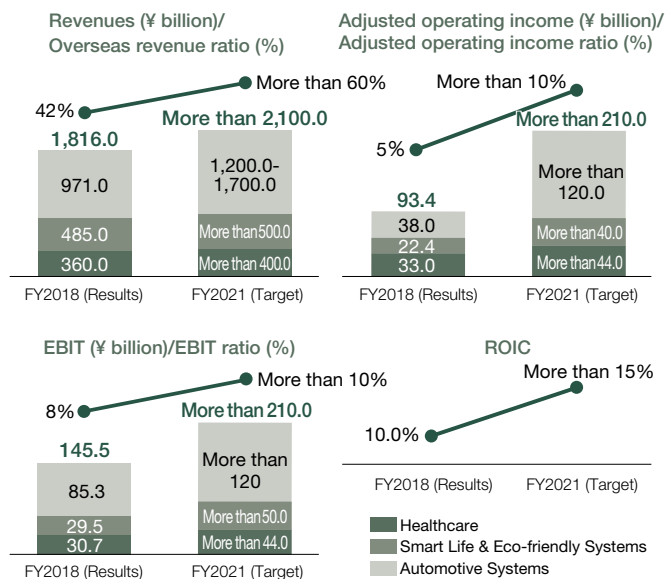


# Story of Value Creation in the Smart Life Sector

While global economic development continues, societal issues such as global warming, traffic jams and accidents, aging and nursing care have become more prominent. Progress is being made on the development of technologies aimed at resolving these issues, including electrification, autonomous driving, AI, robotics and personalized medicine. This progress is giving rise to a variety of business opportunities. We are confident that IoT solutions related to daily life will be integrated within smart cities and will comprehensively support the lives of people living in urban areas. In fact, the global smart city market is expected to reach \$2 trillion or more in 2025.

## Results and Targets



## Principal Products and Services

FY2018 Revenues **¥1.8 trillion**

Healthcare **20%**

- Diagnostic systems
- Treatment systems

Automotive Systems **53%**

- Powertrain
- Chassis parts
- Safety systems

Smart Life & Eco-friendly Systems **27%**

- Home appliances
- Air-conditioning systems

\* The healthcare and related business includes revenues of healthcare-related businesses of Hitachi High-Technologies Corporation ("Hitachi High-Tech")

## Vision and Targets under the 2021 Mid-term Management Plan

### Accomplishing business structural reform in support of our next stage of growth through digital technology

We have promoted business structural reforms in the Smart Life Sector over the past several years, including the deconsolidation of the air-conditioning systems business and the sale of the car navigation and automotive battery businesses. During the period covered by the 2021 Mid-term Management Plan, we will accomplish business structural reform by improving profitability through business replacement and operational restructuring. At the same time, we will establish a business model for Lumada and develop our digital service business, leading us into our next stage of growth.

## Growth Strategies under the 2021 Mid-term Management Plan

### Significant Improvement in Profitability through Business Replacement and Operational Restructuring

#### Automotive Systems business

Chief Executive Officer Koch assumed his position at Hitachi Automotive Systems, Ltd., during fiscal 2018, ushering in structural reforms. He promoted the classification of core and non-core

businesses, establishing the powertrain, chassis and safety systems businesses as core businesses. Meanwhile, the energy station, car navigation, automotive lithium-ion battery and cargo handling materials businesses were sold as non-core businesses.

In terms of core business products, we will form strategic alliances and conduct M&A with the goal of achieving one of the world's top three market shares and improve profitability by pursuing economies of scale in both procurement and manufacturing. As a first step toward these goals, we decided to acquire Chassis Brakes International in June 2019 in an effort to strengthen the competitiveness of the chassis and safety systems businesses. We will expand the safety systems business, which integrates electric steering and suspensions, while giving due consideration to the market environment, where the shift to electric brakes is under way.

Competition in product development utilizing electrification and automation technologies is intensifying both in the automotive system business and throughout the industry. For this reason, rising research and development costs are proving to be a primary cause of reduced profitability. As a corporate organization, the Research & Development Group of Hitachi acts as a common foundation for research and development, reducing investment overlap between businesses and improving efficiency.

In addition, we are promoting the use of Lumada customer cases with the goal of streamlining operations such as marketing, design, procurement, production and quality improvement using digital technologies.

We will achieve our target adjusted operating income ratio of more than 10%

by boosting business efficiency through scale expansion, raising research and development efficiency and improving operations through the use of Lumada.

### **Smart Life & Eco-friendly Systems business**

The Smart Life & Eco-friendly Systems business, which has a long history of developing products from consumer perspectives, is a core business aiming to improve the quality of people's lives in the Smart Life Sector. We will create solution businesses using "design thinking," which involves coming up with methods for improving our lives without being shackled by preconceptions.

In April 2019, Hitachi Consumer Marketing, Inc., which had been in charge of home appliance sales, merged with Hitachi Appliances, Inc., which had been handling design and manufacturing. This merger led to the establishment of Hitachi Global Life Solutions, Inc., which is venturing into challenging new fields.

We are already launching a lineup of new connected products, including robotic vacuum cleaners and refrigerators that can be controlled and managed using smartphones. Furthermore, we are accelerating efforts aimed at creating solution businesses, launching services such as "Doshiteru," a monitoring service for elderly individuals who live alone, and "Peloridge," a smartphone app for sharing experiences and emotions related to food.

In addition to expanding solution businesses, it is essential that we improve business efficiency. In October 2015, Hitachi's air-conditioning systems business was merged with the air-conditioning systems business of Johnson Controls in the United States, creating Johnson Controls-Hitachi Air Conditioning, an unconsolidated subsidiary of the Hitachi. By combining the sales channels, technical capabilities and research and development of these two businesses, we strengthened the global competitiveness of our air-conditioning systems business. Additionally, in the home appliances business, we will promote collaboration with strategic partners overseas under a flexible capital policy and conduct business operations with an emphasis on investment efficiency.

### **Healthcare business**

Many hidden and unmet needs exist within the healthcare business field, and high rates of growth are expected to continue in the future. On the other hand, technology in the existing diagnostic imaging systems business has matured, and the business has entered a stage of competing for business scale expansion. Accordingly, selection and concentration are becoming increasingly important.

The strength of the Hitachi Group in this field lies in its measurement and analysis technologies, which originated from research and development concerning electron microscopes that was continuously conducted from 1942, when the Group's Central Research Laboratory was initially established. All of the major healthcare products that we have developed so far, including products related to X-ray and ultrasonic diagnostics, MRI, CT, mass spectrometry, DNA sequencing, bioimmune analysis and optical topography, were all

created from these technologies. Our basic strategy is to create innovative healthcare solutions by combining AI with our measurement and analysis technologies. Hitachi will develop healthcare business on the basis of a measurement and analysis technology portfolio, which the Research and Development Group of Hitachi and Hitachi High-Technologies have built.

Hitachi's top priority in the healthcare business is to minimize the invasiveness (generally, invasiveness refers to stimuli that can disrupt the homeostasis of the body's internal environment) of diagnosis and treatment. In the medical treatment field, we are focusing on cancer treatment solutions using less invasive radiation. In accordance with this focus, we integrated Mitsubishi Electric Corporation's particle therapy systems business in June 2018. Moving forward, we will continue to strengthen investment related to this business, including the development of technologies that greatly reduce equipment costs, with the goal of expanding the use of particle therapy.

### **■ Establishment of a Lumada Business Model**

Machine data is collected via the Internet from Smart Life Sector products, including connected cars, connected home appliances and healthcare equipment. Using Lumada's analytics and AI to process this big data, we can create new economic value by automating product operation, as has been done in the case of autonomous driving systems.

Once devices that support our daily lives are automated and various solutions are provided, subsequently these devices are integrated into smart cities and a new data economy is created. Under the 2021 Mid-term Management Plan, we will invest approximately ¥30 billion in the Smart Life Sector, focusing on the smart city market in Asia, a region that continues to urbanize. Furthermore, we will aim to secure ¥100 billion in orders of the Lumada business.

### **Collaborative Creation of Value within the Energy Sector**

Focusing on the three themes of health, safety and comfort, the Smart Life Sector creates social, environmental and economic values by creating communities that are easy to live in, which helps improve the quality of people's lives. We also provide particle therapy systems, allowing people to live normally while receiving cancer treatment, and contribute to the elimination of fatal traffic accidents through autonomous driving technologies. Furthermore, we will contribute to the prevention of global warming by reducing the CO<sub>2</sub> emissions of our products through electrification and IoT technology.