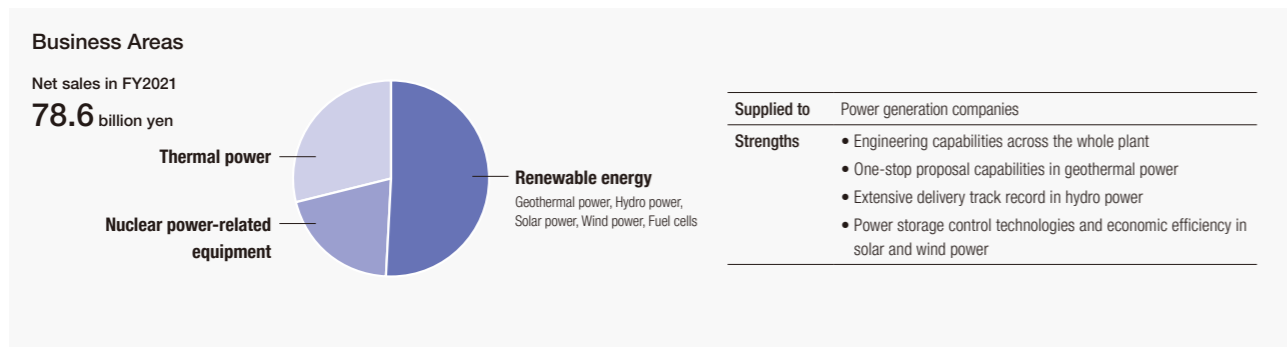


Power Generation



We will transform our portfolio and strengthen profitability by expanding our renewable energy, after-sales, and nuclear power-related businesses.

Tadao Horie
Executive Officer
Corporate General Manager, Power Generation Business Group



Market Trends and Business Opportunities

In response to the growing problem of climate change, the market for renewable energy is expanding as the trend toward decarbonization accelerates.

For geothermal power generation, although business negotiations have stalled in some overseas markets due to the impact of the COVID-19 pandemic, development is progressing in Japan, and projects with low capacities are starting to materialize.

In hydro power generation, which is a stable source of electricity, demand continues in Japan for replacing aging power generation facilities and rising output.

For solar power generation, demand for the construction of

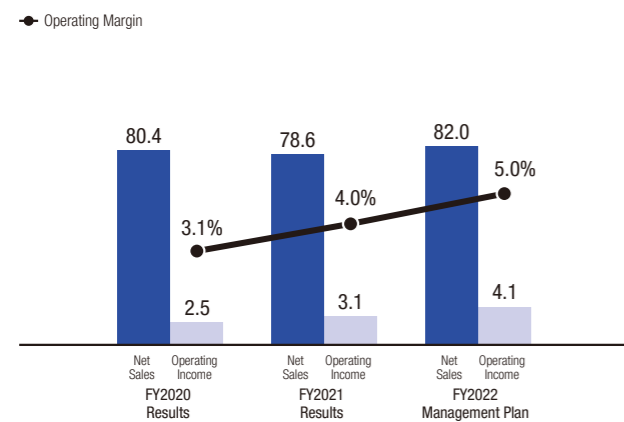
regional microgrids as distributed power sources is gradually expanding in Japan, while Official Development Assistance (ODA) projects are taking shape in Southeast Asia.

In the nuclear power generation sector, safety is a top priority, and there is increasing demand for decommissioning of facilities and waste treatment.

In the after-sales sector, in response to the expansion of renewable energy sources with fluctuating output, such as solar and wind power generation, there is a growing need to improve the output adjustment capabilities of existing thermal and geothermal power generation facilities.

Fiscal 2021 Results and Fiscal 2022 Plan

Business Performance Trends (Billions of yen)



We are focusing on improving profitability as well as promoting the transformation of our portfolio with a focus on the renewable energy and after-sales businesses.

In fiscal 2021, despite a decrease in sales due to rebound from large-scale renewable energy projects recorded in the previous fiscal year, the operating margin improved to 4.0%, reflecting differences between projects and cost reductions.

In fiscal 2022, thanks mainly to higher sales in the renewable energy and after-sales businesses, particularly geothermal power generation, we forecast net sales of ¥82.0 billion, up ¥3.4 billion year on year, and operating income of ¥4.1 billion, up ¥1.0 billion, with an operating margin of 5.0%.

Priority Measures

We are promoting the transformation of our business portfolio in response to the accelerating tide of decarbonization. In addition to our core renewable energy and after-sales businesses, we will expand business in the decommissioning and waste treatment sectors in nuclear power-related facilities and increase sales in the carbon-free sector.

Expanding orders for renewable energy Geothermal power

In geothermal power generation, where we have the top market share in the industry, we are expanding our business mainly in Japan, Asia, and Africa. Fuji Electric has the advantage of being able to handle flash cycles, which are suitable for high-temperature heat sources, and ORC*, which can generate power from low-temperature heat sources, as a single company. Taking advantage of this strength, we will intensify proposals to expand orders in Japan for small-scale heat sources of 5 MW or less, which have short lead times. Overseas, we will continue to promote activities to win orders in countries developing geothermal power systems in Asia and Africa.

* ORC (Organic Rankine Cycle): A method of generating electricity using a low-boiling medium with a low evaporation temperature instead of water and steam

Hydro power

In response to the high level of power plant S&B* demand, we are expanding orders by leveraging our strengths in differentiated products such as hybrid servo systems that reduce environmental impact and improve reliability and maintainability, as well as turbine technology that enables highly efficient power generation from water sources with varied flow rates. As of the beginning of fiscal 2022, our order backlog had grown around 3.1-fold for the past 4 years, and we will strive to respond to high workloads by developing and expanding human resources, with the goal of further expanding orders and sales.

* S&B (Scrap and Build): Achieving efficiency by scrapping or eliminating obsolete and inefficient facilities and replacing them with new ones

Solar and wind power

For solar power generation, we are pursuing increased orders by leveraging our strengths in high-efficiency power conditioning systems, as well as solutions that use storage batteries to contribute to power stabilization and peak shifts, and by responding to the need for distributed power sources in Japan, for example with regional microgrid construction and self-consumption power generation facilities in the industrial sector. Overseas, we will seek to expand orders by leveraging the supply chain we have established for geothermal power generation and other projects, particularly in Southeast Asia.

For wind power generation, in addition to steadily carrying out our ongoing large-scale self-consumption wind power generation facility project, we will strengthen our proposals in Japan by leveraging the know-how we have accumulated through this project and our strengths in power stabilization technology and other areas.

Expanding our nuclear power-related equipment business

Amid progressive efforts to improve the safety of nuclear-related facilities, we are continuing to contribute to safe and secure decommissioning and waste treatment by utilizing Fuji Electric's strengths in remote handling (including nuclear fuel removal and storage), radiation measurement, radioactive waste cutting and solidification, and other technologies.

Expanding our after-sales business

To expand sales of maintenance and replacement services, we will develop and propose new products that meet decarbonization needs, such as solutions for changing fuel mixes. In Japan, we will strengthen our solution proposals by increasing the efficiency of power generation facilities and improving the adjustment capabilities of existing power generation facilities, which contribute to stabilizing electric power when combined with renewable energy. Overseas, we will strengthen our proposals to ensure that we capture the maintenance needs of existing power generation facilities in Southeast Asia and other regions.

Percentage of Sales by Sector

