

July 19, 2023

Press Release

Nishi-Nippon Railroad Co., Ltd.
Shizen Energy Inc.
Nishitetsu Shizen Energy GK

Nishitetsu and Shizen Energy enter grid storage battery business ~Energy management system "Shizen Connect" used for market trading and control~

Nishi-Nippon Railroad Co., Ltd.(Nishitetsu) and Shizen Energy Inc.(Shizen Energy) have agreed to enter the grid storage battery business through their joint venture, Nishitetsu Shizen Energy GK (Nishitetsu Shizen Energy). Shizen Connect, an energy management system developed and operated by Shizen Energy, will be used for market transactions and electricity control in this project.

In light of the Japanese government's declaration to achieve carbon neutrality by 2050 and the need to further promote renewable energy, it is important to ensure flexibility to maintain a balance between supply and demand in order to promote the introduction of renewable energy sources such as solar and wind power, which fluctuate greatly in power generation depending on weather conditions.

Since its establishment in April 2022, Nishitetsu Shizen Energy (*1) has been promoting the development of renewable energy sources in collaboration with companies and municipalities mainly along the Nishitetsu railway lines, under the vision of "contributing to the decarbonization of Kyushu". By introducing grid storage batteries and participating in this project to provide flexibility in the electricity market, including the wholesale electricity market and the supply-demand adjustment market, the joint venture company will make further contributions to the spread of renewable energy in Kyushu.

As the first initiative in this project, grid storage batteries with a rated capacity of 1.92 MW/4.659 MWh will be installed at two Nishitetsu Group facilities to accumulate operational know-how. The storage batteries will be Bluestorage (*2), an energy storage system developed by ITOCHU Corporation that utilizes high-density batteries for EVs, and will be leased to Nishitetsu Shizen Energy by IBeeT Corporation, which provides storage battery leasing services.

In addition, using Shizen Connect, Shizen Energy's energy management system, the company will forecast market prices, formulate recharge and discharge plans, execute remote control, and perform a series of other operations, including monetization through trading in each power market and balancing group (*3) operations.

Nishitetsu has identified the environmental resources area as one of the new areas of challenge in its long-term vision "Nissitetsu Group Machiyume Vision 2035," and aims to contribute to the realization of a zero-carbon city through the creation of renewable energy

and energy management. Through this project, Nishitetsu will steadily advance its efforts to realize this vision, as well as acquire knowledge of energy management with a view to utilizing the Group's internal energy storage functions, such as batteries for electric buses. In addition, through this project, Shizen Energy will improve the accuracy of market price forecasts using "Shizen Connect" and accumulate know-how on market trends, which will lead to the future development of multiple locations and large-scale deployment.

Nishitetsu and Shizen Energy will contribute to the realization of a sustainable decarbonized society by promoting the introduction of grid storage batteries and energy management systems, and by contributing to the efficient use and stable supply of electricity derived from renewable energy sources.

<Overview of the first phase of project>

Storage Battery	Product name: Bluestorage Storage capacity: 4.659 MWh (output: 1.92 MW) *Equivalent to the daily usage of approx. 470 households (Leased from IBeeT Corporation)
Energy Management System	Product name: "Shizen Connect" (Provided by: Shizen Energy Inc.)
Place of Installation	①Nishi-Nippon Railroad Co., Ltd. Hayami Garage 2-17-2 Wakakusa, Umi-machi Kasuya-gun, Fukuoka ②Nishitetsu-unyu Co., Ltd. Chikuhou Branch 958-4 Ariyasu, Iizuka-shi, Fukuoka
Operator	Nishitetsu Shizen Energy GK
Scheduled start of operation	May 2024

<structure for first phase of project>



*1 Press release on Nishitetsu Shizen GK (April. 2022)

https://www.shizenenergy.net/2022/04/20/nishitetsu_shizen/

*2 Press release on Bluestorage (Feb. 2023)

<https://www.shizenenergy.net/en/2023/02/16/grid-scale-battery/>

*3 **balancing group**: a group of operators that performs the settlement of imbalance (difference between planned and actual results). There are "demand balancing groups" consisting of electricity retailers and "generation balancing groups" consisting of electricity generators

【About Nishi - Nippon Railroad Co., Ltd.】

This year marks the 115th anniversary of the founding of our predecessor company, Kyushu Electric Railway Company, in 1908.

The Nishitetsu Group, under the corporate message of "Connecting your dreams," is engaged in a wide variety of businesses that support the daily lives of local residents. Our automobile transportation division, one of the largest in Japan, and our railroad division, which has two lines, the Tenjin-Omuta Line and the Kaizuka Line, transport approximately 2.02 million passengers per day. In addition, our divisions including international logistics, urban development, and real estate also continue to grow steadily.

- Headquarters: 3-5-7 Hakataekimae, Hakata Ward, Fukuoka City
- President & CEO: Koichi Hayashida
- URL: <https://www.nishitetsu.co.jp/en/index.html>

【About Shizen Energy Inc.】

Founded in June, 2011. With the company purpose of "We take action for the blue planet," the company's business includes development, financing, and asset management of renewable energy power plants using solar power, wind power, small-scale hydroelectric power, and biomass. Since 2016, the company has also been focusing on its international operations, expanding its development and power generation projects in areas such as Southeast Asia and Brazil. In 2019, the company also entered the energy tech business, offering micro-grid and VPP construction, smart charging and discharging services for EVs, and other services through its self-developed EMS (energy management system). Shizen Energy Group has been involved in more than 1 GW of renewable energy generation internationally.

- Headquarters: Fukuoka Ohori Bldg. 1-1-6 Arato, Chuo Ward, Fukuoka City, Fukuoka
- Representative Directors: Ken Isono, Kenji Kawado, Masaya Hasegawa
- URL: <https://www.shizenenergy.net/en/>

【About Nishitetsu Shizen GK】

Established in April 2022 as a joint venture between Nishitetsu and Shizen Energy. With the vision of "contributing to the decarbonization of Kyushu," the company is engaged in the corporate PPA business, which supplies renewable energy power to the Nishitetsu Group and local companies and municipalities, and energy management business using storage batteries.

- Headquarters: 3-5-7, Hakata Ekimae, Hakata-ku, Fukuoka City, Fukuoka Prefecture
- Representative: Yasuhiro Hayashida, Executive Director, Nishi - Nippon Railroad Co., Ltd.

【Shizen Connect】

Shizen Connect is an aggregation energy management system that collectively controls energy resources such as renewable energy power generation, storage batteries, EVs, and EcoCutes. Shizen Connect can control residential solar power generation with storage batteries and V2H equipment, as well as operation of microgrids connecting multiple buildings with transmission lines, and VPP construction of several thousand units of energy resources. Individual control and VPP control tended to be separate, but Shizen Connect provides a one stop service allowing

energy resources to be utilized with multi-purpose which also improves economic efficiency. The system can be adapted with any equipment supplier, allowing energy resources to be chosen freely without relying on a certain manufacturer.

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