

Manufacturing Capital

Outline of Efforts to Strengthen Manufacturing Capital

With a focus on the progression of the CASE revolution, DENSO is building a global production structure to enhance the satisfaction of customers in all areas of operation in terms of quality, cost, and delivery (QCD). At the same time, we are striving to reduce our environmental burden by conducting production activities with a commitment to world-leading environmental efficiency and high productivity. In these ways, we are working to evolve our manufacturing bases. Furthermore, as part of our efforts to establish DENSO-style digital-twin plants, we will strive to evolve our plants by combining our conventional strength of creativity, which is realized through the collective knowledge and efforts of our employees, and the strength of our scientific, logical analysis capabilities based on data, and leveraging them to a greater extent than ever before.

KPI Targets for Fiscal 2026

Capital expenditures **¥350.0 billion**

CO₂ emissions per unit **50% reduction (compared with fiscal 2013, non-consolidated)**

Characteristics of DENSO's Manufacturing Capital (Fiscal 2022 results)

Capital expenditures

¥353.9 billion

Planned investment in efforts to reduce

CO₂ emissions

¥100.0 billion (2022–2025)

CO₂ emissions per unit

48% reduction

(compared with fiscal 2013, non-consolidated)

With regard to our fiscal 2026 target of achieving a 50% reduction compared with fiscal 2013, we have realized a 48% reduction as of fiscal 2022.

Global Production and Supply Structure

Guided by the basic principle of manufacturing products in close proximity to our customers, we have built a highly competitive production structure in North America, Europe, China, greater Asia (including India), and Japan. At our manufacturing bases around the world, we aim to achieve leading levels of QCD in each region and realize *Monozukuri* that can withstand change. In order to reshuffle our business portfolio to accommodate the progression of CASE, realize carbon neutrality, and deliver products to our customers in a stable manner even while facing various supply risks, we are clarifying the role that each region and plant needs to play and striving to build a robust global production and supply structure that fully leverages DENSO-style *Monozukuri* know-how and production assets across the global supply chain, including our suppliers.

Initiatives to Realize Carbon Neutrality in Our *Monozukuri* Activities

DENSO aims to realize carbon-neutral *Monozukuri* by 2035. To that end, DENSO established the in-house Carbon Neutral Project Team in 2021 under which it will promote initiatives to conserve, create, and reuse energy in its *Monozukuri* activities. As an energy-saving initiative, we are striving to visualize energy use through F-IoT and reduce the wasteful use of energy during production. In addition, we are developing eco-friendly facilities and manufacturing methods that help us conserve energy. We are also promoting the use of materials and manufacturing methods that do not require heat by considering the idea of carbon neutrality from the stage of product development. As part of our efforts to create energy, we have designated the Anjo Plant, Hirose Plant, Nishio Plant, and DENSO FUKUSHIMA CORPORATION as model plants at which we will commence a wide array of verification tests for creating, storing, and reusing energy within our *Monozukuri* activities. In these ways, we will steadily push forward with efforts to realize our goal of carbon neutrality.

DENSO-style Digital-twin Plants

To create even better products and production lines, we have worked to create a robust manufacturing foundation through Excellent Factory (EF) activities in which all employees participate on a daily basis. In the same manner as these EF activities, the DENSO-style digital-twin plants that we are currently promoting revolve around people in the leading role. With such plants, we are promoting further improvements led voluntarily by personnel on the front lines by weaving together the inspiration and creativity that occurs on-site with various data related to production. By doing so, we are working to evolve our on-site manufacturing operations on a daily basis. The data we accumulate through these efforts is not only put to use within our plants but also linked with data from the engineering chain for product, process, and equipment design and data from the supply chain, including data from materials and components suppliers and data from our customers. By linking such data, we are able to enhance the speed and flexibility throughout the process from development to production. Going forward, we will refine the concept of digital-twin plants through in-house verification tests with the aim of rolling out the concept across the DENSO Group and among our suppliers.

