



**GO  
FAR  
BEYOND**

# **MUSASHI REPORT 2021**

Musashi Seimitsu Industry  
Integrated Report 2021

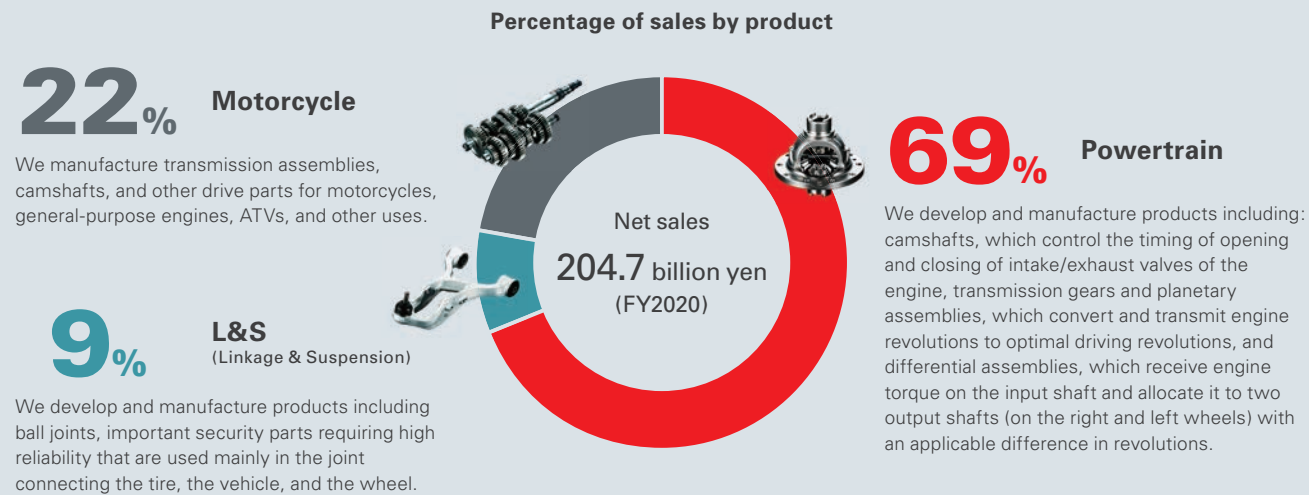
 **MUSASHI**



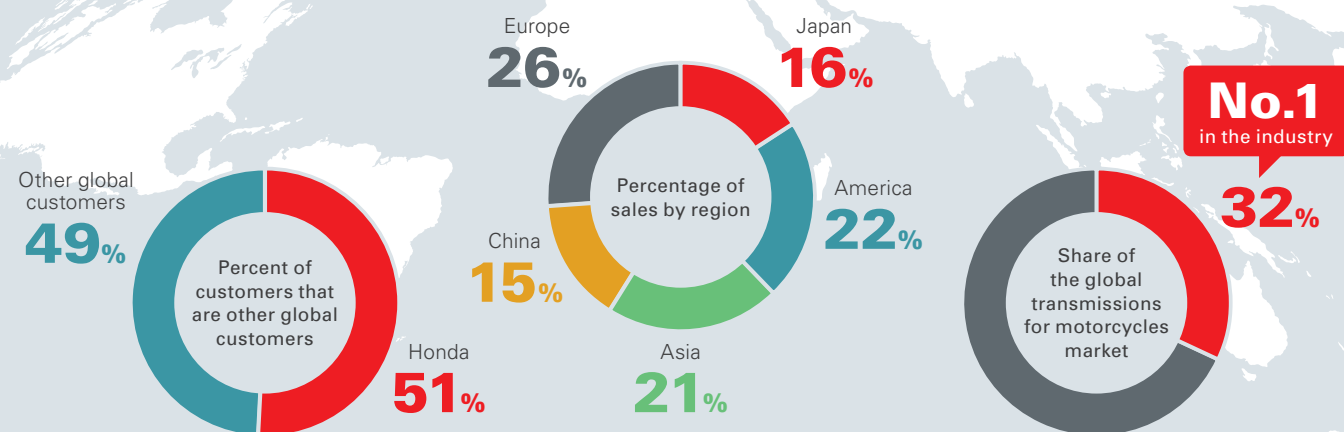
## WHO WE ARE

Established in 1938, Musashi Seimitsu Industry is a world-leading manufacturer of parts for automobiles and motorcycles with strengths in the development and manufacturing of Powertrain and chassis parts. We are also an important supplier to Honda.

Moving forward, we aim to be a key device supplier in the EV era. At the same time, we will fully leverage our leading-edge technologies, experience and creativity to transform into an essential company needed by society.



## Taking on challenges with the world as our stage — with advanced technologies



Percentage of top management that is non-Japanese

**47%**

Ratio of overseas employees

**85%**

Number of employees: 15,120

Number of employees with professional qualifications

**1,686**

\*Total number of employees with professional qualifications in Japan

Ratio of engineers

**30%**

\*Japan headquarters only

Becoming an “Essential Company”  
needed by Society!

## MUSASHI 100<sup>TH</sup> YEAR VISION

**GO  
FAR  
BEYOND**

**Break barriers  
and go on  
adventures!**

According to the Musashi Philosophy, for “a world where the earth and people coexist in prosperity and harmony,” each one of us becomes an adventurer and together we will create a path forward into the future.

Looking to the year 2038, the 100th anniversary of our founding, we will break free of limitations and perceived barriers to create new value by our own transformation not just by extending the present.



Continue growing by making decisions and taking on challenges as the times change

We provide customers all over the world with reliable, high-precision, high-quality products

	FY2007	FY2020	FY2023	FY2038
Net sales	161.3 billion yen	204.7 billion yen	Net sales (target) 300.0 billion yen	
Number of operation bases	21 sites in 10 countries	35 sites in 14 countries	Number of operation bases 36 sites in 14 countries	
Employees	9,000	15,000		

GO FAR BEYOND

Building a new plant in China



Net sales (billion yen)



1938 1946 1956 1961 1963 1965

Foundation period

- 1938 Foundation (Otsuka Seisakusho)
- 1947 Entry into the sewing machine industry



Employees of the company at the time of its foundation (in front of Otsuka Seisakusho)

Thread take-up cam

Entry into the motorcycle and automotive industries

- 1956 Trade with Honda Motor (motorcycles) begins
- 1961 Establishment of an integrated manufacturing system
- 1967 Manufacturing of automotive parts begins
- 1968 Development of maintenance-free ball joints



Soichiro Honda (left) and Yoshiharu Otsuka



The first maintenance-free ball joints developed by the company



Oil crisis

1970 1975 1980 1985

Overseas expansion with parts for automobiles

- 1978 Exports to Ford Motor Company in the United States begin
- 1980 Establishment of MAP-MI, an overseas subsidiary (Michigan)



A visit by delegates from Ford Motor Company (May 28, 1986)



Collapse of Japan's economic bubble

1990 1995 2000 2005 2010 2015

An integrated manufacturing system established overseas

- 1987 Establishment of MAP-TH (Thailand)
- 1999 Successful development of an original 3D bevel gear



Opening ceremony of MUSASHI Auto Parts Co., Ltd.



Transmission gear assembly



Original 3D bevel gear

Development of new Musashi brand products

- 2008 Completion of the Musashi Global Center



Musashi Global Center

Establishment of a globally competitive system and initiatives for new businesses

- 2016 Acquisition of HAY (Germany)
- 2018 Acquisition of ASADAKATAN CHUTETSUSHO
- 2020 Acquisition of JM Energy



Rolled ring forging

Net sales (target)  
300.0 billion yen

Fourth industrial revolution  
COVID-19 pandemic



Flooding in Thailand



Global financial crisis

2020 2023



# OUR PURPOSE

We contribute to enriched **Harmony**  
between our lives and Earth, using  
our **Passion** for **technology** and  
**Wisdom** for innovation.



## PASSION Technology

Our passion for monozukuri  
and the use of technology,  
allows us to overcome  
new challenges.

## WISDOM Innovation

We innovate through the  
use of our acquired and  
enhanced "Wisdom."

## HARMONY Sustainable

We contribute to a sustainable  
and enriched world by  
achieving "Harmony"  
between our lives and Earth.

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#### Forward-Looking Statements

This report contains quantifiable data on the Musashi Group's future performance. This data is based on judgments we have made in light of the information available at the time of the publication of this report and therefore contain uncertain factors. Please note that actual performance may differ significantly from these forecasts due to many factors. Significant factors that may affect actual performance include, but are not limited to, changes in the economic conditions surrounding the Musashi Group, exchange rates, and stock market trends.

# OUR WAY

The values each of us hold in our hearts.  
Moving into the future with Exploration and Exploitation  
of knowledge.

## 01 Customer first

- Recognize all stakeholders as "customers"
- Understand their true needs and expectations

## 02 Integrity

- Act with integrity, do the right thing
- Work with passion

## 03 Be unique, be creative

- Seek originality
- Create with ingenuity

## 04 Try first, learn fast

- Challenge yourself
- Learn from practice

## 05 One Musashi

- Respect individuality and diversity
- Build the best team by leveraging the strengths of others

## 06 Leadership and ownership

- Act proactively
- Lead the solution

## 07 Smile and thanks

- Remember to smile
- Be grateful



## CEO MESSAGE

# Break Free of Limitations and Perceived Barriers to Create New Value

President &amp; CEO

## Hiroshi Otsuka



### History of Musashi as a History of Challenges

Thread take-up cam



The global economy has been greatly harmed by the COVID-19 pandemic, and the automobile industry was forced to shut down or reduce production. Economic activity began to increase approaching the end of FY2021, and the economy has started trending towards a recovery, mainly in Europe and the United States. However, new problems such as the semiconductor shortage have also emerged. Also, looking at the business environment from a medium- to long-term perspective, we see the automobile industry making a major shift to Electric Vehicles (EVs). While this change could be considered a threat depending on our perspective, it is also the greatest opportunity since our foundation, depending on the actions we take.

The 83 years of Musashi's history has been a history of challenges. It has been consolidated into our corporate philosophy, the Musashi Philosophy, and it is also linked to

the Musashi 100th Year Vision that we have established. Yoshiharu Otsuka, who is our founder and my grandfather, became an apprentice when he was 14 years old. Moving from one workplace to another, he began working for Nakajima Aircraft Company. He arrived at the factory earlier than anyone else in the morning and worked later than anyone else at night. In 1938, he launched a company manufacturing aircraft parts in Tokyo with the ambition of becoming known as an outstanding company. The business was a great success thanks to the dramatic growth of the aircraft industry. However, the business itself ceased to exist due to the end of the war, so Yoshiharu Otsuka came back to his hometown, Toyohashi-shi, Aichi. In 1947, he launched a business which manufactured parts for sewing machines, this post-war era was a time when clothing, food and housing were all in short supply.

The company dealt in thread take-up cams, a key sewing machine component. The business went well, partly because the device was registered in the Japanese Industrial Standards (JIS) but also due to the company's high level of technical capabilities. Around that time,

Yoshiharu Otsuka met Soichiro Honda and entered the business of manufacturing motorcycle parts. Believing in the future of motorcycles, Yoshiharu Otsuka discontinued the production of sewing machine parts, which was going well, making a major change to the business. The company had tens of customers but it had only one now. Business schools in general teach you to have diverse customers to ensure the stability of your business, but Yoshiharu Otsuka made precisely the opposite choice. However, Musashi would not be what it is now without this decision, without taking on this challenge, or if Yoshiharu Otsuka had not met Soichiro Honda. The company later expanded its business from motorcycle parts to automotive parts and kept growing, overcoming the oil crisis and other challenges. Then, the company turned in the direction of global expansion and entered the United States in 1978 and the Asian market in the late 1980s. During the 1990s and 2000s, the company entered the United Kingdom, Canada, Brazil, Hungary, India, China, and other countries, thus accelerating its global expansion. Until this period, Musashi had been highly acclaimed by customers as a company that

manufactured products accurately in accordance with drawings from customers. I became the president in 2006 with a strong desire to turn Musashi into an R&D-oriented company. So we established the Musashi Global Center, our technology development center. It was completed in October 2008. As you know, this was followed by the 2008 global financial crisis, and we experienced a temporary management crisis. The R&D team started with only three members. It has now been expanded to around 150 members and it is our competitive edge. The differential assembly was created at the Musashi Global Center. It is a strategic product with which we aim to achieve the largest share of the global market, taking advantage of the opportunities presented by the shift to EVs.

In 2016, we accepted German forging manufacturer HAY Holding GmbH (now known as Musashi Europe GmbH) as a member of the Musashi Group, thus building a framework that has made it possible for us to compete with global mega suppliers. The company has overcome many situations to grow by changing and taking on challenges, and I am proud of that.



Leveraging and exploiting our knowledge to move into the future

Now, the automobile industry is in the midst of a great, once-in-a-century change. In response, we established the Musashi 100th Year Vision toward 2038. The Vision’s goal year is 2038, the year we will celebrate our 100th anniversary. At the same time, we announced Our Purpose (Musashi’s missions). The world is facing issues such as environmental destruction, poverty, food insecurity, economic crisis, and the aging of the population. We aim to be a Corporate Group which proactively applies leading-edge technologies in the world, whilst using our acquired and enhanced wisdom to innovate and surprise the world. Based on our passion for monozukuri, we will contribute to the realization of a sustainable and enriched world with harmony between the Earth, the natural environment and society, allowing people to live enriched lives.

Specifically, we will move into the future through exploration and the application of knowledge as stated in Our Way (our action guidelines). By “exploration of knowledge,” we mean the deep exploration of our automobile parts business, which is our core business. “Application of knowledge” means the creation of new businesses. We are determined to foster new businesses that resolve social issues by investing in start-ups.

OUR PURPOSE

We contribute to enriched Harmony between our lives and Earth, using our Passion for technology and Wisdom for innovation.

OUR WAY

The values each of us hold in our hearts. Moving into the future with Exploration and Application of knowledge.

- 01 Customer first
- 02 Integrity
- 03 Be unique, be creative
- 04 Try first, learn fast
- 05 One Musashi
- 06 Leadership and ownership
- 07 Smile and thanks

Three Winning Strategies

For us, the shift to EVs (Electric Vehicles) is both a crisis and an opportunity. Previously, a full model change of an automobile took place every four to five years. Recently, the interval has been growing longer, and it is now at least six years. Engines and transmissions are changed every ten to 15 years. For manufacturers like us, who deal in important parts that impact safety, these changes are the only chances to make inroads. At present, however, automotive manufacturers all over the world are competing to develop EVs, an area with many development projects. While the automotive industry has continued to pursue increased performance, the shift to EVs is in a completely different dimension. Take the number of parts, for example. A gasoline vehicle is said to have approx. 30,000 parts while an EV has 10,000 to 15,000. There is even the possibility that the number of parts suppliers will be reduced to half or less in the near future. We are facing both the possibility of being a winner and of being a loser.

In response, we are thinking about three winning strategies to survive this difficult time. One is to be a key device supplier playing a leading role in the electrification era. The differential assembly, is one of the key devices in EVs as it contains the gears that transmit the power generated by the motor to the wheels, furthermore it is a product in which already we have a competitive advantage.

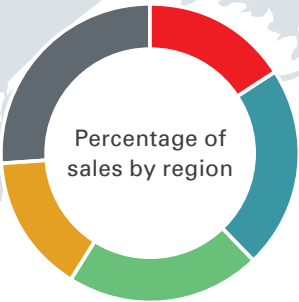
We have been applying the latest digital technologies to the knowledge that we have accumulated over decades as we strive to optimize this transmission function. As a result, we have succeeded in developing a compact, lightweight, high-strength reducer unit for EVs. Quiet performance is especially necessary for EVs because these vehicles are driven by silent motors. High strength is also necessary because EV gears are subjected to greater loads than the gears of gasoline-powered vehicles. This technology is difficult for companies other than manufacturers specialized in gears for vehicles, and differential gears are important components. I believe that we are one of the world-leading companies in the manufacturing of gears for vehicles, and our experience and high level of technological ability will be our competitive advantage in EVs as well. We would like to leverage our gear technologies to proceed with the development of compact, lightweight reducer units combining reduction gears and differential assemblies, aiming to be No.1 in the world.

The second strategy is focused on our global network of manufacturing bases with integrated manufacturing systems. At present, we have 35 bases in 14 countries. Generally, however, it is difficult to use this same infrastructure when gasoline engines are replaced with electric motors. This generates legacy costs in many cases, but we have minimized these costs by enabling our previous infrastructure to evolve in a way that allows gears for gasoline-powered vehicles to be used for EVs as well, thus increasing our global competitiveness. Infrastructure like ours, which we have developed through the investment of tens of billions of yen over several decades, could never be built by an emerging manufacturer who has entered the market in the last few years. We can say that this is also a competitive advantage that we have.

The third strategy involves our firm global customer base. I believe that our customer portfolio is very well-balanced and we have built firm relationships of trust with our customers through tens of years of interactions with them. We will take advantage of this robust customer base to achieve new growth.

Becoming an Essential Company that Supports Society with Technologies

The structure of the automobile industry supply chain is changing from the traditional, vertically integrated pyramid-shaped structure with the finished vehicle manufacturers at the top, to a structure that has a horizontal division of work, in which each company is required to demonstrate unique characteristics. We have established our 100th Year Vision, “Go Far Beyond! Break barriers and go on adventures!” The automobile industry is witnessing the dismantling of business affiliation barriers. Car makers have many development themes to work on, including automated



Japan	16%
America	22%
Asia	21%
China	15%
Europe	26%



Honda	51%
Other global customers	49%

driving and new services (such as “Software as a Service”), beyond simply manufacturing automobiles. Therefore, they are successively outsourcing operations that had previously been done internally. We would like to take this opportunity to achieve growth by taking advantage of our globally integrated manufacturing system.

We also feel that new projects, including projects related to AI and carbon neutrality, are difficult to achieve within a pyramid-shaped organizational structure. I think this is because the more experienced you are, the less flexible you are looking towards the future. Young people with enthusiasm and vitality are better suited to innovative projects, even though they are inexperienced.

“Let’s break free of limitations and take on exciting jobs. Let’s dismantle the barriers faced within organizations and corporate environments and continue to make change happen. Let’s defy common wisdom and preconceived ideas and surprise the world.”

We will dismantle the barriers faced by automotive parts manufacturers and transform into “an essential company” that supports society with technology.



## OUR ORIGIN



Consistent Sincerity

Simple and Sturdy



With new employees who joined the company in April 2020 in front of the head office building lobby

## Direction of New Businesses

We would like to mobilize all of our technologies to develop new businesses, aiming to create a sustainable society for the next-generation; this is something that we have identified as a key issue. When we expanded abroad, our founder told us, “Be respected by the local people,” and “Operate the business for the good of the country and its people.” The spirit of autonomy and self-reliance expressed by the words, “Simple and Sturdy,” and the spirit of co-existence and co-prosperity reflected in the words, “Consistent Sincerity,” constitute Our Origin (the founder’s spirit). The idea of enriching people and global society through business activities based on new technologies is connected to the original spirit of Musashi; this spirit has been passed down through successive generations and remains unchanged.

Above all, partnership is important. I agree with the idea of open innovation. In principle, innovation is the combination of things which are foreign to each other. Therefore it is impossible for a single company to innovate. When we invest in a start-up, we attach importance to

technology, finances, and social significance, and finally choose a partner based on the personality of the top executive. In a way, we value fate, which is beyond reason. Mobility, energy, industry, and well-being; based on these four major directions, we reinforce our relationships with our many partners across the world and create a new future through open innovation.

## Change Management

The Musashi Group’s most important asset, which is not visible on the balance sheet, is its human resources. Our experience overcoming several crises has taken hold as a culture and been passed down in our DNA. Our human resources are outstandingly good in a crisis and during change. Our teamwork and enthusiasm, which are demonstrated when we overcome a crisis, are really astounding. We are again facing many changes in our business environment, including the COVID-19 pandemic, the great, once-in-a-century change in the automobile industry, and the need to address climate change. We will enthusiastically forge ahead towards our new vision. Surely, we will succeed.

Please, look forward to the future of Musashi.

## CFO MESSAGE

## Go Far Beyond!

— Let’s go on an adventure! —

As I near the close of my 5th Fiscal Year as Musashi Group’s CFO I am more excited than ever to embark on the future! Musashi has built a strong foundation on which we can meet and exceed the expectations of our changing world, enhance our contribution to society and grow our business. Our corporate history and philosophy are deeply embedded in our organization creating a culture of resilience and excitement as we embrace the challenges ahead.

During FY2021 the world has been smothered by COVID-19 creating huge disruption to the Automotive Industry. As the COVID case count came down and governments lifted restrictions we were affected by global supply chain shortages, and inflation. Production volatility became the norm with the constantly changing mix of trials affecting all regions during the curse of the year. In the first half we increased our inventory levels to protect against the uncertainty of supply. The changing customer demand early in the pandemic for semiconductors and reduced production due to COVID-19 created a supply problem that is still rolling through the automotive industry. This coupled with logistic and port delays around the world affected the smooth operations of our plants. Instability in production and inflation reduced our profit results. Musashi is rising to the challenge of operating with uncertain demand by implementing measures to protect EBITDA (Earnings before interest, tax, depreciation and amortization) and keep Balance Sheet Ratio’s healthy as we ride out the current upheaval created by COVID-19 and global supply.

With the world travel restrictions changing so quickly due to the pandemic it has been important for Musashi to be a world leader honoring the spirit of protecting people globally by flowing all government guidelines. In this spirit we have adjusted to reduced mobility by developing and enhancing remote capabilities. Over the past 20 months we have embraced technology to stay connected and have seen improvements in many functions and supports offered by Musashi HQ. One example is utilization of virtual tools deployed by our engineering groups to continue to support the overseas subsidiaries on the Gemba. The finance teams globally are becoming better connected and informed with enhanced use of global operating systems. I do miss visiting the regions to see firsthand the kaizen improvements and I hope that travel can safely resume in the near future.

Musashi’s finance teams globally strive to create transparency for our shareholders and management teams through efficient systems and processes. Musashi was amongst the first companies to implement the SAPS/4 operating system. Standard systems provide true transparency of operations enabling us to clearly understand our situation, direct management to problem areas quickly and share best practices globally. Musashi has an operating results expectation of

Director  
Managing Executive Officer  
**Tracey Sivill**

“better than yesterday” and “optimum environment” focusing our plants on the continuous improvement so important for innovation. Our CFO group steers the development and implementation of these systems, this cohesive effort allows us to utilize our combined knowledge to the maximum benefit of shareholders and associates.

Global labour markets have been affected by COVID-19 and as the pandemic continues to surge HR organizations publish studies finding more and more people evaluating their lives and roles in the workforce. Musashi will excite and motivate our associates by utilizing our AI, Digital Transformation (DX) and Green Transformation (DX) strategies creating “human work for humans”. Musashi AI is developing sophisticated inspection systems to allow associates to utilize more creativity in the engineering and production processes. All disciplines within our organization are delivering digital solutions to the workforce to reduce mundane or repetitive tasks. Musashi’s strength is engineering and we will utilize that strength to reduce our carbon footprint and work towards our GX targets. Our ultimate goals ties to our 100th year vision of contributing to a healthy plant, both environmentally and in the human essence. Musashi will entice the best young talent by being a “Great Place to Work”.

Our efforts are concentrated in our future product lines to achieve our growth targets. The demand for EVs is increasing quickly, fortunately our engineers have been developing products for this migration in the areas of differentials, transmission and reduction gears. Musashi can utilize its extensive knowledge on mobility gear production to perfect lightweight, strong and quiet products for the EV markets and competitively produce those products worldwide with our global integrated manufacturing footprint. These advantages position us to be a strong device supplier to EV markets around the globe. With this transition in mind Musashi has increased our Capital Expenditure send over the last few years to meet the challenge of this once in a century change.

Preparing for the future Musashi as sought out opportunities and partnerships to produce new products needed by society. Our Corporate Venture Capital (CVC) portfolio creates synergies with Musashi’s core business and Musashi 100th year vision. We look for visionary partners that are committee to enhancing the lives of humans while protecting the plant. These ventures are very exciting and we look forward to watching their growth and social contributions.

My favorite message from the Musashi Philosophy was delivered by Kimitoshi Otsuka “Always move forward”. Musashi embraces the future with confidence in our products, committed to improving the human experience and protecting the plant. Guided by our philosophy and vision, with the strength and passion of our global associates, we will keep moving forward toward our 2038 vision and “Go far beyond!”



# Value Creation Process

## Trends in the business environment

Changes to the industrial structure (CASE\*)  
Social requirements related to SDGs\* and ESG\* Shift to the new normal created by the COVID-19 pandemic

## Competitive advantages

- 1 Product development capability
- 2 Integrated production system
- 3 Support technology
- 4 Global production/ sales system

## Vision

P15

**Go Far Beyond!**  
Break barriers and go on adventures!

## Relevant SDGs



## INPUT

### Financial capital

Consolidated net assets  
**95.9** billion yen

Equity ratio  
**37.7** %

### Human capital

Consolidated No. of associates  
**15,120**

Non-Japanese top management  
**47** %

### Intellectual capital

Number of patents (granted/pending)  
**58** (Japan) **166** (Outside Japan)

R&D cost  
**4.30** billion yen

Number of development bases  
**3** (Japan, Canada, and China) **3** (Japan, Canada, and Indonesia)

### Manufacturing capital

Number of manufacturing facilities  
**35** sites in **14** countries

Capital investment  
**12.4** billion yen

### Social and relation capital

Number of steel suppliers  
**5** (Japan) **33** (Outside Japan)

Business-academia  
Comprehensive collaboration agreement with Toyohashi University of Technology  
Comprehensive collaboration agreement with Nara Institute of Science and Technology

## Core businesses

Single parts assembly

▼  
Becoming a key device supplier in the EV era

## Strategy

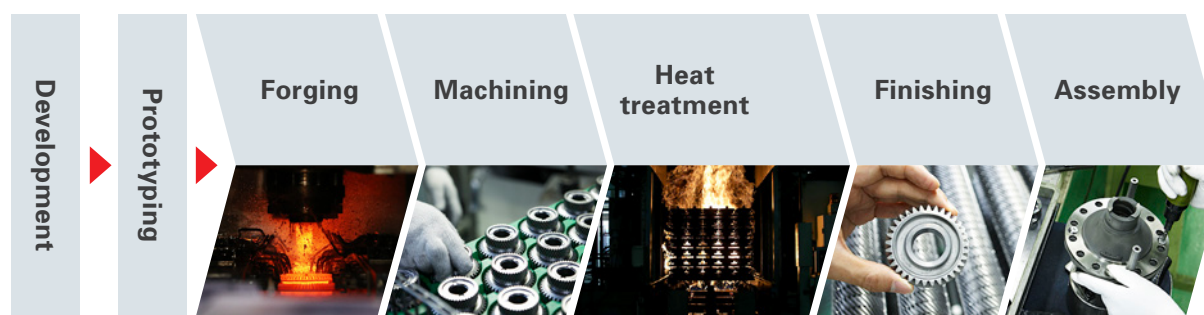
## New businesses

Evolution, efficiency improvement, and solutions involving Monozukuri

▼  
Contributing to solving social issues using the power of technology

## Integrated production system

We have achieved a globally integrated manufacturing system where processes from forging to cutting, heat treatment, finishing, and assembly are organically connected.



Support technology

Dies

Power tools

Equipment

Cooperation and synergy

## Creation of innovation

We enrich the world with technologies.  
We aim to build a sustainable society.

**OPEN INNOVATION**

MOBILITY

ENERGY

INDUSTRY

WELL-BEING

## CVC ACTIVITIES



## PARTNERSHIP



Playing the leading role in EVs

Global

Production System

Sales System

**14**  
countries

**35**  
bases

Solving social issues using technology

## OUTPUT

### Powertrain

Differential Assembly  
Planetary Assembly  
Transmission Gear/  
Reduction Gear  
Camshaft

### Linkage & Suspension

Suspension Arm Assembly  
Steering Ball Joints

### Motorcycle

Transmission Assembly for  
Motorcycles  
Camshaft

### Machinery & Tools

Specialized Machine  
Prototyping and  
Manufacturing  
Dies, Cutting Tools

### AI

Visual Inspection Equipment  
Autonomous Moving Robot

### Energy Solutions

Lithium-Ion Capacitor  
Hybrid Batteries

and more...

## OUTCOME

### Financial capital

Consolidated sales  
**204.7** billion yen

ROE  
**9.4** %

Introduction of a shareholder incentive program

### Human capital

Number of employees with professional qualifications  
**1,686** employees in Japan

Ratio of engineers (Musashi Seimitsu Industry)  
Approx. **30** %

### Intellectual capital

Number of patents (Granted)  
**18** (Japan) **99** (Outside Japan)

### Manufacturing capital

Motorcycle transmission share (according to our research)  
Approx. **32** %

AI visual inspection equipment used by Toyota Motor  
Collaborations for the introduction of autonomous mobile robots (AMR) in logistics centers

### Social and relation capital

Participation in East Mikawa Startup Promotion Council  
MUSASHI Innovation Lab CLUE  
Number of partners

Corporate partners **9** Individuals **4**  
Invested in Spornado (Canada)

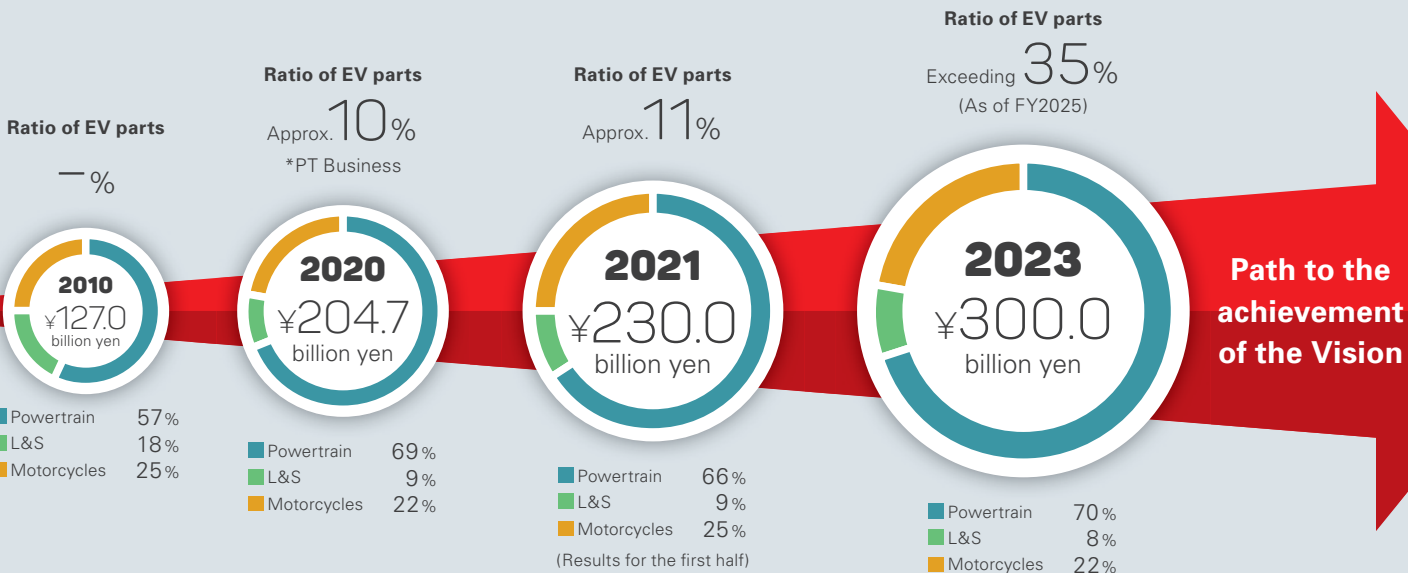
\*CASE: Connectivity, Autonomous, Sharing and Electrification. \*SDGs: Sustainable Development Goals. \*ESG: Environment, Social and Governance



# Our Purpose

We contribute to enriched Harmony between our lives and Earth, using our Passion for technology and Wisdom for innovation.

# GO FAR BEYOND



## Becoming an Essential Company that Supports Society with Technologies

The world is forcibly shifting to the era of the new normal created by the COVID-19 pandemic at an accelerated rate. In the automobile industry, value provided by automobiles has become more diverse and structural changes have accelerated, mainly reflecting mechanical changes attributed to electrification and new business models, including Mobility as a Service (MaaS). In this era, we aim to become an essential company that dismantles the barriers faced by an automotive parts manufacturer and uses technology to provide the value that society expects.

## Opening the Path to the Future Through Organizational Flexibility

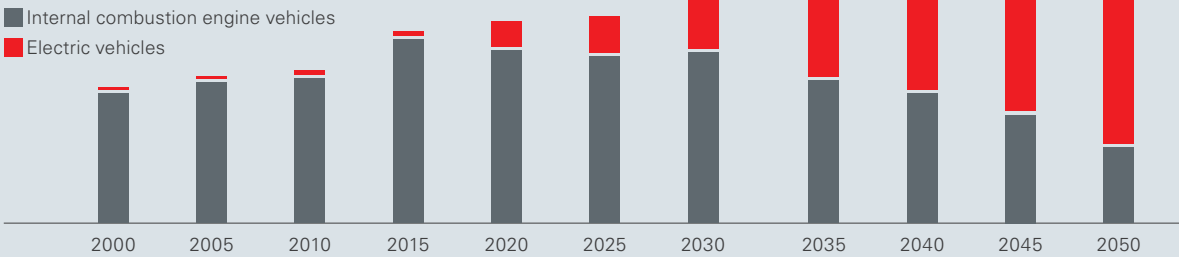
We will achieve sustainable growth by seeing change in the business environment as opportunity, exploiting our existing core businesses, and creating new businesses.

In the core business domain, we will pursue ideal tooth profiles for gears, improve production efficiency through integrated manufacturing, increase the speed of

development using digital technologies, and take other measures to pursue the optimization of transmission features, which is the value we provide. Thus, we aim to expand sales by providing compact, lightweight, high-strength products that contribute to the quiet performance that is being demanded in the electrification era.

In the domain of new businesses, we include mobility, industry, energy and wellbeing (contributing to the healthy, happy lives of people), with monozukuri technologies at our core. Through this, we will lead in the realm of open innovation to create new value.

## Market prediction Internal Combustion Engine Vehicle and Electric Vehicle Trends



Source: Created by Musashi Seimitsu Industry based on Reference materials from the secretariat of the Study Group on Structural Changes in Mobility and Future Directions of Automobile Policies Beyond 2030 (Ministry of Economy, Trade and Industry)

**Exploration of knowledge**  
Entering a new growth stage by developing monozukuri skills

**Application of knowledge**  
Creating new value through open innovation

Summary of strategies

Core businesses

- 1 Becoming a key device supplier in the electrification era based on differential assemblies and reduction gears
- 2 Using global infrastructure with an integrated manufacturing system
- 3 Achieving growth by providing new value based on a firm customer base

- 1 Advanced the technologies we possess as a specialized manufacturer supporting the quality of important parts that impact safety
- 2 Versatility and scale of infrastructure that can be diverted for key EV parts
- 3 Well-balanced customer portfolio and relationships of trust with customers

Financial indicators

Net sales  
Operating profit  
EBITDA

Strategic indicators

Percent of products for EVs

Net sales of new businesses

Achievement of ESG indicators (CO<sub>2</sub> emissions)

## The path to creating value

- 1 **Mobility**  
Providing key devices for EV platforms and MaaS
- 2 **Industry**  
Providing solutions to improve the efficiency of monozukuri which were developed at our own manufacturing sites
- 3 **Energy**  
Power storage and power supply solutions which contribute to expanding the use of renewable energy and achieving carbon neutrality
- 4 **Well-being**  
Leveraging monozukuri expertise and the resources of the East Mikawa region to contribute to the healthy, prosperous lives of people

## Competitive advantages

- 1 Technologies for designing and mass-producing gears and other drive components and unit products
- 2 Integrating advanced AI technologies with hardware and establishing technologies at our manufacturing sites
- 3 Technologies for developing and mass-producing lithium-ion capacitors (LIC), infrastructure, and ability to propose systems taking advantage of LIC's features
- 4 Rare soil characteristics of the East Mikawa region and an industry-academic network in the plant biotechnology domain

New businesses

Sustainability

## Musashi DX

Comprehensive optimization of business processes using digital technologies  
Making effective use of data to create new value

## Musashi GX

Implementing a green strategy transforming environmental activities into value targeting all business activities

P25



## ELECTRIC VEHICLE

Special  
Feature

# Playing a Leading Role in the Era of Electrification

### 1 Differential assemblies and reduction gears as key devices for EVs

The EV market is growing rapidly.

The development race is becoming fierce globally, which is leading to car makers increasingly outsourcing operations. An increase in new manufacturers entering the market, an increase in new development projects, shorter development cycles, and other changes have also created new opportunities for us to make inroads. Gears used for differential assemblies and speed reducers, which are our mainstay products, also play an important role in EVs, so demand for these parts is expected to increase.

In this trend, the technologies and knowledge that we have accumulated over many years as a manufacturer specialized in gears for vehicles are our great advantage in the era of electrification. We also work on the development of reducer units for EVs that combine the differential assemblies and reduction gears, aiming for another leap forward based on key devices in the EV era.



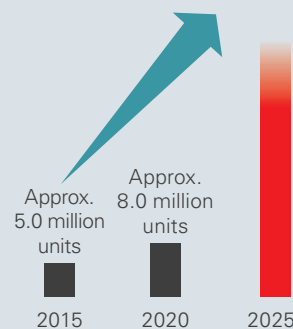
Reducer unit for EVs  
(Designed by Musashi Seimitsu Industry)

Differential assembly

Reduction gear

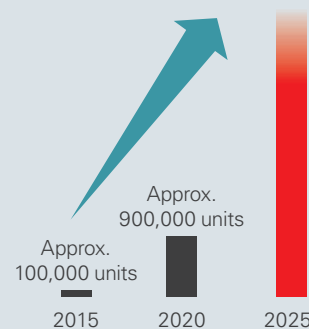
A differential assembly is a differential gear arrangement that receives torque from the engine via the input shaft and directs it to two output shafts (on the right and left wheels) with an applicable difference in revolutions. This device must be very strong and durable because the torque that moves the automobile which weighs more than

one ton is applied to the palm-sized gear.



A reduction gear is a mechanical system that converts the high rotational speed of the motor to a safe and comfortable driving speed. Differences in the reduction ratio affect the performance of an automobile, including acceleration and range. We are working vigorously to improve technologies to reduce gear noise and

weight and to achieve other targets.



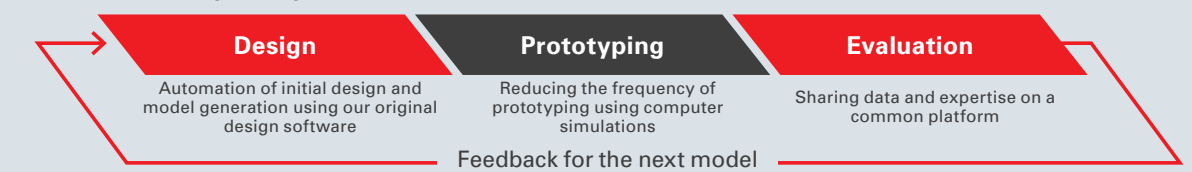
### Intensive investment since the 2008 global financial crisis in anticipation of electrification

At Musashi Global Center, which was established in 2008, we have been working on the development of high-performance, affordable Powertrain parts in anticipation of the arrival of the electrification era. One of the great achievements from these efforts is the commercialization of our proprietary differential assembly.

### 2 Greater opportunities created by accelerating development

We have been working on the digital transformation (DX) of the development process. While development process used to involve many elements that are dependent on individual skills, we have consolidated knowledge through

#### DX of the development process

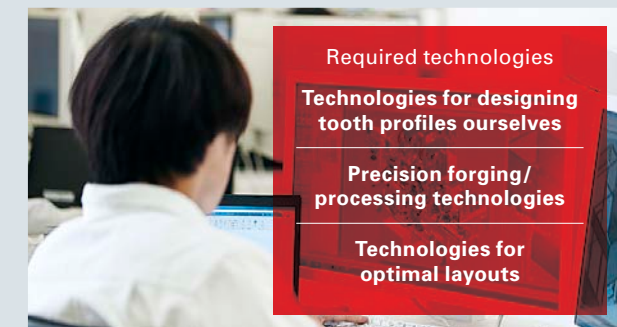


### 3 World's best technologies for the optimization of transmission functionality

Compact & Lightweight High-Strength Quiet

EVs are heavy partly because of the battery. This makes it more important than ever to use compact, lightweight parts. In addition, gears used in EVs must be very strong and quiet while driving due to the characteristics of EVs' motors.

We are pursuing the optimization of transmission functionality, which is our core technology. We cater to high-level customer needs using the world's best technologies, including technologies for the realization of the ideal tooth profile for specific gears, highly efficient processing technologies leveraging our integrated manufacturing system, and technologies based on our digital platform that enable outstanding development speed.



### POINT

- 1 Differential assemblies and reduction gears as key devices for EVs
- 2 Greater opportunities created by accelerating development
- 3 World's best technologies for the optimization of transmission functionality
- 4 Capable of supplying products locally to customers all over the world

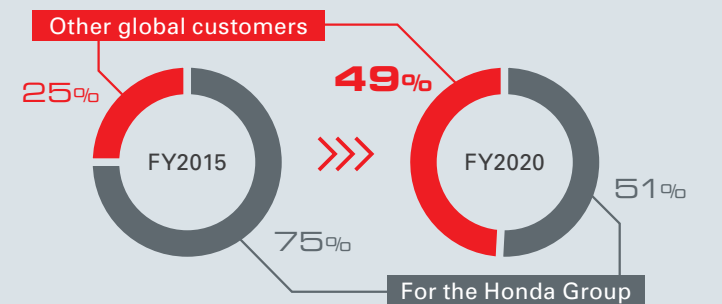
the introduction of a digital platform. This has enabled us to improve the efficiency and speed of the process.

Because the development period for EVs is short, suppliers must also maintain an unprecedented development speed. We have established an advanced development system leveraging digital technologies. Using this system, we are able to cater to increasingly sophisticated customer needs and seize opportunities to expand our business.

### 4 Capable of supplying products locally to customers all over the world



Our global production and sales network with its integrated manufacturing system is one of our greatest advantages. It is unrivaled by other companies. The continued evolution of our existing infrastructure enables us to deliver products to customers all over the world from our local bases even as electrification progresses.





Differential Assembly

Transmission gear

Planetary assembly/  
gear

Camshaft

We are working to improve the added value of our products, such as reduction gears, transmission gears, planetary assemblies, and camshafts, in addition to differential assemblies whose strengths are their compact dimensions, light weight, and high-precision.

Parts for

## AUTOMOBILES

Steering ball joint  
(rack end)

Suspension ball joint

Suspension arm  
assembly

Suspension and ball joints are components that play an important role in safety. They absorb shock and vibrations from the road surface and keep the vehicle body stable when steering, in addition to connecting the vehicle body, steering wheel, and tires. The world is pursuing a reduction in the weight of these parts, in addition to increased wear resistance and durability.

### About the Business

At Musashi, we believe the era of electrification is an opportunity to leap forward. We pursue optimal monozokuri in the PT, L&S, and Motorcycle business domains. Thus, we aim to contribute to enriched Harmony between our lives and Earth through our business activities.

Parts for

## MOTORCYCLES

We manufacture transmission assemblies, camshafts, and other drive parts for motorcycles, general-purpose engines, ATVs\*, and other uses and supply them to customers all over the world.

At the same time, we are reinforcing our framework for analysis and evaluation related to noise and vibrations and also responding to environmental regulations, which have been an important issue in recent years.

### Gear assembly (transmission parts)

We manufacture light weight and low cost gear assemblies with a focus on assemblies intended for compact motorcycles for emerging countries. We have achieved high productivity with net shape manufacturing, which does not involve cutting. For large premium models, we have fulfilled high quality requirements with specifications that require high precision and great strength. We can also suggest designs we develop on our own based on the customer's concept.

### Gear shafts (for scooters)

We manufacture these parts mainly for scooters for emerging countries. Net shape manufacturing, which does not involve cutting, enables high productivity and product competitiveness, which are features that we boast of.

### Parts for ATVs/General-purpose parts

At Musashi, we provide a wide range of products including products for 4-wheeled and 2-wheeled vehicle, for general-purpose assembly camshafts and final gear assemblies for ATVs.

\*ATV. "All Terrain Vehicles" are vehicles with engine or motor which designed to handle a wider variety of terrain than most other vehicles.



Differential Assembly

### Automobiles

## PT Business (Powertrain)

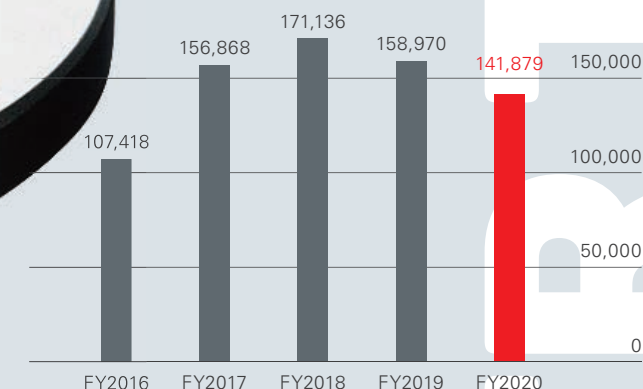
Contributing to automobiles' smooth acceleration and quietness

In the PT Business, we develop and manufacture products including differential assemblies, transmission gears, planetary assemblies and camshafts. The differential assembly receives torque from the engine or electric motor through the input shaft and allocates it to output shafts connected to the right and left wheels whilst allowing the wheels to rotate at different speeds if needed. The transmission and planetary gears convert the engine or motor speed to the required driving speed, whilst the camshaft controls the opening and closing of the engine's intake and exhaust valves. For the MS differential assembly with bevel gears we developed ourselves, we have achieved a more than 10% weight reduction compared with previous products, thus contributing to reduced vehicle weight and increased fuel efficiency.



Changes in Net Sales in 5 Years

(¥ million)  
200,000



### Business strategy

- Commercialization of reducer units for EVs and launching them on the market
- Evolution of strategic products
- Optimization of transmission functionality

In the PT Business, we are striving to differentiate ourselves to maintain a competitive advantage amid the electrification of vehicles through the accumulation of knowledge about the design requirements that are specific to EVs and HVs (Hybrid Vehicles), in addition to the provision of the lightweight, compact, high-precision differential assemblies which are our existing products. We have enhanced activities for proposing and promoting sales of our lineup of lightweight differential assemblies, with a focus on EVs and HVs for customers in Japan and other countries, leading these efforts toward a steady increase in orders. For reducer units, which are speed reducers for EV motors, we develop designs and manufacturing technologies for high-added value products based on market needs, thus enhancing sales activities for vehicle manufacturers and motor manufacturers.

### Providing new products by improving gear technologies

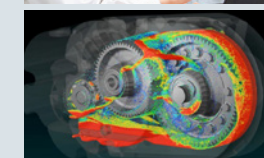
#### Environment that enables speedy development



Advanced test facilities



People and systems



Simulation technologies



**Automobiles****L&S Business****Contributing to vehicle handling and ride quality**

The ball joints supplied by our L&S business are mostly used in the linkages connecting the wheel to the vehicle body. They are important parts impacting the safety of vehicles that require a high degree of reliability. The front ball joints allow the wheels to be steered, whilst absorbing any bumps in the road, contributing to smooth steering and improved ride quality. We have succeeded in developing compact, lightweight ball joints using high-precision simulation to help define the optimal shape. We have also established an internal system that enables the integration of processes through to evaluation. Thus, we provide customers with ball joints optimized for the individual vehicle, thereby contributing to increased ride quality and fuel efficiency through reduced vehicle weight. We have also made high-efficiency manufacturing possible through the development of a series of products in a range of sizes which permits low-cost, compact, lightweight ball joints to be supplied globally.

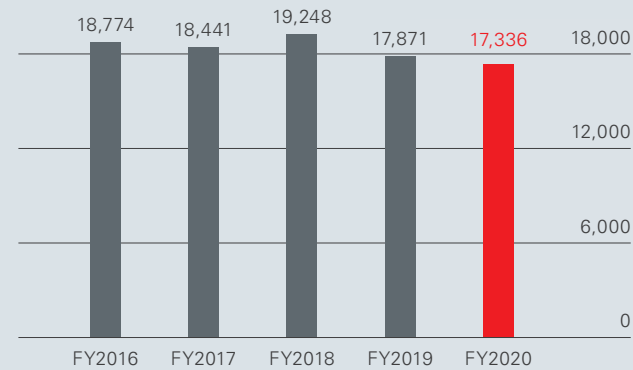
**Business strategy**

- Use of aluminum and downsizing
- Improvement of analytical and design capabilities
- Development of ball joints able to handle low and constant torque

In the L&S Business, we work on suspension and steering parts. In the development of products we keep in mind the changes in customer requirements associated with autonomous driving. By using advanced computer analysis to develop optimal designs, we are able to achieve size and weight reduction of low-friction ball joints. The result is an improvement in ride quality and responsiveness of the vehicles. They are highly acclaimed by new customers from overseas countries and in Japan, leading to our receiving new orders. In the domain of manufacturing, we optimize processes from the GX perspective and improve processes in our efforts to provide attractive products.

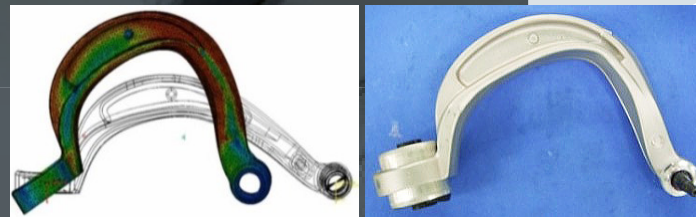


Changes in Net Sales in 5 Years

(¥ million)  
24,000**TOPICS**

We are globally promoting the commercialization of compact, lightweight ball joints and aluminum arms, which can help improve the fuel efficiency of automobiles, with optimal designs enabled by high-precision simulation technology and internal product evaluation at our various test facilities.

We have also continued to develop our simulation technology. This technology is enabling us to develop high-strength, high-durability ball joints with superior friction performance that make the stable maneuvering of vehicles possible while increasing ride quality and reducing road noise.



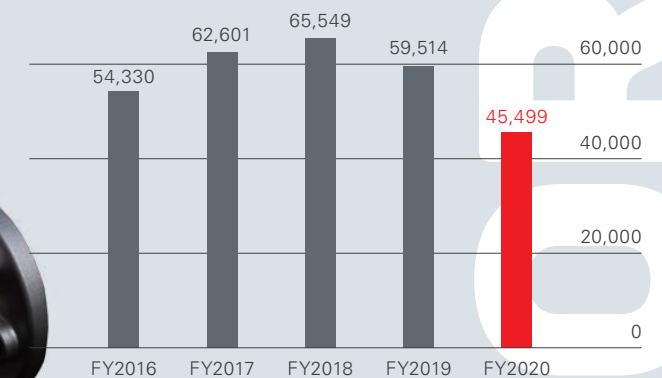
Analysis using a high-precision simulation technology

**Motorcycle Business****Globally applying our technological capabilities cultivated in Japan**

In the Motorcycle Business, we manufacture transmission assemblies, camshafts, and other drive parts for motorcycles, general-purpose engines, and other applications and supply them to customers all over the world. Against the backdrop of our having achieved the world's largest production volume, we are developing new products for compact motorcycles for emerging countries by taking advantage of our design and processing technologies that we have accumulated to date. For large premium models, we are applying the technological capabilities that we have cultivated in Japan at our overseas locations. We are also proactively promoting local procurement, aiming to cater to the needs of customers around the world. We have enhanced our system for analyses and evaluations related to noise and vibrations, advancing environmental initiatives including initiatives for the establishment of a carbon neutral society.



Changes in Net Sales in 5 Years

(¥ million)  
80,000**Business strategy**

- Commercializing EV units for motorcycles and launching them on the market
- Pursuit of high added value
- Achieving overwhelming cost competitiveness

In the Motorcycle Business, as the world's No.1 supplier of transmissions, we are powerfully promoting the development of highly attractive new products with superior efficiency, by integrating our technological capabilities for monozukuri, which we have cultivated over many years, and design capabilities with full knowledge of the functionality and specifications required of transmissions. Further, we are also powerfully expanding contract design of transmissions for motorcycles, aiming to achieve absolute customer confidence.

**TOPICS**

We have applied gear assembly technologies to develop a motor unit with an integrated gearbox intended for electric motorcycles. We have achieved the slim dimensions and light weight of the unit by integrating the motor and gearbox. In addition, the high transmission efficiency and low noise have been achieved through the application of Musashi's high-level expertise in gear processing. We have designed this product in a way that it can be applied to vehicles with different wheel sizes just by changing the gears and arms, without having to change the motor or inverter, which enables quicker development and cost reduction.



# Machinery & Tools

## Catering to every need of monozukuri sites

In the Machinery & Tools business, we provide new value by producing original equipment for specialized and other machines, prototypes, jigs, dies and cutting tools. In 2018, we launched a solution-oriented business in which we externally apply our technologies to support the monozukuri we have cultivated internally to solve customers' problems. We aim to expand this business by targeting monozukuri companies, which are not limited to companies within the automobile industry.

### PROTOTYPE

A team of skilled-workers who can shape any product



### MACHINERY

Adding value to Musashi's production automation using unique technologies



### DIES

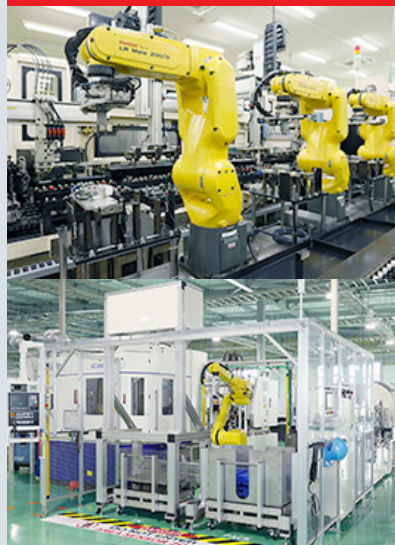
Strong support for forging using Musashi's core technologies



We make production for quick delivery possible with optimal process design and our processing specialists with national qualifications.



Shaping and creating one-of-a-kind equipment based on customer needs



Ensuring the quality of forged parts by combining our expertise in die production that we have accumulated over more than 50 years with the latest cutting and measurement technologies.

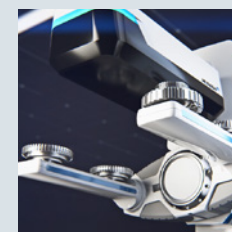


# MUSASHI AI

# AI SOLUTIONS

## An automation solution using leading-edge AI technologies

In monozukuri, products go through the processes of conveyance, processing, and inspection before they are shipped to customers. Among these processes, conveyance and visual inspections by humans are monotonous, high-load tasks that are repeated over many hours. Under the slogan, "Human jobs for humans," Musashi AI implements AI at manufacturing sites, releasing people from monotonous, high-load tasks as an initiative to enable innovation in monozukuri.



### AI auto inspection system

Auto inspection using AI has achieved the same or higher level of precision that is achieved by visual inspections by humans. It is being introduced at our internal manufacturing sites and also the external sites of our customers.



Autonomous Mobile Robot

### Neural Cube

Neural Cube is an edge AI device that supports the prompt introduction of AI on sites. It enables sites to implement AI immediately without spending too much time building the environment, permitting the significant reduction of work-hours for the introduction of AI.



# MUSASHI

Musashi Energy Solutions Co.,Ltd.

## Providing sustainable energy solutions

Musashi Energy Solutions develops, manufactures, and sells lithium-ion capacitors with one of the few companies with mass-production infrastructure in the world. A lithium-ion capacitor is an electric storage device which has much higher energy density than conventional capacitors while maintaining the ability to rapidly charge and discharge, which is an advantage of capacitors. This is enabled by the technological combination of an electrical double-layer capacitor and a lithium-ion battery.



Lithium-ion Capacitor Cells



Lithium-ion Capacitor Standard Modules



Lithium-ion Capacitor High Voltage Module



Pre-lithiation Treatment Equipment

# ENERGY SOLUTIONS

## Business strategy

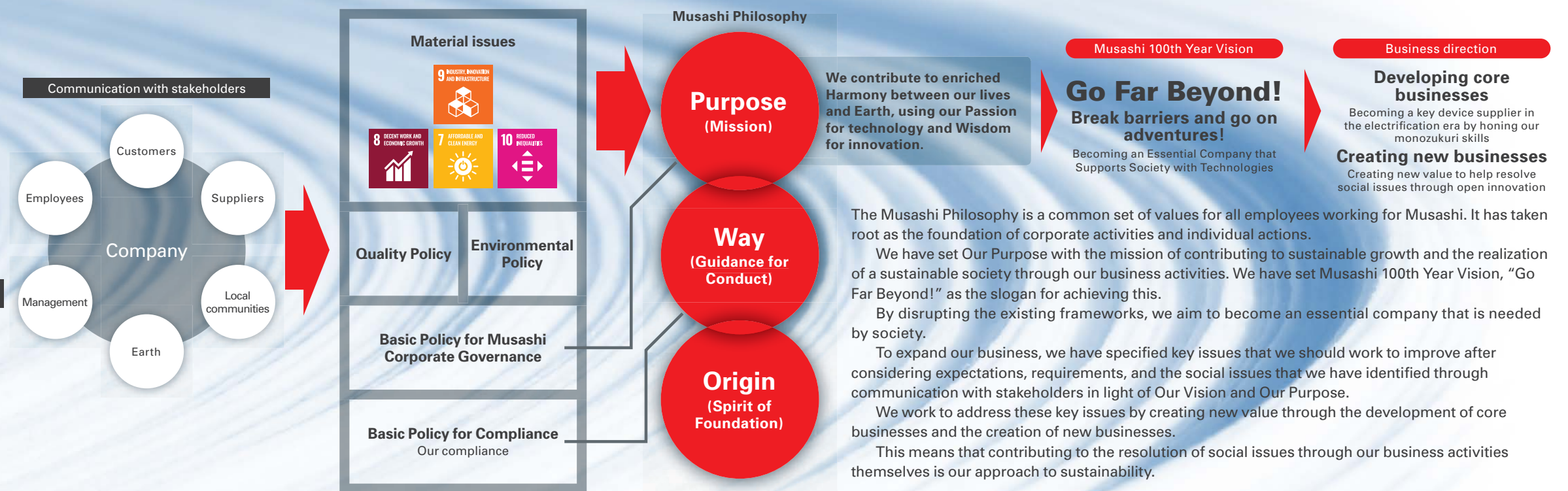
Other features of lithium-ion capacitors include long service life, no need for maintenance, and a high level of safety. At present, they have been used in Japan and overseas as voltage sag compensators for use in the event of a power outage and energy recovery systems for guideway transit and other applications. With the progress in the development of technologies for increasing the capacity of lithium-ion capacitors, it is expected that we will see the creation of new markets and it will become one of the key devices for the electrification of society. Moving forward, Musashi Energy Solutions will further accelerate the expansion of its energy solution business, which is helping to establish a sustainable society.



# MUSASHI SUSTAINABILITY

We are working toward the complete realization of a sustainable global society

Contributing to sustainable growth and the realization of a sustainable society through the expansion of business centering on the Musashi Philosophy



## MATERIALITY (Material issues)

Process for specifying material issues and the involvement of the Board of Directors

STEP 01

### Identify issues

Refer to social standards and guidelines and identify 36 issues mainly according to the 17 categories of SDGs.

STEP 02

### Evaluate importance

Prioritize and map issues from 2 perspectives of importance: "for stakeholders" and "for Musashi group."

STEP 03

### Examine and specify

Put the mapped issues in SDGs to specify materiality for management's examination.

STEP 04

### Specific index

Put the examined material issues into specific index and measures.

We have identified material issues regarding management by analyzing the things that Musashi is capable of doing now and the fields it should focus its efforts on based on Musashi Philosophy.



### TOP PRIORITY ISSUE

#### Creating a sustainable social system for the next-generation

### SECOND PRIORITY ISSUE

#### Work style change Improvement in productivity

**Background social issues**  
Despite world-wide workforce is increasing, employment opportunities are decreasing. Quality of employment gets worse and poverty expands.

**Why does Musashi take action?**  
Responsibility as a global company to assure quality of employment. Stable economic and social infrastructures are necessary for corporate development.

Infrastructure of economic growth

P17

#### Creation of sustainable energy

3 billion people rely on wood, coal, charcoal, and animal waste for cooking and heating. Greenhouse gas warms the globe.

Responsibility for the automobile industry which emits vast amounts of CO<sub>2</sub>. Keeping the global environment is essential for business continuity.

Sustainable energy system

P29

#### Promotion of diversity and inclusion

A gap is expanding between rich and poor. Behind this, unequal job opportunities by race, ethnicity, gender, etc. exist.

Responsibility as a global company. Human resources need to be assured for business growth. Personality of each employee can contribute to corporate growth.

Realization of diverse work styles  
Better quality of employment

P31



# Prosperous Coexistence with the Global Environment

Confronting all environmental problems with sincerity,  
aiming to improve the global environment

## Support for the TCFD



At Musashi Group, we regard climate action to be an important task for sustainable management. We address climate change through our products, services, and corporate activities, thus “contributing to enriched Harmony between our lives and Earth.”

In August 2021, we announced our support for the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) to increase communication with our stakeholders. We will continue striving to disclose more information via media outlets including integrated reports and our website.

### Strengthening governance

We have strengthened our corporate governance system to reflect our climate actions in our management. We have clarified the roles and responsibilities of domestic and overseas Group companies and affiliates in the organization, to enable them to act to achieve targets in a responsible manner while supervised by management. **P42**

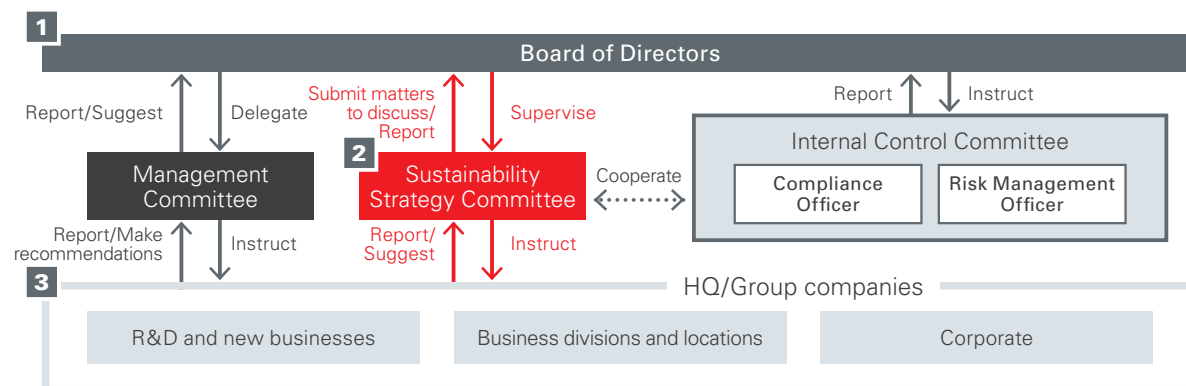
### Green Operation 100

**Achieving 100% carbon neutrality of our business activities (Scopes 1 and 2) by 2038, our 100th anniversary.**

We have implemented an array of initiatives to address environmental problems, including energy conservation activities. We will begin acting with renewed determination as a member of a global society to achieve carbon neutrality, a goal supported by a global consensus. We promise to make our own activities green globally by 2038, aiming to achieve the carbon neutrality of the entire value chain by 2050.

See our website for more information about Musashi's declaration of Carbon Neutrality.

[www.musashi.co.jp/en/newsrelease/news/musashi\\_set\\_a\\_new\\_middle\\_term\\_goal\\_to\\_achieve\\_carbon\\_neutrality.html](http://www.musashi.co.jp/en/newsrelease/news/musashi_set_a_new_middle_term_goal_to_achieve_carbon_neutrality.html)



#### 1 Board of Directors

The Board of Directors makes decisions on the company's initiatives (policies and strategies).

#### 2 Sustainability Strategy Committee

This committee deliberates and makes decisions regarding the Group's direction, targets, and indexes for achieving sustainability, based on the policies and strategies resolved by the Board of Directors. It orders affiliates and Group companies all over the world to take actions to resolve issues, by adding the perspective of the medium- to long-term improvement of corporate value to the perspectives of social issues, management risks, and governance.

Chairperson	Members	Frequency of meetings
Chief management executive	Directors, C-suite executives and external specialists	At least twice a year

#### 3 Execution area (HQ/Group companies)

PDCA cycles for achieving targets are implemented in a responsible manner, and the status of implementation is reported to management.

### Environmental Policy

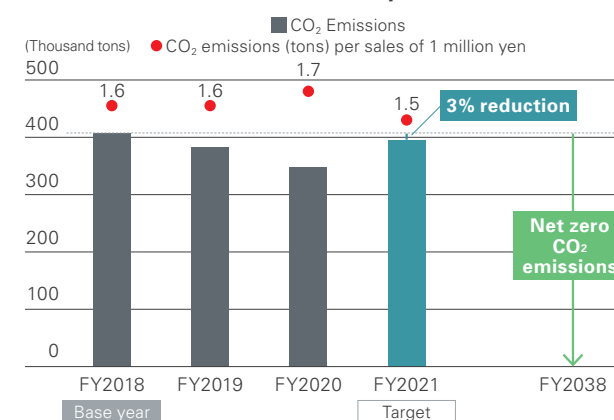
We intend to address global environmental problems through the achievement of Our Purpose, thereby contributing to the global society through all of our business activities as a member of that society. We have summarized our basic approach and stance for this purpose as our Environmental Policy.

See our website for more information.

[www.musashi.co.jp/en/sustainability/earth.html](http://www.musashi.co.jp/en/sustainability/earth.html)

## Initiatives for reducing global CO<sub>2</sub> emissions

### CO<sub>2</sub> emissions & CO<sub>2</sub> emissions per unit ~Scope1,Scope2~



## Initiatives to reduce industrial waste and the consumption of water resources

### Initiatives to reduce industrial waste

In FY2020, we set a target of reducing the amount of industrial waste, which increased in FY2019 due to a new plant commencing operations, to a level equivalent to the level in FY2018, and implemented initiatives including the improvement of waste oil treatment. While we were unable to achieve this target, the initiatives produced certain results. Moving forward, we will consider even more effective means and methods of operation and apply them to more plants and processes to reduce emissions.

### Initiatives to reduce the consumption of water resources

While consumption increased in FY2019 due to the operations of the new plant, we were able to reduce total consumption in FY2020. There was a water leakage at the Head Plant, but we addressed this problem and the situation has been normalized at present. (We promptly checked if a similar problem had occurred at any other plant.)

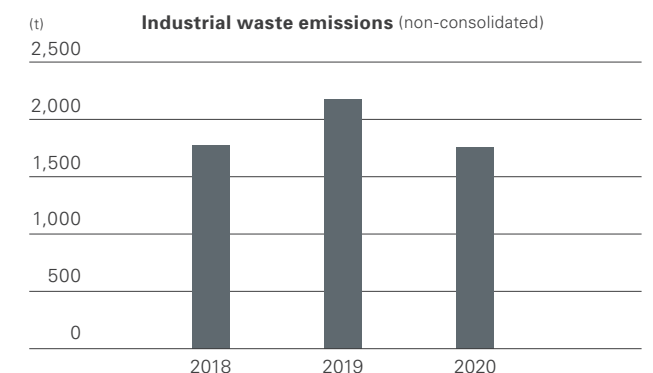
\* We are preparing globally unified management and evaluation systems for the consumption of water resources as we did for CO<sub>2</sub> emissions.

At Musashi, we again collected data on our global CO<sub>2</sub> emissions (Scope 1 & Scope 2) upon the announcement of Musashi's declaration of Carbon Neutrality. During the collection of this data, we stopped requiring Group companies to calculate their CO<sub>2</sub> emissions individually and redefined globally unified measurement criteria. This enabled us to start afresh with a correct understanding of our impact on society and to visualize targets for the entire Group.

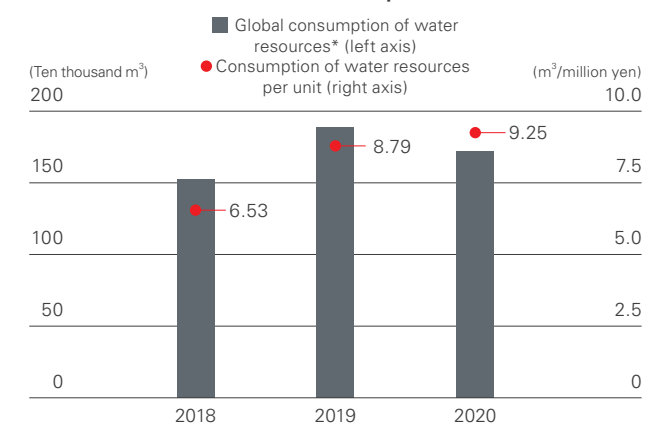
Having set FY2018 as the base year, we are pushing forward with initiatives to achieve Green Operation 100 by 2038. **P27**

In FY2020, we reduced our absolute emissions. However, this was due to fluctuations in production which was greatly affected by the semiconductor shortage and the COVID-19 pandemic.

For FY2021, we have set a new global target of reducing the CO<sub>2</sub> emissions of the entire Group by 3%. In addition, we have set indexes to establish a structure for the evaluation of steady reduction activities even when impacted by external factors, enabling the establishment of a system that enables the monitoring of progress at all locations.



### Consumption of water resources and consumption of water resources per unit



\*Global data (coverage rate: 91%)

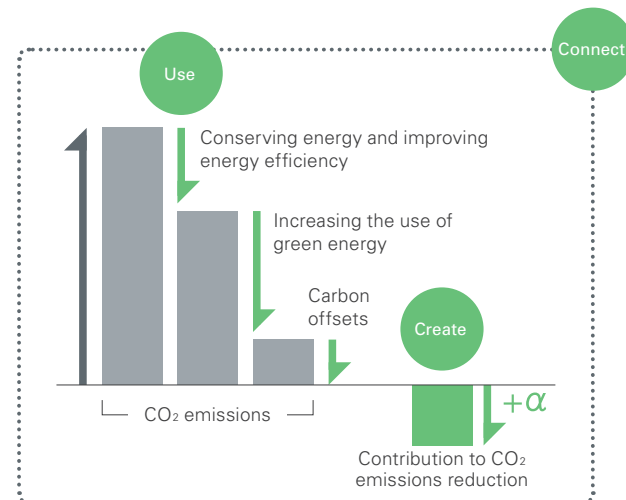


# Green Transformation

**Create green value!**  
We take on challenges to contribute to a global society where the nature and people are able to coexist in harmony.

## What is Green Transformation?

Since Industry 1.0, the lives of humans have been enriched by technology and energy. However, the global environment has become polluted. Now that the pollution has reached a level where the previous environmental initiatives are far from sufficient, Musashi will implement green strategies to contribute to increasing the harmony between our lives and Earth through innovation using technologies as expressed in Our Purpose.



## Musashi Green Strategy

- Create**
  - Green Products
    - Creating products that contribute to the reduction of CO<sub>2</sub> emissions
    - Providing products and services with value for the natural environment and other added value
- Use**
  - Green Operation
    - Improving energy efficiency and minimizing consumption
    - Using renewable energy for all production processes
- Connect**
  - Green Communication
    - Making all activities carbon neutral
    - Commitments for local communities and society

## Create

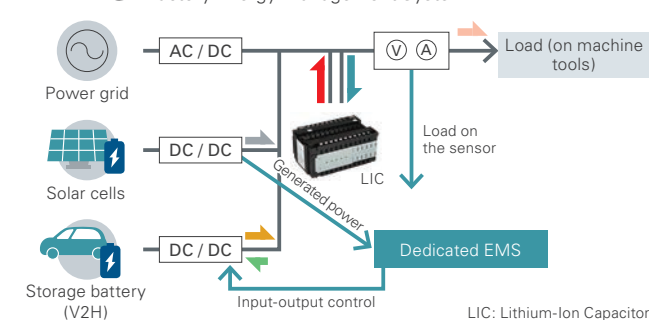
### Green Products

We are working to achieve GX through a combination of a shift to EVs in our core business **P17** and new businesses.

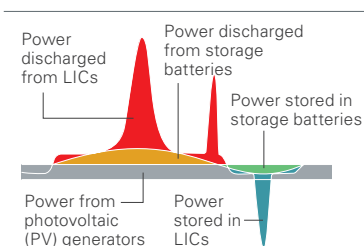
At our production sites with high electric load, the use of only privately generated power makes it difficult to maintain the balance between power demand and supply. We also face issues that cannot be solved only through energy conversion.

Momentary load at industrial facilities is more than ten times the power generated by solar cells, which forces us to rely on grid power. The alleviation of momentary load using FEMS with lithium-ion capacitors **P24** enables plants to shift peak loads, reduce electricity costs through demand control, use renewable energy, and operate for long periods of self-sustained operations during power outages, contributing to the achievement of carbon neutrality at production sites.\* We conducted a demonstration experiment at our plant in 2021. Additionally, AI-based autonomous mobile robots (AMR) **P24** improve productivity and also aid the transition from gas- or gasoline-driven carriers to electric ones. These tasks are faced by all manufacturers, and we are developing initiatives to deliver solutions for these tasks to manufacturing sites around the world.

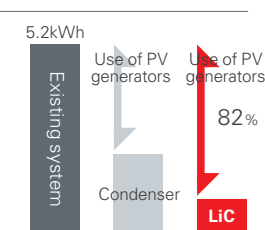
### \*FEMS: Factory Energy Management System



### Conceptual rendering of load control enabled by the introduction of LICs



### Improvement of renewable energy utilization



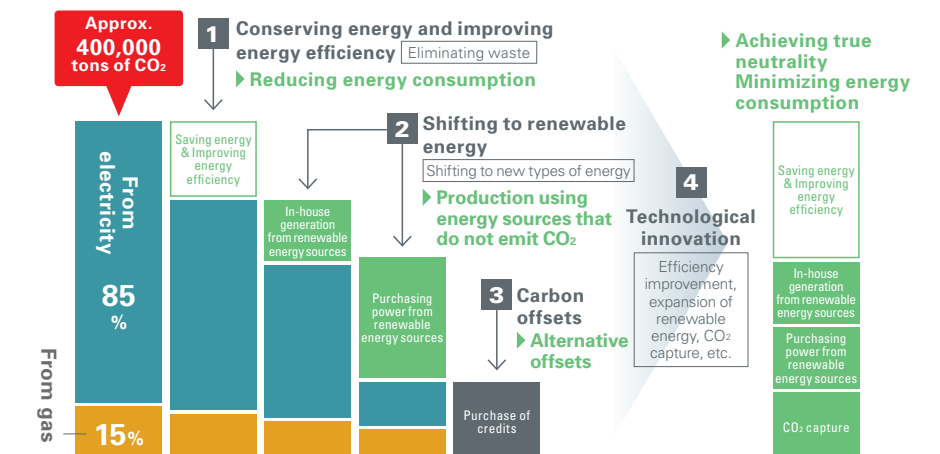
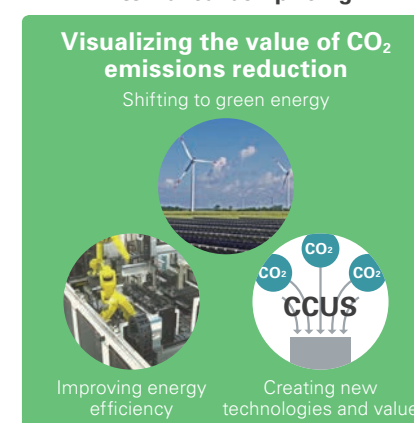
## Use

### Green Operation

From the perspective of CO<sub>2</sub> emissions, electricity is 85% of the energy used in Musashi's production activities. The remaining 15% is mostly gas. While we use a lot of energy in manufacturing, we will start with thorough measures to conserve energy and improve production efficiency. We will then replace power sources with those which do not emit CO<sub>2</sub> or capture CO<sub>2</sub>, through efforts such as the introduction of in-house power generation and switching to electricity from renewable energy sources or non-fossil fuel energy sources. Building on the strength of our global production system, we will implement these measures one by one by selecting the highly competitive and effective initiatives and choosing the countries and regions where they will be highly competitive and effective. In domains where energy conversion is difficult, we will first achieve carbon neutrality through carbon offsets. However, we aim to achieve true carbon neutrality through continuous improvement and technological innovation.

To drive the implementation of these measures, we have begun to introduce internal carbon pricing, including capital investment, starting with the Head Plant. We are planning to expand this system to the entire Group.

### Internal carbon pricing



## Connect

### Green Communication

To improve local communities' disaster resilience, we have launched a joint project with the local government of Toyohashi, Aichi. The project was selected by the Ministry of Economy, Trade and Industry as a project formulating a plan for the introduction of a local microgrid.\* Moving forward, we will establish an exploratory committee by inviting local business operators, experts with specialized knowledge, and other people to be its members and consider the times, locations, and other specific details of individual demonstrations.

The power to be stored in an in-house power generation system that is planned to be installed will be used efficiently using FEMS for production activities during normal times. When the power supply is shut down in the event of a disaster or similar event, the stored power will be supplied to local communities to maintain a safe, hygienic living environment for local people during the emergency. This initiative is the first step toward the future we are aiming for. It contributes to the achievement of the carbon neutrality of our production sites using FEMS and also helps increase the disaster resilience of local communities.

- ▶ In the event of an emergency, the photovoltaic power generation system and power storage system will be used as a power plant to supply power to areas around the evacuation facilities.
- ▶ During normal times, the system is used to reduce electricity costs and promote carbon neutrality through the control of demand within the plant and the use of renewable energy.

\*Local microgrid: When the power grid of the electric power company is disconnected in the event of a large power outage following a disaster or similar event, Musashi's facilities, including their photovoltaic power generation systems and storage batteries are used to supply power stably within a specific grid.



See our website for more information.  
[www.musashi.co.jp/newsrelease/news/post\\_57.html](http://www.musashi.co.jp/newsrelease/news/post_57.html)



# Solving Social Issues through Open Innovation

## Corporate Venture Capital

To enrich the global society, we are striving to create new value through open innovation to help solve social issues. To achieve this, we have been engaged in corporate venture capital (CVC) activities since 2018.

In the four domains of mobility, industry, energy, and well-being, we invest in and collaborate with start-ups with innovative technologies, venture capitalists with broad networks, and the like. Under firm partnerships with our investment destinations, we are advancing measures for the sustainable growth of existing businesses, the speedy creation of new businesses, and the medium- to long-term expansion of business portfolio.

Monarch Tractor from Silicon Valley, California, the United States, is one of the start-ups that we invest in. This company has developed the world's first electric smart tractor, which solves problems faced by farmers, such as labor shortages and productivity declines.

We are working on the joint development of power trains leveraging our gear technologies that we have cultivated through our business of developing and manufacturing parts for automobiles. We are also deepening our collaborative relationship with Monarch Tractor in a broad range of technologies, such as AI technologies and power storage technologies that are applied in electric smart tractors. Thus, we aim to create multi-layered synergy to improve the competitiveness of our core and new businesses.



Monarch Tractor CEO  
**Mr. Praveen Penmetsa**



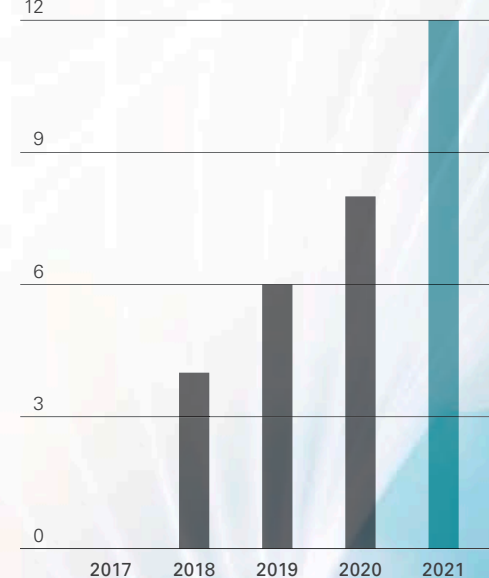
Since the beginning of our relationship with Musashi, they have been the partner that forms the foundation of our development activities. Synergy between Monarch and Musashi has enabled the joint development of key technologies such as power trains, battery systems, and AI. This contributes to the development efforts of Monarch Tractor as a truly powerful, innovative platform for farming technologies.

The attitude of Musashi, which is committed to building a sustainable future with technology, is consistent with Monarch's mission of building sustainable food ecosystems around the world. We were able to obtain the support of Musashi as we were starting up, which has contributed greatly to our success. We were able to accelerate our production of the world's first electric, self-driving smart tractor. This has enabled more sustainable, more profitable farm management.

## CORPORATE VENTURE CAPITAL

# CVC

Number  
12  
Number of CVC investments  
(cumulative total)



## MUSASHI Innovation Lab

In December 2018, we opened MUSASHI Innovation Lab CLUE in front of Toyohashi Station as a platform for innovation. Through industry-government-academia collaboration, we have created this space for encounters with diverse people, including other local companies in the East Mikawa region and people from the local community. We aim to innovate to help solve social issues with unique technologies and novel ideas created through these encounters. MUSASHI Innovation Lab CLUE provides an environment which permits free thinking and high-quality discussion. This makes it appropriate for the creation of new businesses, as well as a good venue for incubation programs fostering entrepreneurs, pitch events aimed at attracting partners and procuring funds for the growth of business, and various activities related to the reinforcement of frameworks for industry-government-academia collaboration.\*

\*Pitch event: event for quick presentations aimed at procuring funds, attracting partners, obtaining advice, and similar purposes

## MUSASHI INNOVATION LAB

# CLUE



## OPEN INNOVATION NETWORK

### MOBILITY e-mobility Unit



INDUSTRY  
AI solutions

### ENERGY Energy solutions



WELLBEING  
Plant Biomethodology

### Comprehensive collaborations with universities

Toyohashi University of Technology **W**  
Nara Institute of Science and Technology **W**

### Joint development

Asahi Kasei Corporation · Development of high-performance lithium-ion capacitors **E**  
CKD Corporation · Commercialization of lithium pre-doped equipment **E**

### Start-ups

ABEJA · Social implementation of deep learning technologies **I**  
634A · AI-based automatic conveyor system **I**  
REE Automotive · Modular EV platform **M**  
Aquarius Engine · Small free-piston engines for power generation **E**  
Monarch Tractor · Electric smart tractor **E W**  
Sakuy · Multi-material 3D printing (for all-solid-state batteries) **E I**  
Spornado · Agricultural innovation using airborne pathogen analysis **W**  
Waphyto · Care products containing functional ingredients of plants yielded in the East Mikawa region **W**  
Agritrio ("Nou-How") · Agricultural matching service **W**  
wkwk(icuco) · Nap monitoring device **W**

### Venture capital

Monozukuri Ventures · Support for hardware start-ups  
Vasuki · Investments in next-generation technologies in the domains of automobiles and industrial technologies  
Chartered Group · Investment in start-ups diverting Israeli military technologies to the private sector

**M** · MOBILITY **E** · ENERGY **I** · INDUSTRY **W** · WELLBEING



# Monozukuri

In addition to developing leading-edge infrastructure including facilities and equipment, we focus our efforts on the development of human resources who embody the vision, “Go Far Beyond!”

## Development

The market globalization has led to the requirement that products fulfill increasingly diverse needs, such as high quality requirements at low costs and environmentally friendly features. At Musashi, we proactively introduce advanced development testing devices and are building a system to enable the internal completion of all processes from product design to functional assurance, in our efforts to build a system for studying and developing unique products quickly.

3D design technology for the differential gears that we have developed on our own and basic design and applied analysis fully leveraging CAE analysis technology are praised by customers as technologies that achieve compact dimensions, light weight, high-strength, and low friction.

### Integrated production system

We have built an integrated manufacturing line where processes from forging to cutting, heat treatment, finishing, and assembly are organically connected.



In September 2008, we established the Musashi Global Center, our technology development center, on the premises of our headquarters. We have introduced advanced testing equipment in this facility, aiming to achieve the Musashi 100th Year Vision with a view toward accomplishing basic research in materials and other fields and the enhancement of technological development capabilities.

Integrated internal manufacturing enables improvement activities from the perspective of comprehensive optimization, fully leverages our strengths and achieves the high quality and low cost that fulfill customer needs. Further, these technologies and expertise are shared by our locations all over the world, serving as the source of our competitiveness enabling us to survive and thrive in the competition of the globalized market.

## Support technology

### Die manufacturing technologies

We internally manufacture dies for precision forging. We are improving our competitiveness by accumulating comprehensive technological expertise, ranging from die design to production, to achieve higher precision, longer service life, and quicker production.



### Tool grinding technology

We regrind and reuse the cutting tools used in many machining processes. This is an environmentally friendly technology that enables cost reduction and helps conserve energy and reduce cost.



### Internal production of manufacturing equipment

Our unique expertise is concentrated to enable the greater efficiency of our manufacturing lines. Having achieved the improvement of efficiency and the reduction of costs, we internally produce these pieces of manufacturing equipment.



# Quality

“Generate trust and prosperity through quality.” “Provide products that fully satisfy our customers.” Holding true to these words that have been passed down since our foundation, we are propelling quality assurance activities to provide better products to customers.

## Quality Policy

**Identify the needs of customers around the world correctly, build a forward-thinking corporate culture, and provide world-leading products from the perspectives of quality, cost, delivery, morale, safety, and the environment, aiming to build a sustainable society.**

### Quality management system

We have established a quality management system based on the IATF16949 requirements. This system enables us to provide products which satisfy customers' quality requirements. We are also building quality management systems under the IATF16949 standard at our production sites around the world. At present, 32 sites have obtained the IATF16949 certification.

### Culture of improvement and quality training

We provide quality training to our employees in a well-planned manner in accordance with their internal qualifications and duties. Since FY2018, TQM (Total Quality Management) Training has been provided for all administrators and supervisors to strengthen human resource development and circle activities. Further, support is provided for employees from not only the department in charge of quality, but all of the company's departments who are taking the quality control (QC) exam. As a result, the number of employees who have passed the exam has been increasing every year. Moving forward, we will establish our own quality examination system and promote quality training globally.



Quality training at an overseas location

### Auto inspection using AI

By implementing AI at our manufacturing sites, we release employees from high-workload tasks such as visual inspections and the conveyance of products. This is how we are working on monozukuri innovation. Among them, the accuracy of auto inspections using AI has reached a level equal to or better than visual inspection by humans. The AI auto inspection system has been implemented at our internal manufacturing sites and also the manufacturing lines of major Japanese automobile manufacturers. We will continue to widely provide our technologies to monozukuri sites all over the world, aiming to realize Industry 4.0.



## Quality management

### Culture of improvement and quality training

### Inspection process reform using AI





# Human Resources

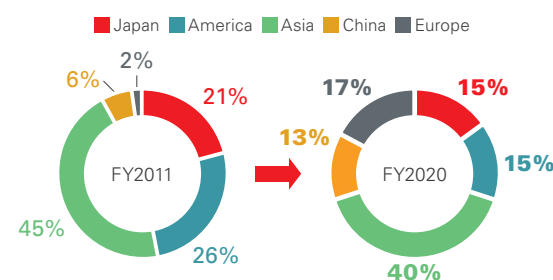
Creating an exciting future using the “human chemistry” that occurs when individuals from diverse backgrounds, each with their own unique qualities, are brought together.

## Investment in human resources as the source of corporate value

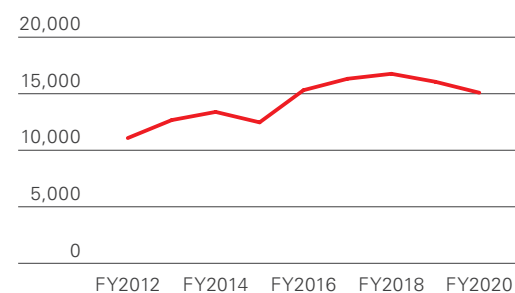
Due to the global expansion of our operations, the number of employees working for us, including our consolidated subsidiaries, has increased 1.5 times in the last ten years, and the ratio of overseas employees has also increased.

As our basic human capital policy, we will work to create systems, an environment, and a corporate culture that enables diverse human resources to develop and actively participate towards the achievement of the Musashi 100th Year Vision.

Percentage of employees by region (%)



Number of employees (consolidated)



## MM circles (QC circle activities)

At the Musashi Group, 391 circles (3,343 members) continue to make business improvements at individual locations through small group activities. The achievements of these activities are reported at achievement presentation sessions hosted by customers in Japan and other countries and they are highly valued by those customers.

In addition, we hold the MM Circle World

Convention every year, inviting select circles from all over the world. During the COVID-19 pandemic, we held this event online to continue presenting achievements and communicating. The World Convention enables participants to share knowledge about improvement activities and also is an opportunity for them to interact with their associates from all over the world, increasing the cohesiveness and competitiveness of the Group.

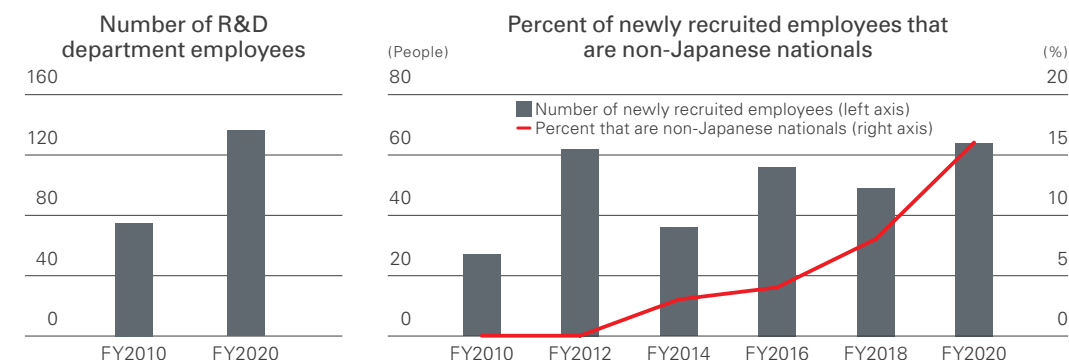


MM Circle World Convention held in FY2019

We respect diversity and promote fair and equitable recruitment and promotion of human resources without regard to gender, age, nationality, disability, or other attributes.

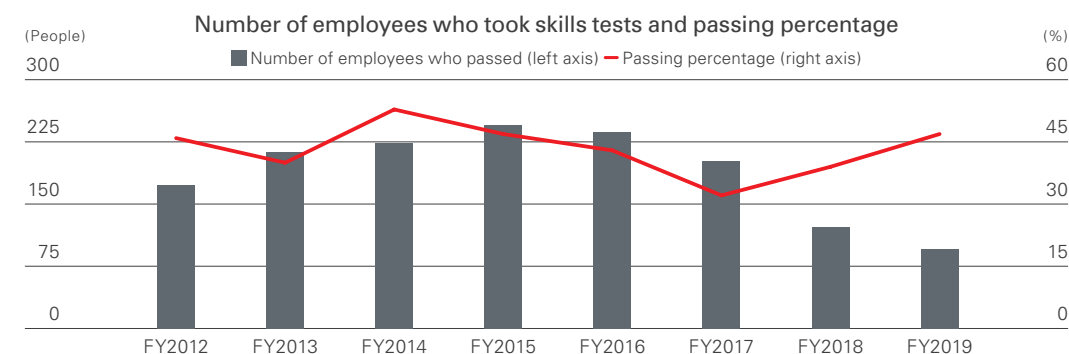
We have been proactively recruiting engineers, aiming to build a system that enables

the speedy research and development of our unique products. In addition, regarding the promotion of diversity, we have enhanced measures to recruit non-Japanese nationals in response to the globalization of our businesses.



We believe in the importance of the skills and technology training that are essential for a monozukuri company, and proactively provide training to fostering technicians, with the goal of enabling trainees to pass national skills tests.

Total number of employees with professional qualifications **1,686**



## Project to formulate the Musashi 100th Year Vision

In April 2021, we formulated the Musashi 100th Year Vision, which says, “Go Far Beyond! Break barriers and go on adventures!” as our new slogan toward 2038, when we will celebrate our 100th anniversary. Our Vision Team played a leading role in the formulation of this vision. The team consisting mainly of young employees in their 20s to 30s who will be the future leaders of Musashi.

In the formulation process, the Vision Team members held global meetings with local employees from the Americas, Europe, Asia, and China. Opinions collected from all over the world were reflected in the new philosophy and vision.



## Recruitment of more engineers and non-Japanese nationals

## Skills and technology training

## Globally developing a corporate culture with future leaders



## Human Resources

### Diversifying workstyles to create an environment that enables the active participation of individual employees

#### Promotion of paid holiday acquisition

We are promoting the use of paid holidays through cooperation between management and labor, and the usage rate has remained high. We have also introduced a special paid holiday program for medical treatment which enables unused paid holiday to be carried over every year for use in the event of a non-work-related disease, injury or need to care for family.

#### Support to balance work and family

We have introduced a shorter working hour program for childcare and family care, which is available to employees raising children and caring for family members. Employees raising children that have not yet entered fourth grade can use this program for as many years as they want if they fulfill certain conditions. We have also introduced a nursing/family care leave program, separate from annual paid holiday. This program enables employees to take time off to care for their pre-school children, take children to clinics or hospitals, provide nursing care to family

members, and for similar purposes.

In addition, we have established a work-from-home program and a reemployment system for employees raising children or caring for family members, further supporting the healthy balance of work and family life.

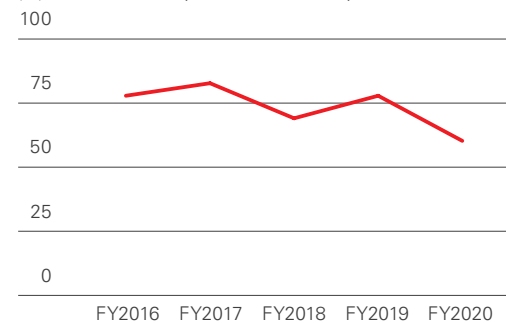
#### New workstyle (remote work)

In FY2020, we introduced a remote work system as a new workstyle that is appropriate for the new normal created by the COVID-19 pandemic. The system is aimed at both controlling COVID-19 infections and also improving business efficiency through autonomous workstyles.

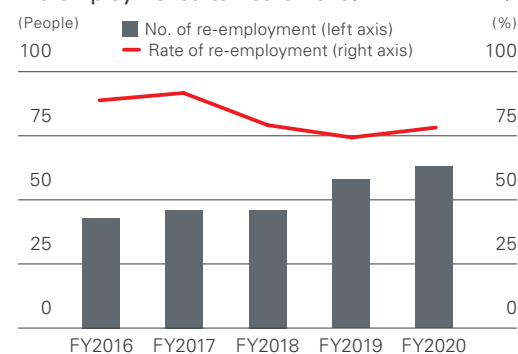
#### Re-employment after retirement

The company sets the retirement age as 60; however, our system enables re-employment after retirement to allow the employees with good health and mentality to work continuously. Employees can work until the age of 65 in full-time base or some days a week. Their skills built over a long time can be utilized after their retirement.

Paid holiday acquisition rate (non-consolidated)



Re-employment after retirement (non-consolidated)

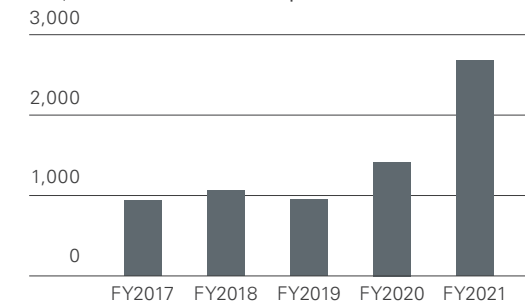


Child-care leave (non-consolidated)

	2016	2017	2018	2019	2020
Female employee child-care leave (%)	100	100	100	100	100
Return to work after child-care leave (%)	100	100	100	100	100

To achieve sustainable growth, it is essential that we listen to employees' thoughts and continue our dialogue with them. Based on this idea, we are proactively creating opportunities for management, including the Representative Directors, and employees to communicate. In addition to direct dialogue with employees, we held a kick-off event for the Musashi 100th Year Vision in April 2021. With these and other events, we are striving to promote interactions not only in Japan but globally.

Number of participants to sessions for policy explanation by the president and discussion sessions with the president (total)



### Employee engagement

### Respect for human rights and prevention of harassment

We believe that creating a workplace which is comfortable for every employee is important for the sustainable growth of the company. Respect for the diversity of individuals and the prohibition of harassment are stipulated in the Musashi Compliance Guidelines, which lay out our basic policies on compliance. We ensure that these rules take root and are understood by our employees through annual compliance training. We aim to be a company which enables employees to demonstrate their individual qualities and take on new challenges.

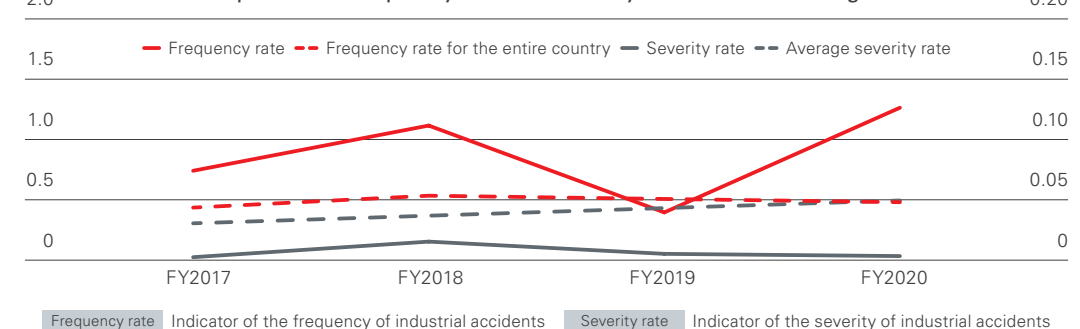
"No safety, no production" is the basic philosophy of our occupational safety and health activities, and we believe that creation of a safe, healthy workplace is essential for the survival of the company.

To eliminate industrial accidents, we implement initiatives to improve the risk prediction capabilities of each individual employee, including risk assessment regarding newly introduced manufacturing lines, the provision of internal risk simulation training, and the provision of risk prediction training based on accidents that have actually happened in the past.

We also take measures to support the continual improvement of employee health, including full medical check-ups, mental health support, and the promotion of passive smoking prevention.



Comparison of frequency rate and severity rate with national figures



Frequency rate Indicator of the frequency of industrial accidents

Severity rate Indicator of the severity of industrial accidents



# Directors

As of June 22, 2021

			Corporate management	Manufacturing and engineering R&D	Sales and marketing	Advanced technology and IT	Finance and accounting	Governance, risk management, and personnel affairs	Global experience
	President and CEO <b>Hiroshi Otsuka</b>	Since May 2006, Mr. Otsuka has been supervising the businesses of Musashi Seimitsu Industry (hereafter, the "Company") and the Musashi Group (hereinafter, the "Group") as the representative director and president of the Company. In addition to expanding existing businesses, he has demonstrated strong leadership by driving the creation of new businesses and various reforms, such as the formulation of a new vision, policy, and long-term strategies by looking ahead to the future of the Musashi Group.	●		●			●	●
	Representative Director Senior Managing Executive Officer <b>Takayuki Miyata</b>	Mr. Miyata has extensive experience in the PT Business, which is a core business of the Company. He has a track record of increasing profit in existing businesses and creating new demand. He also has extensive international experience and currently serves as the president of Musashi Holdings Europe GmbH.	●	●				●	●
	Director Managing Executive Officer <b>Tracey Sivill</b>	Ms. Sivill has the experience of working as a responsible person in the accounting and IT divisions of the Company and Group companies. At present, she serves as the Chief Financial Officer of the Group. She is responsible for achievements impacting the management and improvement of business efficiency of the Group.	●			●	●		●
	Outside Director <b>Goro Kamino</b>	Having worked as a corporate manager of listed companies for many years, Mr. Kamino has extensive experience and a high level of knowledge in corporate management. He supervises the management of the Company from the perspective of a corporate manager of companies engaged in businesses that are different from those of the Company.	●		●		●	●	
	Outside Director <b>Hari N. Nair</b>	Mr. Nair has a wealth of experience and a high level of knowledge in corporate management which he has obtained through his experiences serving in key management positions, including as the Chief Operating Officer (COO) of an overseas automotive parts manufacturer. He supervises the Company's management from the viewpoint of an overseas corporate manager.	●	●	●			●	●
	Outside Director <b>Keisuke Tomimatsu</b>	Mr. Tomimatsu has extensive experience and knowledge in the securities industry and the AI industry as well as a high level of knowledge in finance and accounting. He supervises the management of the Company from the perspective of an investor.				●	●		●
	Outside Director <b>Yoshie Munakata</b>	Mr. Munakata has extensive experience and a high level of insight cultivated through the management of a global company in the information and telecommunication technology industry. He supervises the management of the Company from the perspective of a corporate manager of companies engaged in businesses that are different from those of the Company.	●			●			●
	Director serving as Audit & Supervisory Committee Member <b>Michi Miyasawa</b>	Ms. Miyasawa has a wealth of experience and a high level of insight, which she cultivated mainly by serving in key positions in the legal affairs, sustainability promotion and personnel affairs departments of the Company. She audits and supervises the Company based on her wealth of experience related to compliance and corporate governance.						●	
	Outside Director serving as Audit & Supervisory Committee Member <b>Makiko Yamamoto</b>	Qualified as a lawyer, Ms. Yamamoto has experience and specialized knowledge cultivated mainly through involvement in projects regarding corporate legal affairs at a law firm in Japan and an international law firm. She audits and supervises the Company's management from the viewpoint of a legal expert.						●	●
	Outside Director serving as Audit & Supervisory Committee Member <b>Okubo Kazutaka</b>	Mr. Okubo has a wealth of insight into finance and accounting gained from his experience as a certified public accountant and a high level of expertise acquired while serving as a member of various expert panels for public offices. He audits and supervises the management of the Company from the perspective of a specialist in governance and finance.	●			●	●	●	



# CORPORATE GOVERNANCE

## Basic Concept

Based on the Musashi Philosophy which is composed of Our Origin, Our Purpose and Our Way, Musashi Seimitsu Industry (hereafter, the “Company”) positions the enhancement of corporate governance as the highest management priority in the corporate activities of the Musashi Group.

## Musashi Corporate Governance Basic Policy

The Company has established the Basic Policy for Musashi Corporate Governance to achieve sustainable growth and the medium- to long-term improvement of corporate value in accordance with its basic view on corporate governance.

See the Company's website for details.  
[www.musashi.co.jp/ir/management/market/](http://www.musashi.co.jp/ir/management/market/)

## Corporate Governance System

The Company has adopted the institutional design of a company with an Audit and Supervisory Committee as it works to enhance the function of its auditing and supervising directors in their execution of business and improve the effectiveness of internal control.

In addition, the Company involves its outside directors, including those serving concurrently as members of the Audit and Supervisory Committee, in the decision-making of the Board of Directors, thus improving the soundness and transparency of management.

Further, the Company has established the Nomination Committee and Remuneration Committee, with outside directors constituting the majority of each of these committees, to supplement the supervisory functions of the Board of Directors.

Meanwhile, authority over some matters to be resolved by the Board of Directors is delegated to the Management Committee and other committees, thus enabling prompt decision-making and the execution of business and increasing the agility of business decisions.



Chairperson  
Hiroshi Otsuka  
Number of meetings held in FY2020

8

### Board of Directors

The Company's Board of Directors consists of ten directors, and three of them serve concurrently as members of the Audit and Supervisory Committee. It is chaired by the President & CEO.

Authority over some of the matters to be resolved by the Board of Directors is delegated to the Management Committee and other committees, permitting the Board of Directors to dedicate itself to resolutions regarding important matters faced by the Company, such as the formulation of basic management policies, management strategies, and management plans, and the supervision of the directors' execution of their duties. Further, six of its members are outside directors, constituting the majority. This structure permits the Board of Directors to fully demonstrate its function of supervising the execution of business from a neutral, objective standpoint.

The Board of Directors met eight times in FY2020. In the meetings, the Board of Directors deliberated on not only the business plan and medium-term management plan but also the revision of the Musashi Philosophy and the formulation of the Musashi 100th Year Vision.



Chair  
Michi Miyasawa  
Number of meetings held in FY2020

12

### Audit and Supervisory Committee

There are three members of Company's Audit and Supervisory Committee: one inside director, who is also a full-time member of the Audit and Supervisory Committee, and two outside directors, who are independent. This committee is chaired by the inside director as its full-time member.

The Audit and Supervisory Committee regularly receives reports from directors (excluding members of the Audit and Supervisory Committee) and others about the businesses of the Company and Group companies and the status of development and the operation of the internal control system, among other matters. In addition, the committee audits the directors' execution of their duties using information obtained by attending important meetings of the Management Committee and through other means.



Chairperson  
Hiroshi Otsuka  
Number of meetings held in FY2021

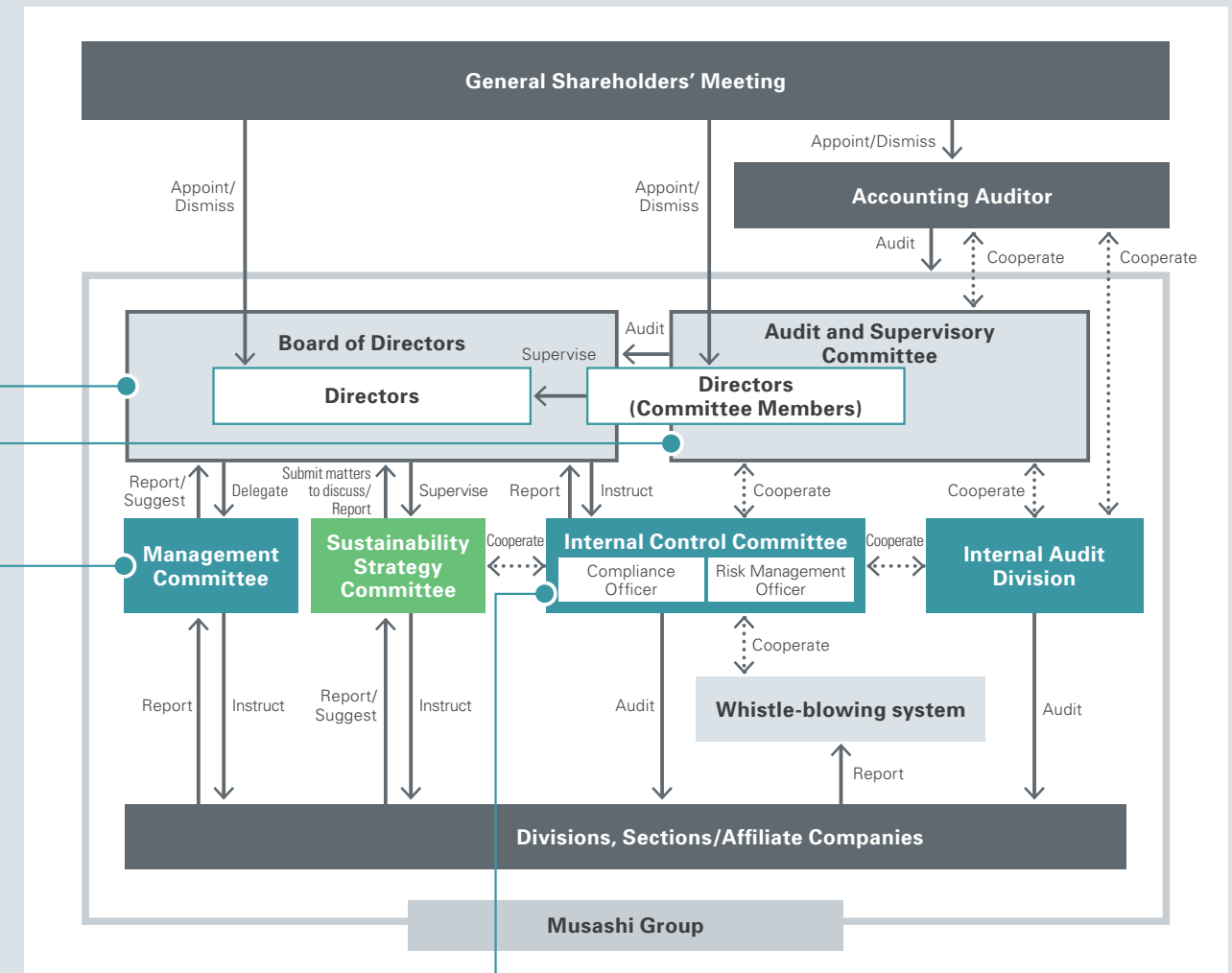
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### Management Committee

The Management Committee deliberates and makes decisions on policies regarding the execution of business and the implementation of specific matters regarding businesses, aiming to make decisions on important matters in the execution of business that are delegated to it by the Board of Directors.

The Management Committee consists of at least three executive officers including the chairperson (Chief Executive Officer).

The Management Committee also deliberates in advance on matters to be resolved by the Board of Directors.



### Internal Control Committee

The Internal Control Committee deliberates on matters related to internal control from all over the world, aiming to ensure efficient, effective business management, compliance with laws related to business management, and appropriate financial reporting.

This committee consists of five executive officers including the Chief Compliance Officer, who serves as the chairperson. Members of the Audit and Supervisory Committee also attend its meeting as necessary.

The Internal Control Committee receives reports from relevant departments, committees, and subsidiaries concerning the status of development and operations regarding regulations, etc., in accordance with the basic policy for the development of an internal control system.

In addition, departments and subsidiaries examine themselves regarding internal control every year to clarify their issues, in their efforts to continually improve internal control.

### Internal Information Management Committee

The Internal Information Management Committee meets when financial results are announced and when an array of corporate information is disclosed to manage internal information. It prevents the leakage of internal information and deliberates on the accuracy and appropriateness of disclosures. The Internal Information Management Committee consists of people responsible for handling information and members of the Management Committee. Its chairperson is appointed by the president.



Chair  
Masaru Maeda  
Number of meetings held in FY2020

8

## Establishment of the Sustainability Strategy Committee

The Sustainability Strategy Committee, which is chaired by the Chief Executive Officer (CEO), has been incorporated into the corporate governance system (since December 2021) to address social issues regarding sustainability in an appropriate manner.

This committee has discussions for the realization of

sustainability considering stakeholders' expectations and requests identified through dialogues with them and other opportunities, as well as discussions of other social issues, in light of the Company's Vision and Purpose. The committee enables the management of the Company to reflect social issues, thus improving the effectiveness of management, with the goal of steadily addressing these issues. **P27**



### Changes in corporate governance

The Company has proactively enhanced its corporate governance, positioning it as a top management priority.

When it was a company with a Board of Auditors, the Company introduced an executive officer system to improve the efficiency of the operations of its business and appointed outside directors to enhance auditing and supervisory functions.

In 2015, the structure of a company with an Audit and Supervisory Committee was introduced as a new institutional design for companies. Judging that a company with an Audit and Supervisory Committee was an appropriate form for the corporate governance it aims to achieve, the Company transitioned to being a company with an Audit and Supervisory Committee in the fiscal year when it was introduced.

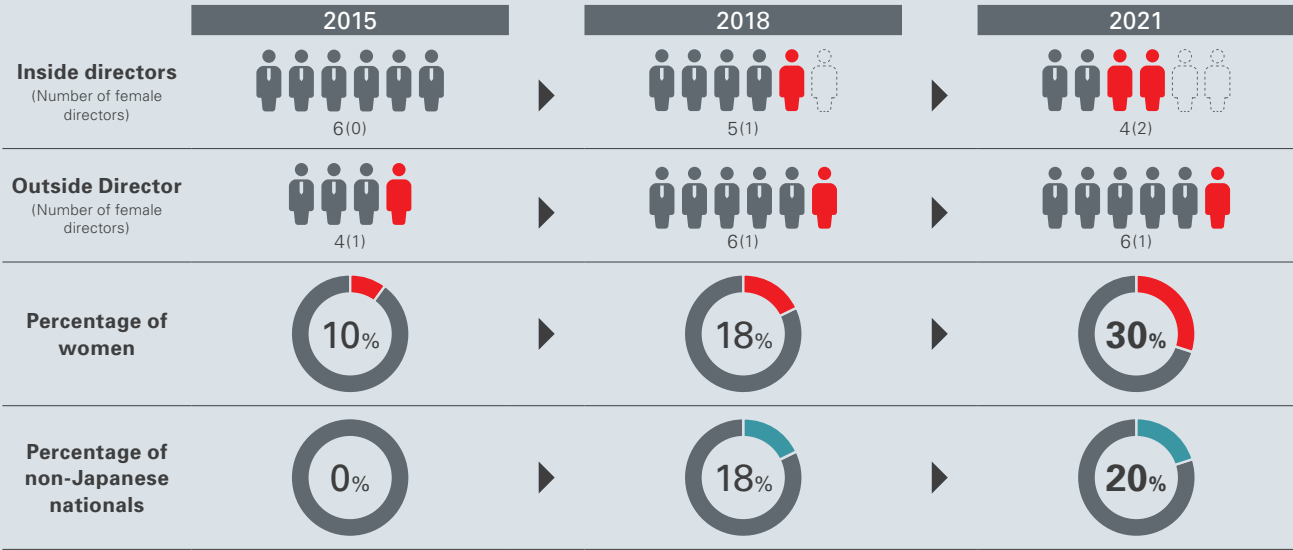
As a result of this transition, the Company continued

with its separation of the execution and supervision of management. The authority of the Board of Directors was delegated to the Management Committee chaired by the CEO, in an attempt to improve the management efficiency. At the same time, the Nomination Committee and Remuneration Committee were set up as advisory committees to the Board of Directors, thus enhancing the supervising functions of the Board of Directors.

In addition, the composition of the Board of Directors is reviewed every year, even following its transition to a company with an Audit and Supervisory Committee, and diverse human resources have been promoted to director positions. In addition to people with experience in other industries, women and non-Japanese nationals have been promoted to director positions. As a result, the Board of Directors consists of directors of both genders with diverse career backgrounds and nationalities.



### Changes in the composition of the Board of Directors



### Assessment of the effectiveness of the Board of Directors

At the Company's Board of Directors, each director conducts a self-assessment every year. Referencing the results of the self-assessment, the effectiveness of the overall Board of Directors is analyzed and assessed, and the results are shared. In FY2020, each director answered a questionnaire in an environment that ensured anonymity. The aggregated results of the questionnaire were analyzed based on advice

from a third party. Applying this method, the assessment was conducted with an effort to ensure objectiveness.

Effective structures and practices were confirmed regarding the diversity of the members of the Board of Directors, the management strategies of the overall Group, discussions on the improvement of corporate value, the proceedings of meetings, and opportunities to make remarks, among other aspects.

In addition, the Company provides directors with information and knowledge related to its business activities

which is necessary for the directors to appropriately fulfill their roles and duties. The Company will provide directors with information about management, organizational operations and other matters, and continually provide them with training related to the Group's business challenges, relevant laws, and corporate governance.

To improve the effectiveness of the Board of Directors, the Company will strive to further enhance measures related to the discussion of investment projects and the like (including the entry into a new business, the expansion of business, mergers and acquisitions), the distribution of meeting materials to the Board of Directors prior to meetings, and the discussion of risks faced by the Company.

### Nomination Committee and Remuneration Committee

The Company has set up the Nomination Committee as an advisory committee to the Board of Directors, to improve the transparency and objectiveness of the selection of director candidates and strengthen the Board of Directors' supervisory functions.

Decisions regarding the selection of director candidates are made through resolutions of the Board of Directors after deliberation by the Nomination Committee.

Its members are Hiroshi Ostuka, Goro Kamino, and Keisuke Tomimatsu, which means that outside directors constitute the majority of its members.

The Remuneration Committee deliberates on the establishment and revision of the officer remuneration and evaluation systems, the results of evaluations, and the appropriateness of the remuneration of each officer.

Policies on decisions related to the details of directors' remuneration, etc. are resolved by the Board of Directors after consideration by the Remuneration Committee.

Its members are Hiroshi Ostuka, Goro Kamino, and Keisuke Tomimatsu. As in the Nomination Committee, outside directors constitute the majority of its members.

### Remuneration for officers

The Company determines the remuneration of each officer in accordance with the Policy for Decisions on Directors' and Executive Officers' Remuneration stipulated in the Basic Policy for Musashi Corporate Governance, and the Policy for Decisions on the Details of Individual Remunerations, etc. of Directors resolved by the Board of Directors.

The remuneration consists of basic salary which is fixed compensation for the execution of duties that is paid every month, performance-linked bonuses that are linked to business performance for the fiscal year, and restricted stock compensation that is aimed at sharing profits with shareholders and paid as an incentive for improving the Company's medium- to long-term corporate value.

The remuneration of outside directors consists of the basic salary and restricted stock compensation, reflecting

their roles and independence. The remuneration of directors serving concurrently as Audit and Supervisory members includes only a basic salary, reflecting their roles.

Decisions regarding remuneration are deliberated by the Remuneration Committee, which consists mainly of outside directors, before resolution by the Board of Directors, to increase the transparency and objectiveness of decisions regarding remuneration.

### Policy for Decisions Regarding the Details of the Individual Remuneration, etc. of Directors

Under the Policy for Decisions Regarding the Details of the Individual Remuneration, etc. of Directors, performance-linked remuneration is closely linked to the degree of achievement of target values for each fiscal year and initiatives for improving medium- to long-term corporate value.

This is outlined as follows.

See the Company's securities report for details.

- The basic policy on the remuneration of the Company's directors (excluding those serving concurrently as Audit and Supervisory Committee members; the same applies hereinafter) is to link the remuneration system to shareholder profit so that it is able to fully function as an incentive to improve corporate value sustainably, and to appropriately set the remuneration of the individual directors in light of the duties of each director.
- The basic remuneration of the Company's directors is monthly fixed compensation, and the amount of remuneration for the individual directors is determined in accordance with the position and responsibilities of each director while comprehensively considering of the remuneration provided by other companies and other factors.
- Performance-linked remuneration is paid at a certain time every year as a cash bonus the amount of which is calculated based on the degree of achievement of the Company's annual performance targets and strategic indicators based on a medium- to long-term perspective.
- The ratio of each type of director's remuneration is considered by the Remuneration Committee based on the level of remuneration using the benchmark of other companies with the same scale of business as the Company or companies which belong to relevant industries or business categories while the composition of remuneration determined under this policy is regarded as the basic level, so that the remuneration system will function as an appropriate incentive.
- Regarding the remuneration of individual directors, the Remuneration Committee evaluates the appropriateness of the executive directors' execution of their duties, such as by comparing the Company's business performance with other companies, while considering the Company's business environment. Based on the results of the evaluation, decisions on the specific amounts of remuneration for individual directors are left to the representative director and president.



## Musashi is a manufacturer where it is actually easy to take on new challenges.



Message from  
Outside Director

Amid the increasing pace of change in society, more than a few companies are questioning the continuity of their existing businesses. Actual society demands ESG and much else besides from business. Meanwhile, the metaverse, non-fungible tokens (NFT) and other value creation in virtual spaces are rapidly gathering pace, blurring the border between the real and the virtual. To address the question of how we should define the significance of our existence, we are pursuing a number of initiatives on the basis of the new Musashi 100 Year Vision of “Go Far Beyond!”, diversity in the company and our Spirit of Foundation of Shitsujitsu Goken (Simple and Sturdy) and Shisei Ikkan (Consistent Sincerity).

Until around 10 years ago, we focused on developing, producing and offering components for fossil fuel-powered automobiles featuring new functions and performance. Today, in addition to these activities, we offer components for electric vehicles. We are collaborating with, and investing in, businesses and ventures in entirely new areas to offer substantial results and services. Why can an 80-year-old company try and create new businesses? It is important to take on new challenges, but it is actually even more important to carry them through.

I believe that this would be impossible without employees' unstinting efforts based on the spirit of Shitsujitsu Goken (Simple and Sturdy) and Shisei Ikkan (Consistent Sincerity), as well as the wide-ranging support they receive from the Board of Directors. Outside directors play an active role in the support provided by the Board of Directors.

Our outside directors are very much involved in businesses and actively visit overseas plants and bases. For overseas investment projects, we go and take direct part in negotiations. We also offer proposals on new businesses. At times, we give advice directly to employees. In other words, we act as third parties that are close to the players. The Board of Directors is characterized by a great diversity of members. (At the moment, our Board of Directors consists of ten directors, four of whom are inside directors while the remaining six are outside directors. This means that outside directors form a majority. Two of them are from overseas and three are females. The average ratio of outside directors on the boards of all companies listed on the First Section of the Tokyo Stock Exchange is around 36% and the average ratio of female directors is less than 8%.)

Sincerely serving stakeholders and answering the diversifying demands from society, I would like to help the company build the foundations for surpassing the 100 Year Vision of “Go Far Beyond!” and become a company that is “Above the Beyond!” in 2038.

Outside Director

Keisuke Tomimatsu

## Risk management

### Risk Management System

We appoint a Risk Management Officer from among our directors and executive officers. This post is in charge of executing risk management. We are thus constructing a system for systematic risk management activities.

Risk management at ordinary times includes measures by each section for risk reduction/moderation and preparation of procedures in case of risk.

We regularly perform a self-check on the state of management in an ongoing effort to enhance management.

### Crisis Response and Business Continuity Management

We have prepared rules on actions to be taken by organizations and employees at the time of a crisis. We apply them to group companies as well.

In Japan, the Company has created a Business Continuity Plan (BCP) intended for a large-scale earthquake as one of the biggest risks in business continuity. Education and training based on BCP is provided on a regular basis.

We reflect drill results and update/revise BCP periodically to improve the capability against risk in business continuity.

## Business continuity management system



### Basic Policy of BCP

- 1 Prioritize the safety of human life
- 2 Comply with laws and agreements
- 3 Respond to customer needs and assure stakeholders' profits

Together with the above basic policy, cooperate with local communities and support the recovery and restoration of our partners necessary for product supply.

## Compliance

### Basic Concept of the Compliance System

Each employee should think about society and take actions independently in performing their day-to-day duties. We believe that this is fundamental to our group fulfilling corporate social responsibility, including corporate ethics and compliance, while operating businesses worldwide. To ensure our respect for cultures and customs in various countries and regions and further develop our global business, we have stipulated common behavioral rules to be followed by each employee in our group in interactions with customers and society under the name of the Musashi Compliance Guidelines.

It is translated from the Japanese and English, defined as the basic languages, into languages in different regions and countries. We disseminate it to all officers and employees in our group companies on different occasions of education and training.

### Management structure for compliance

We appoint a Compliance Officer from among our directors and executive officers. This post is in charge of implementing compliance activities. The Internal Control Committee conducts systematic actions including deliberations on corporate ethics and compliance.

We conduct an annual self-check on the status of compliance with the use of a checklist. We exchange opinions with the relevant departments to identify matters with high risks and to prevent these risks from materializing.

We have an organization in charge of securing information on revisions to laws and ordinances related to our businesses. In the event of any such revision, it swiftly distributes the information in the whole company.

### Musashi Compliance Guidelines

- I We will conduct activities in accordance with social rules and conscience.
- II We will build sound relationships with society.
- III We will implement fair and healthy transactions.
- IV We will respect human rights and human diversity.
- V We will endeavor to ensure health and safety and to preserve the environment.
- VI We will properly handle information owned by the company.



10-Year Financial and Non-Financial Data Summary

(Millions of yen)		(FY)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Financial data	Net sales		125,205	125,993	148,820	158,209	164,397	180,522	237,910	255,934	236,355	204,714
	Revenue	Total	125,205	125,993	148,820	158,209	164,397	180,522	237,910	255,934	236,355	204,714
	By region	Japan	35,465	35,353	35,421	31,156	27,717	27,221	28,778	33,699	35,316	32,543
		America	40,881	40,472	45,322	49,662	56,261	49,251	52,111	55,922	55,924	45,296
		Asia	42,166	45,016	62,771	71,333	73,772	69,779	63,703	64,955	61,678	44,262
		China	—	—	—	—	—	—	20,652	23,597	22,003	29,987
		Europe	6,690	5,150	5,305	6,055	6,645	34,269	72,665	77,759	61,433	52,624
	By customer	HONDA	—	—	—	—	—	—	125,858	128,525	122,905	105,355
		Global Customer	—	—	—	—	—	—	112,052	127,409	113,450	99,359
	Operating profit		10,377	938	8,567	11,588	13,398	11,166	15,767	14,107	7,285	7,507
	Profit attributable to owners of parent		4,432	2,529	6,827	6,379	6,809	6,315	10,351	9,885	(6,902)	7,378
	Return on equity (ROE) %		9.52	5.14	12.03	9.57	9.81	9.10	13.40	11.33	—	9.42
	Capital investment		18,182	22,907	24,314	16,324	9,295	13,303	12,792	16,276	17,368	12,469
	Depreciation		9,411	11,688	12,779	12,021	13,291	14,779	18,564	18,178	17,742	15,941
	R&D cost		1,539	1,481	1,563	1,880	2,373	2,910	3,489	3,587	4,369	4,353
	Cash dividends paid		1,060	1,247	1,372	1,497	1,559	1,622	2,060	2,695	2,053	2,284
	Net income per share (yen) <sup>1</sup>		142.08	81.09	218.86	204.51	218.29	202.47	331.69	155.55	(105.95)	113.14
	Dividend per share (yen)		34.0	40.0	44.0	48.0	50.0	52.0	66.0	42.0	31.5	35.0
	Dividend payout ratio		23.9	68.1	20.1	23.5	22.9	25.7	20.0	27.0	—	30.9
	Total payout ratio		23.9	68.1	20.1	23.5	22.9	25.7	20.0	27.0	—	30.9
	Share price at end of fiscal year (yen)		1,972	2,095	2,125	2,542	2,234	2,846	3,595	1,500	834	1,889
	Dividend yield		1.7	1.9	2.1	1.9	2.2	1.8	1.8	2.8	3.8	1.9
	Price earnings ratio (PER)		13.88	25.84	9.71	12.43	10.23	14.06	10.84	9.64	—	16.70
	Price book-value ratio (PBR)		133	125	108	110	104	124	135	107	76	145
	Cash flows from operating activities (A)		10,312	14,127	18,965	17,570	22,968	19,445	26,813	26,714	26,359	18,259
	Cash flows from investing activities (B)		(16,312)	(27,752)	(26,288)	(20,295)	(10,211)	(41,236)	(14,336)	(19,847)	(18,673)	(12,198)
	Free cash flows (A+B)		(6,000)	(13,625)	(7,323)	(2,725)	12,757	(21,791)	12,477	6,867	7,686	6,061
	Equity attributable to owners of parent (shareholder equity)		46,329	52,162	61,329	72,029	66,821	71,582	83,055	91,509	71,435	85,141
	Total assets		110,448	133,441	155,162	169,539	155,152	248,482	247,778	244,450	207,333	226,066
	Ratio of equity attributable to owners of the parent		41.95	39.09	39.53	42.49	43.07	28.81	33.52	37.43	34.45	37.66
Non-financial data	CO <sub>2</sub> emissions (t)		25,689	27,184	25,955	21,645	19,947	27,011	27,353	406,824 <sup>3</sup>	383,198 <sup>3</sup>	348,563 <sup>3</sup>
	CO <sub>2</sub> emissions per unit (CO <sub>2</sub> tons/million yen) <sup>2</sup>		—	—	—	—	—	—	—	1.59 <sup>3</sup>	1.62 <sup>3</sup>	1.70 <sup>3</sup>
	Renewable energy ratio (electric power) (%)		—	—	—	—	—	—	—	0.7 <sup>3</sup>	2.0 <sup>3</sup>	2.4 <sup>3</sup>
	Water consumption (m <sup>3</sup> )		82,373	90,475	89,960	94,340	91,410	98,313	102,764	1,518,251 <sup>4</sup>	1,885,72 <sup>4</sup>	1,718,477 <sup>4</sup>
	Water consumption per unit (m <sup>3</sup> /million yen)		—	—	—	—	—	—	—	6.53 <sup>4</sup>	8.79 <sup>4</sup>	9.25 <sup>4</sup>
	Waste emissions (non-consolidated) (tons)		1,822	1,854	1,821	1,506	1,329	1,480	1,539	1,772	2,176	1,753
	Number of employees		10,516	11,002	12,634	13,375	12,427	15,351	16,385	16,839	16,114	15,120
	Number of overseas employees		8,294	8,938	10,534	11,397	10,556	13,357	14,341	14,692	13,946	12,912
	Number of employees (non-consolidated)		1,108	1,138	1,179	1,178	1,195	1,220	1,234	1,219	1,221	1,237
	Percentage of female employees (non-consolidated)		5.1%	5.1%	4.6%	4.7%	4.6%	4.9%	5.4%	6.1%	6.5%	6.5%
	Number of women in management positions (non-consolidated)		1	2	2	2	2	2	2	3	2	2
	Percentage of women in management positions (non-consolidated)		1.0%	1.9%	1.7%	1.6%	1.5%	1.4%	1.4%	2.2%	1.5%	1.4%
	Percentage of heads of overseas bases who are local employees		7%	6%	6%	6%	11%	16%	16%	44%	53%	47%

1 The Company implemented a common share split at a ratio of two shares for one share on October 1, 2018. The figure represents the value stated in the securities report for the fiscal year concerned.

2 The “per unit” figure represents the value per unit of sales.

3 The figure represents global data with a coverage rate of 100%.

4 The figure represents global data with a coverage rate of 91%.



Consolidated Balance Sheet

(Millions of yen)		
Assets	Previous fiscal year. March 31, 2020	Fiscal year under review. March 31, 2021
Current assets		
Cash and deposits	20,665	24,143
Notes and accounts receivable - trade	25,370	33,776
Merchandise and finished goods	7,817	8,309
Work in process	7,054	8,077
Raw materials and supplies	18,843	21,417
Other	9,401	6,430
Allowance for doubtful accounts	(78)	(102)
Total current assets	89,075	102,053
Non-current assets		
Property, plant and equipment		
Buildings and structures	44,233	47,213
Accumulated depreciation	(21,758)	(24,197)
Accumulated impairment loss	(308)	(293)
Buildings and structures, net	22,167	22,722
Machinery, equipment and vehicles	204,621	223,359
Accumulated depreciation	(151,437)	(168,586)
Accumulated impairment loss	(524)	(527)
Machinery, equipment and vehicles, net	52,659	54,245
Tools, furniture and fixtures	12,183	13,057
Accumulated depreciation	(8,217)	(9,315)
Accumulated impairment loss	(16)	(15)
Tools, furniture and fixtures, net	3,949	3,726
Land	6,994	7,488
Construction in progress	12,449	14,065
Total property, plant and equipment	98,219	102,249
Intangible assets		
Goodwill	972	694
Customer relationship assets	2,948	2,807
Software	1,560	1,318
Software in progress	33	36
Other	1,908	1,559
Total intangible assets	7,423	6,416
Investments and other assets		
Investment securities	6,203	9,749
Investments in capital	667	777
Long-term loans receivable	993	65
Deferred tax assets	2,189	2,243
Other	2,604	2,556
Allowance for doubtful accounts	(43)	(43)
Total investments and other assets	12,614	15,348
Total non-current assets	118,258	124,013
Total assets	207,333	226,066

(Millions of yen)		
Liabilities	Previous fiscal year. March 31, 2020	Fiscal year under review. March 31, 2021
Current liabilities		
Notes and accounts payable - trade	15,189	17,843
Short-term borrowings	31,803	38,932
Current portion of long-term borrowings	19,345	11,410
Accounts payable - other	3,002	3,967
Accrued expenses	8,424	7,614
Income taxes payable	1,247	1,954
Provision for bonuses	2,230	2,054
Provision for bonuses for directors (and other officers)	42	23
Provision for product compensations	1,144	235
Other	5,369	5,826
Total current liabilities	87,800	89,862
Non-current liabilities		
Long-term borrowings	27,958	27,151
Deferred tax liabilities	2,285	2,653
Retirement benefit liability	5,169	6,695
Other	1,607	3,788
Total non-current liabilities	37,021	40,289
Total liabilities	124,821	130,152

(Millions of yen)		
Net assets	Previous fiscal year. March 31, 2020	Fiscal year under review. March 31, 2021
Shareholders' equity		
Share capital	5,361	5,394
Capital surplus	4,340	3,093
Retained earnings	79,624	85,992
Treasury shares	(8)	(8)
Total shareholders' equity	89,317	94,472
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	1,437	2,605
Foreign currency translation adjustments	(19,314)	(11,581)
Remeasurements of defined benefit plans	(6)	(354)
Total accumulated other comprehensive income	(17,882)	(9,330)
Non-controlling interests	11,076	10,773
Total net assets	82,511	95,914
Total liabilities and net assets	207,333	226,066

Consolidated Statements of Income and Comprehensive Income

(Millions of yen)		
	Previous fiscal year. From April 1, 2019 to March 31 2020	Fiscal year under review. From April 1, 2020 to March 31 2021
Net sales	236,355	204,714
Cost of sales	203,665	175,035
Gross profit	32,690	29,679
Selling, general and administrative expenses	25,405	22,171
Operating profit	7,285	7,507
Non-operating income		
Interest income	596	229
Dividend income	425	150
Foreign exchange gains	–	499
Subsidy income	–	427
Other	598	362
Total non-operating income	1,621	1,669
Non-operating expenses		
Interest expenses	743	543
Foreign exchange losses	629	–
Loss on valuation of investment securities	–	79
Other	419	276
Total non-operating expenses	1,792	899
Ordinary profit	7,113	8,277
Extraordinary income		
Gain on sales of non-current assets	77	130
Gain on bargain purchase	–	877
Gain on reversal of liabilities	–	557
Insurance claim income	–	45
Total extraordinary income	77	1,610
Extraordinary losses		
Loss on sales of non-current assets	17	7
Loss on retirement of non-current assets	130	136
Impairment losses	13,762	–
Loss on litigation	3,142	–
Total extraordinary losses	17,052	144
Profit (loss) before income taxes	(9,861)	9,744
Income taxes - current	3,883	3,098
Income taxes - deferred	(3,065)	(665)
Total income taxes	818	2,433
Profit (loss)	(10,679)	7,310
Profit (loss) attributable to non-controlling interests	(3,776)	(67)
Profit (loss) attributable to owners of parent	(6,902)	7,378



## Consolidated Statements of Cash Flow

(Millions of yen)

	Previous fiscal year. From April 1, 2019 to March 31 2020	Fiscal year under review. From April 1, 2020 to March 31 2021
Cash flow from operating activities		
Profit (loss) before income taxes	(9,861)	9,744
Depreciation	17,742	15,941
Impairment losses	13,762	—
Amortization of goodwill	880	278
Gain on reversal of liabilities	—	(557)
Gain on bargain purchase	—	(877)
Increase (decrease) in allowance for doubtful accounts	(2)	18
Increase (decrease) in provision for bonuses	80	(256)
Increase (decrease) in provision for bonuses for directors (and other officers)	(9)	(19)
Increase (decrease) in provision for product compensations	270	(942)
Increase (decrease) in retirement benefit liability	254	(827)
Interest and dividends income	(1,022)	(380)
Interest expenses	743	543
Foreign exchange losses (gains)	141	(939)
Loss (gain) on sale and retirement of property, plant and equipment	70	13
Insurance claim income	—	(45)
Loss (gain) on valuation of investment securities	—	79
Decrease (increase) in trade receivables	6,427	(6,035)
Decrease (increase) in inventories	360	(871)
Increase (decrease) in trade payables	(1,851)	857
Other	1,912	5,308
Subtotal	29,900	21,034
Interest and dividends received	1,031	385
Interest paid	(798)	(535)
Income taxes paid	(3,773)	(2,669)
Proceeds from insurance income	—	45
Cash flows from operating activities	26,359	18,259
Cash flows from investing activities		
Purchase of property, plant and equipment	(16,490)	(12,524)
Proceeds from sales of property, plant and equipment	175	702
Purchase of intangible assets	(525)	(321)
Purchase of investment securities	(2,165)	(639)
Proceeds from sales of investment securities	4	—
Loan advances	(167)	(724)
Collection of loans receivable	147	125
Purchase of shares of subsidiaries	—	(5)
Proceeds from purchase of shares of subsidiaries resulting in change in scope of consolidation	—	1,176
Other	347	12
Cash flows from investing activities	(18,673)	(12,198)
Cash flows from financing activities		
Net increase (decrease) in short-term borrowings	7,909	6,397
Proceeds from long-term borrowings	1,115	10,039
Repayments of long-term borrowings	(16,046)	(19,523)
Purchase of treasury shares	(0)	(0)
Dividends paid	(2,735)	(1,010)
Dividends paid to non-controlling interests	(610)	(335)
Proceeds from purchase of shares of subsidiaries without change in scope of consolidation	—	(2,122)
Other	(509)	(329)
Cash flows from financing activities	(10,878)	(6,886)
Effect of exchange rate changes on cash and cash equivalents	(2,287)	2,469
Net increase (decrease) in cash and cash equivalents	(5,479)	1,644
Cash and cash equivalents at beginning of period	27,069	23,246
Increase (decrease) in cash and cash equivalents resulting from change in closing dates of consolidated subsidiaries	1,656	—
Cash and cash equivalents at end of period	23,246	24,891

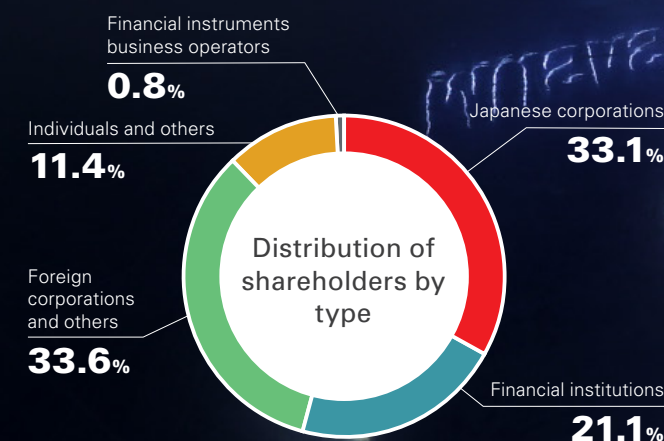
Company Outline As of September 30, 2021

Company Name	Musashi Seimitsu Industry Co., Ltd.	Stock exchange listing	Tokyo and Nagoya
Incorporated	January 1944 (founded in April 1938)	Stock code	7220
Business Activities	Manufacturing of transportation equipment	Fiscal year	From April 1 to March 31 each year
Share capital	5,427 million yen	Ordinary General Meeting of Shareholders	June each year
Employees (consolidated)	15,337	Record Date	March 31
Total number of authorized shares	140,000 thousand shares	Record dates	Year-end dividends: March 31 Interim dividends: September 30
Total number of issued shares	65,287 thousand shares	Trading unit	100 shares
Number of shareholders	4,728		

Status of shares As of September 30, 2021

Major shareholders (Top 10)

Shareholder name	Number of shares (in thousands)	Ownership ratio (%)
Honda Motor Co., Ltd.	16,364	25.0
The Master Trust Bank of Japan, Ltd. (trust account)	7,113	10.8
Joint Stock Company Otsuka Holdings	2,603	3.9
Custody Bank of Japan, Ltd. (trust account)	2,286	3.5
JPMorgan Chase & Co.	2,198	3.3
Custody Bank of Japan, Ltd. (trust account 9)	2,187	3.3
Hiroshi Otsuka	1,489	2.2
Government of Norway	1,178	1.8
Juniper	1,100	1.6
State Street London Care of State Street Bank and Trust, Boston SSBTC A/C UK London Branch Clients - United Kingdom	1,095	1.6







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MOBILITY

ENERGY

INDUSTRY

WELL BEING

