

OUR STRATEGY

# Power Infrastructures Business Group



Reflecting on FY2023

- ▶ Achieved operating income for the first time under the current segment classifications thanks to business expansion and profitability improvement in the Overseas T&D Business and increased revenue from demand recovery in the Domestic Power & Energy Business.
- ▶ Substantial increase in orders in the Overseas T&D Business on the strength of growing demand for power equipment in major countries, rising environmental awareness, expanding investment in renewable energy, etc.
- ▶ Orders in the Domestic Power & Energy Business increased due in part to aggressive, future-oriented investment plans by electric power companies

“ Establishing an efficient manufacturing system to meet strong domestic and overseas demand ”

Managing Executive Officer & Strategic Group Leader, Power Infrastructures Business Group | **Shinichiro Kon**

Business Environment

Opportunities

- Expanded business opportunities for our distinctive products due to stricter environmental regulations in North America and Europe and increased demand for updating
- Upswing in electricity demand forecasts associated with new data centers, semiconductor factories, etc.
- Expanding demand for planned updates to aging facilities in the wake of the new revenue cap system in Japan
- Firm demand for updates to hydroelectric power plants, a dependable renewable energy source

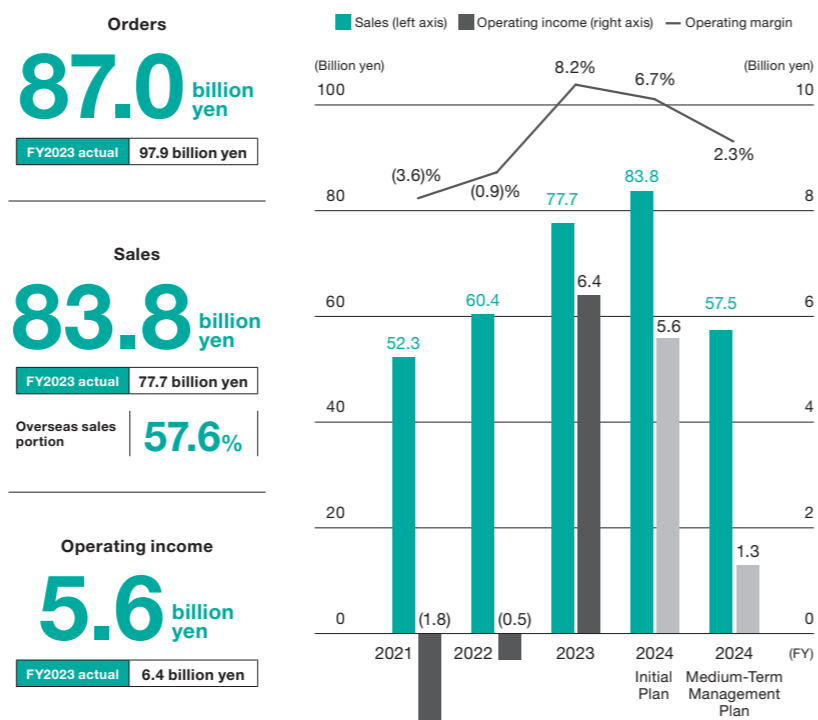
Risks

- Major changes in geopolitical risks, exchange rates, foreign countries' national trade and investment policies, etc.
- Delayed sales and compromised profitability due to process delays in large projects
- Changes in the market environment for environmentally friendly products

Strengths

- Lineup of environmentally friendly products
- Optimal cost and supply capacity realized through collaboration with overseas bases
- Power conversion technology that helps ensure renewable energy and power quality

FY2024 Management Targets (as of April 1, 2024)



Development in FY2024 and Beyond

Increasing global demand for electricity fuels market tailwinds

T&D Business

- ▶ Strong market conditions likely to continue due to rising global environmental awareness and expanding electricity demand forecasts
- ▶ Strengthen sales capacity and improve production systems to capitalize on stronger market environment
- ▶ Differentiate from competitors by expanding lineup of environmentally friendly products

Power & Energy Business

- ▶ Demand for power equipment expected to remain strong against a backdrop of future demand growth, stronger interconnection over wider areas, and development of power transmission and distribution networks in line with the revised power supply mix
- ▶ Strengthen production systems and pursue efficient manufacturing through aggressive capital investment and DX promotion

TOPICS

## Expanding our lineup of ester oil transformers and reactors toward realizing a sustainable society



IMPACT Quantitative social impact

CO<sub>2</sub> emissions reduction from using vegetable oil as an alternative to mineral oil in insulating oil \*1

Roughly **1/6**

Amid the growing need for environmentally friendly substation equipment over the past several years, demand has increased for products that run on plant-derived esters as an alternative to mineral oil. In May 2024, Meidensha added shunt reactors to its lineup of products featuring low-impact ester oil as the insulating oil, following the June 2023 release of environmentally friendly transformers. The cooling medium used to insulate these products can be any of the three esters specified in JIS C 2390 (Readily biodegradable electrical insulating oils).<sup>\*2</sup>

Among these esters, palm oil, rapeseed oil, and soybean oil are insulating oils made from vegetable oils, and using them can reduce CO<sub>2</sub> emissions in the product life cycle—which includes the process of disposing of and incinerating the insulating oil after use—compared to products with petroleum-derived mineral oil as the insulating oil.

Amid expectations for investment in power transmission and distribution networks to continue increasing in line with rising demand for electricity and greater reliance on renewable energy, firm demand is also expected for these environmentally friendly substation products. As a

sustainability partner that contributes to the realization of a more affluent and environmentally aware society, Meidensha will continue to take on the challenge of creating new technologies and value.



**Yuhi Kasai**

T&D and Power Products Engineering Section  
Power Infrastructure Business (PIB)  
Engineering Division  
PIB Sales & Engineering Group  
Meidensha



**Yuki Ahara**

Sales Section 2  
Power Infrastructure Business (PIB)  
National Sales Division  
PIB Sales & Engineering Group  
Meidensha

\*1 Comparing the total CO<sub>2</sub> emissions of mineral oil and rapeseed oil in each process of raw material production, production, and incineration  
\*2 Three types: Plant-derived esters (oil palm oil), natural esters/vegetable oils (rapeseed oil, soybean oil), and synthetic esters