

# Power Generation Business Strategies

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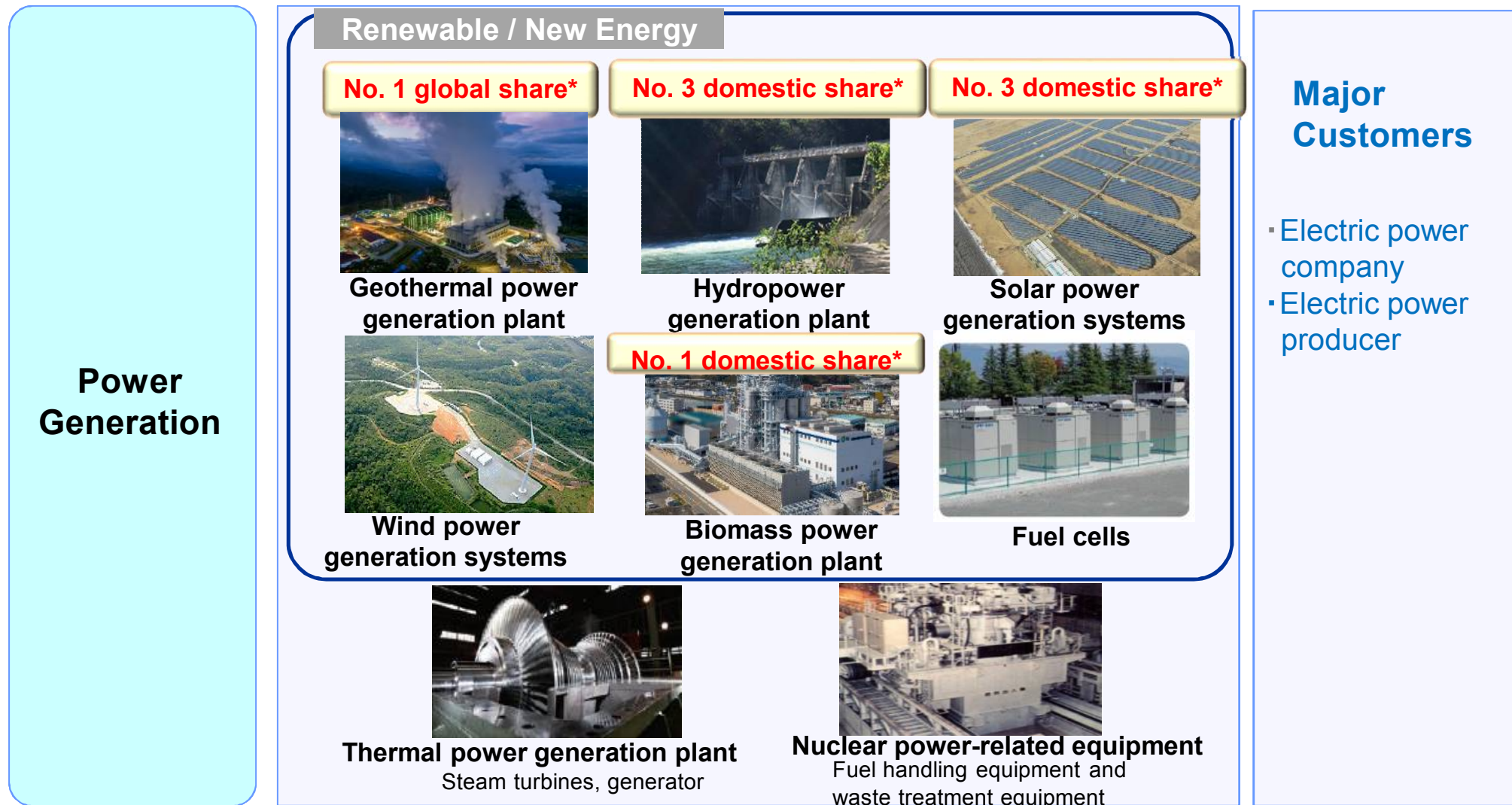
Fuji Electric Co., Ltd.

## ■ Business Overview

## ■ FY2021 Management Plan

- Market Outlook
- Business Policies
- Business Plan
- Priority Measures
- Capital Investment / Research and Development

## Provision of highly efficient, eco-friendly clean energy



\* Based on FY2020 performance; Source: Fuji Electric Co., Ltd.

Notes: 1. Share figures for geothermal power generation plants are based on orders from 2000 forward. Share figures for solar power generation systems based on deliveries of industrial power conditioning subsystems with a capacity of 500 kW or more applicable under 2012 feed-in tariff system.

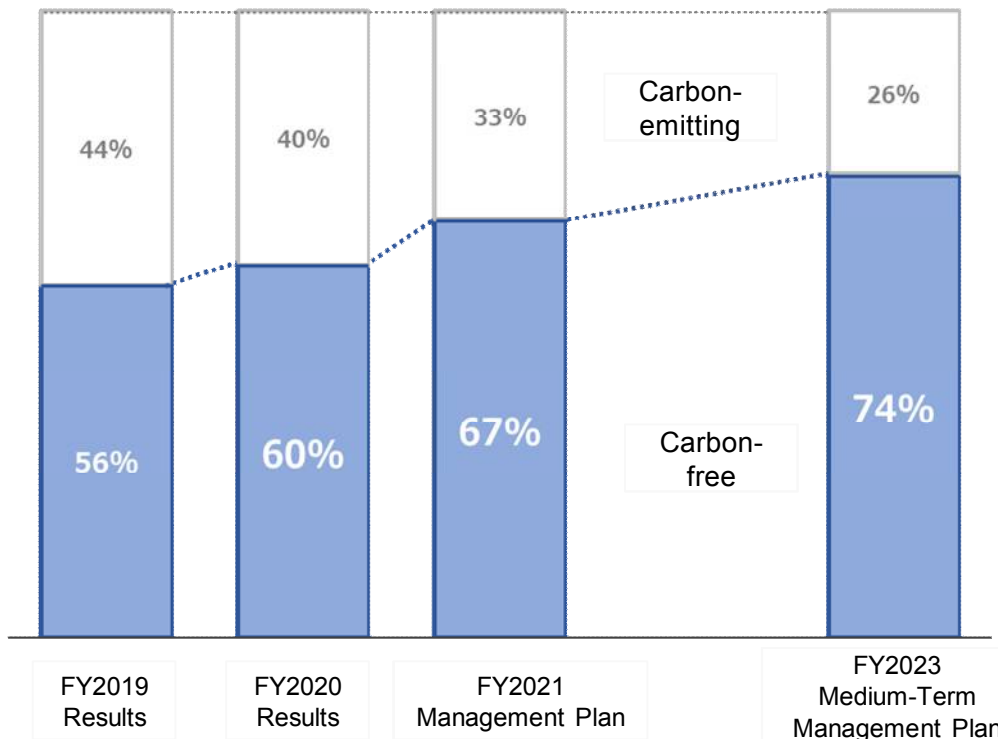
2. Photograph for geothermal power generation plant displays the Muara Laboh Geothermal Power Plant (photograph provided by PT Supreme Energy Muara Laboh).

# Progress in Priority Measures

- **Focus on renewable energy and decentralized power supplies**  
(geothermal, hydropower, solar power, wind power)
- **Enhancement of after sales businesses**

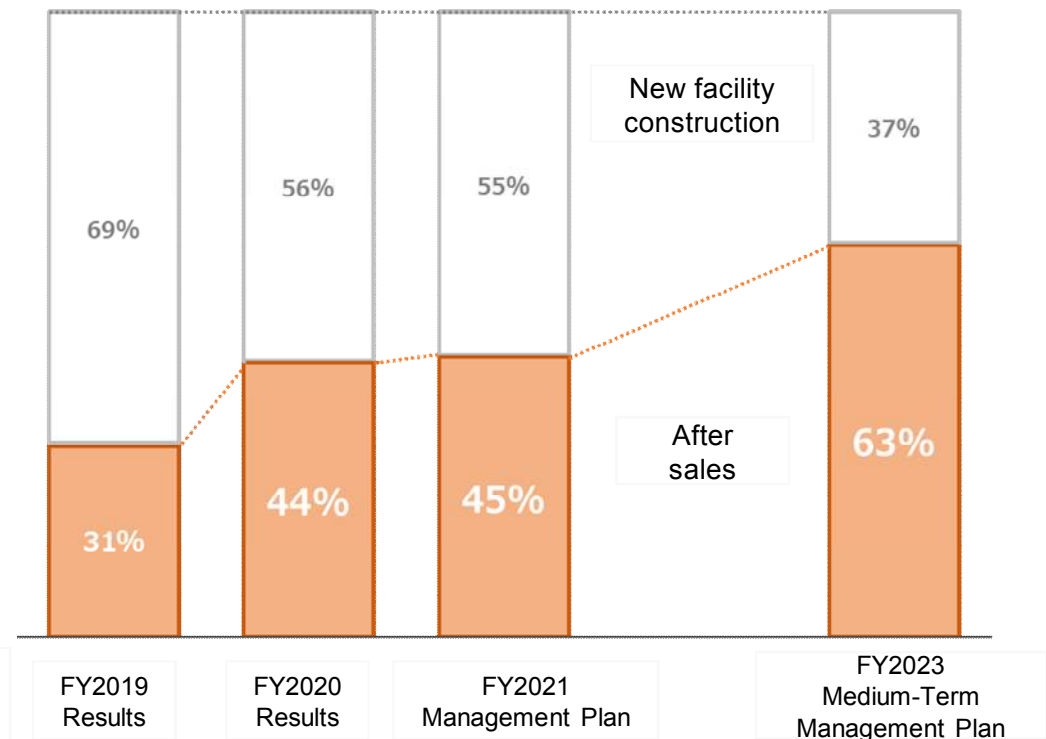
**Sales Ratio by Market Need Category**  
(Carbon-Free / Carbon-Emitting)

Increase ratio of sales of carbon-free systems



**Sales Ratio by Business Category**  
(New Facility Construction / After Sales)

Increase ratio of sales of after sales services



# Market Trends and Measures in Principal Businesses

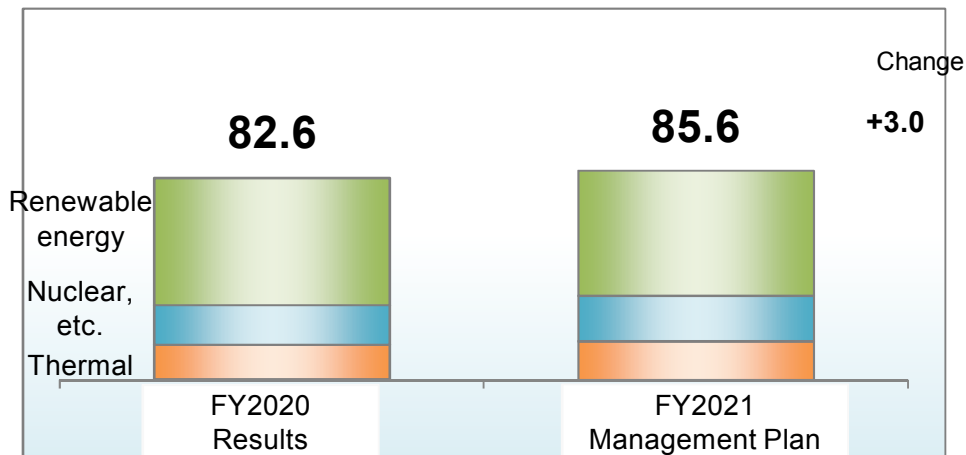
## Advancement of portfolio reforms to grow orders and sales for renewable energy systems and non-fossil fuel power supplies

	Market Trends	Change (YoY)	Measures
<b>Geo thermal</b>	<ul style="list-style-type: none"> <li>▪ Rise in survey and development projects</li> <li>▪ Increase and concrete progress in projects with low capacities below 5 MW</li> </ul>	<b>Growth</b> →	<ul style="list-style-type: none"> <li>▪ Development of relationships that facilitate acquisition and advancement of projects through design assistance in early stages of project development</li> </ul>
<b>Hydro power</b>	<ul style="list-style-type: none"> <li>▪ Continuation of FIT-driven scrap and build projects</li> </ul>	<b>Growth</b> →	<ul style="list-style-type: none"> <li>▪ Leveraging of technological prowess in domestic market to achieve consistent growth over the medium to long term</li> </ul>
<b>Solar/ Wind etc.</b>	<ul style="list-style-type: none"> <li>▪ Resumed activity in remaining FIT-applicable solar power projects</li> <li>▪ Business opportunities related to onshore and offshore wind power</li> <li>▪ Movement toward green hydrogen utilization</li> </ul>	<b>Flat</b> →	<ul style="list-style-type: none"> <li>▪ Steady generation of earnings through remaining FIT-applicable solar power projects</li> <li>▪ Expansion of operations in grid stabilization and other areas with potential for differentiation</li> <li>▪ Proposal of (hydrogen) fuel cells</li> </ul>
<b>Nuclear</b>	<ul style="list-style-type: none"> <li>▪ Rise in decommissioning and waste treatment projects</li> </ul>	<b>Growth</b> →	<ul style="list-style-type: none"> <li>▪ Contributions to safe decommissioning</li> <li>▪ Expansion of waste treatment solutions provisions</li> </ul>
<b>Thermal/ Geothermal After Sales Services</b>	<ul style="list-style-type: none"> <li>▪ Impacts on inspection and maintenance plans due to possible decommissioning of inefficient coal-fired thermal power plants and COVID-19 pandemic</li> </ul>	<b>Flat</b> →	<ul style="list-style-type: none"> <li>▪ Reinforcement and expansion of solutions-oriented upgrade services</li> <li>▪ Increased provision of hybrid technical services merging remote and face-to-face interaction</li> </ul>

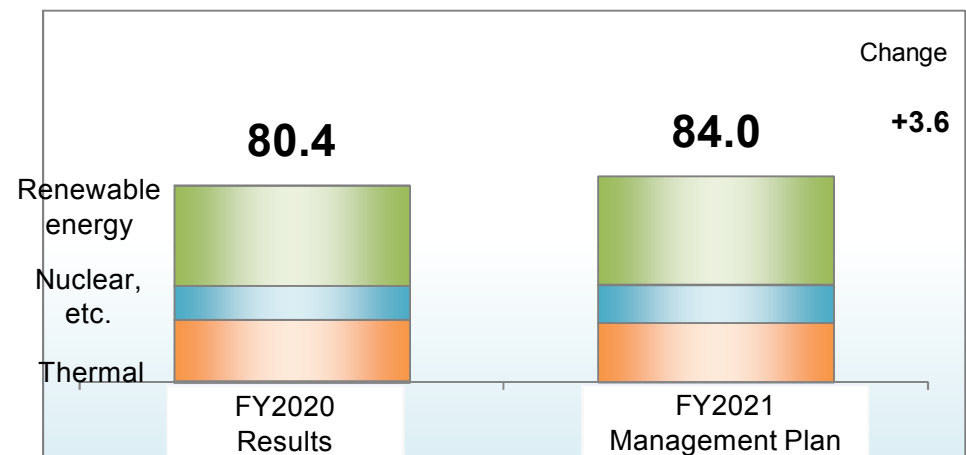
## Business Policies

Expansion of operations in carbon-free areas to address changing market environment

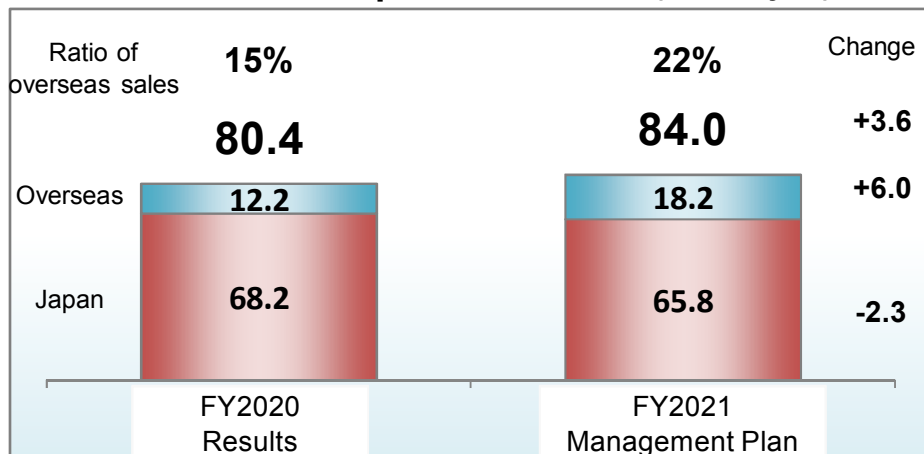
Amount of Orders Received (Billion yen)



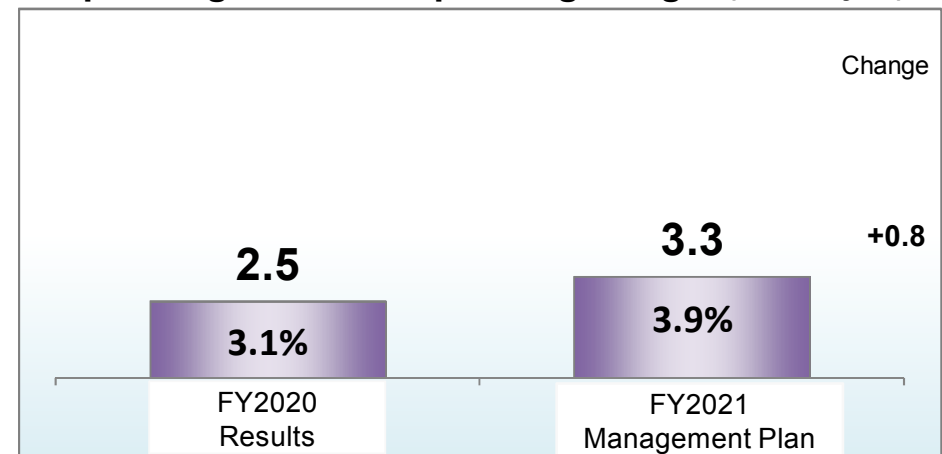
Net Sales (Billion yen)



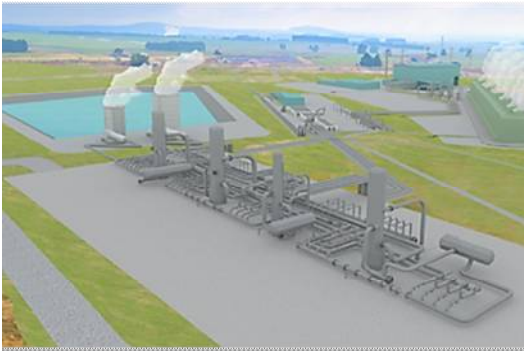
Net Sales in Japan / Overseas (Billion yen)



Operating Income / Operating Margin (Billion yen)



# Geothermal Power Priority Measures



**Tauhara Geothermal Power Station**  
(rendition of completed facility)  
(Photograph provided by Contact Energy)



**Muara Laboh Geothermal Power Plant**  
(Photograph provided by PT. Supreme Energy Muara Laboh)

## Japan

- Promotion of sales of flash systems with 15 MW capacity
- Promotion of sales of ORC\* systems for projects with less than 5 MW capacity

\*Organic Rankine Cycle: Generation method using fluids with low boiling points in place of water

## Overseas

- Continuance and promotion order-taking activity in Asia, Africa, and other promising locations
- Enhancement of market presence by contributing to renewable energy popularization in countries developing geothermal power systems, advancing partner strategies, and reinforcing supply chains
- Growth of profits through stronger project management and cost reduction measures

### ■ Topics—World's Large Capacity from Single Geothermal Power Unit

**Project Name: Tauhara Geothermal Power Project (New Zealand's North Island)**

**Generation Capacity: 152 MW**

**Generation Method: Triple flash geothermal facility (scheduled for completion in 2023)**

# Hydropower Priority Measures



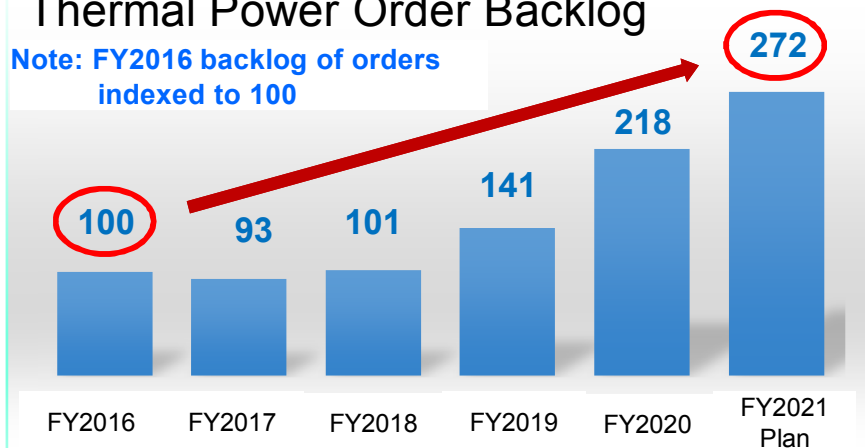
**Shimizu Sawa Hydro Power Plant**  
(Photograph provided by Hokkaido Prefectural Enterprise Bureau)

Effective incorporation of existing power plant after sales service projects (including output increases and scrap and build)

- Strengthening of project execution systems, ongoing acquisition of scrap and build projects by optimizing supply chains
- Differentiation of operations through application of new eco-friendly technologies

## Thermal Power Order Backlog

Note: FY2016 backlog of orders indexed to 100



### ■ Topics

Performed water turbine generator installation as part of Shimizu Sawa Hydro Power Plant renovation project for Hokkaido Prefectural Enterprise Bureau (operation commenced in April 2021)





# Solar Power and Wind Power Priority Measures

## Solar Power

### Japan

- Support for swift development of inactive projects using FIT scheme and acquisition of related orders
- Promotion of sales of stabilizers and PCSs for local consumption power generation applications

### Overseas

- Ongoing growth in solar power orders in Southeast Asia



**GPD Oboro Solar Power Plant**  
(Photograph provided by Green Power Development Corporation of Japan)

### ■ Topics

- **Completion of GPD Oboro Solar Power Plant (DC capacity of 31.7 MW, AC capacity of 20.0 MW, LiB capacity of 8.7 MWh), battery-equipped solar power generation facilities (compatible with output fluctuation mitigation standards required of plants under HEPCO jurisdiction), in July 2020**
- **Receipt of orders for FIT projects including Aoki Power Station (DC capacity of 23.3 MW, AC capacity of 19.5 MW) for FSJ (order received in March 2021) and Nobuoka Solar Power Plant (DC capacity of 12.6 MW, AC capacity of 10.0 MW) for JDC (order received in March 2021)**

## Wind Power

### Japan

- Support for swift business development
- Promotion of proposals using electricity storage and stabilization equipment and ultrahigh voltage and transformer technologies developed in solar power field and in which Fuji Electric specializes



**Wind power plant construction site in Aichi Prefecture**

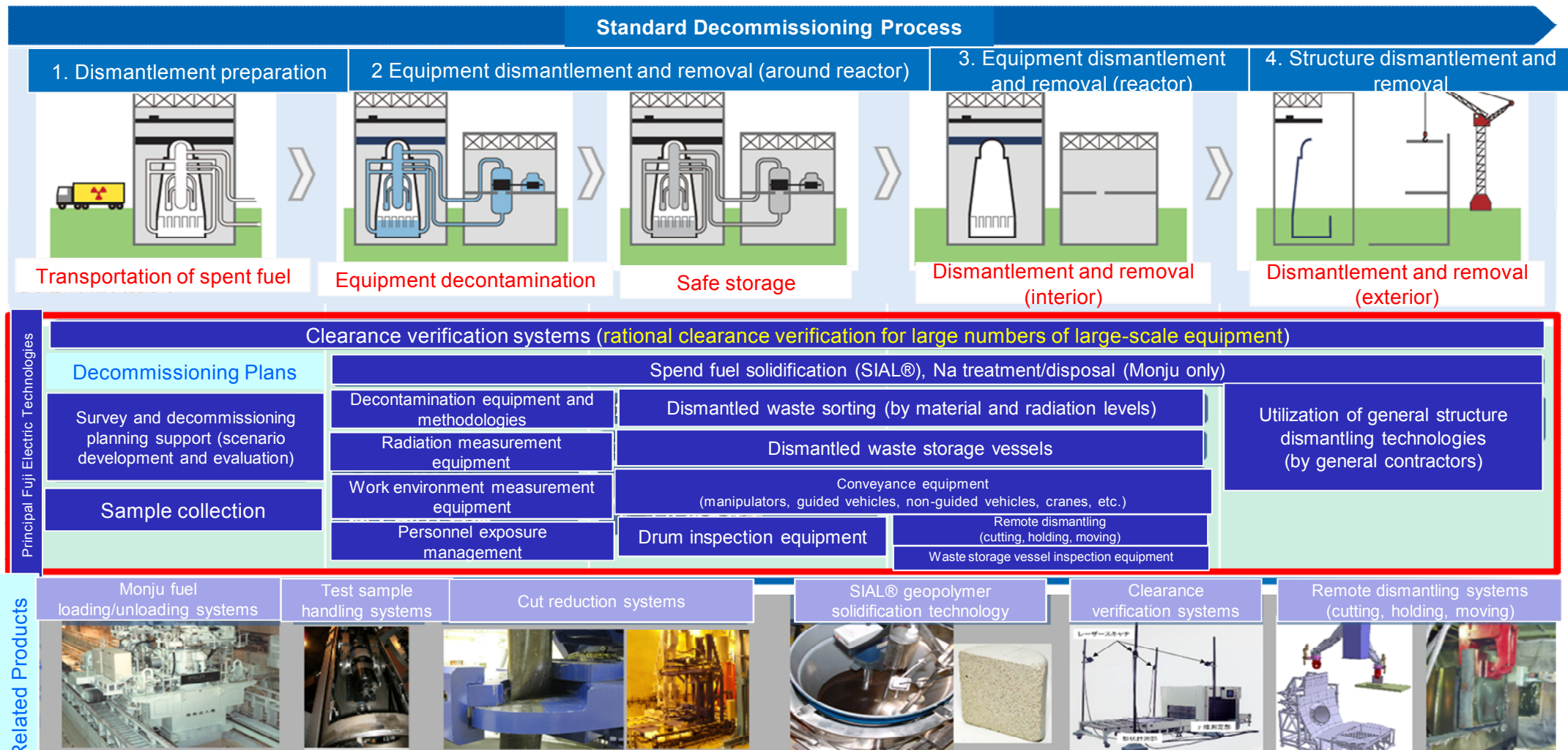
### ■ Topics

- **Moved forward with construction of large-scale wind power plant (5 units with capacity of 4.3 MW each) for localized consumption in Higashi-Mikawa area of Aichi Prefecture**

# Nuclear Power-Related Equipment Priority Measures

## Expansion of safe decommissioning and after sales businesses

- Expansion of decommissioning and radioactive waste treatment businesses and introduction of new products
- Advancement of spent fuel extraction initiatives



# After Services Priority Measures

- Enhancement of solution proposal in response to decarbonization trend  
 Fuel conversion, operation conversion, efficiency improvement, etc.
- More extensive provision of remote technical field advisor services matched to customer needs  
 Enhancement and expanded application of remote technical field advisor services to respond to diverse customer needs through approach combining remote technical services and engineer dispatch

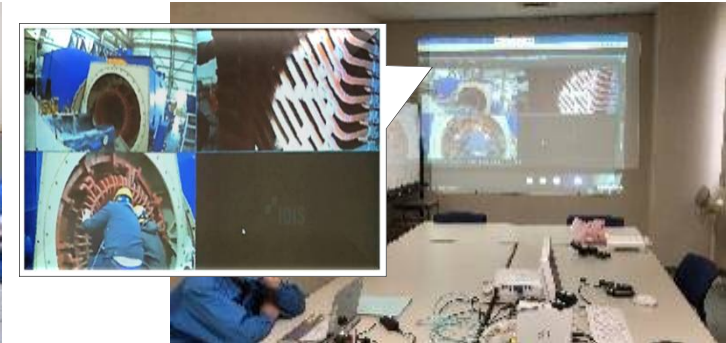
## 1. Remote Technical Field Advisor Service



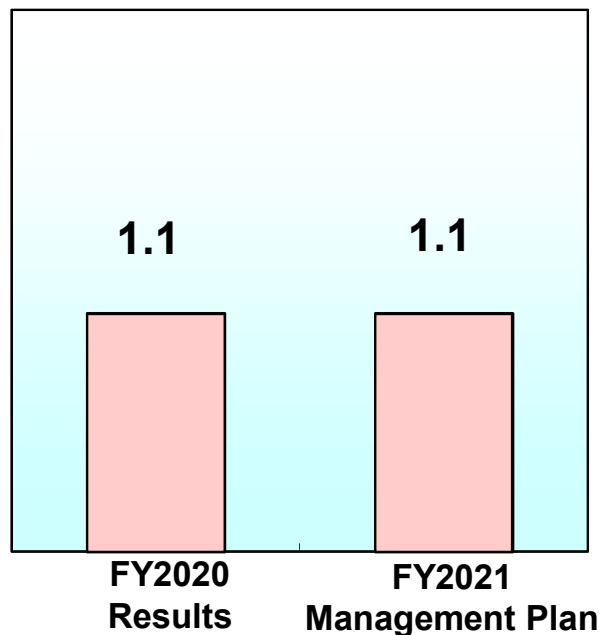
## 2. Remote Technical Field Advisor Service through local engineers



## 3. Engineer dispatch + Remote Technical Field Advisor Service



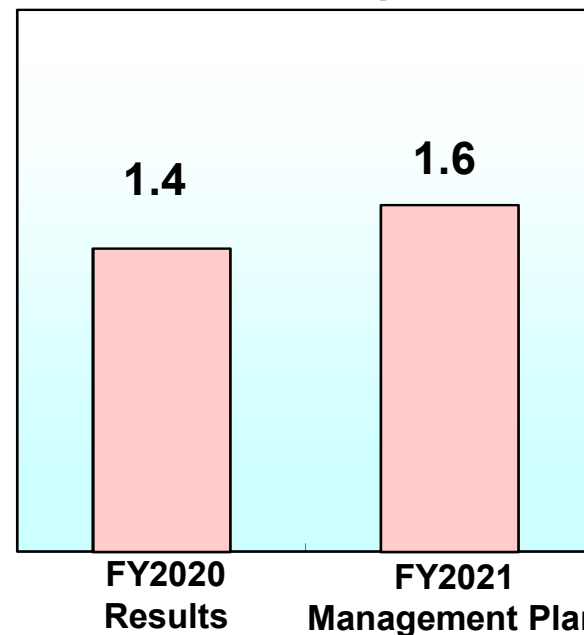
### Capital Investment (Billion yen)



#### Kawasaki Factory

- Production equipment upgrades/repairs
- Rationalization, etc.

### Research and Development (Billion yen)



Development of products and enhancement of solutions for growing renewable energy operations and strengthening after sales businesses

- Development of electricity storage and grid stabilization technologies and products
- Enhancement of inspection and repair service lineup

Note: The R&D expenditure figures above represent expenditures that have been allocated to segments based on theme and may therefore differ from figures contained in consolidated financial reports.

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