

# **FY2020 ESG Presentation**



**March 1, 2021  
OMRON Corporation**

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# **Corporate Philosophy Management and Sustainability**

## OMRON Principles

**In 1959, OMRON Founder Kazuma Tateisi created the motto behind our growth: Solving social issues through our business**

### Our Mission

**To improve lives and contribute to a better society**



### The spirit embodied in the founder's motto

- Companies have an obligation to serve society
- The determination to be a pioneer in driving social change

# OMRON Principles

## Our Mission

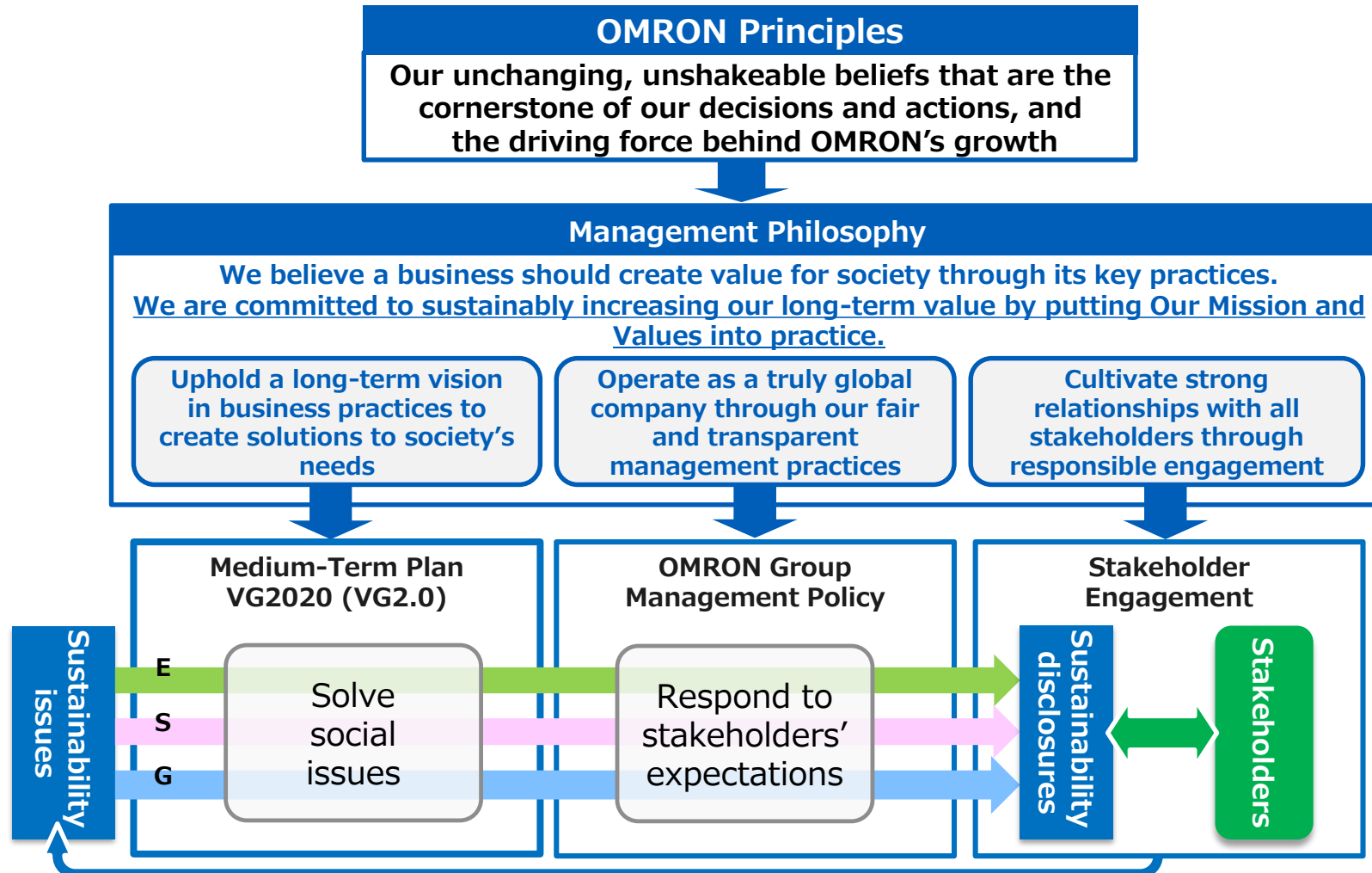
**To improve lives and contribute to a better society**

## Our Values

- **Innovation Driven by Social Needs**  
Be a pioneer in creating inspired solutions for the future.
- **Challenging Ourselves**  
Pursue new challenges with passion and courage.
- **Respect for All**  
Act with integrity and encourage everyone's potential.

## Corporate Philosophy Management: Rooted in our Principles

**The Management Philosophy creates a framework for embedding our Corporate Philosophy in our practices and operations**



# Management Efforts to Inspire Resonance

**Wide variety of unique activities to expand the circle of resonance and deepen understanding of the OMRON Principles**

Message from Senior Management



OMRON Principles Dialogue



The OMRON Global Awards(TOGA)



CEO Circle



Engagement Survey



OMRON Principles Workplace Exchange



## Corporate Philosophy in Action During COVID-19 Outbreak: HCB

**Despite lockdown, the Italian production and development team increased production of medical aspirators to fulfil supply obligations**



### What is a medical aspirator?

A suction device for patients on ventilators to aid breathing by removing mucus or bodily fluids from the respiratory tract





## Corporate Philosophy in Action During COVID-19 Outbreak: IAB

**Collaborated with a partner to develop a UV disinfection robot as a solution to COVID-19 transmission risk**



# Corporate Philosophy in Action During COVID-19 Outbreak: IAB

**Solutions created in Europe during the COVID-19 outbreak now being deployed globally**



Poland



Canada



France

S. Korea



Australia

Mexico

Brazil

## OMRON's Corporate Philosophy Management

- **The Principles are embodied in how we conduct our business**
- **We have created a culture that is rooted in “Our Values”**
- **Our global employees are capable of taking initiative independently**

## VOICE: Framework to Support Corporate Philosophy Management

**Using VOICE to identify and solve issues. 5-fold Y/Y increase in additional comments as employees engage with management**

### Goal

To support OMRON's continuous development, Voice allows the management team to:

1. Measure the attractiveness of the workplace
2. Understand and identify issues
3. Create a framework for actions to solve issues

FY2020  
Overview

Target

Global Employees 21,287 \*

Results

No. of respondents 19,176, response rate 90.0%  
No. of additional comments 40,453

### Major programs introduced or revised as a result of VOICE feedback

- Expand work from home program: FY19 (abolished limitations)
- Introduce application system: FY18
- Expand public job posting system: FY18 (increased number of companies where program is available)
- Start global corporate system project: FY18

\*Excludes overseas production workers



# **Sustainability and Environmental Initiatives**



# OMRON's Sustainability Framework

## Medium-term Plan earnings targets and business strategies aligned with sustainability issues

### OMRON Principles

### VG2.0

Business Strategies

Sustainability Issues

A value-generator for people and the Earth that is qualitatively and quantitatively superior

- 1. Reinforce businesses by designating focus domains
- 2. Business model evolution
- 3. Enhance core technologies

×

Collaboration with partners

+

Human capital management, manufacturing, risk management...

FA



Healthcare



Social Solutions



×

Collaboration with partners



+

Human Capital Mgmt.



Manufacturing



Risk Management



## OMRON Environmental Policy

**Created Environmental Vision based on Corporate Principles.  
Initiatives aimed at the realization of a better, sustainable society**

### Vision: Green OMRON 2020

#### OMRON Group Environmental Policy

**In line with OMRON Principles, we will contribute to realizing sustainable societies, globally, by providing eco-friendly products and services that can contribute to the global environment and by efficient management of resources.**

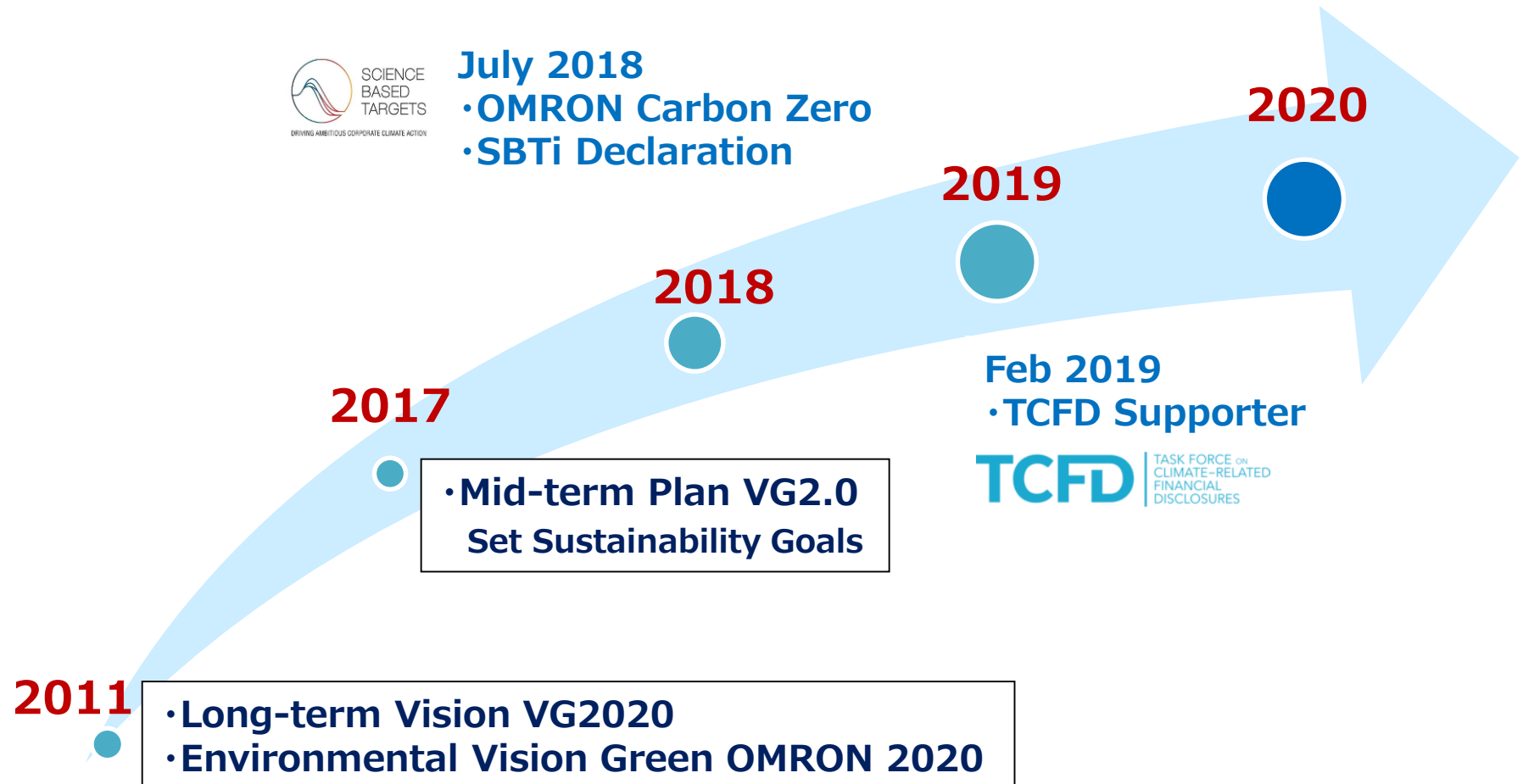
1. Provide eco-friendly products and services that can contribute to the global environment
2. Prevent Global Warming
3. Use resources efficiently
4. Co-existence with nature
5. Implement environmental management

#### OMRON Group Environmental Goals

1. Reduction of greenhouse gas emissions
2. Appropriate management and reduction of hazardous substances
3. Reduction of waste
4. Prevention of air, water, and soil contamination
5. Effective usage of water resources
6. Facilitating environmental management

# Evolution of OMRON's Climate Change Initiatives

Strengthened initiatives in line with our Environmental Vision and Policy



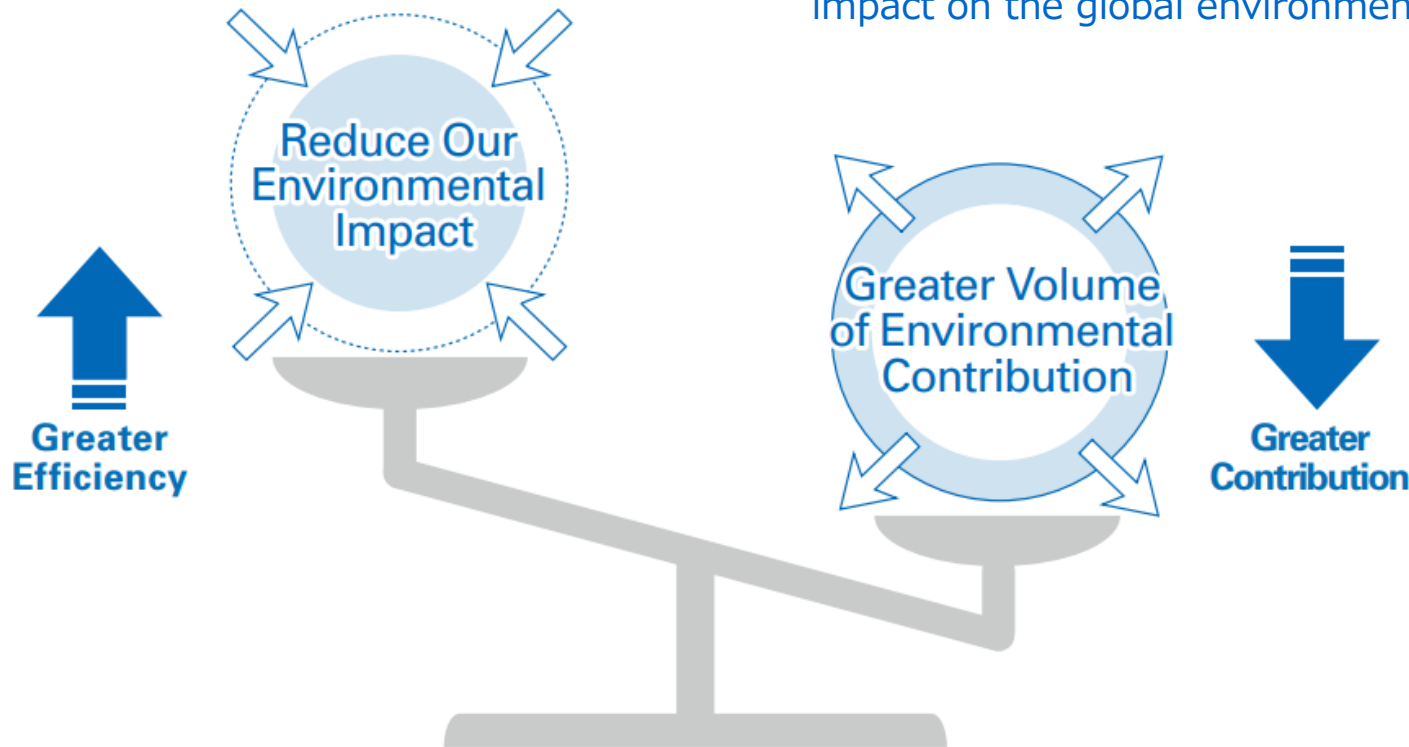


## Key Features of Our Environmental Actions

**Ongoing environmental activities on 2 fronts: Providing products and services that contribute positively to the environment, while reducing the environmental impact of our business activities**

**Maximize the Effective Use of All Management Resources**  
(Improve energy, resource productivity)

**Products and Services Useful to Society**  
(Grow our businesses that have a positive impact on the global environment)





# Energy Solutions Business

## History of Energy Solutions Business

**Started 85 years ago with protective relay business in 1934, 1 year after OMRON's founding. Environmental Business Promotion HQ set up in 2009 as an incubation business reporting directly to the CEO**

**1934**



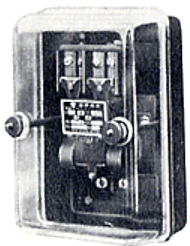
**1994**



**2009**



**Now**



**Developed improved protective relay for timers**

**1<sup>st</sup> PV inverter developed, production started**

**Environmental Business Promotion HQ established**

**Integrated with SSB**

# Integration with SSB

**Bolster Energy Business by combining Environmental Business, Social Systems with respective strengths in components and engineering**

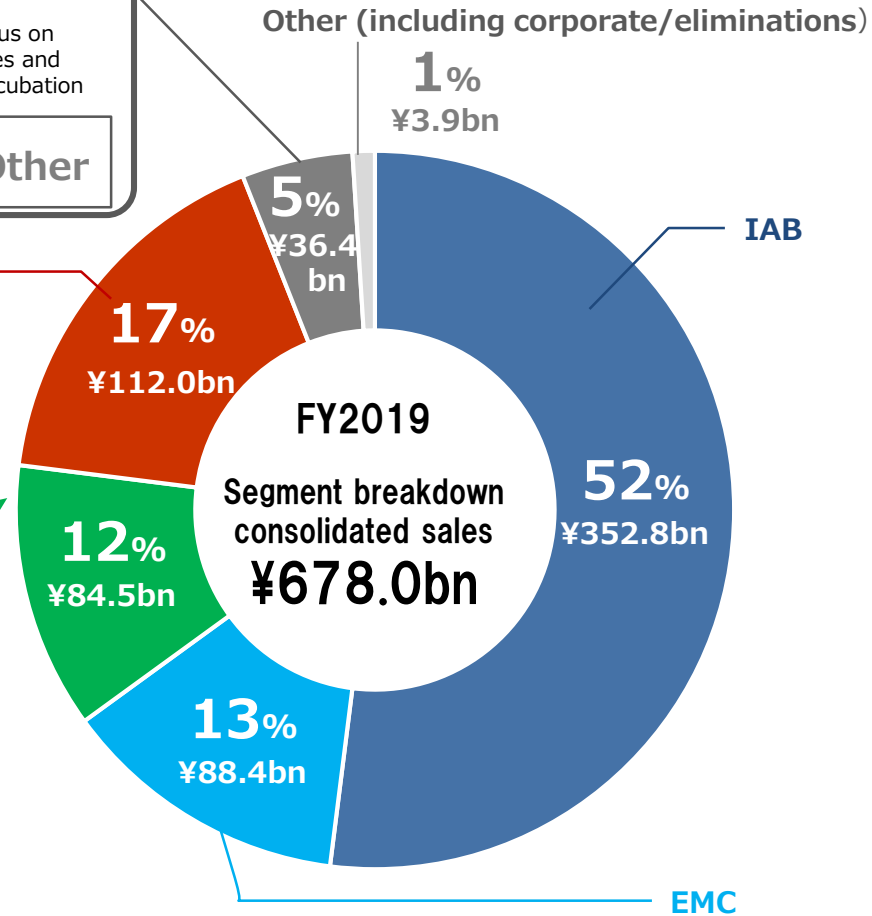


April 2020 Business Integration



**SSB**

**OMRON Social Solutions Group**  
OMRON Social Solutions Co. Ltd.  
OMRON Field Engineering Co. Ltd.  
OMRON Software Co. Ltd.  
OMRON Aso Co. Ltd.



## Vision for Energy Solutions Business

### OMRON Social Solutions: Mission

Create a vibrant society where people around the world enjoy safe, secure and comfortable lives

### Vision for Energy Solutions Business

**Realize a circular society for the next generation through energy optimization**

## Progress on VG2.0 Sustainability Issues (Social Solutions)

**Markets depressed by COVID-19 impact but expect a recovery going forward on rising market needs**

### Social Issues To be Solved

- Increase in traffic accidents and traffic jams
- Global warming from CO<sub>2</sub> emissions
- Slow expansion of the renewable energy market

### Fiscal 2019 Progress

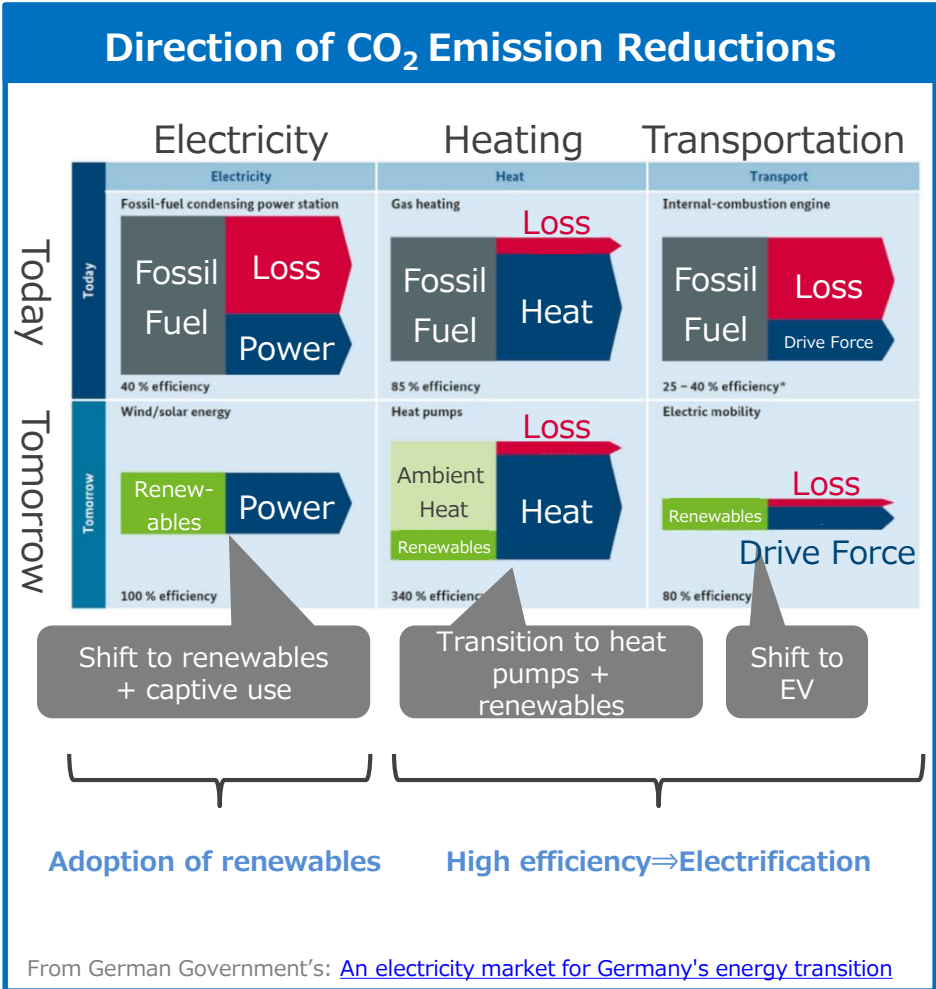
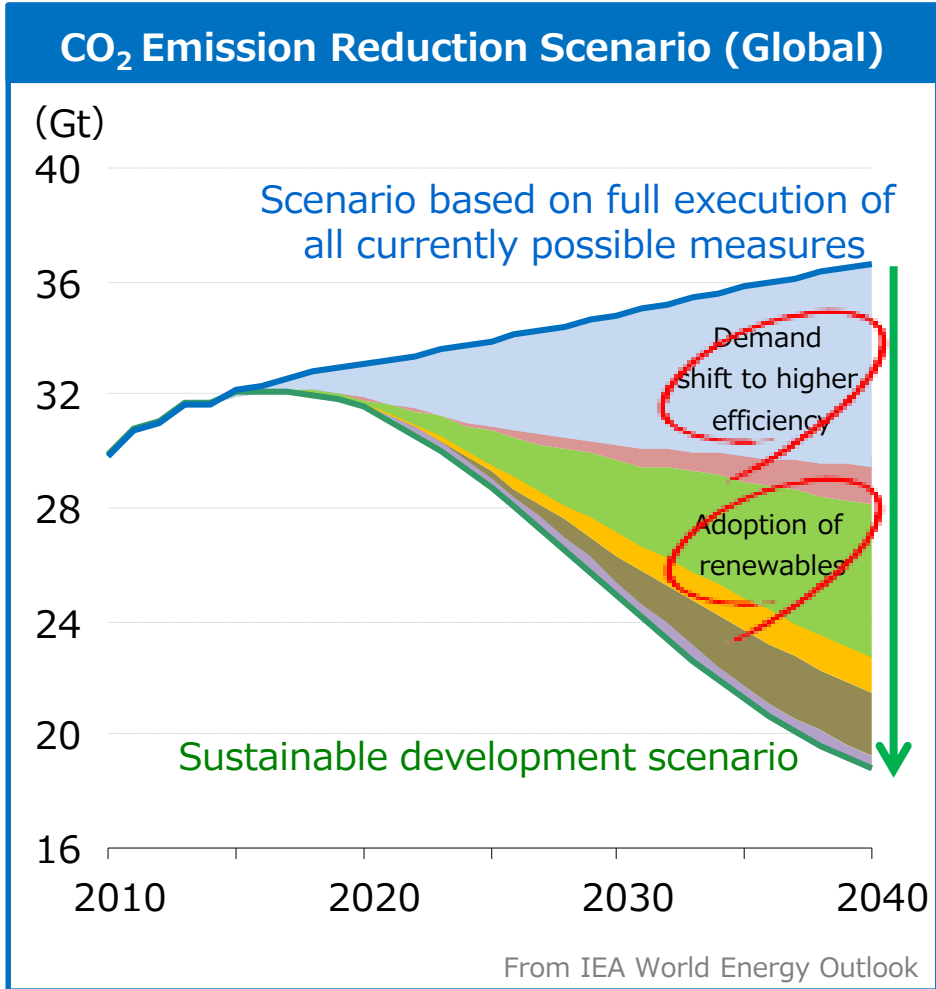
- Introduced tailgating detection function
- Solar power system: Cumulative shipping capacity 9.6GW
- Storage battery system: Cumulative shipping capacity 438MWh

### Fiscal 2020 Goals

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

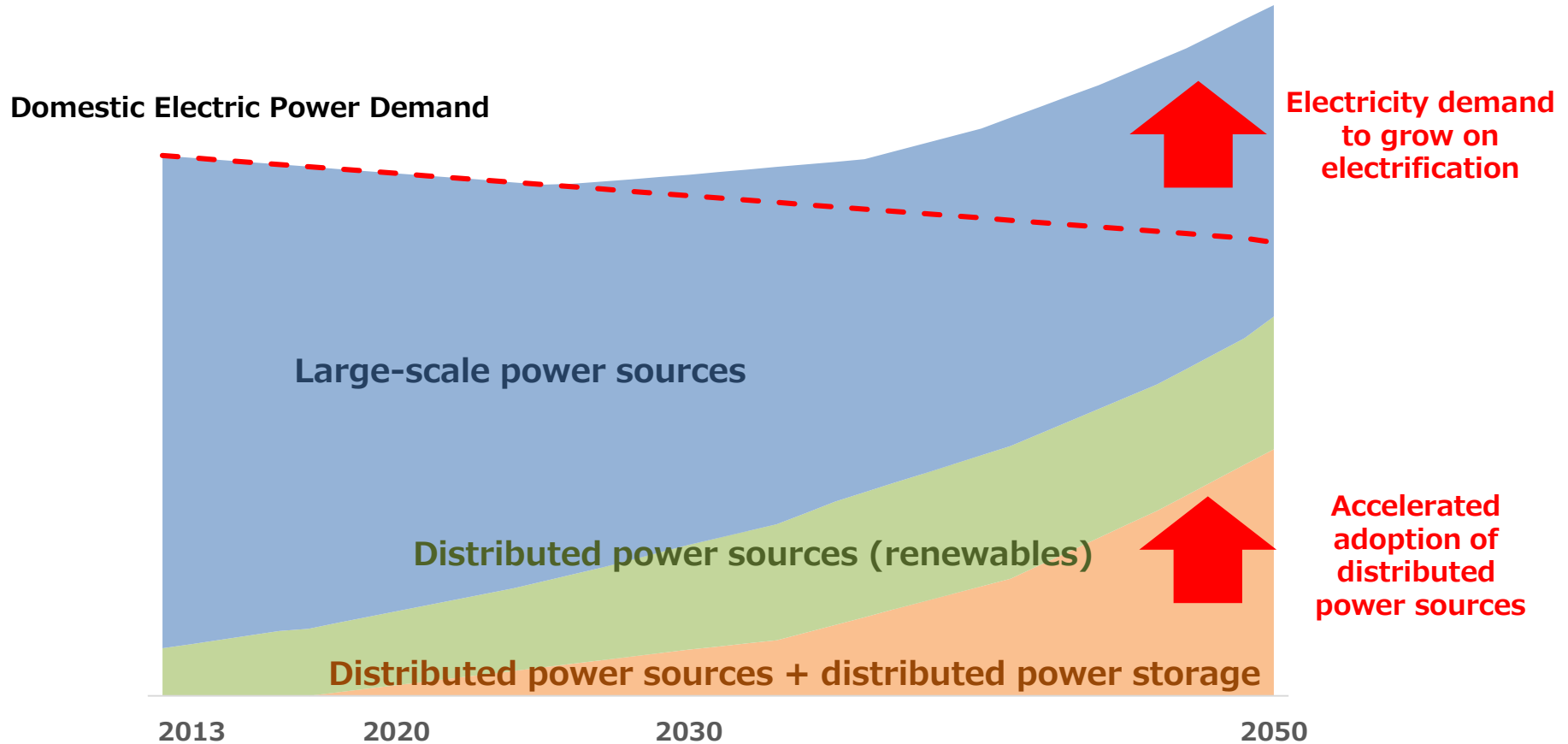
# Macro Trends in the Energy Business

**Countries accelerating adoption of renewables. Demand shifting toward higher efficiency to achieve CO<sub>2</sub> emission reduction targets**



# Decarbonization: Electric Power Demand Trends

**Electrification to drive a resurgence in domestic power demand in the longer term. Continued growth in renewables-based distributed power sources. Accelerating take-up of distributed power storage**



Based on Ministry of Environment's Long-term Low-carbon Vision Council materials, September 19, 2017

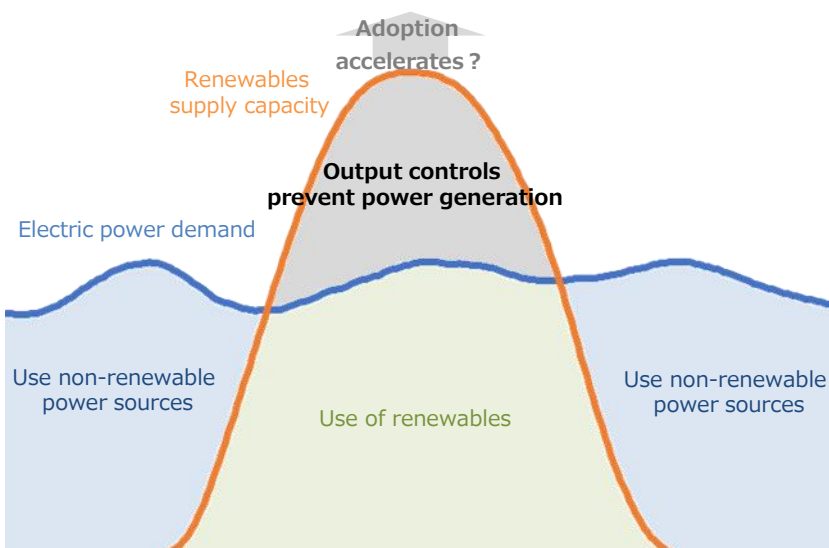


## Challenges Associated with Large-scale Take-up of Renewables

**Balancing variability of demand, supply capacity an issue. Key is supply-demand controls that use storage batteries as control valves**

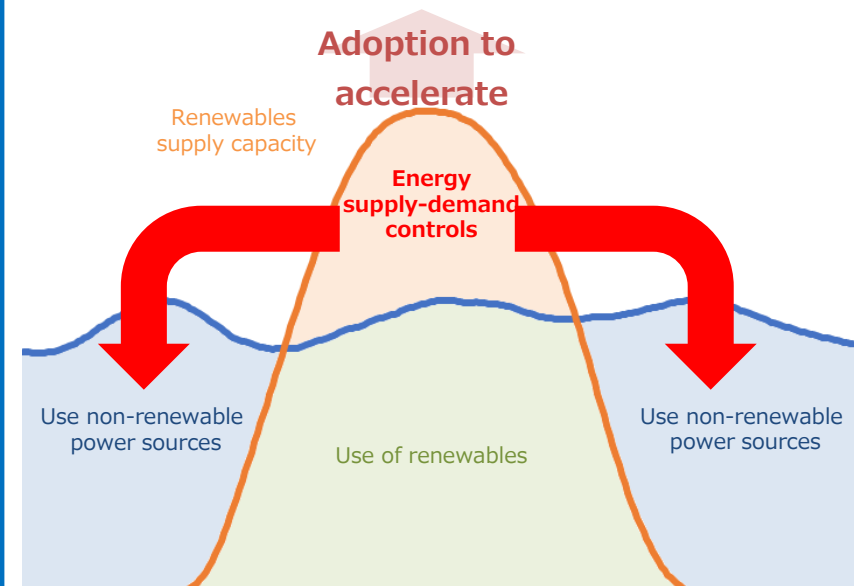
### Challenges Associated with Large-scale Take-up of Renewables

Renewable use must be accelerated to achieve decarbonization but cannot be maximized where **Power demand < Renewable supply capacity** due to output controls



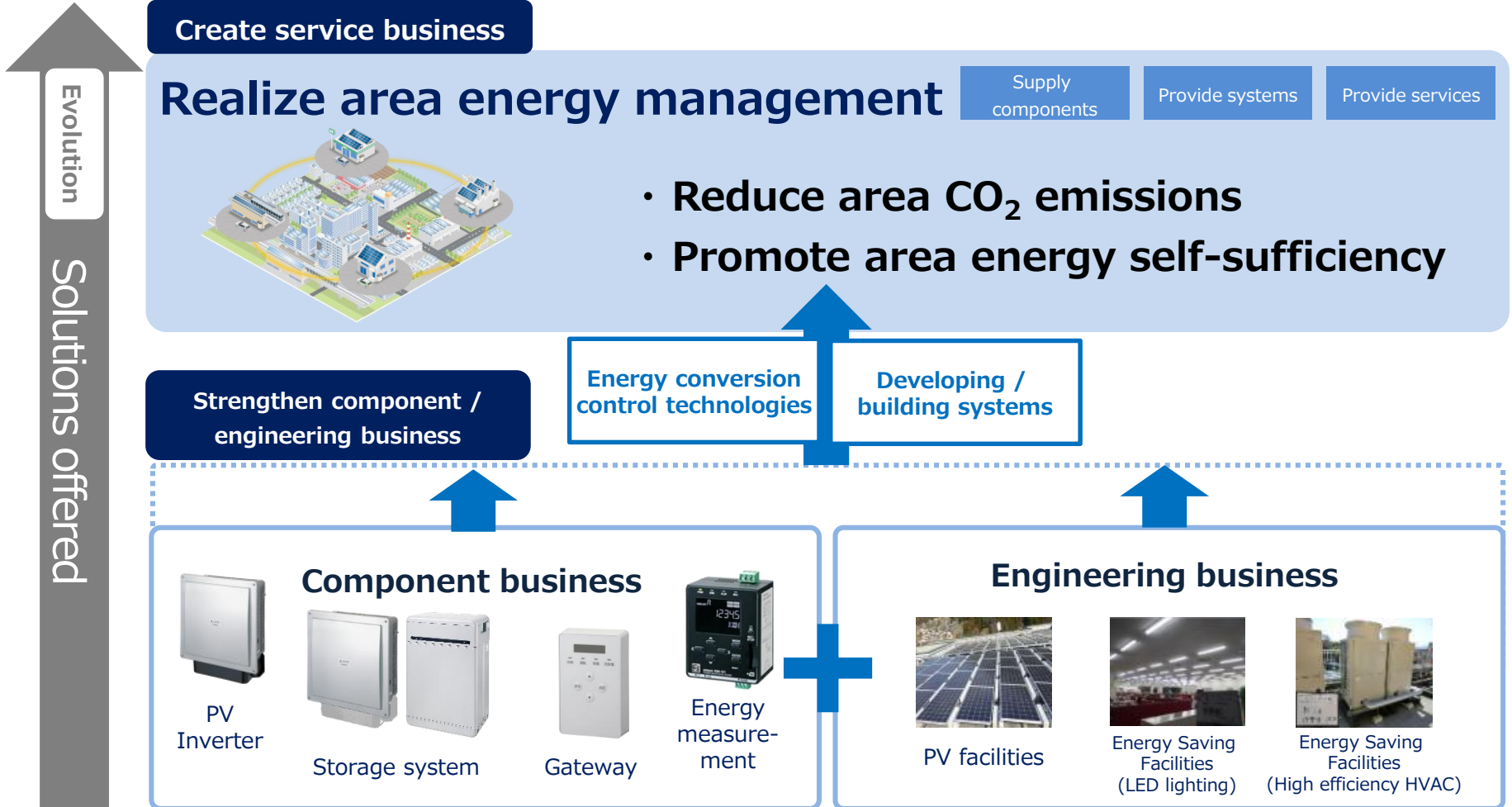
### Initiatives to Maximize Use of Renewables

Energy supply-demand controls enable time-shifting using storage batteries. Even where **Power demand < Renewable supply capacity**, **energy supply-demand controls** make it possible to maximize use of renewable supply capacity



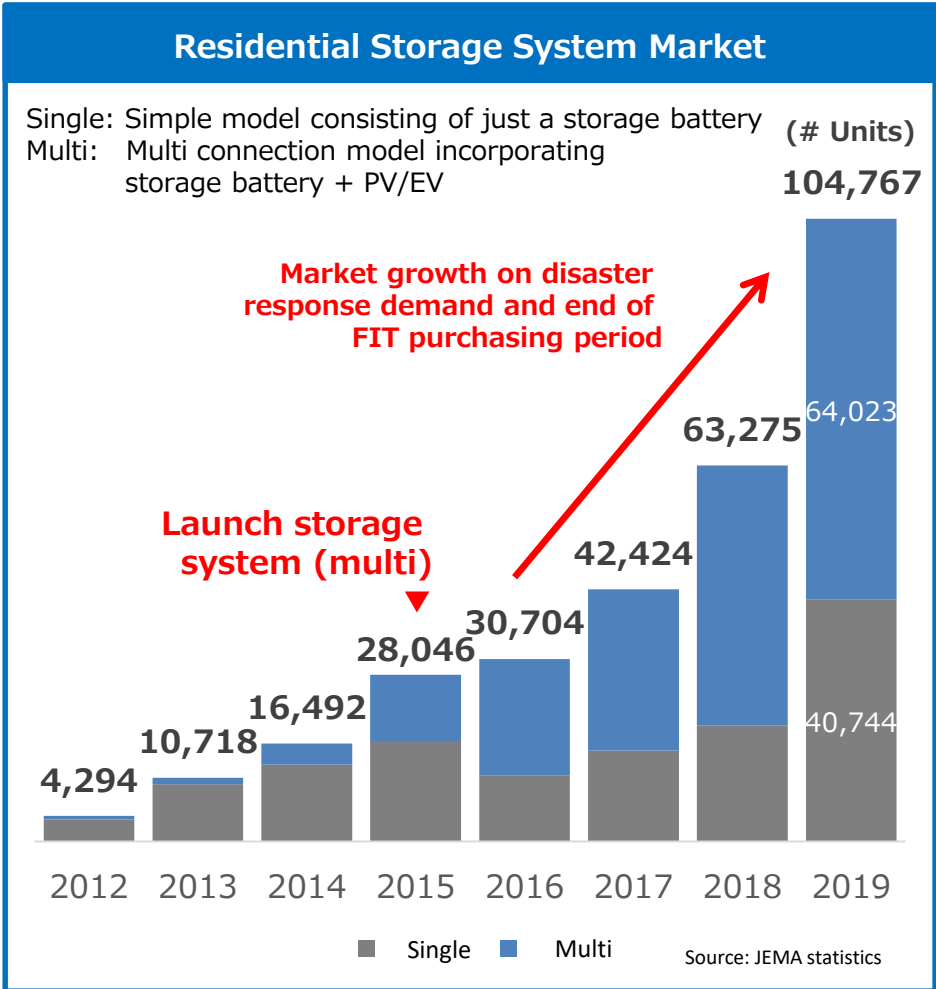
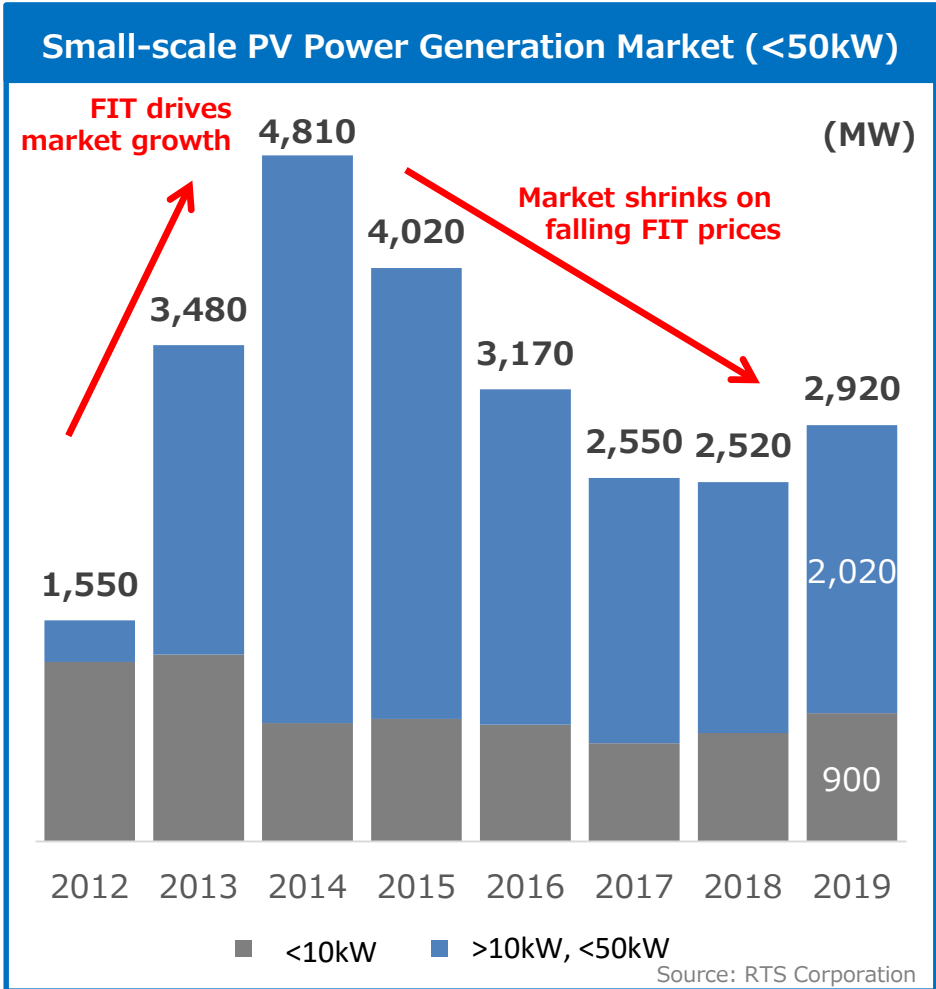
# Our Vision of the Energy Solution Business

## Promote area CO<sub>2</sub> reduction, energy self-sufficiency by combining system development skill with energy conversion/control technology



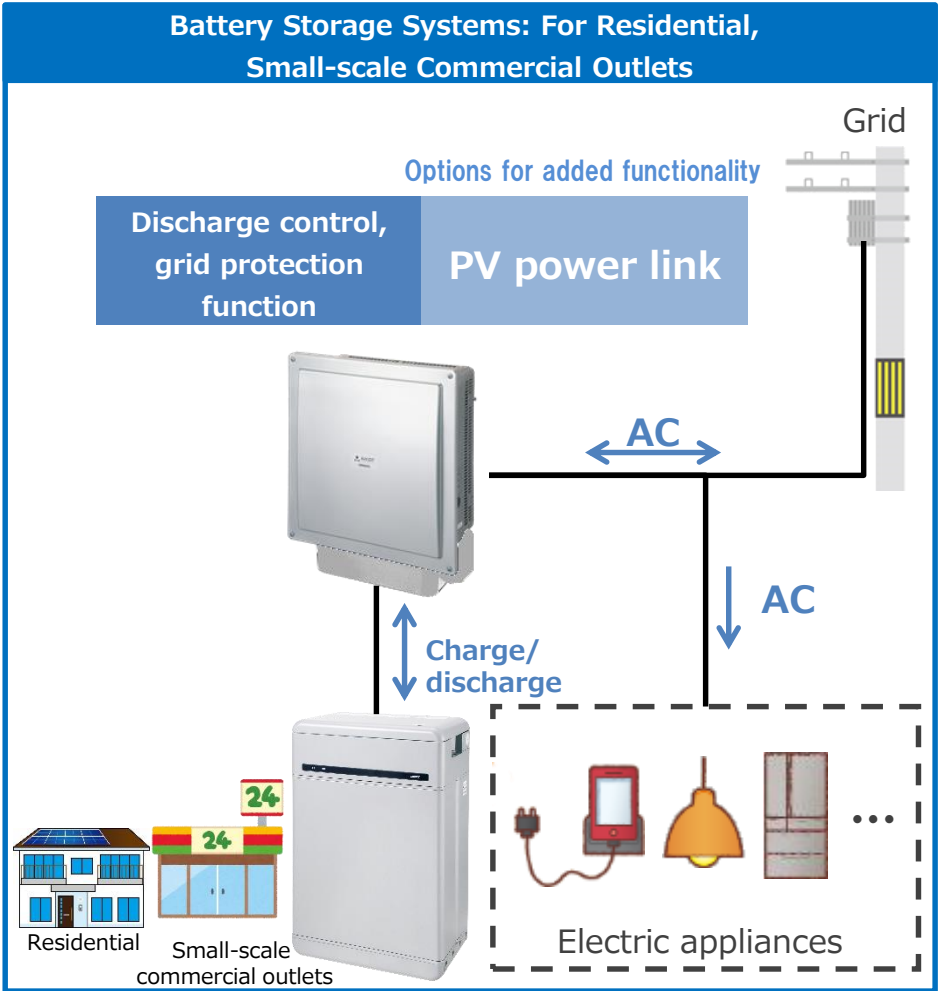
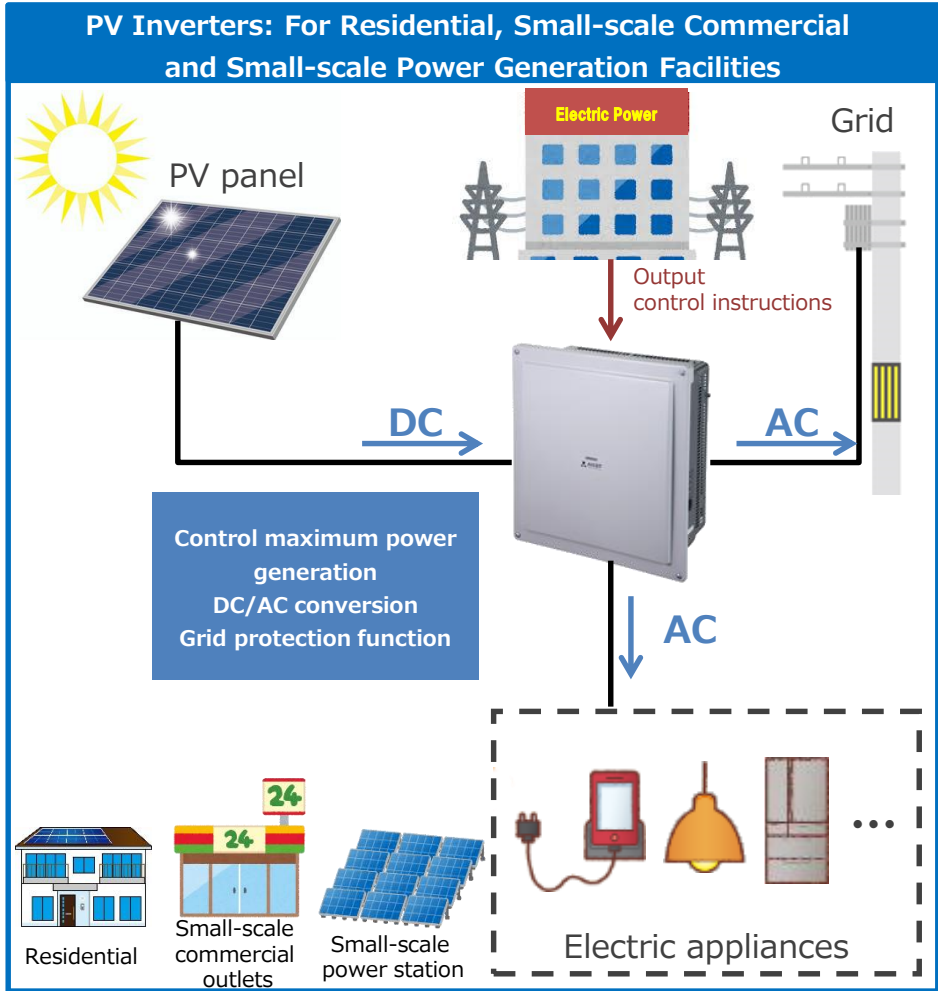
# Market Trends in the Component Business

**FIT start in 2012 drove surge in small-scale PV power market.**  
**Enter storage system market on disaster response demand, end of FIT**



# Component Business Within Energy Solutions Business

**Strengths are inverters that convert PV panels' DC to AC, and storage systems that enable power use at desired time, emergency backup**

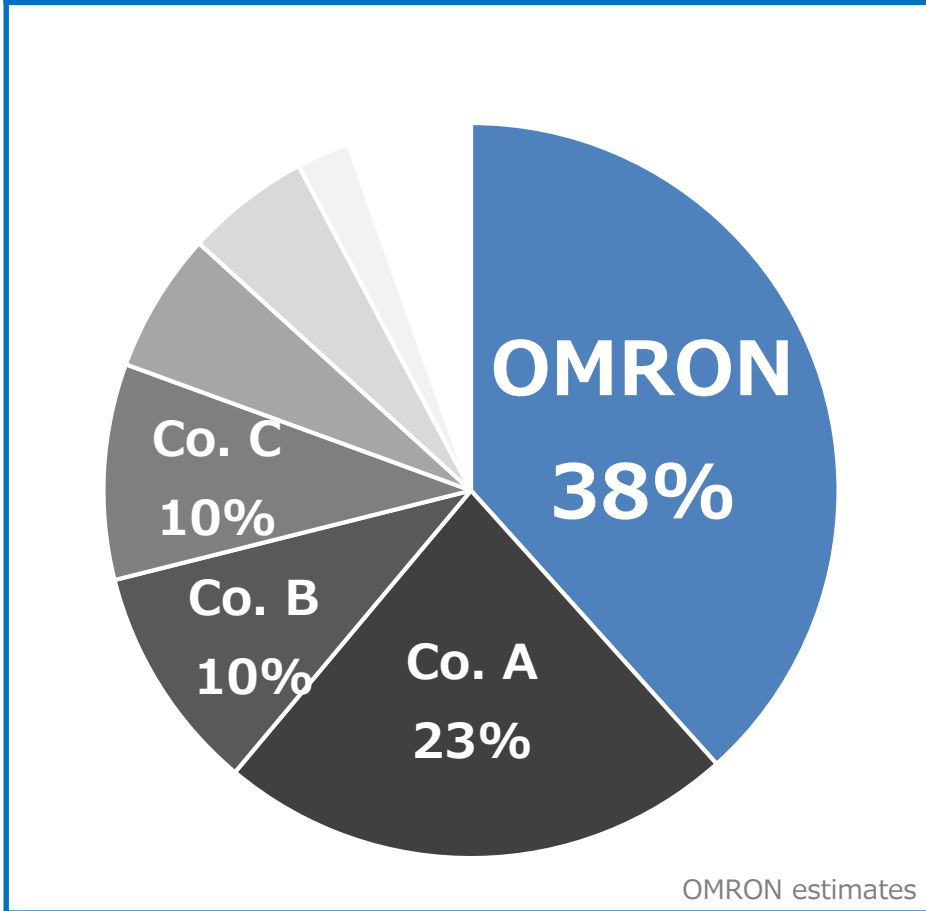


## Track Record in Component Business

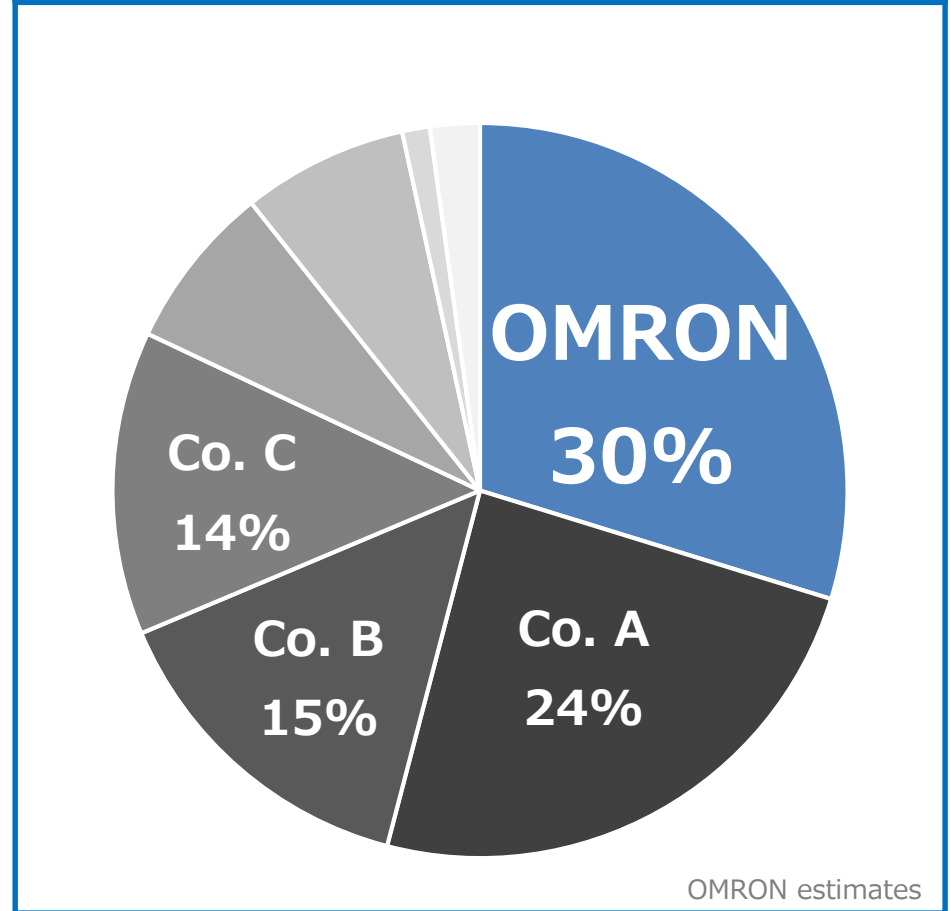
**No.1\*** share in small-scale PV inverters, residential storage battery systems. Shipped >1.8mn PV inverters, > 70k storage systems

\*OMRON estimate

### Share in Small-scale PV Inverters



### Share in Residential Storage Battery Systems

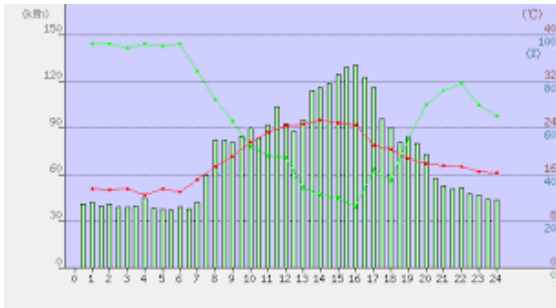


# Engineering Business within Energy Solutions Business

## Provide total solutions for enterprise energy issues (energy savings, CO<sub>2</sub> emission cuts, BCP): Diagnostics, design, installation and O&M

### Energy Assessment

Analyze current situation, propose improvement plan



### O&M\*Service



- Mfg. Plants
- Logistics Facilities
- Hospitals
- Nursing Homes
- Retail Facilities
- Retail Stores
- Office Buildings
- Schools
- Gas Stations
- Financial Institutions

### Power Generation (Renewables) Engineering

Design captive-power generation facilities



PV power generation system

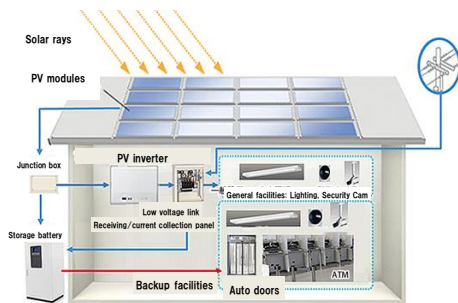


Regular/emergency use power generator  
Co-generation system  
Fuel cell system



### Energy Storage Engineering

Design, install storage system



### Energy Conservation Engineering

Enhance facilities, design & implement renovation



\*O&M : Operation & Maintenance

## Engineering Project: Contributing to Car Port PV Facilities

**Car port PV facilities installed at Murata Manufacturing's Okayama Plant are one of Japan's largest. OMRON supports corporates in their efforts to increase use of renewables to reduce CO<sub>2</sub> emissions**



PV power generation system installed in parking lot for 1,200 vehicles

Double-sided panels enable use of reflected light to generate power



PV power generation systems installed on car port roofs

## Engineering Project: Contributing to BCP System

**Install BCP system for Yamaichi Electronics, combining PV power generation system and large-scale storage batteries. Contribute to securing emergency power source and lowering electric power costs**



PV power generation system installed for Yamaichi Electronics



Large-scale storage battery used to secure emergency power source.  
Battery charged with solar power generated in excess of requirements



## Engineering Project: Contributing to Local Government

**SSB proactively helping municipalities to address issues. Contribute to local government efforts to reduce CO<sub>2</sub> emissions and use renewables to help make communities safe, secure and comfortable**



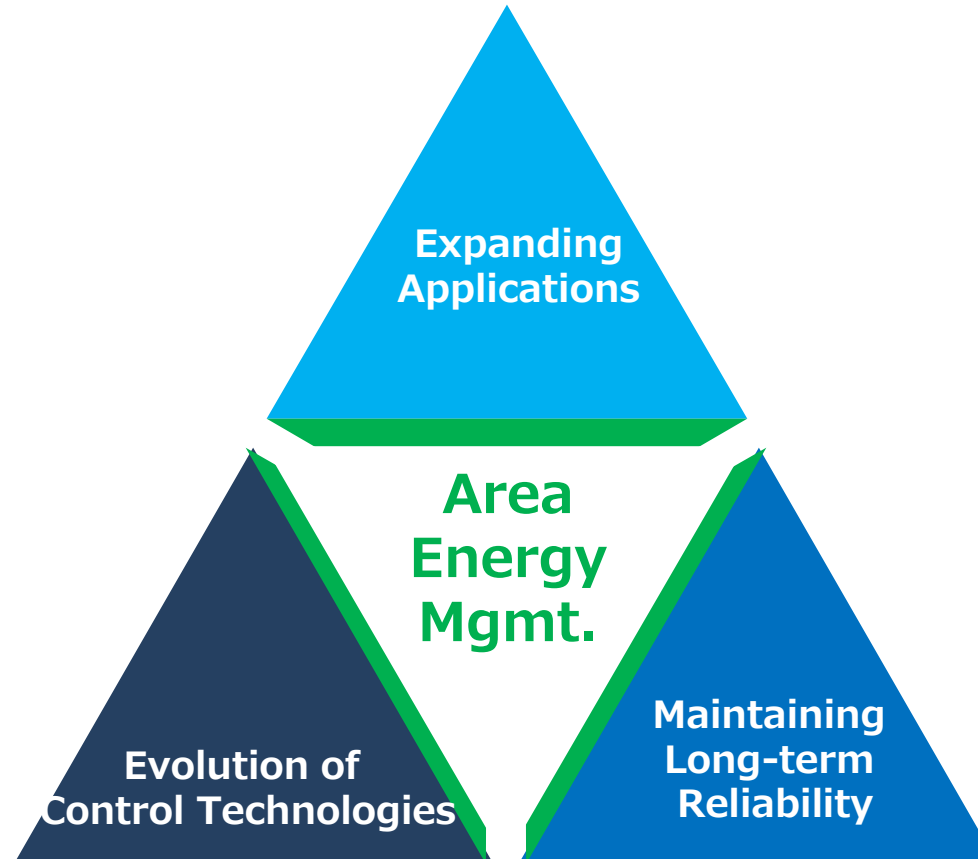
Based on comprehensive agreement with Miyazu City, converted abandoned farm land to an asset by installing PV power systems. Contribute to making the community safe, secure and comfortable, and decarbonization



Installation of PV power system in Maizuru City, based on comprehensive agreement with the city. Adoption of PV power system for the Cultural Park Gymnasium contributes to regional disaster prevention and damage reduction as well as decarbonization.

## To Achieve Area Energy Management

**Following 3 elements are key to achieving area energy management:**  
**1) Expanding applications, 2) Enhancing control technologies,**  
**3) Maintaining long-term reliability**



# Expanding Applications: Maximizing Integration Impact

**Expand into business fields covered by SSB, in addition to existing focus on residential and small-scale commercial outlets**



## Energy Solutions

Manufacturing



## Transport Solutions

Railways



## Life Svc. Solutions

Distribution



## Community Solutions

Local Government



Residential/Small-scale Commercial



Roads/Mobility



Services

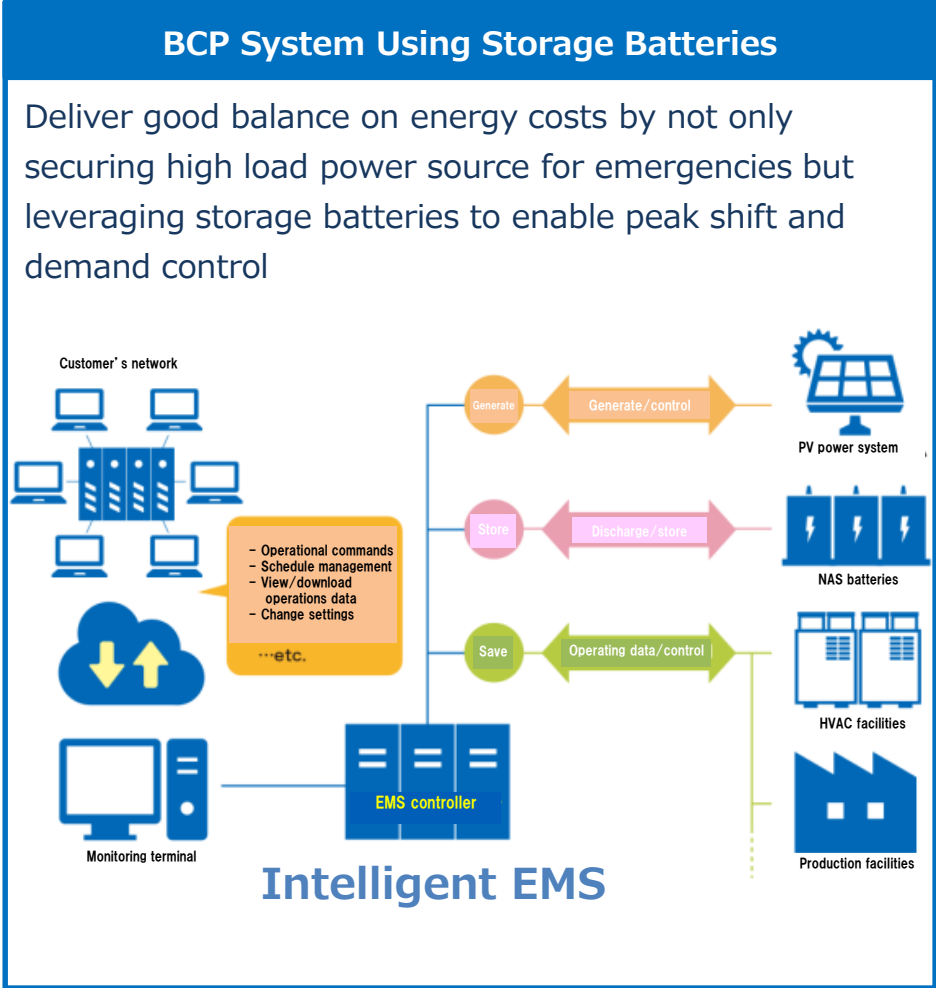
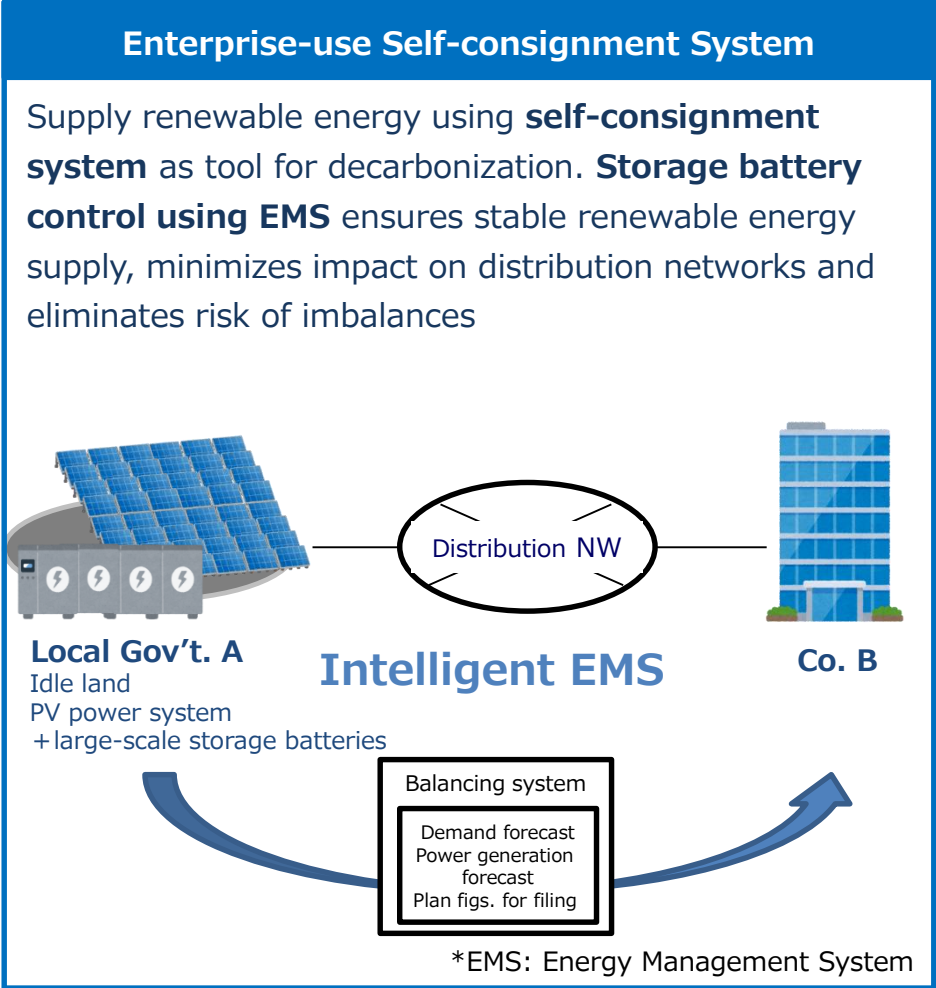


Multi-purpose Facilities



# Evolution of Control Technologies: Energy Control Technologies

**Pairing storage control with PV facilities enables stable supply. Optimizing energy control cuts energy cost and fulfils BCP needs**



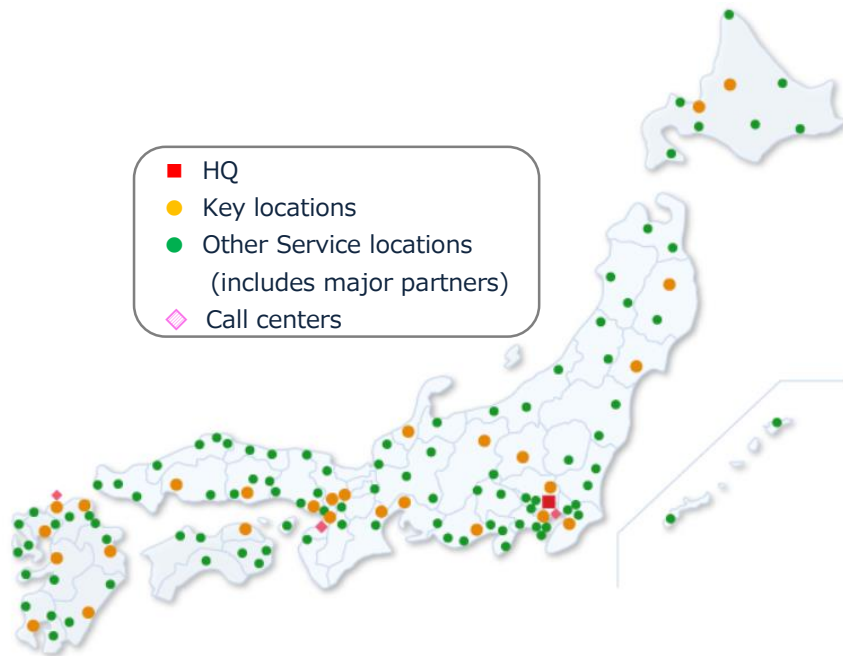
# Maintaining Long-term Reliability: Maximizing Renewables Output

## Robust service network indispensable for stable operation. New service combines PV inverter rental and maintenance service



### Robust Service Network: Positioned for Rapid Response

Support long-term, stable operations of customers' facilities: **nationwide coverage with 140 service locations**



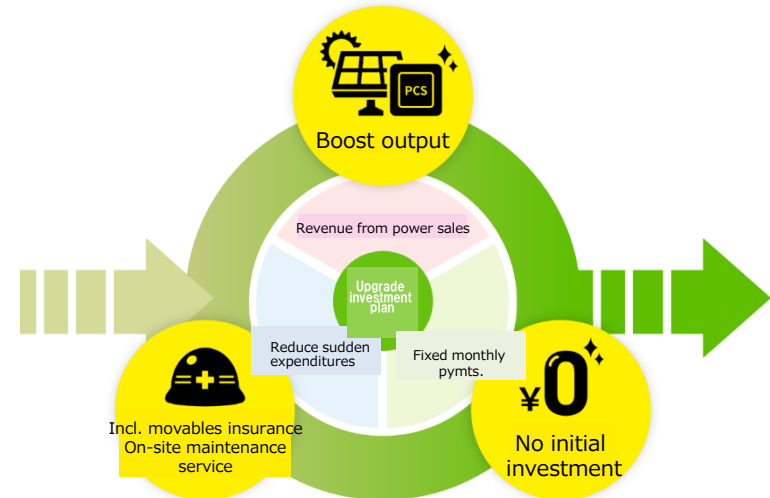
### PV Inverter Flat Fee Rental

Contribute to long-term, stable operations of PV power plants through **service combining PV inverter rental and maintenance & support**

PV inverter flat fee rental

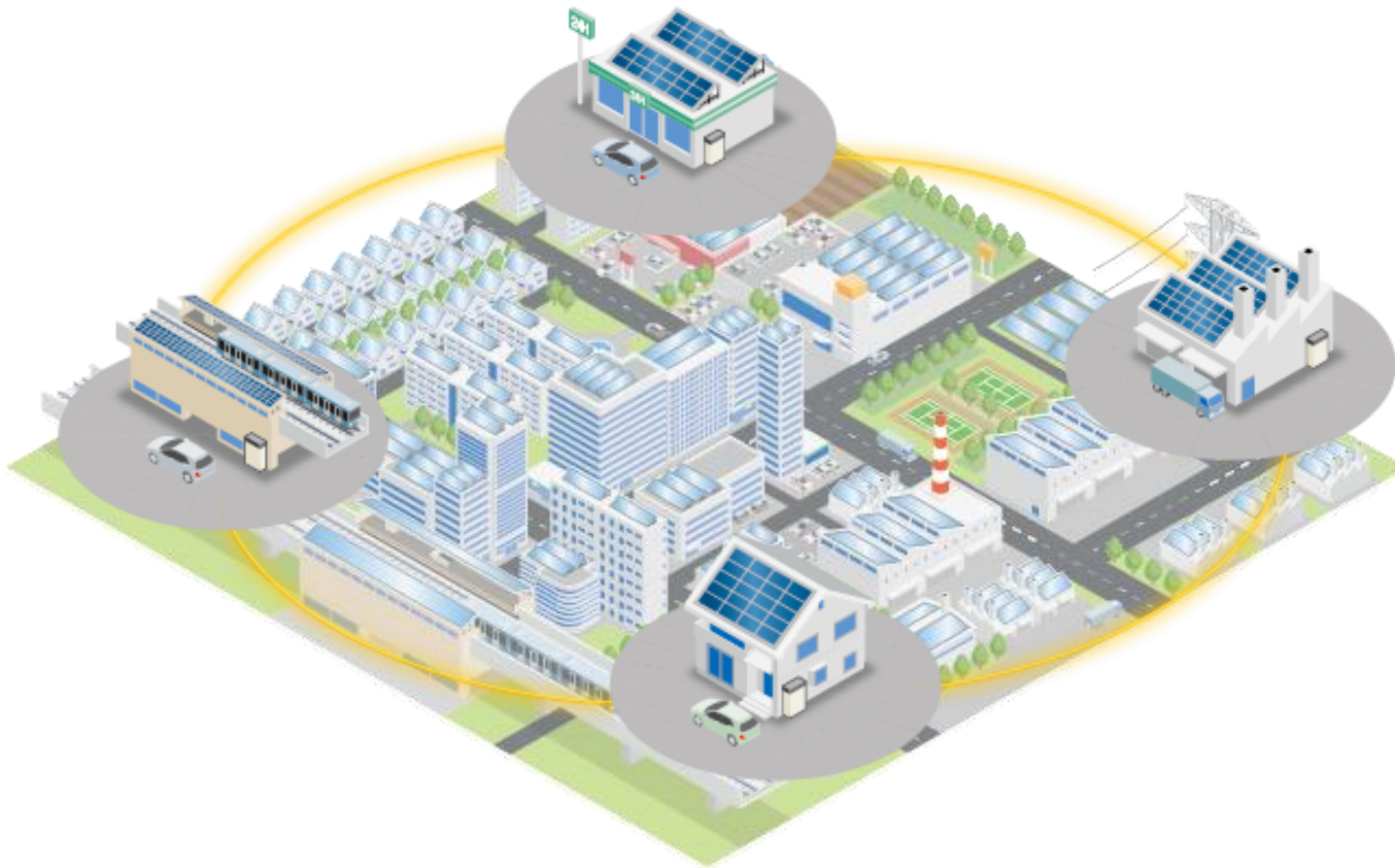


パワーコンティニュー



## Our Vision of the Energy Solution Business

# To realize area energy management





# Climate Change Initiatives



## Evolution of OMRON's Climate Change Initiatives

**Stepped up climate change initiatives in VG2.0. Currently developing Long-term Vision for 2030 in which climate change will be positioned as one of our top priorities; will further step up initiatives**



**July 2018**  
 •OMRON Carbon Zero  
 •SBTi Declaration



**Feb 2019**  
 •TCFD Supporter

**2020**

**FY2020 CDP**  
 Climate Change 'A-' 2<sup>nd</sup> consecutive year  
 Water Security 'A-' 1<sup>st</sup> time  
 EcoVadis\* Platinum Rating

**2019**

**2018**

**FY2018**  
 Minister's Award for Global Warming Prevention Activity  
 "Implementation of Countermeasures and Dissemination Category"

平成30年度  
 地球温暖化防止活動  
 環境大臣表彰



**2017**

**FY2016**  
 CDP Climate Change: B

**2011**

•Long-term Vision VG2020  
 •Environmental Vision Green OMRON 2020



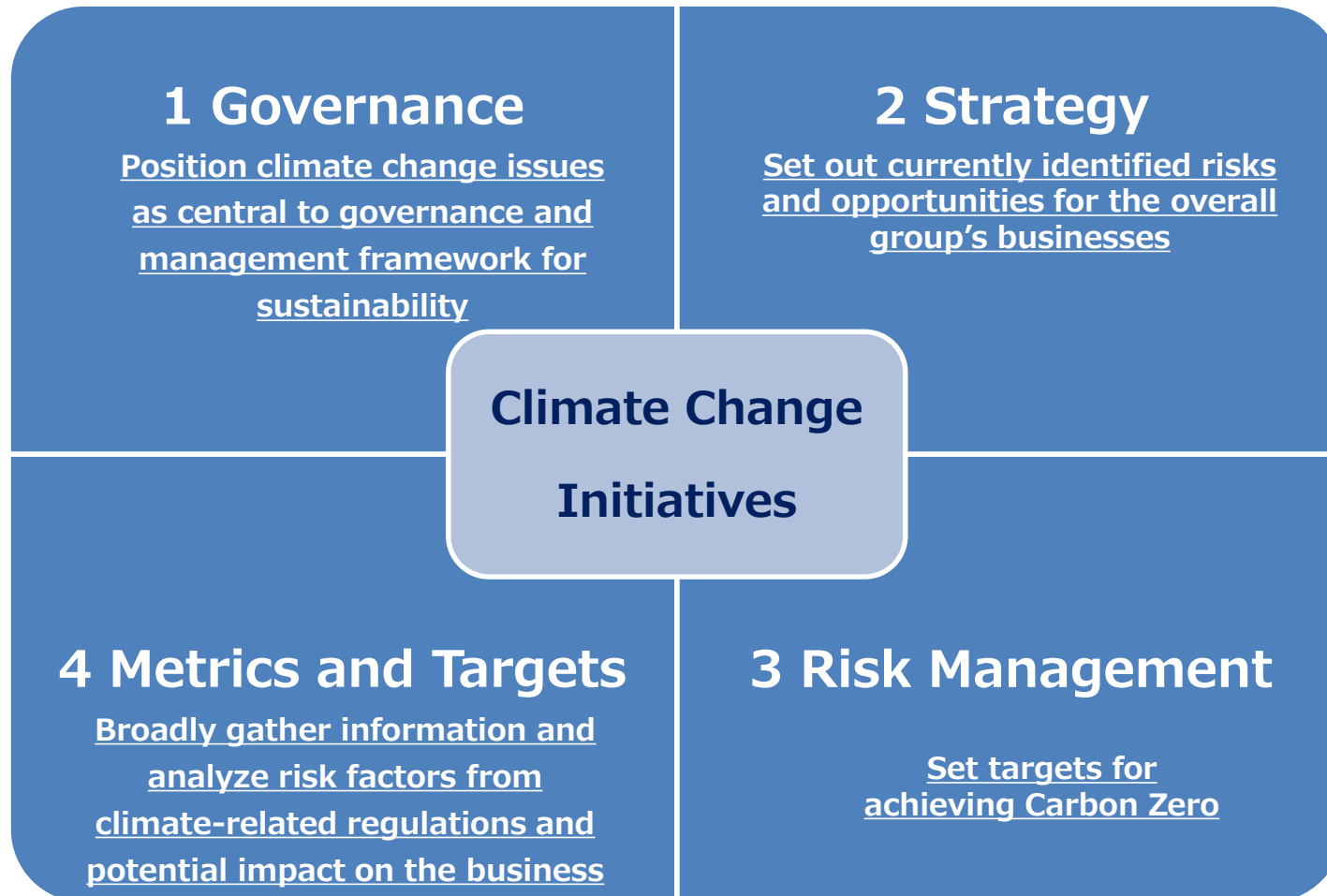
\*EcoVadis: Independent provider of sustainability assessments/monitoring for supply chains, including climate change. Provide scorecard assessments to more than 65,000 companies and organizations, across 200 industries and 160 countries

**To Next Long-term Vision**



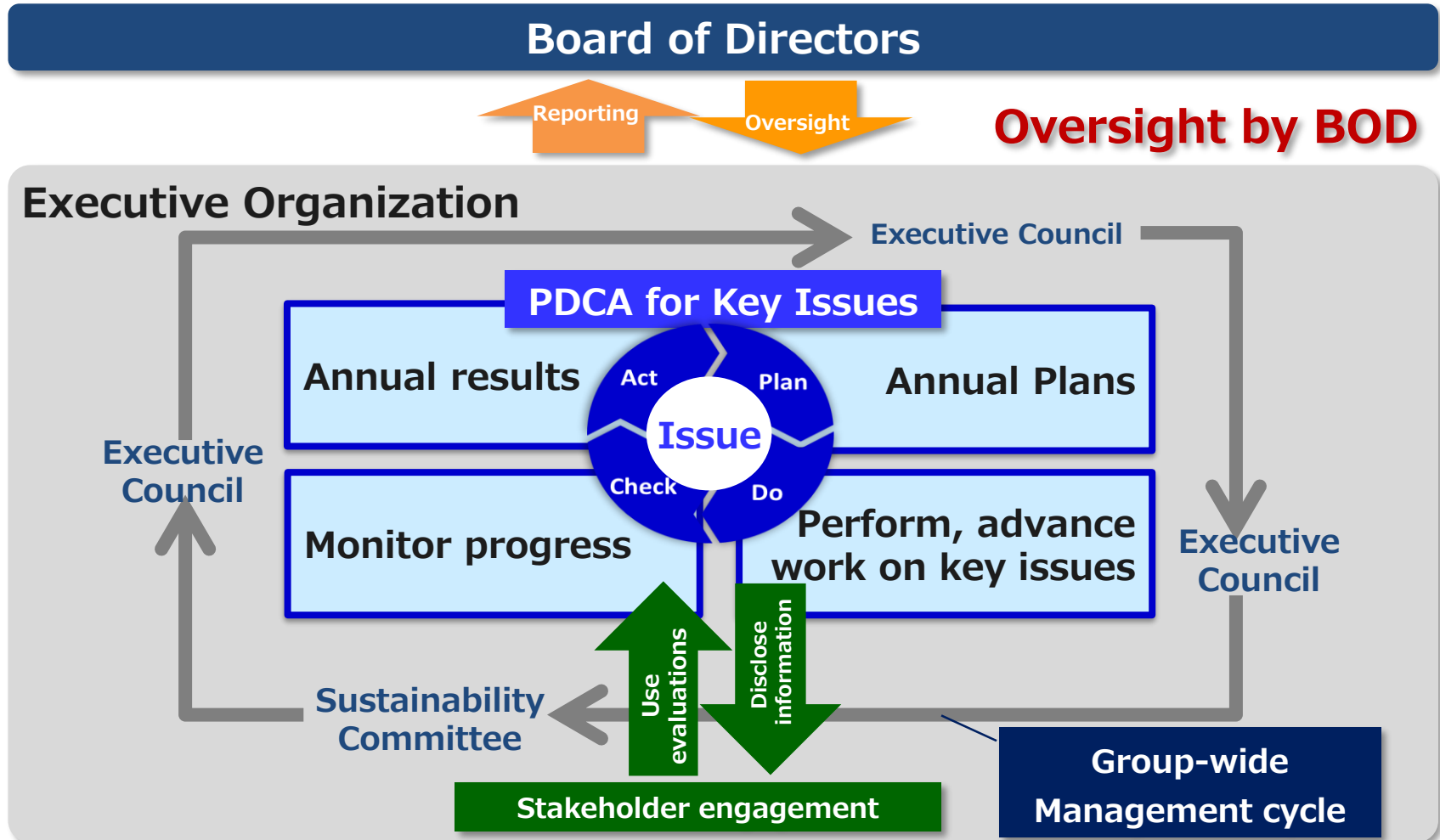
# Climate Change Initiatives: Disclosure Using TCFD Framework

**Present our initiatives using TCFD's recommended disclosure framework**



# 1. Governance

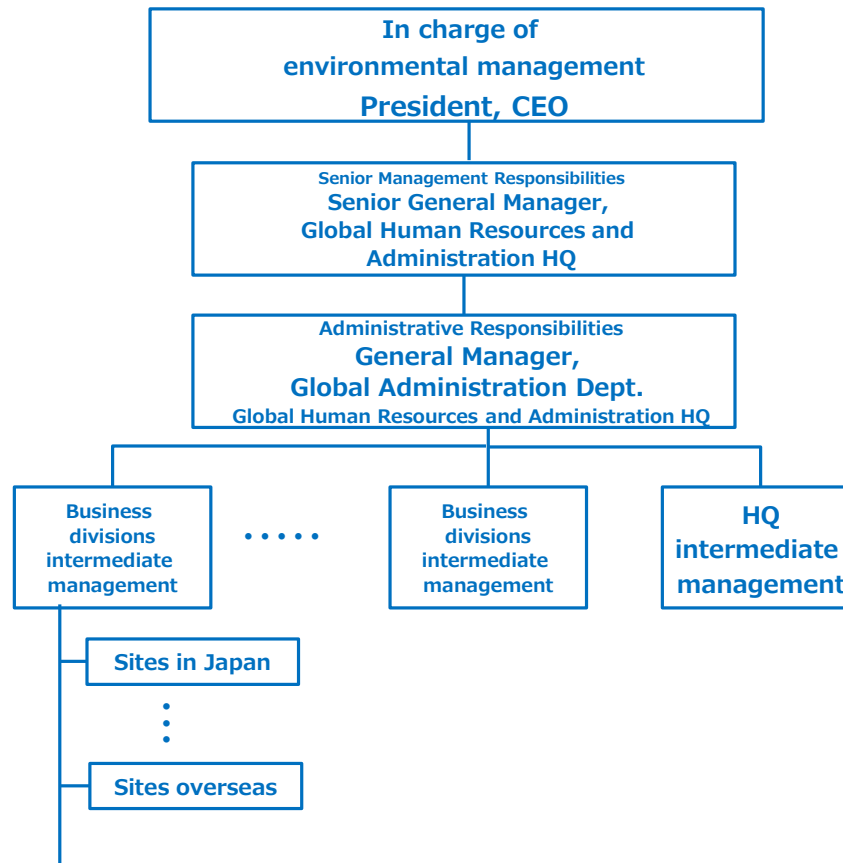
Climate change initiatives are designated key sustainability issues under Mid-term Plan VG 2.0, with monitoring and oversight by the board



# 1. Governance: Environmental Management Structure

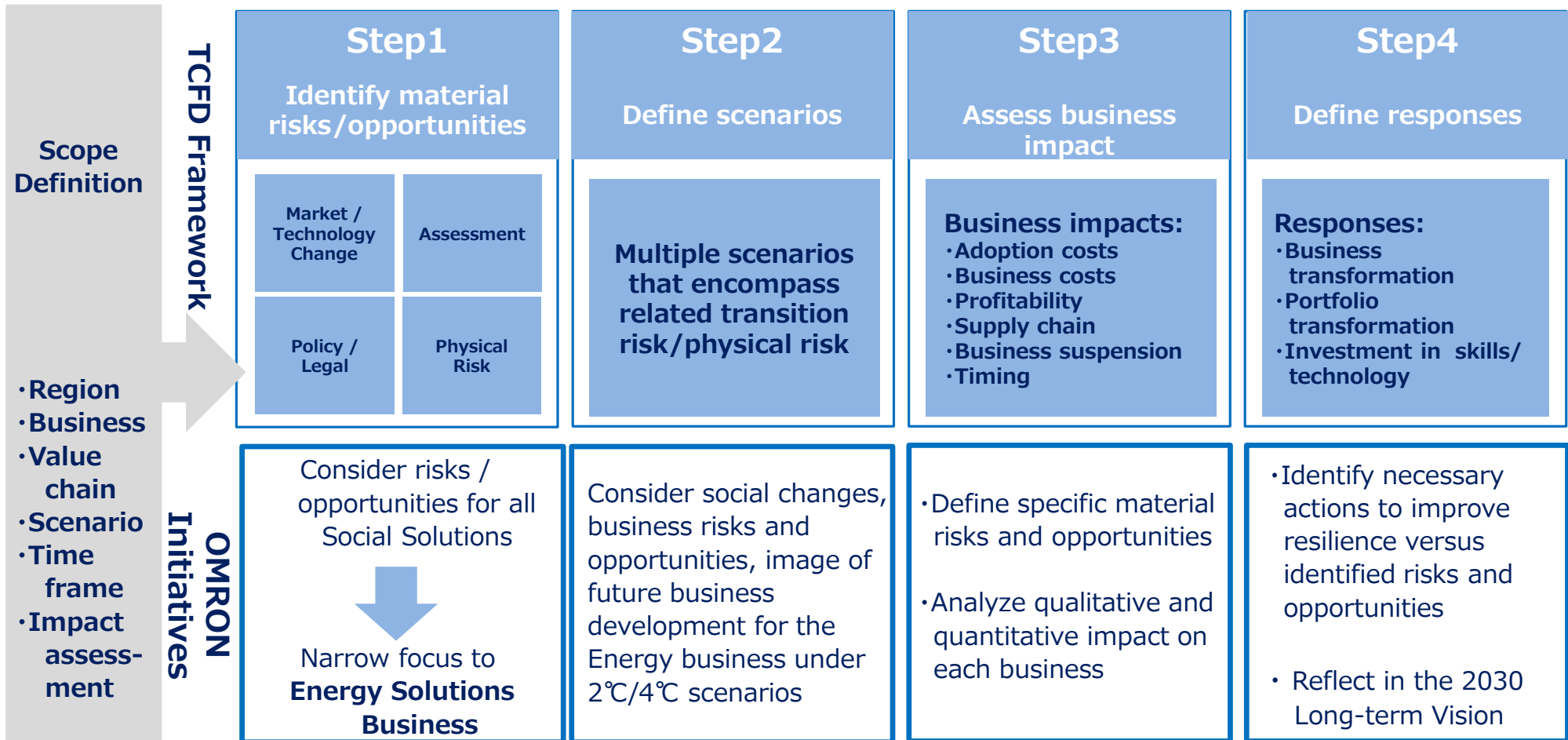
**HQ department responsible for environmental management works with each business company to set targets, formulate plans and support execution**

## Environment Management Structure



## 2. Strategy: Energy Business Scenario Analysis

**Identify risks and opportunities in the Energy business to 2030 through scenario analysis, using the steps below. This will feed into the next Long-term Vision**



## 2. Strategy: Energy Business Scenario Analysis

### Advance CO<sub>2</sub> emission reduction and energy self-sufficiency by combining system development skill with energy conversion and control technologies, factoring in scenario analysis results

#### Identified Risks and Opportunities

Transitional Risk

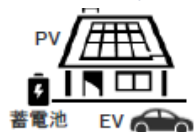
- Intensification of competitive environment as a result of new entrants from other industries/overseas players, changing customer needs
- Increased business costs (mandatory reparability) as a result of responding to regulations related to transition to a circular economy such as climate change (carbon taxes, etc.), or an acceleration of climate change measures, etc.

Physical Risk

- Supply chain disruption as a result of the intensification of natural disasters (floods, torrential rains, water shortages), etc.

Opportunities

- Expansion of markets for renewable energy, energy storage and management as a result of rapid advances in decarbonization of energy supply and consumption (Accelerating adoption of renewable energy and storage solutions as a part of diversification of power sources, which is raising demand for decarbonization and disaster prevention solutions from corporates and local governments. Home energy self-sufficiency rising on captive-generation, storage and consumption)
- Increasing need for sophisticated energy management to solve the challenge of managing power supply-demand balance resulting from the rising adoption of renewables, etc.



- Market for home use storage batteries: Approx. 4x
- Non-residential storage battery market: Approx. 6-7x



- Market for power aggregation: Approx. 90x

#### OMRON's responses

- Development of products/services that lead to reduction of GHG emissions
- Review of product plans/designs
- Advancing plans to reduce energy consumption and use of renewable energy, etc.

- BCP initiatives (diversification of suppliers, production bases, etc.)
- Adoption of in-house power generation from renewable sources, etc.

- Further expansion of sales of PV inverters targeted at rising demand from corporates, households and local governments for renewable energy and energy storage solutions
- Development of energy management business leveraging solar/storage solutions
- Consideration of new businesses in anticipation of advances in the circular economy, etc.

- Expected time horizon: FY2030
- Scenario used: IPCC/RCP8.5: Global average temperatures rise 4°C or more from pre-industrial revolution levels  
IEA/SDS (partial use of IPCC/SR1.5): Rise in average global temperatures limited to less than 2 °C as agreed under the Paris Accord (in part less than 1.5°C)
- Market scale: Estimates based on Fuji Keizai Group publication

## 2. Strategy: IAB Opportunities: Reducing Plastic Waste

**Developed temperature control program that leverages AI to achieve changes in packaging materials for food processing customers. Contribute to solving issue of marine plastic waste**

Solve issue of temperature variability on adhesion process for a variety of packaging materials



Temperature control program that leverages AI

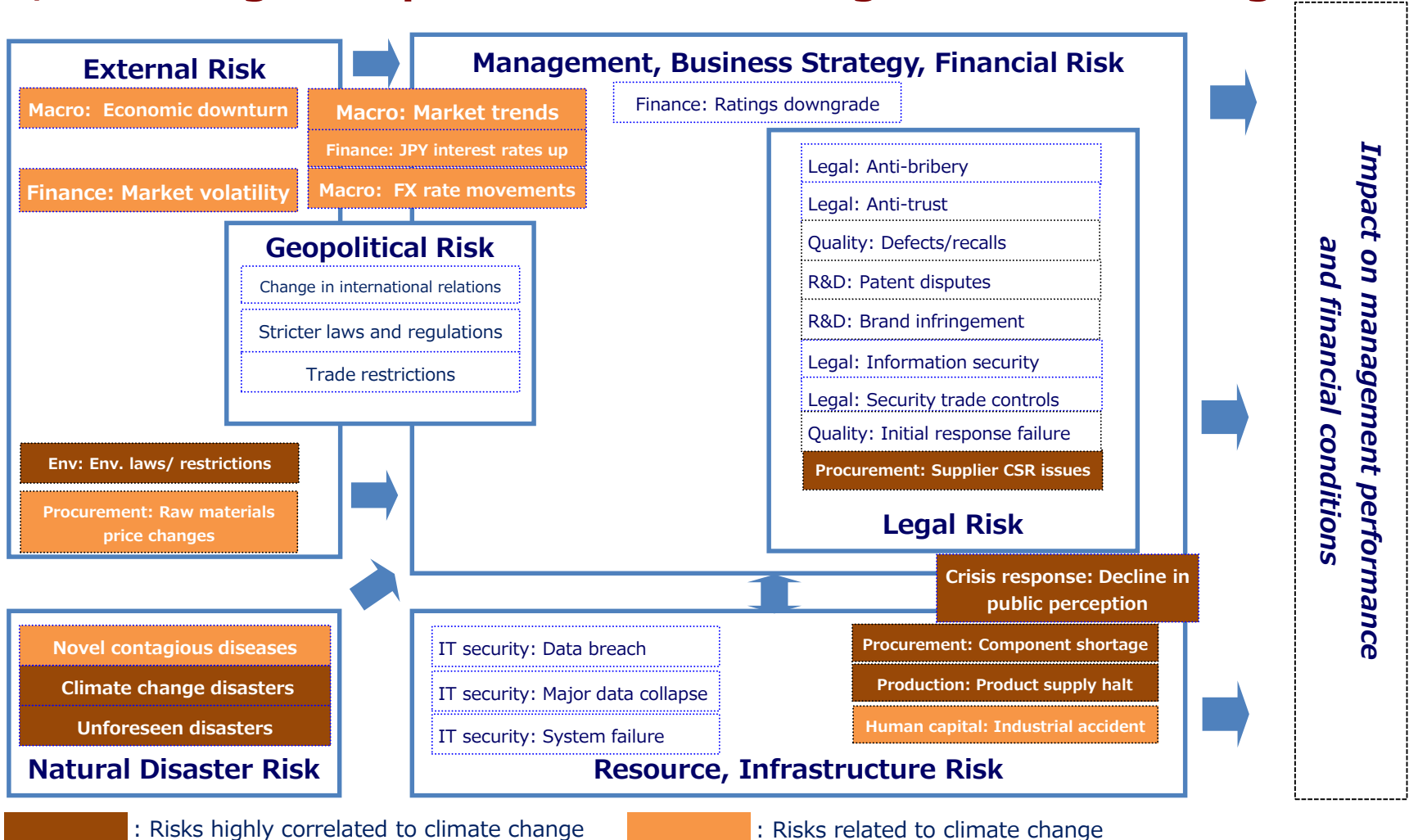
Contribute to reduction of packaging waste equal to 930kt of plastic



\*OMRON Estimates

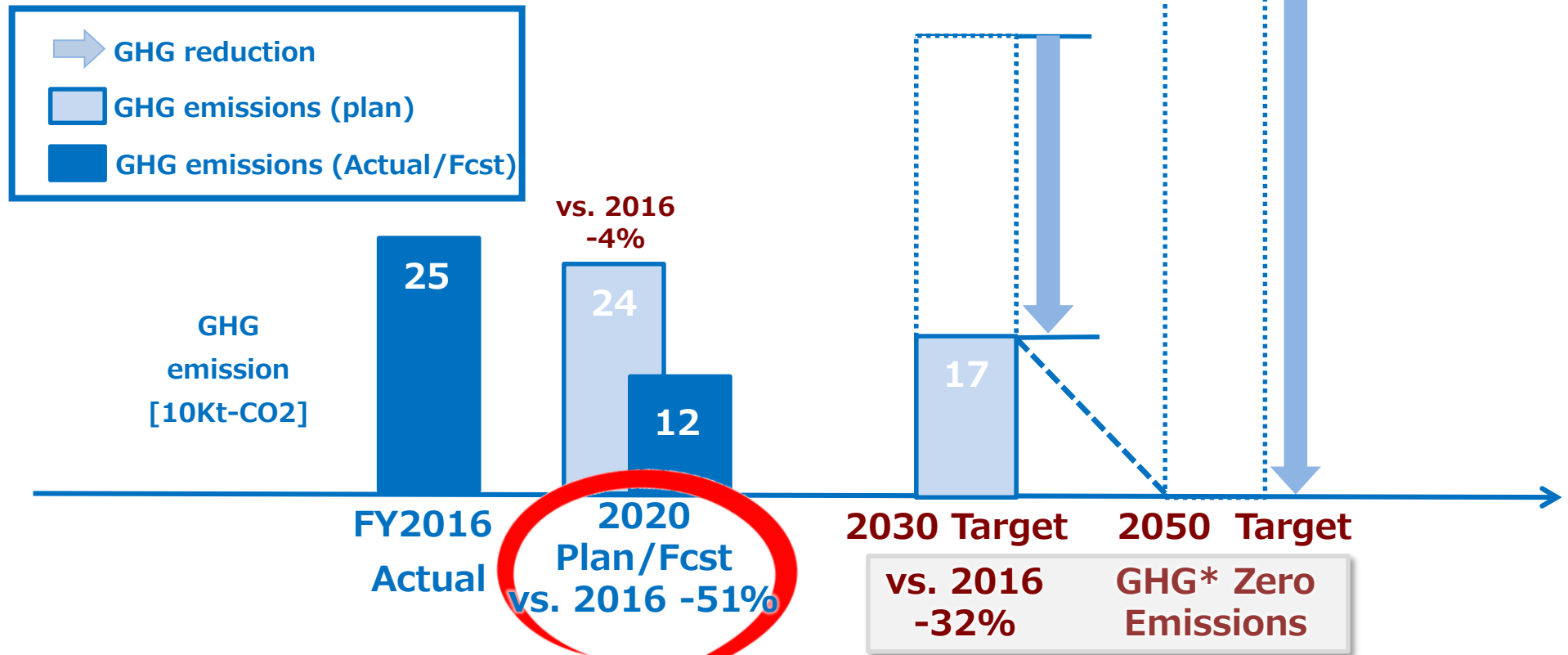
### 3. Risk Management

**Initiate BCP response based on analysis of climate change-related risks, factoring in impacts based on integrated risk management**



## 4. Metrics and Targets: OMRON Carbon Zero

**Expect to exceed FY2020 target (-4%) by 51%, owing to ongoing initiatives. New targets for 2021 and beyond to be set in alignment with next Long-term Vision**



\*Currently formulating Scope 3 target

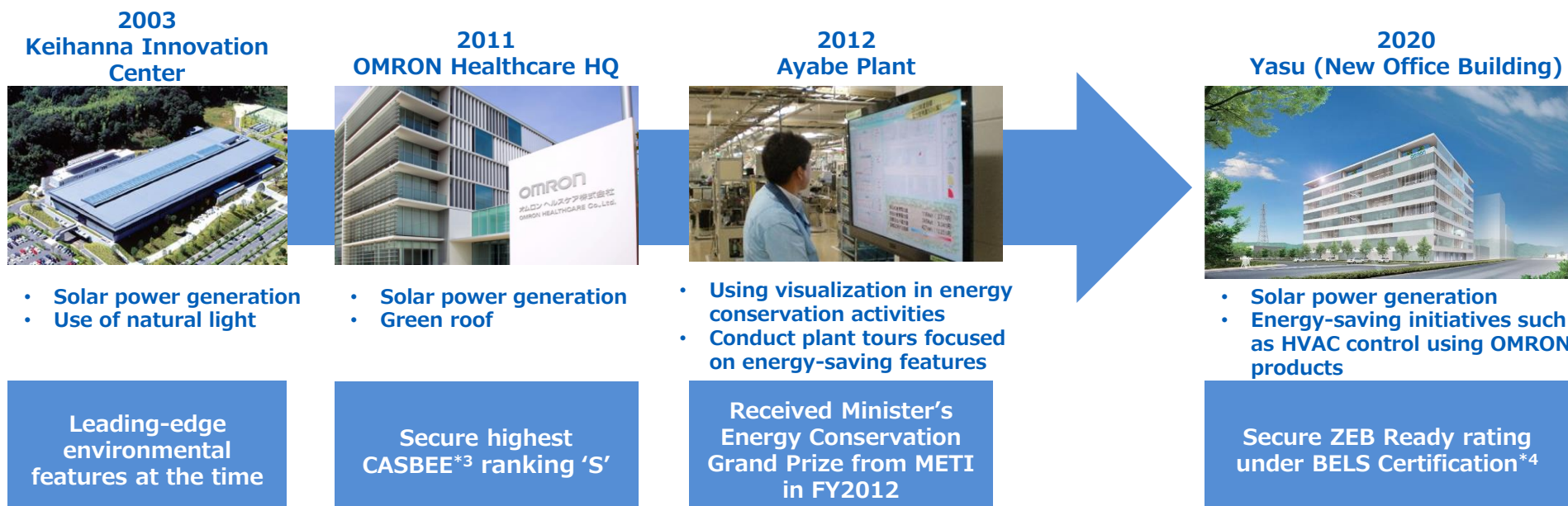
**Carbon Zero Target**

\*1 : GHG : Greenhouse Gas



## 4. Metrics and Targets: Environmental Initiatives in Our Businesses

**Implemented construction design and energy-saving activities.  
New building at Yasu certified ZEB Ready\*<sup>2</sup> in 2020 \*<sup>1</sup>, reflecting  
capacity to reduce energy consumption by more than 50%**



\*1 Year in which operations commenced. Building completed in 2019

\*2 ZEB (Net Zero Energy Building) is an international initiative promoted by the Ministries of the Environment and Economics, Trade and Industry(METI) aimed at realizing zero energy buildings where primary energy consumption is reduced to zero through a combination of energy conservation and power generation. The ZEB Ready rating is awarded to buildings that reduce energy consumption through energy conservation by more than 50%.

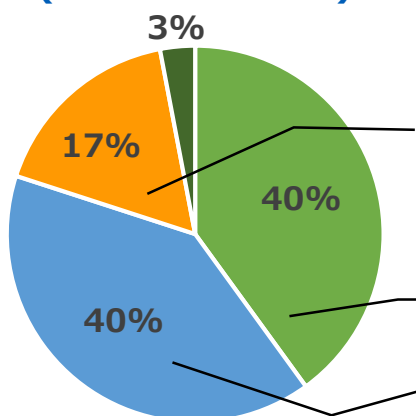
\*3 Comprehensive Assessment System for Building Environment Efficiency: Methodology for assessing and promoting environmental efficiency of buildings

\*4 Building Housing Energy efficiency Labeling System

## 4. Metrics and Targets: COVID-19 Remote Review of Overseas Plants

**Start analysis of energy conservation potential <sup>\*1</sup> in Asia Pacific in FY2019. Due to COVID-19, FY2020 energy conservation review for Malaysia conducted remotely from Japan**

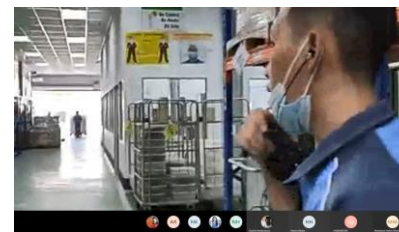
### Breakdown of Energy Use for FY2020 (Electric Power)



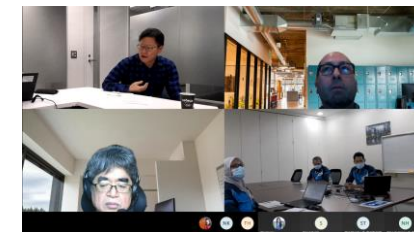
■ Japan ■ China ■ Asia Pacific ■ Americas/  
Europe

Started analysis of energy-saving potential in FY2019

From FY2018, implementing analysis of energy-saving potential and energy saving measures



Virtual site tour  
(energy assessment)



Discussions with local team

<sup>\*1</sup> Analysis of energy-saving potential: Creation of a specific plan with estimates of impacts and costs, based on an understanding of the local situation and a grasp of energy loss risks and opportunities to improve energy efficiency

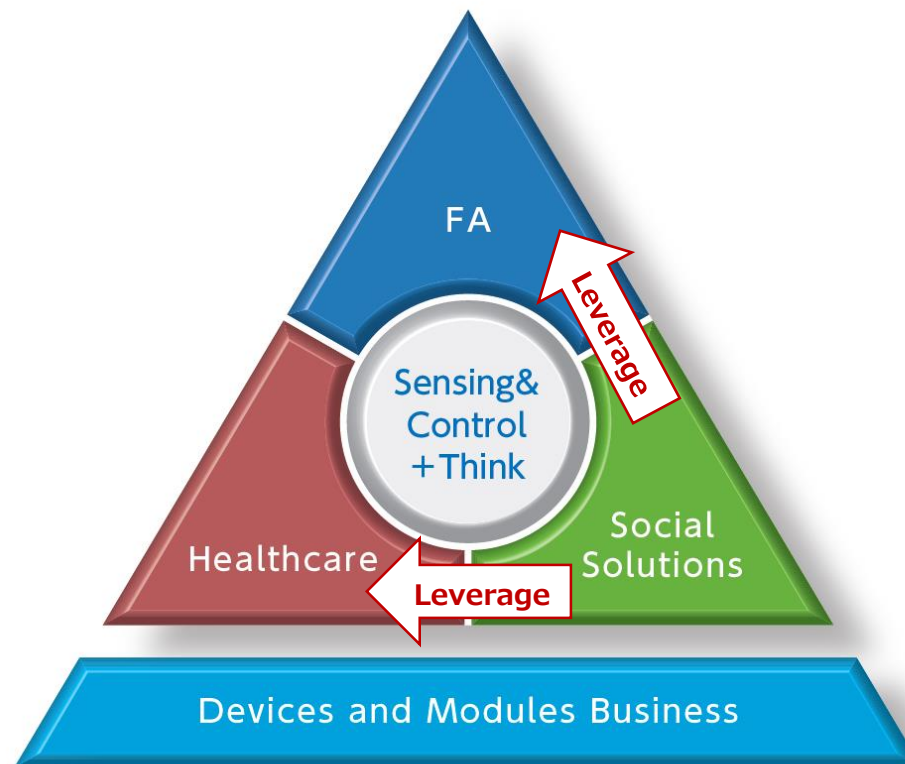
## Material Environmental Sustainability Issues and Targets

**Expect to achieve two VG2.0 initial sustainability targets, as well as targets set in alignment with the Environmental Vision**

|                                | Target Item   | FY2020 Target   | FY2019 Result   | Evaluation        |
|--------------------------------|---|---|---|-------------------|
| Material Sustainability Issues | 1. Reduce GHG emissions                               | Environmental contribution > Production site CO2 emissions  | Environmental contribution 971kt-CO2 > Production plant CO2 emissions : 135kt-CO2 | In line with plan |
|                                |   | <ul style="list-style-type: none"> <li>·2020 -4% vs. 2016</li> <li>*2030 -32% vs 2016</li> <li>*2050 Zero emissions (Scope 1&amp;2. Scope 3 under consideration)</li> </ul> | Total GHG emissions reduced by 34% (vs. FY2016) (Scope 1&2)                       | In line with plan |
|                                | 2. Reduce / appropriately manage hazardous substances | Mercury reduction through adoption of digital thermometers and BPMs<br>69 tons/year   | 57 tons/year<br>(Thermometers: 12.27m units, professional BPMs: 880K units)       | In line with plan |
|                                |   | <ul style="list-style-type: none"> <li>·Stop use of CFCs in 2018</li> <li>·Stop use of HCFCs</li> <li>·Stop use of mercury (fluorescent lights)</li> </ul>                  | Complete full elimination 1 year early  | In line with plan |
| Environmental Vision Targets   | 3. Reduce waste                                       | Achieve zero emissions at all global production sites   | 21 locations<br>(Progress rate 95%)   | In line with plan |
|                                | 4. Prevent air, water & soil contamination            | Undertake environmental legal assessments and complete corrective measures for all production sites globally  | 24 locations<br>(Progress rate 100%)  | In line with plan |
|                                | 5. Effective use of water resources                   | Reduce volume of water used at all production sites globally by 6% vs. FY2015   | Reduced by 13.2%  | In line with plan |
|                                | 6. Promote environmental mgmt.                        | Acquire and maintain ISO14001 certification for all production sites globally   | 25 locations<br>(Progress rate 100%)  | In line with plan |

## Toward 2030: Climate Change Initiatives

**As we seek to expand opportunities under the Long-term Vision to 2030, climate change is one of our highest priorities. Consideration of risks/opportunities for FA and HCB to be reflected in strategy**



**We will achieve sustainable corporate value growth by continuing to generate economic value, environmental value and social value, underpinned by our focus on solving social issues through our business**

**OMRON**