Contribution to International Global Warming Mitigation Measures

Each year, we release the Kyushu Electric Power Company Group Environmental Action Plan (issued in June 2017 last fiscal year; renamed the Kyuden Group Environmental Action Plan from FY2018 onward). This plan is the basis of efforts to prevent global warming in Japan and abroad through such action as our overseas energy business and consulting.

Limiting CO_2 Emissions with the Overseas Energy Business

Limiting of approx. 1.3 million metric tons of CO_2 emissions accompanying the overseas power generation business

In FY2017, high-efficiency thermal power plants overseas and the steady operation of wind power and geothermal power stations*1 contributed to the suppression of approximately 1.3 million metric tons*2 of CO_2 emissions. This is equivalent to roughly 4% of our CO_2 emissions in Japan.

*1 Investments in nine IPP projects in eight countries; equity ownership in output of 1.5 million kW (as of the end of FY2017)
*2 Figures for CO_2 emissions are independent estimates by our company based on emission factors by country and region listed in "World Energy Balances 2017."

Overseas Power Generation Business (see the Sarulla Geothermal IPP Project in Indonesia on p. 21)

Participation in combined-cycle* power plant construction in the USA

This project will build and operate a new thermal power plant with a combined-cycle power generation system for the Birdsboro gas-fired thermal power plant in Pennsylvania. The system will use a high-efficiency gas turbine with cutting-edge performance. The plant will have an output of 488,000 kW. Our participation in the project was finalized in December 2017. Construction is now underway, with operations to commence in 2019.

In Connecticut, we have become involved in a power generation project by obtaining a roughly 20% equity share in Kleen Energy Holdings, LLC, which operates the Kleen Energy gas-fired power plant.

*A power generation system that combines a gas turbine with a steam turbine. Latent heat from the gas turbine's gas emissions boil water that turns to steam and spins a steam turbine.

Birdsboro gas-fired thermal plant under construction

Overseas Consulting

Contributions to international solutions with the group's combined strength

We apply the combined strength of the Kyuden Group to apply the technology and knowledge we have built up in the electricity power business both in Japan and abroad to work on a wide array of solutions for the energy sector, from the formulation of basic energy plans to solutions for power generation, transmission, and distribution, as well as renewable energy and the environment. We thus help countries provide a stable power supply and improve the earth's environment.

Technological prowess cultivated in power supply and geothermal generation on remote islands applied abroad

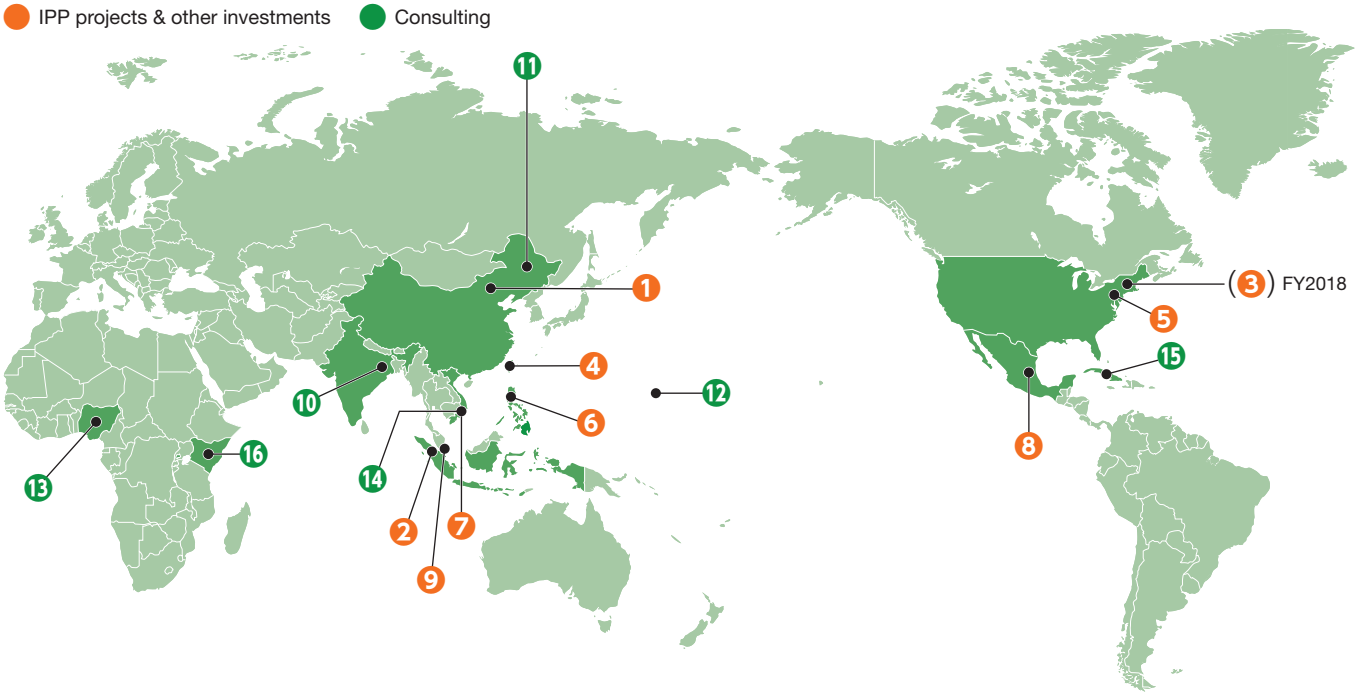
In FY2017, we used the engineering skill built up from our work in supplying power to remote islands and in geothermal power generation—both distinctive strengths of the Kyuden Group—to provide consultation on the installation and expansion of solar power stations in Cuba and the Marshall Islands, as well as improving the operational performance of the Olkaria Geothermal Power Station (output: 430,000 kW) in Kenya, which is one of the largest such plants in East Africa.

In future, Kyuden will continue to promote environmentally friendly energy use through proposing effective solutions for the countries we support.

Survey at the Olkaria Geothermal Power Station in Kenya (a JICA survey to assess operational status)

Overseas Project Implementation (FY2017)

IPP projects & other investments　Consulting



		Country	Project	Overview
IPP projects & other investments	Renewable Energy ❶	China	Inner Mongolia Wind Power	Output: 50,000 kW, commenced operation in September 2009
	Renewable Energy ❷	Indonesia	Sarulla Geothermal	Output: approx. 330,000 kW, operation of all units commenced in May 2018 (see p. 21)
	Natural Gas (Combined) (❸)	USA	Kleen Energy Gas-Fired Thermal Power Project	Output: 620,000 kW, operation commenced in July 2011, equity shares acquired in May 2018 (see p. 31)
	Natural Gas (Combined) ❹	Taiwan	Shin Tao Power Corporation	Output: 600,000 kW, operation commenced in March 2002, equity shares acquired in November 2010
	Natural Gas (Combined) ❺	USA	Birdsboro	Output: 488,000 kW, operation to commence in 2019 (see p. 31)
	Natural Gas (Combined) ❻	Philippines	Ilijan	Output: 1.2 million kW, operation commenced in June 2002
	Natural Gas (Combined) ❼	Vietnam	Phu My III	Output: 744,000 kW, operation commenced in March 2004
	Natural Gas (Combined) ❽	Mexico	Tuxpan Unit 2	Output: 495,000 kW, operation commenced in December 2001
			Tuxpan Unit 5	Output: 495,000 kW, operation commenced in September 2006
	Natural Gas Oil ❾	Singapore	Senoko Energy Pte. Ltd.	Output: 3.3 million kW, equity shares acquired in September 2008
Consulting	❿	India	Feasibility Survey on Installation of Environmental Equipment at Coal-Fired Thermal Power Plant	———
	⓫	China	Textile Industry Energy Conservation Promotion Scheme Development	———
	⓬	Marshall Islands	Ebeye Island Solar Power Generation System Development	Plan preparation survey, solar power plant construction (see p. 31)
	⓭	Nigeria	Electrical Power Master Plan	Creation project in-country support studies and personnel training
	⓮	Vietnam	LNG Thermal Power Generation Project	Feasibility study
	⓯	Cuba	Data Collection and Identification Survey on Introducing Renewable Energy (see p. 31)	———
	⓰	Kenya	Data Collection and Identification in Support of Olkaria Geothermal Power Plant Operation and Maintenance (see p. 31)	———