



# Sustainability Report 2018

# Powering Progress Together through Sustainability

This first edition of the MARELLI Sustainability Report marks the beginning of a new phase, with the two companies Calsonic Kansei and Magneti Marelli united since May 2019, forming one new industrial entity, MARELLI.

As MARELLI, the new global entity is a leading player in the industry, positioned as one of the world's largest independent automotive suppliers, with 62,000 employees and 170 facilities and R&D centers across the world.

Within this publication we host the sustainability reports of Calsonic Kansei and Magneti Marelli for the period 2018. During this period each company operated as a separate entity from what is now the MARELLI group, with different reporting boundaries, metrics and standards of reference. For Calsonic Kansei, the reporting period within this report covers 1 April 2018 – 31 March 2019. For Magneti Marelli, the reporting period covers 1 January 2018 – 31 December 2018.

Although integration of our two companies has only just begun, we chose to present the reports in one for the purpose of transparency and ease of reference for our many stakeholders. Through the reports we aim to display our commitment to the ongoing compliance and investment in sustainability practices under the global brand, MARELLI.

As part of the ongoing integration of MARELLI, we will ensure progressive alignment of strategies, metrics and reporting methods. In future years, we are excited to report one single MARELLI sustainability policy and commitments.

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**Top Commitment**

**BUILDING A LONG TERM, SUSTAINABLE BUSINESS THROUGH THE COMBINATION OF TWO INDUSTRY LEADERS**

**Beda Bolzenius**  
President and Group CEO  
MARELLI Group

**A new dawn: for the industry and us**

2019 marked a huge milestone for our company as Calsonic Kansei and Magneti Marelli formally joined forces to create one of the world's leading global independent automotive suppliers. In coming together under the global brand, MARELLI, we can compete even more effectively on a global scale, better serving our customers, employees, suppliers and many stakeholders across the world within the many communities we operate. With post-integration net sales of

around €14.6 billion (approximately ¥1825 billion\*<sup>1</sup>), the MARELLI Group becomes one of the top 10 largest independent automotive suppliers in the world. Our aim is to build on this position in the coming years to create a strong and sustainable business, delivering long-term value to all of our stakeholders.

The automotive industry is undergoing unprecedented change. Advances in technology and changing consumer demand fueled by environmental considerations are driving the development of sustainable, socially responsible vehicles. As a global automotive supplier, inspired by our strong heritage in innovation and *Monozukuri*\*<sup>2</sup> we take our role in contributing to a sustainable society very seriously. Through ongoing investment in sustainable technologies and innovation, we see a real opportunity to help shape the future of mobility.

**Sustainability trend driving push for clean, shared cars**

Central to what is considered the once-in-a-century transformation of the global automobile marketplace is the development of Connected, Autonomous, Shared and Electric (CASE) mobility. Consumer attitudes towards the purpose, value, and use of cars is changing. One of the critical factors in this shift

in mindset is prompted by a growing need to address climate change caused by CO<sub>2</sub> emissions and more demand for shared mobility and connectivity.

**Leading in sustainability with product portfolio, design, and skill**

At the MARELLI Group, we recognize that our own product portfolio must provide a strong mix of established and new technologies to meet the needs of the evolving environment. Our existing competitive product line will continue to prove critical going forward and we will compliment this through ongoing investment in research and development in order to respond to meet the changes in consumer demand.

I believe that, in particular, electrification of the powertrain and the pursuit of zero-emission vehicles will gather pace. This is an area where we are very confident that we can make a real difference in leading the transition to a greener future. Autonomous driving is another key trend likely to accelerate in the years ahead. The MARELLI Group can support the delivery of safe, comfortable autonomous driving for people with various needs and preferences through our cutting-edge technologies, human centered designs and comprehensive system solutions. Our safety-related technologies will also be integral to this entire development.

**Utilizing our global presence to be a green pioneer**

As a leading production company with a large number of manufacturing plants across the world, we are well placed to make significant steps towards greater sustainability.

As part of our integration work, we are conscious of the need for a clear vision and implementation program for how we want to improve our environmental performance, including via purchasing and logistics. As a combined company, we are reviewing our environmental strategies to ensure we set ourselves progressive targets helping to tackle climate change related issues through recycling, resource efficiency, reduction of pollutants, and protection of ecosystems.

Now is the time to ask ourselves what we, as the MARELLI Group, can further do to raise our environmental performance. CO<sub>2</sub> emissions and their impact on climate change is among the most critical issues not only for our industry, but also for humanity. Addressing it is therefore of key interest to our stakeholders, and increasingly, our customers.

Today, we consider sustainability as impacting not only industry trends, but also a new set of political priorities that may affect entire social systems in many parts of the world. We need a growth strategy and a mindset that incorporates this development. I do not see these changes in our relationship with the environment and each other as something we should try to avoid or merely react to; rather they represent a new set of innovation drivers that will help separate winners from losers in the future global automotive market.



**Realizing sustainable mobility via our thought leadership**

We want to be an industry leader, not a follower. For that, we must clearly communicate our vision and future direction clearly, both internally and to communities. Sustainability will form an important part of our combined group strategy as we move forward in future years. The vision we project, targets we set, and plans we implement will be important signals showing how we intend to contribute to fundamental and needed changes in society. Consistent with our current approach, MARELLI will align its own Sustainability activities to the United Nations' Sustainable Development Goals.

I believe that there should be no compromise between the global growth strategy of the MARELLI Group and the move towards safer, cleaner, zero-emissions vehicles. It is this message that, with hope and excitement, I share with my colleagues, business partners, customers, and society. While we keep driving innovation in our manufacturing processes to achieve state-of-the-art environmental performance, we can grow our business with products and services that help realize a more sustainable form of mobility for the world.

\*1 Based on Fiscal 2018 figures. Converted at an exchange rate of €1= ¥125  
\*2 *Monozukuri* refers to the creation of value in all respects, through manufacturing fine products and providing excellent services in a timely manner to meet customers' expectations.

**SUSTAINABLE DEVELOPMENT GOALS**  
17 GOALS TO TRANSFORM OUR WORLD



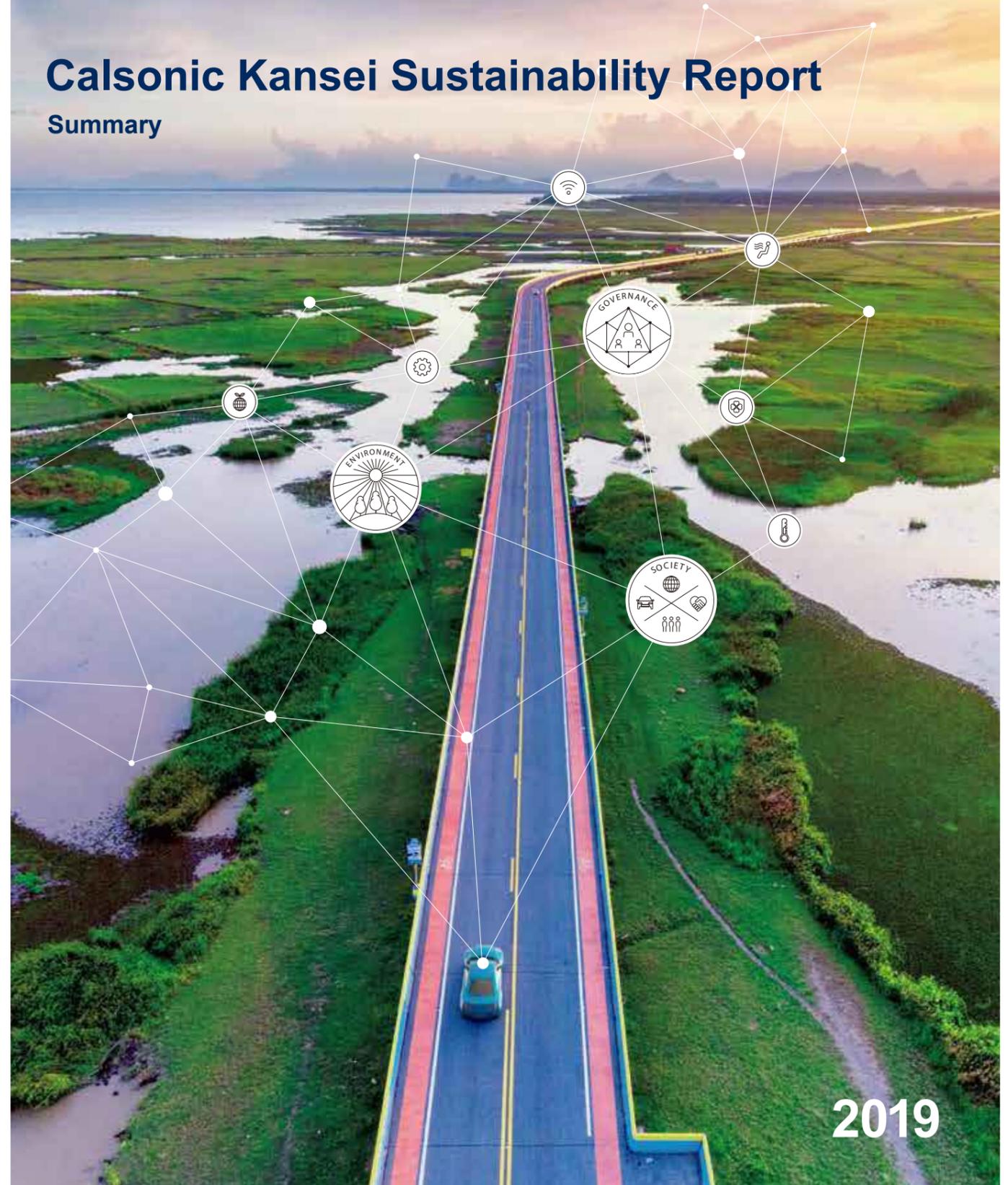
Sustainable Development Goals (SDGs)

A PART OF



# Calsonic Kansei Sustainability Report

## Summary



2019



# Creating New Value through Sustainability

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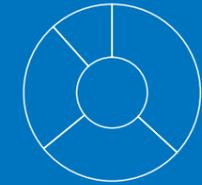
At a Glance

Consolidated Sales



**8,921**  
Billion Yen

Share of Consolidated Sales by Region

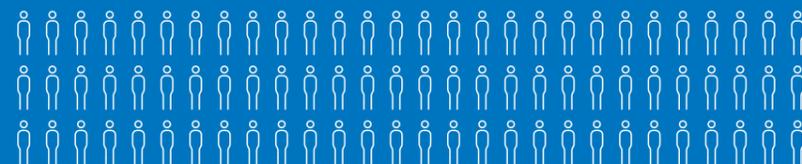


Japan **36.6%**  
Americas **27.5%**  
Asia **24.3%**  
Europe **11.6%**



Number of Employees (Consolidated)

**22,382**



Number of Employees by Region (Consolidated)

Americas **6,238** Europe **2,367**  
Asia **6,819** Japan **6,958**

R&D Bases

**9** Countries **14** Bases



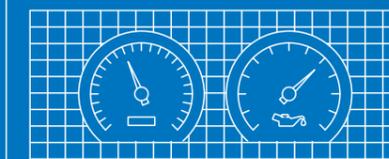
Production Sites

**15** Countries **81** Bases



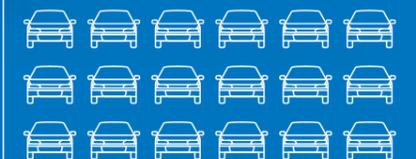
Consolidated R&D Expenditures

**315.4** Billion Yen



Customer Auto Manufacturers

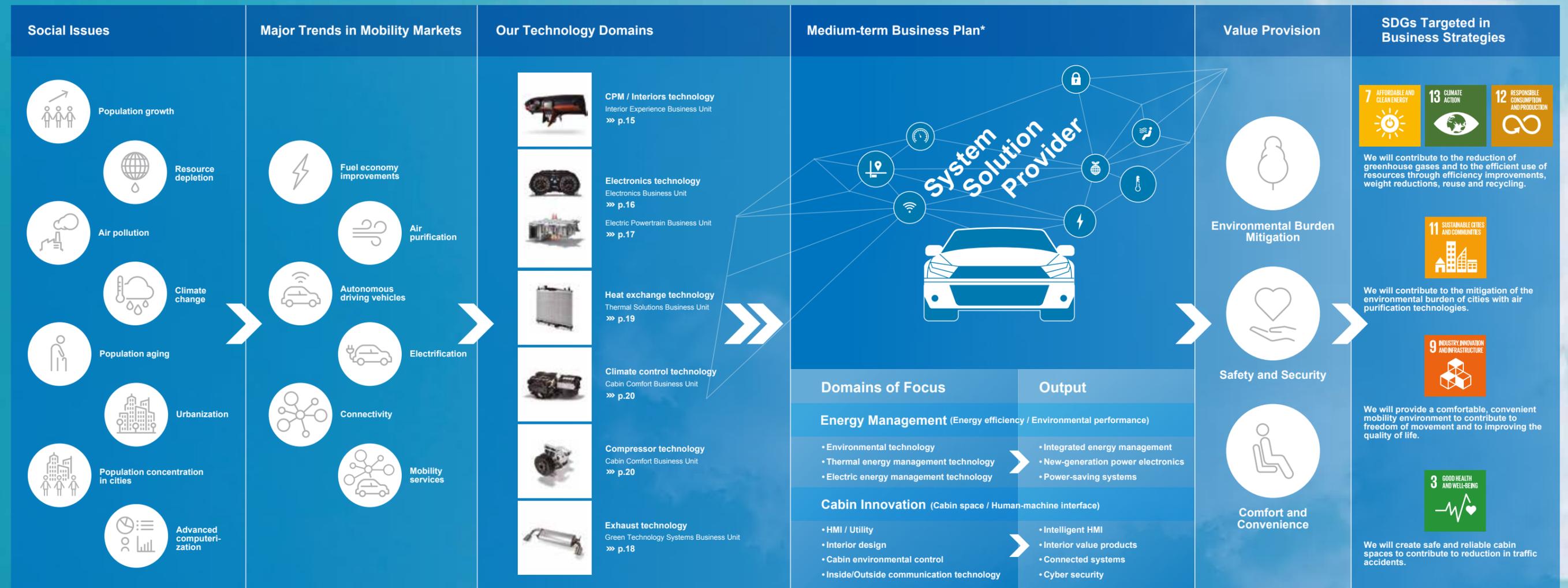
**18** companies



As of March 31, 2019, Calsonic Kansei only

## Sustainable Value Creation Process

We have addressed solutions to social issues related to mobility by using the diverse technologies we have cultivated through the manufacture of automotive components. Going forward, leveraging our deep knowledge of the mobility market, we will promote innovation and, through the creation of value that is distinctive to our Group, contribute to realizing a sustainable society.



### Risks and opportunities based on social issues and major trends in the mobility market

	E : Environment	S : Social	G : Governance
<b>Risks</b>	<ul style="list-style-type: none"> <li>Restriction of fossil fuel mobility due to climate change</li> <li>Tight raw material supply and demand due to resource depletion</li> </ul>	<ul style="list-style-type: none"> <li>Shift toward public transport due to population growth and urban concentration</li> <li>Decline in labor force due to population aging</li> </ul>	<ul style="list-style-type: none"> <li>Information security threats</li> <li>Scandals due to dysfunctional internal control</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>Support electrification as a countermeasure to climate change and atmospheric pollution</li> <li>Development of products that will contribute to improved fuel economy and resources recycling</li> </ul>	<ul style="list-style-type: none"> <li>Action toward highly safe autonomous driving technologies</li> <li>Safety measures for connectivity</li> <li>Improve labor force through workplace safety, productivity improvement, and diversity</li> </ul>	<ul style="list-style-type: none"> <li>Improve external evaluation through the establishment of voluntary regulations that exceed statutory regulations</li> </ul>

We have identified the top priority CSR issues that we will engage in, based on the risks and opportunities. >>> p.21

### Management Assets

Intellectual property	Human Resources	Customer Assets	Production sites
R&D expenditures	Number of consolidated employees	Degree of value penetration among employees	Customer auto manufacturers
<b>31.54</b> Billion Yen	<b>22,382</b>	Global ave : <b>3.18 / 4</b> Points	Customer satisfaction
		<b>18</b> Companies	<b>3.44 / 5</b> Points
			<b>81</b> sites

\*The 2018 to 2021 Medium-term Business Plan was formulated by Calsonic Kansei before Calsonic Kansei and Magnetti Marelli integrated their businesses.

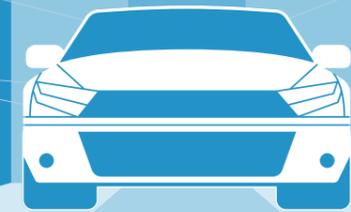
## Medium-term Business Plan

We aim to be a "System Solution Provider" focused on cabin innovation and energy management with the DNA of technology innovation and a passion for *Monozukuri*.

**Financial target: Value-added sales of 750 billion yen**

(Sales excluding parts specified by and supplied from completed vehicle manufacturers)

System Solution Provider



<b>System</b>	Human Machine Interface Cockpit Module Climate Control System		Electric Power Management Thermal Management Control System
<b>Products</b>	Interior Displays Network / Communication	Heat Exchange, Climate Control Electronics Exhaust	Optimal Temperature Control Energy Regeneration / Conversion Exhaust Purification / Restriction Compliance
<b>Technology</b>	Safety Evaluation Usability Sensing	Reliability Evaluation CAE / MBE Mechatronics Circuit / Software Development	Traction Control High Voltage System Design Energy Balance Prediction

Domains of Focus

**Cabin Innovation**

(Cabin space / Human-machine interface)

&

**Energy Management**

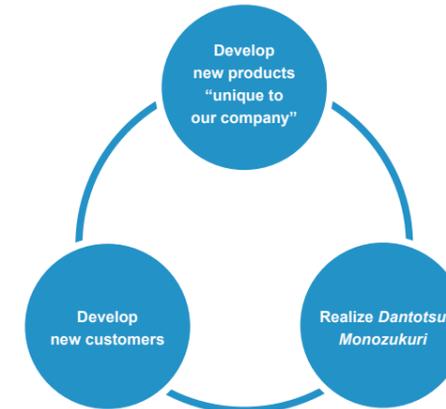
(Energy efficiency / Environmental performance)

### Ideal Form and Domains of Focus

In July 2017, our Group implemented our new Medium-term Business Plan. This is our first mid-term management plan after becoming independent from the Nissan Motor Group. It defines our ideal form (our "to be") as a "System Solution Provider". Utilizing our inherent strengths with a wide range of technologies and products for automotive parts, we set our focus on the two

domains of cabin innovation (cabin space / human-machine interface) and energy management (energy efficiency / environmental performance). We will continue to further refine our competitiveness at each level of technology, products, and systems, and provide our customers with systems that anticipate future value.

### Growth Strategy: 3 Pillars



#### 1. Develop new customers

In addition to promoting the maintenance and expansion of business with Nissan Motor, our main customer, we will also diversify our customer base and expand sales. We will create a specialized team for expanding sales and steadily advance step by step based on concrete milestones.

#### 2. Develop new products "unique to our company"

We established a future product planning office for the purpose of strengthening our two domains of focus and will promote the development of new products that have appeal "unique to our company". We will actively propose products and technologies that anticipate the market and customer needs.

#### 3. Realize Dantotsu Monozukuri

Our aim is a production system that realizes the value of products and services that satisfy customer needs at the highest level of efficiency. Specifically, we will promote automation and in-house production that increases cost competitiveness, on-site management that brings stability to quality, and initiatives for new production technologies.

### State of Progress

In Fiscal 2018, we reviewed our management structure and transitioned to Business Unit entities. Through these changes, we will achieve speedy decision-making and clarification of responsibilities, a strong spirit of enterprise and flexible portfolio management, and make creative innovation possible. At the same time, we will pursue a transformation into a company that finds value in quality and speed. We are also pursuing the integration of our management with that of the Italy-based global automotive supplier, Magneti Marelli. As a world leading independent general automotive supplier, we aim to offer value to all of our stakeholders.

### Business Foundation: CSR Activities

In light of the Medium-term Business Plan, the CSR medium-term plan was updated in Fiscal 2018 to become the plan for up to Fiscal 2021. Based on this plan, which reflects the latest demands from stakeholders, we will pursue activities throughout the group as a global company, and use the PDCA cycle to manage progress.

### CSR Vision

Toward the goal of remaining an honest and trusted company, we strive to create a rewarding workplace, develop CSR-aware employees who tackle social issues, build a resilient company, and contribute to the achievement of a sustainable society.

### Priority Areas

#### ▼ Improving Employee Awareness

- Creating a rewarding workplace (decent work)
- Improving employee awareness about tackling social issues

#### ▼ Coexisting with Society

- Support for international norms
- Resolution of social issues through business operations
- CO<sub>2</sub> emission reduction activities based on SBT

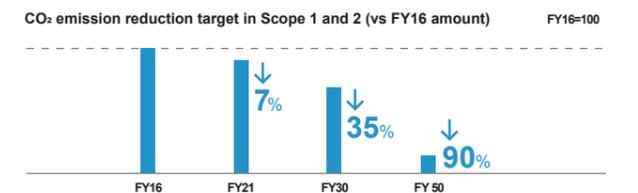
#### ▼ Improving Corporate Value

- Achieving the Medium-term Business Plan
- Strengthening our CSR activities

Applying ISO 26000  
(International guidance on social responsibility)

Regarding "Coexisting with society", we set a target for reducing our CO<sub>2</sub> emissions based on SBT. We will achieve this target through thorough energy conservation activities and introducing renewable energy.

As an activity to prevent global warming, we will promote CO<sub>2</sub> emission reduction activities based on SBT.



With intensive energy-saving activities & introduction of reusable energy, we aim to reduce CO<sub>2</sub> emission.

## Our Business Units and Sustainability

Business unit interviews were conducted in April 2019 based on the structure and person in charge at the time. The titles shown in this report are current as of June 2019.

### Interior Experience Business Unit



**Hideaki Watanabe**  
Executive Vice President  
CEO, Interior Experience Business Unit



Achieved a weight reduction of 35% in the cross-car beam by changing to aluminum and 30% in the instrument panel lining with the use of foam molding.

#### New Value Propositions that Only Our Exhaustive Knowledge of Cockpits Can Provide

The Interior Experience Business Unit provides not only instrument panels and other interior products, but also cockpit modules (CPMs) that contain those products to provide an approach of meticulous support to its customers. In CPMs, everything from styling to layout design, component design, process design, production, and supply chain management, which are domains that are usually tackled by the car makers themselves, can be performed in-house. CPMs are assembled alongside the car maker's production line. This has enabled them to shorten the vehicle production line and build multiple models on the one line, contributing to improved productivity in production. Since we are providing the CPMs, the car makers have been able to cut down on man-hours and allocate more resources to the development of CASE, which are the megatrends of the automotive industry today. This brings about enormous benefits for customers. The basic concept of the cockpit module lies in improving efficiency. Improving the efficiency of the production system in turn contributes to reducing the burden on the environment. With the progress being made in vehicle electrification and autonomous driving, we are required to propose the vehicle interiors of the future. Precisely because we have such an extensive knowledge of the structure of cockpits, we are able to propose new value in what can be installed. This could be described as one of our major strengths.

#### Innovation that Supports the Evolution of Cars

We declared "cabin innovation" in our medium-term business plan as our response to the CASE initiatives being pursued by our customers, and by fusing new technologies together with the technologies cultivated in our wide range of cabin-related products, we aim to realize safe, secure, and comfortable cabin spaces that will bring added value to the new mobility society. In particular, a key point is to pursue spaces that support autonomous driving, and this means cars that can be driven safely, even by drivers of more advanced age, and interior technologies that support such cars. In the area of connectivity as well, we want to create new value by providing safe, comfortable cabins for a new kind of car life, such as data confirmation functions, and new ways of enjoying time inside the car, and we hope to connect this to new opportunities for growth. In the interiors area, weight reduction, resources conservation, and other ways of reducing environmental burden will be a major theme. Lighter, thinner materials, material modifications, less wastage in the use of materials, and reduction in quantities used through more efficient plastic molding and simplification of structure...these are the areas to which we are devoting our efforts. Thinking about production-focused easy to produce structures in the design stage will also help to reduce the burden on the environment. These initiatives come under Goal 3, health, Goal 7, clean energy, and Goal 12, responsible production, in the SDGs.

#### Relevance to the SDGs



- 3: We will create safe, secure interior spaces by developing cabins that are easy even for drivers of advanced age to operate and reducing the use of VOCs inside the cabin.
- 7: We will increase vehicle energy efficiency by reducing the weight of components, thus contributing to reduced CO<sub>2</sub> emissions.
- 12: We will contribute to reducing the burden on the environment through highly productive *Monozukuri* across the entire supply chain.

### Electronics Business Unit



**Makoto Ishibashi**  
Senior Vice President  
Electronics Business Unit, Senior Global Director (Innovation)



Above: Current weight detection type ODS.  
Below: Next generation ODS that distinguishes between adults and children using a unique algorithm based on the skeleton of the occupant detected in a near-infrared camera image. The next generation ODS is capable of supporting airbag deployment control as well as individual authentication making it possible to reproduce the occupant's desired air conditioner and other settings.

#### Creating New Value in the Electronics Domain

The Electronics Business Unit engages in business in a very wide range of domains in the areas of human-machine interfaces (HMI) and body electronics. A major feature of our business is that, instead of revolving around products, our business extends across the entire electronics domain, creating value that does not currently exist. Against the background of the CASE megatrends in the automotive industry, we see major opportunities for the blossoming of the car electronics technologies we have built up to date. These trends include a great many essential values, including safety and security in the mobility society, and enriched lifestyles. It is the mission of our business unit to accurately identify those values, build new business models, and create new value that will contribute to people and society. To deal with the risks that accompany CASE, in 2017, we established a cyber security company that specializes in automobiles. Called White Motion, this company provides cyber security solutions with the reliability of motion that is vital to vehicle in mind. We believe that initiatives to prevent the threats to automated driving and connectivity and to increase their reliability are the social responsibility of automotive component manufacturers dealing with CASE.

#### Safety and Security Supported by Electronics technology

Our business unit hopes to contribute to society by supporting the era of transformation of the mobility society with safety and security from the HMI and body electronics domains. One example is a product called the Occupant Detection System (ODS). Airbags are important in life-threatening accidents, but when infants and small children are on board, the activation of the airbag itself can be dangerous. ODS is a device that detects the occupant of the passenger seat to determine whether or not it is safe to activate the airbag and controls its activation accordingly. The current system does this based on the weight of the occupant, but in future, we hope to increase the accuracy of such determinations by using cabin monitor cameras and image recognition technology to detect the occupant's position. These technologies could also be adapted to detecting if a driver is dozing at the wheel, and the same camera image information could be used to control the air-conditioning and create a comfortable cabin environment. In the area of lithium ion batteries, we will use battery status estimation technology to monitor and control the status of individual battery cells. As well as delivering safety and security, this will contribute to greater energy efficiency and to the effective use of resources. Our aim is for a world in which, in the age of autonomous driving vehicles, computers will take the place of drivers in achieving safety. To respond flexibly to such a world, in the area of detecting dozing at the wheel, as well as our own original research, we are participating in joint demonstration testing with the Japanese government and in many joint research projects with universities. Meanwhile, as well as responses to CASE, with the upward trend in the use of batteries and motors in cars, reducing the use of rare metals and rare earth minerals such as lithium, copper, and gold has become an important management issue. We consider proactive initiatives aimed at a circular society to be essential. By pursuing these initiatives, our business unit will contribute to Goal 3, health, Goal 7, clean energy, and Goal 12, responsible production, in the SDGs.

#### Relevance to the SDGs



- 3: As well as reducing traffic accidents through electronics technologies, we will contribute to the safety and security of the mobility society by strengthening cyber security.
- 7: We will contribute to the improvement of energy efficiency with electronics technologies that support EVs.
- 12: We aim to build a circular society as a manufacturer that uses rare metals and rare earth minerals.

## Electric Powertrain Business Unit



**Joachim Fetzer**  
Executive Vice President  
CEO, Electric Powertrain Business Unit



The inverters installed in the world's first mass-production electric vehicle and have the production capabilities to respond to the popularization of electric vehicles that is anticipated in the future.

### Supporting the Transition to Electric Vehicles

We are moving toward a sustainable, low-carbon society, and the electrification of vehicles is a key aspect of this transition. At Electric Powertrain Business Unit, we are in a strong position to take advantage of this trend and stake out a dominant place in this growing market.

I believe our flexible thinking and superior technological strengths will lead to successful growth strategies in China and Europe, which are large and growing markets for electric vehicles. At the same time, we will make a major contribution to reducing humanity's burden on the environment.

The strength of our business unit lies in our highly competitive *Monozukuri* — our manufacturing prowess — from the perspective of innovative design premised on high productivity, manufacturing process and price. We have both a technology roadmap to develop superior products and a production roadmap to bring them to market. Demand is soaring for our systems and components for electric vehicle powertrains. These include electric motors, inverters, gearboxes, DC-DC converters, onboard chargers and battery management systems. All of these are world-leading in terms of both hardware and software.

We have developed a number of characteristic technologies and products, including hairpin winding technology to boost output performance drive motors, new control algorithms, SiC technology and next-generation GaN technology.

### Contributing to a Safe, Secure and Low-carbon Society

One of the most important themes in sustainability is climate change. Electric vehicles can help reduce some of its causes, including CO<sub>2</sub>, SO<sub>x</sub> and CO emissions, and they can contribute greatly to decarbonization and to reducing air pollution. From the perspective of energy diversity as well, they are attracting attention because of their ability to use renewable energy sources.

Our strength lies in both the quality and the breadth of our product range that supports electric vehicles.

As everything becomes interconnected, a major concern in the mobility society is potential threats to cybersecurity. This is a crucial issue, and it is important to take a broader perspective, realizing that the problem does not affect electric vehicles alone. It encompasses mobility, communications, the internet of things -- our entire connected society.

In our business unit, we are serious about reducing the burden on the environment. Therefore, we are determined to contribute to the UN's Sustainable Development Goals -- in particular Goal 9, technological innovation; Goal 11, sustainable communities; and Goal 12, responsible production.

I believe a core theme of sustainability is mobility. The efficient supply of goods and services in the automotive industry, with its extensive range, has a major impact on society. Therefore, reducing the environmental burden from transport, which directly affects corporate activity and daily life, will contribute to the sustainability of our environment and of society as a whole.

My vision is for our company to become a leader in e-mobility by managing and controlling power in electric vehicles and perfecting the optimization of energy flows. At the same time, this will be a powerful contributor to solving a variety of social issues.

By innovating to develop superior new products and harnessing our superior *Monozukuri* to make them, we offer electric vehicle components that connect the technologies we have accumulated with our intentions for the future. In so doing, we will continue to meet the challenge of building a sustainable society.

### Relevance to the SDGs

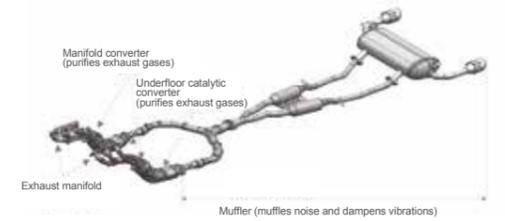


- 9: We will create innovative clean technologies for electric vehicles.
- 11: We will contribute to reducing the burden on the environment, such as reducing CO<sub>2</sub> emissions and air pollution in cities with products and technologies that support electric vehicles.
- 12: We will contribute to reducing the burden on the environment through rational and environmentally-friendly *Monozukuri* across the entire supply chain.

## Green Technology Systems Business Unit



**Shuji Kobayashi**  
Executive Vice President  
CEO, Green Technology Systems Business Unit



Product that combines purification performance and pressure loss at a high level while maintaining compactness with its catalytic converter for purifying exhaust gases efficiently installed in the tight space of the engine room.

### Global Supplier that Meets the Requirements of Society and the Expectations of the Car Markers

Steady progress is expected in the electrification of vehicles going forward. However, given the time that will be needed to conquer challenges such as infrastructure development and electricity supply, the popularization and expansion of these vehicles is unlikely to be rapid. Looking at the long-term up to 2060, there may be isolated regions in which they do become popular, but electric powertrains equipped with internal combustion engines (ICE) are predicted to be the mainstay. Meanwhile, against the background of the automotive industry's CASE megatrends, with their survival at stake, as well as exploring various business schemes, the only options for the car makers are to pursue collaboration and cooperation with each other and with partners in other industries, and to concentrate the allocation of their limited resources into these areas. In terms of the exhaust emissions of ICE-equipped electric powertrains, this will give global suppliers such as us more opportunities to shine.

Environmental laws and regulations related to exhaust emissions, fuel consumption, and noise will become increasingly stringent. However, this actually represents growth opportunities for suppliers that have the ability to meet such stringent environmental requirements. So that we can continue on our path as a global comprehensive automotive supplier and to respond quickly to change, we have always provided feedback into development strategies that look five and ten years into the future. We have established systems that allow us to respond flexibly and speedily to environmental regulations and market developments such as CASE. As well as conventional systems, we will work on developing innovative products that anticipate the future and propose solutions that will exceed the expectations of the car makers, which we hope will lead to major business opportunities.

### MBE Development and One-team *Monozukuri* Activities

Our exhaust system is a combination system consisting of hot products (exhaust manifold and catalytic converter), cold products (muffler box, front and rear pipes), and tailpipe. The main functions of this system, which extends under the floor from the engine room to the rear of the vehicle, are to purify exhaust gases, muffle noise, and dampen vibration. The system also needs to have sufficient durability and reliability even in harsh conditions, such as high exhaust temperatures, inferior fuel, salt damage, and poor roads.

Meanwhile, the pace of development by car makers continues to increase, and virtual development and support for global platforms are progressing. Under these circumstances, to clear the required product specifications, shorten development cycles, and improve quality, we are actively incorporating Model Base Engineering (MBE) development. With this development approach that entails breaking down the superior functional requirements (in this case, the vehicle requirements) into the functional requirements of each product and efficiently conducting analysis, design, and verification of system requirements, our strength lies in our ability to balance conflicting phenomena at a high level and achieve high degrees of functionality, performance, and quality in compact, lightweight products. We also employ a variety of development tools to engage directly in the process from design concept to trialing, to prevent having to redo development. Reducing the substances that cause air pollution is one mission of the Green Technology Systems Business Unit, and we are engaging proactively in developing new, innovative products that will accommodate the increasingly stringent environmental regulations of the future. We are pursuing simultaneous engineering, in which design, production engineering, the manufacturing plant, and suppliers work together from the initial stages of development. Based on 5G methodology (*genba*, the actual place or source of the problem, *genbutsu*, the actual article, *genjitsu*, the facts, *genri*, fundamental principles, and *gensoku*, the rules), each division contributes its respective knowledge and ingenuity in a spirit of friendly competition in the pursuit of *Monozukuri* that will raise the competitiveness of our products and contribute to reducing the burden on the environment. These initiatives equate to Goal 3, health, Goal 7, clean energy, and Goal 11, sustainable communities, in the SDGs.

### Relevance to the SDGs



- 3: We will reduce the atmospheric pollutants found in exhaust gases to reduce the detrimental impact on human health and living environments.
- 7 & 11: We will use our collective strengths, including collaborations with our supply chain, to reduce exhaust gases with the aim of realizing cleaner exhaust emissions.

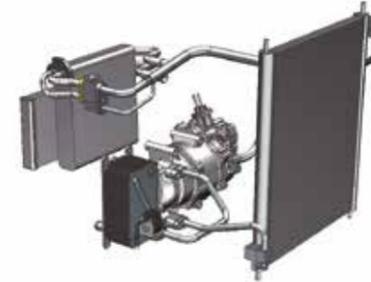
## Thermal Solutions Business Unit



**Bharat Vennapusa**  
 Executive Vice President  
 CEO, Thermal Solutions Business Unit  
 CEO, Cabin Comfort Business Unit



Battery Thermal Plate, which along with our intelligent thermal system, will contribute to maintain optimum battery temperatures for range and life extension of batteries.



Heat pump heating and refrigerant system that contributes to enhanced cabin comfort and extended EV driving range through improved efficiency by reducing weight through simplified system configuration.

### Providing Solutions to the Increasingly Diverse Needs of Electrification

Our business unit is committed to provide solutions for ICE (Internal Combustion Engine), HEV (Hybrid Electric Vehicles) & BEV (Battery Electric Vehicles) for efficiency improvement, contribution to CO<sub>2</sub> reduction thus creating a better world for current & next generation. For ICE & HEV, we have been providing EGR-C (Engine Gas Recirculation-Cooler), BOC (Build in Oil Cooler) & CAC (Charge Air Cooler) targeting exhaust gas, transmission oil & intake gas respectively contribution to reduce CO<sub>2</sub> by increasing fuel efficiencies. With the shift in market to electric vehicles, we are working to develop a total thermal management system for batteries.

In our business unit, we effectively manage thermal energy of the batteries in HEV (Hybrid) & BEV (Battery). This is particularly important in electrically-powered vehicles such as hybrid & full electric.

Lithium-ion batteries, which are highly efficient and have high energy density, need to be cooled during charging/running whereas it also needs to be heated in cold climates when starting the vehicle. Our business unit's thermal energy management system aims to effectively maintain optimum temperatures for energy efficiency using battery thermal plate & various sensors which will be operated by control module. Effective battery management will also help extend the life of a battery.

The auto industry is seeing a significant shift toward increase electrification of the power train and related systems. Making safe, effective use of these electrical energies to the greatest extent possible is essential from the perspective of protecting the global environment. Our strengths are the development of solutions needed in thermal management, including the battery, and the technical capabilities and expertise to commercialize those solutions. Through co-development with battery manufacturers, we will respond to the demands of the car makers and society.

### Contributing to the Popularization of E-mobility with Intelligent Thermal Management

The market is moving towards electrification at a very fast pace particularly in China and Europe. As the market grows, competition is also expected to become increasingly intense. We want to deliver new technologies to the battery OEMs in these countries and regions. However, because there are no unified global directions for mobility solutions and regulations, we need to minimize this risk by expanding business in emerging countries as well as in developed countries where automotive markets overall are already very mature. We see this as a challenge not only for the car makers, but also for us.

With the electrification of the powertrain, the role of thermal management has become increasingly complex and comprehensive. There are more and more needs that are not confined to battery cooling. Thermal management, including increasing the efficiency of electrical energy to improve the car's overall performance, holds the key to solving these challenges. We are a global, comprehensive supplier of automotive systems. Leveraging the strength of our diverse product line coupled with our ability in whole-car management, with our intelligent thermal management that considers the entire vehicle in a comprehensive way, we are able to respond to the e-mobility.

Electrically-powered vehicles will contribute to the realization of a zero-emissions society. In terms of the SDGs, we believe our business unit can make major contributions to Goal 7, clean energy, Goal 11, sustainable communities, and Goal 13, climate action. By offering technologies and products that support these goals, we will continue our challenge toward realizing a sustainable society.

## Cabin Comfort Business Unit

### Monozukuri to Suit the Country or Region

A vehicle's climate system automatically regulates air temperature, and quantity, direction independently for the passenger, and other occupants. It is a high-performance air-conditioner that uses sensors and other elements to detect the external temperature and sunlight coming into the vehicle and maintains the cabin temperature at a constant set level. In the Cabin Comfort Business Unit, we build a variety of climate systems for different vehicle models at the request of the car makers.

In our global expansion, different countries and regions require different specifications, but our goal is to develop products that will meet them all. In addition, in line with the trend toward the electrification of automobiles, we are working on the development of heating and refrigerant heat pump system, and electric compressors as its main component. Regular compressors are a component of the air-conditioning cycle. Powered by the engine, they intake and compress refrigerant gas, and send heated, high-pressure gas to the condenser. The electric compressor is designed to meet global requirements, and once perfected, we believe we will be able to produce a climate system for electric vehicles that will meet the specifications of any country and region, including China and Europe. We are aiming to establish a technology we can bring to market by 2021.

However, there is not a global agreement on standardization of the refrigerant due to differences of opinion from country to country. This is a risk for our business unit. Despite that risk, a unique part of our *Monozukuri* is that our products are zero carbon products made with 100% recycled materials. We want to respond to our customers' requirements with our *Monozukuri* and to realize a global zero-carbon footprint.

### Contributing to Society with Improved Energy Efficiency

Similar to the Thermal Solutions Business Unit, the Cabin Comfort Business Unit's greatest goal is to improve the efficiency of energy use. In the air-conditioning domain, instead of thinking in terms of single products, it is important to have a perspective of improving the efficiency of the entire vehicle. By optimizing the energy needed to achieve occupant comfort and reducing wasteful energy consumption, we can improve fuel efficiency and vehicle performance. We are working with the Environmental Protection Agency (EPA) toward goal of obtaining approval of off-cycle credit for our compressor. Under the EPA's off-cycle credit program, the vehicle's environmental performance is evaluated and credits are issued according to the evaluation score. For the car makers, this has a major advantage in terms of meeting fuel efficiency regulations.

We are working to improve thermal efficiency not only in the products themselves but also by introducing new technologies to our manufacturing processes, which will lead to improved energy conservation. We believe that pursuing efficiency in our plant and production processes is important in any consideration of sustainability. With these approaches, we will contribute to Goal 7, clean energy, Goal 12, responsible production, and Goal 13, climate action in the SDGs.

### Relevance to the SDGs



- 7: We will contribute to improving energy efficiency through thermal management.
- 11: We will contribute to reducing the burden on the environment, such as reducing CO<sub>2</sub> emissions and air pollution in cities with products and technologies that support electric vehicles.
- 13: We will contribute to alleviating climate change and reducing its impact through thermal management.

### Relevance to the SDGs



- 7: By improving compressor efficiency, we will raise the combustion efficiency of the engine, contributing to improved fuel efficiency and better efficiency of energy use.
- 12: By taking the environment into consideration in our materials, we will contribute to reducing CO<sub>2</sub> emissions and curbing the generation of waste.
- 13: Through the provision of climate systems, we will contribute to the mitigation, adaptation, and reduction of the impacts of climate change.

## CSR Policy and Key CSR Issues

### CSR Policy

#### Responsibilities to Stakeholders and Society

Our CSR Policy outlines the responsibilities and policies we promise to fulfil for our stakeholders, with a view to achieving our "Corporate Vision." Based on this policy, each employee contributes to the achievement of a sustainable society by conducting their daily operations with an awareness of social responsibilities and with well-balanced business management based on environmental, social, and economic aspects.

#### Responsibilities to Customers

We aim to be the most trusted parts supplier by responding to the diversified needs and expectations of society and providing high-quality products and services that satisfy our customers.

#### Responsibilities to Business Partners

We will collaborate with our business partners, who provide us with components and services, as equals, and aim to create mutual improvement and sustainable growth through fair and ethical business practices.

#### Responsibilities to Employees

We respect the diversity and value of each employee and provide opportunities for them to develop talents that contribute to the company and to society, as well as securing a healthy and safe workplace environment. With this approach, we will create a company in which every employee can enjoy a rich life of hope, passion, and pride.

#### Responsibilities to Employees' Health and Safety

Based on the basic principle "the health and safety of employees takes precedence over all," we are committed to creating the safest and most appropriate workplace in the auto-parts industry through the participation of all employees.

#### Responsibilities to Shareholders

We aim to improve our profitability by continuously developing competitive products, and, at the same time, we aim to enhance the company's corporate value by conducting fair business trade and proactive information disclosure in order to meet the expectations of our shareholders.

#### Responsibilities to Society

##### Monozukuri

We will contribute to the automotive society through our products by focusing on three key technologies: Environment, Safety and Comfort.

##### Environment:

Technologies for developing eco-friendly-vehicles

##### Safety:

Technologies for creating an automotive society without car accidents

##### Comfort:

Technologies for developing vehicles that drivers can drive with comfort

##### Environment

We will contribute to the sustainable development of society as good corporate citizens by proactively participating in social activities of local communities through our business activities.

##### Responsibilities to Employees' Health and Safety

Based on the basic principle "the health and safety of employees takes precedence over all," we are committed to creating the safest and most appropriate workplace in the auto-parts industry through the participation of all employees.

### Key CSR Issues

We have identified our key CSR issues and KPIs as a concrete action plan for the CSR Medium-term Plan, and are striving to reliably implement the PDCA cycle to achieve them.

In Fiscal 2017, with the announcement of the new Medium-term Business Plan in September 2017 titled Compass 2021, we conducted a review of the key CSR issues that we identified in Fiscal 2015, and aligned them with the rapidly-changing expectations of society and with the new management plan.

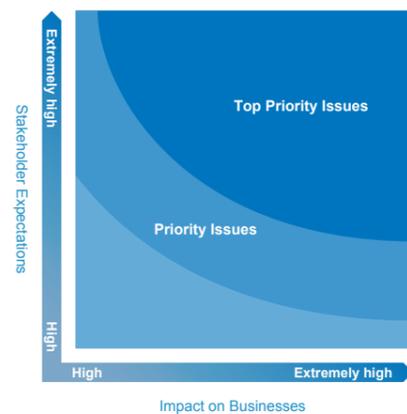
#### Materiality

In the review of our key CSR issues that we performed in Fiscal 2017, we first confirmed the latest trends in social expectations before carefully examining the contents of our initiatives. We then conducted an assessment based on the two axes of (1) stakeholder expectations, and (2) impact on business, based on which we identified 23 key issues for us to address, 15 of which we identified as top priority issues.

We also set KPIs for each of those issues, and we are implementing the PDCA cycle based on their respective degree of priority.

#### Materiality Map

The 23 CSR key issues are introduced on the page on the right.

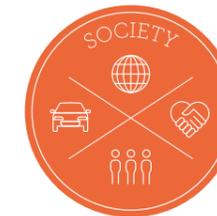


## ESG Initiatives

With our aim of realizing a sustainable society, we position CSR as the foundation of our management, and to increase our corporate value, we are pursuing initiatives for priority CSR issues from the aspects of the environment (E), social (S), and governance (G).



Environment



Social



Governance

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Top Priority Issues</p> <ul style="list-style-type: none"> <li>• Effective use of resources</li> <li>• Climate change action</li> <li>• Prevention of pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Quality improvement</li> <li>• Maintain occupational health and safety</li> <li>• Improve customer satisfaction</li> <li>• Create social values through innovations</li> <li>• Respecting human rights</li> <li>• Improve ESG in supply chain</li> <li>• Promoting diversity</li> <li>• Promoting work-life balance</li> <li>• Human resource development</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthening compliance</li> <li>• Strengthening information security</li> <li>• ESG risk management</li> </ul>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Priority Issues</p> <ul style="list-style-type: none"> <li>• Protection of water resources</li> <li>• Protection of biodiversity</li> </ul>	<ul style="list-style-type: none"> <li>• Productivity improvement</li> <li>• Dialogue between management and employees</li> <li>• Promotion of social contribution activities</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthening of business continuity management (BCM/BCP)</li> <li>• Prevention of corruption and bribery</li> <li>• Maintenance and disclosure of appropriate tax administration</li> </ul>

# Highlights

CK = Calsonic Kansei Corporation  
 Japan = CK, consolidated subsidiaries in Japan  
 Global = Japan, major overseas group companies



## Environment

To further enhance protection of the environment through our global corporate activities, in response to the international community's demand on businesses to be considerate of the environment, we revised our Environmental Policy established in 2000, relaunching it in March 2018 as the Green Policy. This new Policy comprises the Basic Environmental Policy and Environmental Action Guideline. Based on this policy, we have established Green Challenge 2030, our medium to long-term environmental goals to 2030, as the vision we aim to achieve through environmental activities. We will all engage in environmental activities as one team and contribute to the realization of a sustainable society.

» Global

### Green Policy (Environmental Policy)

To further enhance our initiatives to protect the environment through our global corporate activities, we revised our Environmental Policy established in 2000, relaunching it in Fiscal 2017 as the Green Policy, which comprises the Basic Environmental Policy and Environmental Action Guideline.

Based on this Policy, we will all engage in environmental activities as one team and contribute to the realization of a sustainable society.

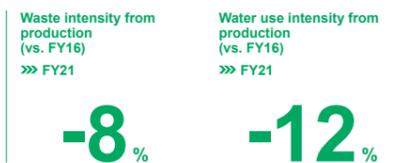
### Green Policy (Environmental Policy)

**Basic Environmental Policy**  
 To contribute to building a sustainable society, each individual shall strive to protect the environment at every stage of our business activities.

- Environmental Action Guideline**
- Continuously improve current target-achieving activities and environmental management systems globally by setting annual plan based on compliance, social demands, and long-term vision.
  - Promote development of environmentally friendly products, with consideration to the lifecycle.
  - In addition to making efforts to prevent pollution and complying with laws and regulations, etc., promote reduction of environmental impact caused by corporate activities.
  - Enhance communication with stakeholders. Promote coordination, cooperation and involvement with local communities, governments, and municipalities regarding environmental protection.
  - Build coordination and cooperation not only with affiliates but with customers and business partners towards reduction of environmental impact on the overall supply chain.

» Global

### Green Challenge 2030 (Medium to Long-term Environmental Goals)



## Climate Change

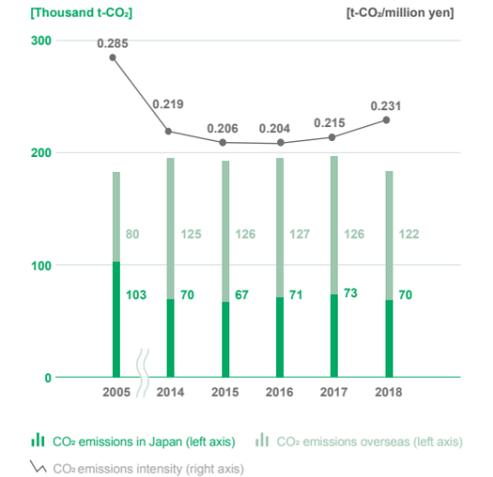
» Global

### Approaches to Climate Change

We have positioned responses to climate change as a top priority issue in our environmental activities and engage in those responses at all of our global sites. In our activities, we identify the risks and opportunities for society and corporate activities presented by climate change. In terms of the physical risks posed by climate change, there is the disruption of parts procurement and supply and the suspension of plant operations due to torrential rain and flooding. Meanwhile, we view the leveraging of our technological strengths in thermal energy and electricity energy management, to send out into the world products that will contribute to the reduction of CO<sub>2</sub> emissions, as a business opportunity. We consider the identified risks and opportunities and the conspicuous environmental aspects and obligations and incorporate them into our activity plans. Based on these plans, we strive to achieve our targets and make continuous improvements.

In Fiscal 2017, we established CO<sub>2</sub> reduction targets that incorporate the concept of Science Based Targets (SBT), an international initiative that declares CO<sub>2</sub> reduction targets to achieve the Paris Agreement's "2°C Target," and declared those targets in our medium-term business plan, Compass 2021. In addition to the energy conservation activities that we have been engaging in for some time, we are working on the introduction of energy-saving equipment and the adoption of new manufacturing methods that will lead to energy conservation, and will further accelerate the reduction of CO<sub>2</sub> emissions from our business activities. Our total CO<sub>2</sub> emissions in Fiscal 2018 came to 192,000 t-CO<sub>2</sub>. In terms of emission intensity (total CO<sub>2</sub> emissions/sales revenue), we pursued activities aimed at reduction targets of 17.9% for overseas and 22.5% for Japan compared to Fiscal 2005. The overseas result of a 13.8% reduction fell short of the target, but emissions in Japan in Fiscal 2018 were reduced by 28.0%, achieving the target.

### Trends in CO<sub>2</sub> Emissions and Emissions Intensity



» Japan

### Contribution To Electrification

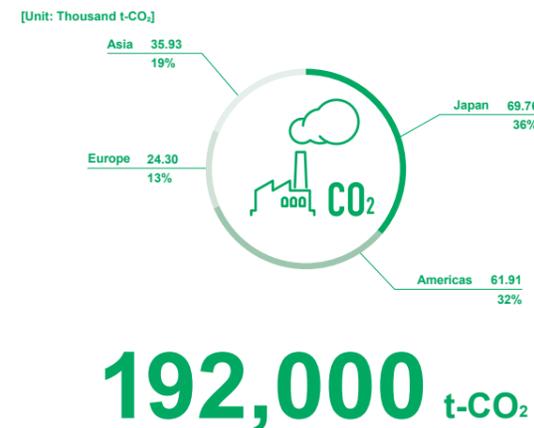
Regarding the goal of "Climate Action," which is one of the SDGs, we believe the electrification of vehicles to be an effective method of achieving this goal. We are actively supporting electrification and engaging in the following initiatives, concurrently with product development.

#### Major Initiatives

- Installation of rapid charging stations outside company headquarters, accessible free of charge to anyone in the region
- Introduction of Work Place Charging, which visitors and employees can use to charge their EVs, at all our sites and some group companies in Japan
- Introduction of HEVs and EVs to company fleets



### CO<sub>2</sub> Emissions by Region



### My CSR Declaration

Here are some of the personal declarations made by our Group employees around the world regarding their own CSR activities in their companies and beyond.



● Tomoaki Hasegawa

I organize the relationship between development operations and construction of a sustainable society and explain it in easily accessible terms to people within and outside the company. Also, in line with the philosophy of the SDGs, we set and pursue products related goals from the perspectives of climate change, resources recycling, and environmental pollution.



● Zhang Yuanyuan

We have an obligation to treasure the earth both for our own sake and for the sake of future generations. Starting with simple things in my own daily life, such as not using paper cups or disposable wooden chopsticks, or taking the bus or other public transport instead of driving my own car, I hope to make a contribution to environmental protection.



● Keina Sakai

As CSR promotion officer, I set up forums for discussions about corporate social responsibility and strive to invigorate communication. I am also engaged in reducing plastic and other types of waste.

## Resources Recycling

» Global

### Effective Use of Resources

With an emphasis on the effective use of resources, we are engaged in initiatives to reduce waste, achieve zero landfill, and conserve resources.

Waste intensity (waste volumes/sales revenue) in Japan in Fiscal 2018 fell by 24.7% due to the pursuit of exhaustive activities for the reduction of process defects, achieving the target of a reduction of 21.3% compared to Fiscal 2005.

Overseas, we actively engaged in activities for the reduction of process defects and in the horizontal extension of resources conservation best practice, and the result was a 3.9% reduction.

#### Waste intensity [waste volumes/sales revenue]

Japan

**-24.7%**

FY2018 target: -21.3%  
[Compared to Fiscal 2005]

Overseas

**-3.9%**

FY2018 target: -8.8%  
[Compared to Fiscal 2010]

#### Landfill rate [landfill volumes/waste volumes]

Japan

**0%**

Target continuously achieved since FY2006

Overseas

**0%**

FY2018 target: Maintain zero landfill

» Global

### Approaches to Resources Recycling

We are engaged in the recycling of resources such as catalysts used in automobile exhaust purification. We are striving to recycle materials (wash coats) that contain rare metals, which are a precious valuable resource, by efficiently separating and recovering them with the use of dry separation equipment, which is less burdensome on the environment.

Also, leveraging our plastic-forming technologies, we are engaged in the recycling and re-use of the plastic containers used for in-house logistics. This has enabled us to re-use these plastic containers, which previously would have been thrown away, helping to reduce waste and save costs.

» Global

### Protection of Water Resources

With an emphasis on the protection of water resources and to strengthen our initiatives to reduce water use, we have built a global water use monitoring system. This has enabled us to identify production sites with particularly high usage and problematic equipment. We have also undertaken a range of improvement measures on a global basis, such as updating equipment and adopting efficient water use systems for flushing toilets.

As a result of these initiatives, our global water usage in Fiscal 2018 was 1,085,000 m<sup>3</sup> (down 7.2% on FY2017), but water use intensity (water usage/sales revenue) increased by 3.1%. Going forward, we will promote analysis and plan further improvements.

#### Water Use Intensity [Usage volume/Sales revenue]

FY2018



**3.1%** Up

FY2018 target: Global: -2.0%  
(compared to FY2017)

## Environmental Pollution and Biodiversity

» Global

### Thorough Management of Chemicals

We have identified "environmental pollution and biodiversity," with a focus on chemicals, as top priority issues for environmental protection. This is to ensure that we do not have a serious impact on the environment at all stages, from manufacturing through use to disposal.

Also, along with increased environmental awareness in the global community, laws and regulations concerning the reduction and non-use of harmful chemicals are also becoming stricter year by year. With this recognition, to comply with the law and with customers' requirements, we have adopted basic policies of not using harmful substances as far as possible, of reducing their use and adopting alternatives as much as possible, and managing them properly if they are used. On that basis, we are thoroughly managing the risks for each product, manufacturing, and purchased product (components and sub-materials) at each of our global sites.

» Global

### Prevention of Pollution

As well as responding to the laws and regulations of individual countries, such as Europe's ELV Directive\*1 and REACH regulation\*2, in light of the requirements of our customers and suppliers around the world, we have set voluntary targets and are working to reduce the content of substances that place a burden on the environment.

Specifically, areas we are working on include the enhancement of management and follow-up systems using in-house systems, the pursuit of development of alternative technologies, and the construction of frameworks for managing chemicals according to our Green Procurement Guidelines throughout the entire supply chain. We are also striving to analyze impact in the stages prior to becoming SVHCs\*3 under the REACH regulation and to take prompt, appropriate action.



» Global

### Protection of Biodiversity

We consider the protection of biodiversity as a priority issue and are engaging in it with a focus on social contribution activities.

In 2018, as an 80th anniversary project, through multiple social contribution activities, we launched a global Green Project for the planting and conservation of more trees than there are global employees (22,678 in Fiscal 2017).

We aim not only to protect biodiversity, but also to mitigate the impacts, risks, and vulnerabilities of climate change and natural disasters and to contribute to securing the lifestyles and safety of local residents.



Young Tree Giving Ceremony for Mangrove Forest Regeneration Project, one of the Green Project activities

\*1 ELV Directive : End-of-Life Directive

\*2 REACH Regulation : Registration, Evaluation, Authorisation and Restriction of Chemicals regulation

\*3 SVHC(Substance of Very High Concern)



**Soukaina Yassine**

In our workplace, we are practicing environmental initiatives that each individual employee can perform. The reduction of plastic use and promotion of recycling are a step toward a circular society.



**Yuan Cui**

To reduce waiting times when receiving truck shipments, we are working on staggering delivery times. When we engage in our operations, we are constantly thinking about how we can contribute to society through our work, such as helping to curb CO<sub>2</sub> emissions with such activities.



**Andra Savu Straja**

To renew our awareness that planting trees plays a beneficial role in environmental conservation, we are planning a tree-planting activity in the green space around the plant, as well as a clean-up activity, for Earth Day, a day in which people around the world think about and take action for the Earth.



**Watcharanon Suphatree**

The Coral-Planting Project involves building plastic greenhouses to cultivate coral and returning the coral we grow there to the ocean. I am proud to be involved in this project together with my work colleagues.



## Social

We aim to realize a sustainable society by engaging in solutions to social issues through our business. As well as responding to increasingly diverse and complex social issues from the aspects of human rights, labor, safety, and quality, we also recognize the importance of promoting diversity within the Group and acting with diverse perspectives. We will also deliver products and services that will satisfy our customers and create new value for society.

### Improve ESG in Supply Chain

**208** companies

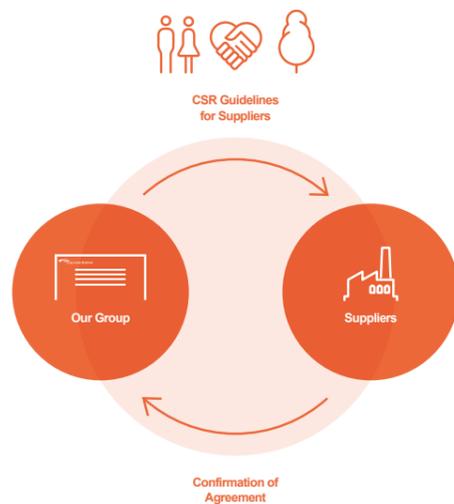
Number of companies surveyed regarding conflict minerals

» Global

#### Promotion of Socially Responsible Procurement

With the expansion of our business, our supply chain is also expanding globally. We are sharing our ideas and policies regarding CSR with our suppliers in Japan and overseas as we pursue our procurement activities.

In Japan, with the roll-out of our CSR Guidelines for Suppliers, we have asked our suppliers to be thorough in their communication of compliance, including the prevention of bribery. We are also making efforts to ascertain the state of approaches to the priority CSR issues we established by conducting CSR due diligence surveys. Overseas as well, in addition to sharing our CSR policies with our suppliers, we are actively pursuing local procurement from the perspective of securing employment.



» Global

#### Supplier Surveys for Action on Conflict Minerals

In recent years, against a background of the increasingly borderless nature of the economy, there have been growing calls for businesses to establish frameworks for respecting human rights that encompass their entire supply chain. To respond to these demands from the community, we established a Policy for Approaches to Conflict Minerals from the perspective of curbing human rights violations in conflict regions. In line with that policy, we have been conducting supplier surveys and other initiatives since 2012. In Fiscal 2018, 208 companies were surveyed regarding conflict minerals.

Year of Survey	Number of surveyed suppliers	Response rate
FY2012	40 companies (preliminary survey)	-
FY2013	224 companies (full survey)	-
FY2014	288 companies	-
FY2015	285 companies	-
FY2016	284 companies	83%
FY2017	211 companies	99%
FY2018	208 companies	96%

» Japan

#### Collaboration with Suppliers for CO<sub>2</sub> Reductions

To strengthen our suppliers' manufacturing systems and relationships of trust, our purchasing divisions provide support to suppliers. In these activities, with the agreement of the supplier, we are introducing site improvement tools and pursuing activities to improve manufacturing sites.

Business cases are presented to other suppliers at exhibitions and other events, which we believe will invigorate site improvements at other suppliers.

In particular, an example of an environmental conservation activity is the "quantification and visualization of the CO<sub>2</sub> reduction effect of site improvements" that we began in 2013. The ongoing implementation of improvement activities contributed to a reduction in CO<sub>2</sub> of approximately 37 tonnes in Fiscal 2018.

We plan to continue with these environmental protection activities with our suppliers into the future.

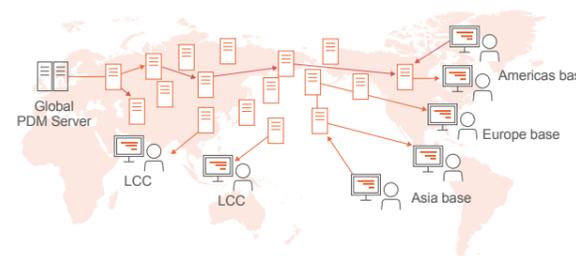
## Create Social Values Through Innovations

**10.6 %**

Ratio of sales expansion by products which affect "Environmental Burden Mitigation", "Safety and Security" and "Comfort and Convenience"

» Global

#### Technological Innovation and Research and Development Framework

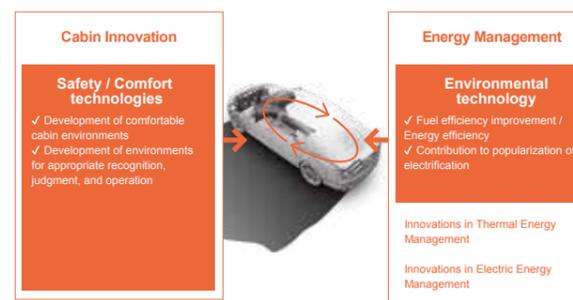


\*PDM=Product Data Management

In response to the needs of our customers around the world, we have planted roots in our respective regions and are pursuing product development that reflects our customers' opinions. We are also working to strengthen our development overseas by leveraging the mechanisms of the Global Product Data Management (PDM) System. This system provides integrated management of engineering information on a global basis to enable us to deliver future value to our customers.

» Global

#### Technological Development Based on Domains of Focus



Under our Medium-term Business Plan, we have set two domains of focus, namely "Cabin Innovation" and "Energy Management." Based on these pillars, we will engage in development that focuses on Human-Machine Interfaces (HMI) that have human-centric design, and on the minimization of energy loss. We will develop and deliver products and technologies that contribute to social issues, to create a sustainable mobility society.

» Global

#### Base Technologies that Will Give Rise to Innovative Products

We are actively engaged in product design, and are developing pioneering technologies in areas such as analysis, measurement, and evaluation that will provide a foundation for creating innovative products and supporting even higher product quality.

To enhance the quality of development and increase its efficiency, we are undertaking technological development in Computer Simulation (CAE) and Model-Based Engineering (MBE), and using these technologies in a range of situations. We are also developing and making use of CAE and MBE not only for enhancing product performance, but also in manufacturing domains, such as resin flow and plastic working.

» Global

#### Ensuring a High Degree of Product Development Quality

The Testing Research Center, which implements measurement and evaluation technologies, investigates the global market environment in the areas of safety, environment, and comfort technologies from our customers' perspective, and replicates the market environment through state-of-the-art equipment and testing technologies. In the pursuit of product development that will satisfy our customers, we are enhancing safety and durability with the steady implementation of the Development Quality Assurance Process in the four stages of Vehicles, Systems, Components, and Elements/Materials.



EMC Test, a type of verification test at the "Vehicle" stage of the Development Quality Assurance Process



**Watinee Wongkaew**

As a production management officer, I hope to cooperate well with our team and our suppliers so that we can deliver products that meet the quality standards required by our customers and make our customers happy, and to work for the mutual improvement of manufacturing and transport systems.



**Emily Weaver**

The mission of the regional hospital is to advance cures, and means of prevention, for intractable diseases in children through research and treatment. We are committed to supporting that mission by raising funds through various events including bake sales, a Summer Festival, etc.



**Sarah Murphy**

We are continuing with our school engagement activities and building relationships with schools and universities. I will attend events to encourage young people into engineering and take part in site visits.



**Areerat Srinun**

I want to propose and develop groundbreaking products that mitigate environmental burden and contribute to creating a better environment and building a sustainable society.

## Respecting Human Rights **96.2 %**

CSR e-learning participation rate (Japan)

» Global

### Encouraging More Respect for Human Rights

In April 2016, we published the Basic Policy for Human Rights and the Key Policy on Human Rights. To ensure that our operations can be pursued with respect for ethnicity, culture, and other factors in diverse countries and regions, we conduct education and raise

awareness to thoroughly instill our human rights policies in all employees of the Group. In Fiscal 2018 also, we adopted a variety of approaches, including those described below, to instill these policies throughout the Group.

			
Information published in company CSR newsletter	Company magazine	In-house e-learning on CSR (Includes the Human Rights section)	Posters hung in company premises
			
Notices on global intranet on World Human Rights Day	Information published in CSR Handbook	Notices on company electronic noticeboards on World Human Rights Day ★★	Human rights training as part of new employee induction training Approx. 250 trainees(40mins) ★

No mark: Global (with some exceptions) ★: Japan ★★: Headquarters only

» Global

### Human Rights Due Diligence in the Supply Chain

We conduct due diligence surveys of our suppliers, consisting of 80 questions on seven topics: 1.corporate governance regarding CSR; 2.human rights; 3.labor practices; 4.environment; 5.operating practices; 6.consumer (or customer) issues; and 7.community development.

In Fiscal 2017, we rolled out the survey to 225 of our major suppliers that account for 99% of our domestic purchasing. We analyzed the opinions, questions, and survey responses received from them and fed the findings back to the individual suppliers in Fiscal 2018. These findings will be reflected in our activities in Fiscal 2019.

» Global

### Response to UK Modern Slavery Act

Calsonic Kansei Europe plc. (CKEU) published an annual statement in response to the UK Modern Slavery Act\* for the first time in Fiscal 2016 and has produced and published such a statement every year since then. In addition to activities to raise awareness within the company, CKEU also made efforts to raise awareness among its suppliers by conducting due diligence and distributing the CSR Guidelines for Suppliers.

For the prevention of forced labor, human trafficking, illegal child labor, and other similar acts, these initiatives are being extended globally beyond the United Kingdom. We are continuing in our endeavors to fulfil our responsibility to respect human rights across the entire supply chain.

\*UK Modern Slavery Act 2015  
2015 Legislation that requires enterprises to prepare and publish an annual statement on the actions they have taken to guarantee that they have not been involved in slave labor or human trafficking. For-profit organizations and companies that are engaged in business activity in the UK and that have annual sales of over GBP 36 million, are subject to this obligation.

#### Namchai Kaewsalee

I want to help economically disadvantaged children to pursue their dreams and become fine citizens by donating to scholarship funds and other activities.

#### Melissa Dixon

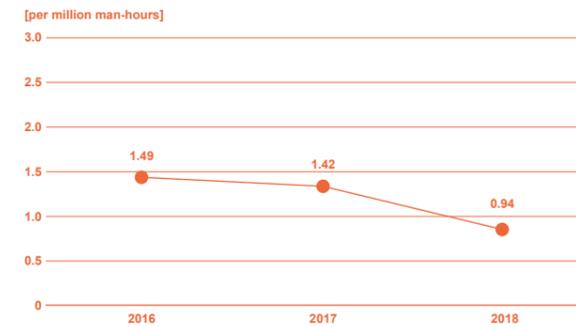
I attended the annual skills convention, joining local universities, the Welsh Government and others. Through this event, which attracts over 4,000 attendees, we promote careers within the automotive industry.

## Occupational Health and Safety **0.94** LTIFR\*

Year-on-year reduction target achieved

» Global

### Occupational Health and Safety Initiatives



Every year, in Japan, we set certain challenges and strive to raise the level of their performance in occupational health and safety. In Fiscal 2018, in response to the Top Safety Declaration at each business location, a review was performed of the previous year and each business site engaged in improving its individual weaknesses. Other action in Fiscal 2017 included the publication of an Occupational Health and Safety Manual and the establishment of audit criteria. Further, with the objective of PDCA confirmation, it was decided to conduct annual audits of each business site going forward. LTIFR\* for the entire Group fell from 1.42 in Fiscal 2017 to 0.94 in Fiscal 2018.

\* Lost Time Injury Frequency Rates: Incidence of workplace accidents per 1,000,000 hours worked = (number of workplace accidents) ÷ (working hours) x (1,000,000 hours)

» Japan

### Mental Health Initiatives

Every year since Fiscal 2008, we have provided our employees with stress checks, conducted by independent service providers. Almost 100% of employees undertake the tests. Employees with high stress levels are able to obtain advice from specialist doctors. Managers are also able to check the overall stress levels in individual workplaces and link it to improvements in their own workplaces. Return-to-work programs have been developed for employees who become ill due to mental health issues. Systems have been put in place that will allow employees to return to their workplaces by following these programs.

#### Yuta Furuya

I make a point of communicating actively with our operators so we can create a safe, comfortable environment in which colleagues in the workplace can cooperate with each other.

## Promoting Diversity **23**

Number of Female Managers (Japan)

» Global

### Diversity & Inclusion

In the belief that creating new innovations through healthy conflict between employees with diverse values will lead to the growth of the company and the growth of the individual, we consider the promotion of diversity as an important management strategy for the entire Group.

In Fiscal 2018, executives and senior managers with extensive international experience were employed from within Japan and overseas, regardless of nationality, and efforts are being made to further extend our diversity management.

» CK

### Employee Data

	2016	2017	2018
Number of employees	3,741	4,056	4,694
Number of male employees	3,419	3,657	4,175
Number of female employees	322	399	519
Average age (years)	44.2	43.7	42.3
Contract employees	246	231	272
Non-Japanese employees	75	75	112
Percentage of employees with disabilities	2.07	1.99	2.16

» CK

### A Company Where Women Can Shine

We aim to create workplaces and working styles that make it possible to maximize the capabilities of women at various life stages, such as childbirth and childcare. Accordingly, we listen to our employees' voices through employee opinion surveys and through the Working Style Improvement Committee and Diversity Promotion Team. The results of such activities are reflected in our various diversity promotion measures.

		
Number of employees returning to work after maternity leave	<b>100%</b>	Eruboshi Mark We obtained the highest level of certification under the Eruboshi Mark scheme in 2016. This scheme recognizes companies with an excellent record in terms of implementing initiatives to promote women's advancement in the workplace.
		Company that Practices Diverse Working Styles (Saitama Prefecture) In 2012, we were chosen as a certified company under the Saitama Prefectural Government's Scheme for Certification of Companies That Practice Diverse Working Styles.

#### Nawarat Nakprasit

I would like to plan a fund-raising event in aid of disadvantaged children and people living in poverty. I hope to cooperate with other foundations to donate books as educational aid and provide economic assistance.

## Promoting Work-life Balance **85.7%**

Average percentage of annual leave taken

» Japan

### Encouraging a Good Work-life Balance

The lifestyles of employees are becoming increasingly diverse every year as the structure of society changes, and we are developing and implementing systems to support those different lifestyles. The systems we have put in place under the Act on Advancement of Measures to Support Raising Next-Generation Children exceed the standard required by the legislation.

» Japan

### Work and Family Life Balance Assistance Scheme

We are working to enhance our personnel and welfare programs so that all of our employees may work energetically with peace of mind according to their own individual circumstances and values and their various life stages. In recent years, to contribute to the creation of a society that makes the most of women's vitality, we are making efforts to enhance programs that assist with childbirth, raising children, and caring for elderly and infirm family members. In Fiscal 2016, we expanded the scope of eligibility for receiving dependent family benefits, extended the child care leave period (until the end of the April following the child's second birthday), and introduced a program for regular consultations with employees on child care leave. In addition, from Fiscal 2018, we also extended the period during which employees raising children are able to work shorter hours until the end of compulsory education (under the age of three by law). As a result of our continued efforts to expand our programs to help employees to continue their careers and support their smooth return to their workplaces, in Fiscal 2018, our rate of return to work was 100%. In our nursing care leave scheme, we have extended the period for which such leave can be taken, to support working employees.

» CK

### Child Care and Nursing Care Data

	2016	2017	2018
Number of employees taking childcare leave	14	18	35
Number of employees taking nursing care leave	1	1	1

### Situation Regarding Annual Leave Taken

	2016	2017	2018
Percentage of annual leave taken (%)	77	83	85.7



**Employee welfare programs**  
Adopted a system in Fiscal 2018 for selecting and receiving services that match one's lifestyle from approximately 20,000 programs (for employees and members of their families)



**Flextime scheme**  
A flextime scheme has been introduced that has no core time requirements, with the exception that employees work at least one hour between 8:30 a.m. and 5:30 p.m.



**Child Birth**  
**Pre-and post-birth maternity leave**  
Expectant mothers are entitled to 6 weeks' maternity leave or, in the case of multiple pregnancy, 14 weeks, dating back from the due date, and to 8 weeks' leave counted from the day after the child is born.



**Measures for health examinations, etc.**  
On request, pregnant women and new mothers may be excused from work for the time required to receive health guidance or undergo health examinations during pregnancy and up to one year after the child's birth.



**Child Care**  
**Child Care Leave**  
Employees may take child care leave up to the first April after the child turns two years of age (the legislative requirement is for up to eighteen months of age).



**Regular Consultation Scheme**  
Consultations are set up for employees on child care leave to make it easy for them to return to work.



**Child Care**  
**Shorter working hours to care for children**  
Employees may work shorter hours until the child completes compulsory education (the legislative requirement is for up to three years of age).



**Nursing**  
**Nursing Care Leave Scheme**  
Employees with less than one year's service may also take nursing care leave (under the legislation, employers may exempt employees of less than one year from such leave).

## Human Resource Development **10.7 hour**

Training time (per person)

» Global

### Human Resources Development to Expand Individual Capabilities

We believe that, above all else, it is our people who are most instrumental in the company's sustainable growth. We are rolling out various human resources development programs, with a priority on "Monozukuri" and "global" perspectives. In Fiscal 2018, a total of 8,911 employees undertook these programs, spending a combined total of 95,267 hours (10.7 hours training time per person).

### Monozukuri Human Resources Development

To further improve the *Monozukuri* capabilities that have been strengthened through global competition and roll out these capabilities on a global level, we conduct training for the acquisition of knowledge and skills in a planned manner. This training includes training on site improvement tools, which forms our foundation for *Monozukuri*, and various specialized technical training programs.

### Introduction of the Skills Meister System (CK only)

The Skills Meister System has been introduced to clarify the skills that are required in *Monozukuri*. The Meister Certification Committee convenes every year to certify Skill Meisters. Currently, there are 10 Meisters working hard in the Group. Skilled workers who have the required skills as a matter of course, but who are also recognized by all around them as being exemplary role models, are selected as Meisters.



### Global Human Resources Development

For the purpose of developing the next generation of global business leaders, each year, we conduct Global Business Leader Training (GBLT), a group training program conducted in English for leader candidates from each country and region, including Japan. Further, to develop global *Monozukuri* human resources, we conduct Global Factory Manager Training for factory managers and factory manager candidates from each country and region.

## Productivity Improvement **1.74%**

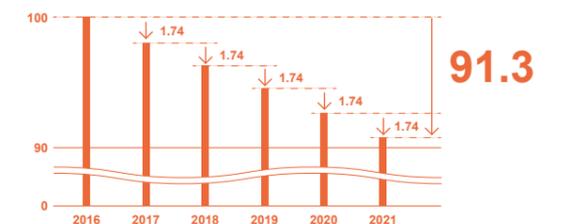
Cost per hour (year-on-year percentage reduction)

» Global

### Productivity Improvements in Manufacturing Processes

We are striving to improve productivity through a range of ongoing kaizen activities, such as reduction of setup times and equipment cycle times, and improvement of the efficiency of assembly and transport tasks. These efforts include the use of robotics and improvements to employee working environments. In Fiscal 2017, we introduced "Cost per Hour" as a global KPI to determine whether these kaizen activities are having sufficient effect, and we are monitoring the outcomes of activities based on a shared philosophy. With this initiative, activities that are closely related to financial figures are being promoted, and in Fiscal 2018, Cost per Hour decreased by 1.74%. Going forward, we will continue to pursue activities with the shared global target of a 1.74% decrease per year until 2021.

Cost per Hour (indicator)



» Global

### Promotion of Work-style Reform

We are engaged in the reform of work styles with the objective of creating highly satisfactory workplace environments by raising operational productivity, achieving higher added value, and realizing diverse working styles. Specific initiatives include setting specific times for when meetings with overseas parties may be held, thorough implementation of the rules for holding meetings, the use of ICT, thorough improvements in the efficiency of operations, particularly back-office operations, and the systematization of various procedures and processes.

» CK

### Work-style Reform Related Data

	2016	2017	2018
Overtime worked (hours)	22.7	22.0	21.6
Total working hours (hours)	2215.8	2216.0	2211.0



**Kazuyoshi Kimura**  
I coach a local children's soccer team. I started when my own child joined the team, but I have kept it up even after my child left. I want to work hard at practice every day, watching over the children's growth as they bounce from joy to sorrow.



**Cai Ping**  
Donating blood can save lives and improve people's health. As a mother of two, I want to keep doing things that will make my children feel proud of me.



**Mooktapha Wasikarat**  
As a member of the Human Resources Department, I hope to work in the planning and development of training courses with the objective of enhancing employees' skills. I believe that such training will encourage productivity improvements and steady, sustainable growth.



**Hugh John**  
CKLL are supporting a team from Gowerton School for the Engineering Education Scheme Wales (EESW). Students are doing a project at CKLL that will give them valuable workplace experience and an idea of the appeal of CKLL.

## Improve Customer Satisfaction **3.44** points

Customer satisfaction level (maximum 5 points)

» Global

### Reflecting Customers' Opinions in Improvements

We hope to be an industry leader in *Monozukuri* in the mobility society and to continue to provide a range of values. To push forward vigorously in *Monozukuri* that is of high quality, competitive, and that meets the needs of our customers, we are dedicating efforts to our customer service capabilities. To this end, we have been conducting Customer Satisfaction Surveys since 2005. The Customer Satisfaction Survey asks respondents to evaluate us on a five-point scale in the individual categories of Quality, Cost, Delivery, Development, Management, and Sales (QCDDMS). It also seeks comments from respondents on specific requests for improvement. In Fiscal 2018, based on the results of surveys in the previous year, we implemented three measures, namely quicker response times, compliance with various deadlines, and strengthening of cooperation with customers, which enabled us to raise customer satisfaction by 0.01 points. With this survey as a point of connection, we will further enhance our communication with our customers and aim to improve customer satisfaction.



### Points for Improvement by Function

Sales	1. Issues related to costs and cost details (177 cases)
	2. Issues related to response and speed (49 cases)
	3. Issues related to management (32 cases)
Development	1. Issues related to new development and advanced development (54 cases)
	2. Issues related to proposal activities (46 cases)
	3. Issues related to management (project management, etc.) (41 cases)
Quality	1. Issues related to management (133 cases)
	2. Issues related to response and speed (38 cases)
	3. Issues related to analysis capabilities (37 cases)

## Quality Improvement **11** awards

Number of quality awards received from customers

» Global

### Acquisition of Quality Management Standard IATF 1694

We have now acquired certification for ISO/TS 16949, an international standard of quality management systems for the automotive industry, for all of our sites. We have been pursuing activities aimed at bringing our quality management systems into compliance with the new standard, IATF 16949, to which product safety and the development of products with embedded software have been newly added, and to obtain certification for all of our global sites. In Fiscal 2018, transition from TS16949 certification to IATF 16949 was completed at all sites, with 63 sites, including three new ones, acquiring certification.

» Global

### Quality Education and Awareness Raising Initiatives

#### Q-Forum

As part of our quality awareness-raising activities, once a year, we hold the Q-Forum. Through exhibits of the prevention of quality defect recurrences, displays of actual defective products, presentation of kaizen examples, and supplier quality seminars, the Q-Forum gives each and every individual the opportunity to reflect on their own awareness and actions regarding quality and make new discoveries. In this way, they can raise their awareness of quality and the quality of their own actions, leading to improvements in quality.

#### QC Circle Global Convention

We conduct QC circle activities all over the world to promote quality improvement activities on the factory floor and human resources development through such activities. Once a year, the QC Circle Global Convention is held at the headquarters. Through presentations of outcomes of quality improvement activities, we are striving to encourage friendly competition among regions and to make further improvements to our *Monozukuri* quality.



» Global

### Assessment of Novelty and Importance

We clarify the novelty and importance of new products from the design concept phase. In accordance with those assessments, expert reviewers conduct design examinations and process design examinations to raise the safety and reliability of our products. There were 1,148 such examinations in Fiscal 2018, and there were no problems with product safety. In pursuit of "limitless *Monozukuri* reform," the Production Engineering Center conducts development of new production methods, prototype verification, and global standardization. Valuing teamwork, it is pursuing the realization of drawings and production processes based on *Monozukuri* principles and doctrines.

» Global

### Quality Awards from Automotive Companies

As a result of our various initiatives in quality improvement, we have been honored with various awards from automotive companies.

#### Fiscal 2018 Award Winners

Automotive Manufacturer	Awards Received	Award Category
Nissan Motor Co., Ltd	Certificate of Appreciation for Excellent Quality, Japan Region	Compressor Business Unit
	ASEAN Regional Quality Award	Calsonic Kansei (Thailand) Co., Limited (CKT) Body category
	Europe Regional Quality Award	Calsonic Kansei Europe plc. (CKEU) Engine & Drive category
	Regional Supplier Quality Award Finalist	Calsonic Kansei North America, Inc. (CKNA) Electric category
Regional Supplier Quality Award Finalist	CKT Interior & Exterior category	
General Motors Thailand	Supplier Quality Excellence Award	CKT
Nissan (China) Investment Co., Ltd.	Quality Improvement Award	Calsonic Kansei (Guangzhou) Corporation
GAC Mitsubishi Motors Co., Ltd. (GMMC)	Outstanding Supplier	Calsonic Kansei Components (Wuxi) Corporation
Dongfeng Motor Co., Ltd. (DFL)	Supplier Contribution Award	Calsonic Kansei (Guangzhou) Corporation, Dalian Plant
	New Vehicle Quality Improvement Award	Calsonic Kansei (Xiang Yang) Corporation
Zhengzhou Nissan Automobile Co., Ltd.	Quality Improvement Award	Calsonic Kansei (Guangzhou) Corporation, Zhengzhou Plant

## Promotion of Social Contribution Activities

» Global

### Four Domains of Social Contribution Activities

To contribute to the creation of a better society, we enrich activities on a global basis, with a focus on four domains. In the expansion of these activities, we identify the expectations of stakeholders and requirements of our stakeholders by communicating with them, with the aim of contributing to regional development and solving social issues.



» Japan

### Support for the *Monozukuri* Human Resources of the Future

Team SKETT is a team of volunteers whose members are drawn from an open call to our employees for participants. It conducts a wide range of activities to give children, who are the future of society, hands-on experience of *Monozukuri*. Team SKETT has exhibited at Kids Engineer, a hands-on exhibition for elementary school pupils organized by the Society of Automotive Engineers of Japan, Inc., every year since the inaugural event in 2008. In Fiscal 2018, at Kids Engineer 2018 in Yokohama and at Mini Kids Engineer in Tohoku (Sendai), more than 3,000 people participated in challenges such as assembling a cockpit module, where they learned the enjoyment of *Monozukuri*. We also exhibited again at the Jidosha Kaikan Kids Engineer event, which the Automobile Business Association of Japan began holding in 2018. At our booth, we gave more than 300 attendees a hands-on building experience. In our Traveling Classrooms for Elementary Schools program, which began in 2012, we conveyed the fun of science to more than 1,000 children at 21 schools in Fiscal 2018.

#### Number of Participants Attending Kids Engineer (2018)



More than **3,000** people

#### Wang Xu

In January 2019, the management policy of "creating appealing workplaces" was rolled out, and an activity was launched in which, every Tuesday, we all greet everyone we meet when we come into work in the morning. At first, not everyone was able to do this, but now, everyone is able to respond to these morning greetings.

#### Toshihisa Okada

As a factory technician, I aim to create a workplace in which everyone on the factory floor can work in safety and comfort. I will be diligent in the quest for high quality and contribute to eliminating defects in delivered products. Going forward, I will work hard every day in my endeavors to work steadily and enjoyably.

#### Ricardo Ponce de León

A person's fate is decided by that person's own abilities and by their willingness to make moral decisions. As everyone knows, the actions of each and every individual around the world has an impact on their local community. As a corporate citizen with a conscience, we vow to bring about positive change in our community.

#### Jennifer Norman

CKNA successfully completed ISO 14001 re-certification for the Shelbyville, TN plants and the Lewisburg, TN plants. The Madison, MS plant received its first certification in ISO 14001. We will continue to be united in our efforts to protect our environment.



## Governance

For our Group to continue to be an organization that is trusted by society, we have established corporate governance and risk management frameworks with a strong awareness of ESG and are pursuing business that is legally compliant, ethical, and sustainable. Under the Global Code of Conduct of our Group, we have conducted exhaustive education and awareness-raising of employees, with the goal of strengthening our global compliance regime.

## Corporate Governance

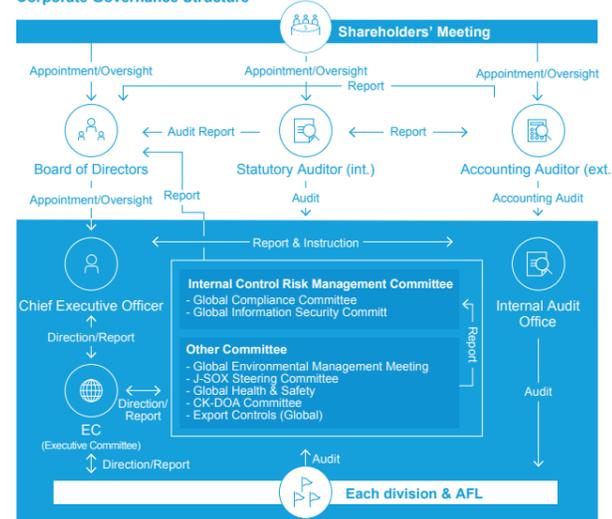
» Global

### Corporate Governance Structure for Speedier Decision-making

We are working to enhance our corporate governance to create a prosperous society through our business activities and to build excellent relationships with all of our stakeholders. With the objective of realizing speedier decision-making, we have established a corporate governance structure consisting of a Board of Directors, with three directors who concurrently serve as executive officers, and two auditors. Also, in terms of our relationship with its controlling shareholder, as a wholly-owned subsidiary of CK Holdings (CKH), an entity wholly owned by Kohlberg Kravis Roberts (KKR), we are working to increase the diversity of its Board of Directors membership, under the supervision of the CKH Board of Directors. The auditor monitors the performance of Directors in carrying out their duties, and also works with the auditors of CKH to audit the execution of business related to all aspects of the Group's management. In addition, outside auditors conduct accounting audits, in which they verify the appropriateness and legal compliance of accounts and of internal controls related to the accounts from an independent standpoint.

The current structure has been chosen because we believe these measures will ensure the effectiveness of our corporate governance.

### Corporate Governance Structure



## ESG Risk Management

» Global

### Activities of Internal Control Risk Management Committee

We have established various committees from social and environmental perspectives, with directors taking responsibility for them. These committees consider policies and actions concerning risk management and report to their responsible directors. They also report regularly to the Board of Directors through the Internal Control Risk Management Committee.

Through close cooperation with these committees, we strengthen and further enhance CSR activities.

In Fiscal 2018, there were no legal violations regarding labor, bribery, information security, product safety, or exports. Consequently, we have not been subject to any fines or other punitive measures. We will continue in our endeavors in appropriate organizational governance and information disclosure under our CSR policies.

### Committees responsible for internal control

Committees	Board of Directors Reports	Positions and departments of directors with responsibility
Internal Control Risk Management Committee		Executive Vice President, Global Corporate Development Division
Global Compliance Committee	Report	Executive Vice President, Global Corporate Development Division
Information Security Committee		Senior Vice President, Global IT & Process Innovation Division
CK-DOA Committee	Twice annually (joint reports)	Executive Vice President, Global Corporate Planning Division
Health and Safety Committee		Executive Vice President, Global Corporate Development Division
Environmental Council		Executive Vice President, Global Manufacturing Division
Export Control Committee		Deputy Global Function Leader, Global Corporate Development Division
J-SOX Steering Committee		Senior Vice President, Global Finance Division

\*As of March 31, 2019

## Strengthening Compliance

» Global

### Regular Monitoring

We monitor major compliance activities in its various regions and sites according to seven elements (compliance program). This monitoring is reported to the Global Compliance Committee and connected to process improvements.

### Compliance program

- Standards and procedures
- Organizational structures
- Education and training (including corruption and bribery prevention)
- Regular evaluation (including survey of degree of penetration of compliance)
- Commendations and disciplinary action
- Reports and surveys
- Responses and recurrence prevention (compliance risk management including prevention of corruption and bribery)

» Global

### Whistleblowing Systems Operation

#### Trends in Whistleblowing Cases



We have introduced whistleblowing systems at all of our Group companies, to ensure that every employee has an understanding of compliance and puts it thoroughly into practice and to confirm that corporate activities are being conducted properly.

In Japan, we have incorporated the perspectives of whistleblower protection in line with the Whistleblower Protection Act that came into force in April 2006, and operate a Helpline as an external contact point for whistleblowing in Japan. Highly experienced call-takers from an independent organization receive the information while respecting the whistleblower's privacy. The responsible division is contacted and, in turn, contacts the relevant departments and organizations and takes appropriate action.

Globally as well, in the various regions and bases, we have established and are operating whistleblowing systems in the most appropriate form for each company, taking into consideration the culture and laws of their respective countries and regions. In the Americas and Europe, we have established independent hotlines that accept calls 24 hours a day, seven days a week. We are also looking into establishing independent contact points in Asia going forward. Since Fiscal 2016, we have also been establishing whistleblowing contact points for suppliers in each of our regions globally. There was a total of 280 whistleblowing cases in Fiscal 2018 in Japan and overseas. Proper action has been taken in all cases, including improvements of systems after consultation with the relevant departments.

## Strengthening Information Security

» Global

### Initiatives for Strengthening Information Security

The Global Security Committee meets twice a year to share information about the roll out of new measures concerning the improvement of information security and the status of audits.

### Major initiatives in Fiscal 2018

- Security measures: Internal audit conducted of cyber attacks
- Employee awareness activities: Education of employees using globally standardized educational content
- Security Week to raise consciousness and increase knowledge about security among all global employees
- Communication of awareness-raising messages from the President and responsible directors
- Display of security awareness messages on the Intranet and in posters
- Strengthening of security measures for factory equipment

» Global

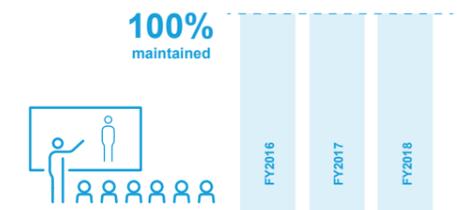
### Initiatives for Information Security Education and Awareness-Raising

A high awareness of control in each individual employee is essential to compliance with information security. We are strengthening that awareness through education. In addition to implementing various security measures, such as control of rights to access electronic data and the restriction of use of external storage media, we are also pursuing activities to raise awareness among employees.

### Education and Awareness Activities

Initiatives	Details
Security measures	<ul style="list-style-type: none"> <li>Clarification of access rights through confidentiality classifications</li> <li>Restrictions on writing data onto external storage media</li> <li>Anti-virus measures and hard-disk encryption</li> </ul>
Employee awareness-raising activities	<ul style="list-style-type: none"> <li>Communication of awareness-raising messages by the responsible executives</li> <li>Implementation of new employee education and regular employee education programs</li> <li>Assessment</li> </ul>

### Employee Education Track Record



### Adrian Key and Greg Harris

CKNA supports Angel Tree, a program that provides personal items and toys to children at Christmas. This year our Lewisburg team was inspired by three special requests for beds. They fabricated custom bed frames specifically themed for each child.

### Kazumi Osawa

I want to contribute to the community through the activities of the neighborhood association. I also make a point of acting in ways that are considerate of the environment in my daily life, such as planting green curtains, conserving energy, and recycling resources.

### Victoria Manghan

We will make a positive impact on the communities around us through school engagement projects, focusing on apprenticeships and improving skills in the area, being committed to improving the health and wellbeing of our employees and becoming involved in local initiatives wherever we can.

### Mitsuhiro Koyashiki

I want to fulfill my corporate social responsibility through communication with members of the local community by actively participating in events for children and volunteer activities.

## Company Overview

<b>Company</b>	Calsonic Kansei Corporation
<b>Address</b>	2-1917 Nisshin-cho, Kita-ku, Saitama City, Saitama, Japan
<b>Main Products</b>	Cockpit modules, Front-end modules, Exhaust systems, Air conditioning units, Compressors, Meters, Radiators
<b>Number of Group Companies</b>	Consolidated: 34*
<b>Total Number of Employees</b>	Consolidated: 22,382*
<b>Major Clients (alphabetical order)</b>	Audi AG, Daihatsu Motor Co., Ltd., Daimler AG, Geely Automobile, General Motors Corporation, Hino Motors, Ltd., Honda Motor Co., Ltd., Isuzu Motors Limited, Jaguar Land Rover Limited, Mazda Motor Corporation, Mitsubishi Motors Corporation, Nissan Motor Co., Ltd., Peugeot S.A., Renault S.A.S., Subaru Corporation, Suzuki Motor Corporation, UD Trucks Corporation, Volkswagen AG

\*As of March 31, 2019

## Editorial Policy

### About this Report

We report on our ideas and various initiatives as a communication method for stakeholders and as part of our efforts to disclose information about corporate social responsibility (CSR). The report is published in Japanese and English.

We have also produced a summary version of the report in the form of this booklet to familiarize even first-time readers with the Group's CSR endeavors. More detailed information is found on the website. To coincide with the change in management structure to a business unit framework in January 2019, the 2019 edition contains messages from the CEOs of the business units. We have also changed the format of the report in line with the materiality based on ESG (environment, social, governance). As well as deepening readers' understanding of our materiality, we aim to further pursue CSR initiatives.

In May 2019, Calsonic Kansei and Magneti Marelli announced that they will pursue a merger under the shared brand, MARELLI. However, this report concerns only the activities of the Calsonic Kansei Group in Fiscal 2018.

### Applicable Scope

Calsonic Kansei Corporation and Group companies

### Applicable Term

Mainly Fiscal 2018 (April 1, 2018–March 31, 2019)

### Publication Date

June 2019 (previous report: June 2018; next report: August 2020 (scheduled) )

### Reference Guidelines

GRI Sustainability Reporting Standards  
Environmental Reporting Guidelines of the Ministry of the Environment of Japan, 2018 Edition

### Support for various principles, etc. concerning the environment, society, and management

We are in agreement with the initiatives laid out in policies such as the UN International Bill of Human Rights, the UN Guiding Principles on Business and Human Rights, the UN Global Compact, the ILO Declaration on Fundamental Principles and Rights at Work, ISO 26000 (Guidance on social responsibility) and the Keidanren (Japan Business Federation) Charter of Corporate Behavior, and implements initiatives to help achieve these important management indicators.

### Third-party Assurance and Opinions

Third-party assurances will be conducted in 2019.

### We look forward to receiving your opinions and comments about this report

2-1917 Nisshin-cho, Kita-ku, Saitama City, Saitama 331-8501, Japan  
Calsonic Kansei Corporation  
Global Communication Department

### CSR Opinion/Suggestion Form

<https://www.calsonickansei.co.jp/en/csr/opinion/>

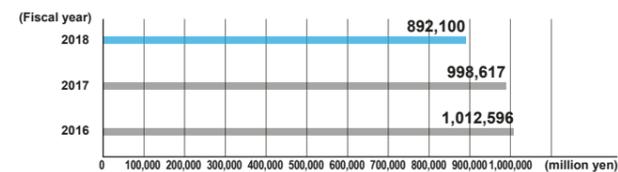
### Website CSR Page

<https://www.calsonickansei.co.jp/en/csr/>

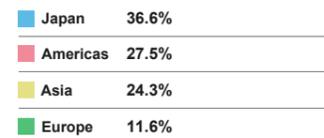


## Financial Highlights

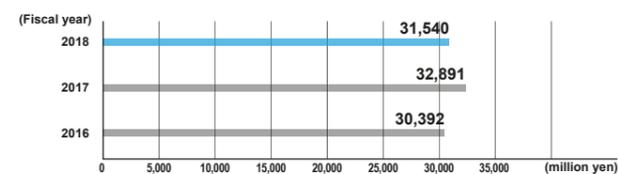
### Consolidated Sales



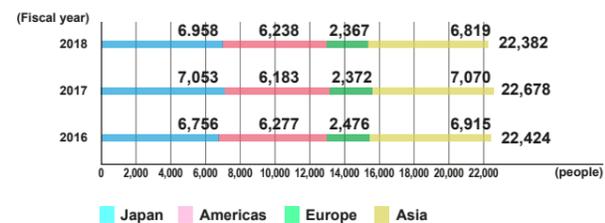
### Share of Consolidated Sales by Region (Fiscal 2018)



### Consolidated R&D Expenditures



### Number of Employees by Region (Consolidated)



A PART OF



## Magneti Marelli Sustainability Magazine

Calsonic Kansei Corporation

R&D Center, Headquarters

2-1917 Nisshin-cho, Kita-ku, Saitama City, Saitama 331-8501, Japan  
Global Communication Department  
[www.calsonickansei.co.jp/en/](http://www.calsonickansei.co.jp/en/)

## STARTo6 | READERS' GUIDE

This is the sixth edition of Start, the sustainability magazine regarding Magneti Marelli's scope of activities, which brings together figures, strategies and stories that characterised Company performance over the previous year.

By reporting on performance in 2018, it is an overview of the company's final year as part of the FCA Group, following FCA's sale of Magneti Marelli's automotive component business to leading Japanese automotive supplier, CK Holdings Co. Ltd., a holding company of Calsonic Kansei Corporation. 10 May 2019 also saw the announcement of the adoption of MARELLI as the new global brand uniting Magneti Marelli and Calsonic Kansei.

Reflecting the 4 pillars on which our sustainability strategy has been based, the magazine is made up of 4 sections: Products, Processes, Stakeholders and Impacts. Each chapter begins with a summary of the key figures used to measure

our performance and presents an example of the way in which we faced up to the challenges of sustainability with a focus on a representative case.

The performance reports in this document are based on the Global Reporting Initiative (GRI) Guidelines and, as said, make reference to overall figures as of 31 December 2018. Therefore, the scope of activities includes all the business lines belonging to Magneti Marelli at the time, including Plastic Components and Modules Automotive S.p.A. (PCMA), which was later excluded from the sale of Magneti Marelli to CK Holdings in 2019.

In the future perspective of a new and wider sustainability perimeter as "MARELLI" with new approaches and shared methods, START o6 has the only objective to provide a consistent and methodologically correct picture of the former Magneti Marelli sustainability perimeter as of year 2018.

# INDEX

STARTo6

WHO WE ARE

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2018  
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IMPACTS

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[magnetimarelli.com/company/sustainability](http://magnetimarelli.com/company/sustainability)

# MAGNETI MARELLI SINCE 1919

In the year of our Centenary, we are dedicating the company profile to an original look back over a long and glorious history of technology.



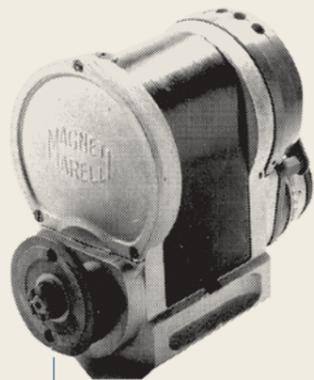
Here we are!  
I'm the "man with the megaphone", created by Noël Quintavalle, the director of the company magazine "Sprazzi e Bagliori", to introduce the "Domando la parola" (Let me speak) column and answer readers' questions. I have now been chosen to tell 100 years of history through 12 "sparks", themed fragments that retrace some of the most important moments of a bright industrial, business and technological history



Ercole Marelli

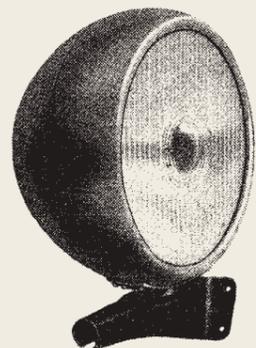


First Magneti Marelli logo



## THE MAGNETO

It all started here. Engines needed a spark generator: the "magnete", or rather, the magneto. And Ercole Marelli started to produce it. It would become a symbol, an icon.



## LIGHTING

The introduction of electric light to cars facilitated nighttime travel and exchanges. Light tore through the night, extending the space given to social life and changing society.



## PLACES AND BRANDS

The world is our home. From the very beginning, Magneti Marelli opened its doors to the world with commercial and manufacturing activities, going as far as to incorporate great historical brands that make our industrial heritage unique.



## RADIOMARELLI

Not just engines, but telecommunications too: connecting and transmitting information to help society progress. Magneti Marelli enabled television broadcasts and produced the most popular radios and televisions in Italy in the 1960s.



## SPRAZZI E BAGLIORI

Corporate culture, information and a sense of humour: «Sprazzi e Bagliori», our company magazine, shows the spirit and life at Magneti Marelli in its early years in the best possible way.



## THE PEOPLE

Magneti Marelli's people have guided and directed the company's life. They have made the "factory" great with the same dogged determination that came from Ercole Marelli.

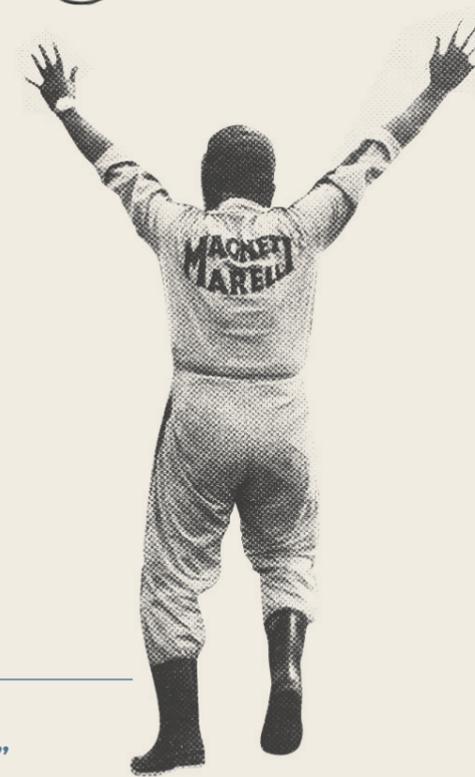
## RACING

They have always been in Magneti Marelli's DNA. From the track to the road, motorsport is the strictest testing ground and a field for research and innovation.



## ELECTRONICS

Magneti Marelli's "destiny". The brains that rule and will increasingly rule all processes linked to smart mobility in the automotive industry... And just think that it all started out with the Dinoplex control unit...



## "SCINTILLA"

To tell Magneti Marelli's story, we have used sparks to convey the highlights of 100 years of history. But there's more, a historic image that represents us: a passionate Magneti Marelli technician cheering. In the Formula 1 paddock, everyone knew him. His nickname was "Spark", that is to say: "Scintilla"!



## OFF THE BEATEN TRACK

What you didn't expect from Magneti Marelli: from video surveillance systems and teaching in schools, to submarines and Geneva's CERN, as well as artificial satellites and a presence on the Milan Metro.

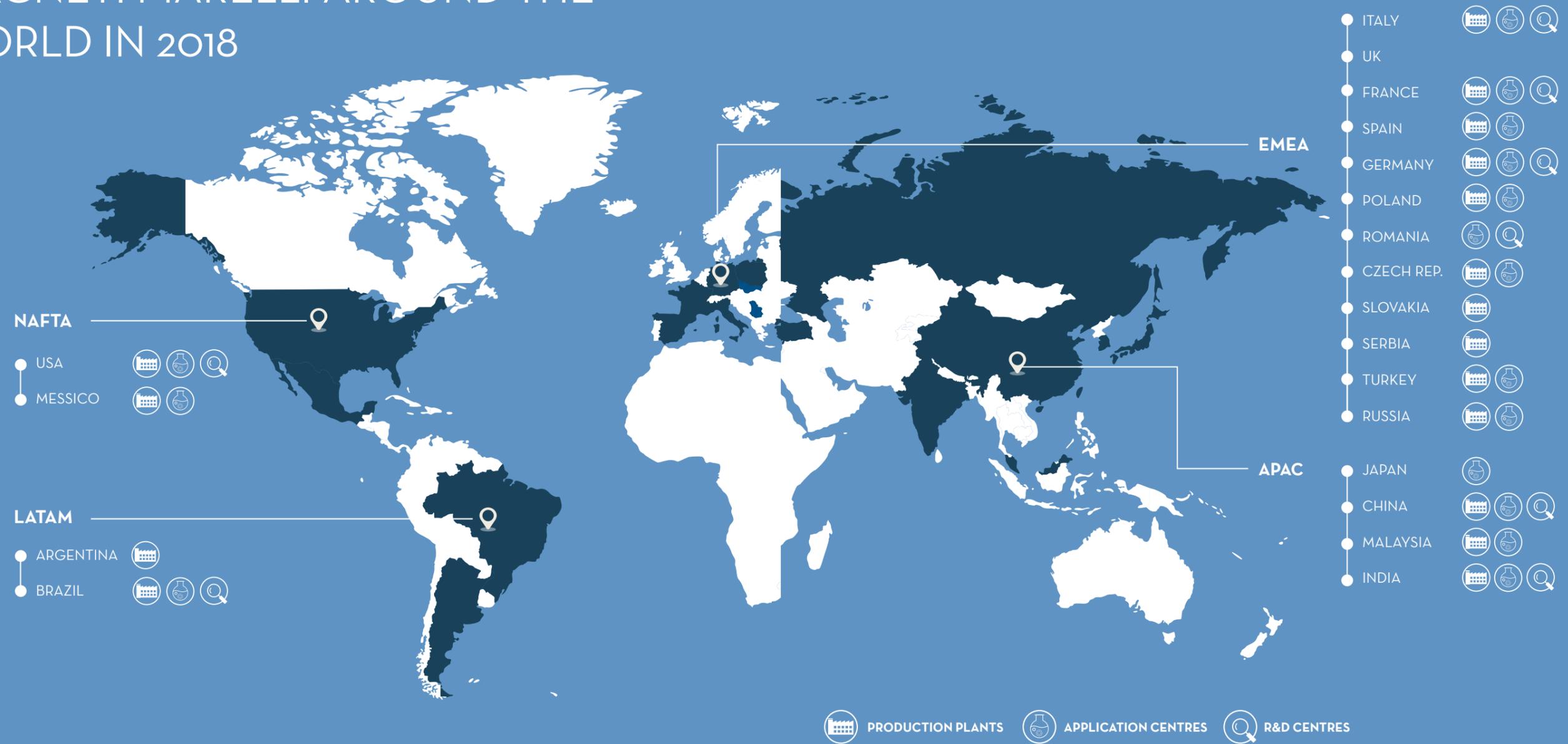


## FUTURE

We were born a century ago to improve the future and to create the future. Our history is a story of the future.



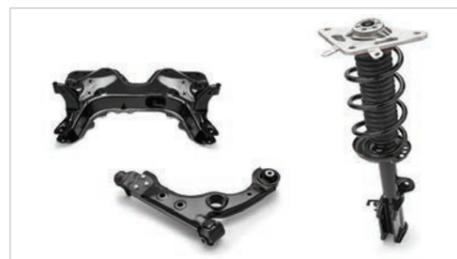
# MAGNETI MARELLI AROUND THE WORLD IN 2018



## AUTOMOTIVE LIGHTING



## SUSPENSION SYSTEMS AND SHOCK ABSORBERS



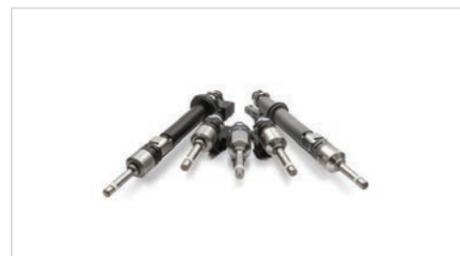
## EXHAUST SYSTEMS



## PLASTIC COMPONENTS AND MODULES



## POWERTRAIN



## ELECTRONIC SYSTEMS



## AFTER MARKET PARTS & SERVICES



## MOTORSPORT



# THE STRATEGY

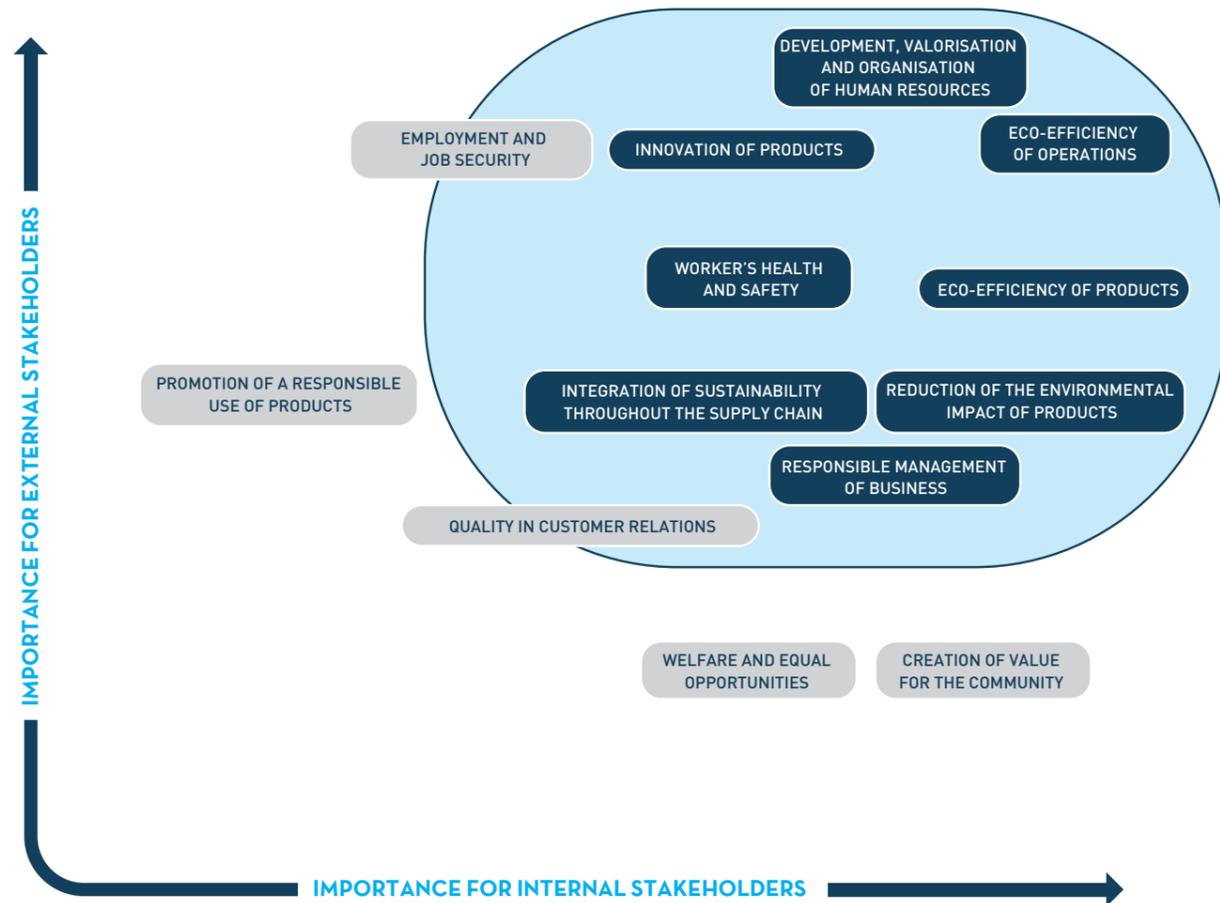
In order to apply our sustainability strategy to our business, we have identified two main instruments that

allow continuous exchange both within the company and with the outside world: the materiality matrix and the 17 Sustainable Development Goals

(2030 Agenda for Sustainable Development) identified by the United Nations in 2015.

## MATERIALITY MATRIX

The materiality matrix indicates the themes that are the most important for our business. The matrix has been constructed through a careful analysis of the our stakeholders' needs. The approach adopted for matrix definition is available in the previous edition of START.



## The Sustainable Development Goals and our sustainability strategy

The Sustainable Development Goals (or SDGs) set out by the United Nations in 2015 represent a benchmark and a source of inspiration for Magneti Marelli. In line with its role as a global leader in the automotive field, Magneti Marelli has identified five goals that have impact on business as usual, and one goal, Goal 17 (Partnership for the goals), that

provides for the direct involvement of our main stakeholders (customers, employees, suppliers, institutions, etc.) and the raising of awareness with these groups regarding the commitment to sustainable development. In order to make the goals tangible, in 2018 Magneti Marelli combined the SDGs with the materiality matrix and with its own

sustainability strategy, which is based on four pillars:

- Products
- Processes
- Stakeholders
- Impacts

This has allowed the Company to identify not only the level of coverage of the sustainability themes, but also cues for the examination of future objectives.

	8 DECENT WORK AND ECONOMIC GROWTH	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	13 CLIMATE ACTION	11 SUSTAINABLE CITIES AND COMMUNITIES	17 PARTNERSHIPS FOR THE GOALS
Eco-efficiency of operations						
Eco-efficiency of products						
Reduction of the environmental impact of products						
Development, valorisation and organisation of human resources						
Innovation of products						
Worker's health and safety						
Responsible management of business						
Integration of sustainability throughout the supply chain						
Employment and job security						
Quality in customer relations						
Promotion of a responsible use of products						
Welfare and equal opportunities						
Creation of value for the community						

Legend: Products Processes Stakeholders Impacts

# THE STORY OF A CONTINUOUS COMMITMENT

JANUARY



Participation in the **Consumer Electronics Show (CES)** in Las Vegas exhibiting high-tech electronics, lighting and powertrain solutions, with a focus on autonomous driving, connectivity and hybrid/electric mobility.

FEBRUARY



Victory at the “**Indian Automotive Technology and Innovation Award (IATIA)**”, recognised for excellence in the category “Transmission Technology of the year”.

JULY



Signing of an agreement for the **acquisition of Smart Me Up**, a pioneering start-up operating in the field of autonomous driving.

AUGUST



India sees the launch of the “**Scholarship distribution program**”, which ensures education for over 1100 students in economically disadvantaged conditions.

MARCH



The **Brazilian plant in Mauà** sees the launching of “**Women's week**”, focusing on equal opportunities and the role of women in the Automotive market.

APRIL



The **Wuhu Automotive Lighting plant** is the first in **China** to **achieve the Silver Award** in World Class Manufacturing.

SEPTEMBER



On the occasion of World Charity Day, a **book-collection is launched in China for children** to support schools in isolated rural regions, offering quality didactic materials.

OCTOBER



The French Automotive Lighting plant in **St. Julien** takes part in the “**Le Foulées Roses de l'Yonne**” march for breast cancer prevention.

MAY



The **Corbetta plant** takes part for the first time in “**Italia Loves Sicurezza**”, hosting for a day a high school in order to raise awareness among the pupils on themes regarding safety in the workplace and in daily life.

JUNE



Launch of the **internal contest “Beat plastic pollution”** at world wide level, involving all employees and inviting them to share ideas on the **reduction of plastic consumption** in everyday life.

NOVEMBER



To promote the **diversity of flora and fauna**, in Trusetal-Laudenbach, the German Automotive Lighting plant in **Brotterode** plants **18 fruit trees** and inaugurates the largest “**insect hotel**” in **Thuringia**. A “**wild pharmacy**” is also created, with clovers and wild flowers.

DECEMBER



The **Health and Safety Leadership Award (EHSLA) 2018** presents two Magneti Marelli plants with three awards: the **Manesar plant in India** for the “Health & Safety” category, and the **Bielsko Biala plant in Poland** in the categories “Environment” and “Energy”.

KEY FIGURES 1

11

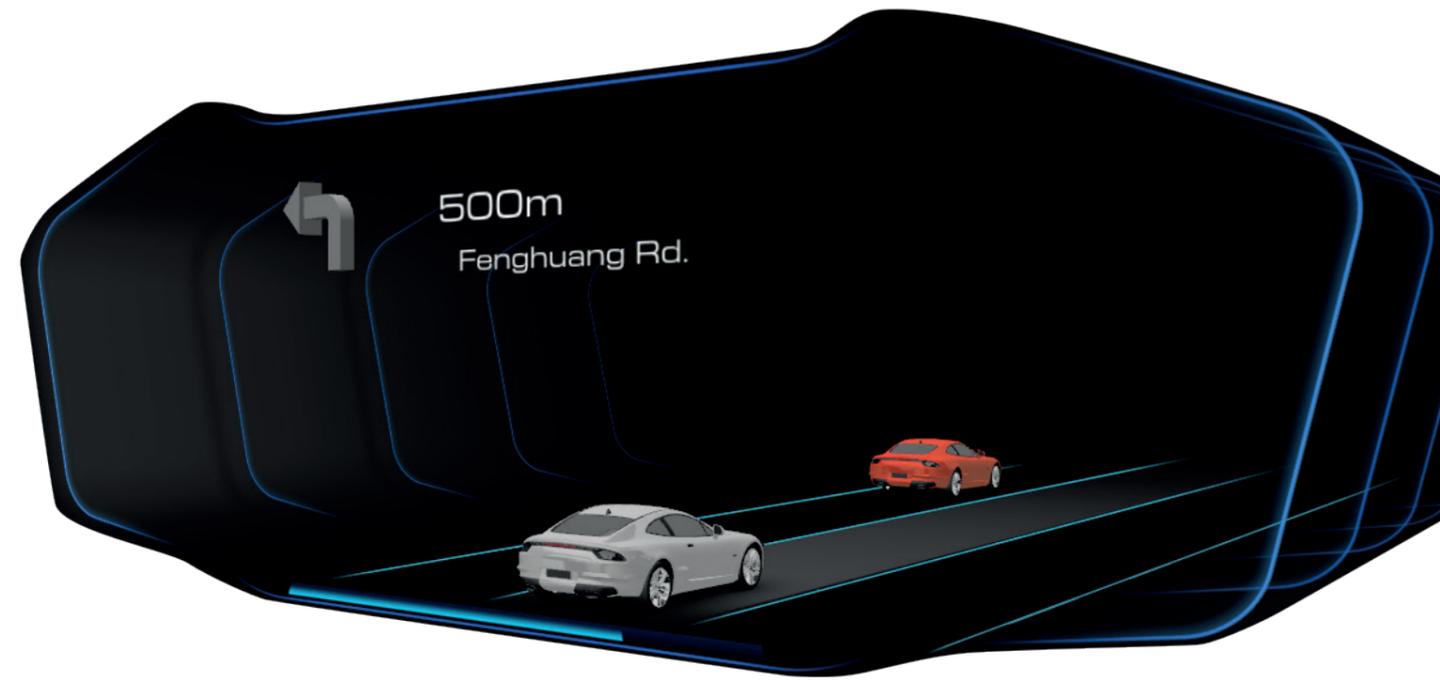
Projects released with Life Cycle Assessment methodology since 2012

10%

Of Magneti Marelli components turnover involved in LCA projects

1g CO<sub>2</sub>/Km

Saved thanks to Low beam LED module "E-Light" compared to traditional lighting



## FOCUS | THE 3D INSTRUMENT CLUSTER BECOMES AUTO-STEREOSCOPIC

In the automotive field, we are now seeing the proliferation of on-board displays. From the instrument cluster to the central console, from screens on the dashboard and on the seats for passenger use to head-up displays, screens have now become a necessary and ever-more common element in car interiors. This phenomenon is facilitated by the fact that future mobility, the progressive introduction of autonomous driving and the consequential evolution of human-machine interaction (HMI) is freeing up ever-increasing amounts of space and time available to occupants. This is why screens, tactile surfaces, infotainment systems and video conference systems are opening new horizons and new possibilities with regards to time spent on board. While in the past the instrument cluster was used above all as an interface via which driver and car could dialogue with



each other in a closed system, nowadays passengers in a vehicle can make use of numerous forms of information regarding not only the vehicle, but also mobility, infrastructures, the surrounding environment and even entertainment. Although devices for the viewing of information are becoming increasingly widespread and sophisticated, the portrayal of the third dimension is not so common. The scarce

**Marelli is applying innovative 3D instrument clusters to the automotive sector that, with the use of new auto-stereoscopic technology, offer clear advantages over traditional 3D technologies.**

presence of 3D screens in the automotive field is due above all to the complexity of 3D technology, to their larger size compared to conventional screens, to the increased manufacturing costs and to the need to use special stereoscopic glasses. In order to overcome these problems, Marelli is applying innovative 3D clusters to the automotive sector that, through the use of new

autostereoscopic technology, offer clear advantages in comparison to traditional 3D technology. The technology used up to now requires two displays to provide the sense of depth to the image, and are therefore bulkier, heavier, more expensive and of low energy efficiency. Thanks to a specific software and the use of various lenticular optical layers, the new Marelli displays offer better performance in terms of image quality and depth and are more sustainable in terms of use of materials and energy for operation. Furthermore, bulky 3D glasses that are difficult to use while driving are no longer necessary. Marelli's autostereoscopic display technology is based on special, ultra-thin lenses that are layered onto the surface of a single display. This technology allows for the reproduction of images with more realistic effects, allowing

**By using a single display, this technology allows for advantages in terms of space and a lower and more intelligent use of materials.**

for a better perception of complex shapes, obstacles and depth, thus also contributing to increasing levels of safety while the vehicle is in motion, a fundamental theme for mobility. Warning messages, indicator lights and driving information can therefore be shown more efficiently and clearly, guaranteeing increased levels of safety for the occupants of the vehicle, as well as persons and objects in the vicinity. The advantages of this solution are therefore important for two main reasons. On the one hand, thanks to a more faithful visual perception of the surrounding area as well as increased depth and realism of images, Marelli technology allows for more aesthetically-pleasing results that until now were impossible to achieve in 3D instrument clusters, in central consoles with 3D infotainment content, for head-up displays with

Marelli's 3D displays can be useful for perception of surrounding environment during a parking sequence, or to provide immersive navigation. At the same time, they can replicate complex object surfaces, or can be used to display alerts to the driver.

information at variable depths, in augmented reality applications and in depth perception in 3D rear-view displays. Furthermore, the flexibility of these devices allows 3D viewing to be deactivated, leaving all of the functionality of a traditional 2D screen. On the other hand, by using a single display, this technology allows for advantages in terms of space and a lower and more intelligent use of materials. This results in improvements in terms of weight and consumption for the vehicle's electrical systems. Marelli's proposal is therefore also more environmentally and economically sustainable than traditional 3D systems, offering clear benefits not only for the end user but also for the environment.

KEY FIGURES 2

INJURIES

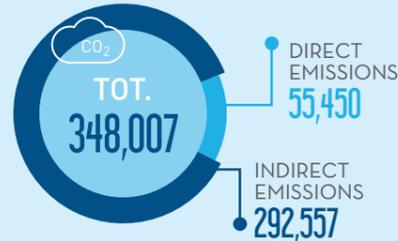
INJURY FREQUENCY INDEX  
(number of injuries / hours worked) x 100,000



ECO-EFFICIENCY OF OPERATIONS

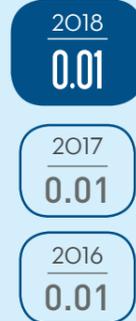
DIRECT AND INDIRECT EMISSIONS (tCO<sub>2</sub>)

2018



	2017	2016
DIRECT CO <sub>2</sub> EMISSIONS	53,598	49,880
INDIRECT CO <sub>2</sub> EMISSIONS	295,943	298,309
TOT. CO <sub>2</sub> EMISSIONS	349,541	348,190

DIRECT AND INDIRECT EMISSIONS OF CO<sub>2</sub> PER HOUR OF PRODUCTION  
\*tCO<sub>2</sub>/Good hours produced



ENERGY EFFICIENCY

DIRECT ENERGY CONSUMPTION PER SOURCE (GJ)

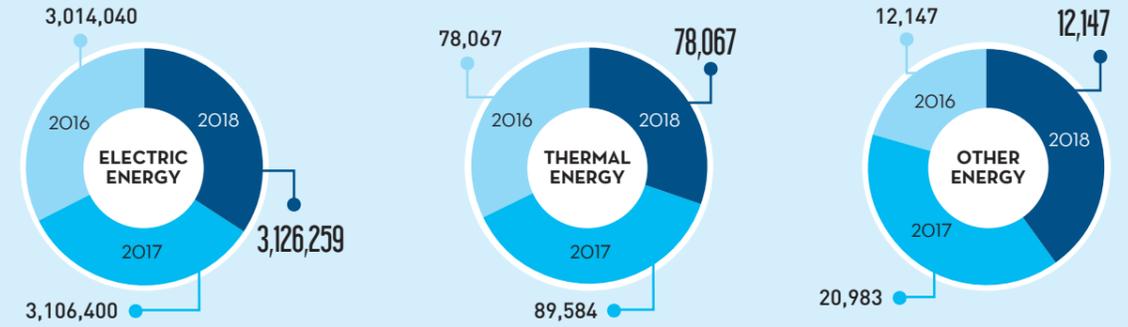
TOTAL NON-RENEWABLE SOURCES

981,713



	2017	2016
NATURAL GAS	914,802	850,692
OTHER FUELS	35,270	33,340
TOTAL NON-RENEWABLE FUELS	950,072	884,032

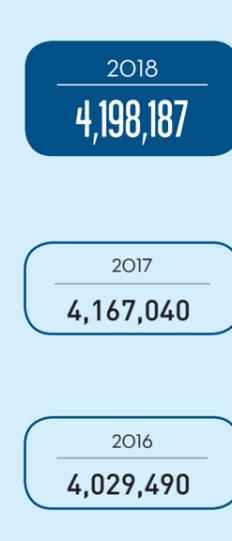
INDIRECT ENERGY CONSUMPTION PER SOURCE (GJ)



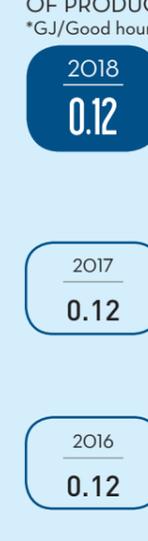
TOTAL INDIRECT CONSUMPTION OF ENERGY (GJ)



TOTAL CONSUMPTION OF ENERGY (GJ)

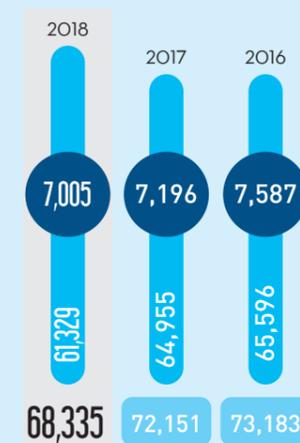


DIRECT AND INDIRECT CONSUMPTION OF ENERGY PER HOUR OF PRODUCTION  
\*GJ/Good hours produced

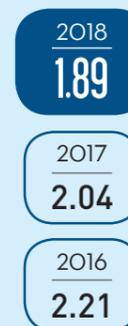


MANAGEMENT OF WASTE

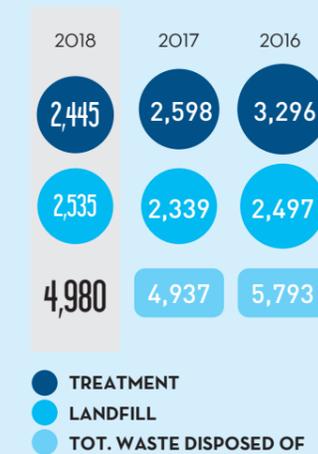
WASTE GENERATED (t)



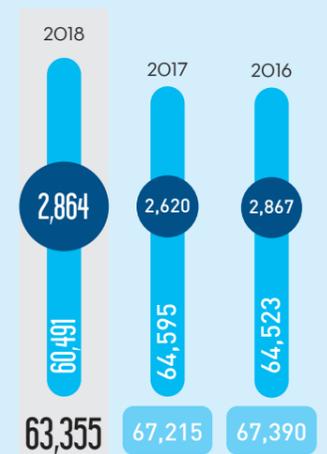
WASTE GENERATED PER HOUR OF PRODUCTION  
\*Kg/Good hours produced



WASTE DISPOSED (t)



WASTE RECOVERED (t)



- HAZARDOUS WASTE GENERATED
- NON-HAZARDOUS WASTE GENERATED
- TOTAL WASTE GENERATED

- INCINERATION
- WASTE RECOVERED
- TOT. WASTE RECOVERED

\* Good hours produced = Number of good pieces x Cycle time

# FOCUS | MAGNETI MARELLI: WORKING TO REDUCE ENVIRONMENTAL IMPACT

## PROJECT 1 | "REDUCTION OF HAZARDOUS WASTES" IN BIELSKO BIALA

### PLANT INFORMATION

COUNTRY: POLAND  
 BUSINESS LINE: SHOCK ABSORBERS  
 PLANT: BIELSKO BIALA

### THE PLANT IN NUMBERS

NUMBER OF EMPLOYEES: 343  
 BLUE COLLARS: 275  
 WHITE COLLARS: 68

### ENVIRONMENTAL KPIs 2018 vs 2016

WASTE GENERATED: -47%  
 HAZARDOUS WASTE GENERATED: -43%  
 WASTE RECOVERY: +2%



### The Plant

The Polish plant of Bielsko Biala (Shock Absorbers), which has already reached its goal of ZERO production waste sent to landfill, has also considerably reduced the production waste generated in the 2016-2018 period.

### The project: Reduction of the generation of hazardous wastes

The welding department during 2018 introduced for the first time the application of an electrostatic filter for the

purification of oil. This device, which takes advantage of the electrostatic charge of pollutant particles, is used in machinery, allowing the reuse in the process of the filtered oils. This has led not only to a reduction in the quantity of consumed oil, but above all a progressive reduction of hazardous waste generated. After this first application, this solution has been extended to other production units in the plant.

### Bielsko SA - Hazardous Waste KPI (kg hazardous waste generated/ Good Hours Produced)

2016  
0.041

2017  
0.031

2018  
0.023

## PROJECT 2 | "ZERO WASTE SENT TO LANDFILL" PROJECT IN CONTAGEM

### PLANT INFORMATION

COUNTRY: BRAZIL  
 BUSINESS LINE: AUTOMOTIVE LIGHTING  
 PLANT: CONTAGEM

### THE PLANT IN NUMBERS

NUMBER OF EMPLOYEES: 782  
 BLUE COLLARS: 650  
 WHITE COLLARS: 132

### ENVIRONMENTAL KPIs 2018 vs 2016

WASTE GENERATED: -12%  
 HAZARDOUS WASTE GENERATED: -9%  
 WASTE SENT TO LANDFILL: -23%  
 WASTE RECOVERY: +11%



### The plant

The Brazilian plant in Contagem (Automotive Lighting) improved its environmental performances over the 2016-2018 period, with a particular focus on wastes.

### The project: ZERO waste sent to landfill

In 2018, the plant worked to reduce environmental impacts, focusing on production wastes sent to landfill. A dedicated study revealed that the most relevant quantity of wastes was made up of BMC (Bulk Moulding Compounds), thermosetting materials used in the moulding of Reflectors.

The project, that was developed and launched in the last quarter of 2018, focused therefore on the search for an alternative to sending BMC wastes to landfill. After a detailed selection, a company that was able to blend BMC wastes with other wastes to form a blend that could be used as fuel in cement factories was found. Since it was launched, the project has led to a progressive reduction in the percentage of waste sent to landfill that was already significant in 2018 and that will guarantee the reaching of the defined target (ZERO waste sent to landfill) in 2019.

### Contagem - Waste to landfill KPI (waste to landfill/ waste generated) %

2016  
28.8%

2017  
26.7%

2018  
22.1%

### "ZERO waste sent to landfill" Project

Now the BMC and not recyclable waste are coprocessed



Plant generates wastes in its productive process



Wastes are carried to the recovery supplier



The waste is analysed and processed



The blend moves from the recovery supplier to the cement kiln



The blend is used as fuel in the cement kiln



A certificate proves the thermal destruction and the effective disposal



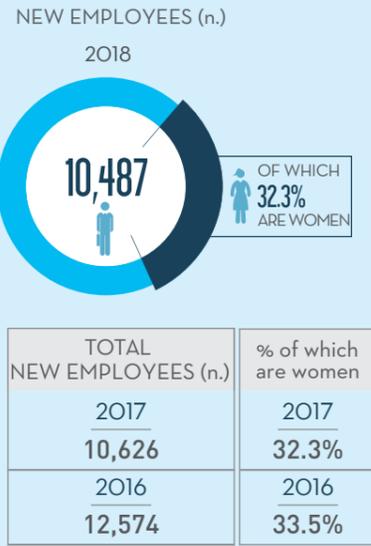
The selected waste is transformed into a blend



Transformation of waste into energy

KEY FIGURES 3

EMPLOYEES



SUPPLIERS

NUMBER OF SUPPLIERS INVOLVED IN SUSTAINABLE SUPPLY CHAIN PROGRAM

UNIT	2018	2017	2016
NUMBER OF SUPPLIERS	1,300	850	300
% OF ANNUAL PURCHASED VALUE (APV)	98%	90%	70%

# FOCUS | TOWARDS AN EVER-INCREASINGLY RESPONSIBLE SUPPLY CHAIN: THE ISO 20400 GUIDANCE

**M**agneti Marelli has always been committed to sharing its sustainability values not only within the company but also with all its external stakeholders, from customers to suppliers. Beginning with the Sustainable Supply Chain Program launched in 2012, Magneti Marelli has always placed particular attention on the supply chain, raising awareness among its suppliers on themes such as respect for the environment and for human rights, in the conviction that the implementation of a clear and transparent sustainability strategy is not possible without an analysis of the surrounding context.

In 2018, Magneti Marelli took a new step in this direction, with the aim of responding to the most advanced requirements for sustainability in the management of the supply chain. To this end, an assessment has been carried out in accordance with the new ISO 20400 Guidance, published in 2017, which indicates a series of steps to be taken in order to include criteria for sustainability in the supply chain. As well as providing a set of definitions and suggestions on criteria that should be included in the procurement process, the guidance introduces the concept of risks and opportunities to bear in mind when making company decisions. Magneti Marelli's assessment was carried out by an external

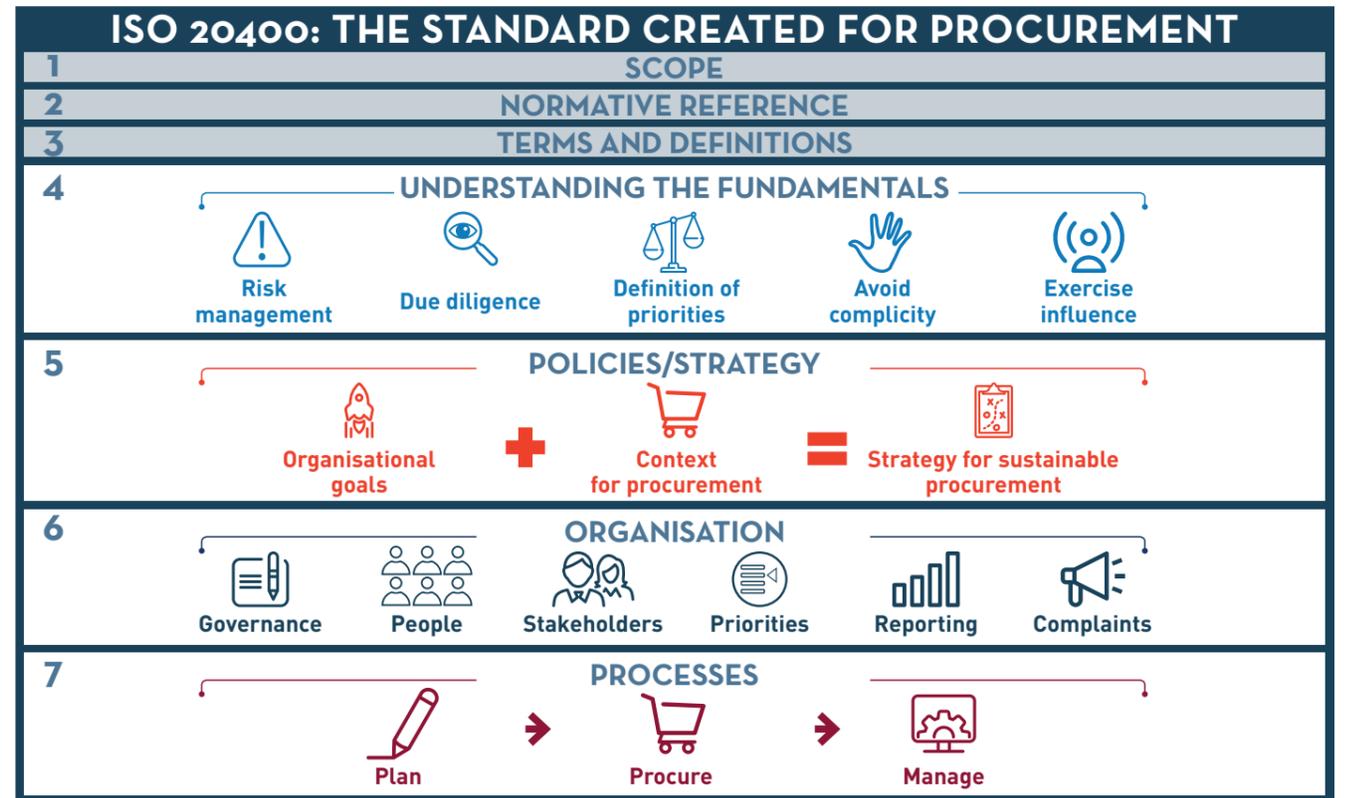
company that analysed the company procurement processes with reference to the four macro-categories identified by the regulation: fundamental elements, policies and strategies, organisation, and processes. Each of these aspects was examined in relation to various themes regarding not only the environmental aspect, but also aspects of ethics, referring to principles such as responsibility, transparency and respect for human rights. The assessment process was divided into three steps:

- 1) Analysis carried out through interviews with actors involved in the procurement process and through the analysis of the main documents regarding company governance.
- 2) Assessment of the areas for improvement and Gap analysis through a dedicated tool.
- 3) Analysis of the results and definition of actions to be taken for improvement in each macro area examined.

The results of the study highlighted a solid structure of company values founded on a clear and complete Code of Conduct shared with all the Stakeholders, and a structured grievance mechanism to report violations

(in anonymous form or not). The assessment also highlighted the particular importance that Magneti Marelli places on evaluation, monitoring and certification of suppliers, an approach that, in the future

perspective, could evolve through the inclusion of the principles of sustainability in all the stages of the sourcing process, from the definition of technical specifications to the qualification of the supplier.



KEY FIGURES 4

INVESTMENTS IN THE COMMUNITY (M€)



NUMBER OF VOLUNTEER HOURS



SOCIAL PROJECTS IN INDIA

PARTNERS INVOLVED



PEOPLE INVOLVED



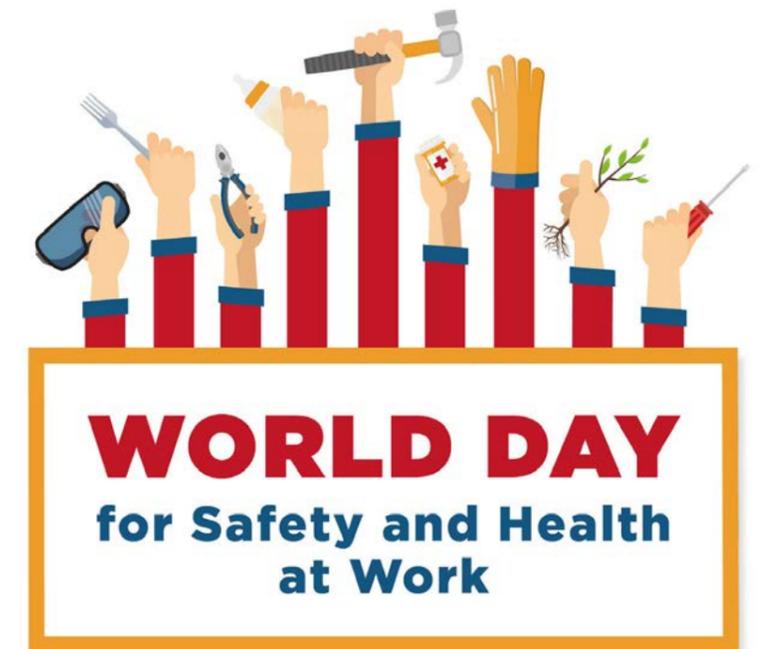
# FOCUS | ITALIA LOVES SICUREZZA, THE CONTRIBUTION OF MAGNETI MARELLI



The culture of Health and Safety has always been an essential pillar of Magneti Marelli's activity, in fact it represents a value to be shared not only within the production plants, but also exported to the local communities in which the company operates. In 2018, Magneti Marelli took part for the first time in the initiative Italia Loves Sicurezza (Italy Loves Safety), a "movement of people united through a shared passion for health and safety that is contributing to change the way to communicate" these themes. To celebrate the World Day for Safety and Health at Work (28 April), Italia Loves Sicurezza launched a road show including approximately 700 events throughout Italy aimed at promoting the concept that health and safety are assets to be sought and protected, not only in the workplace, but also and most of all outside the company. Magneti Marelli made an active contribution to the campaign, hosting the event "The evolution of safety in the Industry 4.0 era" in its Corbetta headquarters. It

welcomed 60 students from a local State-High School, basing the activity on the concept that safety represents a collection of abilities and behaviour to be applied above all in everyday life and then in a working environment that is more and more technological. Magneti Marelli's commitment to safety, both as a cornerstone in its sustainability strategy and as an approach to all the activities in all of the plants worldwide, was illustrated to the students. Following a "safety game" aimed at identifying dangerous actions through the use of virtual reality,

the students visited the production plant, where they were given the opportunity to have hands-on experience of the application of best practices regarding safety in a 4.0 plant. Magneti Marelli's participation in the Italia Loves Sicurezza event was merely an initial step for the company, which aims to extend the initiative to the plants in Italy, and in the future to those abroad, identifying new Safety Ambassadors from among its employees who actively promote the culture of safety among younger generations.





## Magneti Marelli Sustainability Magazine

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### COLOPHON

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For further information  
sustainability@marelli.com  
Viale Aldo Borletti 61/63  
20011 Corbetta (MI), Italia

