# **Power and Social Infrastructure**



#### A Look at the Segment

This segment is divided into the power generation business and the social infrastructure business. The power generation business supplies highly efficient and eco-friendly thermal and geothermal power systems. The social infrastructure business contributes to the realization of smart communities by helping optimally control energy using smart meters, new energy sources, and grid connection and distribution control systems.

Our deliveries of equipment for generating geothermal power—a source of renewable energy—over the past 10 years equate to approximately 40% of all deliveries over that period, representing the leading share in the global market. In this manner, we are helping meet global energy demand.

### FY2011 Major Initiatives

In the power generation business, demand for thermal power was strong as electricity demand expanded around the world. Against this backdrop, the Company pushed forward with research ventures geared toward improving the efficiency of steam turbines and turbine generators. Sales efforts targeting increased orders progressed simultaneously. One major accomplishment during fiscal 2011 was the receipt of an order for a large-scale biomass power generation plant in the United States, a strategically important region. This plant will be among the largest in the country. production of radiation measurement equipment in response to the rise in concern for the safety of living environments that followed the Great East Japan Earthquake. In order to strengthen our systems for providing these products, we established a radiation equipment calibration and testing base in Fukushima Prefecture. At the same time, we are advancing verification tests for smart community projects in which the Company is participating with the aim of controlling and optimizing electricity supply and demand balances. These projects are located in Kitakyushu City, Fukuoka Prefecture, and other locations.

In the social infrastructure business, we stepped up

## FY2012 Policies and Strategies

- Enter into domestic combined cycle thermal power market
  Commence capital participation in U.S. geothermal
- power projects
- Reenter substation equipment business
- Address radioactive waste material treatment and other post-earthquake reconstruction demand

In the power generation business, global electricity demand is expected to continue rising as a result of such factors as population growth. In this environment, the market for thermal power, which accounts for the largest portion of total global generation capacity, is expected to expand by an average of 2% per year up until 2035. Likewise, the market for renewable energy is projected to expand by an average of 9% per year over the same period.

In light of these circumstances, Fuji Electric is planning its full-fledged entry into the domestic market for highly efficient combined cycle thermal power generation systems that utilize gas and steam turbines. At the same time, we view the progressive deregulation in this field as a chance for us to advance into the domestic geothermal market as well.

Overseas, we will expand our thermal power business into the Near and Middle East and South America. In our geothermal power business, we will target increased orders from the growing markets of Central and South America as well as Africa. We are also expanding operations in the U.S. market, and in April 2012 concluded an agreement to commence capital participation in a geothermal project there.

In the social infrastructure business, we are anticipating the accelerated development of smart communities as the realization of more efficient energy usage and lowcarbon societies is pursued. We are thus aiming to commercialize our smart communities as quickly as possible. To this end, we are levering the energy management and operational knowledge gained through verification tests, conducted in Kitakyushu City and on remote islands in Okinawa Prefecture and Kagoshima Prefecture, and expanding smart meter development and provision activities.

			(Billions of yen)
	FY2011	FY2012 Forecast	Change
Net Sales	156.6	193.1	+36.5
(Overseas Sales)	29.4	37.5	+8.1
Operating Income	12.0	9.5	-2.5

We believe that these efforts will help us accelerate the expansion of this business. Furthermore, following the dissolution of our merger agreement with Japan AE Power Systems Corporation in April 2012, this company's transformer and power distribution equipment operations were transferred to the Company, marking our reentry into the substation equipment business. This will enable us to develop a more comprehensive business spanning from power generation to the supply of electricity to users. We are also redoubling our efforts to contribute to the post-Great East Japan Earthquake reconstruction effort by treating radioactive waste.

#### **Global Electricity Demand Forecasts**

