IR DAY 2020



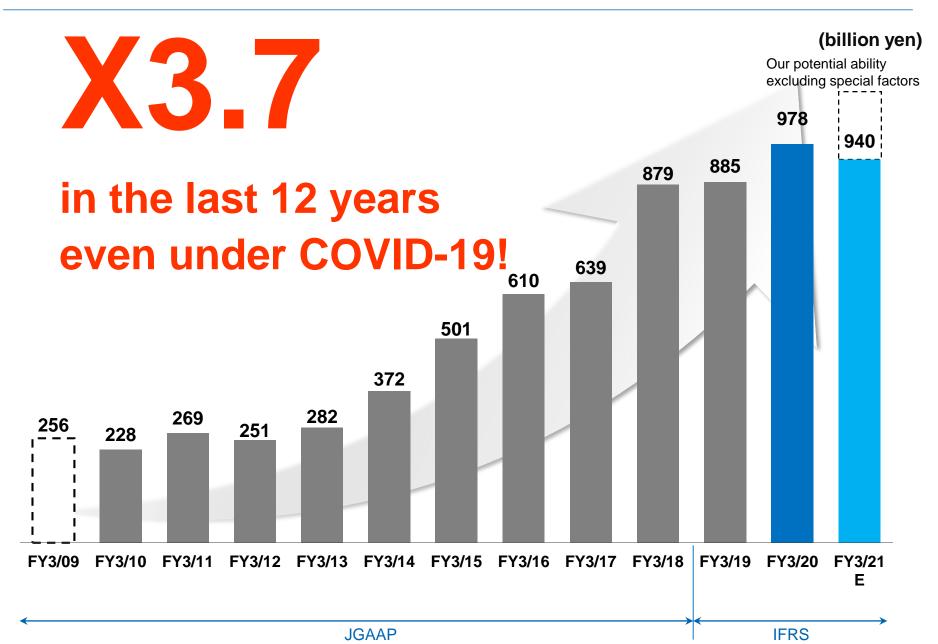
## Today's Summary and ESG Activities which Support our Growth December 3, 2020



## Yoshihisa Kainuma

Representative Director, CEO & COO



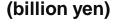


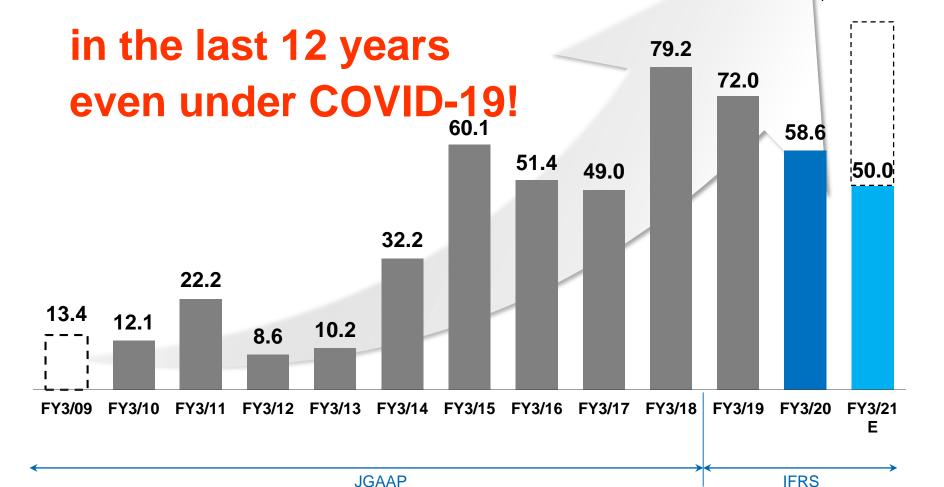
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Our potential ability excluding special factors

**X3.7** 





## **Review of the Last Decade**



## Made a giant leap forward via M&As and organic growth

**Clear business categorization** 

Core businesses: Strengthening with ultra-precision and ultra-high quality

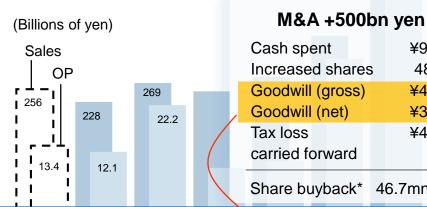
Sub-core businesses: Cash cows for maximizing profit

**Portfolio restructuring** 

Business portfolio that creates synergy

**Aggressive M&As** 

All 19 M&As succeeded, accumulated PMI know-how



#### Organic +243bn yen

Machined comp. +¥36bn Motor +¥118bn Elec device +¥92bn Others (¥3bn)

> **OP** grew mainly from organic!



940

Negative goodwill (¥14.6bn)

\*Including 20mn shares from CB

Past decade

Present

¥95bn

48mn

¥45bn

¥30bn

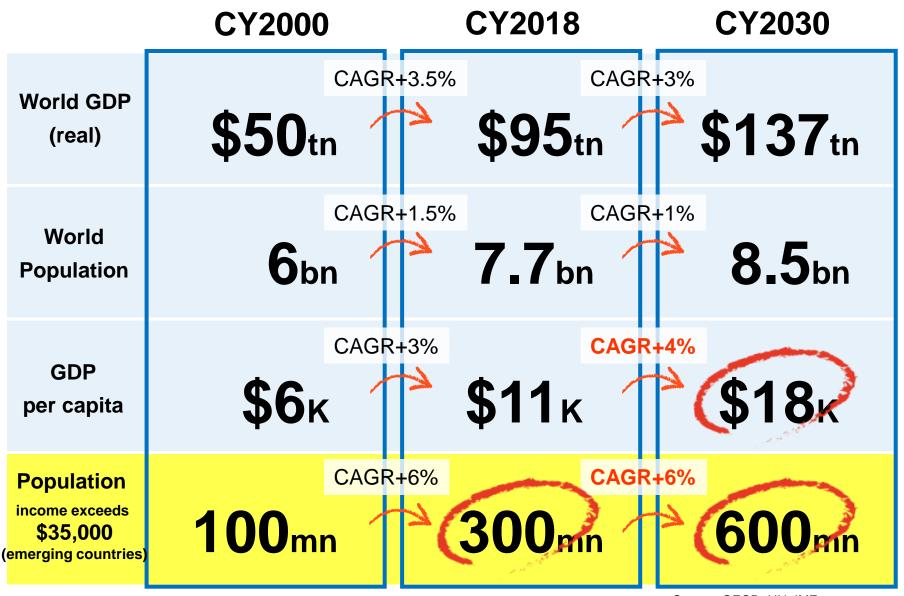
¥40bn

46.7mn

## **Macro Transition**

From the Investor Meeting Presentation on May 8, 2019





## **Basic Strategy for the Next Decade**

From the Investor **Meeting Presentation** on May 8, 2019

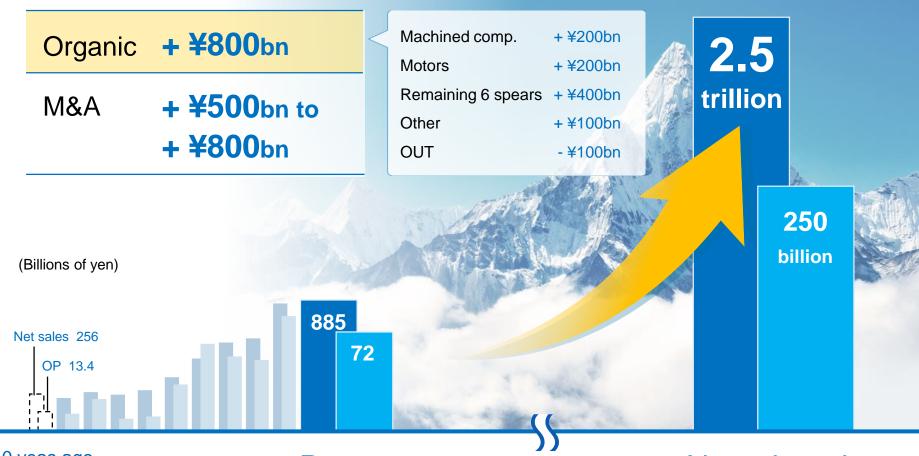


## Organic growth (mainly) & aggressive M&As boost businesses

Next decade CAGR Sales +11% TOP +13% TOP +13%







10 yeas ago

Present

Next decade (Image)

## Examples of new products to raise profits from the next fiscal year









Resolver for traction motor



Large-scale SOP\* in '21



Cooling fan for rechargeable battery



DC motor

World Smallest SOP\* in '21





Small 6-axis force sensor

**ABLIC** 

nquiries increase

Batteryless leak sensor







Fan and control

IC for server



Wavy Nozzle



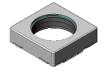


GRATION

For server

High power, high accuracy, low current consumption

home electronics



Ultrasonic motor OIS actuator

For eye massager

security units

devices



Resonant device

Motor, battery IC for fan jacket



Fan jacket

Super fast Space saving



**Dust/waterproof USB** Type-C connecter

## **ESG Summary**



## MinebeaMitsumi's Sustainability

We believe that diversification serves as the essence of sustainability, premised on the notion that sustainability acts as the starting point of business management. We will not be significantly damaged as a whole even under various changes in situation of specific sales area thanks to our focus on diversified product portfolio. The Company builds and refines multifaceted and decentralized frameworks across areas that include manufacturing sites, markets, technological development, in addition to products, in a manner whereby such frameworks act as a source of the Company's competitiveness. Our policy is to boldly invest our business resources in a manner that reinforces our efforts relating to the environment, society and corporate governance, encompassing execution of such business activities.

## **POINT**

- Our products themselves contribute to realize sustainable society.
- Production method also aims for maximum efficiency.
- Contribute to reduction of power consumption by downsizing products.
- **Examples of power consumption reduction** by our precision parts (ball bearings).
- Our company also develops with the growing demand for ultra-high quality and energy saving.

## MinebeaMitsumi Green Products



## Almost all our products are environmentally friendly products Contribute to saving energy and space

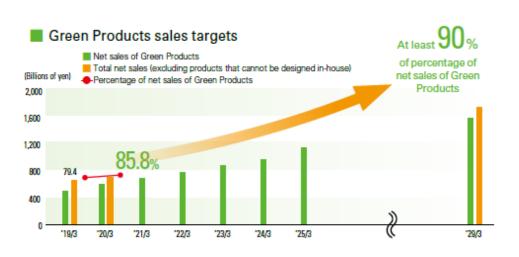
Through our corporate activities,

create products that contribute to energy conservation and global environmental improvement



For these products that are particularly environmentally friendly, certifies them as MinebeaMitsumi Green Products

#### ⇒Set target as an important KPI







Our high-quality bearings greatly contribute to reducing CO<sub>2</sub> emissions!

Reduce

million tons





Total <u>reduction amount</u> of CO<sub>2</sub> emissions with using our bearings in the server FAN motors during their product lifetime.

approx. Total 0.8 million tons



CO<sub>2</sub> emissions of the Company as a whole (FY3/20 results)

Reduce more CO<sub>2</sub> than our annual emissions by producing one year's amount of bearings for FAN!

(Estimated by the Company)

Annual shipment volume of bearings for FAN: 700 million units (expected for FY3/21)

Number of bearings per one FAN: 2

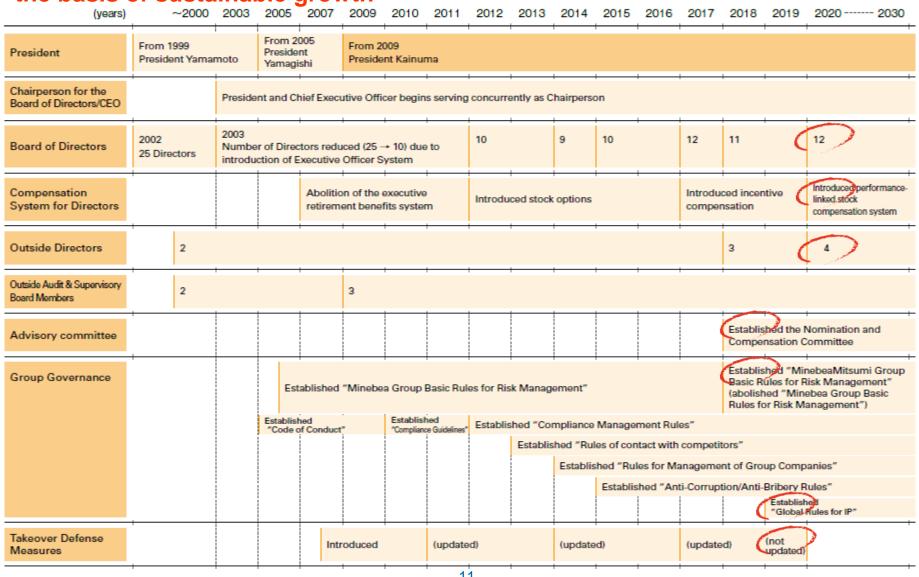
Power consumption reduction per one FAN: 1.23 kWh/year (according to our research, compared with the FAN using bearings made by other company) FAN Product Life: 5 years (24/7)

CO2 emissions figures: 0.496 kg/kWh (from the Ministry of the Environment)

## History of corporate governance revolution



Continue to enhance and reinforce the corporate governance, which will be the basis of sustainable growth



## Infrastructure Business and Social Initiatives



## **Active contribution to SDGs through "INTEGRATION"**







### Delivery of 15,000 road lights in Cambodia

- Installation of LED road lights by wireless control
   Phnom Penh, Siem Reap, etc.
- Dimming management and centralized monitoring service
- •50,000 road lights worldwide in the near future

# Approx. 90% power reduction compared to mercury road lights

(Cumulative)

## Social demonstration test of wireless power supply with Kyoto University cf. p24

- Comprehensive verification of operations of the infrastructure monitoring system
- •Compact, highly sensitive, ultra-low power consumption type strain gauge, the MINEGE™ is used for the sensor

# **Economical and efficient maintenance of social** infrastructure

(Press release on October 9, 2020)

Demonstration experiment to improve the accuracy of weather forecasts with Japan Weather Association

- cf. p23
- •Analyzing the sensor information of smart lighting in real time
- Utilization of environmental sensor as an IoT small weather sensor

Improve the accuracy of weather and solar radiation forecasting for energy optimization

(Press release on October 29, 2020)

## Demonstration Experiment in Osaka using LED Streetlights with Sensors

- Collectively monitoring functions related to urban life
- ➤ Various sensors (environmental, parking, etc.)
- ➤ Surveillance cameras, etc.
- •Monitor the environmental conditions around the road, traffic volume, flood water on the road, etc.

Enhance convenience and improve safety for urban life, and optimize energy

(Press release on August 31, 2020)

## **Utilization of Renewable Energy**



Install one of the largest scale of solar panels in Thailand on the rooftop of factories to reduce environmental impact, CO<sub>2</sub>, and costs

**Bang Pa-in Plant** 



**Lop Buri Plant** 



Total installation area

30,000m<sup>2</sup>

Power generation capacity

5 megawatt

Contributing to the promotion of renewable energy and the realization of a sustainable society.

Contribution to the SDGs







## Our business activities and products themselves are SDGs. Achieving the SDGs goals and our sustainable growth are two side of the same coin.

#### The 17 Goals of SDGs

#### **Examples of our initiatives**





NO POVERTY

ZERO HUNGER

- MinbeaMitsumi has employed a total of approximately 600,000 employees in Singapore, Thailand, China, Cambodia and the Philippines. We created huge amounts of jobs, including business with external partners involved in our company, such as vendors, logistics, security, and cafeterias.
- Continuous improvement in wages.
- In impoverished and areas where majority of people are employed in agriculture, we provide employees with not only basic training on employment rules and work standards but also pave the way to enhanced selfreliance through educational initiatives focused on issues of hygiene control as well as food, clothing, and shelter
- By working at MinebeaMitsumi, employees become enriched, and neighboring residents and relatives who hear about it also become enriched by working with us, and finally the entire local community will be enriched.





After: Employee A's home (After working at Cambodia factory)



(Before working at Cambodia factory)



After: Employee B's home (After working at Cambodia factory)



#### The 17 Goals of SDGs

#### **Examples of our initiatives**



GOOD HEALTH AND WELL-BEING

- We supply bearings, various motors, sensors, power supplies, semiconductors, connectors, etc. to various medical devices such as ventilators and cardiopulmonary bypass devices.
- Donated 220,000 N95 masks and other medical supplies such as goggles, faceguards, clean suits, hoods, nitrile gloves, gauze, etc. to 150 organizations.
- Started producing masks and through hygiene education etc. to fulfill our supply responsibility with preventing external infection damage and ensuring employee safety. 23 million masks produced from April to November!

Continue our efforts to suppress the external damages caused by the virus, ensure the safety of our employees, and fulfill our responsibilities to supply products as a parts manufacturer in all business activities, including production and sales activities.

- Medical offices and full-time doctors are stationed at each plant to create an environment where employees can work in good physical and mental health.
- At factories in Asia, pharmaceuticals are provided free of charge to employees.
- Hygiene management and enhancement of dormitory facilities. (Air conditioning, meals, etc.).
- For children who lost their parents in the Great East Japan Earthquake, tuition fees until graduation from junior high school are provided every year without obligation to repay them as funds for raising funds.(14 years)



Donation of N95 masks to German medical institutions



MinebeaMitsumi Masks



Production of MinebeaMitsumi masks



Dormitories in Cambodia



#### The 17 Goals of SDGs

#### **Examples of our initiatives**



#### QUALITY EDUCATION

- In areas where the level of primary education has problems, we run
  education schools in their native language and contribute to
  improving literacy.
- Offer scholarships for science and engineering students in Minebea Thailand and support for education and research institutions. (Have supported higher education for a total of approximately 3,000 students)
- Support higher education through donations to more than 100 universities in Japan every year. (Takahashi Industrial and Economic Research Foundation)
- Support students in improving their skills in cooperation with a nearby vocational training school in Mexico.

The trust and cooperation of government, local communities, and employees have helped us continue to operate in a harsh environment caused by COVID.



DECENT WORK AND ECONOMIC GROWTH

- Trust-type Employee Shareholding Incentive Plan (E-Ship®) was implemented, and the average distribution per subscribed employee was as follows.
  - 1st E-Ship (Nov'09-Apr'12): approx. 10,000 yen 2nd E-Ship (May'12-Jan'19): approx. 1 million yen
- Selected as One of the 100 best Employers in Germany's Best Employers competitions 2020.
- Established **various award systems** (team building awards, president's awards, etc.).
- Group executive officers promote motivation as a career model for local employees.



Khmer Language Classes (Cambodia)



Scholarships (Thailand)



Mexican Vocational Schools



Excellent Employee Award (Cambodia)



#### The 17 Goals of SDGs

#### **Examples of our initiatives**



GENDER EQUALITY

- Continuous improvement of women's participation
- 2 female directors (of 12 directors)
- 2 female Group executive officers (of 14 group executive officers)
- 50,000 female employees (64% of total employees)
- 430 Female managers (15% of total managers)

We expand opportunities for women to play an active role according to the characteristics and abilities of our operations, and provide a stable supply of highquality products to customers around the world.



Ball Bearing Division
Succession of skills over three
generations



A team that aims to actively recruit women



Round-table discussion by female employees



Team building activities by multinational teams



REDUCED INEQUALITIES

- We develop excellent human resources without regard for gender, nationality, cultural background, or previous company.
- --> Revitalize organization by the group's executive officer system and shifting position after business integration.



#### The 17 Goals of SDGs

#### **Examples of our initiatives**



CLEAN WATER AND SANITATION

- Sewage treatments plant are fully equipped at the factory.
- Mineral water is provided in the factory.
- Started operation of plant wastewater zero system.
- Maintaining discipline, including hygiene education, and promoting awareness-raising activities.



Shanghai Plant Wastewater Treatment Center



AFFORADABLE AND CLEAN ENERGY

- Establishment of the "Green Products Certification Program".
- Efforts for continuous drastic electricity cost reduction, such as investments in environmental measures.



One of the largest solar panels in Thailand (Bang Pa-in Plant)



#### SUSTAINABLE CITIES AND COMMUNITIES

- Contributing to a sustainable society through the installation of solar panels, etc.
- Development of smart cities in various countries using smart products (various sensors, smart street lights, etc.).



**Smart City Solutions** 



#### The 17 Goals of SDGs

#### **Examples of our initiatives**







CLIMATE ACTION

LIFE BELOW WATER

LIFE ON LAND

- We will introduce a state-of-the-art plant wastewater zero system that completely recycles and reuses factory wastewater, and realize the ultimate energy-saving plant by utilizing all kinds of technologies such as LED lighting and the use of heat shield paint.
- Installed **one of the largest solar panels** in Thailand in the rooftop space of the Thai factory building.
- Declared support of the TCFD recommendation and strengthen initiatives including information disclosure.
- "INTEGRATION" of 8 spear products = "Energy optimization"



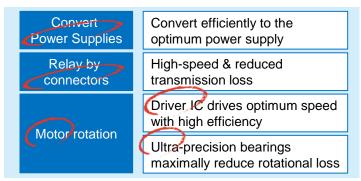
LED lights Installation at plants.



Declared support for the TCFD recommendations

# When something moving

Electric signal



Reduce power consumption

To the best efficiency

Almost all of our products are environmentally friendly products, and by developing and selling them, we contribute greatly to the improvement of environmental issues such as global warming and waste reduction.



#### The 17 Goals of SDGs

#### **Examples of our initiatives**



- We provide a large number of products in areas where cutting-edge technology is required.
- --> Cutting-edge small robots, such as AI robots, are treasure trove of our ultra-precision parts.





Small 6-axis force sensor



RESPONSIBLE
CONSUMPTION AND
PRODUCTION

- "CSR Procurement Self-assessment Checklist" are distributed to major business partners and 100% collected.
- Cambodia plant presented about their "plastic waste reduction program" at the international forum.



PEACE, JUSTICE AND STRONG INSTITUTIONS

- Established the "Anti-Corruption/Anti-Bribery Rules" based on the laws of each country.
- MinebeaMitsumi Group has established a "Policy on Conflict Minerals" and requests suppliers to respond.



Promotion of waste plastic activities at United Nations Development Programme (UNDP)



Demonstration experiment in Osaka using MinebeaMitsumi's LED streetlights with sensors



PARTNERSHIPS FOR THE GOALS

- In order to realize a sustainable society, we have concluded partnerships with various companies, organizations, universities, etc.
- --> Japan Weather Association, Kyoto University, Keio University, Osaka Prefecture, Suginami-ku in Tokyo, etc.
- In collaboration with numerous local governments and universities around the world.
- NMB-Minebea Thai received CSR-DIW Continuous Award Year from Thailand's Ministry of Industry for the 11th consecutive year.



Any statements in this presentation which are not historical are future projections based on certain assumptions and executive judgments drawn from currently available information.

Please note that actual performance may vary significantly from any particular projection due to various factors.

Factors affecting our actual performance include but are not limited to: (i) changes in economic conditions or demand trends related to MinebeaMitsumi's business operations; (ii) fluctuation of foreign exchange rates or interest rates; and (iii) our ability to continue R&D, manufacturing and marketing in a timely manner in the electronics business sector, where technological innovations are rapid and new products are launched continuously.

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# Reference



# Japan Weather Association and MinebeaMitsumi Aim to Improve Prediction Accuracy of Weather Information by Utilizing Smart Lighting Data

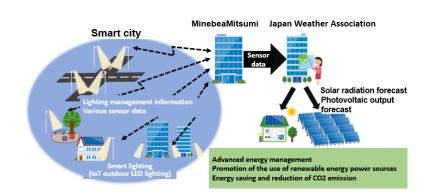
Japan Weather Association and MinebeaMitsumi Inc. are working together to improve the accuracy of weather forecasts by utilizing "smart lighting data". As one of the practical efforts, we started a demonstration experiment for improving the accuracy of solar radiation / photovoltaic output forecasting from September 2020 to March 2021.

\*a demonstration experiment in "operations related to improving the accuracy of solar radiation forecasting using smart lighting data"

This was commissioned by Mitsubishi Research Institute, Inc., the leading operator, that conducts the "Year 2020 Consignment Business on Examination and Verification regarding Measures for Establishing a Digital Data Infrastructure Utilizing the Existing Infrastructure in Region (Street Lights, etc.)" publicly solicited by the Ministry of the Environment, Government of Japan.

In this demonstration experiment, we use smart lighting that combined "high-efficiency LED street light with wireless function" and the "environment sensor" originally developed by MinebeaMitsumi. Data is collected by MinebeaMitsumi and JWA analyze data and verify the possibility of improving the accuracy of solar radiation prediction.

MinebeaMitsumi and JWA have been studying how to utilize this environmental sensor as an IoT small weather sensor. Using a development stage prototype, we conducted field observations and long-term observation tests and confirmed that good results can be obtained.





## Kyoto University and MinebeaMitsumiStarted Social Demonstration Test

with Wireless Power Supply

MinebeaMitsumi and Kyoto University conducted social demonstration test with wireless power supply in October 2020.

To monitor the falling or collapse of heavy ancillary equipment such as jet fans for smoke exhaust that are bolted to tunnel structure frames, we will use a recursive-type infrastructure monitoring system that can collect sensing information in real time while transmitting power from a traveling vehicle at a speed of 50 km/h to a sensor. This system is used in the Kyoto University COI program\*, developed mainly by the research and development group of MinebeaMitsumi Inc. and is a combination of the elemental technologies of "microwave wireless power transmission," "high-speed image signal processing" and "battery-less bolt axial force sensors" (a compact, highly sensitive, ultra-low power consumption type strain gauge originally developed by MinebeaMitsumi Inc., the MINEGE™ )that directly detects loose bolts.

It is expected to further promote the use of labor-saving technology, which is aging and deteriorating, and that this infrastructure monitoring system will make it possible to efficiently and economically inspect the entire area of infrastructure during driving in tunnels, etc., mixed with general traffic and without imposing traffic restrictions.

\* the COI (Centre of Innovation) program of the Japan Science and Technology Agency (JST)

Period: 5 days from October 19 (Mon.) to October 24 (Sat.), 2020 Location: Inside the evacuation tunnel of the Takiba Jizo Tunnel.

Miyazu City, Kyoto Prefecture

Conducted by: MinebeaMitsumi Inc.



Image of wireless power transmission system



While traveling at 50 km/h, we succeeded in successfully receiving transmission data from the three battery-less dummy sensors installed!





# Demonstration Experiment of Smart City Solutions in Osaka Using MinebeaMitsumi's LED Streetlights with Sensors

MinebeaMitsumi has started a demonstration experiment for the development of smart city solutions will start from September 1, 2020 with the support of the Concept Demonstration Promotion Team Osaka (the Promotion Team), which is consisted by the Osaka Prefectural Government, the Osaka City Government and the Osaka Chamber of Commerce and Industry.

With our unique wireless technology and mounted environmental sensors and a camera on smart lighting, MinebeaMitsumi's smart city solution aims to monitor the environmental conditions around the road, traffic volume, flood water on the road, etc.

The Promotion Team has been supporting us to carry out demonstration experiments in Osaka more smoothly and effectively, and this is a part of their support.



Smart Lighting (Image)

#### **Demonstration Overview**

Period: From Tuesday, September 1, 2020 to Tuesday, August 31, 2021

\*Demonstration period may vary by several days depending on the installation location

Places: Six roads managed by Osaka Prefecture

Conducted by: MinebeaMitsumi Inc.