



Food Value Chain

Food is essential to people's lives. Together with our partners, we take a holistic view of the entire food value chain and provide solutions that ensure food safety and security to each region of the world, anytime, anywhere, and to anyone, forever. By combining technology with creative ideas, we aim to create new value and contribute to a society where everyone can live with peace of mind.

Yasushi Mukai Executive Officer

Business Strengths	Opportunities	Risks
• Horticultural greenhouse and automation technologies that enable stable cultivation amid labor shortages and climate change • Compact mobile refrigeration/freezing units utilizing thermal control technologies and downsizing/weight reduction technologies developed for automobiles • QR Code®, RFID, and digitalization technologies developed for manufacturing sites	• Concerns about food shortages stemming from worldwide decline in the farming population and unstable agricultural production due to climate change • Rising demand among consumers for food safety and security, and growing needs for streamlined food distribution	• Intensified competition and accelerated development driven by the rise of start-ups and industry consolidation in the horticultural sector • Competitive disadvantage if unable to deliver value-added solutions that integrate multiple products and services rather than offering stand-alone products

Business Strategy

By applying DENSO's industrial technologies to food cultivation and distribution, we aim to deliver solutions that ensure safe and secure access to food anytime, anywhere, and to anyone, forever.

Specifically, by industrializing farms through the integration of agricultural and industrial technologies, we will provide stable and planned food production solutions that flexibly respond to labor shortages, energy constraints, and climate change. Together with our partners, we will also globally roll out one-stop food distribution solutions that deliver high-quality food efficiently to consumers, thereby addressing food-related issues in society.

Progress on Mid-term Policy for 2025 and Outlook

Secure and Stable Food Production through Farm Industrialization

We are working with Certhon, a company in the Netherlands with state-of-the-art horticultural technology (which was turned into a wholly owned subsidiary in August 2023), to develop high-efficiency agricultural greenhouses by integrating our automation, environmental control, and DX technologies. Together, we will plan and develop reliable production solutions like these greenhouses.

To further stabilize agricultural production, we aim to provide farmers with comprehensive packaged solutions that include seeds and optimal cultivation methods. With this in mind, DENSO acquired Axia Vegetable Seeds B.V., a company in the Netherlands known for its high-yield and disease-resistant tomato varieties, and turned it into a wholly owned subsidiary in July 2025. We also signed a basic agreement in April 2025 with DELPHY GROEP BV, a leading cultivation consulting company in the Netherlands. We will continue to strengthen and accelerate collaboration with new partners, efficiently and rapidly building solutions while expanding our business globally.

Increasing Work Efficiency by Visualizing Food Distribution Data, and Enhancing Brand Value

We contribute to the streamlining of food distribution and the assurance of food safety and security by visualizing food distribution information using the QR Code®. We are expanding the use of our food origin certification system, which ensures traceability from production to sales and has been applied to clams from Kumamoto Prefecture, to include glass eels (subject to the Act on Ensuring the Proper Domestic Distribution and Importation of Specified Aquatic Animals and Plants) and are conducting pilot programs in cooperation with the national government and industry organizations. We will continue to participate in national project planning phases to expand the initiative to other food resources.

TOPIC

Data-Driven Autonomous Cultivation System

DENSO is developing an autonomous cultivation system using environmental and crop growth data from greenhouses, applying technologies cultivated in the mobility field, such as sensing technologies. This system will use data on crops, climate, markets, and other factors to control operations as well as the environment inside the greenhouse itself. Doing so will enable even those lacking agricultural expertise to achieve stable and systematic agricultural production. Furthermore, in a virtual space utilizing the cloud, we aim to make remote cultivation a reality by integrating market demand data and accumulated greenhouse data on the environment and crop growth to conduct real-time analysis and forecasting, leveraging insights from agricultural consultants and seed manufacturers, making it possible to appropriately control the greenhouse environment and cultivation operations.

