

Mitsubishi Electric Key Growth Businesses

< Building Systems >

November 11, 2021

Mitsubishi Electric Corporation

- 1 Realize our unique value provision and contribute to solving social challenges by providing solutions in building space (p.7)**
- 2 Establish growth targets for FY2025 with sales of ¥650 Bn. or more, and an operating profit margin of 10% or more (p.8)**
- 3 Achieve ①strengthening competitiveness of products and services, ②expansion of solution business, and ③higher profitability by building a consistent business management system (pp.11-13)**
- 4 Leveraging our strengths to provide energy-saving, safe, and secure solutions which offers comfort for Smart Buildings, and to contribute to the realization of Smart Cities (pp.18-22)**
- 5 To strengthen elevators & escalators business on a global level, expand its portfolio as well as maintenance and renewal business (pp.23-30)**

1. Business Overview

1-1. Business Structure

1-2. Business Details and Areas

1-3. Business Management Policy

1-4. Our Strengths

1-5. Strengthening of Business Foundation

2. Medium-Term Management Plan of Key Growth Businesses

2-1. Business Environment

2-2. Overview of Key Strategy

2-3. Growth Target

2-4. Growth Strategy

2-5. Initiatives on Social Challenges

Note

FY2018 : April 1, 2018 -March 31, 2019

FY2019 : April 1, 2019 -March 31, 2020

FY2020 : April 1, 2020 -March 31, 2021

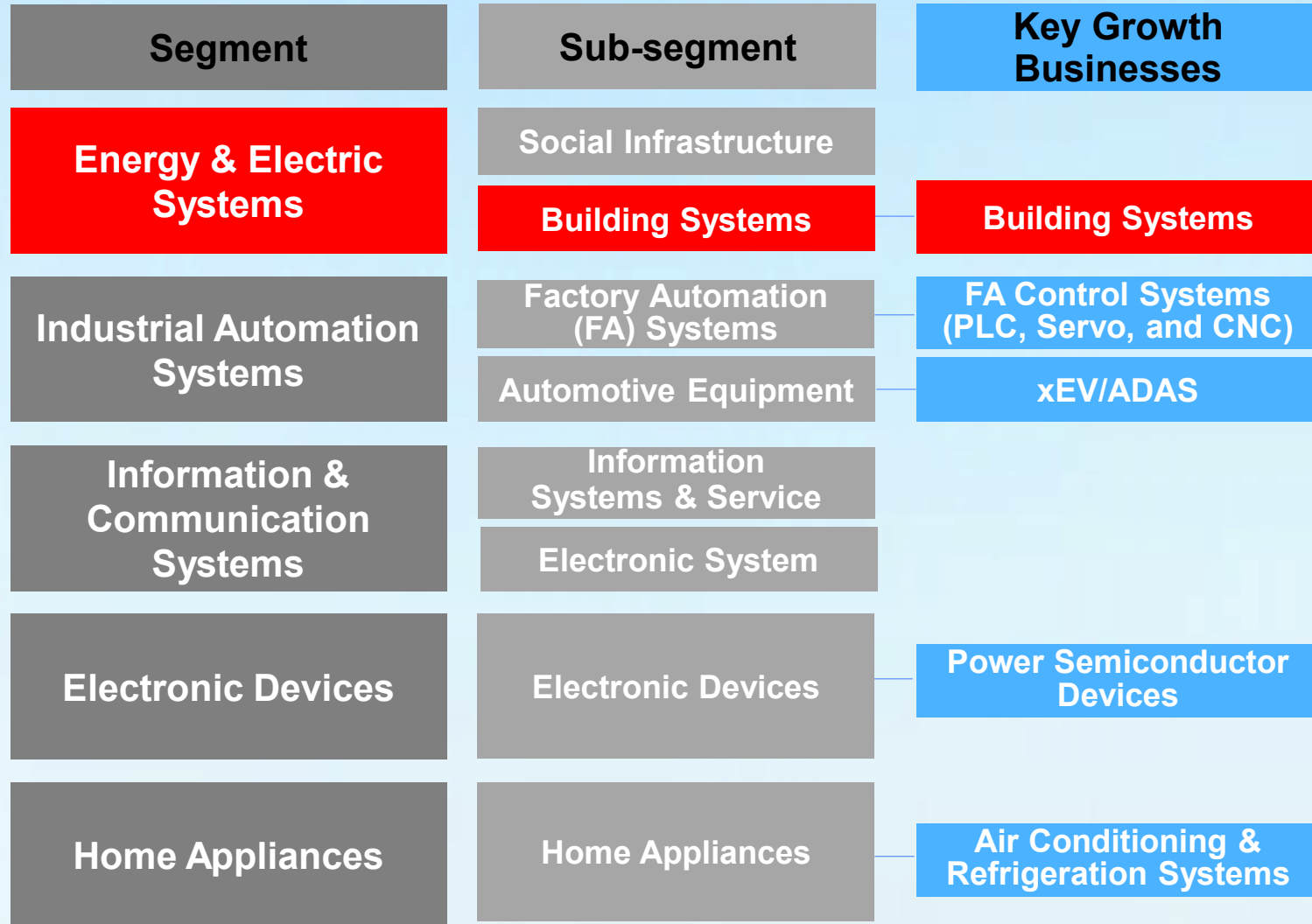
FY2021 : April 1, 2021 -March 31, 2022

FY2025 : April 1, 2025 -March 31, 2026

1

Business Overview


Business Structure



Building Systems

Our products and services in building space

Air-Conditioning & Refrigeration Systems




- Multi-air conditioner for building
- Air cooling heat pump chiller
- Packaged air conditioner for Equipment
- Lighting
- Page air conditioner
- Ventilator
- Air swing fan
- Hot water supply equipment

- Direct current distribution system
- Power receiving and transforming facility
- UPS
- Emergency power generator

Power Systems

Building management system

System control linking energy-saving equipment and various sensors



[Service with product]

- Equipment sales, manufacturing and installation
- Maintenance, remote monitoring
- Renewal




Elevator




Escalator



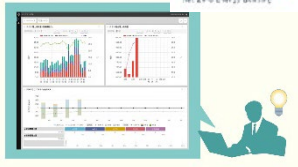
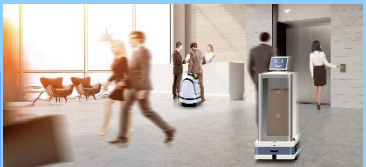
Network camera (Video monitoring system)

[Service for whole building]

- One-stop proposal (Installation consultation - support)
- Energy management
- Smart solution proposal




Access control system



三菱電機スマートシティ・ビルIoTプラットフォーム【ヴィルフェユール】



To satisfy society, customers, shareholders and employees by creating solutions in building spaces that leverage our strengths to meet diversifying social challenges and by providing our company's unique value

Social Challenges in Building Space

Mobility

Zero traffic accidents

Comfortable transport

Eliminate traffic congestion

Reduce air pollution

Measures for deteriorating infrastructure

Prepare for natural disasters

Elimination of poverty/inequalities

Infrastructure

Preparation for man-made threats

Eliminate regional disparities Enrichment leisure time

Improving QOL of mobility impaired people

Build communities

Prevent global warming

Clean water

Industry and technological innovation

Response to uneven distribution and depletion of resources

Sustainable Society

Life

Health

Comfortable Life

Prepare for infectious diseases

Equal opportunity for education and training

Preserve the ecosystem

Avoid water/food shortage

etc.

Address labor shortage

Industry

Strengths of our company

Activities for value creation

Creation of comfortable, safe and secure building spaces

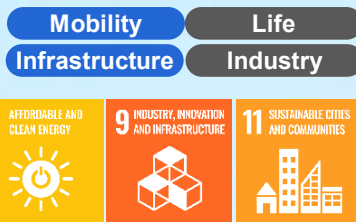
High-quality business growth

Creation of comfortable, safe and secure building spaces

Contribute to the realization of a safe, secure and comfortable society and a sustainable global environment by solving social challenges through business activities

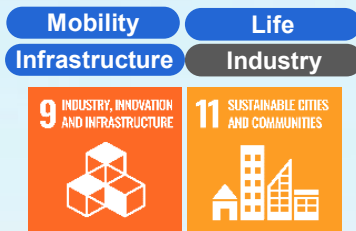
1. Decarbonization efforts

In addition to energy conservation and energy creation solutions for individual buildings, energy for the entire region is centrally managed, contributing to the creation of a decarbonized society through optimal regional control



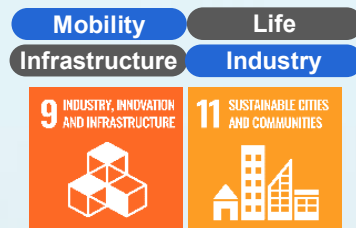
2. Response to the "New Normal"

Utilizing technologies such as touchless solutions, people-flow control, and security, we have created a more comfortable, safe, and secure building space to respond to the New Normal



3. Measures against labor shortages

Contributing to labor-saving efforts to eliminate labor shortages by enhancing robot mobility support service and creating more values



High-quality business growth

Achieve growth targets by promoting growth strategies and strengthening business foundations

FY 2025 Growth Targets

Revenue

¥650Bn. or more

Operating Profit Margin

10% or more

Based on the expansion of maintenance services, contribute to solving social challenges by creating comfortable, safe, and secure building spaces through the provision solutions making use of accumulated technologies and data, as well as multi-business synergies

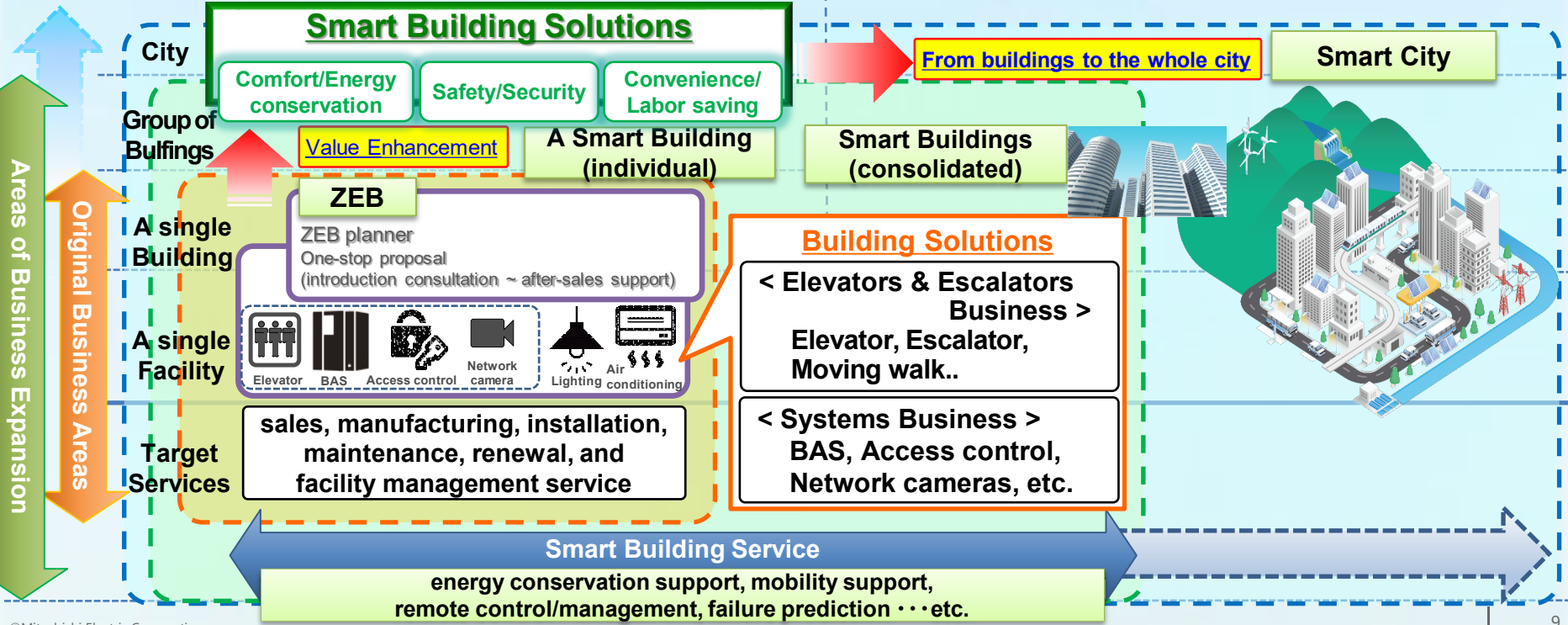
Growth strategy

Provide integrated solutions

Strengthen elevator and escalator business globally

Building

Area

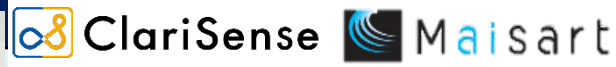


By combining our diverse range of building-related products, including elevators & escalators, with a wealth of field knowledge in building operation management and advanced digital technology, our company provides unique integrated solutions



- Knowledge of the equipment
- Optimization know-how responding to needs
- Operational support and maintenance performance
- Accumulation of operational management data
- Connection with customers

- Heterogeneous data linkage of various devices and systems
- Failure prediction detection
- Estimation of remaining equipment's life
- Optimized control and operation by Digital Twin



Restructuring of Building Systems Group

Building systems business will be integrated in April 2022 to enhance global competitiveness by building a consistent operational structure from new installation, maintenance, and renewal of elevators & escalators

Current

Mitsubishi Electric (Building Systems Division)

Mainly responsible for sales/development/manufacturing/installation of elevators & escalators' new installation

Personnel	Approx. 3,000
Net sales	¥134.8 Bn.
No. of sites	12

Mitsubishi Electric Building Techno-Service

Mainly responsible for maintenance services, and renewal sales/development/manufacturing/installation of elevators & escalators

Personnel	Approx. 10,000
Net sales	¥319.5 Bn.
No. of sites	274



After restructured

Mitsubishi Electric Building Solutions

Mitsubishi Electric Building Systems Division
×

Mitsubishi Electric Building Techno-Service

Consistently in charge from new installation to maintenance and renewal

Personnel	Approx. 13,000
Net sales	Approx. ¥400Bn.
No. of sites	274

*To be concurrent with Mitsubishi Electric for partial management and solution promotion across business segments

Mission

Create value in building spaces and contribute to solving social challenges by providing integrated solutions that combine products and services, which are the strengths of the new company, and the knowledge gained through their accumulation with advanced ICT

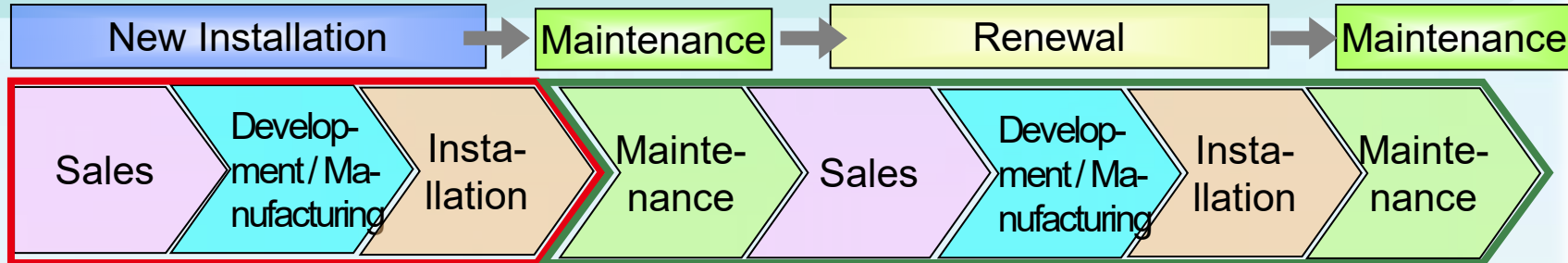
Business promotion through integrated management



A consistent business management system enables

- ① Strengthening competitiveness of products and services
- ② Expansion of solution business
- ③ Higher profitability

Strengthen Global Positioning



Current

Mitsubishi Electric

Mitsubishi Electric Building Techno-Service

After restructured

Mitsubishi Electric Building Solutions (New Company)

< Effects of the Integrated System >

① Strengthening competitiveness of products and services

Sales	Enhancing customer responsiveness and improving service quality through one-stop operations
Development and manufacturing	Strengthening competitiveness of products and services through consistent development planning
Installation and maintenance	Maximizing field capacity with multi-skills, optimizing resource allocation

② Expansion of solution business

Creation of new solutions by utilizing accumulated technologies and data from various building facilities, mainly elevators & escalators

Strengthening collaboration with other businesses by sharing knowledge and enhancing group's comprehensive proposal capabilities

->Promotion by the Building Solutions Division of Mitsubishi Electric to strengthen cooperation among business groups, group companies, and other companies

Enhancing cooperation with air conditioning & refrigeration systems business

->Strengthening proposal capabilities utilizing knowledge based on Mitsubishi Electric Building Techno-Service's expertise in maintenance and renewal business of air conditioning & refrigeration systems

③ Higher profitability

Improving business processes and streamline organizations by eliminating overlapped functions

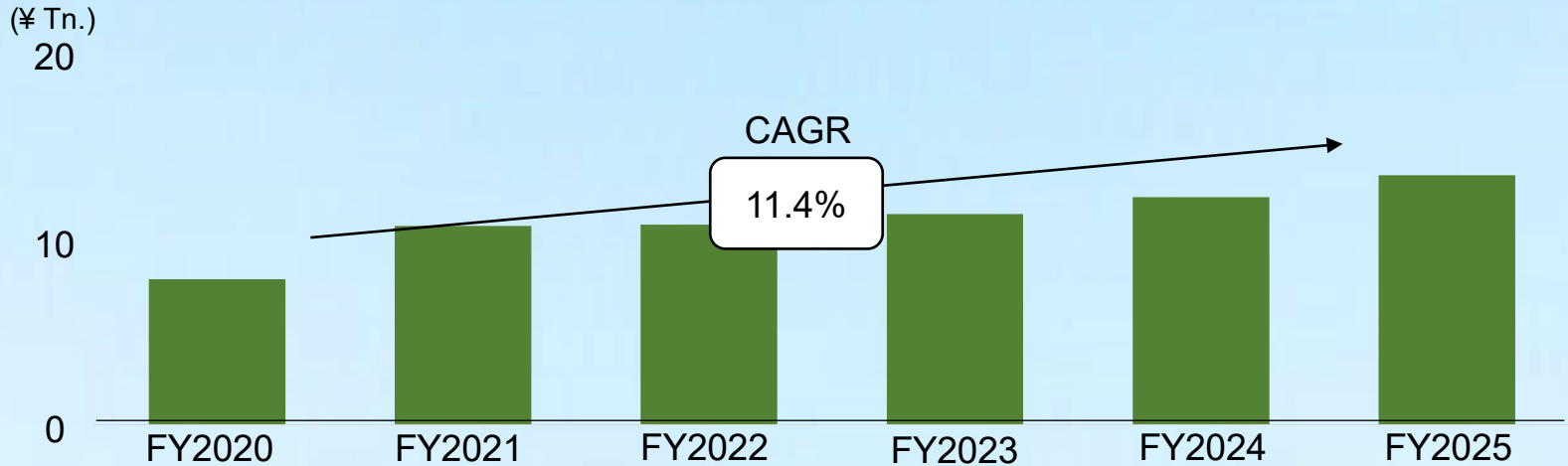
< Quality enhancement and corporate culture reform of new company>

- Establishment of an independent Quality Assurance department under the direct control of the President to check inspection operations
- Enhancement of inspection operations through quantitative evaluation based on appropriate procedures
- Improving the level of business quality by promoting standardization and digitization of business processes
- Preventing fixation of corporate culture by active personnel rotation between Mitsubishi Electric and the new company, and within the new company

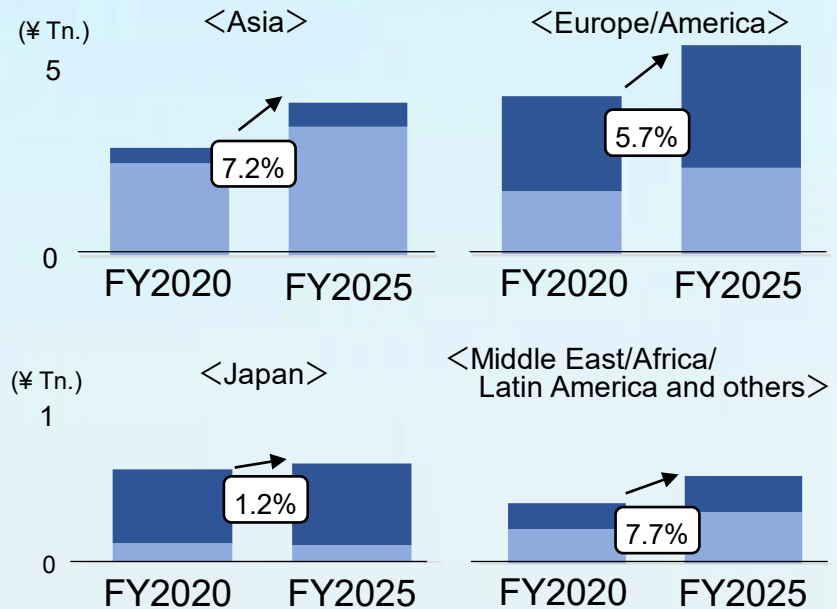
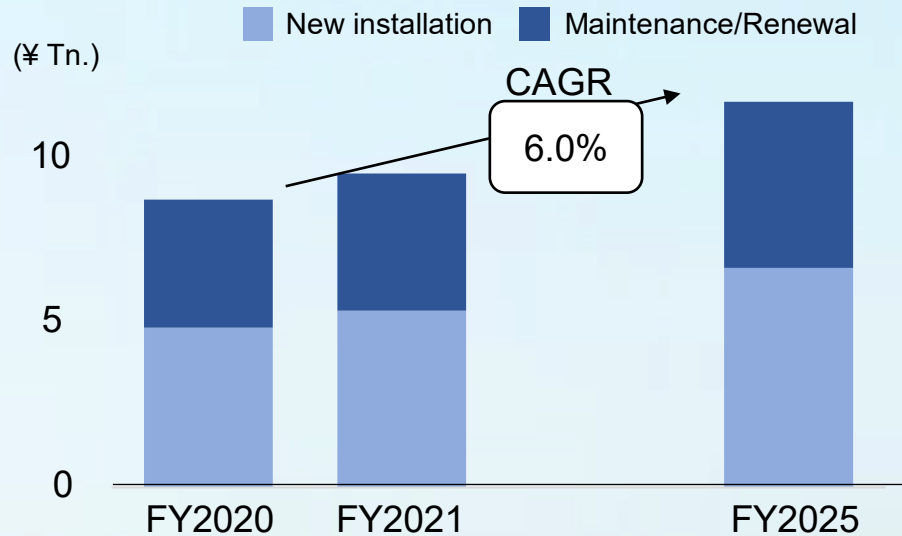
2

Medium-term Management Plan of Key Growth Businesses

Global demand forecast for Smart Buildings *



Global demand forecast for elevators & escalators *



**Corporate
vision**

World's leading provider of building solutions

**Provided
value**

Creation of comfortable, safe and
secure building spaces

High-quality business growth

Key strategy

**Growth
strategy**

Provide integrated solutions

- ① Provide smart building solutions ② Contribute to the realization of Smart Cities

Strengthen elevators & escalators business in global market

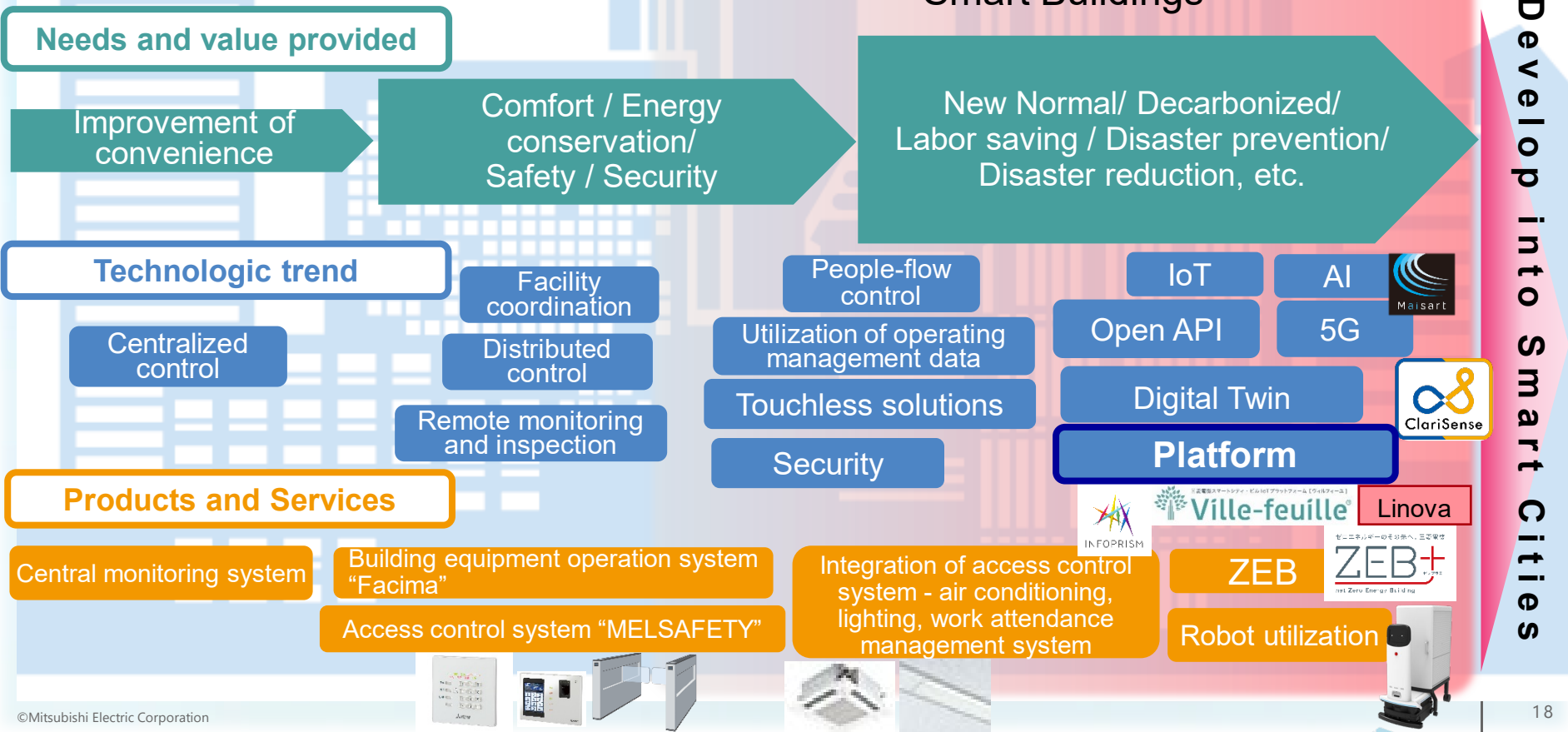
- ③ Expand portfolio of
elevators & escalators ④ Expand maintenance and renewal business

Strengthening of Business Foundation

Restructuring of Building Systems Group

Provide Smart Building solutions

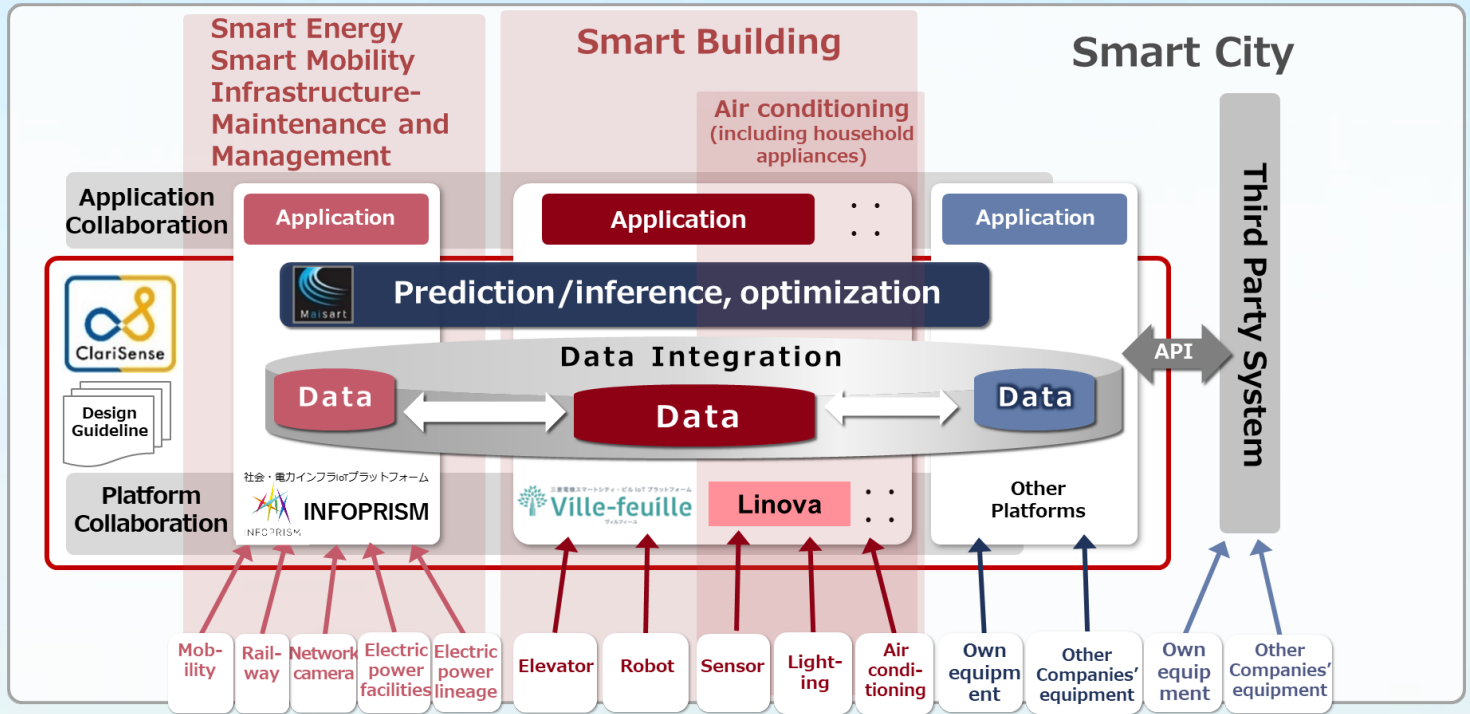
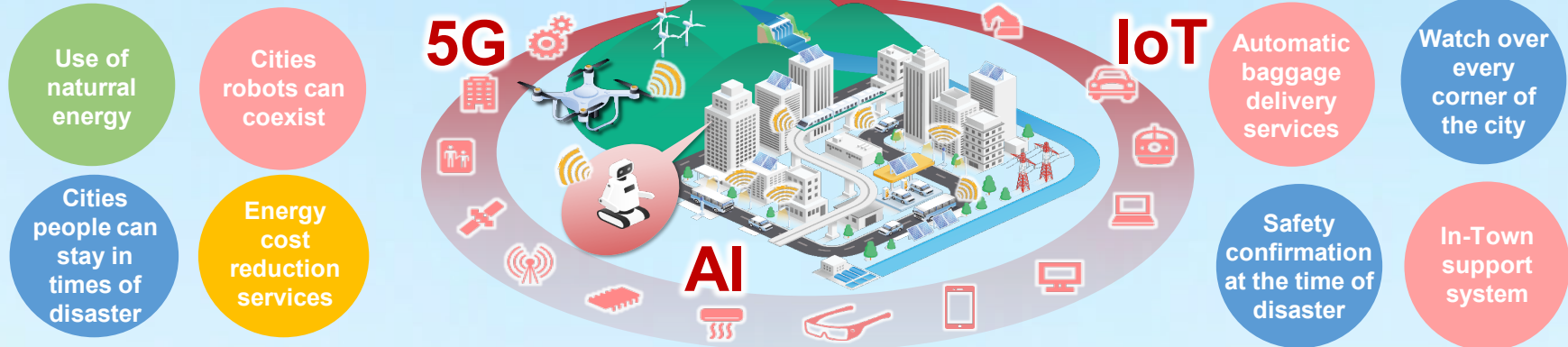
The needs and value of building solutions, and the key technologies that enable them have changed over time. In the future, platforms collaborating with various building facilities will play an important role



Develop into Smart Cities

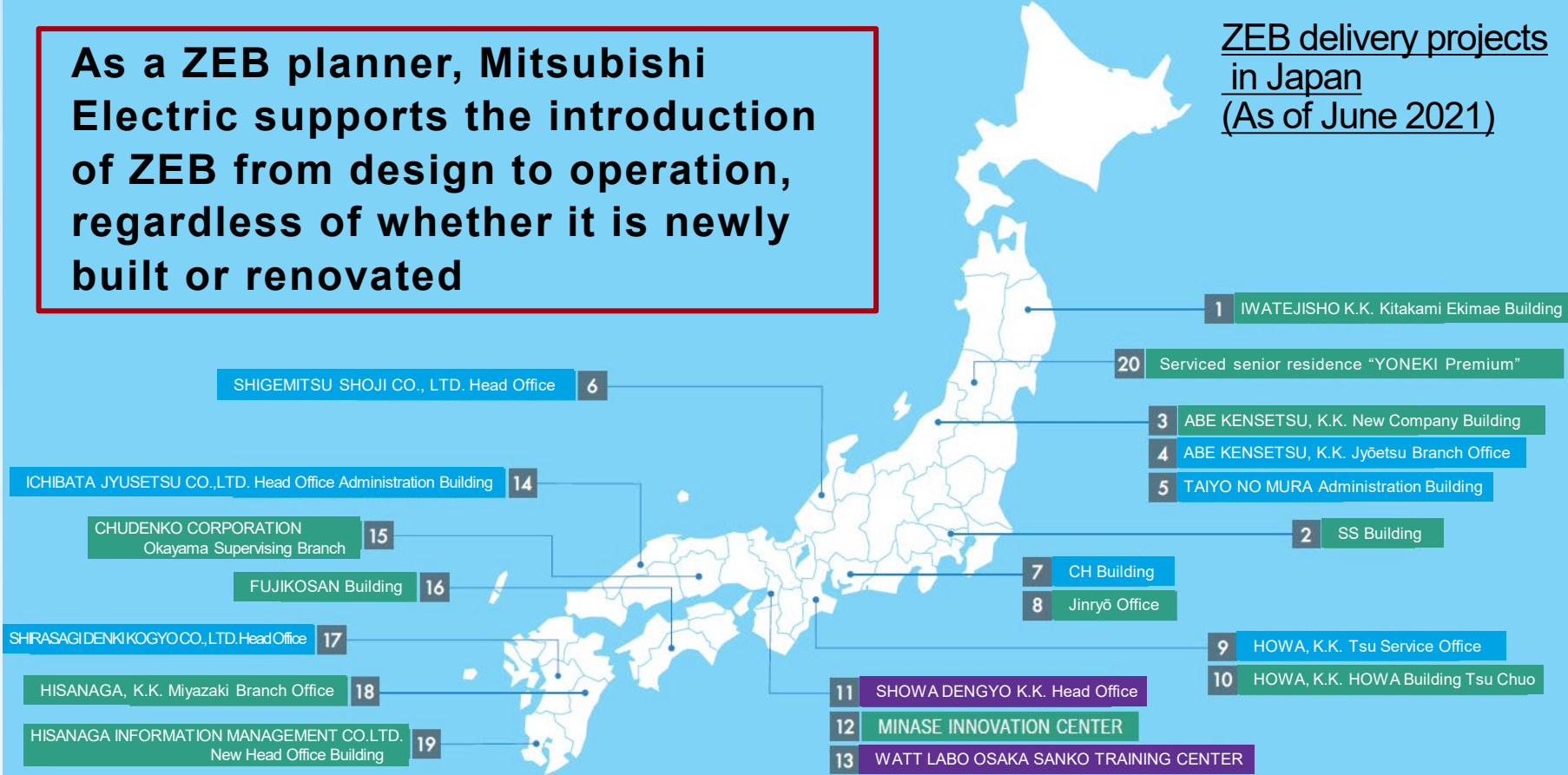
Contribute to the realization of Smart Cities

Solving social challenges by utilizing data beyond business boundaries



As a ZEB planner, Mitsubishi Electric supports the introduction of ZEB from design to operation, regardless of whether it is newly built or renovated

ZEB delivery projects in Japan (As of June 2021)



(Unit:Items)	Market size	Orders Received
FY2018	83	10
FY2019	144	18
FY2020	204	31

ZEB Oriented

Buildings with a total area of 10,000 m² or more, excluding renewable energy, that are designed to save 30-40% of the standard temporary energy and introduce unevaluated technologies

ZEB Ready

Buildings designed to save 50% or more of the standard temporary energy, excluding renewable energy

Nearly ZEB

Buildings that meet the conditions of ZEB ready while adding renewable energy and reducing the standard primary energy consumption by 75% or more

『ZEB』

Buildings that meet the conditions of ZEB ready while adding renewable energy and reducing the standard primary energy consumption by 100% or more

*The market size is the number of ZEB certification acquired by BELS (Building-Housing Energy-efficiency Labeling system) in the fiscal year concerned. Orders received include projects for planners from other companies (equipment supply implementation in our company).

Promote ZEB and contribute to decarbonization

Energy management service

ZEB operation support

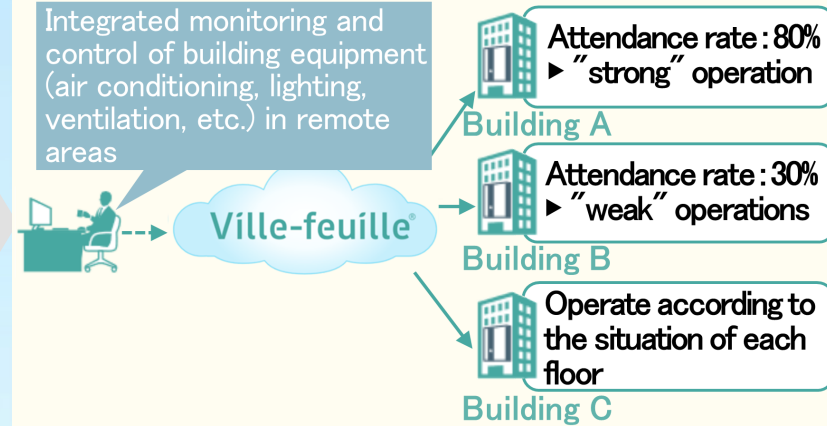


Enhancement of functions

Integrated monitoring and control of building equipment (air conditioning, lighting, ventilation, etc.) in remote areas

Remote monitoring and control function

Released November 2021



Support for energy management improvement after completion of ZEB, and support for labor-saving in building management through centralized management of multiple buildings via the Internet



Ville-feuille, Mitsubishi Electric's original IoT platform for Smart Cities and Buildings. In October 2020, we began providing building management services using this platform, and will continue to expand the services in the future.

Delivery project of integrated solutions (ZEB)

- ZEB Technology Test Facility "SUSTIE" (Kanagawa Pref.)



SUSTIE

World's highest level of primary energy consumption in medium-sized office buildings of 6,000 m² or more

▶ Accelerate ZEB Support for medium-sized buildings through various demonstration experiments

Completed in 2020

ZEB rank: 『ZEB』

Contribute to the elimination of labor shortages by enhancing robot mobility support services

Robot mobility support service

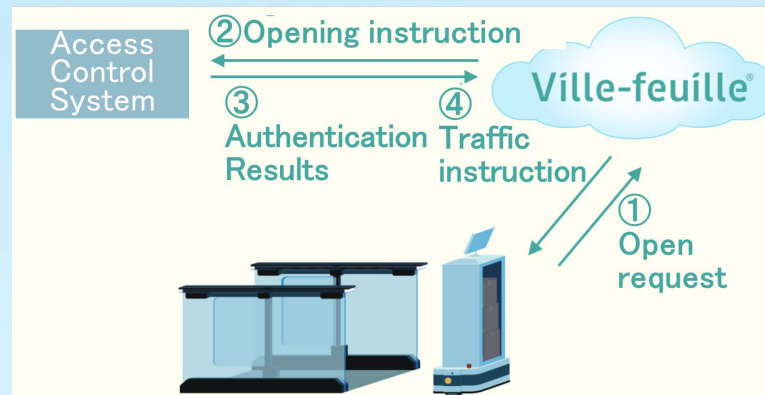


Supporting the safe coexistence of humans and service robots for security, cleaning, and delivery in buildings

Enhancement of functions

Access control system linkage

Released November 2021



Delivery project of robot mobility support service

■ Tokyo Portcity Takeshiba (Tokyo Metropolis)



Completed in 2020

As a solution to realize Tokyo Portcity Takeshiba's "coexistence of humans and robots," Mitsubishi Electric provides a platform for security and delivery robots that autonomously ride on and out of elevators and move vertically

< Products and Technologies Introduced >

- Elevators
- Robot mobility support service
- Destination Oriented Allocation System "DOAS"
- Access control system integrated with "DOAS"

Expand portfolio of elevators & escalators

① Further strengthening of premium market

Further expand share in premium market by providing new models and accelerating functional development to meet social needs

Improving added value through the development of new products and new functions to meet social needs

-> Touchless, antibacterial/antivirus, security, BCP measures, robot collaboration, etc.

Project responding to Social Needs

■ Tenjin Business Center (Fukuoka Pref.)

< Products and Technologies Introduced >

- Elevators
- Destination Oriented Allocation System "DOAS"
- Access control system integrated with "DOAS"
- Visitor reception system using an aerial display



Completed in 2021

▶ **Achieving touchless offices and contribution to infectious disease control**



AXIEZ-LINKs

Released October 2020
machine-room-less elevator for Japan



NEXIEZ-MRL Version 2

Released October 2021
machine-room-less elevator for global

Growth Strategy: (2) Strengthen Elevators & Escalators Business in Global Market

Recently secured projects

- **Commerzone Madhapur**
 - **Altimus (India)**
 - A total of 71 units including high-speed elevators
- Secured in 2021



- **Shenzhen Galaxy Twin Towers (China)**
 - 48 high-speed elevators
- Secured in 2019 - 2020



- **8111 Douglas, Dallas, Texas (USA)**
 - 11 high-speed elevators
- Secured in 2021



- **One Bangkok (Thailand)**
 - Thailand's first double-deck elevator, a total of 278 units, including the fastest elevators in Thailand
- Secured in 2021



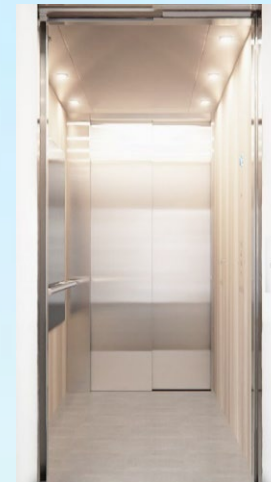
② Capturing volume market

Increase share by capturing volume market where demand continues to grow by utilizing products developed independently by regional bases

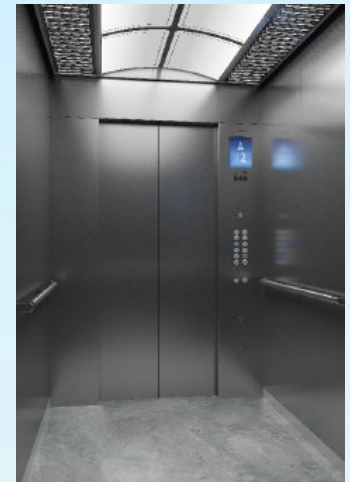
Segment-by-segment strategy utilizing cost-competitive products originally developed by manufacturing bases

Increase share in volume market,
-continue sales expansion with models that meets regional needs and characteristics
-develop and introduce models with local specifications

-Increase the number of maintenance units by expansion of new installation
-Aim to grow as a cyclical development business for future renewal



MOVE
Made by EMEC
machine-room-less
elevator



LEHY
Made by SMEC
elevator with
machine room

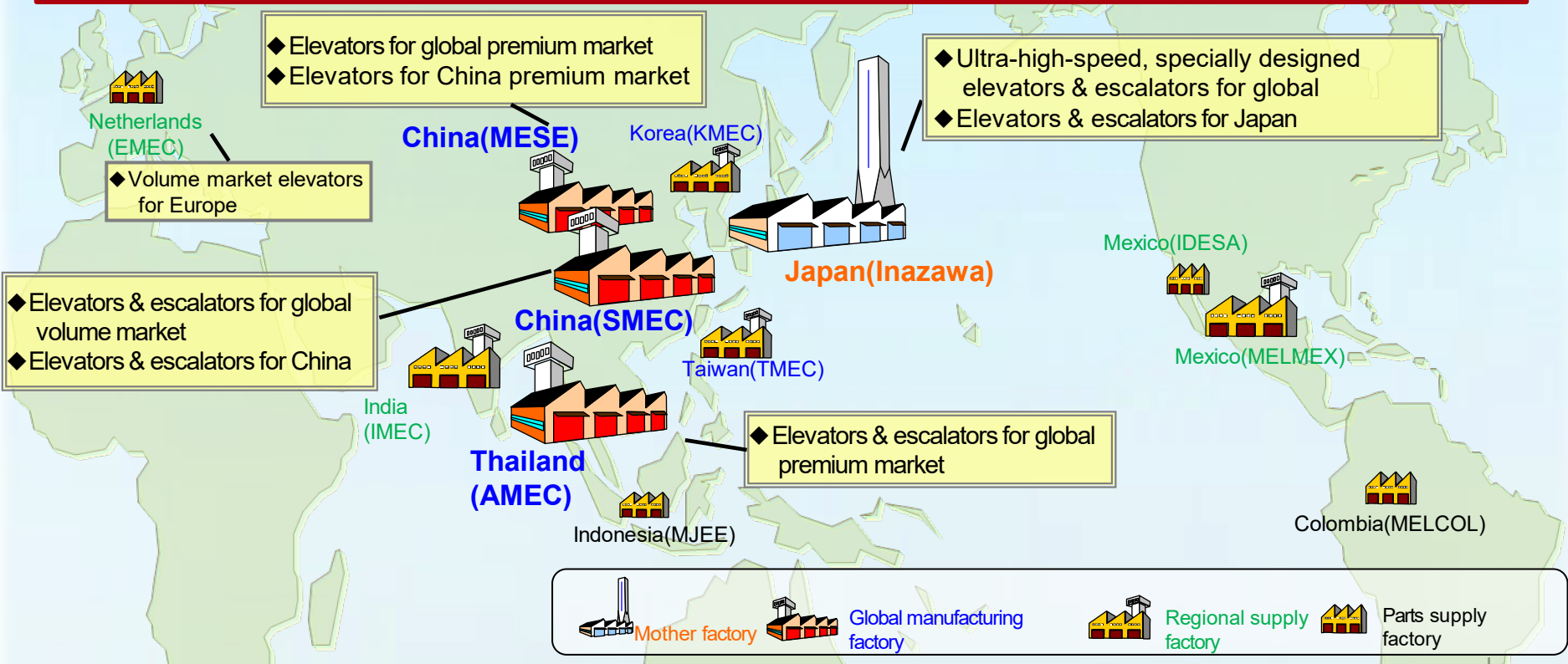
Growth Strategy: (2) Strengthen Elevators & Escalators Business in Global Market

China to be a major global development and production base in addition to Thailand

Enhance product competitiveness by consolidating global development and production into two bases

Other bases to be regional development and production bases

Strengthen local development and introduction of models with local specifications that meet regional characteristics



Expand maintenance and renewal business

① Expand maintenance services utilizing ICT and AI

Further improve maintenance quality, sophisticate/optimize in maintenance service through utilization of remote monitoring/facility operation data

240,000 units as the largest number of maintenance units in Japan (as of October 2021)

High-quality 24/7 maintenance service with abundant field knowledge



Remote maintenance service “ELE FIRST Smart” utilizing AI, launched in Japan in April 2021

ELE FIRST-smart
〈エレファーストスマート〉

Advanced inspection services utilizing AI

Remote inspection is performed 24/7, and the modulation before failure is automatically notified to the information center. In addition to predicting deterioration signs and life of equipment and parts with AI and preventing failures, AI analysis is used to estimate the cause of failures and remote restarts reduce downtime due to failures.



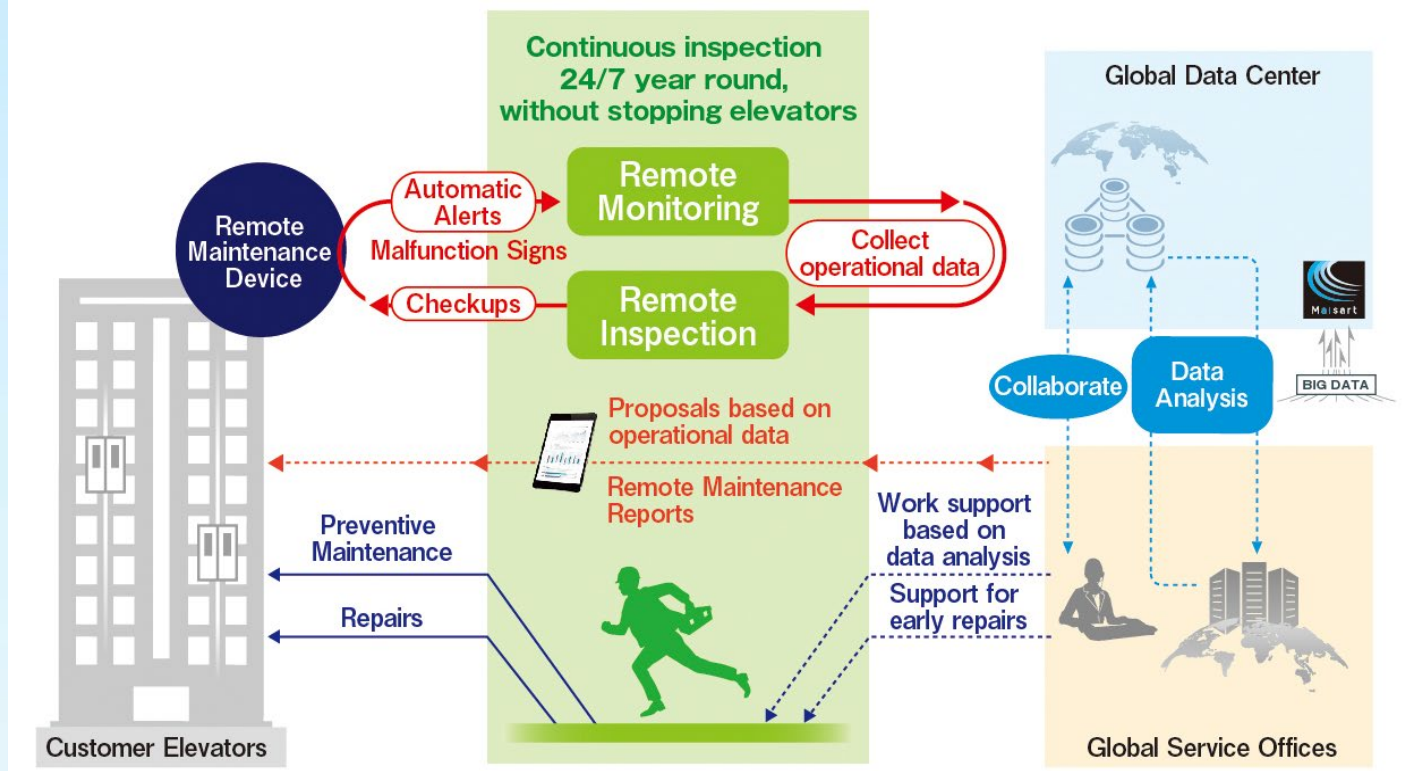
Response to disasters

- Automatically diagnoses elevators that have been stopped by the control operation device during an earthquake, and after confirming safety, resumes operation in a minimum of about 15 minutes. (Available up to 200Gal and seismic intensity 5+)
- Linked with “risk distribution of heavy rain warning (flood damage)” data of the Japan Meteorological Agency. When an alarm is issued, it automatically waits / pauses on the upper floors to reduce flood damage.

ELE-Quick
〈エレクイック〉

Growth Strategy: (2) Strengthen Elevators & Escalators Business in Global Market

Global remote maintenance service "M's BRIDGE" was introduced overseas in October 2019, and the provided countries are expanding



Continue to provide advanced, high-quality maintenance services that leverage our strengths



② Expand maintenance portfolio with multi-brand maintenance

Expand maintenance business by expanding the scope of maintenance services including other than our own products

<Japan>

Utilizing the know-how of Hanshin Transport Co., Ltd. in our group, we will expand maintenance menus and develop a multi-brand maintenance system



<Overseas>

Aggressively carry out our group's maintenance activities, including products other than our own. At the same time, in order to acquire know-how for multi-brand maintenance, expand the maintenance menu, and strengthen the business foundation, we will consider capital participation and cooperation with maintenance-dedicated companies

By increasing the number of maintenance units, we aim to grow as a cyclical development business that will lead to future renewal

Growth Strategy:

(2) Strengthen Elevators & Escalators Business in Global Market

Since the export of the first unit to overseas in 1950, we have expanded our business to 94 countries, and aim to expand market coverage and acquire missing parts by promoting various strategies including capital participation and collaboration for further development

Overseas business strategy

- Strengthen product capabilities by launching new models and expand market coverage by utilizing regional production bases
- Rapid launch of products that meet market needs through collaboration and expansion of portfolio by capital participation in companies with manufacturing and development functions in the target area
- Expansion of maintenance business through capital participation and collaboration with a maintenance company
- Expansion of global remote maintenance service utilizing technology and know-how cultivated in Japan
- Building a regional-led management system by establishing the Regional Strategy Office
- Expansion of Smart Building business by utilizing original IoT platform
- Expansion of solution business in collaboration with air conditioning & refrigeration systems business

Utilize Mitsubishi Electric's strategic investment facility for capital participation and collaboration with companies with manufacturing and development functions and maintenance companies

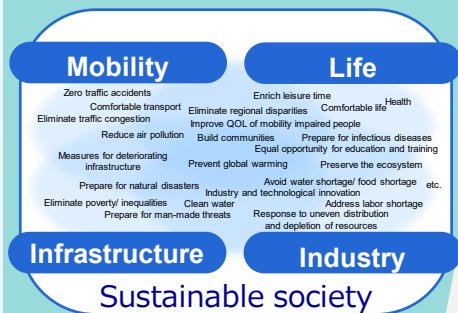
Contributing to solving social challenges to achieve sustainability

- Achieving a sustainable global environment by contributing to the spread of ZEB
- Realization of a safe, secure, and comfortable society through solutions to respond to the New Normal

Materiality to realize sustainability

Provide solutions to social challenges through our business	Realize a sustainable global environment
	Realize a safe, secure, and comfortable society
Strengthen our business foundation to enable our sustainable growth	Respect for all people
	Strengthen corporate governance and compliance on a sustainable basis
	Create a sustainability-oriented corporate culture

Social Challenges



Provide solutions to social challenges through our business

Realize a sustainable global environment

Realize a safe, secure, and comfortable society

1. Decarbonization Efforts

In addition to energy conservation and energy creation solutions for individual buildings, energy for the entire region is centrally managed, contributing to the creation of a decarbonized society through optimal local control



Highly relevant SDGs



2. Response to the “New Normal”

Utilizing technologies such as contactless solutions, human flow control, and security, we have created a more comfortable, safe, and secure building space to respond to the New Normal



Highly relevant SDGs



3. Measures against labor shortages

Contributing to labor-saving efforts to eliminate labor shortages by enhancing robot mobility support and creating more value



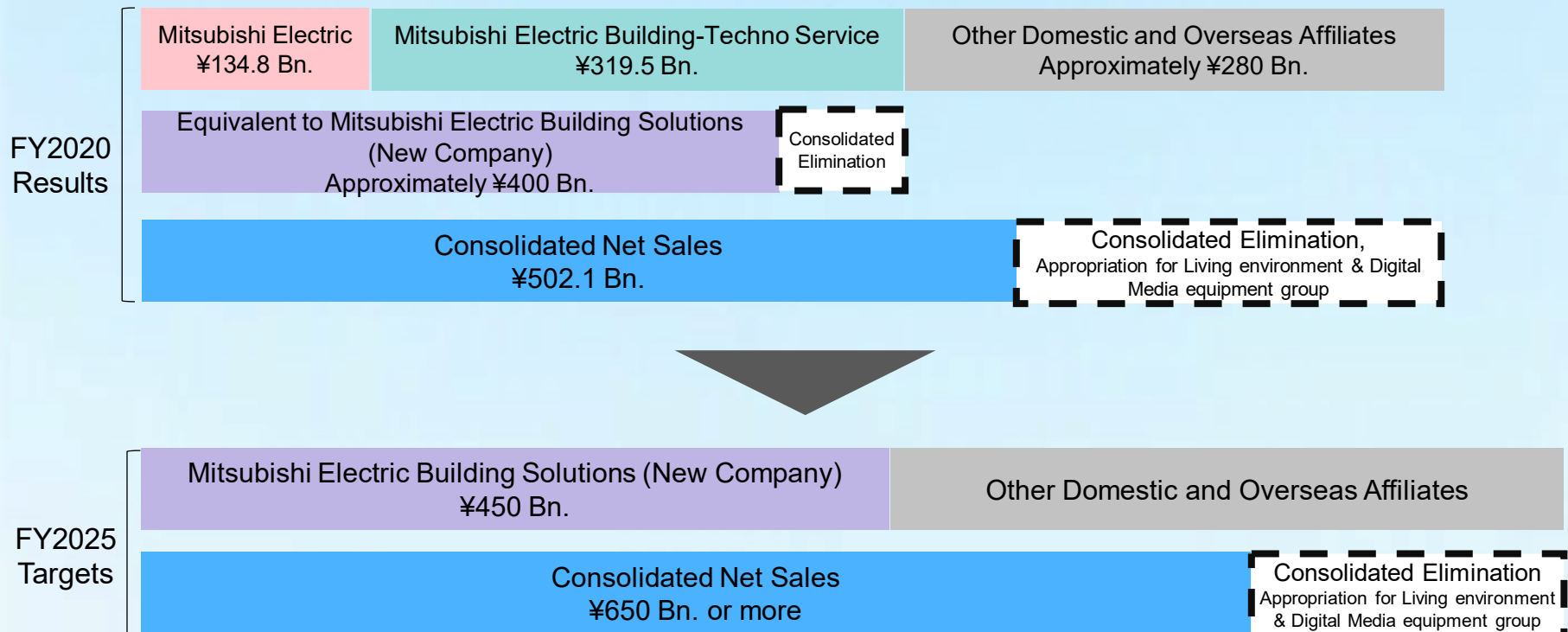
Highly relevant SDGs



A p p e n d i x

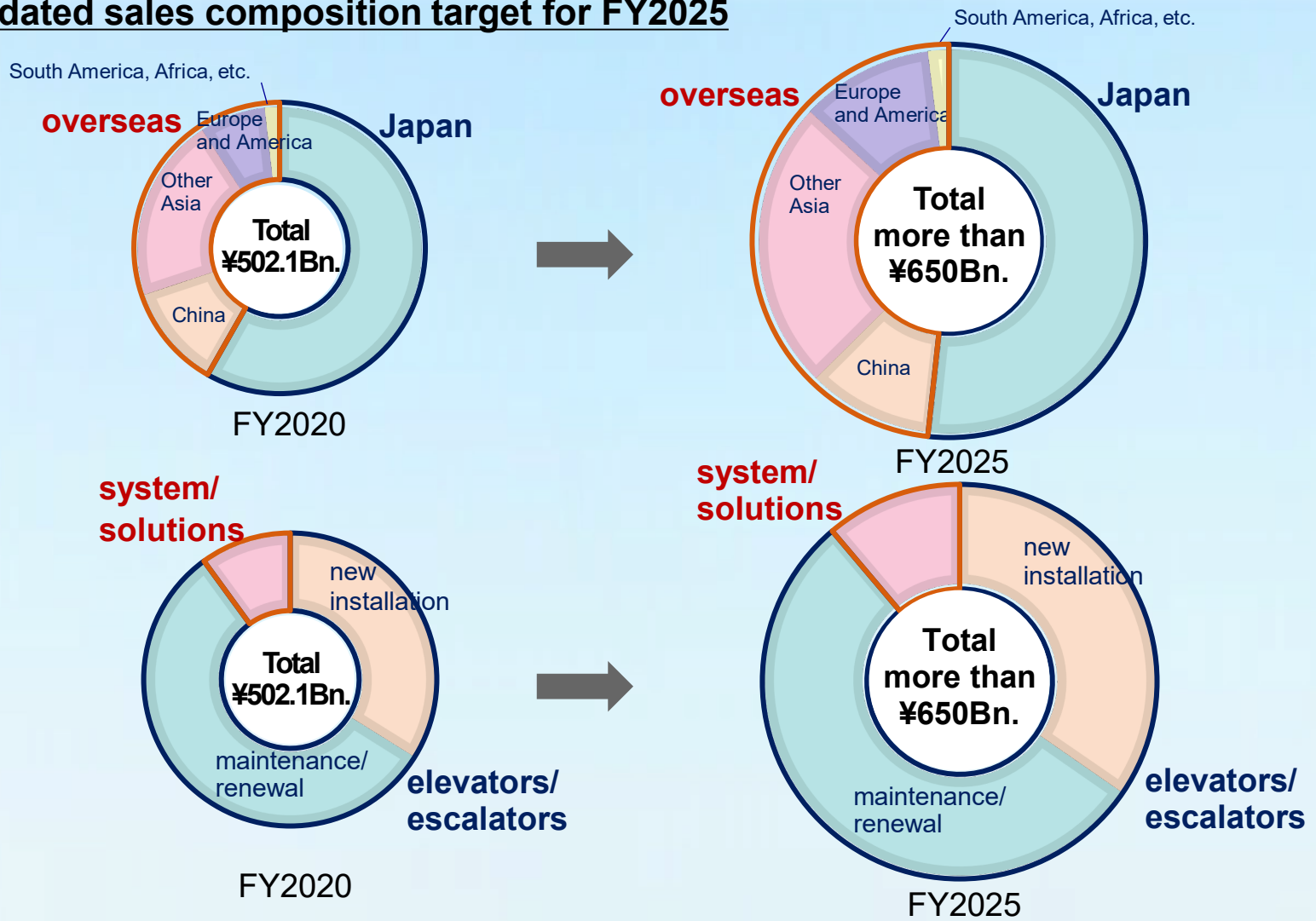
Consolidated sales and new company sales of building systems business

Consolidated Sales of Building Systems Division (breakdown)



- Aim for consolidated sales of ¥502.1Bn. in FY2020 to more than ¥650Bn. in FY2025
- The new company aims to achieve sales of ¥450Bn. in FY2025, up from about ¥400Bn. which is equivalent to the actual amount of FY2020 (Including appropriation for Living environment & Digital Media equipment group)

Consolidated sales composition target for FY2025



- Expand overseas ratio from 42% to 48% by capturing overseas volume market and maintenance demand
- Expansion of new Installations, maintenance/renewal, and system/solutions

Main HR development and technical verification facilities for maintaining and improving the quality of building system products and services



QM Center
Inazawa Works



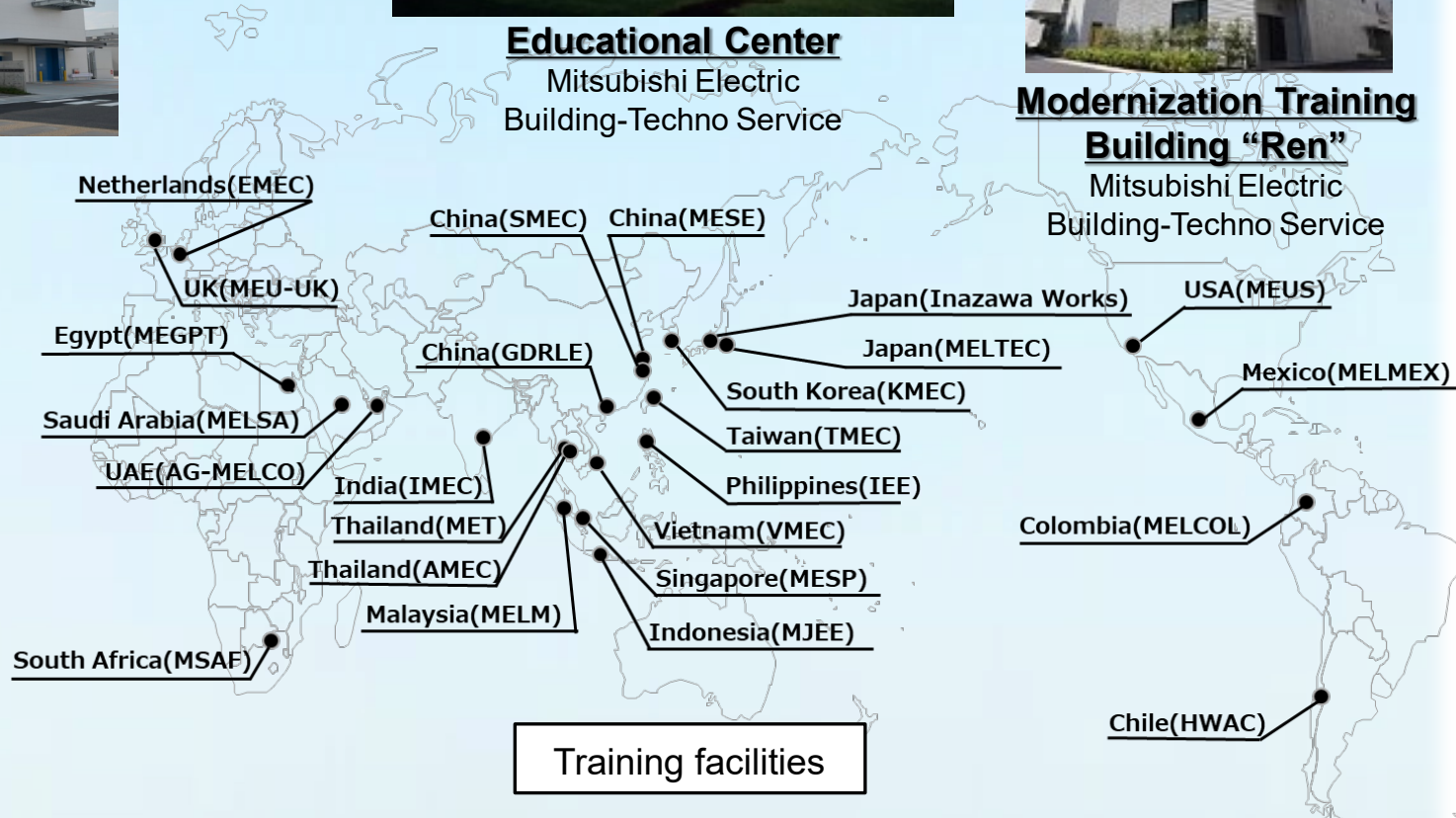
Educational Center
Mitsubishi Electric
Building-Techno Service



Modernization Training Building "Ren"
Mitsubishi Electric
Building-Techno Service



Inazawa Installation Training Center "Takumi"
Inazawa Works



Appendix

List of affiliated companies appearing in the materials

Abbreviation	Country	Name	Business summary
MELTEC	Japan	Mitsubishi Electric Building Techno-Service Co., Ltd.	maintenance / repair / installation of various building equipment and various electrical machinery / equipment and comprehensive management of the building
SMEC	China	Shanghai Mitsubishi Elevator Co., Ltd.	manufacturing / sales / installation / maintenance of elevators & escalators
MESE	China	Mitsubishi Electric Shanghai Electric Elevator Co., Ltd.	manufacturing / sales / installation / maintenance / research / development / engineering of elevators
GDRLE	China	Guangdong Ryoden Lift & Escalator Co., Ltd.	manufacturing / sales / installation / maintenance of elevators & escalators
KMEC	South Korea	Mitsubishi Elevator Korea Co., Ltd.	manufacturing / sales / installation / maintenance of elevators & escalators
TMEC	Taiwan	Taiwan Mitsubishi Elevator Co., Ltd.	manufacturing / sales / installation / maintenance of elevators & escalators
AMEC	Thailand	Mitsubishi Elevator Asia Co., Ltd.	manufacturing / sales of elevators & escalators
MET	Thailand	Mitsubishi Elevator (Thailand) Co., Ltd.	sales / installation / maintenance of elevators & escalators
IEE	Philippines	International Elevator & Equipment, Inc.	sales / installation / maintenance of elevators & escalators, refrigeration systems, generators
MJEE	Indonesia	PT. Mitsubishi Jaya Elevator and Escalator	manufacturing / sales / installation / maintenance of elevators & escalators
MELM	Malaysia	MITSUBISHI ELEVATOR MALAYSIA SDN. BHD.	sales / installation / maintenance of elevators & escalators, refrigeration systems, building equipment
MESP	Singapore	MITSUBISHI ELEVATOR (SINGAPORE) PTE. LTD.	sales / installation / maintenance of elevators & escalators, building equipment, and electronic equipment
VMEC	Vietnam	MITSUBISHI ELEVATOR VIETNAM CO., LTD	sales / installation / maintenance of elevators & escalators

List of affiliated companies appearing in the materials

Abbreviation	Country	Name	Business summary
IMEC	India	Mitsubishi Elevator India Private Limited	manufacturing / sales / installation / maintenance of elevators & escalators
AG-MELCO	UAE	AG MELCO Elevator Co. L.L.C.	sales / installation / maintenance of elevators & escalators
MELSA	Saudi Arabia	Mitsubishi Electric Saudi Ltd.	sales / installation of heavy electric appliances, elevators & escalators, and electronic devices, civil engineering work, and local transportation contracts
MEGPT	Egypt	MELCO-MEC Egypt for Elevators & Escalators	sales / installation / maintenance of elevators & escalators
MSAF	South Africa	Melco Elevator (South Africa) Pty. Ltd.	sales / installation / maintenance of elevators & escalators
EMEC	Netherland	Mitsubishi Elevator Europe B.V.	manufacturing / sales / installation / maintenance of elevators & escalators
MEU	Netherland	Mitsubishi Electric Europe B.V.	Mitsubishi Electric's general sales company in Europe (sales of refrigeration systems, semiconductors, automobile equipment, FA equipment, video information equipment, heavy electrical work, material procurement)
MEUS	USA	Mitsubishi Electric US, Inc.	Mitsubishi Electric's representative organization in U.S. and its sales subsidiary (refrigeration systems, elevators & escalators, semiconductors and video-information equipment, material procurement)
IDESA	Mexico	Internacional de Elevadores, S.A. de C.V.	manufacturing of elevators
MELMEX	Mexico	Mitsubishi Electric de Mexico, S.A. de C.V.	manufacturing / sales / installation / maintenance of elevators & escalators, and manufacturing / sales / maintenance of rolling stock systems
MELCOL	Colombia	Mitsubishi Electric de Colombia Ltda.	manufacturing / sales / installation / maintenance of elevators & escalators, and sales / installation / heavy electrical work of refrigeration systems
HWAC	Chile	Heavenward Ascensores S.A.	sales / installation / maintenance of elevators & escalators

Cautionary Statement

While the statements herein including the forecast of the Mitsubishi Electric Group are based on assumptions the Group considers to be reasonable under the circumstances on the date of announcement, actual results may differ significantly from forecasts. Such factors materially affecting the expectations expressed herein shall include but are not limited to the following:

1. Any change in worldwide economic and social conditions, as well as laws, regulations, taxation and other legislation
2. Changes in foreign currency exchange rates, especially JPY/dollar rates
3. Changes in stock markets, especially in Japan
4. Changes in balance of supply and demand of products that may affect prices and volume, as well as material procurement conditions
5. Changes in the ability to fund raising, especially in Japan
6. Uncertainties relating to patents, licenses and other intellectual property, including disputes involving patent infringement
7. New environmental regulations or the arising of environmental issues
8. Defects in products or services
9. Litigation and legal proceedings brought and contemplated against the Company or its subsidiaries and affiliates that may adversely affect operations or finances
10. Technological change, the development of products using new technology, manufacturing and time-to-market
11. Business restructuring
12. Incidents related to information security
13. Large-scale disasters including earthquakes, typhoons, tsunami, fires and others
14. Social or political upheaval caused by terrorism, war, pandemics, or other factors
15. Important matters related to the directors and executive officers, major shareholders and affiliated companies of Mitsubishi Electric Corporation

