

FY18 ESG Presentation



2019.2.22
OMRON Corporation



OMRON Sustainability Initiatives

Tsutomu Igaki
Executive Officer
Global Investor & Brand Communications HQ

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- OMRON's ESG initiatives are rooted in the link between the OMRON Principles and sustainability.

Our DNA: Improving Lives and Contributing to a Better Society Through Our Key Practices

In 1959, Omron Founder Kazuma Tateishi created the motto,

To Improve Lives and Contribute to a Better Society

In words that are easy to understand, this motto implies that the very purpose of the company's existence is to serve society as well as to pursue profits.



Founder Kazuma Tateishi
(1900-1991)



Handwritten Sketch by Our Founder

- The establishment of Our Mission created a strong bond between management and employees, and a sense of unity, which drove OMRON's subsequent growth.

Our Mission

To improve lives and contribute to a better society

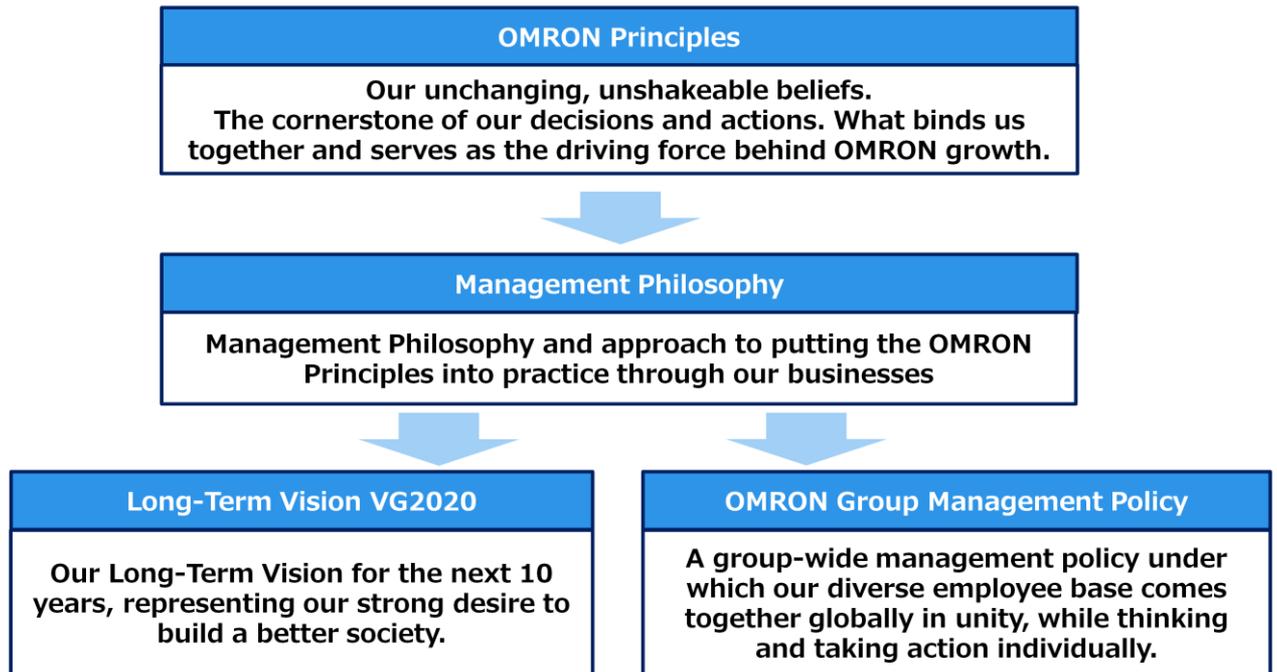
Our Values

- **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.

- The current OMRON Principles were revised in 2015.
- Our Mission has been maintained as is. To aid in achieving Our Mission, we have set out the 3 values we consider important in our day-to-day tasks, as Our Values.

Management Based on the OMRON Principles

We have declared our Management Philosophy based on the OMRON Principles, setting our Long-Term Vision and conducting our business guided by the OMRON Group Management Policy



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- Our Mission is not simply a slogan. It is the heart of management's cohesive strength. Our Mission is the foundation for our Management Stance on execution.

Global Activities to Promulgate and Create Shared Belief in the OMRON Principles

Promulgating and creating shared belief in unique OMRON activities in all workplaces

CEO Circle



OMRON Principles Dialogue



The OMRON Global Award (TOGA)



Messages From Senior Management



Engagement Survey

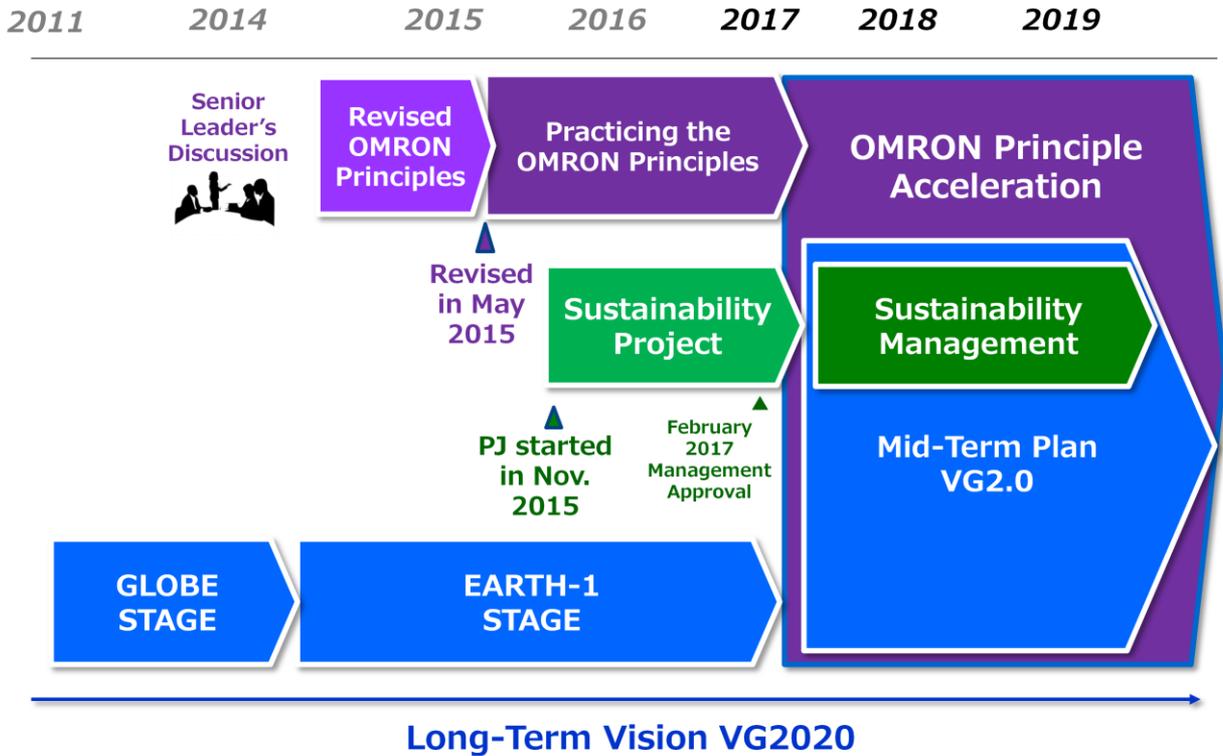


OMRON Principles Workplace Interchange



- OMRON undertakes many unique activities to forge bonds between management and employees through the application of the OMRON Principles, underpinned by the Management Stance as a supporting framework.

OMRON Principles and Sustainability Initiatives



- In 2017 OMRON established its Sustainability Policy to replace OMRON's commitment to sustainability under the Management Stance, to reflect the demands of global society, while enhancing the supporting framework.
- Specifically, in the Medium-term Management Plan started in FY2017, OMRON incorporated initiatives to address sustainability issues, backcasting from the SDGs, which form a part of the 2030 Agenda for Sustainable Development.

Linking Medium-Term Management Plan and Sustainability Initiatives

OMRON Principles

Medium-Term Management Plan VG2.0

Business Target & Strategies

Net Sales ¥1 trillion
Operating Income ¥100 billion

1. Redefine focus domains and maximize the strength of businesses
2. Evolve business models
3. Reinforce core technologies

×

Collaborative Creation With Partners

+

Human Capital Management,
Manufacturing, and Risk Management

Sustainability Initiatives

A global value-creating group that is qualitatively and quantitatively superior



×

Collaborating With Partners

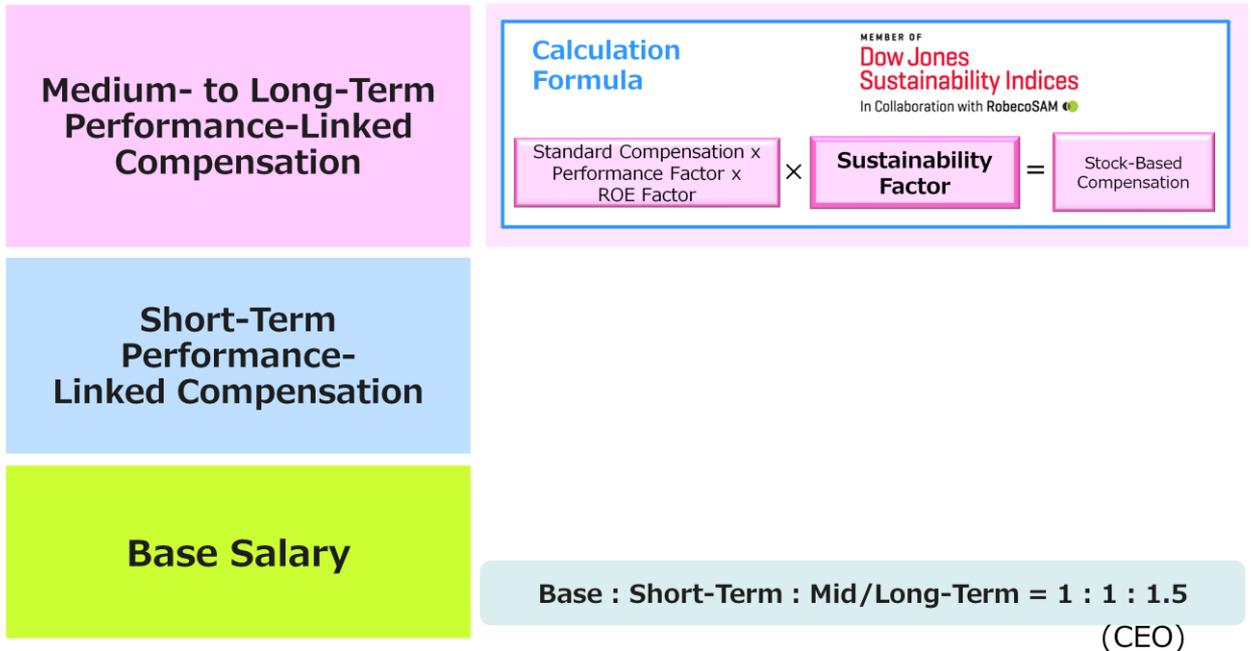
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- In the Medium-term Management Plan, sustainability targets are given equal weighting with earnings targets.
- Today, we will focus on corporate governance and climate change initiatives, key areas of interest within ESG for stakeholders.

Management Commitment to Sustainability

Adopt sustainability indicators from third-party organizations for use in medium- and long-term performance-linked compensation (Directors and Executive Officers)



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- OMRON positions its commitment to achieving its sustainability targets as equal to its commitment to achieving its earnings targets.
- This is epitomized by the compensation policy for executives. At OMRON, managing for sustainability is reflected in compensation.

OMRON



Corporate Governance

Takashi Kitagawa
Executive Officer
Board of Directors Office

**Fraud
Prevention
Systems**

**Management
Monitoring
Systems**

**Earnings
Capacity
Improvement
Systems**

What Does Corporate Governance Mean to You?

**Management
Foundation**

**Mirror
Reflection of
Management**

- OMRON defines corporate governance as follows in the next slide.

Grow Sustainable Corporate Value Based on the OMRON Principles

Basic Stance for Corporate Governance of the Company

At the OMRON Corporation and its affiliated, corporate governance is defined as the system of processes and practices based on the OMRON Principles and the OMRON Management Philosophy. The system is intended to ensure transparency and fairness in business and speed up management decisions and practices. This is done by connecting the entire process from oversight and supervision all the way to business execution in order to boost the OMRON Group's competitive edge. OMRON's corporate governance also involves building such a system and maintaining its proper function. The ultimate objective is to achieve sustainable enhancement of corporate value by earning the support of all stakeholders.

In accordance with this basic stance, the OMRON Group has set forth the following corporate governance policies as the foundation for the Group's pursuit of continuous improvement of its corporate governance.

- The key underlying assumption to Omron's corporate governance is that the objective is to continuously enhance corporate value, based on the OMRON Principles.
- We set out our basic thinking on corporate governance based on this.

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.

- Our Mission under the OMRON Principles is 'To improve lives and contribute to a better society'. We continue to consider what corporate governance should be in order to achieve our mission of contributing to a better society.

Corporate Governance Framework

The OMRON Principles link directly to our corporate governance.



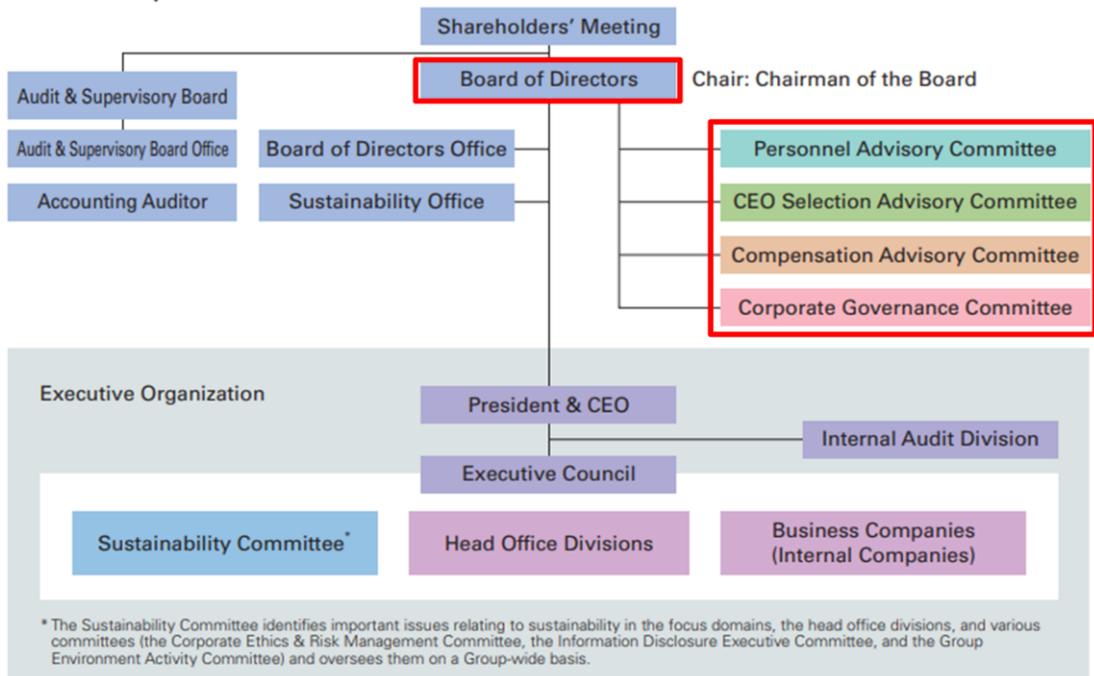
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- Our Corporate Governance Policy is the formalization of our corporate governance initiatives to date, which were based on the OMRON Principles. Our corporate governance structure is based on this policy.
- The Policy consists of 4 sections. In the first section, we set out the general provisions. In the second, we focus on how we relate to stakeholders. The third section covers enhancing disclosure and the fourth, the corporate governance structure.
- Omron's policy respects the spirit and the aims of the Corporate Governance Code which applies to listed companies from 2015.

Corporate Governance Structure

We have designed a hybrid structure incorporating the outstanding features of nominating committees to strengthen the oversight function of the board of directors.



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- OMRON employs a hybrid committee framework. OMRON is a company with an Audit & Supervisory Board but in the interest of enhancing the oversight function of the Board, we have adopted some of the superior elements of a company with a Nomination Committee.
- As a company with an Audit & Supervisory Board, all material decisions on business operations are approved by the Board of Directors. However, advisory committees have been put into place for the most important elements of oversight, namely management personnel and compensation. This structure allows for improved objectivity and transparency.
- OMRON has had 4 advisory committees in place since 2006.

Advisory Committee Members

Chairs of the Personnel Advisory Committee, CEO Selection Advisory Committee, and Compensation Advisory Committee are outside directors. A majority of the members of these committees are outside directors. The chair and members of the Corporate Governance Committee are outside directors and outside members of the Audit and Supervisory Committee, raising transparency and objectivity in our decision-making. Our CEO does not serve as a member on any of these committees.

Title	Name	Personnel Advisory Committee	CEO Selection Advisory Committee	Compensation Advisory Committee	Corporate Governance Committee
Chairman of the Board	Fumio Tateishi		<input type="checkbox"/>		
Representative Director	Yoshihito Yamada				
Representative Director	Kiichiro Miyata	<input type="checkbox"/>			
Director	Koji Nitto			<input type="checkbox"/>	
Director	Satoshi Ando	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<u>Outside Director</u>	Eizo Kobayashi★	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Outside Director</u>	Kuniko Nishikawa★	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Outside Director</u>	Takehiro Kamigama★	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Audit & Supervisory Board Member (Full-time)	Kiichiro Kondo				
Audit & Supervisory Board Member (Full-time)	Tokio Kawashima				
Audit & Supervisory Board Member (<u>Independent</u>)	Hideyo Uchiyama★				<input type="checkbox"/>
Audit & Supervisory Board Member (<u>Independent</u>)	Tadashi Kunihiro★				<input type="checkbox"/>

Chairperson
 Vice-Chairperson
 Committee Member
 ★ Independent under Tokyo Stock Exchange rules

Ratio of Outside Directors and Outside Audit and Supervisory Board Members	3/5	3/5	3/5	5/5
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- The Personnel Advisory Committee, the CEO Selection Advisory Committee and the Compensation Advisory Committee are all chaired by outside directors, and the majority of members are outside directors. The Corporate Governance Committee chairperson and committee members are all external directors or auditors, to improve transparency and objectivity. The President & CEO is not a member of any of these committees.
- The Personnel Advisory Committee advises on selection standards for directors, auditors and executive officers, and deliberates on candidates.
- The Compensation Advisory Committee determines the compensation policy for directors and executive officers, and deliberates on compensation levels and amounts.
- The goal of OMRON's Corporate Governance Committee is to supervise ongoing improvements to corporate governance. It also aims to improve management transparency and fairness by measures such as assessments of the effectiveness of the Board.

**The selection and responsibilities
of our president and CEO and
the role of outside directors.**

- Today, we will focus on a discussion of the CEO selection process and the role of outside directors.

Our View on the Selection of the President and CEO

OMRON Corporate Governance Policies* (extracts) revised on Nov.27, 2018

Section 4 Corporate Governance System

5. Advisory Committees

(2) The CEO Selection Advisory Committee

In accordance with the relevant rules, the CEO Selection Advisory Committee is intended to bolster the management oversight function of the Board of Directors by enhancing the transparency, objectivity, and timeliness of the decision-making process regarding nomination of candidates for CEO.

The CEO Selection Advisory Committee annually conducts assessment of the CEO and nominates a candidate for the CEO for the succeeding fiscal year.

In the case of re-appointment, the CEO Selection Advisory Committee nominates the current CEO for the succeeding fiscal year, based on results of an evaluation reflecting the Company's business results. The Committee then makes recommendations to the Board of Directors.

In the case of change, the CEO Selection Advisory Committee nominates candidates for the CEO for the succeeding fiscal year based on the succession plan, etc. and makes recommendations to the Board of Directors.

The Corporate Governance Report (Comply and Explain)

- OMRON Corporate Governance Policies* (extracts) revised on Nov.27, 2018 -

The Board of Directors takes the appointment and dismissal of the CEO as one of the highest-priority matters in management oversight. Accordingly, the CEO Selection Advisory Committee, dedicated to the nomination of candidates for the CEO, annually evaluates the performance of the CEO and nominates candidates for the CEO based on the results of the evaluation, thereby maintaining the transparency, objectivity, and timeliness of the CEO appointment process. As such, the Company annually appoints a CEO for the succeeding fiscal year based on the evaluation reflecting the Company's business results, etc. and thus has established a system for deliberating the reappointment or dismissal of the current CEO based on the business results, etc.

* <https://www.omron.com/about/corporate/governance/>

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- OMRON's Corporate Governance Policy was updated on November 27, 2018. In response to revisions made to the Corporate Governance Code, we incorporated specific references to our initiatives.
- We disclose the CEO selection process, as shown on the slide.

Members of the CEO Selection Advisory Committee

Outside directors play a major role in the CEO Selection Advisory Committee, ensuring transparency and objectivity in the CEO selection process.

CEO Selection Advisory Committee

Chairman	Outside Director Eizo Kobayashi
Vice Chairman	Director Satoshi Ando
Member	Outside Director Kuniko Nishikawa
Member	Outside Director Takehiro Kamigama
Member	Chairman of the Board Fumio Tateishi

- ✓ [Chair is an outside director](#)
- ✓ [Majority of members are outside directors](#)
- ✓ CEO is not a committee member
- ✓ All members are non-executive directors

- The CEO Selection Advisory Committee is chaired by an outside director; outside directors represent a majority on the committee. The President & CEO is not a member of the committee. The CEO Selection Advisory Committee includes internal directors but none of the internal directors have operational executive roles.
- OMRON has established a highly transparent and objective CEO Selection process, through the deep involvement of outside directors in the CEO Selection Advisory Committee.

Outside Director



**Eizo
Kobayashi**

**Senior Representative,
ITOCHU Corporation**



**Kuniko
Nishikawa**

**President & CEO,
Firststar Healthcare Co. Ltd.,
Chief Executive Officer,
FRONTEO Healthcare, Inc.**



**Takehiro
Kamigama**

**Mission Executive,
TDK Corporation**

- These are our outside directors.
- The first is Mr. Kobayashi. He is currently a Senior Representative for ITOCHU Corporation, having served previously as President and CEO, and subsequently Chairman.
- The second is Ms. Nishikawa. She is concurrently serving as CEO at two companies. Previously, she had worked for a consulting firm.
- The third is Mr. Kamigama. He is currently the Mission Executive for TDK Corporation, and previously served as President and, subsequently, Chairman.

CEO Selection Advisory Committee: Deliberations, Selection Process

The CEO Selection Advisory Committee meets on an annual basis. Members-only deliberations are conducted after asking the president and CEO three questions. After receiving reports and holding discussions, the board of directors selects (or reappoints) the president and CEO. This process ensures a highly transparent and objective selection process, unique to OMRON.

■ Annual discussion of president appointment (not just when new president is to be named)

■ Matters Discussed (specific questions to the CEO by the committee chair)

- ✓ President Appointment for Upcoming FY
⇒Do you intend to continue as CEO in the upcoming fiscal year?
- ✓ Succession Plan
⇒Who do you intend to be your successor in the event of an emergency?
- ✓ Succession Plan
⇒What are you doing to educate and train your successor? *Provide list of successors

■ Committee member discussion after CEO leaves the room



*1 Committee chair is an outside director;
majority of members are outside directors

*2 Eight directors (three of whom are outside director)

- The CEO Selection Advisory Committee meets once a year, nominating a CEO every year. At the outset, the committee asks the incumbent 3 questions after which the CEO leaves the room. All deliberations are conducted solely by committee members. The President & CEO is confirmed after the committee submits a recommendation to the board, which is then voted on by the full board.

Board of Directors

Outside directors serving as members of the CEO Selection Advisory Committee provide executive oversight of the board of directors, ensuring we meet our duties in selecting the CEO.



- The Board meetings are one of the most important forums for improving the effectiveness of the CEO selection process. In particular, the outside directors that are members of the CEO Selection Committee have oversight over the executive organization as members of the board; in this way, they are held accountable for the selection of a CEO.

Systems to Ensure Board of Director Effectiveness

The Corporate Governance Committee (consisting of only outside directors) evaluates the effectiveness of the OMRON board of directors. Based on this evaluation, we improve the effectiveness of the board of directors through management policy decisions (overseen by the board of directors) and oversight by executive body (via board of director meetings).

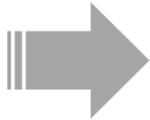


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- OMRON has also put into place a framework for improving the effectiveness of the Board itself.
- The 2015 Corporate Governance Code called for improvements to the effectiveness of board meetings and assessments of the board itself. OMRON viewed this as an opportunity to adopt a framework for assessing the board to improve board effectiveness.
- To assess the board's performance, we ask each of the directors and auditors to conduct a self-evaluation for each of the themes discussed by the board over the previous 12 months. The chairman also conducts one-on-one interviews with each of the board members to understand their views. The Corporate Governance Committee, which is made up of only outside directors and auditors, uses this information to conduct the assessment.
- Based on this assessment, the board sets out its operating policy for the next year. Having the board exercise oversight over the executive organization improves the effectiveness of the board meetings.
- We did consider using a third-party to evaluate the board, but ultimately felt that the assessment by the Corporate Governance Committee, which consists only of the outside directors and auditors, was a better choice from the standpoint of effectiveness and objectivity.

What role do outside directors play in the OMRON governance structure?



**CEO Selection Advisory Committee
selects/reappoints CEO**



**Oversee operational execution in
board of director meetings**

- The outside directors play 2 important roles. They are tasked with the responsibility of selecting a CEO, and supervising the operational activities of the executive through the board meetings.
- These 2 functions are the core of OMRON's corporate governance, and are very important.

Higher Levels of Sustainable Corporate Value

This has been an explanation of OMRON governance in the brief time we have to share today. We encourage ongoing dialogue toward creating higher levels of sustainable corporate value.



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- Although time has been limited, we have explained OMRON's corporate governance initiatives.
- In the interest of continuously enhancing corporate value over time, we believe an active dialogue on topics such as the backdrop to why OMRON has been focused on building a governance structure from 1996, or the activities of the other committees will lead to a deeper understanding of the true nature of OMRON's approach to governance.
- We aim to proactively engage with stakeholders and hope that a better understanding of OMRON's governance initiatives will provide you with a sense of comfort in owning shares.

Reference

Reference: First CEO Appointed through the CEO Selection Advisory Committee

Yoshihito Yamada was the first-ever OMRON CEO appointed by the CEO Selection Advisory Committee, taking over from Hisao Sakuta. (June 2011)

■ Committee Members as of FY2010

Chairman : (Outside Director) Kazuhiko Toyama
Vice Chairman : (Director) Fumio Tateishi
Member : (Outside Director) Masamitsu Sakurai
(Director) Yoshio Tateishi

■ Committee Establishment

- (1) Shifted management unifying inward force from the founder to the OMRON Principles (May 2006)
- (2) Selection and dismissal of CEO is the most important issue related to oversight function
- (3) Accountability for transparency and objectivity to stakeholders
- (4) CEO to concentrate on incorporating the OMRON Principles in management

■ Committee Deliberations Leading to Yoshihito Yamada's Selection as CEO

- (1) Narrowed list of candidates to 10 individuals three years prior to Yamada's selection in 2011
- (2) Discussed whether individuals could lead in promoting the OMRON Principles and demonstrate skills to accomplish the OMRON Vision (VG2020)
- (3) Narrowed list candidates to several individuals, evaluated individually

The Story Behind the Appointment of a New President (Annual Report 2011)



<https://www.omron.com/about/corporate/governance/govlib/>

Reference: Overview of Fiscal 2017 Board of Director Effectiveness Evaluation

Policy for the operation of the board of directors for fiscal 2017

The board of directors exercises its oversight function with particular focus on three areas to ensure achievement of the medium-term management plan VG2.0, which began in fiscal 2017:

- ✓ **Progress of short-term management plans**
- ✓ **Human resources and technology strategies key to medium-term management strategies**
- ✓ **Initiatives to address materiality, which have been identified based on sustainability policies**

Results of the fiscal 2017 evaluation of board effectiveness

The Corporate Governance Committee confirmed that the board of directors operated according to the policy for board operations for fiscal 2017 and that the board demonstrated its oversight function. Evaluation results and future issues are as described below:

✓ **Progress of short-term management plans**

The board of directors discussed and approved VG2.0 and the company-wide management plan for fiscal 2017. In addition, the board of directors received sufficient reports from executives regarding initiatives at individual divisions.

✓ **Human resources and technology strategies key to medium-term management strategies**

(1) Human resources strategies

The board of directors discussed human resources strategies, a key component of VG2.0. The board recognized that human resources strategies were important to achieve VG2.0 and that the board should continue to exercise its oversight function.

(2) Technology strategies

The board of directors confirmed the companywide core technology system developed on the SINIC Theory platform. SINIC Theory is OMRON's unique predictive theory encompassing AI, IoT, robotics, and other rapid technological innovations. The Board recognized that technology strategies were important to achieve VG2.0 and that the board should continue to exercise its oversight function.

(3) Other strategies related to medium-term management strategies

The board of directors recognized the need to exercise its oversight function on strategies related to information systems and quality to achieve the company's medium-term management strategies.

✓ **Initiatives to address materiality which have been identified under sustainability policies**

To ensure the achievement of VG2.0, the board of directors received reports on fiscal 2020 targets and KPIs for material sustainability issues.

The board also received reports related to the company-wide management structure for advancing Sustainability and reports on material issues.

OMRON began sustainability initiatives in fiscal 2017. The board recognized the need to exercise its oversight function on an ongoing basis.

Policy for the operation of the board of directors for fiscal 2018

Based on the results of the fiscal 2017 evaluation of board effectiveness and identified future issues, the board of directors has been charged with exercising its oversight function to ensure the achievement of VG2.0, focusing on three areas in particular:

- ✓ **Strategies for information systems and quality with respect to medium-term management strategies**
- ✓ **Ongoing initiatives for human resources and technology strategies**
- ✓ **Initiatives to address material sustainability issues (materiality)**

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OMRON Group Environmental Action for a Sustainable Society

Kiyoshi Yoshikawa
Managing Executive Officer
Global Manufacturing Innovation HQ

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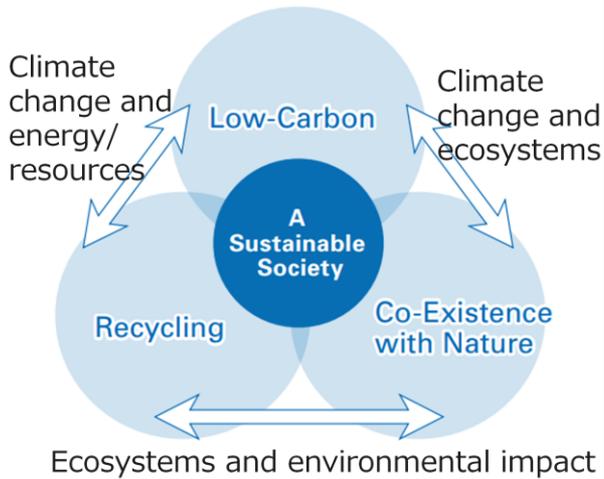
- Turning now to the OMRON group's environmental actions.

Omron Principles and Environmental Policy

Our Mission

To Improve lives and contribute to a *better society*

A 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

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- The OMRON Principles state that we seek to contribute to a better society by solving the issues faced by society through our business.
- We understand 'Contributing to a better society' to mean a sustainable society from an environmental perspective. We specifically believe a sustainable society is a 'low carbon society' with a 'circular economy' that 'exists in harmony with nature'.
- There are two key pillars to OMRON's environmental vision. Through our business, we seek to provide society with products and services that contribute to the environment. We also seek to employ our management resources, such the materials, energy and human capital which we share with the Earth and society, as efficiently as possible.
- We have set out 5 environmental policies and 6 environmental targets.

Green OMRON 2020 Goals: Today's Theme

Today's Theme

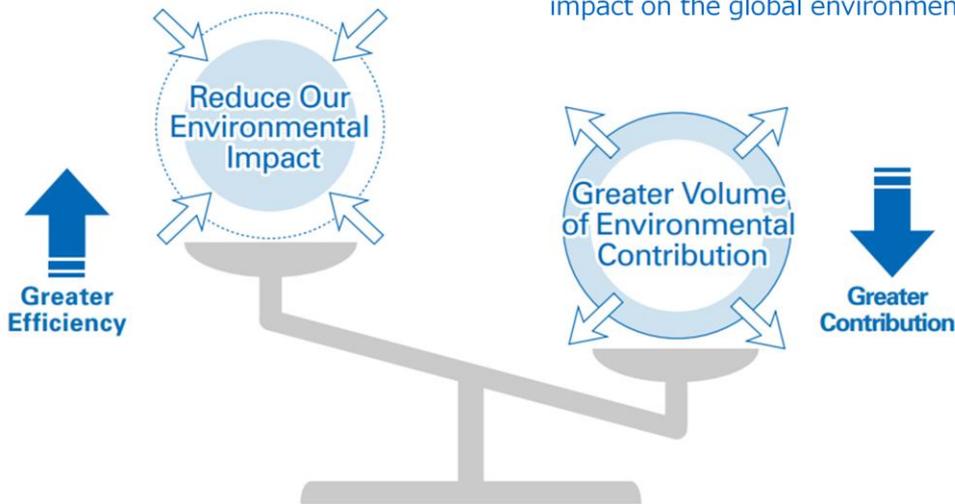
Issues	Goals as of Fiscal 2020
Sustainability Issues 1. Reduction of greenhouse gas emissions	Environmental Contribution > CO2 emissions at production centers KPI change Global Net Sales to CO2 Emissions ⇒ Greenhouse gas emissions •2050 Achieve Zero Emission •2030 Reduce by 32% vs. 2016 •2020 Reduce by 4% vs. 2016
Sustainability Issues 2. Appropriate management and reduction of hazardous substances	Reduction of mercury through the prevalence of digital thermometers and digital blood pressure monitors: 69 tons / year ✓ Stop use of fluorocarbon (CFC) in FY2018 ✓ Stop use of fluorocarbon (HCFC) ✓ Stop use mercury (fluorescent lamp use)
3. Reduction of waste	Achieve Zero Emission at all global production sites
4. Prevention of air, water, and soil contamination	Perform environmental legal assessments at all global production sites
5. Effective usage of water resources	Reduce water consumption at all global production sites by 6% vs. FY2015 result
6. Facilitating environmental management	Acquire and maintain ISO 14001 certification at all global production sites

- We have set 6 environmental targets for FY2020. Of the 6 targets, we have designated the reduction of green-house gas (GHG) emissions and the appropriate management and reduction of hazardous substances as material Sustainability Goals for the company as a whole. As such, we are particularly focused on these 2 objectives.
- We will focus primarily on initiatives to reduce GHG emissions in the presentation today.

Expanding Our Environmental Contribution Through Our Businesses

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)



*Environmental Contribution

Calculated based on the **direct effect** of product contributions and the **indirect effect** of the use of our products and services.

Direct Effect CO2 reduction generated through OMRON product energy conservation improvements compared to a standard product
Examples Energy-saving nebulizers, safety sensors, industrial temperature controllers, general power sources

Indirect Effect CO2 reduction generated through customer use of products in which OMRON components form a major portion of energy saving/energy generation products
Examples PV Inverter, power converter systems for electric and hybrid vehicles, electric power steering

- The environmental actions related to GHG emission reductions are: 1) Reducing the environmental burden directly related to our business activities; 2) Contributing to the environment by providing beneficial products and services to society.
- At OMRON, we believe the interaction between the two is best depicted as a scale, as shown here.

Key Sustainability Initiatives Actions to Reduce Greenhouse Gas Emissions

Make Maximum Use of All Management Resources



Adopted system to visualize electricity usage
(Ayabe City, Kyoto location)



Converted self-generated power to clean energy
(Production plant in Guangzhou City, China)

Offer Products and Services Useful to Society



Products that contribute to the spread of clean energy



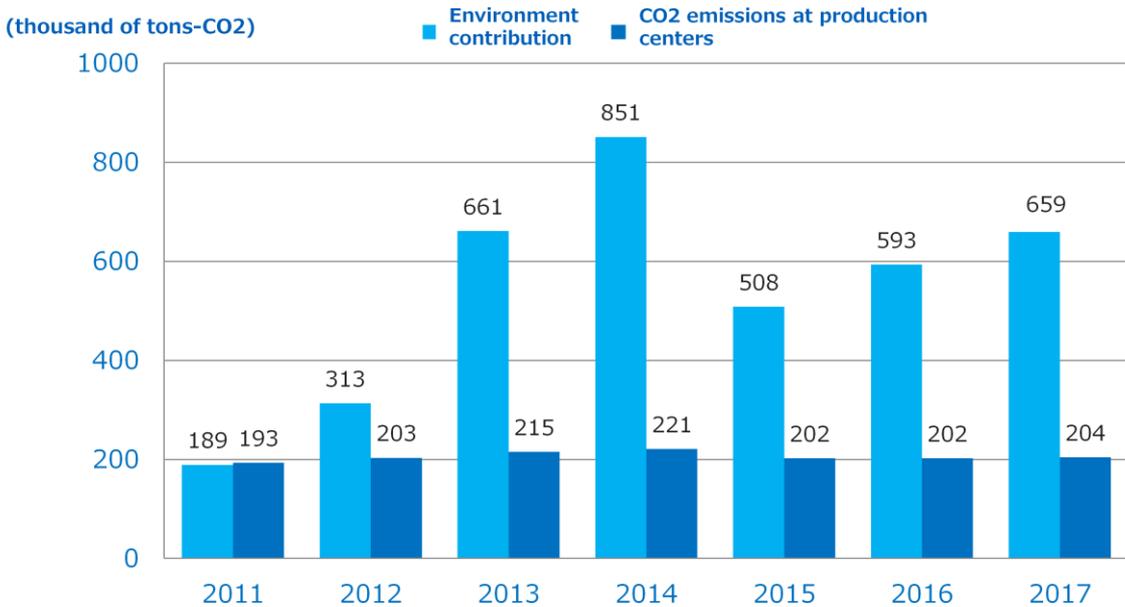
Used abandoned fields to create locally produced, locally consumed energy
(Miyazu City, Kyoto)



- We show here examples of OMRON's initiatives to reduce the environmental impact of its business activities. We promote measures to reduce energy consumption. By visualizing the energy consumption of our facilities, such as the air conditioning or lighting on the shop floor of our manufacturing plants, we are able to control and optimize energy usage to reflect the level of production activity. We are also installing solar panels on the roofs of our facilities.
- Examples of how OMRON contributes to the environment through its business include PV inverters, which are essential for solar power generation and storage batteries, which are needed to use generated electric power effectively. OMRON, in conjunction with initiatives to reinvigorate local communities, also provides energy systems and services for electric power generated for local consumption.

Key Sustainability Initiatives History of Environmental Contribution

Steady rise in environmental contribution since unveiling of Green OMRON 2020



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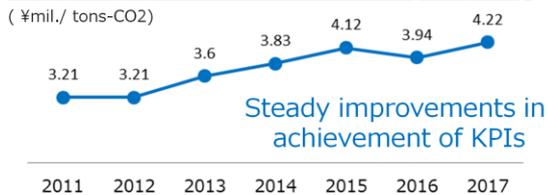
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- OMRON monitors its contribution to the environment on an annual basis. We continue to steadily increase our contribution every year. This will continue to be a focus going forward.

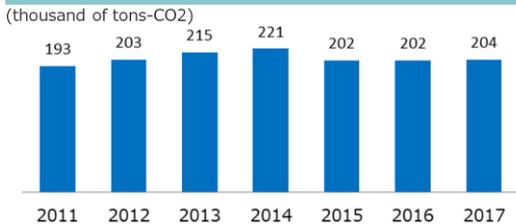
Revised Greenhouse Gas Emissions Reduction Targets

Green OMRON 2020

CO2 emissions at production centers (FY2011-)



GHG emission (As of FY2017)



2018 Established

Omron Carbon Zero : Zero GHG Emissions by 2050

Paris Agreement

Issued in 2016



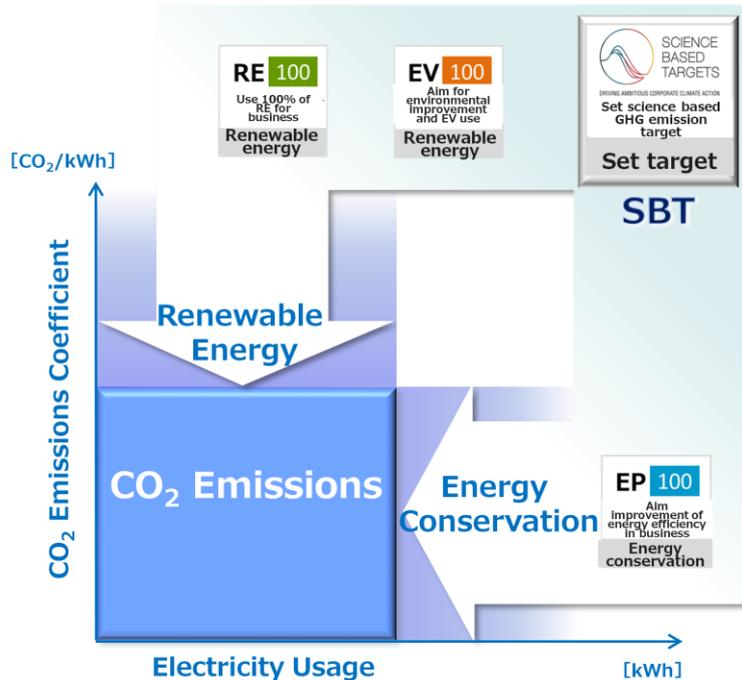
Hold average global temperature increase to within 2°C of pre-industrial revolution era

Limiting greenhouse gas emissions is critical

- Under the Green OMRON 2020 program launched in 2011, OMRON has aimed reduce GMG emissions by improving carbon intensity relative to sales. While we had made progress in reducing emissions on an absolute basis, we were not able to achieve zero emissions.
- Against this backdrop, the Paris Agreement, which focuses on reducing total GHG emissions, was signed in 2016. In order to respond to this global issue, we launched the OMRON Carbon Zero project, aiming to reduce GHG emissions to zero in 2050.

Position of Initiatives Relative to OMRON Engagements

We are striving to limit temperature rise to within 2°C to combat global warming. We have set goals in line with SBTs to limit rise in temperature, advancing initiatives in energy conservation and renewable energy.



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- In order to achieve Carbon Zero, OMRON announced its participation in the Science-Based Targets (SBT) Initiative.
- By using renewable energy and reducing our overall power consumption, we aim to mitigate climate change. In seeking to set targets for our initiatives, we felt that the SBT approach was the most appropriate; we joined SBT in July 2018.

Green OMRON 2020 Environmental Targets and Progress

Issues	Goals as of Fiscal 2020	FY2017 Results
Sustainability Issues	Environmental Contribution > CO2 Emissions at Production Centers	659k t-CO2 > 204k t-CO2
1. Reduction of greenhouse gas emissions	KPI change Global Net Sales to CO2 Emissions ⇒ Greenhouse gas emissions ·2050 Achieve Zero Emission ·2030 Reduce by 32% vs. 2016 ·2020 Reduce by 4% vs. 2016	·Changed KPIs during FY2018
Sustainability Issues	Reduction of mercury through the prevalence of digital thermometers and digital blood pressure monitors: 69 tons / year	51 tons / year
2. Appropriate management and reduction of hazardous substances	✓ Stop use of fluorocarbon (CFC) in FY 2018 ✓ Stop use of fluorocarbon (HCFC) ✓ Stop use mercury (fluorescent lamp use)	·CFC 39% reduction ·HCFC 25% reduction ·Mercury (fluorescent lamp) 26% reduction
3. Reduction of waste	Achieve Zero Emission at all global production sites	23 locations (58% progress)
4. Prevention of air, water, and soil contamination	Perform environmental legal assessments at all global production sites	36 locations (90% progress) Two locations excluded for strategic purposes
5. Effective usage of water resources	Reduce water consumption at all global production sites by 6% vs. FY2015 result	5.9% reduction
6. Facilitating environmental management	Acquire and maintain ISO 14001 certification at all global production sites	39 locations (98% progress)

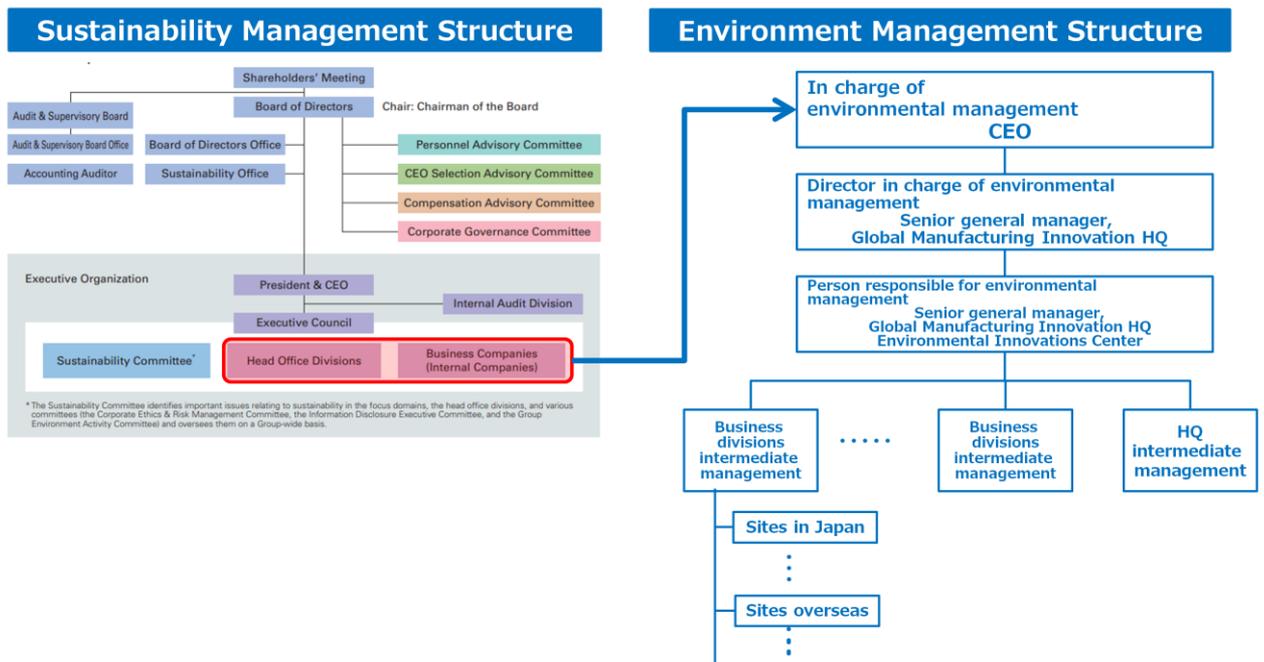
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- With regard to our progress in reducing GHG emissions, we had historically targeted carbon intensity relative to sales. However, we changed our KPI last year to an absolute target for reducing total GHG emissions.
- Our goal is to achieve Carbon Zero in 2050. We have set milestone targets for 2020 and 2030.

Environmental Management Structure

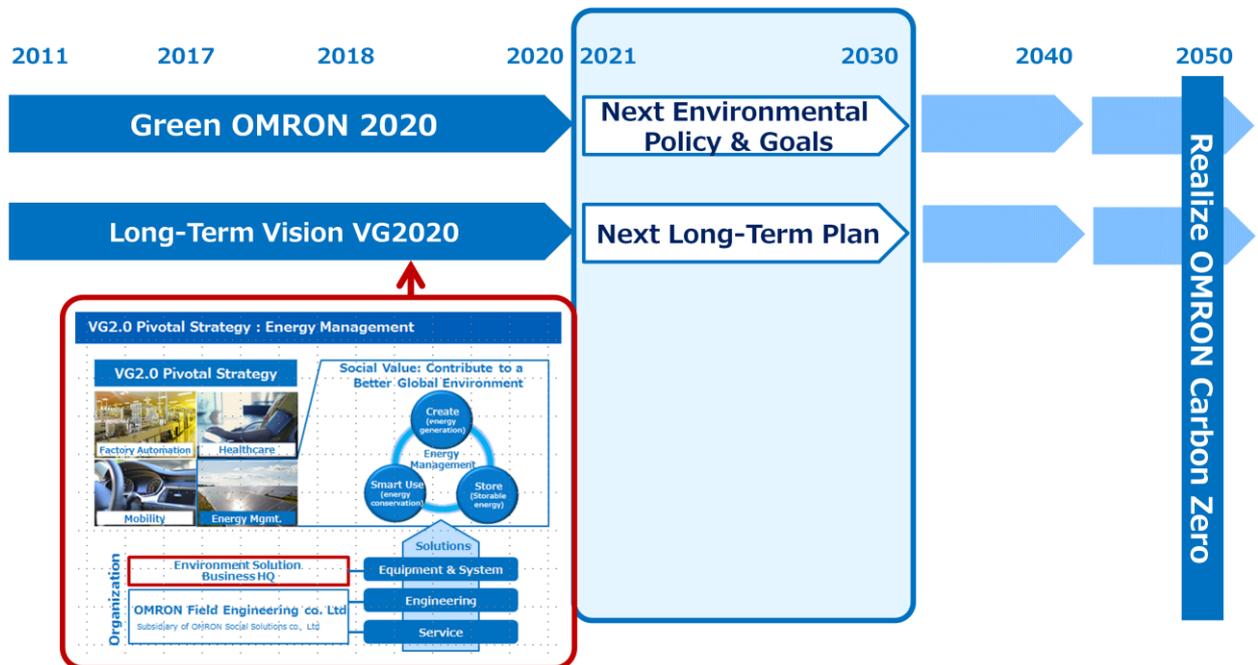
Sustainability reports are made to the board of directors who monitor and oversee progress. Individual business divisions are responsible for execution, working in cooperation to identify risks and opportunities; responsible for setting targets and forming/implementing business plans.



- OMRON's CEO leads our environmental management activities, with reporting responsibilities to the board. OMRON considers achieving its sustainability targets to be equally important to achieving earnings targets such as sales and profit.
- The board receives progress updates and has oversight responsibilities.

Future Direction

Pursue activities to accomplish 2020 goals; research policies and targets for the next 10 years



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- We are currently in the midst of our Long-term Vision VG2020. Our environmental targets are aligned and linked to our earnings targets.
- In formulating our next 10-year plan, we will set our targets in such a way that our long-term management plans are linked to our environmental policy. By repeating this process, we aim to achieve Carbon Zero in 2050.
- OMRON's environmental vision is firmly rooted in the OMRON Principles. We will continue to focus on initiatives to contribute to the environment through our businesses in our own unique way.

OMRON



OMRON Carbon Zero for a Sustainable Society

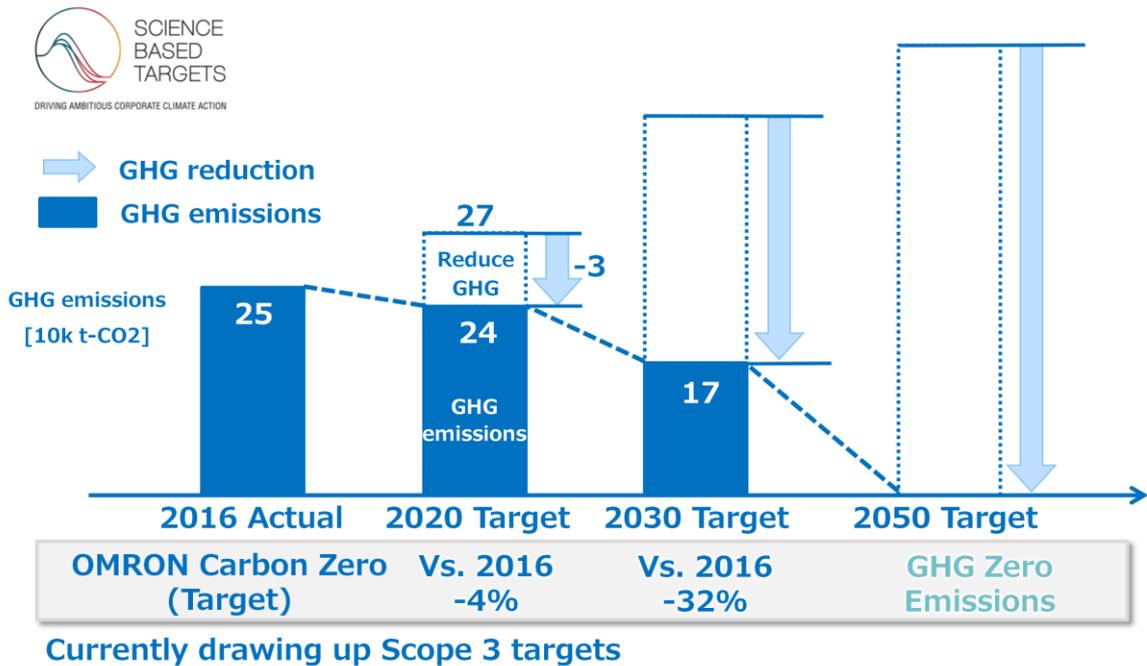
Teruyasu Imai
Senior General Manager
Environmental Innovation Center
Global Manufacturing Innovation HQ

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- We will now talk about OMRON's Carbon Zero initiatives in more detail.

OMRON Carbon Zero

- Set goals in line with SBTs to respond to global warming
- Aim for **zero greenhouse gas (GHG) emissions by 2050** (Scope 1, 2)
(2018.7.27 news release)



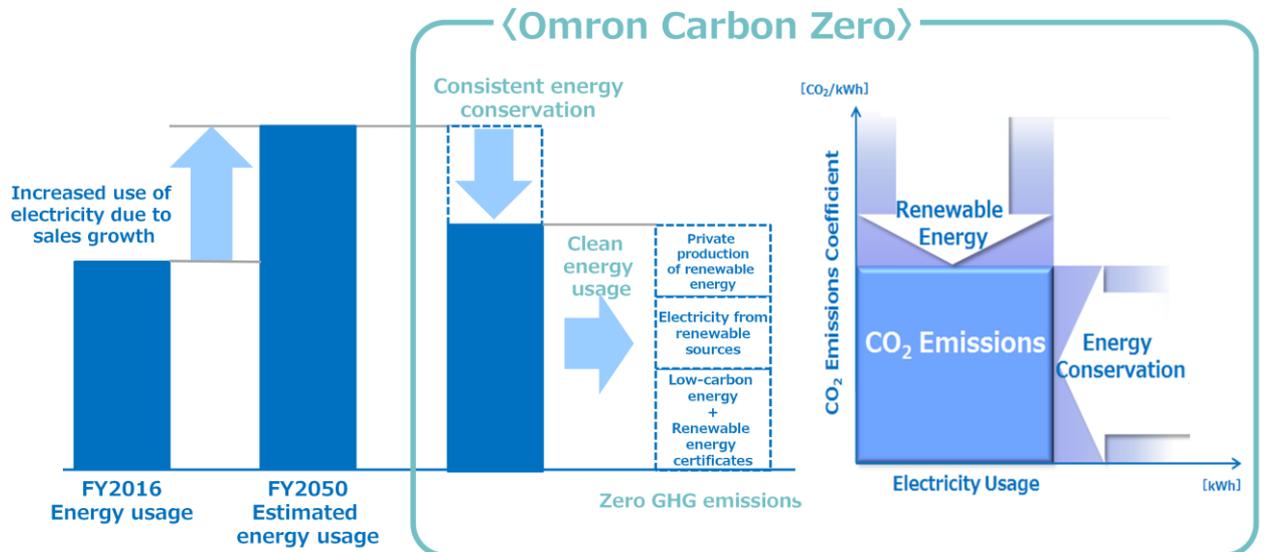
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- Last July, in response to climate change and global warming, OMRON changed its GHG emission reduction target from carbon intensity relative to sales to a reduction of absolute emissions.
- OMRON is targeting Carbon Zero in 2050. We have chosen to adopt the methodology recommended by the SBT Initiative in setting a target that has been shown scientifically to contribute to limiting global temperature increases to within 2^o C.
- Based on GHG emission levels of 2016, we have also set targets for 2030 and 2020, backcasting from 2050.
- These targets are for Scope 1 and Scope 2. We are currently working on setting Scope 3 targets.

OMRON Carbon Zero Basic Policy

Nearly 90% of OMRON Group greenhouse gas emissions arise from electric power. As we minimize energy usage through consistent conservation, we also advance our transition to clean energy use through a number of different measures.



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- With regard to long-term initiatives to 2050, it is our basic policy to constantly review and revisit our original starting point.
- 90% of the OMRON group's GHG emissions derive from the consumption of electric power. As such, our most important initiatives relate to electric power. First, OMRON aims to minimize its own power consumption.
- Then, OMRON will shift to cleaner forms of energy by leveraging renewable energy sources from within the minimum energy necessary for corporate growth.
- This basic policy will allow us to achieve corporate growth while reducing GHG emissions to zero.

Energy Conservation and Renewable Energy Activity Cycle Toward Reducing GHGs

The main feature of the OMRON Group's GHG reduction programs is the energy conservation and renewable energy activity cycle. This cycle leverages the expert staff, knowledge, products, and services of our energy management business.

Determine Potential

Energy experts provide on-site diagnoses
(Leveraging OMRON Group internal business expertise)

- Identify conditions on-site (risks and opportunities)
- Suggest responses to risk
- Suggest actions on improvement opportunities
- Simulate impact
- Calculate costs for measures



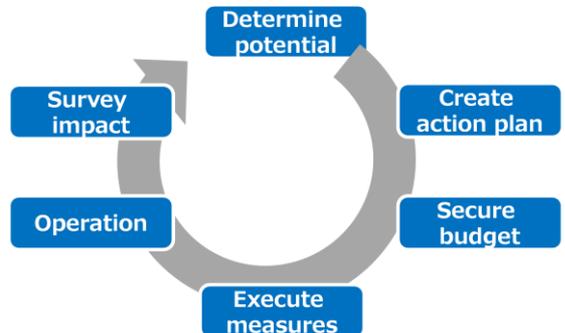
Determination results

(Ex.)

Category	Suggestions	Reduction Vol. kWh	Reduction Vol. t-CO2
Transformer Equipment	Upgrade to High-Efficiency Transformers	45,668	36
Transformer Equipment	PV Electricity Generation	300,000	234
HVAC Equipment	Revise Temperature Settings for Second Floor Central Air	13,845	11
Compressor	Reduce Compressor Air Volume	151,532	118
Compressor	Revise Air Intake Route for Compressor Room	21,577	17
Compressor	Compressor Inverter Control	98,350	77
Lighting Equipment	Reduce Lighting in Second Floor Storage Room	13,415	10
Lighting Equipment	Turn Off Lights During Breaks in the Production Room Work Area	3,227	3
Production Line	Prevent Heat Dissipation From Steam Pipes	95,600	75
Production Line	Measures to Prevent Leaks From Steam Pipes	45,552	36

Sustainable Energy Conservation and Renewable Energy Activity Cycle

Execute the PDCA cycle beginning with an analysis of potential



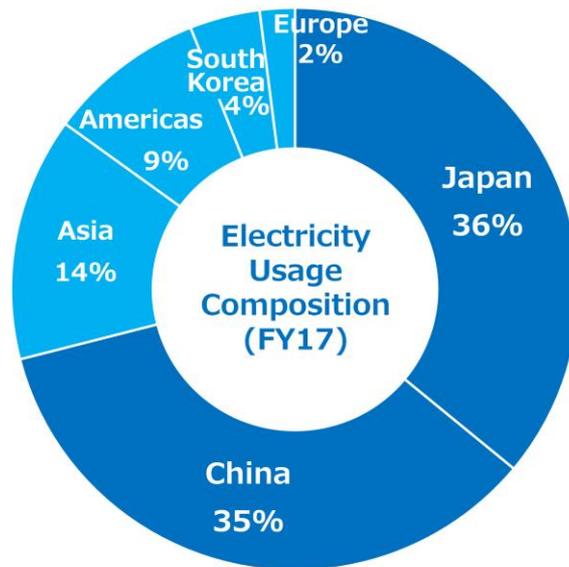
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- A notable feature of the OMRON Group's GHG emission reduction initiatives is that we are actively capitalizing on all of OMRON's Energy Management business assets in our own efforts to reduce energy consumption and utilize renewable energy sources.
- The key is the diagnostic assessment of potential. OMRON Group energy experts undertake on-site inspections to get a deep understanding of energy loss risks and opportunities to improve energy efficiency. Based on the assessment, OMRON proposes a specific program of initiatives, providing estimates of expected impact and costs.

OMRON Electricity Usage

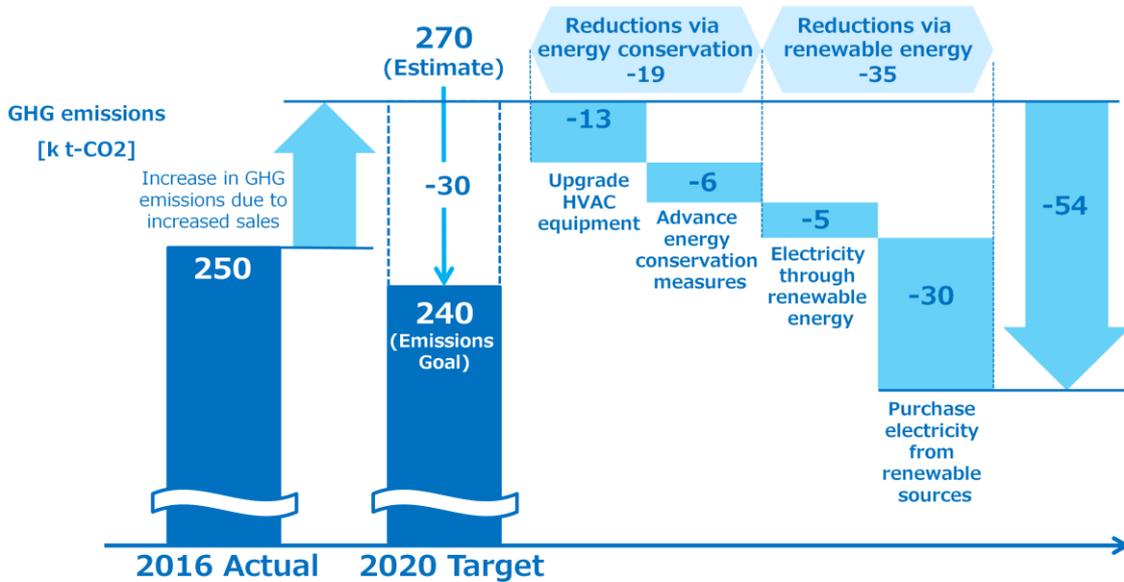
Seventy percent of OMRON Group electricity usage is in Japan and China.



- This slide shows the regional distribution of annual electric power consumption at OMRON.
- Japan and China account for 70% of the total, followed by Asia, the US, South Korea and Europe.

Activities Looking Ahead to 2050

- Plans in place to reduce total electricity usage in Japan/China (70% of total group usage) by 54k t-CO₂
- Rolling out energy conservation and renewable energy cycle programs in other areas to meet 2050 goals



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- OMRON has undertaken a diagnostic assessment of potential energy savings for Japan and China, which account for 70% of the OMRON group's power consumption. Based on the assessment, we have a plan to cut GHG emissions by 54,000 tons by reducing energy consumption and using renewable energy.
- Currently, we are formulating our FY2019 budget, based on this reduction program.
- Going forward, we plan to roll out energy reduction and renewable energy usage programs in Asia and other regions, in order to achieve our 2050 goal.

Expand Use of Renewable Energy

Adopt self-consumption solar power, expand purchases of renewable energy, and continue to increase share of renewable energy used in group electricity consumption

	2017 Actual	2018 Fcst	2020	2021-
Electricity Consumption (MWh/yr)	350,587	357,000	413,000-20,000 =393,000*	Global purchasing of ·Electricity from renewable sources ·Renewable energy certificates
Renewable Energy Usage (MWh/yr)	5,552	22,900	70,800	
Self-Consumption Solar Power	765	1,700	5,300	
Purchase of Electricity from Renewable Sources	4,787	21,200	65,500	
Renewable Energy Usage (%)	1.6%	6.4%	18.0%	

*Use renewable energy to reduce electricity use by 20,000MWh

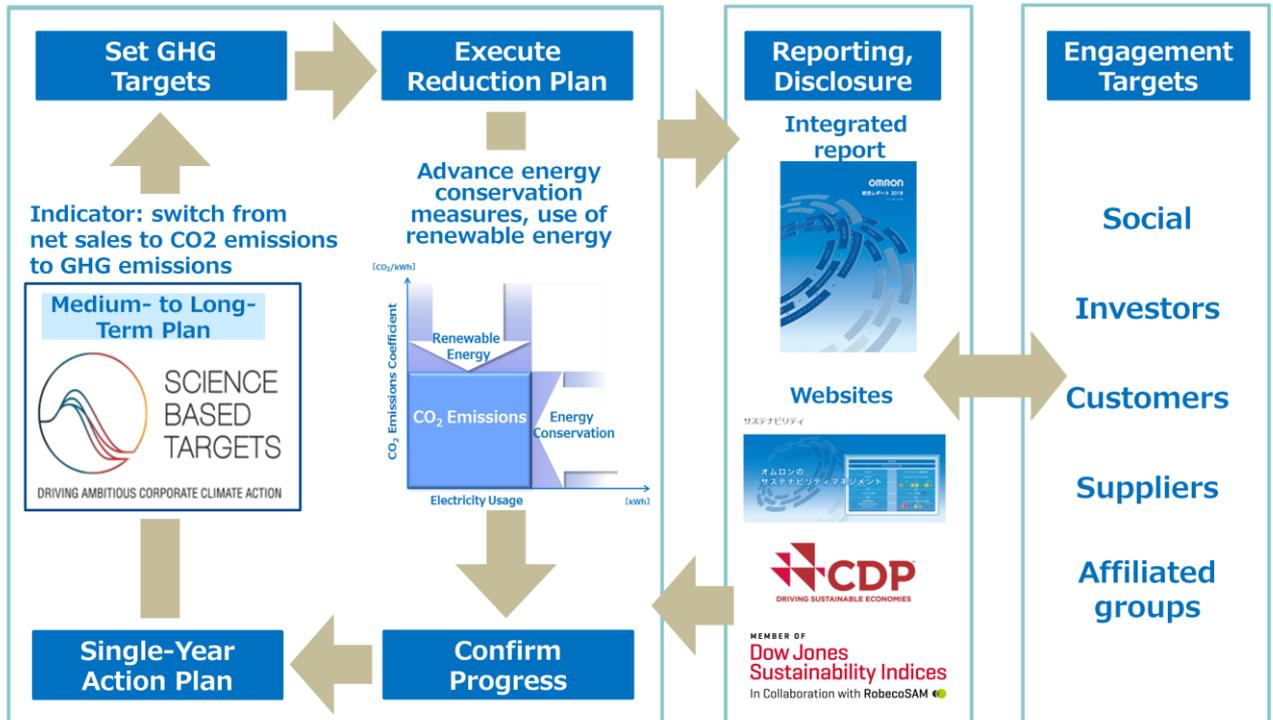
Additional Information	Self-Consumption Solar Power Equipment Installations	7	9	16	Search for GHG Reduction Measure Ideas Today, we are investigating options, routes, processes, and other means to obtain electricity from renewable sources and procure renewable energy certificates. We intend to incorporate these means into future GHG reduction measures.
	Purchases of Electricity from Renewable Sources (by location)	Netherlands: wind Power Brazil: hydroelectricity	Netherlands: wind Power Brazil: hydroelectricity Japan (Kansai): hydroelectricity	Netherlands: wind Power Brazil: hydroelectricity Japan (Kansai): hydroelectricity supplemental investigations ongoing	

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- With regard to the use of renewable energy, we began procuring power generated from renewable sources in the Kansai area from December 2018. We expect to quadruple our usage of renewable energy year-on-year in the current fiscal year. We plan to further raise this level in 2020.
- We plan to initiate procurements of power from renewable sources in the Tokyo area from June 2019.
- As we focus on our 2050 target, we expect to see an increase in the range of renewable energy alternatives, on the back of regulatory change, deregulation and the development of new technologies. We are constantly monitoring global trends, with a view to identifying promising methods to reduce GHG emissions. We will adopt and implement new methods as appropriate.

PDCA for Climate Change Issues



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- We report and disclose our progress on climate change challenges. The results of our engagement with stakeholders is cycled back into our activities as feedback. This allows us to grow our business while addressing environmental issues.

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OMRON Environmental Solutions Business Engagement

Katsumi Ohashi
Environmental Solutions Business HQ

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- We also highlight the initiatives of the Environmental Solutions business which provides environmental equipment and systems.

VG2.0 Pivotal Strategy : Energy Management

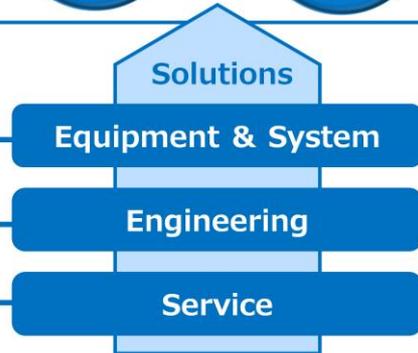
VG2.0 Pivotal Strategy



Social Value: Contribute to a Better Global Environment



Organization



- OMRON's Environmental Solutions Headquarters operates in one of OMRON's focus domains, Energy Management, a part of the current Medium-term Business Plan VG2.0.

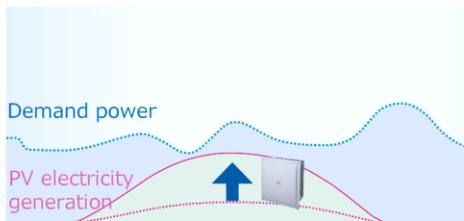
Vision

Use energy conversion technology and control technology to **contribute to a sustainable society** through the **wider adoption of renewal energy**.

Spread of renewable energy



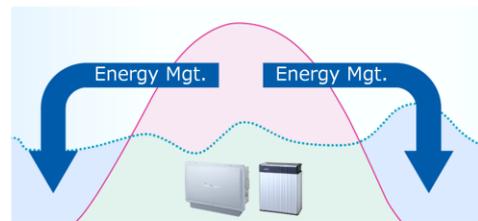
Sales of PV invertors
for solar power generation



Building a sustainable society



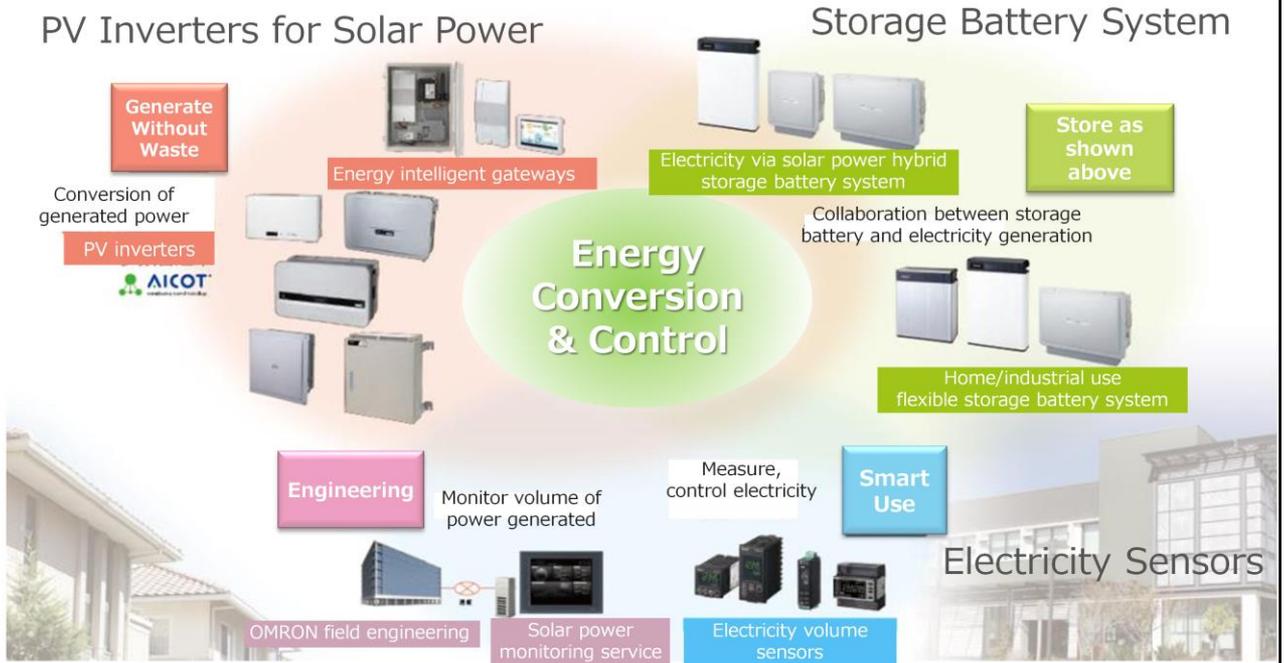
Leverage storage battery systems
for use in renewable energy
management affected by changes
in the weather



- In FY2019, OMRON's photovoltaic (PV) inverter business will celebrate its 25th anniversary since the launch of the product.
- Going forward, we aim to contribute to the creation of a sustainable society by supplying and leveraging not only PV inverters but storage systems. These products help manage electric power generated from renewable energy sources, which is subject to the variability of the weather.

Environmental Solutions Business Domains

Optimal use of overall energy linked to generation, storage, and conservation products and services



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- OMRON's Environmental Solutions Business provides products in 3 areas.
- The first is PV inverters supplied for use in power generation. The second is storage systems for use in energy storage. The third is components for electric power sensors, for use in reducing power consumption.
- By combining these products and services, OMRON provides overall solutions for optimizing the use of energy.

High Market Share of the Environmental Solutions Business

FY2017/OMRON Estimate

No.1 share of the generation, storage, and conservation markets

Share **35%**

Energy Generation: home-use PV inverters
No.1 in Japan

Share **33%**

Energy Generation: industrial-use low-voltage PV inverters
No.1 in Japan

Share **26%**

Storable Energy: home-use storage battery systems
No.1 in Japan

Share **33%**

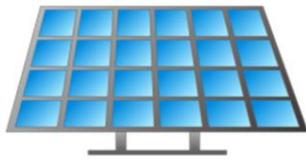
Energy Conservation: industrial-use electricity sensors (multi-circuit)
No.1 in Japan



- These are the domestic market shares for OMRON's Environmental Solutions Business. As shown here, OMRON holds top market share in each of these categories.

Do You Know PV Inverters ?

Device that converts direct current from solar cells and storage batteries **efficiently** to alternating current for home use, connecting **safely to an electric power system**



Solar Cell
(Direct Current)



Storage Batteries
(Direct Current)



PV Inverter



Electricity Sales
(Alternating Current)

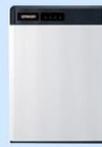
- The function of a PV inverter is to efficiently convert direct current from PV panels or storage batteries so it can be safely used in the home, enabling safe connectivity to the power grid.

OMRON is Here

OMRON products used in above-ground solar power systems and residences



PV Inverter



Storage Batteries



- A PV inverter is typically installed in the back of solar panels installed outside or on the walls of homes that have solar panels installed on the roof.
- They are also installed in all homes that use residential storage batteries.

OMRON Strength: Eight Years Invested in Commercialization

In 2002, a grid safety empirical research project was conducted for entire town's clustered installation of solar power electricity generation systems

First-ever clustered installation
empirical research in Japan



For use with multiple solar cells



Pal Town Josai no Mori, Ota city, Gunma Pref.

Standardization



Certification



Patent
application
release to
the public

Established AICOT®; created **the world's largest multi-clustered system** for a total of 553 homes producing a total 2,129 kW

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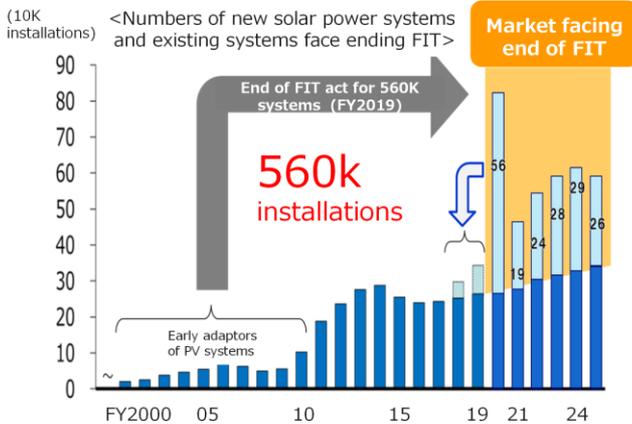
- OMRON's No. 1 share reflects the strength of a business with 25 years' of accumulated expertise.
- To date, it had been challenging to have a high concentration of solar systems in a single location because of issues of safety during blackouts. However, 10 years before solar power generation systems started to be broadly adopted, OMRON spent 8 years conducting field tests at Ohta City in Gumma prefecture to develop the AICOT technology, which addressed the safety issues.
- OMRON disclosed the content of the patent for this technology. This contributed to standardization and verification in the industry, enabling large-scale adoption of solar power systems.

Future Market Opportunity and Value Offering

We see the end of feed in tariff (FIT) and RE100 as future market opportunities where we can offer controls for self-consumption systems

The End of FIT

- Accelerate adoption of **storage batteries** used in solar power self-consumption systems



Renewable Energy 100 (RE100)

- Accelerate adoption of **solar power** suppliers among participating companies

<Major Participating Companies>

Apple, Microsoft, Google, Citibank, Bloomberg, PHILIPS, BMW, GM Motors, AXA, Ricoh, Sekisui House, Askul

(138 companies as of July 2018)

Value in solar power self-consumption system controls

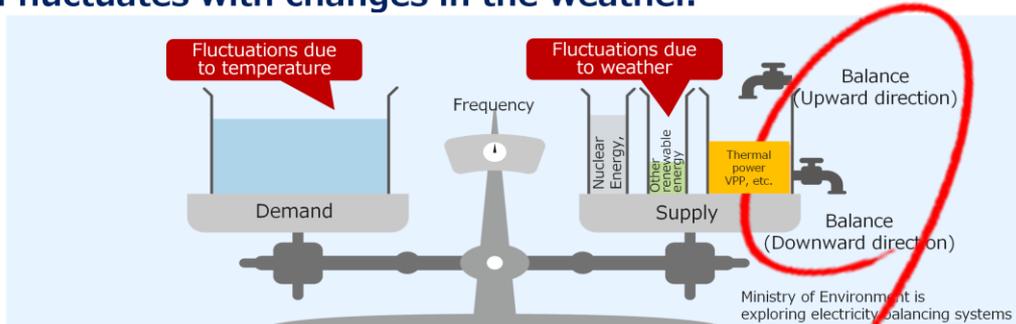
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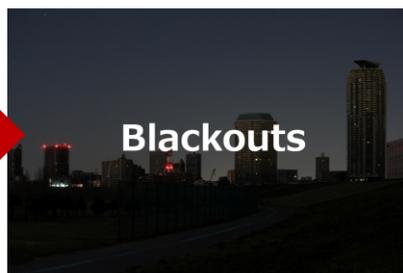
- Going forward, we believe there are 2 market opportunities.
- The first is the post-FIT market. From November 2019, power companies will stop buying power from customers who installed solar power systems in their homes before 2009.
- The second is RE100. We expect adoption of solar power generation systems will accelerate across the supply chain of participating corporates.
- The common element between the two is the need to consume the solar power that is generated, as it will no longer be bought by the grid. The sale of storage systems will accelerate home consumption of power generated. We believe OMRON provides value in control technologies for in-house use.

Related Social Issues

Importance of balancing power generation with power consumption. Imbalances could result in blackouts (worst case). Important to **provide balance** for the adoption of renewable energy, which fluctuates with changes in the weather.



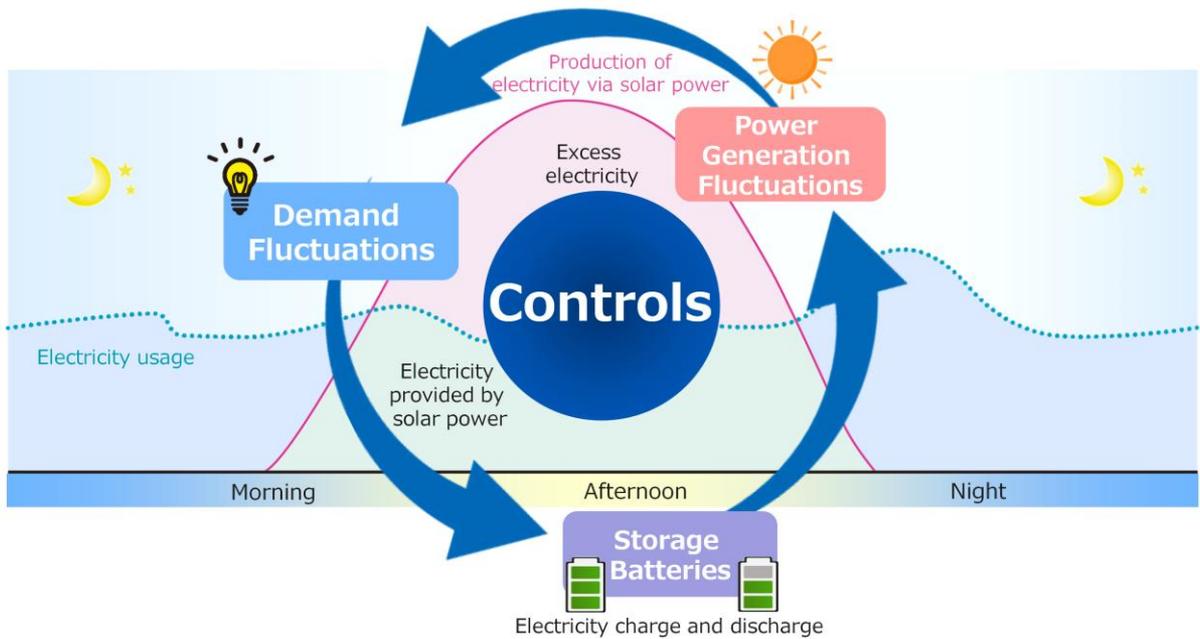
Important to balance demand (consumption demand) and supply (power generation)



- The social challenge in improving adoption of solar and other renewable energy power generation systems is maintaining the equilibrium between power generated and power consumed.
- Demand varies with temperature and other factors but the output from renewable energy power generation also varies by weather conditions. Currently, the equilibrium is being maintained through the use of thermal power generation and VPP(*). There have been instances where the stoppage of a thermal power generation plant led to a large-scale blackout, such as in Hokkaido.
- The ability to adjust for variability in supply-demand for renewable energy-based electric power, which is subject to changes in weather conditions, is very important.
- *VPP (Virtual Power Plant): Integrated control of network systems that manage power supply and demand from multiple small-scale renewable energy power generation facilities, storage batteries and fuel cells.

Key to Wider Renewable Energy Adoption

Leverage PV inverters and No.1 position of storage battery system market, contributing to balance through electricity generation and storage controls, encouraging wider adoption of renewable energy which changes with weather fluctuations



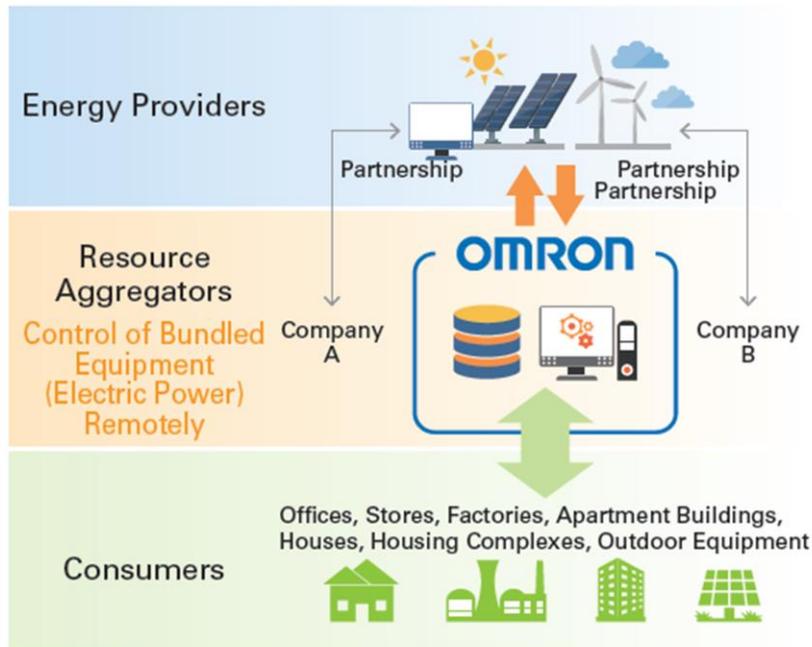
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- Going forward, OMRON will leverage its position as the holder of No. 1 market share in PV inverters and storage systems to contribute to improving the adoption of renewable energy power generation despite the variability due to weather, by balancing power generation and power storage through control technologies.

Looking Ahead to the Near Future

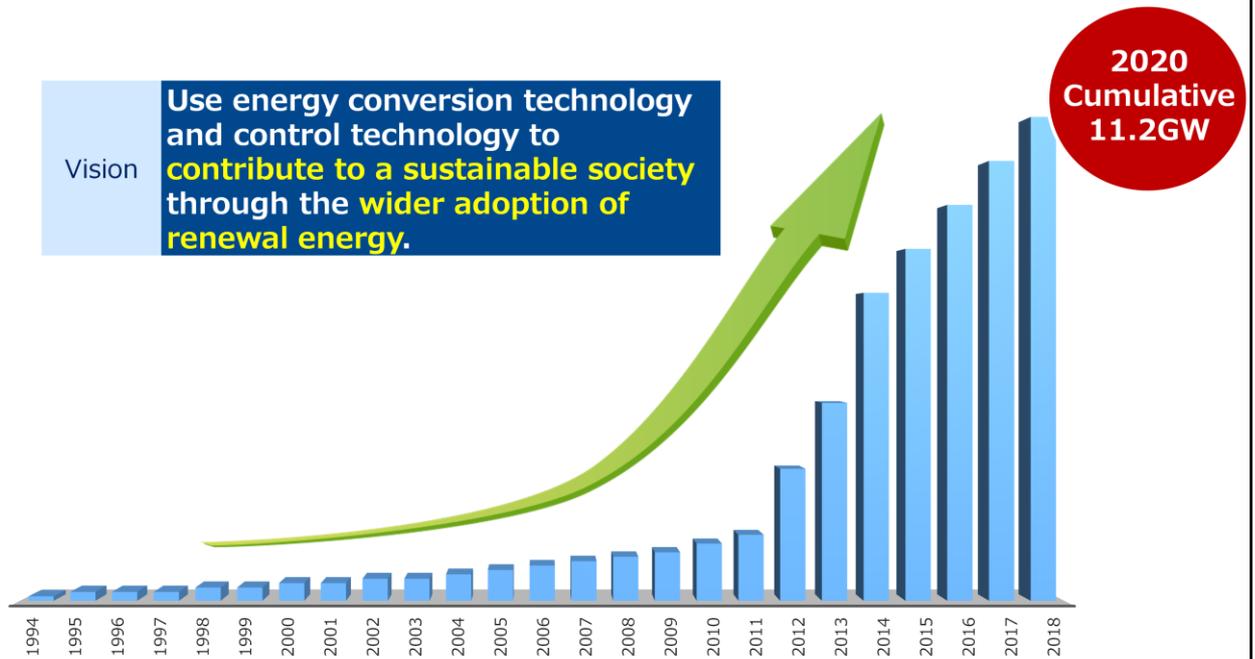
**Link equipment to networks to bundle and control electricity.
Enter the electricity aggregation business using solar power, storage batteries.**



- OMRON also aims to enter the electric power aggregation business, by connecting the installed base of PV inverters and storage batteries into a network, aggregating and controlling electric power generated and stored in solar systems and storage batteries.

Contribute to the Spread of Renewable Energy

Sustainability targets: Aim for 11.2GW by 2020, contributing to the wider adoption of renewable energy



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- OMRON's sustainability goal for energy management is to achieve 11.2GW in cumulative shipped capacity of solar power and storage battery systems by FY2020.
- OMRON will continue to contribute to the creation of a sustainable society by supporting the adoption of renewable energy sources.

OMRON



Reinvigorate Communities Through Renewable Energy!

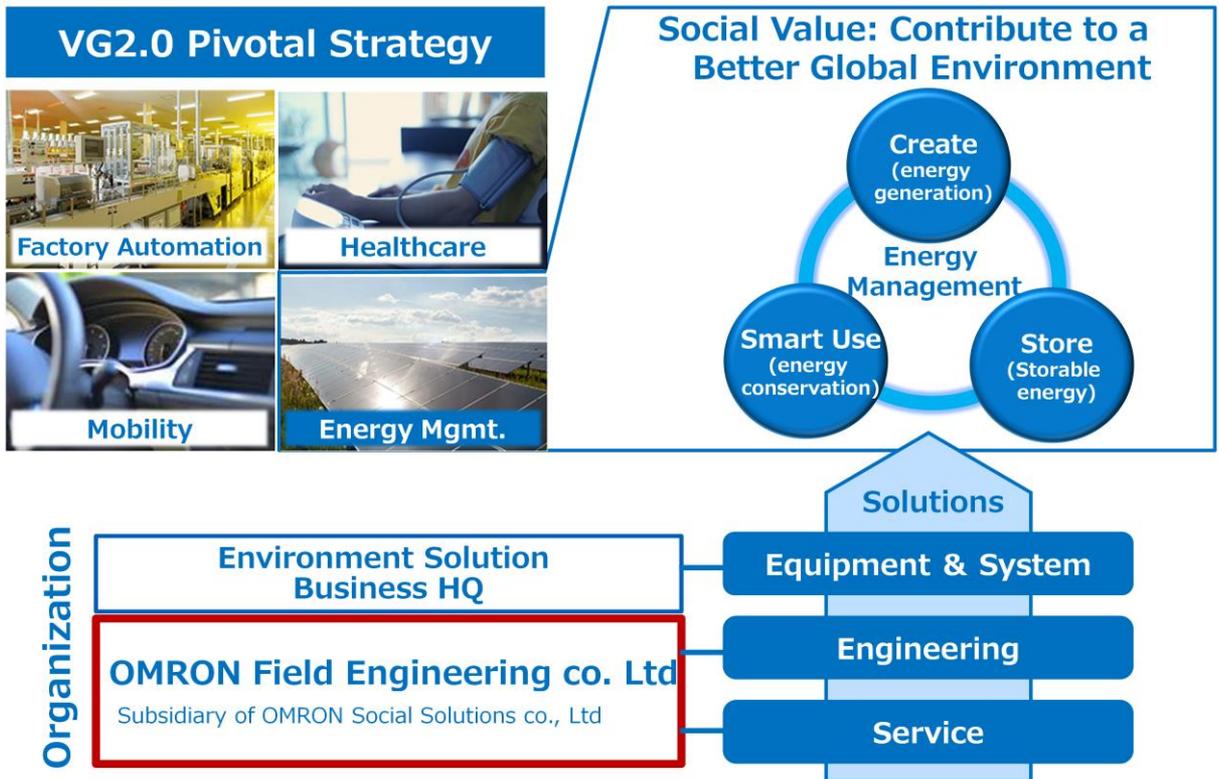
Creating a solar power generation business using idle fields in Miyazu City, Kyoto Pref.

Tetsuya Miyazaki
OMRON Field Engineering Co., Ltd
Energy Management HQ

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- We will now discuss our initiatives to use idle farm land in Miyazu City, Kyoto Prefecture, for solar power generation, through an initiative called 'Revitalizing the Regions with Renewable Energy!'

VG2.0 Pivotal Strategy : Energy Management



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- The business of OMRON Field Engineering (OFE) is Energy Management, which is positioned as one of the focus domains under VG2.0 (current medium-term management plan).
- OFE is a subsidiary of OMRON Social Solutions, which is an SSB business.

OMRON Field Engineering (OFE) Business Domains

- Main businesses in the public sector (rail, traffic, finance, etc.); nearly 50 years of experience of equipment construction and maintenance in highly demanding markets.
- Leverage strengths to improve services in the energy sector



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- Over close to 50 years, OFE had concentrated on maintenance work for railways, expressways and financial institutions.
- OFE has 140 operations bases across Japan and operates on a 24/7 basis.
- OMRON has been able to leverage the strength of this network of locations to provide services in the energy field, as a part of the SSB business.

OFE Energy Management Business

Improving lives and contributing to a better society by solving energy issues

Smart Energy Management Systems
(Smart, rational use of energy through a combination of generation, conservation, and storage)



Buildings

Factories, hospitals, commercial facilities, etc.



Areas

Regions, communities

Energy Management Business

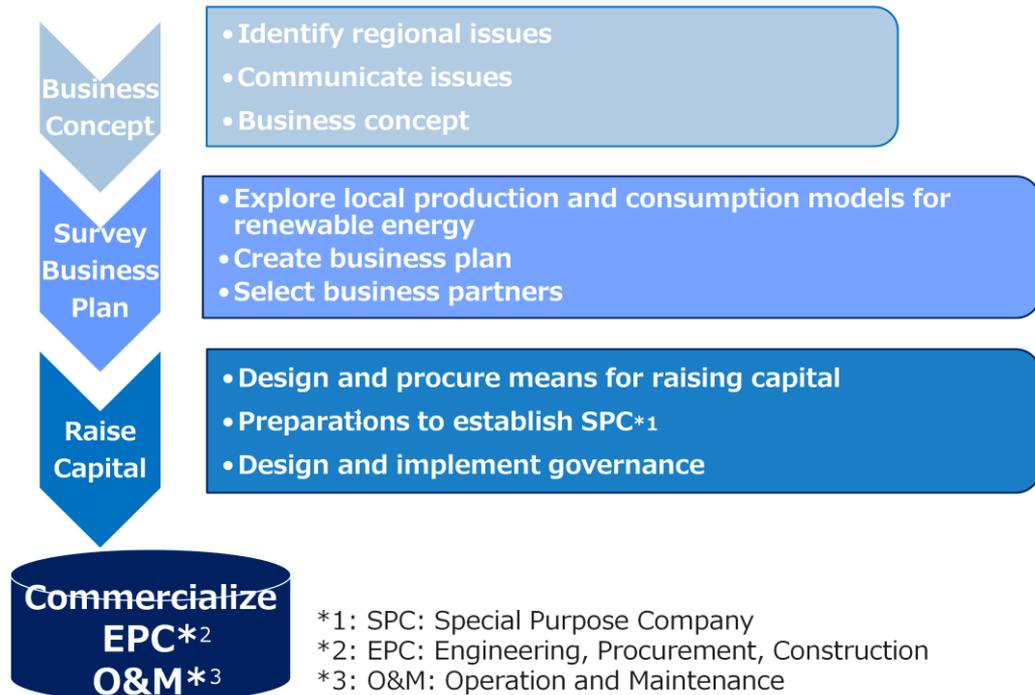
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- OFE's energy management business was originally focused on engineering work to reduce power consumption for factories, hospitals, schools and other physical structures. Specifically, OFE focused on power reduction and capex for HVAC, LED lighting, compressors and other types of equipment.
- OFE now supports its customers to reduce power consumption and adopt renewable energy sources using smart energy management systems, by combining its original business with energy creation and energy storage.
- In addition to providing services for physical facilities, OFE now also provides support for regions seeking to reduce power consumption and adopt renewable energy, through the Area Energy Solution business, which was launched 4 years ago.

Area, Energy Solutions

Work with local governments and companies to commercialize local production and consumption of renewable energy, solving regional issues



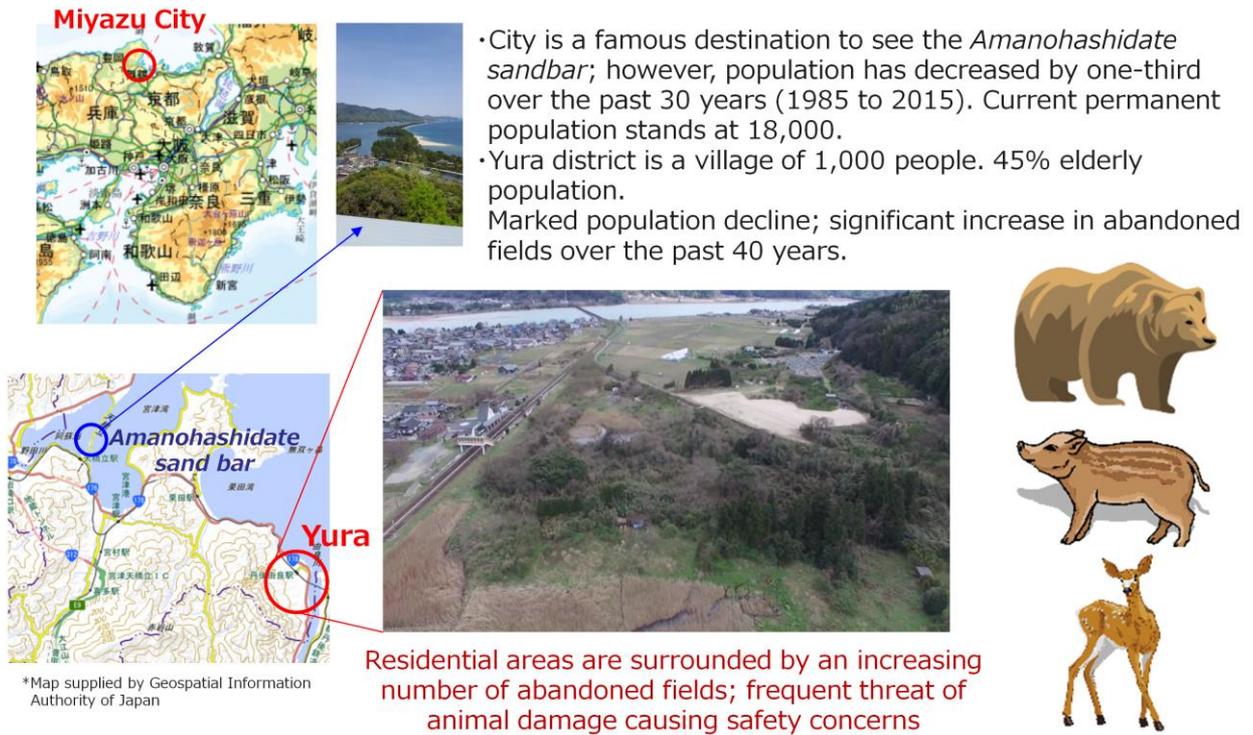
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- The Area Energy Solution business contributes to the energy field not only through conventional engineering but by helping tackle regional energy issues.
- In preparation for commercialization of a project, OFE works with municipal governments and companies based in the region to develop a business plan and secure funding.
- In addition to generating income through its core EPC (Engineering, Procurement and Construction) and O&M (Operations management and Maintenance) businesses, the business model for OFE has benefits for its regional partners. Its first project is the project based in Miyazu City, Kyoto Prefecture.

Issues Facing Miyazu City, Kyoto Pref.

Devastation of idle fields becoming serious issue, burden to the region



Miyazu City

• City is a famous destination to see the *Amanohashidate sandbar*; however, population has decreased by one-third over the past 30 years (1985 to 2015). Current permanent population stands at 18,000.

• Yura district is a village of 1,000 people. 45% elderly population.

Marked population decline; significant increase in abandoned fields over the past 40 years.

Amanohashidate sand bar

Yura

Residential areas are surrounded by an increasing number of abandoned fields; frequent threat of animal damage causing safety concerns

* Map supplied by Geospatial Information Authority of Japan

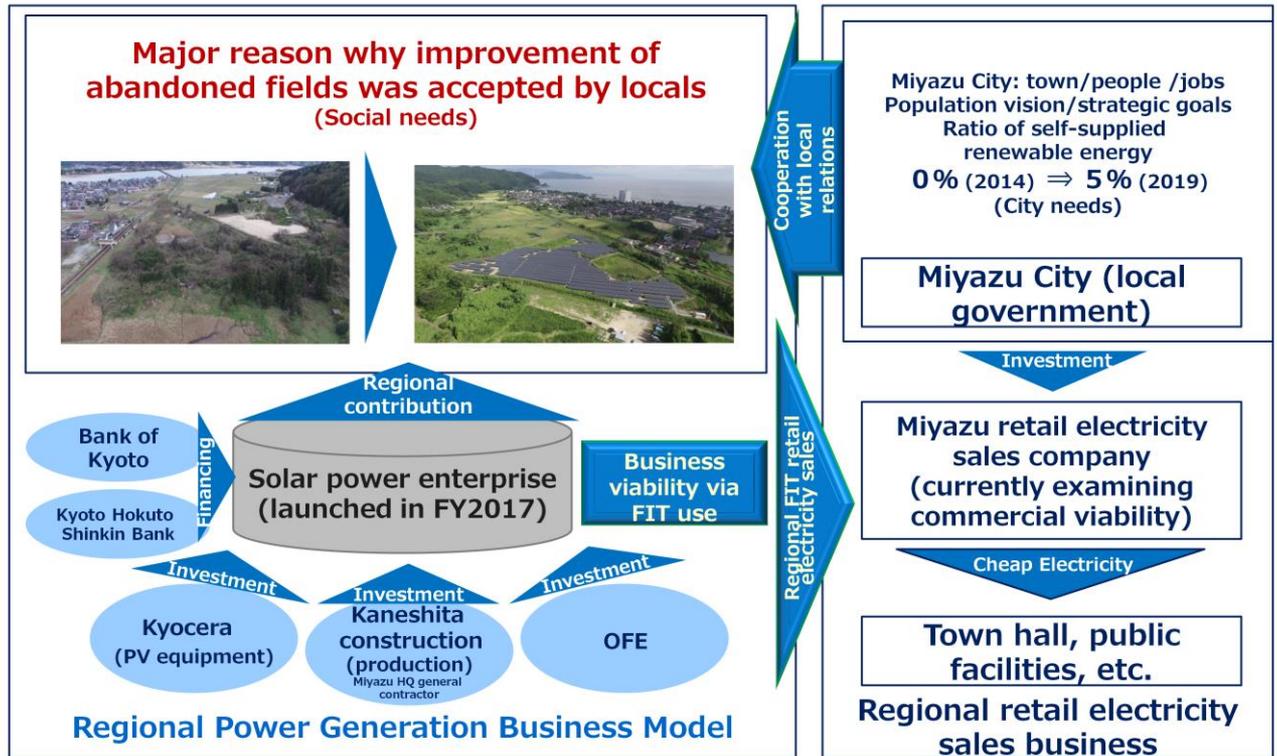
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- Miyazu City is famed for the scenic Amano Hashidate, but is struggling with low birth rates and an aging population. The city is facing a major issue with abandoned farmland.
- On the paved roads that run through the abandoned farm land you can cross paths with bears, wild boars and badgers. Fearing the land could become uninhabitable, the local community approached OFE. OFE proposed the installation of solar panels.

Create Solutions

Solar power generation business using idle fields as a community asset



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- OFE suggested that the installation of solar panels would keep wildlife at bay, addressing the issue of abandoned farmland, while also creating a source of revenue for the community.
- A solar power generation company was set up, with capital from a local contractor, Kaneshita Construction, Kyocera and OFE, and loans from Kyoto financial institutions.
- Currently, Miyazu City is considering selling its power on a retail basis. The success of the project is based on a virtual cycle of energy generation and revenue, where locally generated power is consumed locally.

History of Power Plant Construction

Business viability = construct six power plants (including non-abandoned field locations in Yura) for a total of 5MW to ensure electricity production scale

Yura No.1 Solar Power Plant



Yura North Solar Power Plant (No.1 through No.3)



Upper Miyazu Solar Power Plant



Miyazu City Joshi Solar Power Plant

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- To date, 6 power generation sites have been constructed, including the Yura district.
- Total output is 5MW, enough to provide power to around 1,100 households.

Commercialization Process

- OFE led all commercialization processes, bringing together Miyazu City, landowners, investors, and financial institutions to coordinate the business.
- Major factor for success was conceiving the business with a local government and working together for commercialization with the community.



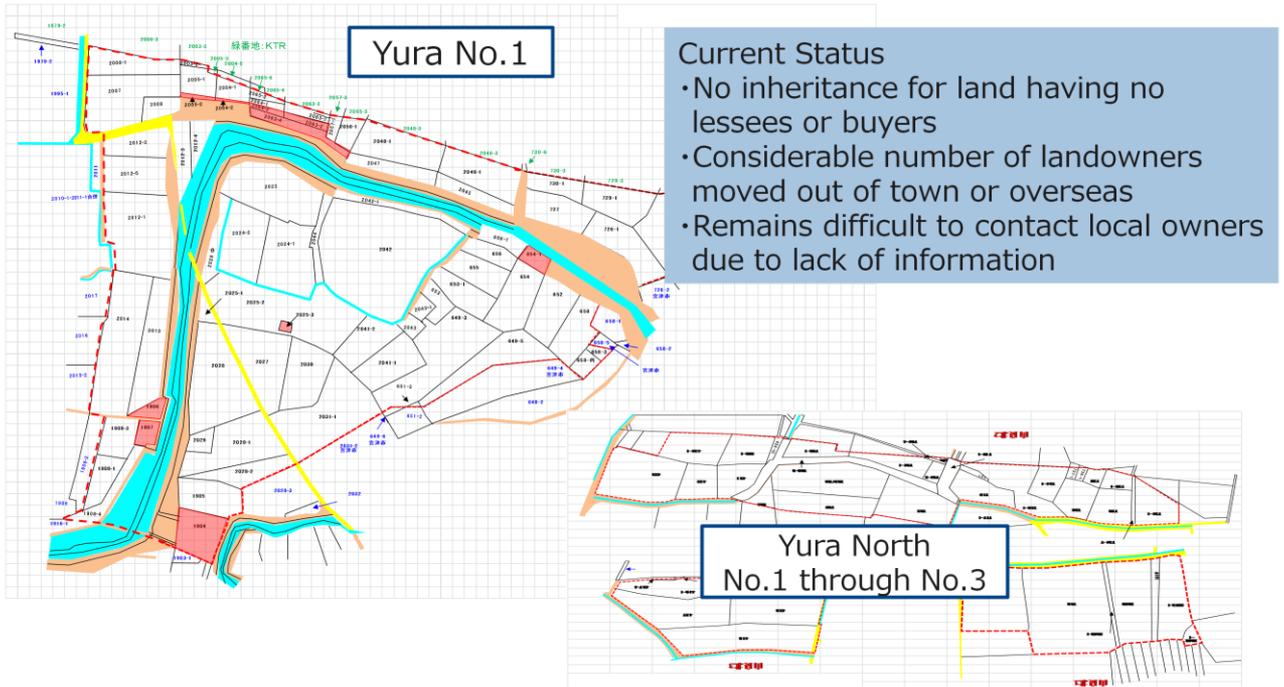
*1 EPC: Engineering, Procurement, Construction

*2 O&M: Operation and Maintenance

- OFE led the project by acting as the coordinator throughout the process of commercialization.
- The key elements of the process were: 1) Securing land; 2) Establishing a business entity and securing funding; 3) Designing and building the facilities.

Success Point (1): Acquire Land

- Lease agreements signed for 140 plots with 100 landowners
- Completed agreements for all plots and registered inheritances as result of painstaking surveys, discussions, explanations, and negotiations.



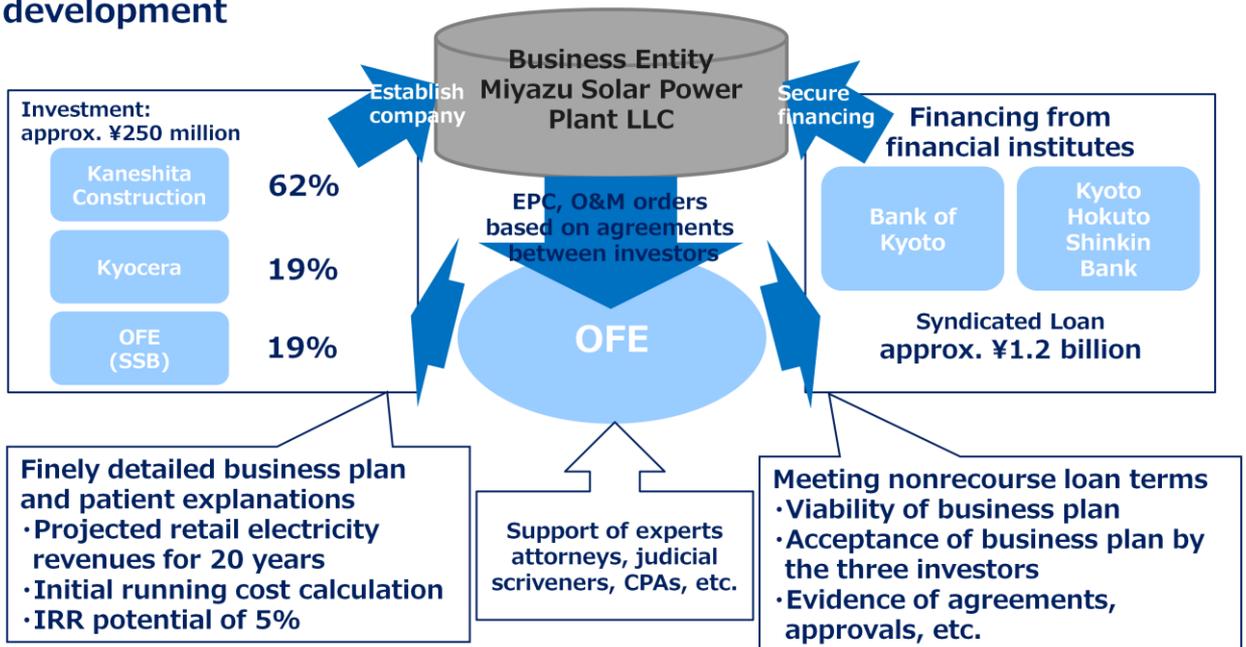
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- In starting a solar power generation business with Miyazu City, the single biggest challenge was securing the land for the power generation facilities.
- All of the farms in question were very small plots, requiring the agreement of numerous landowners and multiple leases. There were many plots of land where contacting landowners was very difficult. It took 1 year to complete all of the leases.

Success Point (2): Business Leadership, Funding

- Due to lack of business leadership, OFE proposed business plan to local companies and financial institutions; succeeded in agreement to establish SPC and passed due diligence for nonrecourse loan
- Major factor for success was a common vision of community development



- The second key element was establishing a corporate entity.
- In order to secure non-recourse financing, the business plan formulated by the 3 stakeholders was subjected to a rigorous feasibility review.

Success Point (3): Facilities Construction (Battle With Nature)

Completed construction safely, overcoming difficult land conditions

Jungle-like trees and weed infestation

Brutally cold winter with **snow accumulation** over 1m

Soft paddy fields and swamp conditions

20-Year Operation

Elevation difference
Park ruins 2m-plus high

Significant **water damage** in the past

*From the Ministry of Land, Infrastructure, Transport and Tourism website

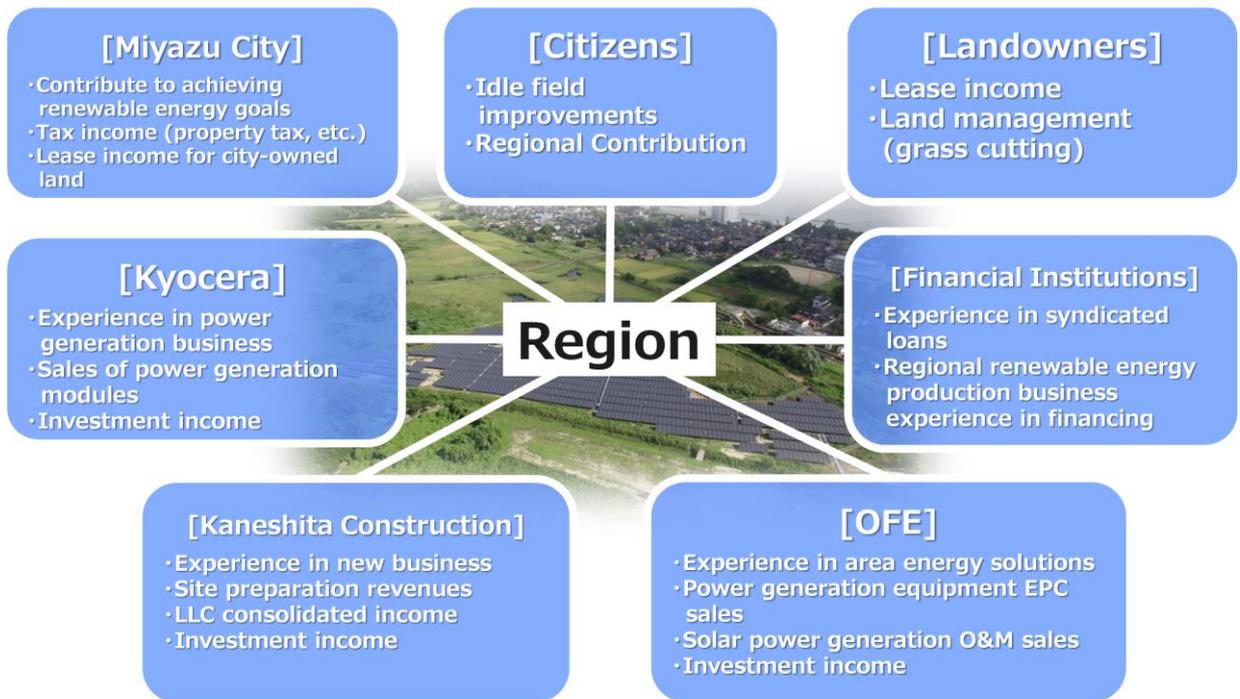
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- The third key element was addressing the challenges of Mother Nature in designing and constructing the facilities. The construction process was very challenging. The area receives significant snow and rainfall. The underlying land had originally been rice paddies. Given the soft soil base, it was necessary to install pilings.
- Despite this, construction was successfully completed.

Value of Initiatives Implemented

Model Offering Benefits to All Parties



- Ultimately, the project not only generated income for OFE, but had benefits for all of the partners and players involved and also addressed a local issue.

And Then : Second-Phase Business

Same three firms opened power plants in seven sites across three prefectures, generating 3.2MW.

Oeyama No.1, No.2 Solar Power Plant



Built **observatory** on top to aid in regional development

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- In Phase 2 of the project, a 3.2MW facility was brought on line in January 2019.
- It is located at the peak of a mountain, on what used to be a skiing area. In response to a request from the local community to put the closed ski resort to good use, OFE built an astronomical observatory at the peak. The region is renowned for its beautiful night skies; we hope it will help bring visitors to the area.

Solving Regional Issues

Working with partners inside and outside the company to resolve regional issues through renewable energy



- OFE's business focuses on combining environmental and energy services with solutions that address the challenges faced by local communities and stimulate the local economy.

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Sustainability Initiatives

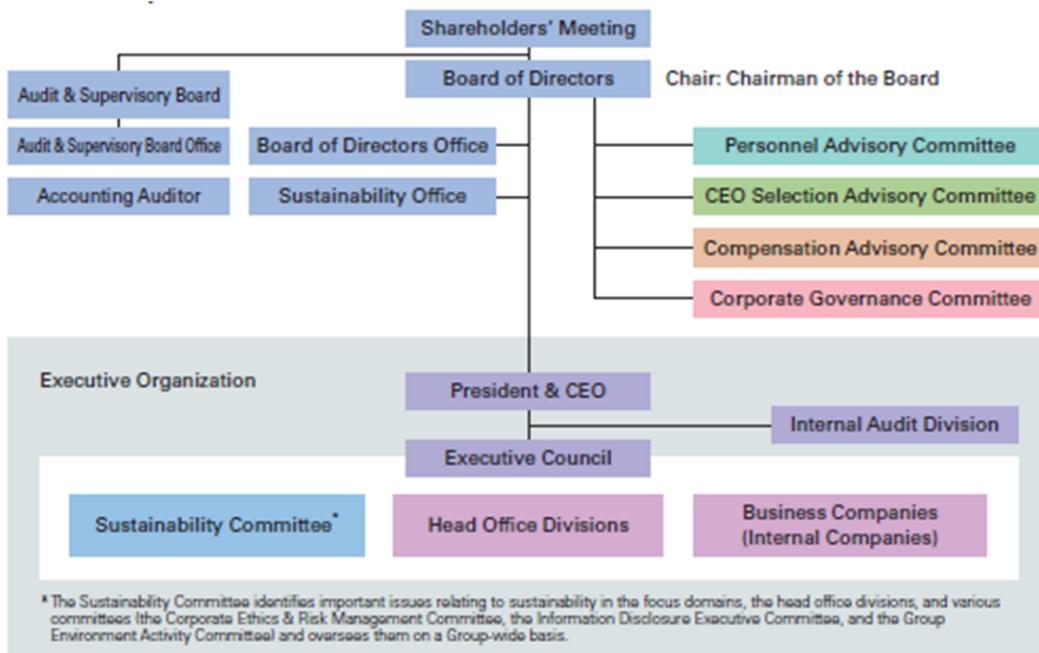
Kashuku Hirao
Senior General Manager
Sustainability Office

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- Finally, we will talk about the big picture for OMRON's progress with its sustainability initiatives.

Sustainability Management Structure

The Sustainability Office reports to the board of directors and is responsible for advancing sustainability company-wide



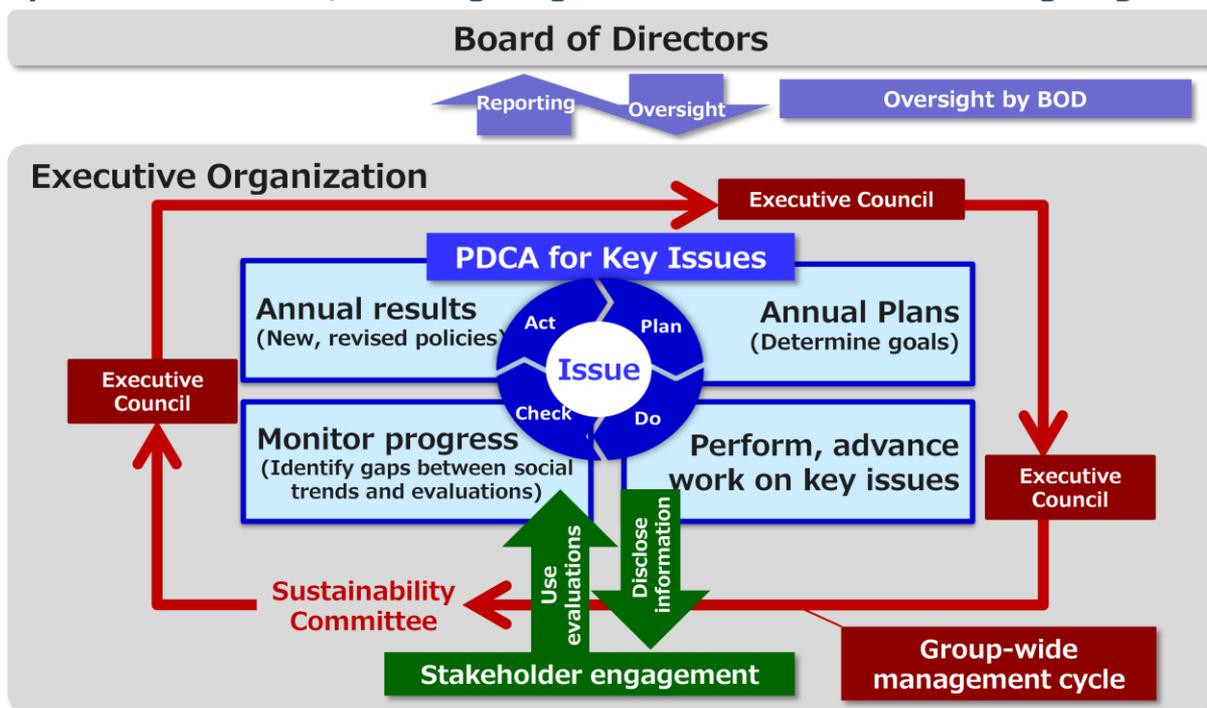
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- The Sustainability Promotion Unit is responsible for sustainability management. It reports directly to the board and is positioned to support the board in its oversight of sustainability initiatives.
- The actual initiatives are executed by the functional division HQs. The Sustainability Committee, which consists of the heads of each division, meets once a year to discuss material issues. Also, executive officers engage in discussions at the Executive Council meetings.

Sustainability Management Structure

The OMRON board of directors has monitoring and oversight for sustainability initiatives. The board identifies social trends and internal corporate conditions, revising targets and initiatives on an ongoing basis.



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- In 2017, when OMRON launched its current medium-term management plan ending in FY2020, it set 15 specific sustainability targets. This diagram shows the management structure in place to ensure that OMRON will achieve its targets.
- The executive reports to the board twice a year. The board also chose to include initiatives on material sustainability issues as a subject for supervision and oversight in its board operating policy for FY2018.
- At the executive level, each division shares its progress on annual targets and specific plans with the Executive Council, which is chaired by the CEO. Where there are issues, the Council also discusses remedial measures.
- In addition, feedback from stakeholders, including assessment agencies, is reflected into the initiatives. OMRON also seeks to ensure its disclosures are appropriate, so that its efforts are appropriately recognized.

Solving Social Issues Through Our Businesses

Red: targets updated or added

Sustainability Targets (Fiscal 2020 Goals/KPI)

Factory Automation

Respond to labor shortages and diversifying manufacturing practices

- Create new products leading to **innovative**-Automation in four focus industries
– Create Controls Technologies for Manufacturing Innovation –



Healthcare

Zero brain and cardiovascular diseases, respiratory diseases

- Blood pressure monitor sales: 25 million units /year
- **Develop analytical technologies to continuously track blood pressure fluctuations**
- Nebulizer + asthma wheeze monitor sales: 7.65 million units/year



Mobility

Reduce traffic accidents, environmental footprint of automobiles

- Create safe driving support systems, technologies
- Create 360° recognition technologies for advanced driving support/self-driving vehicles
- Sales of vehicles with eco-friendly products: **12 million units/year**
(Increase ratio of high fuel efficiency products: 50%)



Energy Management

Promote the use of renewable energy, CO₂ reductions

- Cumulative shipped capacity of solar power/storage battery systems: 11.2GW
- **Build the energy resource aggregation business using PV/storage system (Japan)**



*See the OMRON corporate website for more. https://www.omron.com/about/sustainability/omron_csr/tasks_goals/

- Through the structure shown on the previous page, OMRON is currently reviewing and updating its sustainability targets and initiatives, in preparation for FY2020.
- OMRON's sustainability targets for its sustainability issues fall into 2 categories. The first are 'social issues that can be resolved through OMRON's business'. The items in red are the FY2020 targets that were either revised in FY2018 or newly added.
- In HCB, by adding a new sustainability target of developing technology to continuously measure BPM, OMRON was able to clearly state its intent to contribute to achieving Zero Events (zero cardiovascular events) through technology.
- Reflecting progress and changes made to business plans, OMRON has also revised its sustainability targets for mobility and energy management.

Issues Responding to Stakeholder Expectations

Red: targets updated or added

Human Capital Management

- Talent Attraction and Development
- Diversity and Inclusion
- Wellness Management
- Occupational Safety and Health
- Respect for Human Rights and Labor Practices

Sustainability Targets (Fiscal 2020 Goals/KPI)

- Continue expanding TOGA¹,
- Accelerate the PDCA implementation via employee engagement surveys
- Ratio of women in managerial roles (Japan): 8%
- **Improve awareness of wellness management² (company-wide awareness of Boost5^{3,4})**
- International OSH⁴ certifications: At sites representing 80% of production capacity
- Define and adopt due diligence processes for human rights



Manufacturing/Environment

- Product Safety and Quality
- Supply Chain Management
- Reduction of Greenhouse Gas Emissions
- Appropriate Management and Reduction of the use of Hazardous Substances

- Produce safety assessments for newly developed products: 100%
- **Improve product safety assessments**
- Sustainability self-checks at partner suppliers: 100% implementation; score of 85 points or higher
- **Reduce GHG emissions by 4% (vs. fiscal 2016, SBT conformity⁵)**
- Reduce mercury through the adoption of digital thermometers and digital blood pressure monitors: 69 tons/year



Risk Management

- Fair Business Practices
- Information Security, Personal Information Protection

- Promote OMRON Group rules in all global bases
- Global training for ethical conduct
- Build a new information security system

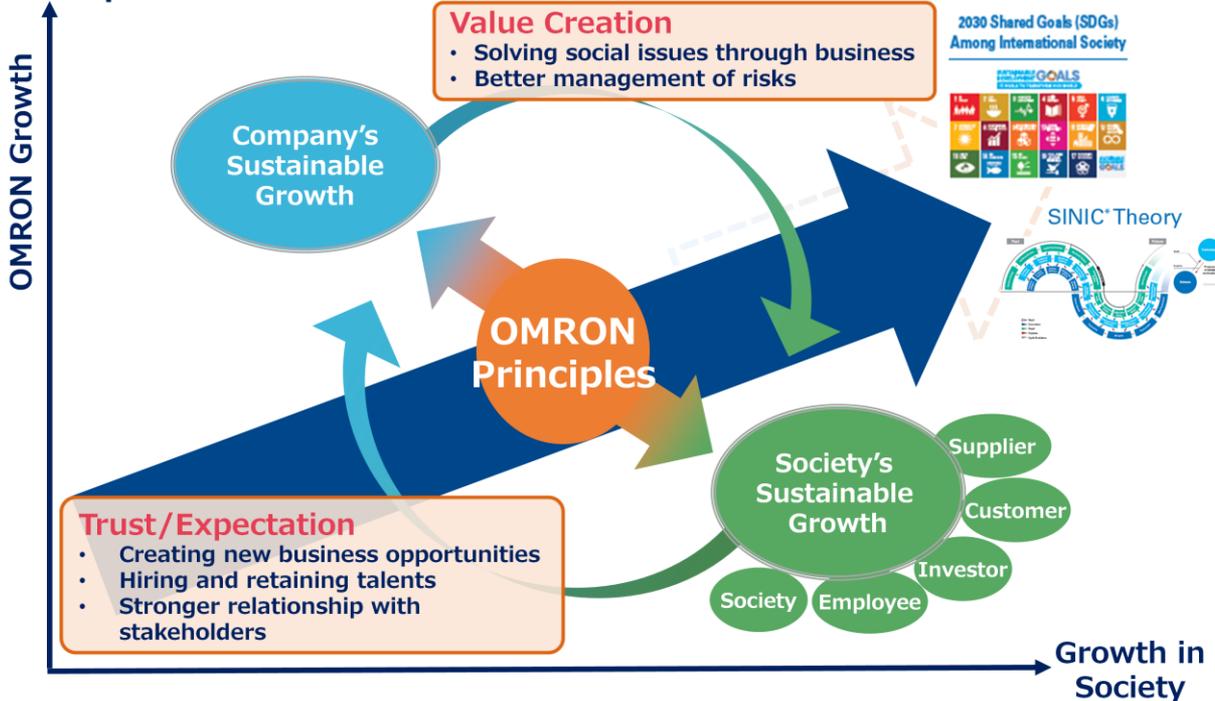


*See the OMRON corporate website for more. https://www.omron.com/about/sustainability/omron_csr/tasks_goals/

- The other category of sustainability issues concerns the sustainability targets related to 'responding to stakeholders' expectations'. These targets are related to the areas of human capital, manufacturing, environmental issues and risk management.
- In the area of human capital management, we have changed our FY2020 target to reflect the initiation of the Boost5 program to encourage greater health consciousness and behavioral changes amongst employees.
- In manufacturing, we set a new target to further enhance product safety assessments reflecting the expectations of our customers and stakeholders. In the environmental area, as highlighted earlier in the presentation, we have changed our 2020 target in light of the new Carbon Zero target for 2050.

Sustainability Vision to Be Led by Principles

Strive for sustainable OMRON corporate value growth and sustainable social development from a global perspective, based on the OMRON Principles



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- This diagram shows how OMRON aims to make further progress on promoting sustainability, centered on the OMRON Principles.
- We believe OMRON's employees are increasingly motivated to participate in sustainability initiatives since the start of our efforts in 2017. It can be difficult to see the social value created by OMRON because it is primarily a B-to-B business. We believe the sustainability targets do contribute toward helping visualize OMRON's contribution.
- OMRON faces many issues but by engaging deeply with stakeholders and leveraging feedback, we will strive to make further progress.

External Evaluations

Win both prestigious Social and Governance awards in Japan.

- Selected for Health and Productivity 2019 Recognition
- Winner of the Corporate Governance of the Year 2018 Minister of Economy, Trade and Industry Award



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- Three notable events related to sustainability
(announced Feb 22, 2019)

1) Selected for the first time as a Health & Productivity Stock
<https://www.omron.co.jp/press/2019/02/c0222-1.html>

2) Received Corporate Governance of the Year 2018,
METI Minister's Award for Corporate Governance of the Year
<https://www.omron.co.jp/press/2019/02/c0222-2.html>

Reaching for Higher Levels of Sustainable Corporate Value

To reach higher levels of corporate value, we will continue to analyze the risks and opportunities related to climate change and disclose information.

- We have expressed Our Support of the Proposals of the Task Force on Climate-related Financial Disclosures (TCFD)



News Release **OMRON**
オムロン株式会社
ブランドコミュニケーション部
IR・CSR推進グループ
2019年2月22日

**「気候関連財務情報開示タスクフォース (TCFD)」
提言への賛同を表明**

オムロン株式会社(本社: 京都府京都市、代表取締役社長: CEO 山田純司)は、金融安定理事会 (FSB) により公表された「気候関連財務情報開示タスクフォース」(以下「TCFD」)の提言への賛同を表明しました。

オムロンは、気候変動が長期的な持続的成長への影響を及ぼすことを認識し、TCFD の提言に基づき、気候変動が事業に与えるリスクを適切に把握し、開示する情報開示を進めています。

オムロンの気候変動に関する取組みについて

オムロンは、グローバルの課題である気候変動に対し、企業として責任を全うするため、企業理念にある社会貢献の観点で、日々の活動を通じて、2050年「社会をつくりしよ」の実現に向けて取り組んでいます。中期経営計画(VISION 2030)「2027年～2030年」において、デジタル化の推進と環境改善を、7つの社会貢献目標と目標(非財務目標)を設定し、グローバルで取り組んでいます。2018年7月には、2050年までに温室効果ガス排出量をゼロを目指す長期の環境目標「オムロン・カーボンゼロ」を設定し、推進に向けた活動を進めています。

気候関連財務情報開示タスクフォース (TCFD) について

TCFD は Task Force on Climate-related Financial Disclosure の略で、主要国の中央銀行や金融規制当局などが参加する国際機関であるFSB によって設立されたタスクフォースです。銀行、金融機関や企業、政府など世界中心に550を超える機関がTCFD の提言に賛同しています。

TCFD Task Force on Climate-related Financial Disclosure

＜オムロンの株式会社について＞
オムロン株式会社は、独自の「シンキング&コントロール=Think」技術を中核としたオートモーティブのリーディングカンパニーとして、自動車、電子部品、産業機械部品、社会インフラ・ヘルシケア、健康と生活にわたる事業を展開しています。2018年業績(連結)は売上高 1兆5,000億円、営業利益 2,000億円、純利益 1,117億円です。株主総数は約1億7,000万人です。詳細については <https://www.omron.co.jp> をご覧ください。

■ 本件に関する報道関係者へのお問い合わせ先
オムロン株式会社 ブランドコミュニケーション部
IR/デジタルコミュニケーション 木村 佳奈子 / 安井 一言
TEL: 075-344-7125
E-mail: kanako.kimura@omron.com / kazunori.yasu@omron.com

3) Statement of support for the Task Force on Climate-related Financial Disclosures (TCFD) Recommendations

<https://www.omron.co.jp/press/2019/02/c0222-3.html>

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