DENSO Integrated Report 2024 Overview by Product

Business Portfolio and Value Creation

DENSO operates seven core businesses in a range of domains, with particular emphasis on the mobility domain. The Company has built its business portfolio with a view to creating new value for the future and enabling respective businesses to resonate together as they maximize value creation. Moreover, at present reweighting the business portfolio is a priority strategy. Even in a volatile operating environment, a reweighted business portfolio will allow us to market products and services that reflect demand and to continue to arow.

Business Composition

As a company trusted by automakers worldwide, DENSO supplies an extensive lineup of products and systems, mainly through its automotive businesses. We have five automotive businesses: the Electrification Systems Business, which is pivotal to the popularization of electric vehicles: the Powertrain Systems Business, developing and manufacturing powertrains for an array of different vehicles; the Thermal Systems Business, engaged in the manufacture of in-vehicle airconditioning systems that account for the largest share of the global market; the Mobility Electronics Business, which aims to eliminate traffic accident fatalities through systems that realize advanced safety functions by incorporating high-performance sensors and radar; and the Advanced Devices Business, providing semiconductors and other devices that are essential for mobility-related development going forward. By promoting electric vehicle popularization, advanced safety, automated driving, and connected driving, these five automotive businesses are leading our progress toward the new mobility that society seeks. Our non-automotive businesses are leveraging technologies fostered in the automotive businesses to develop businesses in the fields of factory automation (FA) and food and agriculture (AgTech).

Relationship between Companywide Strategy and **Business Strategies**

Business strategies closely integrated with Companywide strategy are key to realizing the Mid-term Policy for 2025 and achieving green and peace of mind strategies. We are maximizing the value we provide to society by steadily reweighting our

business portfolio based on a Companywide strategy-which also takes into consideration the advancement of the entire industry and entails ensuring growth through the de-emphasis and discontinuation of internal combustion engine productsand by accelerating the development and sales growth of green and peace of mind products. Further, we are enhancing efficiency through Companywide efforts to reduce fixed costs, reassign human resources, and promote dialogue that enhances engagement and safety awareness.

In light of the current business environment and the progress of business strategies, DENSO annually reviews, deliberates, and revises short-, medium-, and long-term scenarios that envision leveraging the distinctive advantages and capital of each business to realize the Companywide strategy. The following pages focus on the progress of and accomplishments under the business strategies of each business, which are integrated with the Companywide Mid-term Policy for 2025.

Fiscal 2024 Summary

Global economy: The global economy showed resilience and continued recovering gradually, despite continued uncertainty due to concerns that monetary tightening in the United States and Europe would produce an economic recession and to sluggish growth in China and emerging countries.

In the United States, interest rates remained high, with the U.S. dollar appreciating against the currencies of various countries. In addition, although the global inflation rate came down from its 2022 peak, the trend toward rising consumer prices and wages continued in many countries. Disputes with attendant geopolitical risks whose actualization could potentially





disrupt logistics and lead to hikes in material prices continued to smolder. These disputes included Russia's prolonged invasion of Ukraine and instability in the Middle East.

Revenue and operating profit: Against the backdrop of a pickup in vehicle production due to an easing of the semiconductor shortage, sales of electric vehicle components and safety and peace of mind products rose, resulting in an 11.6% increase in revenue year on year, to a record high of ¥7,144.7 billion. Operating profit declined 10.7% year on year, to ¥380.6 billion, due to the establishment of a provision for quality measures amounting to ¥201.5 billion mainly related to fuel pumps, which outweighed the effect of steps to increase production volume, rationalize, and pass on cost increases to prices. Nonetheless, these steps offset hikes in parts and material costs, centered on electric vehicle components, and hikes in labor costs.

Principal Changes in the Business Environment (Future Opportunities and Risks)

Proliferation of electric vehicles: The electrification of cars is attracting attention amid the worldwide acceleration of initiatives, regulatory enforcement, and rulemaking aimed at the realization of carbon neutrality. BEVs are likely to account for more than half of the world's vehicle production by 2035, with particularly high growth rates expected in Europe and China. While the transition to BEVs is set to progress steadily over the medium to long term, in the short term the momentum of BEV penetration is softening, with internal combustion engine (ICE) vehicles and hybrid electric vehicles (HEVs) being reconsidered in some regions. While expediting product development and production capacity ramp-ups for BEVs, we must ensure that our product lineup and supply capacity reflect the powertrain mix required by each region at any given time. (Electrification Systems, Powertrain Systems, and Thermal Systems □ P.82-87

Rising demand for in-vehicle semiconductors: By 2030, the global market for in-vehicle semiconductors is expected to be approximately 3.5 times bigger than it was in 2020. Semiconductors are becoming more important than ever due to the coming of a decarbonized society and innovations in mobility technologies.

Semiconductors also play critical roles in non-automotive industries. In the early 2020s, the COVID-19 pandemic triggered semiconductor supply issues in various industries. Transcending individual industries, a struggle for supremacy in relation to semiconductors continues as geopolitical risks emerge. To ensure a stable supply of highly competitive semiconductors, strategic technology development and the establishment of supply chain structures are essential. (Advanced Devices P.90–91)

Increased utilization of in-vehicle software: As vehicles become more sophisticated due to the popularization of electric vehicles and the development of advanced driver assistance systems (ADAS), in-vehicle software is increasing in quantity and complexity. As for connected vehicles, which link with a range of objects, the use in recent years of over-the-air systems will enable wireless, remote software updates and performance improvements on an ongoing basis. As the importance of invehicle software grows, more IT companies are entering the automotive industry, and competition is becoming increasingly fierce not only in the development field but also with regard to

standardization and commonality aimed at penetration. (Mobility Electronics 🖾 P.88–89)

Intensification of labor shortages: The number of people facing food insecurity is rising due to frequent climate crises globally and disruptions in logistics and supply networks as a result of conflicts. Worldwide, there is ever-increasing demand for stable, large-scale agricultural production and the establishment of food value chains that allow everyone to enjoy the benefits of food security and safety.

In addition, labor shortages are becoming more serious around the world, especially in developed countries. A noteworthy example of this issue is Japan's "2024 logistics problem"* (shortage of truck drivers). To solve the issues that are emerging due to the decline in the working population and to enable the continuation of production activities, society must improve productivity by introducing new technologies for manufacturing and logistics networks. (Factory Automation and Social Solutions; Food Value Chain P.92–93)

* The "2024 logistics problem" refers to the logistical delays that are expected to result from two regulations related to truck driver working hours, both of which took effect in April 2024.

Reweighting of Our Business Portfolio

Since fiscal 2022, DENSO has been optimizing its business portfolio to simultaneously maximize business growth and social value creation that accord with the Company's green and peace of mind principles. Our goal is to concentrate in-house management resources on fields that better align with both earnings growth and our principles. We will invest more in growth and priority businesses. As for contracting businesses, with an emphasis on discipline we will decisively implement well-focused capital expenditures and investments in R&D.

In today's cross-field pursuit of new products and value, competition is becoming ever more complex. Rather than adopting the viewpoint of a stand-alone company, we will drive industry reorganization through selection and concentration that promotes the medium- to long-term growth of the industry as a whole. With the aim of accelerating the transformation of our portfolio, we have assigned a Companywide task force to conduct both financial and non-financial verifications each year and to constantly formulate and implement partner strategies. We will continue to formulate strategies and narrow down partner candidates. Without trying to be overly self-sufficient, we will assemble an optimal lineup of businesses by forming alliances with various partners (M&As) while growing priority businesses and rightsizing or exiting from mature businesses.

Industry-wide Efforts to De-Emphasize and Discontinue Internal Combustion Engine Products

DENSO views rightsizing or exiting from mature businesses as de-emphasizing and discontinuing internal combustion engine products in a manner that allows customers, the companies assuming DENSO's businesses, suppliers, and DENSO to move toward optimal situations. Based on this policy, we have already disposed of the fuel pump module, type III alternator, and spark plug businesses. In fiscal 2024, we announced our intention to begin considering the disposal of certain ceramic product businesses. While continuing to safely and reliably offer customers products of the same high quality as a basic principle, we will create capabilities in the entire automotive market enabling the supply of products that have appealing performance and pricing.