



## DOWA ECO-SYSTEM Expands Used Lithium-Ion Battery Recycling Capacity

DOWA ECO-SYSTEM CO., LTD. (14-1 Sotokanda 4-Chome, Chiyoda-ku, Tokyo; Capital: 1 billion yen; President: YANAI Yasuharu), a subsidiary of DOWA HOLDINGS CO., LTD. (same location; Capital: 36.4 billion yen; President: SEKIGUCHI Akira), obtained permission on March 29, 2021 to set up new municipal waste and industrial waste treatment facilities at its subsidiary ECO-SYSTEM AKITA CO., LTD. (42, Tsutsumisawa, Hanaoka-machi, Odate, Akita; Capital: 50 million yen; Managing Director: KOYAMA Mitsuhiro), and was approved the change of its industrial waste disposal permission as of April 19, 2021. With these permissions, DOWA ECO-SYSTEM CO., LTD. will expand its used lithium-ion battery recycling capacity to meet growing needs in the future.

DOWA ECO-SYSTEM CO., LTD. has participated in the joint collection scheme of lithium-ion battery launched by the Japan Automobile Manufacturers Association, Inc. in October 2018. DOWA Group companies ECO-SYSTEM AKITA CO., LTD. and ECO-SYSTEM SANYO CO., LTD. have been registered as battery recycling facilities.

ECO-SYSTEM AKITA CO., LTD. has newly obtained a permission to treat municipal waste and industrial waste to recycle lithium-ion batteries and other electrical and electronic devices at its existing incineration facility (No. 3 Furnace).

The No.3 Furnace has been licensed to treat 18 tons per day. Combined with the No. 2 Furnace which already carries out lithium-ion battery recycling, maximum receiving capacity will be expanded by six times. In addition, the No. 3 Furnace is a fixed-bed furnace with a wide opening, and this will allow large automotive lithium-ion batteries to be safely inactivated through heat treatment without the need for disassembly. The inactivated batteries will be separated into materials such as iron, aluminum, copper and cobalt/nickel mixtures using the recycling line that entered operation in 2019. Each of these materials will be recycled into the smelting raw materials.

Lithium-ion batteries, which are expected to play a large role in efficient energy usage towards achieving a decarbonized society, have become increasingly widespread in various fields including electrical devices, automobiles such as hybrid and electric vehicles, and homes. Rare and valuable metals such as lithium, cobalt and nickel are used in the batteries, and the demand for re-use and stable recycling has rapidly risen in order to build sustainable supply chains.

The DOWA Group will continue to promote better environmental and recycling services, such as the proper treatment and recycling of waste, thereby contributing to the building of a sustainable society.

## DOWA

[Overview of the Latest Permission]

1. Facility: ECO-SYSTEM AKITA CO., LTD.

Incineration Facility (No. 3 Furnace)

2. Category of the Waste: Municipal solid waste and

industrial waste

3. Capacity: 18 tons / day (recycling of electrical and electronic devices such as lithium-ion

batteries)

4. Start of Receiving: June 2021 (planned)



bird's-eye view of ECO-SYSTEM AKITA

[Corporate overview of ECO-SYSTEM AKITA CO., LTD.]

1. Head office: 42, Tsutsumisawa, Hanaoka-machi, Odate, Akita

2. Representative: KOYAMA Mitsuhiro

3. Founded: February 1987

4. Capital: 50 million yen

5. Number of employees: 88 (as of end of March 2021)

6. Shareholders: DOWA ECO-SYSTEM CO., LTD. 100%

7. Business: Intermediate treatment of industrial waste, intermediate treatment of specially-controlled industrial waste, Detoxification of low contaminated PCB waste

[Corporate overview of DOWA ECO-SYSTEM CO., LTD.]

1. Head office: 14-1 Sotokanda 4-chome, Chiyoda-ku, Tokyo

2. Representative: YANAI Yasuharu

3. Founded: October 2006

4. Capital: 1 billion yen

5. Number of employees: about 2,700 (DOWA ECO-SYSTEM consolidated, as of end of March 2021)

6. Shareholders: DOWA HOLDINGS CO., LTD. 100%

7. Business: environment and recycling business (resource recycling, waste treatment, soil remediation, logistics, consulting)

## References

[Past press releases related to this release]

"DOWA ECO-SYSTEM Increases Processing of Lithium-Ion Batteries and Enables Both Safe Treating and Efficient Metal Recycling," December 17, 2018

https://ir.dowa.co.jp/en/ir/news/news-5617789479587210707.html