

Social Systems, Solutions and Service Business (SSB)

Domains

Corresponding
SDGs

Social Solutions



The mission of the Social Systems, Solutions and Service Business (SSB) is “Creating a society in which the people of the world live in safety, security, and comfort.” We provide a wide range of terminals and systems, including PV inverters, storage batteries, railway station systems such as automated ticket gates and ticket vending machines, traffic and road management systems, payment systems, and UPS that protect equipment from unexpected power disruption which cause data loss. We also provide total solutions ranging from software development to comprehensive maintenance services to support the social infrastructure.



Managing Executive Officer
OMRON SOCIAL SOLUTIONS Co., Ltd.
President and CEO

Toshio Hosoi

Realizing a Well-being Society Where People Can Continue to Live a Safe, Secure, and Comfortable Life in the New Normal Era

Looking ahead to the future, there are many social issues to be solved in front of us. COVID-19 has changed social structures, lifestyles and even our business styles. Amidst these rapid changes, as a company entrusted with the task of providing social systems, OMRON has to identify new social issues and resolve them in addition to maintaining the social infrastructure.

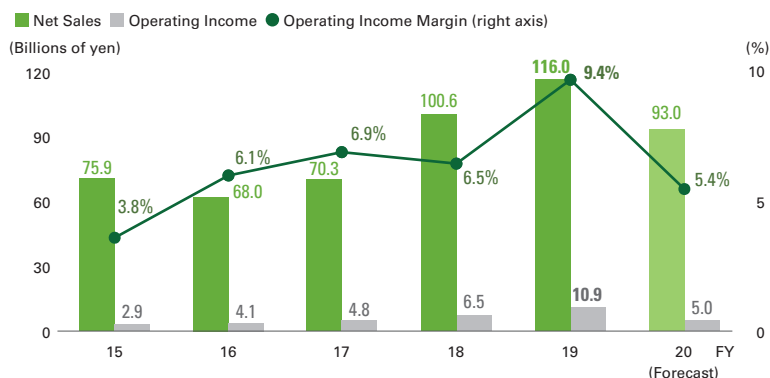
The SSB has defined “labor saving,” “resilience,” and the “environment” as the three social issues to be solved by 2030. Labor saving is a major issue for maintaining social infrastructure functions. Necessity of labor saving is growing even more in response to the demand of non-contact systems due to the COVID-19 pandemic.

Railway companies, our customers, are taking initiatives to maintain and improve their services and optimize their operations by the

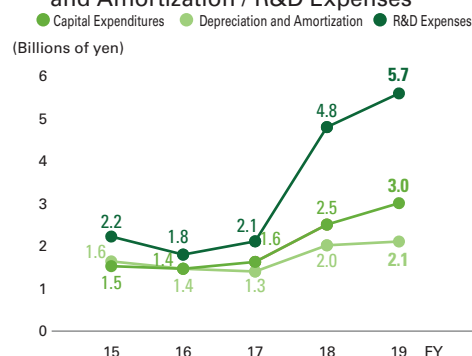
concept of saving labor through “coexistence of people and machines.” The initiatives include automating passenger support desk work handled by railway station attendants and using remote monitoring systems that enable centralized management of multiple facilities. For our initiatives in resilience, we aim to build a “strong” infrastructure assuming that disasters will occur and respond to the increasing frequency and severity of natural disasters on a global scale. We will accelerate our initiatives from the broad perspective of solving region-specific issues to build safe and secure communities. By combining our infrastructure monitoring technologies including water level monitoring to detect river flooding before it occurs with local governments’ information and knowledge. In the field of the environment, we take initiatives to promote renewable energy and optimize energy usage in response to climate change caused by global warming. In fiscal 2020, we merged the Environmental Solutions Business, which was under the direct control of headquarters. This resulted in adding energy control technologies cultivated in the development of environmental components such as PV inverters and storage batteries to our existing capabilities in software development and engineering. Leveraging this additional capability, we contribute to creating a sustainable society by creating systems for managing and coordinating energy demand on a regional basis, as well as sharing energy in the event of a disaster. The SSB will continue challenging to realize a safe, secure, and comfortable society required in the new normal era by solving these social issues through social automation, which combines our automation technologies based on AI, IoT, and robotics and providing total solutions in the fields of energy, transport, lifestyle services, and communities.

Business Highlights

Net Sales / Operating Income / Operating Income Margin



Capital Expenditures / Depreciation and Amortization / R&D Expenses

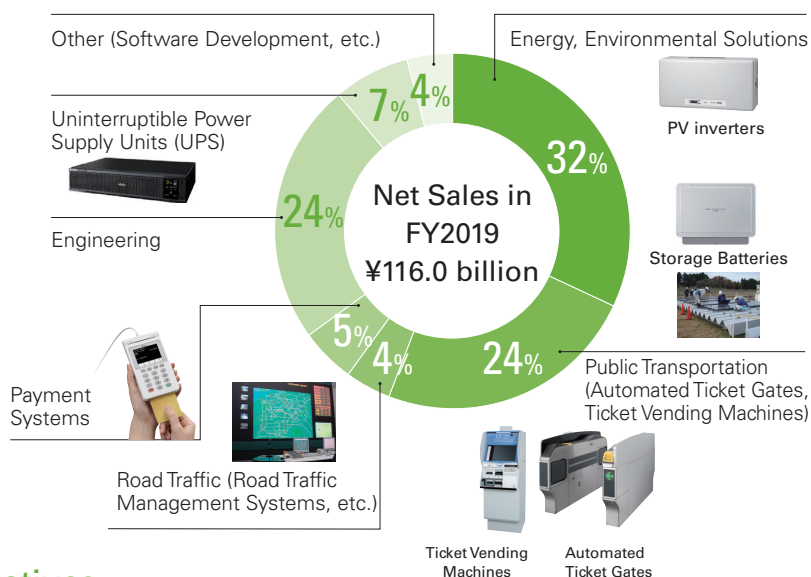


Fiscal 2019 Results and Fiscal 2020 Plan

In fiscal 2019, the SSB segment experienced strong demand for upgrades in the Public Transportation and Road Management Systems Business. In response, we proposed solutions tailored to the needs of our customers. In addition, the Environmental Solutions Business reported strong performance for the year, experiencing growing demand for storage battery systems. Net sales increased significantly compared to the prior fiscal year. Operating income increased significantly year on year, mainly due to higher net sales and improved profitability.

In fiscal 2020, we expect to see significant changes in investment among customers in the Public Transportation Business due to the impact of lower travel revenues. Although the Energy System Components Business is seeing a growing market for storage battery systems, the impact of the spread of COVID-19 has limited customer business activities, likely resulting in weak sales for the segment. As a result, we forecast net sales for fiscal 2020 to be lower than the previous year. Due to the decline in net sales, we forecast operating income to decrease year on year.

Sales by Product



Progress of Sustainability Initiatives

Social Issues to be Solved

- Contribute to achieving a smart society in which people around the world can continue to lead a safe, secure, comfortable, and clean life
- Global warming from CO₂ emissions
- Slow growth of the renewable energy market

Fiscal 2020 Goals

- Create driving safety support systems and technologies
- Cumulative shipped capacity of solar power/storage battery systems: 11.2GW
- Build the energy resource aggregation business using solar power/storage battery systems (Japan)

Fiscal 2019 Progress

INPUT

- Number of employees: 3,237
- Research and development expenses: ¥5.7 billion
- Capital expenditures: ¥3.0 billion

OUTPUT

- Net sales: ¥116.0 billion
- Operating income: ¥10.9 billion
- Launched tailgating detection function for the driving safety support system
- Cumulative shipped capacity of solar power systems: 9.6GW
- Cumulative shipped capacity of storage battery systems: 438MWh

OUTCOME

- Environmental contribution by SSB products and services: 898kt-CO₂



SDGs Goal 7.1.2



SDGs Goal 13.2.1

Promoting the Development of Resilient Communities That Are Resistant to Disasters

In recent years, floods and landslides caused by torrential rain and other natural disasters are increasing in frequency and severity in Japan. Previous natural disaster countermeasures were formed by systematic preparations and set procedures based on a tendency identified from past observation data. However, the recent natural disasters are beyond our expectations and they continue to set new records in scale. It is getting difficult to limit the damage using conventional countermeasures. Each local community needs to build a resilient system that can cope with events exceeding expectations, and to minimize the damage by making decisions and acting autonomously. This is becoming a social issue.

This article introduces our initiatives; the next-generation of disaster prevention “Visualization” that we are working on in cooperation with Maizuru City in Kyoto Prefecture.

Next-Generation Disaster Prevention: Visualization

To build resilient communities, it is necessary to first detect risks that could cause extensive damage to each region in real time, and then visualize them on a community-wide basis. However, local governments, which are responsible for implementing these measures are facing financial difficulties due to aging and depopulation. We therefore set out to develop a compact monitoring system for visualizing regional disaster prevention information, narrowing down the functions of sensors for detecting risks by utilizing our own assets.

We are now in the process of incorporating the monitoring system into Maizuru City’s portal site and setting up the system within the city. By combining data from tide gauges, river water level gauges, rain gauges and other disaster-prevention sensors installed throughout the city with the map data of the local government, the system allows local government employees and residents to view all disaster prevention-related information on one screen. This advanced initiative has been selected as a model for enhancing national resilience* under the Cross-ministerial Strategic Innovation Promotion Program of the Cabinet Office.



Monitoring Business Department
Business Development HQ

Toshiyuki Kinami

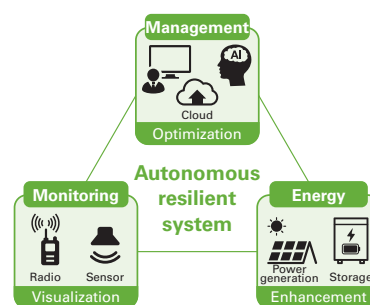


Monitoring system being developed
with Maizuru City

Aiming for Realizing an Autonomous Resilient System

The benefits of a resilient system are not only to minimize damage, but also minimize the burden on local government employees and residents in the event of a disaster so that they can focus on a quick recovery. To build an autonomous resilient system, it is necessary to combine the “visualization” function to monitor risks in real time, “enhancement” to supply energy required for supporting life in an emergency, and an “optimization” function to manage the operations of the region.

We contribute to the creation of a sustainable society by introducing autonomous resilient systems to local governments in Japan.



Autonomous resilient system which the
SSB is building



Having been selected as a SDGs Future City, Maizuru City is aiming for a community, where people can enjoy interaction, a convenient and well-being country life. Developing a safe community by solving disaster prevention issues is the cornerstone of this initiative. We would like to further promote this initiative in collaboration with OMRON SOCIAL SOLUTIONS.

Manager of Flood Control Sewerage Construction Division,
Department of Water and Sanitation, Maizuru City

Mr. Sunao Higashiyama

* Realization of an information system that ensures each citizen can evacuate safely and make decision for an early recovery in the event of a large-scale disaster.

Lifestyle Service Automation for Improving Services and Saving Labor

In Japan, the labor shortage caused by the declining birthrate and aging population is becoming a serious issue year by year. Particularly in the hotel industry, where the number of hotels has increased rapidly due to the continuing demand for inbound tourism, labor shortage has become a serious social issue. OMRON entered the automation business in the area of hotel operations in 2018. With the aim of streamlining and saving labor in hotel operations, we have developed and introduced “Smare,” a self check-in terminal. Recently, the necessity of preventive measures against COVID-19 increased demand for further contactless service through automation.

The article below introduces the application check-in model introduced at APA HOTEL.

It's All for Our Customers:

Developing an Application Check-in Model that Enables a High Level of Hospitality

APA HOTEL, a leading company in the hotel industry, has adopted Smare. They consulted us for solutions to improve the service to their customers. This led to developing the app check-in model for APA app subscribers. The current self check-in service for their registered members took time in its procedures. To solve this issue, we need to combine APA HOTEL's knowledge and our automation technologies to realize their “Always Pleasant Amenity (APA)” concept. The application check-in model was the result of this collaboration, shortening the waiting time to the last one second and escorting customers to their rooms which realized a higher level of hospitality.

The application check-in model does not merely reduce check-in time; it also minimizes the risk of infections from human contact. By eliminating the need to hand over room keys, customers do not need to wait at the front desk and can go directly to their rooms. Furthermore, by streamlining front desk work, it frees up the staff's time which they can devote to entertaining the customers.

We will continue to advance our automation business in the hotel industry by developing remote and centralized hotel management system, and robots that can clean and monitor. Through these initiatives, we will contribute to solving the labor shortage issues and offering lifestyle services with enhanced safety, security, and comfort.



Business Development
Department, Social Solution
Business HQ

Ryoji Ohashi



Application Check-in Model



As indicated in our company name, APA HOTEL aims to constantly provide safe, secure and comfortable accommodation services for customers.

We have worked on cutting-edge initiatives with OMRON SOCIAL SOLUTIONS ever since we opened our first APA HOTEL in 1984. In developing the application check-in model, OMRON showed understanding towards our goal and motto: “Time Is Life.” OMRON and our staff considered how to shorten the check-in speed as much as possible and realized a system that not only affords comfortable, but also stress-free check-in for customers and reduced the risk of COVID-19 infection. In addition to the check-in model, I am looking forward to working together to realize a more comfortable accommodation service together.

Director, IT Department,
APA HOTEL

Mr. Tomonari Kozuka