

JAPAN MOBILITY SHOW 2023

Press Conference Remarks by Mr. Hayashi – October 26th, 2023
Shinnosuke Hayashi, President and COO

DENSO CORPORATION

Good morning. I'm Shinnosuke Hayashi of DENSO. Thank you very much for attending our press conference.

It is a great pleasure that the Tokyo Motor Show, which has attracted much public attention for decades, has been renamed the JAPAN MOBILITY SHOW. This change reflects the fact that we are entering an era of creating new value by addressing various issues from the viewpoint of a mobility-centered society instead of just vehicles and by connecting people and technologies across industries. This means that we must meet major challenges.

“A society where carbon-free vehicles are used in line with the energy situation of respective countries”

“A society in which drivers are freed from the task of driving and can spend time as they like”

“A society in which renewable energy is shared among vehicles, homes, and the social infrastructure”

To realize such a society, it is essential to “connect all the systems in a vehicle,” “connect vehicles,” and “connect vehicles with the social infrastructure.” It is also necessary to build hardware and software platforms that ensure connectivity and to offer products and solutions that meet various needs. When these goals are attained, vehicles will further evolve to help form a mobility-centered society in which they serve as part of the social system.

Since its founding, DENSO has squarely addressed issues of the automotive society, has continued to develop new products to solve issues, and has contributed widely to the auto industry. During its founding period, DENSO helped enhance the reliability of vehicles by developing electrical equipment, which had been a challenge in the development of domestic cars. After motorization took off, DENSO sought to develop system products that meet environmental and safety regulations in order to reduce the negative impact of vehicles. DENSO has continued to support the evolution of vehicles.

While tackling various challenges, we have also committed to giving shape to new concepts by using technologies and contributing to customers as a Tier 1 supplier in the auto industry. This means to “come up with concepts, embody them as products and systems, and refine them for commercialization.” Our commitment remains unchanged even as the scope expands from vehicles to a mobility-centered society.

We will evolve from “a Tier 1 supplier that supports the auto industry” to “a Tier 1 supplier that

supports a mobility-centered society” to create value for more diverse customers.

Today, I will focus on three major initiatives that we must address. The first initiative is to contribute to the evolution of mobility by connecting systems in a vehicle and connecting vehicles. The second initiative is to create new values by applying our mobility technologies into values for the whole of society. The third initiative is to strengthen semiconductors and software, which are fundamental technologies for creating new solutions. Through these initiatives, we will maximize our contributions to “Green” and “Peace of Mind.”

Let me start with the “evolution of mobility.”

First, “Green”, in other words, “the environment”. Previously, we expanded our product lineup in the “horizontal” direction to enable installation in HEVs, PHEVs, BEVs, and FCEVs while innovating the technologies of inverters, motor generators, and battery monitoring systems, which are the key products for electric vehicles. The lineup will be expanded in the “vertical” direction ranging from large systems, which link electrification products with energy management, to components, including power modules, thereby meeting the needs of various customers as BEVs proliferate and helping to achieve carbon neutrality in respective countries.

In the “Peace of Mind” field, in other words, “worry-free society”, in addition to around-vehicle monitoring systems, we will focus on driver status monitoring systems and cloud-based large systems, which connect with the social infrastructure. Through these efforts, we will help eliminate fatalities.

Furthermore, we will extend our commitment to the evolution of mobility to the sky in the form of supplying motors and inverters to help realize more freedom of traveling and expand the possibilities of mobility.

The second initiative is “to create new values.”

We have been studying the possibility of developing and commercializing many technologies in non-mobility fields, including energy, food and agriculture, and the circular economy.

One of our major projects is to “enter the hydrogen business.” Specifically, we have been conducting verification tests of Solid Oxide Electrolysis Cells, which produce hydrogen from electricity, and Solid Oxide Fuel Cells, which generate electricity from hydrogen, at DENSO’s plants. We plan to market energy system products from 2024 and beyond. We hope to contribute to realizing a carbon-neutral society by connecting industries and various energy sources based on hydrogen.

The third initiative is to “strengthen semiconductors and software.”

In terms of semiconductors, we will actively invest about 500 billion yen by 2030 and will triple the scale of the business from the current level by 2035. To expand production, we must ensure the stable procurement of materials. Thus, we will forge strategic partnerships with various companies.

In terms of software, BEVs and software-defined vehicles have been evolving concurrently, we will

shift from the basic design phase to the implementation phase to commercialize software. In the implementation phase to embody concepts, we will accelerate the planning of electronic platform and over-the-air technology development based on user needs while strengthening partnerships with various customers and promote integrated development across companies. In terms of company structure, we will increase the number of software engineers and improve their skills and integrate two group companies which have excellent proprietary technologies, into DENSO. One is NSITEXE, which specializes in the semiconductor intellectual property, and the other is AUBASS, which specializes in developing basic in-vehicle software. Therefore, we will strengthen integrated development involving automakers. We will double the speed of development by applying specialized AI, which incorporates our knowledge and experience gained through in-vehicle software. Moreover, we will hone our engineering capabilities for both semiconductors and software while also promoting external sales and establishing the solutions business.

To promote these three initiatives, human resources are the key.

We will recruit new employees in the electrification and software field and actively shift our employees from the mature field to the electrification and software fields and strengthen approximately 4,000 employees during the four years from 2022 to 2025.

The initiatives that I explained today cannot be accomplished by DENSO alone. Co-creation between the auto industry and other industries is indispensable. The concept of the Japan Mobility Show is “A place to envision the future, together.” Japan has a long history and culture of accepting differences, ensuring harmony, and creating value. We will improve our ability to understand the true needs of customers and design and realize an optimal architecture so that we can serve as an intermediary with partners as “a Tier 1 supplier that supports a mobility-centered society.

A mobility-centered society filled with a sense of well-being and excitement. We hope to create such a future with many companies from different industries.

Thank you very much for your attention.