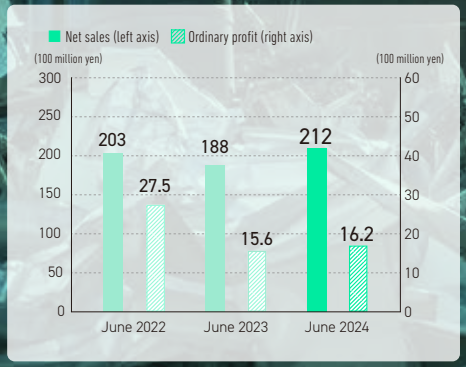
RESOURCE CIRCULATION BUSINESS

Global resource consumption is increasing, and many environmental issues such as resource shortages and massive waste generation are coming to light. The ENVIPRO Group will promote the circular economy by producing green materials and incorporating them into its supply chain.



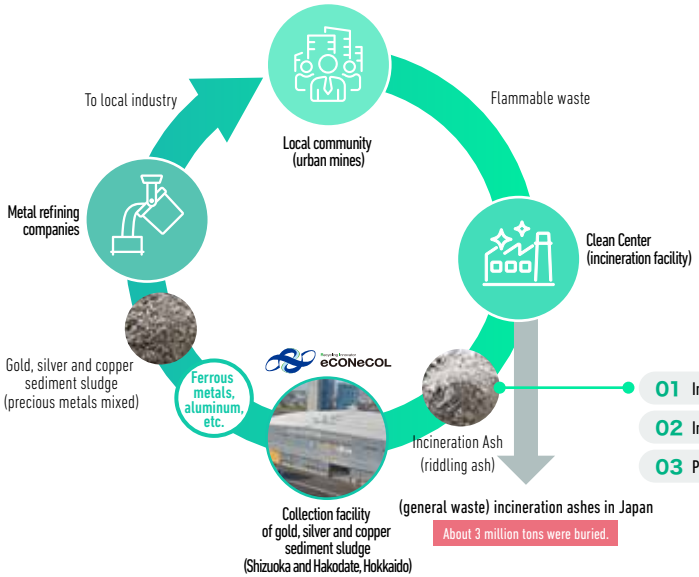
Recycling of Metals and Waste

Amid growing concerns over carbon neutrality and resource depletion, the concept of a circular economy is gaining attention worldwide, particularly in Europe. This has led to a renewed recognition of the importance of metal recycling, which has been a longstanding focus of the ENVIPRO Group.
The ENVIPRO Group entered the business of recycling composite materials with the introduction of a large shredder. At ECONECOL Inc., we crush and process up to 5,000 tons of raw materials per month, including automobiles, multifunction printers, vending machines, and small household appliances. Through magnetic separation, we collect ferrous scrap, while non-ferrous metals and plastics undergo repeated physical sorting in subsequent processes to recycle each resource as green materials.

Equipment introduced in the fiscal year ended June 2024

ECONECOL Inc. Matsumoto Plant Pre-Shredder

ECONECOL Inc. Fuji Plant Sensor Sorter



01 Improved recycling rate
02 Increased revenue and decreased expenditure
03 Prolonging the life of disposal sites

Collecting Gold, Silver, and Copper Sediment Sludge*1 from incineration ash

Municipal waste incineration ash contains trace amounts of precious metals.
Of these, riddling ash*2, which falls from the grates of stoker-type furnace, contains concentrated precious metals. The ENVIPRO Group collects gold, silver and copper sediment sludge from this riddling ash and other sources.

*1 Gold, silver and copper sediment sludge is a mixture of gold, silver, copper, platinum, and palladium.
*2 Riddling ash is incineration ash that falls through the grate of a stoker furnace when waste is incinerated.

Expanding Our Recycling of Wind Power Generation Facilities

Japan' s northern island of Hokkaido already has a large number of wind power generation facilities, and the construction of offshore wind power generation facilities is also underway. The removal of facilities that have been in operation for over 20 years due to aging is increasing year by year. ECONECOL Inc. Hakodate Branch possesses advanced processing facilities and is actively engaged in the recycling of wind power generation equipment. In particular, we actively recycle turbine blades from across the country, including from outside Hokkaido. We recycle the metals and special alloys used in this equipment, as well as waste plastics and hard-to-process materials.

INTERVIEW

RESOURCE CIRCULATION BUSINESS

Making "unwanted things" into "valuable things" Opening up new possibilities for resource circulation

ECODEMO is mainly engaged in the business of transforming "wasted things" into "valuable things" by dismantling equipment in factories and plants and cleaning up equipment in offices and hospitals. Our strength is that we can provide one-stop service from cleanup to dismantling, for equipment or machinery of any sort, and fixtures and fittings anywhere. Using the recycling know-how of the ENVIPRO Group, we maximize the value of resources generated in the process of cleanup and dismantling work. In addition, we established a reuse route for used equipment through investment from Sumitomo Mitsui Trust Panasonic Finance Co., Ltd. and cooperation with Japan Machinery Leasing and Sales Co., Ltd. By matching up with financial institutions and peer companies, we have gone beyond dismantling and not only opened up new possibilities for resource circulation, but also built a system that allows customers to make requests to us with confidence. Safety is our top priority in running a sustainable business. We are working to resolve industry-specific issues such as asbestos and PCBs that continue to be subject to legal changes, under a strong governance system as a listed company group. Going forward, while steadily accumulating results, we will increase our partner companies across the country and build a system that can serve more customers. In addition, we plan to expand into the Tokyo Metropolitan Area and Kyushu Area within five years, and in particular, in Kitakyushu, we are looking at new business development utilizing special zones for recycling resources. Our business plays a role as an entry into the circular economy. However, in order to facilitate the resource circulation, it is necessary to strengthen cooperation not only with the entrance but also with the "exit", which distributes recycled materials to the world. Recently, material procurement and business consideration focusing on reducing environmental impact have made progress, mainly by foreign-affiliated companies. In the future, while engaging in deeper cooperation with such environmentally conscious stakeholders, we aim to achieve a more environmentally conscious resource circulation.

PROFILE

ECODEMO Inc.
President, Representative Director
Hirohito Endo

He joined SANO MARUKA (now ECONECOL) 20 years ago and was responsible for removing regularly produced recycling materials and replacement equipment from manufacturers. He gained a wide variety of experiences through interactions with customers in various industries. He served as Director of Sales and General Manager of the Business Development Department at ECONECOL, and in April 2024, he became President and Representative Director of ECODEMO, a company established by separating the ECONECOL Business Development Department.
He is also a director of the Japanese Society of Independent Appraisers.

"Mottainai BOX"

A Platform for Collecting Community Resources Mottainai BOX and Community-Based Initiatives

ECONECOL Inc. Matsumoto Branch in Matsumoto City, Nagano Prefecture have set up 23 Mottainai BOX Stations as collection points for local resources in the Chushin district of Nagano Prefecture.
The Branch also operates a resource recycling facility in the city of Azumino, called "ECONECOL Plaza Azumino." The convenience of these stations and the plaza has led to an annual increase in the volume of resources collected, and a portion of the earnings from the collected resources are returned to the local community. Moving forward, we will actively engage in regional collaboration and contribute to the circular economy that supports the local community.

Items Collected in the Mottainai BOX

Production of Low-Carbon Fuel from Waste Plastic (RPF)

RPF* is a solid fuel produced by compressing difficult-to-recycle waste plastics and paper waste. This environmentally conscious fuel offers substantially lower CO2 emissions than fuels such as coal, while providing stable quality. ECONECOL Inc. produces approximately 24,000 tons of RPF annually and continuously supplies it primarily to paper companies as boiler fuel. The plant is currently in production 24 hours. ECONECOL is looking to expand the customer base and establish a system to increase production further.

*RPF, which stands for "Refuse derived paper and plastics densified Fuel," is a high-grade solid fuel made mainly from waste paper and waste plastics (mainly from industrial waste) that are difficult to recycle as material


RPF

CONVERSATION

Developing the future of polymer resource circulation through synergies achieved with management integration

Pursuing added value for products through management integration and further advancing as a manufacturer of recycled materials

Nitto Kako manufactures and sells industrial rubber and resin products, and manufactures, sells, and constructs elastic pavement materials. In 2024, it merged with Toyo Rubber Chip Co., Ltd. and Shonan NTK Co., Ltd., and currently develops polymer resource recycling at two bases: the Shonan Plant and the Maebashi Plant. At the Maebashi Plant (formerly Toyo Rubber Chips Co., Ltd.), rubber chips and rubber powder are produced using industrial waste materials from manufacturers of used large tires and rubber parts. With a high production capacity to handle 6,000 tons of waste tires and 2,000 tons of process waste material per year, we maintain stable dealing with major customers such as artificial turf manufacturers. We also sell and install color rubber chips for elastic paving materials for parks and nursery schools, not only in Honshu, but throughout Kyushu and Okinawa. Through this management integration, in terms of procurement the price optimization of common materials has progressed, and in terms of technology, the equipment maintenance system has been strengthened through cooperation with engineers at our Shonan Plant. Sales activities that traditionally specialized in providing materials have also been combined with the product range of the Shonan Plant, making it possible to give a wider range of proposals. Going forward, we will also work on recycling processing of materials such as fluorine-based rubber, which have been difficult to recycle by utilizing the blending technology of Shonan Plant.

New possibilities for resin recycling to expand by utilizing the local advantages of the Shonan Plant

On the other hand, the Shonan Plant manufactures and sells rubber mats for curing, rubber compounds for tire manufacturers, and rubber sheets using rubber powder crushed at the Maebashi Plant as raw materials. Since Shonan Plant is located a critical point for logistics of the Tokyo metropolitan area, we believe it will have a competitive advantage in both sales and logistics such as collection and shipping, as we expand various businesses in the future. Through this management integration, by combining the recycling technology of the Maebashi Plant with the formulation design, mixing and molding technology of the Shonan Plant, we aim to create a more advanced recycled material manufacturer with higher added value than before. In particular, with increasing awareness of resource circulation in the industry, we are focusing on the needs of auto parts manufacturers. We are promoting efforts to recycle rubber process waste materials used in automobile window frames and engine rooms, and return them to the market as high-quality products. In addition, we will focus on strengthening cooperation with group companies, and in particular we will pursue new possibilities for polymer CE by combining the powerful collection and sorting functions of ECONECOL Inc. with our technology.

PROFILE

Nitto Kako Co., Ltd.
Executive Officer
Hideki Kodaira

Joined Nitto Kako in April 1993. Responsible for information systems and accounting operations. In April 2013, he was appointed as the Manager of the Business Administration Office, in September 2023 he was appointed General Manager of the Administration Department, and in July 2024, he became an executive officer.
He works to build an efficient management system from a meta perspective through accounting work.

PROFILE

Nitto Kako Co., Ltd.
General Manager
Katsuhiro Koitabashi

Joined Toyo Tarpaulin Manufacturing, the predecessor company, in December 1992. Responsible for purchasing and delivery operations. The company name was changed six times, and among these changes, he was appointed as the General Manager of Sales, the General Manager of Manufacturing, and the West Japan Business Manager, and in October 2024, he was appointed the RC Manufacturing Manager. Deeply familiar with the waste tire industry, and aims to accelerate the rubber circular economy business.
Deeply familiar with the waste tire industry, and aims to accelerate the rubber circular economy business.

Flow of Treatment/Processing in the Resource Circulation Business