



Tohoku Electric Power Company Co., Inc.

Plants Laboratory Inc.

Nishino Farm Inc.

York Benimaru Co., Ltd.

April 6th, 2022

Start of Shipping and Selling Vegetables Cultivated with Carbon-Free Electricity using "Energy Creating and Saving Indoor Farm System"

～"Sustainable Agriculture from Tohoku" begins～

(Summary)

At a demonstration facility (Name: LEAFRU FARM SENDAI PORT) of the "Energy Creating and Saving Indoor Farm System" installed by Tohoku Electric Power Company, Co., Inc. (Sendai City, Miyagi Prefecture; President: Kojiro Higuchi; hereinafter "Tohoku Electric Power"), vegetables jointly cultivated by Plants Laboratory Inc. (Chuo-ku, Tokyo; President: Atsuyuki Yukawa; hereinafter "Plants Laboratory") and Nishino Farm Inc. (Natori City, Miyagi Prefecture; President: Taku Nishino; hereinafter "Nishino Farm") using carbon-free electricity are shipped today to York Benimaru Co, Ltd. (Koriyama City, Fukushima Prefecture; President Yukio Mafune; hereinafter "York Benimaru") and sold at 20 York Benimaru stores in the suburb of Sendai City.

This series of projects (hereinafter "the Project"), from the installation of the facility to cultivation, shipping, and sales, is subsidized by Miyagi Prefecture's "Horticultural Crop Supply Chain Promotion Project" (*1).

In recent years, issues related to sustainability have emerged in the agricultural industry, such as "decreasing and aging farmers", "increasing scale of damage due to more severe natural disasters", and "effects of climate change (unstable production and quality)".

In order to solve these issues, Tohoku Electric Power, in collaboration with Plants Laboratory, began providing solution services through the "Energy Creating and Saving Indoor Farm System" (hereinafter "the System") (*2) in November 2021.

In February 2022, Tohoku Electric Power installed a demonstration facility equipped with the System adjacent to the York-Benimaru distribution center (Sendai City, Miyagi Prefecture), where Plants Laboratory, who has expertise in indoor cultivation, and Nishino

Farm, a farmer in Miyagi Prefecture, have been jointly growing lettuce (*3).

This demonstration facility combines solar power generation equipment and storage batteries with 100% renewable electricity provided by Tohoku Electric Power to realize vegetable cultivation using carbon-free electricity.

By locating the production site and distribution center adjacent to each other, we are making a significant contribution to reducing CO₂ emissions due to reducing the food mileage (distance for food transportation).

Furthermore, Nishino Farm is in the process of developing a plan to collaborate with local agriculture by planting vegetable seedlings grown in the facility in open fields.

In addition, the implementation of the Project is supported by Miyagi Prefecture's "Horticultural Crop Supply Chain Promotion Project" subsidy.

Miyagi Prefecture supports the establishment of a highly competitive horticultural crop supply chain in which production, distribution, and actual demand are all working together, and this project to cultivate lettuce, a priority promotion item (a prefectural strategic item) with high added value (*4), was selected for the subsidy.

York-Benimaru has been actively promoting SDGs initiatives as a participant in the GREEN CHALLENGE 2050, an environmental initiative by the Seven & i Group, and has been working to reduce food mileage by expanding sales of local vegetables, reduce energy-derived CO₂ emissions by installing solar panels on the stores (20 existing stores), and reduce use of plastics.

The project has the capacity to produce 1,000 heads of lettuce per day using carbon-free electricity, and is scheduled to be shipped to 20 stores (*5) in the suburbs of Sendai City. In May, the number will be expanded to 61 York-Benimaru stores throughout Miyagi Prefecture. We hope to provide even more added value to our customers by selling "high quality vegetables that are even more environmentally friendly, fresher, and safer" *6.

In addition, we will consider producing and selling products other than lettuce (ex. spinach, etc.) in the future.

Tohoku Electric Power, Plants Laboratory, Nishino Farm, and York Benimaru will continue to work actively to realize "sustainable agriculture" by building a supply chain that integrate the region.

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- ※ 1 This project aims to support promotion projects and the development of machinery and facilities by agricultural corporations that lead regional agriculture, actual consumers, distributors, etc., in order to build a production system that transcends traditional regional boundaries and collaborates in a wide area within the prefecture.
- ※ 2 By combining Plants Laboratory's "stable cultivation technology that is unaffected by weather and natural disasters", "unique building structure that is compact and can be installed in any location, and heat shielding technology" with the effective energy-creating and energy-saving system developed independently by Tohoku Electric Power Company, efficient energy management is achieved through electrification, and an environmentally friendly and comfortable space for farmers and crops is created.
- ※ 3 Cultivation is conducted by LEAFRU TOHOKU Inc., a wholly owned subsidiary of Plants Laboratory, and Nishino Farm Co.
- ※ 4 Cultivation using carbon-free electricity from Tohoku Electric Power, reduction of food mileage by cultivation in an area adjacent to the distribution center, no use of pesticides during the cultivation period in a hygienic indoor environment, etc.
- ※ 5 Wakabayashi, Sendai 6-chome, Sendai Nishinotaira, Moniwa, Tomisawa Nishi, Sendai Nakayama, Ishinomaki Hebita, Ichinazaka, Rifu, Siogama, Tagajo, Minami Yoshinari, Yamada Kagitori, Natori Nishi, Tomizuka, Nitta Higashi, Asuto Nagamachi, Foleo Sendai Higashi, Aramaki, Sendai Aiko
- ※ 6 Vegetables grown at the demonstration facility are scheduled to obtain "GLOBAL G.A.P." certification, a global standard for agricultural certification.

【Supplemental Information】

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https://www.tohoku-epco.co.jp/news/normal/_icsFiles/afieldfile/2022/04/06/1226183_b.pdf