In cooperation with its suppliers and customers, UD Trucks will continue using data to seamlessly link and facilitate communication between the engineering and supply chains, with the goals of establishing a resilient supply chain and a customer-oriented business model that creates new value.



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## Sustainability Activities

### Digitalizing aftermarket services

As part of its efforts to raise the efficiency and productivity of aftermarket services, UD Trucks has integrated its customer relationship management (CRM) and enterprise resource planning (ERP) into a new system called UD Dynamics. The system was introduced at its customer centers throughout Japan from April 2022. UD Dynamics is designed to transform and digitalize aftermarket service workflows. At the same time, the Company intends to help customers increase productivity and uptime by using the system to reduce their waiting times, provide services more efficiently, expand maintenance service capacity, access relevant data in real time, and optimize servicing of vehicles that have broken down on the road. Looking ahead, UD Trucks plans to use UD Dynamics as the basis for a comprehensive platform spanning all of its aftermarket services, enabling the operational status of service centers and the vehicles they are servicing to be checked in real time. By responding to customers with such data-driven solutions, the Company aims to enhance the quality of its services and raise the level of customer satisfaction.

### Digitalizing HR systems

UD Trucks is promoting desk sharing and e-correspondence in its workplaces to facilitate open communication and a free exchange of ideas among its employees. Furthermore, with the shift to telecommuting during the COVID-19 pandemic, the Company has been discontinuing outmoded work practices and the use of paper documents by applying digital solutions. For example, it transferred various administrative procedures and payroll calculations to a cloud-based personnel management information platform in June 2022. By digitalizing human resources systems in these ways, the Company aims to foster more diverse and flexible workplaces and attract strategic human resources going forward.

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### Sustainability Activities

## Strengthening corporate governance

### UD Trucks' management team



**Naoto Hakamata**  
Chairman



**Kouji Maruyama**  
President  
Senior Vice President of Japan Sales



**Taro Kunifusa**  
Director



**Yoshinao Arai**  
Auditor



**Tetsuya Aiba**  
Chief Financial Officer and Senior Vice President, Human Resources, Legal and Compliance



**Koichi Ito**  
Senior Vice President, Strategy and Product Line Management, Brand and Communication



**Takeya Okajima**  
Senior Vice President, Operations Modernization



**Douglas Nakano**  
Senior Vice President, Technology



**Shuichi Hayashi**  
Senior Vice President, Purchasing



**Toshihisa Nakaya**  
Senior Vice President, Logistics



**Hiroshi Sasaoka**  
Senior Vice President, Operations



**Jacques Michel**  
Senior Vice President, International Sales



**Keiki Ka**  
Head of Digital Solutions and IT



**Luis Plocharski**  
Head of Quality Assurance

## Sustainability Activities

### Framework for promoting sustainability

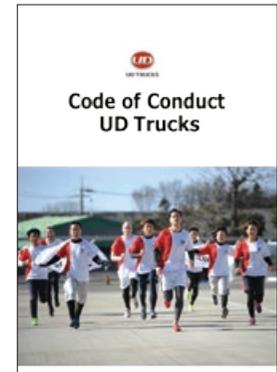
In December 2021, UD Trucks established its Sustainability Committee to promote sustainability-related activities throughout the Company. Positioned under the Company's Executive Board, the Sustainability Committee adopts an environmental, social, and governance (ESG) framework for its activities (refer to page 4). Accordingly, its membership is made up of members from three groups: the Environmental

Group, Social Group, and Governance Group. These members engage in inter-committee discussions, formulate proposals, and submit quarterly reports to the Executive Board, which then integrates the proposals into management activities. Within each of the three groups, teams have been set up to examine and address specific priorities. They determine current circumstances, set goals, devise action plans, and monitor the progress of related activities.



### UD Trucks Code of Conduct

The Company created the UD Trucks Code of Conduct to promote ethical business practices and compliance with laws and regulations. The code explains basic principles and standards for behavior for all employees to follow.



UD Trucks Code of Conduct handbook

### Topics covered in the UD Trucks Code of Conduct

#### Human rights

Respect for others; prohibition of discrimination; safe and hygienic workplaces; compliance with environmental regulations; freedom of association; working hours and remuneration; prevention of modern slavery and child labor

#### Fair and lawful business practices

Compliance with product-related regulations; fair competition; prohibition of inappropriate business courtesies (including gifts and entertainment); compliance with import and export controls; prevention of money laundering

#### Separation of business activities and personal interests

Conflicts of interest; political activities; insider trading

#### Protection of company data and assets

Confidential information; intellectual property; tangible and financial assets; personal information security

#### Transparency and assignment of responsibilities

Financial accounting and reporting

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## Sustainability Activities

### Measures for ensuring compliance

For UD Trucks, compliance is an important component of its corporate culture and values. Recognizing that business transactions must be conducted ethically, responsibly, and in good faith, the Company provides compliance-related training programs to all employees.

In 2020, UD Trucks launched a compliance program for its sales departments in Japan with the goal of ensuring fair and lawful transactions. It has also been carrying out various educational campaigns to better enable employees to act properly based on a solid understanding of business ethics.

After joining the Isuzu Group in April 2021, UD Trucks revised its compliance-related policies and guidelines based on Isuzu Motors' compliance system, and, accordingly, strengthened its management of important compliance-related risks, including those associated with competition laws, corruption, import and export controls, and personal information security. UD Trucks has also set up an internal whistleblower system for facilitating prompt and proper responses to any cases of wrongdoing or suspicious actions, and is developing an online reporting system to improve usability for users.

In addition, UD Trucks established its Compliance Committee in October 2021, and conducted a survey of employees to determine their awareness of compliance-related matters in January 2022.

### Compliance with legal requirements concerning subcontractors

To maintain sound relationships with its suppliers, UD Trucks has established internal rules for ensuring full compliance with Japan's legal requirements concerning subcontractors, which include provisions regarding late

payments. It has also created a related training program, revised its procedures for paying suppliers, and is periodically conducting business audits of relevant departments. Furthermore, the Company has set up a hotline inside its Legal Affairs Department to impartially respond to enquiries and complaints from suppliers regarding compliance-related matters.

### Risk management

UD Trucks has been working to improve risk management across the entire organization. The Company routinely identifies and assesses risks at the managerial and operational levels, and takes proactive steps to effectively manage such risks and prevent them from materializing. These procedures are reported to executive management whenever necessary to ensure that risk management systems are functioning properly. These systems aim to ensure the safety of employees and visitors at workplaces, safeguard confidential information and intellectual property, respond to emergencies such as a fire or natural disaster, and prepare for resuming operations in the event of a disaster. Thanks to these ongoing efforts, UD Trucks has been maintaining safe and secure operations for many years.

### Information security

UD Trucks has taken measures for ensuring the security of its information and data, and is maintaining an information security governance system. To guard against an information system breakdown caused by a disaster, the Company stores and manages electronic information at an earthquake-resistant data center in addition to its head office. It has also stepped up measures for preventing data breaches resulting from cyber-attacks, and regularly provides training sessions on improving information security to its dealers nationwide. In addition, UD Trucks strictly manages and protects all personal information it possesses in accordance with its privacy policies.

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## Sustainability Activities

### Ensuring responsible procurement

#### Strengthening partnerships with suppliers

UD Trucks recognizes that fulfilling its Better Life purpose involves making life better for people and the planet through its entire value chain. From this standpoint, it has included sustainability as an important criterion in its procurement process along with quality, performance, delivery times, and costs, and is bolstering initiatives to tackle sustainability-related issues across its supply chain. As part of these efforts, the Company has included standards for all of its suppliers to meet in the UD Trucks Supplier Code of Conduct, as a means to share its approach to sustainability and expectations for conduct with its suppliers, and to build stronger partnerships in the future.

Meanwhile, the Sustainability Committee, established in 2021, has been assessing the Company's environmental initiatives and business dealings, and identifying and addressing important issues for the UD Trucks Group and its suppliers, such as ensuring that human rights are protected in the supply chain.

#### Requirements placed on suppliers

##### Comply with the UD Trucks Supplier Code of Conduct

Meet the Company's standards for sustainability regarding human rights, environmental protection, etc.

##### Produce sustainable products

Assess sustainability using a version 4.0 self-assessment questionnaire for suppliers in the automotive industry

##### Acquire sustainability-related certification from relevant organizations

##### Do not use prohibited substances and materials

Confirm any usage of items listed in international databases of banned substances and materials

##### Determine CO<sub>2</sub> emissions and take steps to reduce them

#### Responsible sourcing of conflict minerals

UD Trucks strives to ensure responsible and sustainable sourcing of conflict minerals, namely tin, tantalum, tungsten, gold, and cobalt. The Company requires its suppliers to comply with all relevant laws and regulations, and states this clearly in its Supplier Code of Conduct (specifically in the section on responsible sourcing of raw materials). Furthermore, suppliers are required to follow responsible mineral sourcing procedures in high-risk areas.

## About UD Trucks Corporation

For more information about UD Trucks, please refer to the following websites:

- Global website: <https://www.udtrucks.com/>
- Facebook: <https://www.facebook.com/UDTrucksJP>
- YouTube: <https://www.youtube.com/user/udtrucksvideos>



Since its founding in 1935, UD Trucks has been a key player in Japan's transport and logistics industry as a commercial truck manufacturer. The Company currently provides high-performance trucks and services in response to the needs of customers in roughly 60 countries worldwide.

### Company overview (As of April 1, 2022)

Company name	UD Trucks Corporation
Date of foundation	December 1, 1935
Head office address	1-1, Ageo-shi, Saitama 362-8523, Japan
Capital	77.5 billion yen
Number of employees	6,146 employees (Japan)
Main business	<p><b>Japanese business</b> Development, manufacture, export, and sales of heavy-duty trucks; sales of medium- and light-duty trucks; manufacture and sales of vehicle components; maintenance and sales of service parts for trucks and buses; import and sales of Volvo brand products.</p> <p><b>Businesses outside of Japan</b> Development, manufacture, and sales of heavy-, medium-, and light-duty trucks for growth markets; manufacture and sales of vehicle components; maintenance and sales of service parts for trucks and buses.</p>
Operations in Japan	Headquarters and Ageo Plant; Motegi test center; Gunma, Hokkaido, Sanyo, and Kyushu parts distribution centers; Volvo Penta Office
Subsidiaries in Japan	New-Mech Co., Ltd.
Operations outside of Japan	UD Trucks Singapore Office; UD Trucks Bangkok Plant, UD Trucks India, South Africa parts center, Middle East parts center (in Dubai)
Subsidiaries outside Japan	UD Trucks North America, UD Trucks Southern Africa

### History

Decade	History of the company	Technical development and product launches
1930	1935 Originally established as Nihon Diesel Industries, Ltd., in the city of Kawaguchi, Saitama Prefecture	1938 First diesel engine 1939 First diesel truck
1940	1942 Renamed as Kanega-Fuchi Diesel Co., Ltd. 1946 Renamed as Minsei Sangyo Co., Ltd.	
1950	1950 Renamed as Minsei Sangyo Co., Ltd.	1955 Proprietary UD Engine, a powerful lightweight diesel engine 1958 6TW model truck, the first in Japan with a load capacity exceeding 10 tons
1960	1960 Renamed as Nissan Diesel Motor Co., Ltd. 1962 Commenced operations of the Ageo Plant	
1970		1975 Condor medium-duty truck
1990		1990 Big Thumb heavy-duty truck
2000	2007 Joined the Volvo Group	2004 Quon flagship heavy-duty truck
2010	2010 Renamed as UD Trucks Corporation	2013 Qvester heavy-duty truck for emerging markets 2014 Kazet light-duty truck 2017 New Quon and Condor truck models Croner medium-duty truck and Kuzer light-duty truck for emerging markets
2020	2021 Joined the Isuzu Group*	

### Products and services provided by UD Trucks



**UD TRUCKS**

**UD Trucks**

Sales of Quon heavy-duty trucks, Condor medium-duty trucks, and Kazet light-duty trucks to Japan and other developed markets, and Qvester heavy-duty trucks, Croner medium-duty trucks, and Kuzer light-duty trucks to emerging markets

**V O L V O**

**Volvo trucks**

Sales of imported Volvo brand heavy-duty trucks to the Japanese market, including Volvo FH 4x2 and 6x4 tractors, 6x2 and 6x4 Rigid trucks, and FMX 6x4 and 8x4 Rigid trucks

**V O L V O P E N T A**

**Volvo Penta**

Sales of Volvo Penta brand industrial and marine engines for the Japanese market, including forklift and pleasure craft engines, and installation and technical support for original equipment manufacturers

\* UD Trucks is a member of the group of companies led by Isuzu Motors Ltd. For more information about Isuzu Motors, please refer to the following website: <https://www.isuzu.co.jp/world/company/profile.html>