

Cultivating New Business Opportunities

We will speed up our group-wide efforts to pursue new business opportunities for further growth.

Overseas Business

We are actively participating in overseas power generation projects, leveraging the skills and techniques we have developed as an electric power supplier in Japan.

In March 2018, we invested in the Rantau Dedap Geothermal Power Project in Indonesia, to own 10% of the project's equity. This was the first overseas geothermal power project in which we had ever taken part.

The geothermal power plant (total output: 98,400 kW) that was built in this project will begin operations during the second half of 2020. We plan to sign a 30-year power sale agreement with Perusahaan Listrik Negara (PLN) an Indonesian government-owned electricity corporation that takes effect when the plant begins operations. We believe the agreement will ensure steady long-term revenue for us. We will continue to focus our attention on Southeast Asia, as well as North and Central America to participate in more overseas power generation projects as part of our efforts to increase revenue.



Steam power testing at the site of development work for the Rantau Dedap Geothermal Power Project.

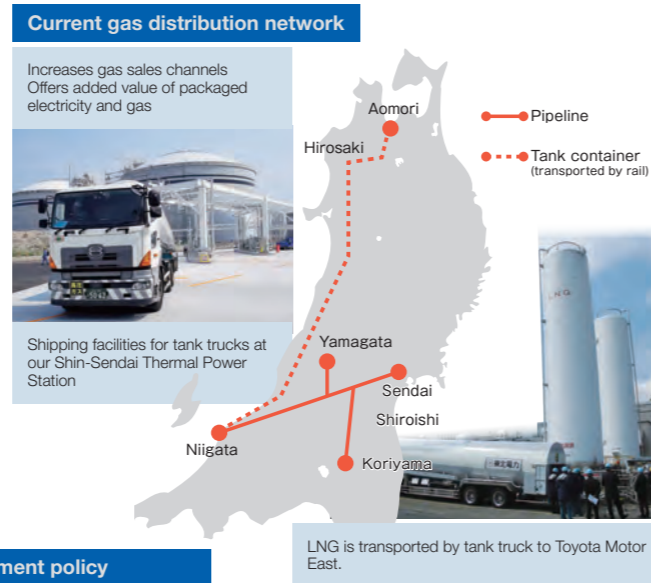
Gas Business

We have been making efforts to promote the use of natural gas in the Tohoku region by supplying the gas to corporate customers and regional city gas companies through our group companies via pipelines and tank trucks.

We began to supply natural gas to Toyota Motor East Japan in Iwate in April 2017, and to its neighbor Denso Iwate in December of the same year.

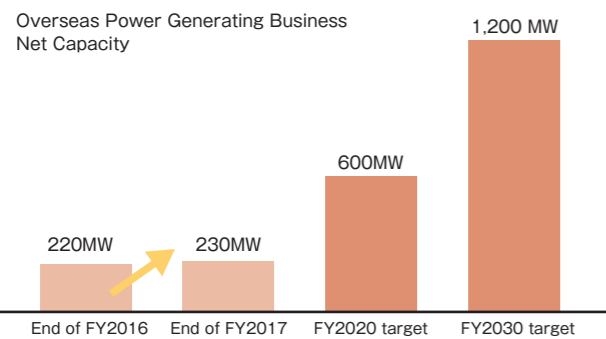
The LNG we supply is transported by tank truck from the Niigata Base of Nihonkai LNG (our group company) as well as the LNG shipping facilities at the Shin-Sendai Thermal Power Station, which went into operation in August this year and other places.

We will continue to take advantage of the shipping facilities to diversify energy used in the Tohoku and Niigata regions, thereby increasing the sales volume of gas.

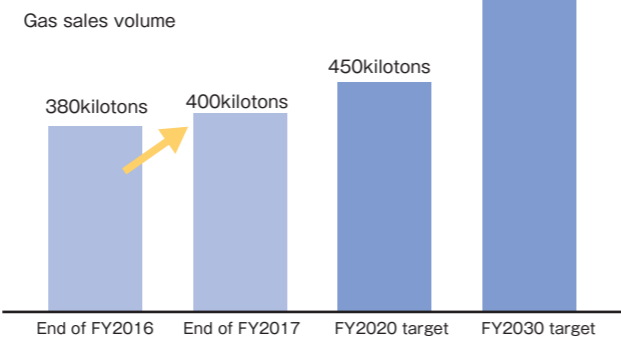


Progress Toward Quantitative targets in Medium-Term Management policy

Overseas Business



Gas Business



Pursuit of Innovation

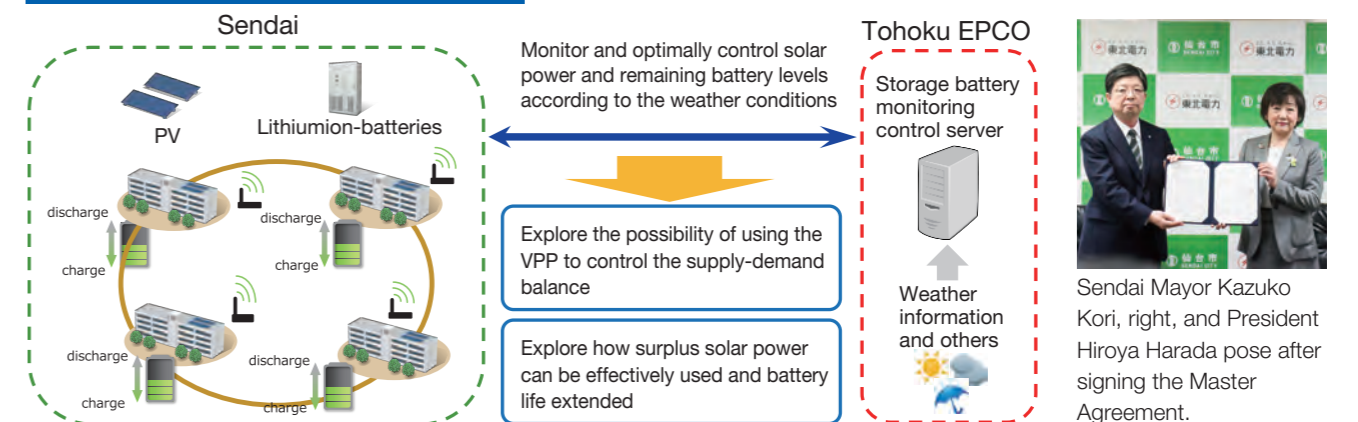
As our initiatives driven by new information technology (for example, internet of things and artificial intelligence), we have launched the Virtual Power Plant (VPP)*1 Verification Project, which will run for three years from FY2018 to FY2020. Sendai City is one of our business partners in this Project*2. We signed the Master Agreement on the Development of Disaster-Resilient and Environment-Friendly Energy Management Driven by VPP

Technologies. In accordance with this agreement, we will integrate solar power facilities and storage batteries at Sendai's 25 designated shelters as the energy resource for the VPP to enhance the region's ability to respond to disasters and reduce regional environmental burdens. We will also remotely monitor and optimize control over the facilities' operation, thereby seeing if the VPP can help control the supply-demand balance.

*1 The VPP is designed to remotely control and integrate energy resources across the region so that they function as one power station.

*2 Using lessons learned from the Great East Japan Earthquake, Sendai City has installed solar power facilities and storage batteries at its designated shelters, which include all elementary and junior high schools in the city. This will allow us to secure power sources in case of disasters, as well as reduce CO2 emissions.

VPP Verification Project with Sendai City



We are also running the Yoriosou Smart Project designed to explore services we can offer by using new information technologies and communication robots. This project will explore the two services below over the period from July 2018 to late August 2019.

With the knowledge and know-how acquired through this project, we plan to develop new services that will help customers live more convenient and comfortable daily lives.

Services explored in the Yoriosou Smart Project

(1) Life assistance services offered through communication robot Bocco

Multiple services will make use of Bocco's functions designed to assist communication between family members in different everyday situations and to provide our newly developed services, including air-conditioner control assistance.

(2) Energy conservation assistance service tailored to specific home appliances

Energy-saving advice delivered through our unique, newly developed system

* Bocco is a communication robot developed by Yukai Engineering Inc. It can be linked with a smartphone to enable the user to exchange messages with family members living separately and to monitor his or her home (e.g. temperature and humidity in the house, presence of family members, etc.).