

NEWS RELEASE

Hybrid Dump Truck Demonstration Test at South African Mining Site Selected by UNIDO's Industrial Cooperation Programme

Achieving reductions in fuel costs and CO₂ emissions to contribute to the development of the countries of the Global South through Japanese technology



EH4000AC-3 electric-drive rigid dump truck

Tokyo, November 5, 2025 - Hitachi Construction Machinery Co., Ltd. (President and Executive Officer: Masafumi Senzaki; "Hitachi Construction Machinery") and Hitachi Industrial Products, Ltd. (President and Director: Shintaro Oku; "Hitachi Industrial Products") announced that the "Hybrid Dump Truck Demonstration Test Project at a South African Mining Site" ("Project") being promoted by both companies was selected on November 2 for inclusion in the "Industrial cooperation programme in the Global South through technology transfer from Japan" publicly solicited by the United Nations Industrial Development Organization (UNIDO).

United Nations Industrial Development Organization (UNIDO) is conducting the programme "Industrial cooperation programme in the Global South through technology transfer from Japan" to promote technological innovation, strengthen supply chains and establish industrial infrastructure in Global South countries by supporting Japanese companies in conducting large-scale demonstrations, funded by Ministry of Economy, Trade and Industry (METI), Government of Japan.

Numerous pieces of mining machinery operate at mining sites, and most are powered by diesel engines. Diesel fuel is the primary cost factor in mine operations, and reducing fuel consumption has been a challenge for many years. In addition, the CO₂ emissions generated by dump trucks account for more than 50%*1 of the total emissions from mining machinery in operation at mines in many cases, which makes reducing their environmental impact an urgent issue.

*1: According to a survey conducted by Hitachi Construction Machinery as of November 5, 2025.

To address these challenges, the Project will manufacture a hybrid dump truck for demonstration testing based on an electrically driven EH4000AC-3 rigid dump truck that uses

a diesel engine as its power source. The demonstration test dump truck will be equipped with an AC drive system manufactured by Hitachi Industrial Products, which operates using electricity generated

by a diesel engine and electricity recovered through regenerative braking and stored in onboard batteries.

The demonstration test will be conducted at a mining site in South Africa. As part of the implementation of the demonstration test, Hitachi Construction Machinery will provide training on the repair and maintenance of hybrid dump trucks to service personnel in South Africa and other countries of the Global South as well as locally transfer knowledge and conduct human resource development.

Compared to the existing EH4000AC-3, the demonstration test dump truck reduces both fuel consumption and CO₂ emissions by 10% or more, which helps reduce lifecycle costs and the environmental impact in mining operations. In addition, the use of HVO (hydrotreated vegetable oil) may theoretically reduce CO₂ emissions by up to 90%*2, which has the technical potential to accelerate decarbonization efforts. Furthermore, the ability to retrofit existing dump trucks into hybrid dump trucks will enable mining companies to effectively utilize the assets that they own and support the realization of sustainable operations.

*2: According to a survey conducted by Hitachi Construction Machinery as of November 5, 2025.

Hitachi Construction Machinery has promoted the joint development and demonstration testing of full battery dump trucks to realize net zero emissions at mining sites. Going forward, the company will continue to strengthen optimal solutions that reduce the environmental impact while maintaining mining site safety and productivity.

Hitachi Industrial Products will contribute to improving environmental performance—such as better vehicle fuel efficiency and reduced CO₂ emissions— by adding service offerings that utilize battery power for AC drive systems in the existing installed base. Hitachi's Connective Industries (CI) Sector, to which Hitachi Industrial Products belongs, focuses on “Integrated Industry Automation,” which aims to expand “HMAX for Industry” into growth industries horizontally. HMAX for Industry provides digital services that combines data from an abundant installed base of products (digitalized assets), domain knowledge, and advanced AI. As part of the CI Sector, Hitachi Industrial Products aims to drive innovation for frontline workers through the delivery of “HMAX for Industry” that embodies Lumada 3.0.

■ Overview of the demonstration test project

Implementation period	From November 2025: Manufacture of the hybrid dump truck at the Hitachi Construction Machinery Hitachinaka-Rinko Works July to December 2027: Demonstration test in South Africa	
Location	Mining site in Limpopo Province, South Africa	
Details	Verification of the basic performance of the hybrid dump truck in the mining site operating environment, reduction in fuel consumption due to charging and discharging, and battery durability as well as training in the repair and maintenance of hybrid dump trucks	
Roles of both	Hitachi	Overall design, manufacture, and demonstration testing

companies	Construction Machinery	of the hybrid dump truck
	Hitachi Industrial Products	Manufacture of AC drive systems powered by diesel-generated electricity and battery-stored energy recovered through regenerative braking.

About Hitachi Construction Machinery Co., Ltd.

Hitachi Construction Machinery Co., Ltd. (TSE: 6305), headquartered in Tokyo, Japan, is a construction machinery manufacturer that globally deploys development, manufacturing, sales, and service businesses for its hydraulic excavators, wheel loaders, compaction equipment, and mining machinery, etc. In addition to its new machinery business, Hitachi Construction Machinery is expanding its "value chain businesses" of parts and services, remanufacturing (parts and machines), rentals, and used equipment as it continues to grow together with customers as a solutions provider that offers innovative solutions to customers. With roughly 26,000 employees around the world, the consolidated sales revenue for Hitachi Construction Machinery was 1,371.3 billion yen for fiscal year 2024 (ended March 2025) with an overseas sales revenue ratio of 84%. For more details, please see [the company's website](#).

The company plans to change its trade name to "LANDCROS Corporation" and its corporate brand to "LANDCROS" on April 1, 2027.

About Hitachi Industrial Products, Ltd.

Hitachi Industrial Products, Ltd. is responsible for the large-scale industrial equipment business within the Hitachi Group. Since its founding, the company has continued the motor business and remains committed to solving customer challenges by leveraging its strengths in manufacturing excellence and technological innovation. Guided by the purpose of "Creating a Bright Future With the Power of Monozukuri," Hitachi Industrial Products contributes to the realization of a sustainable society through its products and services.

To learn more, we invite you to explore [the company's website](#).

Information contained in this news release is current as of the date of the press announcement, but may be subject to change without prior notice.

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