# Smart Company

Contributing to these SDGs













## Hironari Mitarai

Smart Company President

Hironari Mitarai took on the role of Smart Company President in April 2022.



#### Value for society

The Smart Company is contributing to sustainable global society and the creation of a prosperous society through advanced functional materials and their applicable products in the four value-creation fields of energy, safe and secure social infrastructure, healthy lifestyles, and food supplies.

> Power card lead frames (inverter parts for electric vehicles)



#### **Business fields**

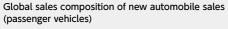
■ Main products: Electronic materials and components (inverter components for electrified vehicles, etc.), anisotropic bonded magnets (low-neodymium magnets, etc.), dental magnetic attachments, GMPS autonomous driving support systems, ultra-sensitive magnetic sensors, iron fertilizers

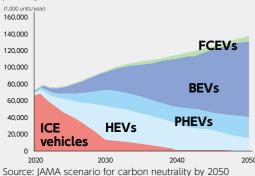
#### Company strengths

- Diverse range of advanced functional materials created through manufacturing capabilities that combine material technologies of materials, magnetism, and surface treatment
- Technologies that draw out the performance of advanced functional materials, and unique applied products

#### Business environment

With expansion of CASE technologies in the automotive industry, markets are expected to grow strongly for components for electrified vehicles and autonomous driving support systems, which are business fields in which Aichi Steel operates. We see this as a great opportunity for our growth. As efforts are made to address social issues that are materializing, including aging societies in advanced countries and food scarcity, we expect business expansion in the denture and iron fertilizer markets, which are expected to grow. We will achieve this expansion through popularization of the dental magnetic attachments that we have already commercialized and the next-generation PDMA fertilizer that we are currently developing.





#### Medium- to long-term growth strategies

#### 1. Electronic components business

- Sustainable growth through steady capture of demand for electrified vehicle components, which is expected to expand going forward
- Enhanced competitiveness through a strengthened production
- base focused on quality, the source of differentiation

  New product development and market launch in anticipation of social needs and in collaboration with customers

#### 2. Magnets business

- Expanded sales through proposal of solutions for more compact, high efficiency motors, including electric axles
- Increased supply chain resilience and rebuilt business models to ensure stability of raw material supplies (rare earths)

#### 3. Dental business

- Expanded market share with MAGFIT dental magnetic attachments, one of our main products, through coverage by
- Expanded sales through market launch of new products able to support diverse dental techniques
- Development of supply chains that also factor in overseas

#### 4. Sensor and metallic fiber business

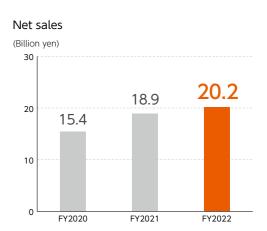
- Expanded sales of GMPS autonomous driving support systems through provision of solutions for streamlining logistics in plants
- Development of markets in security and medical fields that can utilize the properties of MI sensors (ultra-high sensitivity, small size, power saving)

#### 5. Iron fertilizer business

• Establishment of mass production technologies and development of a global sales network to achieve profitability

#### Fiscal 2022 Business Performance

Despite reduced sales in the magnets business, the Smart Company achieved increased revenues thanks to increased sales volumes of inverter components for electrified vehicles due to increased demand for electrified vehicles. Business profit, on the other hand, was negative due to the effect of things like an increased cost burden due to increased costs of raw materials and energy.



### Achievements and Future Initiatives

#### | Electronic components business: Further growth due to rapidly accelerating shift to electrification

With the shift toward electrification of automobiles, the Smart Company is working to enhance its production capacity for power card lead frames, for which demand is expected to continue growing. In fiscal 2022, we expanded and started operating new production lines at the Gifu Plant, one of our key plants. In fiscal 2023, we started preparations to increase production capacity by 30% to capture further growth in the market for electrified vehicle components.

## Approx. Approx. 2.4 times

Sales volumes for power card lead frames

#### I Iron fertilizer business: Overseas expansion

We are focusing on expanding our next-generation PDMA fertilizer business, which is expected to contribute to increased food production in poor alkaline soils. While working to develop technologies for industrialization of this product, we are actively conducting performance evaluations through large-scale field tests overseas, and promoting the product through presentations of research results at various international conferences, to open sales channels overseas as well.

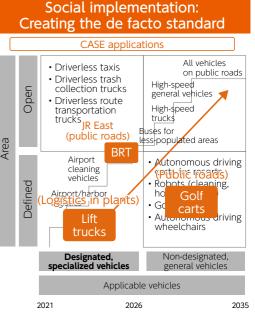
#### I Sensor business: GMPS transitioning to the social implementation phase

Large autonomous

BRT bus

Aichi Steel's GMPS autonomous driving support system has been adopted for use with autonomous buses operating on the JR East Kesennuma Line BRT. As the first example of social implementation of this technology, operation began between Yanaizu Station and Rikuzen-Yokoyama Station, Miyagi Prefecture, in December 2022. With its ability to always identify vehicle position to a high level of accuracy, the GMPS is essential for ensuring safety for public transportation systems. It was adopted because GPS signals are unstable in tunnels, and cameras and other optical devices have trouble in poor weather conditions. We will continue to further increase adoption cases as we work toward expanding sales by expanding the scope of application to include logistics in plants and other uses.





Photograph provided by: East Japan Railway Company

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