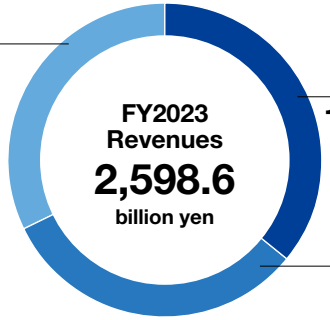
Sector Strategies

Digital Systems & Services / DSS

Business Structure



Services & Platforms
983.5 billion yen / 32%

Front Business
1,111.2 billion yen / 36%

IT Services
969.8 billion yen / 32%

Services & Platforms

Provision of digital engineering and cloud-related services that drives Lumada
Development of digital technologies such as AI and analytics

- **Digital Engineering BU:** Experience design, digital engineering
- **Cloud Services Platform BU:** Cloud services, security, IT products (storage, servers)

IT Services

Development and operation of IT and digital solutions

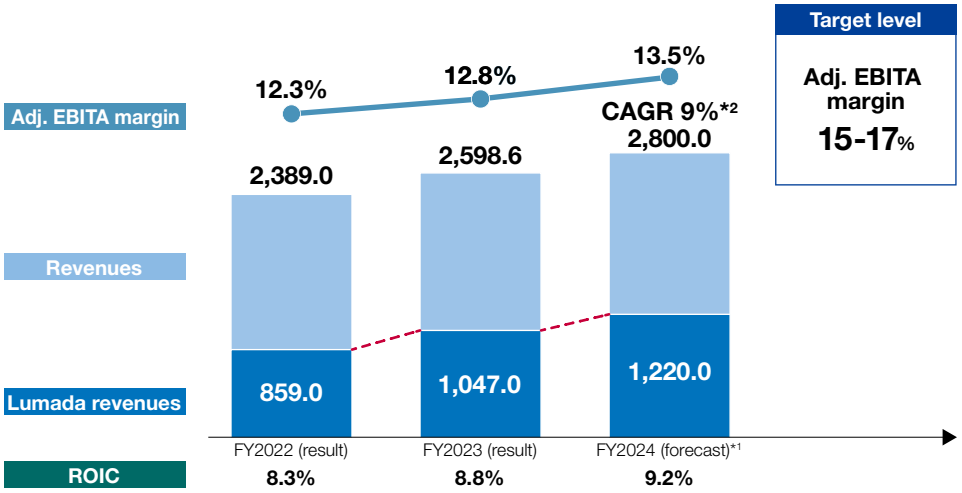
- **Hitachi Systems, Ltd:** Provision of one-stop services that cover all IT life cycles with the advantage of system operation, monitoring, and maintenance
- **Hitachi Solutions, Ltd:** Provision of solutions for productivity improvement and new business creation through the combination of packages and services

Front Business

Building and operation of mission-critical IT and digital systems

- **Financial Institutions BU:** Development and operation of mission-critical systems and provision of digital solutions and services for banks, insurance companies, and securities companies
- **Social Infrastructure Systems BU:** Development and operation of mission-critical systems and provision of digital solutions and services for public fields such as government agencies, local governments and social infrastructure fields such as electric power, transportation and telecommunications

Business Performance (billion yen)



*1 Announced on July 31, 2024 *2 FY2021–FY2024 CAGR

Investor Day (Digital Strategy)

Toshiaki Tokunaga

Executive Vice President and Executive Officer, General Manager of Digital Systems & Services Division

Market Environment

While customers in North America and Europe continue to hold back on IT spending due to the uncertain macroeconomic environment, it is expected that markets where Hitachi can demonstrate its IT, OT and products advantage will continue to grow globally in the future. In addition, demand for system modernization and DX remains strong, particularly in the Japanese market. We anticipate that the global digital market will expand at an average annual rate of 13% to 20% from 2024 to 2027 in the fields that Hitachi is focusing on, such as finance, national and local governments, telecommunications and media, energy, transport and logistics, manufacturing, and healthcare.

Progress of the Mid-term Management Plan 2024

GlobalLogic is experiencing steady growth in its core digital engineering business through bolt-on M&A and the expansion of domain knowledge and talent. Synergies with the OT sectors, such as GEM and CI, are also expanding, including the sophistication of operations and maintenance in social infrastructure and industrial facilities and the transformation of the business model to a service-oriented (recurring) business. In addition, the DSS sector has reorganized and strengthened its service delivery structure to accelerate synergies among IT, OT and products in the global marketplace. In the Japanese market, both sales and profitability increased significantly due to an increase in large, mission-critical System Integration (SI) and DX projects, which is one of our strengths. Accordingly, the DSS sector order backlog at the end of fiscal 2023 increased 15% year on year to 1.5 trillion yen. Revenues in fiscal 2024 are expected to exceed the initial plan, reaching 2.8 trillion yen with an adjusted EBITA margin of 13.5%. The DSS sector continues its transformation as a key driver of the Lumada business and sustainable growth in the digital market.

Growth Strategies

The DSS sector has the capability to build and operate highly reliable systems that have been developed over many years in mission-critical areas, such as in the financial and social fields. We also have abundant digital talent to support customers' DX through advanced technologies and solutions such as generative AI. We will continue to strengthen our digital resources and capabilities to support growth, while accelerating synergies with the GEM and CI sectors, aiming for revenues and profitability that exceed the market growth rate in areas where Hitachi can maximize the advantage of its IT, OT and products.

Expansion of the Global Business

The DSS sector is continuously enhancing an end-to-end global service delivery structure to provide innovative digital solutions. We deliver solutions created by GlobalLogic's design and digital engineering capabilities through highly reliable and efficient cloud managed services from Hitachi Vantara and Hitachi Digital Services. In addition to strengthening digital resources and capabilities by expanding service development/delivery bases and talent, we will further accelerate collaboration with the OT sector to integrate digital into the Hitachi Group's product and installed base in the energy, railway, and industrial fields to capture growth in the global DX market.

Expansion of the Front Business and the IT Services Business

The DSS sector will further strengthen its project management capabilities, which is one of its advantages, and optimize the utilization of the talent resources of approximately 60,000 persons/month currently in operation. In addition, we will expand resources by leveraging GlobalLogic engineers and improve SI productivity through generative AI.

Further Growth through the Use of Generative AI

The DSS sector is driving AI transformation across the Hitachi Group by utilizing many advanced cases from GlobalLogic and Generative AI Center, which gathers expertise and knowledge in generative AI. Based on these efforts, we are also driving co-creation with customers globally and creating new growth opportunities. GlobalLogic has been an industry leader in AI-related offerings for more than a decade with approximately 10,000 AI engineers and more than 500 AI projects, and was an early adopter of generative AI. GlobalLogic's advanced technologies and expertise are being deployed within the Hitachi Group to create new value, for example, in Hitachi Energy's efforts to improve the quality of its customer support.

In Japan, we are also expanding co-creation with customers in the financial field and elsewhere by combining expertise in the development of mission-critical systems with generative AI. We have observed its effectiveness in increasing system development productivity and operational efficiency and plan to further expand the number of generative AI projects.

Furthermore, highly reliable and efficient data management infrastructure is essential to make the most of generative AI. We will speed up the implementation of hybrid cloud solutions that utilize storage virtualization to allow for the integrated and transparent management of company-specific data and open data across the on-premises and cloud environments in which Hitachi Vantara has a competitive edge. In addition, Hitachi Vantara continuously promotes the strengthening of the generative AI platform by developing Hitachi iQ, a portfolio of AI-ready infrastructure, solutions, and services, which attained NVIDIA DGX BasePOD™ certification.

The Story of Value Co-creation

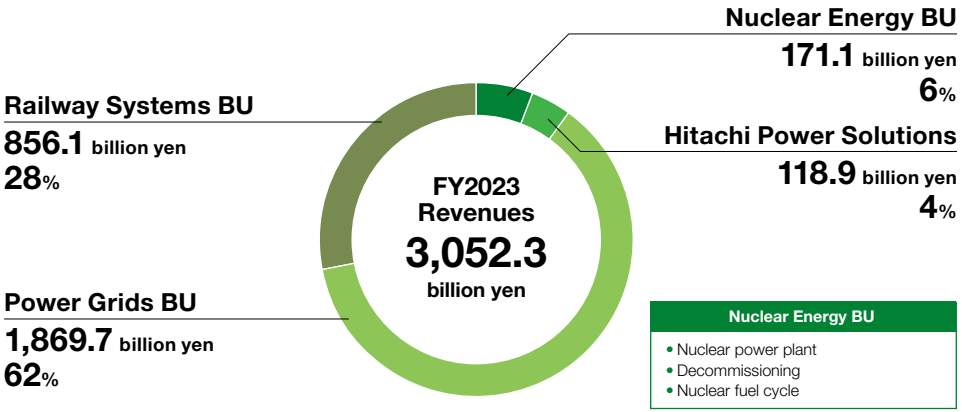
Order for a Next-generation Nationwide Load Dispatching System That Optimizes Power Balancing Control

In October 2023, Hitachi received an order for a next-generation nationwide load dispatching system, a core system that optimizes nationwide power balancing control, from Transmission and Distribution IT & OT Systems LLC, a joint venture established by 10 general power transmission and distribution companies in Japan. Load dispatching systems have been developed in different areas. The new system will be a common load dispatch system for each area except the Okinawa area. By combining Hitachi Energy's global standard packages with the DSS sector's mission-critical system development know-how, Hitachi will contribute to the stabilization of Japan's power supply and the realization of a decarbonized society.

Sector Strategies

Green Energy & Mobility / GEM

Business Structure



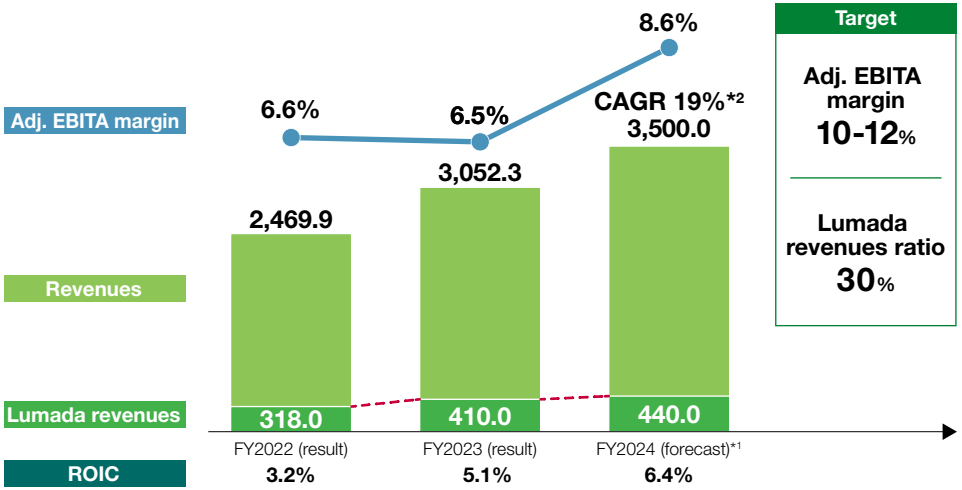
Nuclear Energy BU
- Nuclear power plant
- Decommissioning
- Nuclear fuel cycle

Railway Systems BU
- Rolling stock
- Signalling & Control
- Services and maintenance
- Turnkey solutions

Power Grids BU
- Automation systems
- HVDC (High-voltage direct current)
- GIS (Gas insulated switchgears)
- Transformers

Hitachi Power Solutions
- Wind power solution
- Distributed energy resources
- Energy & Facility management as a Service
- Engineering and field services

Business Performance (billion yen)



Target

Adj. EBITA margin
10-12%

Lumada revenues ratio
30%

*1 Announced on July 31, 2024 *2 FY2021–FY2024 CAGR

Investor Day (Green Strategy)

Alistair Dormer

Executive Vice President and Executive Officer,
General Manager of Green Energy &
Mobility Strategy Planning Division

Market Environment

Global electricity demand is expected to more than double from the current level by 2050*3. This is due to the accelerating electrification to achieve a global society with net zero carbon emissions, the growing importance of energy security and the increased use of generative AI, which requires massive data centers and green energy. This creates potential opportunities for green energy and power grids solutions. Growth is also continuing in the mobility market. The acquisition of Thales's Ground Transportation Systems (GTS) business will expand Hitachi's presence in the accessible global railway market in various countries estimated at 9.3 trillion yen in 2024.

*3 Source: Estimations based on Hitachi analysis of IEA, World Energy Outlook 2023

Progress of the Mid-term Management Plan 2024

After a strong performance in fiscal 2023, we have set even more aggressive targets for fiscal 2024. Revenues will grow to approximately 3.4 trillion yen and adjusted EBITA margin improving to 8.6%. We expect the operational excellence and efficiency improvement measures we have implemented until now to begin to bear fruit in the second half of fiscal 2024. To date, we have been continuously working to improve the quality of our order backlog and profitability through rigorous governance and working closely with our customers to reform our business model and reduce risk. For example, in our power grids business, we have been able to secure long-term framework contracts for standard designs, minimizing construction and EPC risk and even establishing manufacturing capacity reservation agreements/advanced payments to enable us to invest in capacity.

Growth Strategies

Growth of Service and Digital Businesses

Hitachi Energy's order backlog*4 has grown significantly to 4.7 trillion yen. To strengthen our business portfolio even further, we are also working to expand our service and digital businesses, with the goal of tripling Hitachi Energy's services business by 2030. We will create new value for Hitachi and our customers by promoting service and maintenance offerings that leverage our huge global installed base of over 200 billion dollars. In addition, we will capture growth in emerging segments such as data centers, by collaborating with the DSS sector and further digitalizing our products and services.

Additionally, Andreas Schierenbeck has been appointed to be the new CEO of Hitachi Energy, effective July 1, 2024. He has a strong track record in the digitalization of service businesses, as well as working on energy transformation initiatives. With his fresh perspective, he will lead Hitachi Energy's continued future growth as the new CEO.

In our railway business, we will expand the proportion of service and maintenance, which is currently approximately 20% of Railway Systems BU's revenues. Our digital asset management business development leverages our existing products base, where we add a digital maintenance layer in cooperation with the global resources in the Hitachi Group.

*4 As of the end of FY2023

Growth through Strategic M&A Activities

In fiscal 2023, Hitachi Energy acquired eks Energy, a leading Spanish supplier of power electronics and energy management solutions for storage and the integration of renewables. In addition, Hitachi Energy acquired COET, a leading designer and manufacturer of power equipment for the rail and electric mobility segments based in Italy. eks Energy and COET have extensive experience and advanced technologies in battery energy storage systems and EV charging, respectively, and we will expand our business by leveraging the capabilities of these two companies using our existing customer base.

In addition, on May 31, 2024, we completed the acquisition of the GTS business. The acquisition will strategically complement our geographic footprint and enable us to enter attractive new geographical areas, significantly expand our customer base, acquire market-leading signaling and rail control technology, and add 9,000 highly skilled colleagues. The integration will shift the ratio of Hitachi's railway systems businesses from a 50/50 mix of rolling stock and signaling/rail control to a 70/30 mix in the future. This is expected to generate between 90 and 95 million euros of synergies annually on a pro forma basis. Furthermore, GTS's software capabilities in areas other than signaling and rail control, such as e-ticketing and toll system applications, will be leveraged to expand digital services and improve profitability through collaboration with Hitachi's digital business.

Investments in Capacity and Innovation

Hitachi is strategically investing in capacity, capabilities and innovation for continued growth. Hitachi Energy plans to invest a total of 6 billion dollars in manufacturing, engineering, digital businesses, R&D and partnerships, including 1.5 billion dollars to be invested in the increase of transformer capacity through 2027.

In the area of mobility, we have pursued a strategy of growing our railway systems business in North America. Last year, the first fully autonomous metro system in the United States began operating in Honolulu, and we are in the process of delivering rail systems to Baltimore and other cities. In addition, our soon-to-be-completed plant in Maryland, United States, will be a state-of-the-art digital factory using Hitachi's advanced digital technology to meet the strong demand for rail, especially in North America.

Driving Other Green Businesses

We have more businesses that are vital for increasing the world's sustainability. With the ever-growing demand for electricity, we believe that nuclear power plays an important role in the energy mix. Through a joint venture with GE Vernova, Hitachi is developing Small Modular Reactors (SMR*5) and working closely with partners in the United States, Canada, Poland and other countries. Hitachi Power Solutions is leveraging its network of energy assets in Japan to expand a variety of digital technologies and services, including energy management and facility management, to customers as CNaaS*6.

*5 Small Modular Reactor *6 Carbon Neutral as a Service

The Story of Value Co-creation

Hitachi Energy Supports Long-term Operation of Largest HVDC-connected Wind Energy Project in the United States

Hitachi Energy signed a multi-year agreement with Pattern Energy to support its HVDC technologies in the SunZia Transmission Project, and we will provide service solutions for an HVDC system. Services include a wide range of support measures, including advanced maintenance, cyber services and other activities. This is in full alignment with our service and digital strategy, and underlines our partnership commitment to ensure continued support, we will continue to build a partnership ecosystem to ensure continued support for the HVDC link throughout its lifetime, delivering cutting-edge digital services with sustainability and customer value at their core.

Sector Strategies

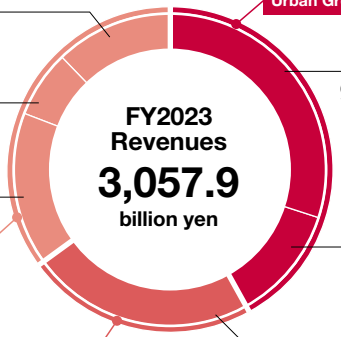
Connective Industries / CI

Business Structure

Industrial Digital BU
370.6 billion yen / 12%

Water & Environment BU
212.0 billion yen / 7%

Industrial Products Business
487.2 billion yen / 16%



Urban Group

Building Systems BU
921.7 billion yen / 30%

Hitachi Global Life Solutions
373.8 billion yen / 12%

Hitachi High-Tech
723.1 billion yen / 23%[*1]

Industry Group

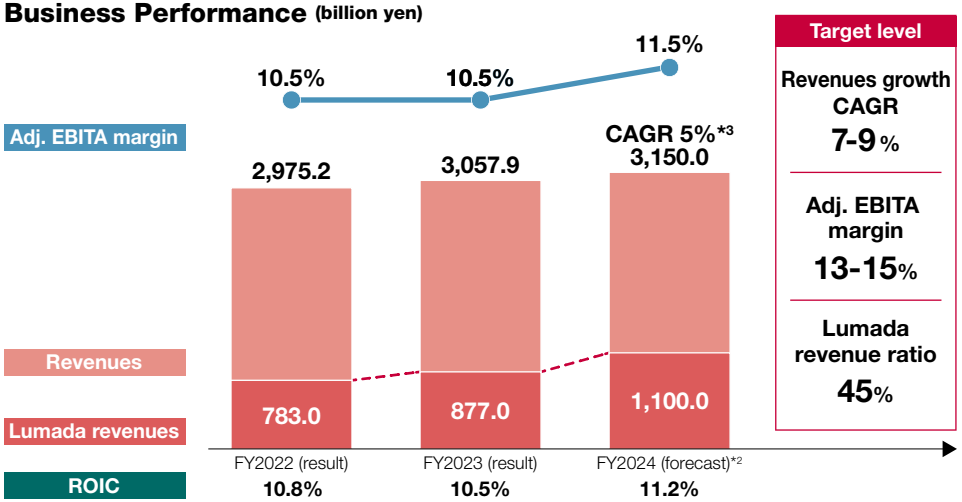
Advanced Technology Group

Industry Group
- Industry and distribution solutions, robotic SI
- Water supply and sewerage, utility solutions
- Custom-made industrial equipment (process compressors, automated guided robots, drive systems, etc.)
- Mass-produced industrial equipment (air compressors, marking systems, power distribution equipment, etc.)

Advanced Technology Group
- Healthcare (clinical chemistry and immunochemistry analyzers, automated cell culture equipment, particle therapy system, etc.)
- Measurement and analysis (semiconductor metrology/inspection equipment, electron microscopes, etc.)

Urban Group
- Elevators, escalators and building services
- Home appliances and air-conditioning systems

Business Performance (billion yen)



Target level

Revenues growth CAGR
7-9%

Adj. EBITA margin
13-15%

Lumada revenue ratio
45%

*1 From FY2024, Healthcare Business Division was taken over by Hitachi High-Tech. In line with this, Hitachi High-Tech's figures for FY2023 reflect this change.
*2 Announced on April 26, 2024 *3 FY2021–FY2024 CAGR

Investor Day (Connective Strategy)

Jun Abe

Executive Vice President and Executive Officer,
General Manager of
Connective Industries Division

Market Environment

CI sector pursues factories, laboratories and buildings as target markets, as these segments are growing rapidly driven by DX and GX. The expansion of generative AI and electrification is expected to lead to high growth in semiconductor and battery manufacturing. In the healthcare field, advances in biotechnology are expected to lead to high growth in molecular diagnosis, biopharmaceutical manufacturing, precision medicine and minimally invasive therapy. Moreover, given global issues such as energy shortages and resource depletion, high growth is expected in the service field of green buildings and circular economy.

Progress of the Mid-term Management Plan 2024

By strengthening Lumada and recurring businesses across CI sector as well as working to improve profitability, we anticipate revenue growth (CAGR) at 5%[*3] and an adjusted EBITA margin surpassing 10% across all divisions in CI sector as of fiscal 2024. Moreover, by expanding Total Seamless Solution of Products × OT × IT, which is our strength in CI sector, as well as strengthening integrated operations, Lumada revenues are expected to grow rapidly at a CAGR of 28%[*3] toward fiscal 2024.
In terms of risk management, we are executing countermeasures to address the real estate recession in China. While orders for new installation of elevators and escalators are declining, we are securing profits in modernization and maintenance services.
Moreover, as upfront investments for future growth, we are developing Hitachi High-Tech's customer co-creation sites and investing capital in semiconductor manufacturing, where we expect to see rapid recovery and growth starting in the second half of fiscal 2024.

Growth Strategies

Basic Policy for Obtaining Opportunities for Growth

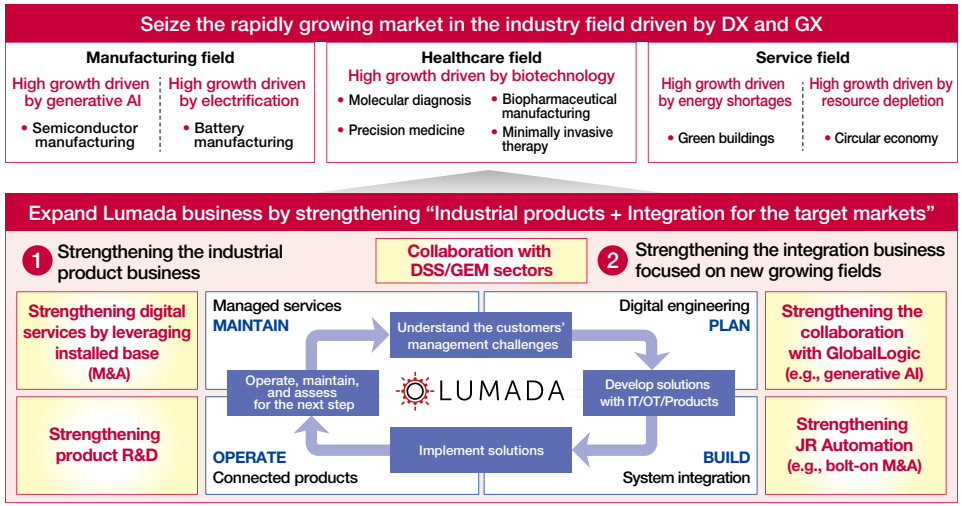
In CI sector, we grow the top line by seizing the rapidly growing market by DX and GX and obtaining new growth opportunities by combining Hitachi's key technologies, such as line building, measurement, and analysis.
As a basic policy, we strengthen the industrial product business and the integration business, which is focused on new growing fields in CI sector, accelerating the creation of synergies with DSS and GEM sectors and expanding the Lumada business. To strengthen the industrial product business, we enhance product R&D and grow the product-related service business by adding digital services that take advantage of our abundant installed base. To further strengthen the integration business, we expand our collaboration with GlobalLogic to utilize digital technologies such as generative AI and strengthen JR Automation's robotic SI through bolt-on M&A, etc. Moreover, as we move toward a new growth trajectory, we focus our investments on the high-growth manufacturing, healthcare and services fields.

Concrete Initiatives for Obtaining Opportunities for Growth

In semiconductor manufacturing, we provide solutions to improve productivity through global top-class "process, metrology, inspection & analysis equipment," such as CD-SEM, optical inspection system and analysis system, "customer data" gathering at collaboration sites located near customers, and "digital," such as integrated data platform that integrate and link the product data. In battery manufacturing, we will improve efficiency of mass production and establish a recycling-oriented value chains based on "manufacturing and inspection equipment," which includes advanced solutions of contaminant inspection system, electronic microscopes, roll presses, clean environments and extra-low dew-point control through "robotic SI," such as automated line building; "digital," such as battery lifecycle management.
Moreover, in biopharmaceutical manufacturing, we establish early start-up of manufacturing processes by utilizing proven "cultivation products," such as cultivation tank for which we have a top-class delivery track record in Japan and automated cell culture equipment; "domain knowledge to address regulation" in the biopharmaceutical industry; "digital," such as MES/LIMS in the pharmaceutical field, for which we have the top market share in Japan and platforms of value chain traceability service for regenerative medicine. In molecular diagnostics, precision medicine, and minimally invasive therapy, we advance cancer treatment based on global top-class "diagnostics and therapy equipment" using "digital" through co-creation with partners in genetic testing for cancer genes, such as clinical chemistry and immunochemistry analyzer, DNA sequencers and particle therapy systems.

Moreover, in service field, we evolve services through "digital" by leveraging our "extensive installed base" of products such as air compressors, marking, power electronics, drive systems, elevators, escalators and commercial air conditioners, as well as "domain knowledge" which includes technological capabilities, business know-how and expertise and strengthen our lineup of green products.

CD-SEM: Critical Dimension Scanning Electron Microscope MES: Manufacturing Execution System
LIMS: Laboratory Information Management System



The Story of Value Co-creation

Example of Smart and Green Building with Nomura Real Estate Development

Nomura Real Estate Development Co., Ltd. has adopted Hitachi's building IoT solution as the building OS* for Tower S of "BLUE FRONT SHIBAURA" under construction in the Tokyo Shibaura area. In the future, both companies will aim to achieve efficient building operations and energy saving utilizing Hitachi's building IoT solution.

*Building OS: Data integration platform that standardizes data by treating assets within a building as abstracted digital assets and enables integration of building facilities and various services to accelerate application development.