

MUSASHI

Musashi Seimitsu Industry Integrated Report 2022

CONTENTS

02 Who we are
- 02 At a Glance
- 03 Business Overview
- 05 Our Growth History
- 06 Value Creation Process
- 08 The Capital Underpinning Musashi's Business Activities
- 09 Musashi Philosophy

11 CEO Message

14 Growth Strategy
- 14 Overview of Our Vision and Strategy
- 16 CFO Message
- 17 Explanation of Key Measures
- 21 Special Feature: Entering a New Growth Phase in the EV Era
- 23 Intangible Assets Supporting Our Strategy

25 Sustainability Strategy
- 26 Description of Material Issues
- 27 Prosperous Coexistence with the Global Society
- 31 GX (Green Transformation)

33 Human Resource Strategy

36 Corporate Governance

49 Data Outline



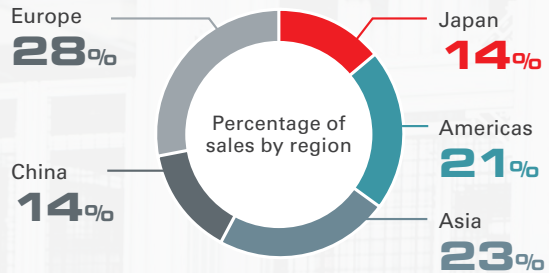


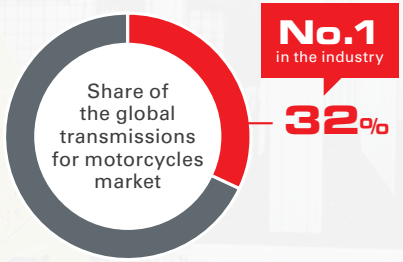
WHO WE ARE

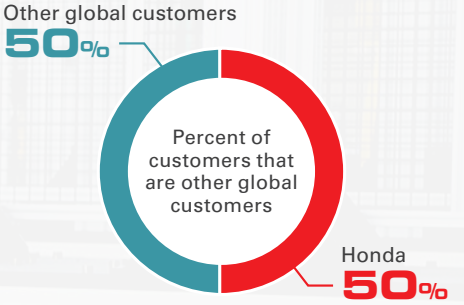
Established in 1938, Musashi Seimitsu Industry is a world-leading manufacturer of parts for automobiles and motorcycles with strengths in the development and manufacturing of Powertrain and chassis parts. We are also an important supplier to Honda.

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
86%

Number of employees with professional qualifications
1,754
*Total number of employees with professional qualifications in Japan

Ratio of engineers
30%
*Japan region only

Ten Years of Change by the Numbers

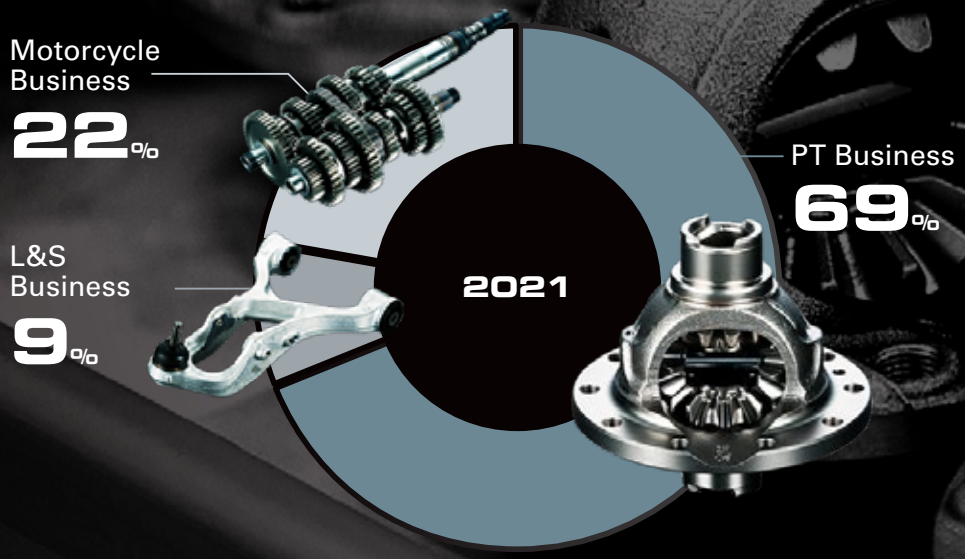
Net sales	2012	125.9 billion yen	▶	2021	241.8 billion yen
Number of operation bases	2012	21 sites	▶	2021	35 sites
Employees	2012	11,002	▶	2021	15,807

*FY2021 results

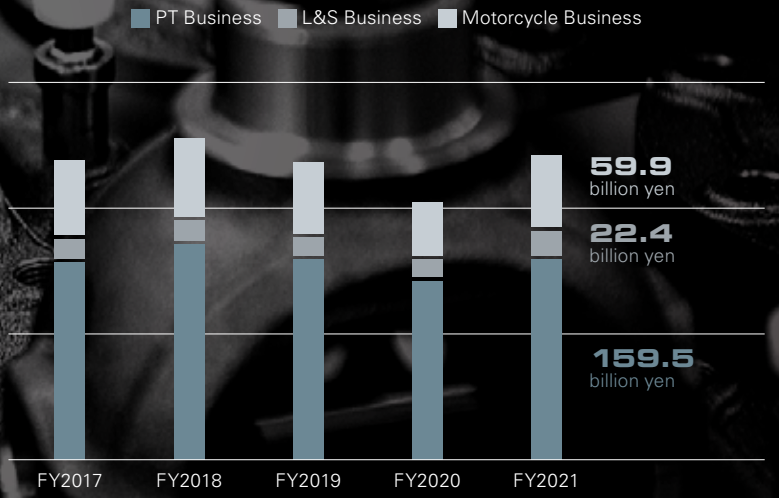
Business Overview

At Musashi, we believe the era of electrification is an opportunity to leap forward. We pursue optimal monozukuri in the PT*1, L&S*2, and Motorcycle business domains. Thus, we aim to contribute to enriched Harmony between our lives and Earth through our business activities.

Percentage of sales by product



Changes in Net Sales in 5 Years



*1 PT: Power Train
*2 L&S: Linkage & Suspension

Parts for Automobiles

PT Business 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.



Differential Assembly



Reduction gear for EVs/ Transmission gear



Planetary assembly/ gear

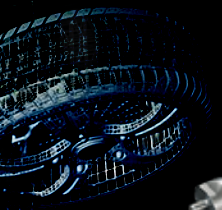


Camshaft





Suspension arm assembly





Suspension ball joint



Steering ball joint (rack end)

L&S Business 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.

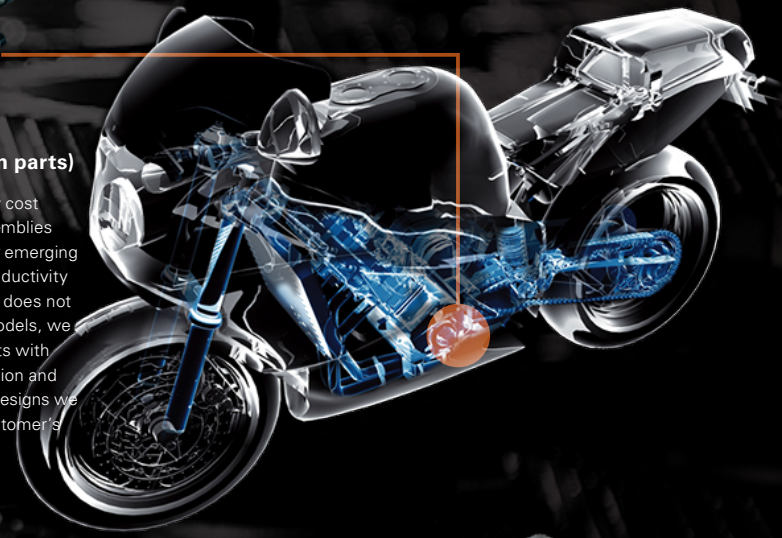
Parts for Motorcycles

Motorcycle Business 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.

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

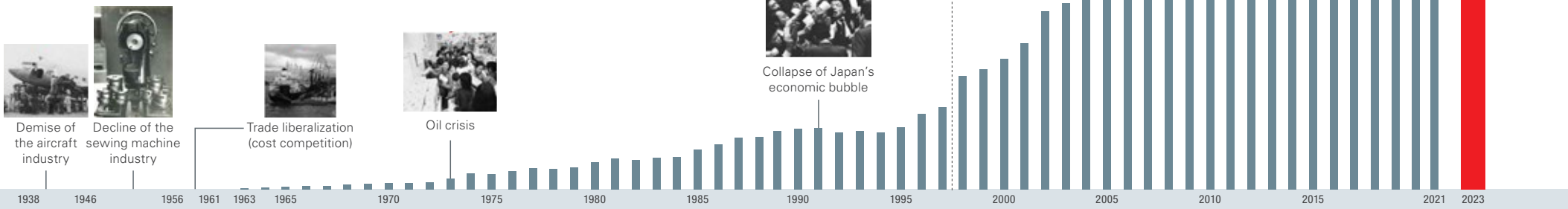


	FY 2007	FY 2021	FY 2023	FY 2038
Net sales	161.3 billion yen	241.8 billion yen	Net sales (target) 300.0 billion yen	
Number of operation bases	21 sites in 10 countries	35 sites in 14 countries	Number of operation bases 36 sites in 14 countries	
Employees	9,000	15,807		

! Building a new plant in China

GO FAR BEYOND

Net sales (target) 300.0 billion yen



Foundation period

1938 Foundation (Otsuka Seisakusho)
1961 Entry into the sewing machine industry



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

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

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)

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.

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

Value Creation Process

Core businesses

Musashi 100th Year Vision

Go Far Beyond!

Break barriers and go on adventures!

Our Purpose

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

INPUT

- Financial capital
- Human capital
- Intellectual capital
- Manufacturing capital
- Social and relation capital
- Natural capital

OUR BUSINESS

Core businesses

Becoming a key device supplier in the EV era

Development | Prototyping | Forging | Machining | Heat treatment | Finishing | Assembly



Support technology **Dies/Power tools/Equipment**

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.

Strengths

Global production/ sales system
35 sites in 14 countries

Cooperation and synergy

New businesses

OUTPUT

OUTPUT

- PT components (differentials, gears, shafts) — Compact & Lightweight
- PT components (engine parts) — High strength
- L&S components — High precision
- Motorcycle transmission assemblies — Low cost
- E-motorcycle drive units — Low environmental impact
- Lithium-Ion Capacitor
- and more...

Fusion of technology

Fusion of technology

PROCESS

- Green transformation — Low environmental impact
- Digital transformation — Improved business efficiency
- Promoting reskilling

OUTCOME

Achieving an enriched harmony between our lives and Earth

- Achieving mobility that is friendly to people and the environment
- Widespread uptake and expansion of mobility services
- Improved environmental performance of internal combustion engines
- Improved energy efficiency
- Promoting the introduction of clean energy
- Promoting carbon neutrality
- Developing a pleasant work environment
- Growing as an essential company that supports society with technologies

KPI

- Net sales
- Operating profit
- EBITDA
- Percent of products for EVs
- Net sales of new businesses
- Achievement of ESG indicators

The SDGs and material issues > P.26

> P.08

Value Creation Process

New businesses

Musashi 100th Year Vision

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INPUT

- Financial capital
- Human capital
- Intellectual capital
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- Social and relation capital
- Natural capital

OUR BUSINESS

Core businesses

OUTPUT

Fusion of technology

Cooperation and synergy

New businesses

Using the power of technology to help solve social issues

Creation of innovation

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

Strengths

OPEN INNOVATION

MOBILITY | INDUSTRY
ENERGY | WELL-BEING

CVC ACTIVITIES

MONARCH, SAKUU, icuco, Chartered General Partner, R3E, SPORNADO, 63rd, How, Waphyto, ABEJA, Monozukuri Ventures, Boom Motors

PARTNERSHIP

CLUE, TOYOHASHI UNIVERSITY OF TECHNOLOGY

OUTPUT

Business creation through open innovation

MOBILITY
Creating beautiful skies with the widespread adoption of e-mobility

ENERGY
Delivering sustainable energy devices to the world

INDUSTRY
Giving people more person-centric jobs

WELL-BEING
Making the era of 100-year lifespans healthier with the power of plants

OUTCOME

Achieving an enriched harmony between our lives and Earth

- Achieving mobility that is friendly to people and the environment
- Widespread uptake and expansion of mobility services
- Improved energy efficiency
- Promoting the introduction of clean energy
- Promoting carbon neutrality
- Developing a pleasant work environment
- Contributing to sustainable local industry
- Achieving high-quality healthcare
- Growing as an essential company that supports society with technologies

KPI

- Net sales
- Operating profit
- EBITDA
- Percent of products for EVs
- Net sales of new businesses
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The SDGs and material issues > P.26

> P.08

Financial capital

	2020	2021
Consolidated net assets	95.9 billion yen	112.2 billion yen
Equity ratio	37.7%	38.7%

Human capital

	2020	2021
Consolidated No. of associates	15,120	15,807
Non-Japanese top management	47%	47%

Intellectual capital

	2020	2021
Number of patents	224 (international/domestic/overseas total)	246 (international/domestic/overseas total)
R&D cost	4.30 billion yen	5.40 billion yen

The Capital Underpinning Musashi's Business Activities

2020 »» 2021

We engage in business activities using various sources of capital with the aim of realizing the Musashi Philosophy and Musashi 100th Year Vision.
Promoting manufacturing that leverages Musashi's strengths and improving product competitiveness provides beneficial value to society and leads to the further capital growth.

Manufacturing capital

	2020	2021
Number of manufacturing facilities	35 sites	35 sites
Capital investment	12.4 billion yen	19.2 billion yen

Social and relation capital

	2020	2021
Number of steel suppliers	38	35 Promoting the rebuilding of supply chains
New business partnerships	17 Companies and organizations	20 companies and organizations

Natural capital

	2018	2021
CO_2 reductions Compared with FY2018 levels	Base year 403,000 tons	▲14.3% 345,000 tons

Also affected by semiconductor shortages and reduced production due to the COVID-19 pandemic

OUR PURPOSE

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



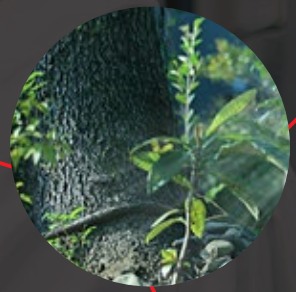
PASSION
Technology

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.

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

OUR ORIGIN

Consistent Sincerity



Simple and Sturdy



CEO MESSAGE



President & CEO
Hiroshi Otsuka

At the cornerstone of everything is the Musashi Philosophy

The history of Musashi is a history of challenges. It has been consolidated into our corporate philosophy, the Musashi Philosophy, which forms the basis for all of our business activities. The world is facing issues such as environmental destruction, poverty, food insecurity, economic crises, and the aging of the population. As stated in Our Purpose, our business activities are not solely the pursuit of size or expanded profits. We aim to be a corporate group which proactively applies leading-edge technologies in the world and uses acquired and enhanced wisdom to innovate and surprise the world, based on its passion for monozukuri, thereby contributing to the realization of a sustainable and enriched global society with harmony between the Earth, the natural environment, society and people, so that people will live enriched lives.

Treating changes to the business environment as opportunities for growth

Now, the automobile industry is in the midst of a great, once-in-a-century change. We see these changes to the business environment as opportunities for growth. We are currently working on new challenges in both existing (core) businesses and new businesses under the banner of "Go Far Beyond! Break barriers and go on adventures!" as the Musashi 100th Year Vision in the lead-up to 2038 when we will celebrate our 100th anniversary.

In the automotive industry, electrification (the shift to electric vehicles) is having a

Realizing a sustainable and enriched global society Changing the world with technology

significant impact on existing industrial structures. This trend is picking up speed, and each automotive manufacturer has set ambitious electrification goals and is racing to launch EVs to the market. New entrant EV manufacturers are also gaining momentum and have expanded new business opportunities in various markets including China and Asia.

To seize upon this opportunity, for some time Musashi has been developing products for EVs and working to cultivate the production technologies needed in the era of EVs. As a result of proactive sales activities around the world that are unconstrained by conventional approaches, we have started to field many business inquiries, including from customers with whom we have no existing business relationships.

Breaking through with gear technologies

One of our winning strategies in the EV market is to break through with the gear technologies we have cultivated to date. Gears for electric vehicles need to meet stringent requirements for compactness, light weight, quietness, high strength and so on. Manufacturing gears that meet these requirements involves techniques that are extremely difficult unless a company is a dedicated manufacturer specializing in mobility. We 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 the shift to EVs as well. Additionally, the high barriers to entry due to the technological capabilities required to produce gears and the extremely large expenses involved in building production infrastructure spell another huge advantage for Musashi.

Our second winning strategy is focused on our global network of manufacturing bases with integrated manufacturing systems. In addition to having production infrastructure in place around the world, we can maintain our existing infrastructure for gasoline-powered car gears and use it as-is for EVs. Our strength is the ability to minimize so-called "legacy costs" while shifting our business model as needed. In addition, as there are high hurdles in the transportation of the lithium-ion batteries equipped in EVs, instead of adopting the model of producing large quantities in regions where personnel expenses are cheap and then exporting them to other countries, it is believed that a local production for local consumption-type model will develop. Considering the trends of these times, our globally integrated production system matches this model of local production for local consumption. The ability to offer proper quality assurance with production sites located around the world is another of our strengths.

Our third winning strategy is our customer base that extends around the world. We maintain a well-balanced customer portfolio in various regions around the world including Japan, Americas, Europe, China and Asia. We have built strong relationships with many customers including complete vehicle manufacturers and mega suppliers, and will achieve new growth based on these relationships of trust.

Turning green value into product competitiveness

As countries around the world successively declare their goals achieving carbon neutrality by 2050, reducing emissions of CO_2 and other greenhouse gases has become an imperative issue. For companies to survive and further enhance their competitiveness in these times, it is important to consider CO_2 emissions as one of the criteria for judging value when considering a business. In the Musashi's declaration of Carbon Neutrality, we have stated our goal of achieving carbon neutrality in our business activities by 2038 and achieving net zero CO_2 emissions across the entire value chain by 2050. For us, green transformation (GX) that achieves carbon neutrality is the top priority for all of the business areas in which we operate. Products that facilitate CO_2 emission reductions will also generate further added value for customers going forward. In addition to low cost and high quality, we are pursuing concrete initiatives that will translate green value into product competitiveness.

One example of how these initiatives have paved the way to commercialization is EV drive units for motorcycles. Many will envisage four-wheeled vehicles when they think about EVs, but in fact the shift to EVs is expected to accelerate for two-wheeled vehicles as well. Particularly in emerging countries where motorcycles serve as a mainstay of people's lives, environmental issues due to motorcycle exhaust and global warming due to CO_2 emissions have become a serious issue. Having declared the achievement of an "enriched harmony between our lives and Earth" as Our Purpose, to solve these social issues with the power of technology, we utilized our gear assembly technologies to develop an EV drive unit for motorcycles. Musashi is one of the world's leading manufacturers of transmissions for gasoline-driven motorcycles, boasting a global market share of around 30%. We are at the stage of seeing the signs of a shift to electric motorcycles, and as a top player in the field, we hope to lead these market changes through the supply of drive units for EVs. We have currently positioned ASEAN nations, India and Africa as strategic markets for electric motorcycles, and are strengthening activities to expand the sales of EV drive units in these regions.

Expectations for green technologies in Africa

Green technology is currently attracting a great deal of attention in Africa. Green technologies are technologies that take into account the resources and environments needed to realize a sustainable society, and are attracting attention as a realistic means to achieving carbon neutrality. As there are many regions in Africa in particular where large-scale energy infrastructure has not been developed, there are hopes that renewable energy and micro grids will be introduced in a single leap. Our aim is not to simply sell EV drive units, but to develop charging stations and energy infrastructure for electric motorcycles, and to be involved with every aspect of the sustainable mobility business, including software and services.

As a first step, Musashi received the first



With the senior management of portfolio company Booma



With governments and corporate partners in various African countries

orders in East African market for EV drive units from a startup company known as ARC Ride based in Nairobi, Kenya. We later invested in ARC Ride and are working on a joint venture to facilitate the widespread adoption of a new e-mobility culture in East Africa. In addition to the East Africa region, Musashi is working to roll out an e-mobility business in the West Africa region including Nigeria and Ghana, in collaboration with its joint venture partner in Israel in the AI business.

Our efforts to facilitate the spread of e-mobility in Africa had attracted interest, and in August 2022 we had the opportunity to exhibit a booth and conduct PR activities for our EV drive units at the TICAD 8 (The 8th Tokyo International Conference on African Development) business forum held in Tunisia. The booth attracted an excellent response, with President Saied of Tunisia, President Macky Sall of Senegal and Minister Maina of Kenya and other African heads of state and economy ministers stopping by. This was a keen reminder that green technologies are required more than in developed countries, and this convinced us of the utility of our technologies and the high expectations for their development. To meet these expectations, we will further cultivate our technologies and products and roll out businesses that can contribute to the achievement of carbon neutrality in Africa.

Enhancing our position to respond to change
Our core values lie in our production sites

With the automotive market undergoing significant fluctuations in production due to the global COVID-19 pandemic and semiconductor shortages, one of the challenges we face is building a structure that is resilient to environmental changes. Given this challenge, to further enhance our manufacturing capabilities and earnings potential, starting FY2022 we established new Chief Core Business Officer (CBO) and Chief Monozukuri Officer (CMO) positions, and developed an organizational structure to anticipate the shift to EVs.

The CBO will make strategic management decisions that span the frameworks of each business division and function, formulate appropriate strategies, and execute them. In addition, by fully integrating development, design and the transition to mass production, the CBO will further speed up activities to receive orders for EV components and units as strategic products.

The CMO will drive improved coordination between our global regions (Japan, Europe, Americas, Asia and China). They will make full use of a globally unified IT platform, promote digital transformation (DX) at manufacturing sites and unify manufacturing mechanisms such as quality control and improvement activities to enhance profitability and enable us to respond flexibly to environmental changes.

We are a technology company and we must not forget that our core value lies in our production sites. By adding software and services to those core values, we will elevate our earnings structure. We believe that the value of automobiles will inevitably shift away from hardware to software and services, but we also think that the real values such as the joy of transportation will remain in the future. It is here where we believe the manufacturing excellence we have honed over many years will come into play.

In the past, the advent of new technologies has changed the world. The same applies to Musashi's history. As illustrated in the Musashi Philosophy, we will continue to incorporate evolving technologies and provide new value that is needed by society. I invite you to keep a close eye on Musashi's journey as it utilizes cutting-edge technologies to break through traditional barriers and surprise the world.



Musashi 100th Year Vision

Go Far Beyond!

Break barriers and go on adventures!

GO FAR BEYOND

Becoming an Essential Company that Supports Society with Technologies

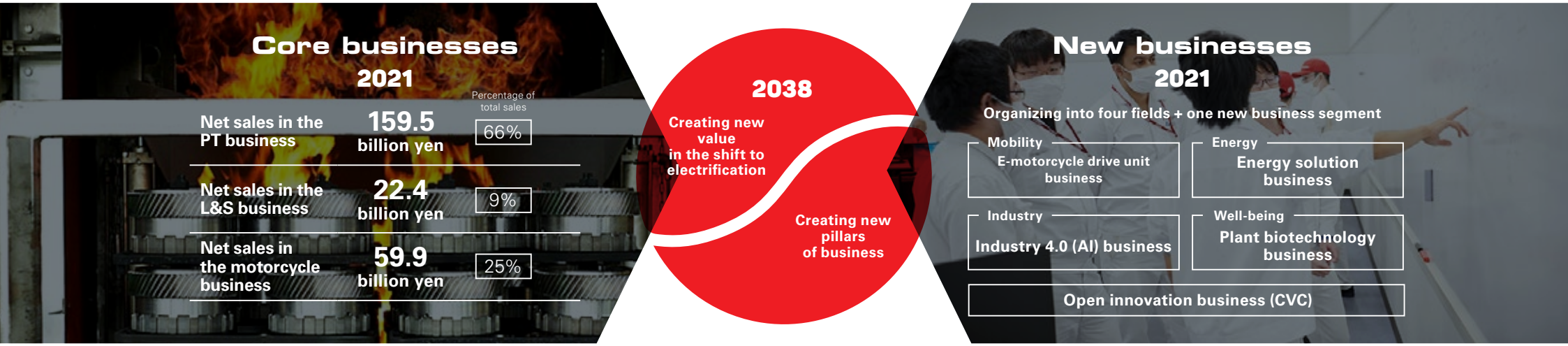
Environmental changes are accelerating in the age of the new normal. In the automotive industry, leading manufacturers have clearly stated their medium- to long-term policies regarding electrification. The entry of new manufacturers has also increased, leading to the ongoing expansion of the EV market.

With the rising value of green solutions, we are on the cusp of a game change on the road to decarbonization. There are growing hopes for a transformation of the structure of industry and the creation of innovation aimed at achieving carbon neutrality.

In this business environment, 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.

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

Among our core businesses, we will respond to the needs of the EV era with technologies, and strategically expand the sale of electrified products that help mitigate climate change and achieve carbon neutrality. In our new businesses, we aim to create businesses that can help solve environmental and social issues, and will cultivate new pillars of business through open innovation approached from four angles: mobility, energy, industry and well-being.



Core businesses >P.17, 18

The path to creating value

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

Competitive advantages

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

New businesses >P.19, 20

Mobility: E-motorcycle drive unit business
Providing value to emerging markets in terms of hardware and software (data utilization) based on original drive units

Energy: Energy solution business
Power storage and power supply solutions which help encourage the use of renewable energy and achieve carbon neutrality

Industry: Industry 4.0 (AI) business
Providing solutions to automate and streamline manufacturing that has been made more effective at our own manufacturing sites

Well-being: Plant biotechnology business
Leveraging resources in the East Mikawa region to contribute to the healthy and prosperous lives of people

Open innovation business (CVC)
Creating businesses that can help solve social issues by developing technology-driven synergies

- Technologies for designing and mass-producing gears and other drive components and unit products
- Integrating advanced AI technologies with hardware, establishing technologies at our manufacturing sites, and building a global development structure
- Ability to propose systems that take advantage of lithium-ion capacitor characteristics and our knowledge of electricity storage devices
- Rare soil characteristics of the East Mikawa region and an industry-academic network in the plant biotechnology domain

Sustainability

Musashi DX (Digital Transformation)	Comprehensive optimization of business processes using digital technologies Utilizing tools to cultivate digitally-minded human resources that will create value Making effective use of data to create new value	**Musashi GX (Green Transformation)**	Implementing a green strategy transforming environmental activities into value targeting all business activities Developing mechanisms for thorough energy conservation activities and global CO_2 monitoring Setting interim goals for carbon neutrality

Financial indicators

- Net sales
- Operating profit
- EBITDA

Strategic indicators

- Percent of products for EVs
- Net sales of new businesses
- Achievement of ESG indicators

CFO MESSAGE



Representative Director
Senior Managing Executive Officer
Tracey Sivill

Go Far Beyond! Let's go on an adventure!

Musashi embodies the principals of our 2038 vision and continues to "Go Far Beyond!". The 1st half of fiscal year 2022 presented both challenges and opportunities encouraging our global associates to meet the turmoil with enthusiasm and conviction. We are cautiously optimistic that the Covid 19 pandemic is on the downward cycle however we are still feeling the effects. Inflation is the highest seen in decades and supply issues continue to disrupt the automotive industry. We saw low profits in Q1 but with and all hands on deck approach, central direction from HQ and the dedication of regional teams we have seen improvement in Q2. Utilizing our Musashi spirit we will continue to strive for sustainable improvement in operations to overcome the challenges and embrace to opportunities.

One opportunity we now have is to meet again in person, this has allowed us to visit our manufacturing sites to see first-hand the kaizen improvements both in manufacturing and support functions. The DX strategy is well underway and we see many examples of increased efficiency in all areas by better management and utilization of data. We continue to standardize the approaches and implement best practices to all Musashi sites, enhanced KPI targets have been directed and performance is measured and reported. This will remain a key activity for the group companies throughout the fiscal year as we are challenged to perform "better than yesterday".

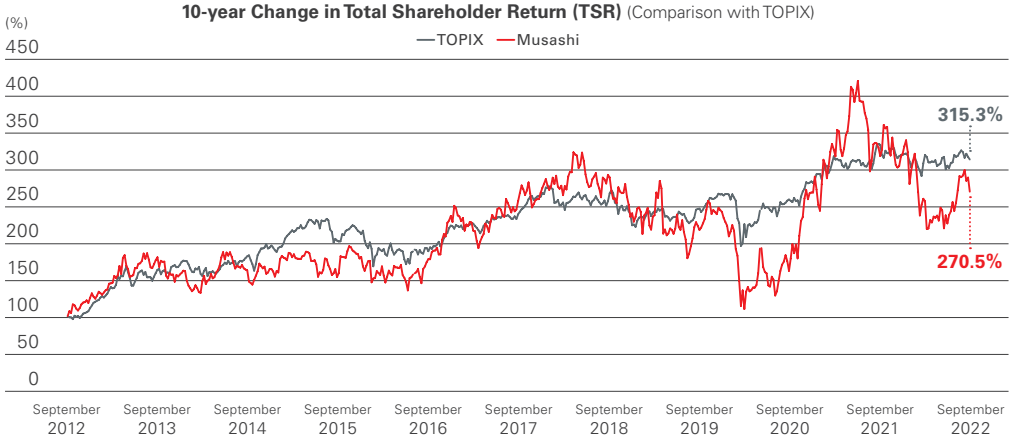
In addition to monozukuri improvements it is imperative that financial KPI's also be tightened to ensure that Musashi's balance sheet remains strong. Continuing our policy of clean balance sheet we have focused on KPI's relating to inventory, asset and loan management. As we increased inventories during fiscal 2021 to protect against supply disruptions we are targeting now to hold or reduce based on regional conditions. Musashi is a capital asset intensive company and we focus on ensuring that the fixed assets are well utilized for the best group purpose. Global cash and loan management is a priority for our CFO group and strategies are reviewed continuously with direction given for each region.

As the world economies continue to strain under inflation transparency of data is of the utmost importance. Musashi is committed to providing accurate information to our partner groups quickly. This requires that all group companies utilize standard systems and process. The CFO group practices the concepts of Transparency, Efficiency, Simplicity. Simple data collection methods create and efficient operation providing transparency of financials. By the end of FY 2022 all Musashi companies will be utilizing the SAP S4 system. The data available helps us to monitor and counter the effects of inflation on our operations and can be shared throughout the organization to assist in kaizen activities related to inflation.

Musashi values all our partnerships and our philosophy impresses upon us the importance of Customer, Shareholder, Community and Associates. We strive to exceed the expectations for all partners and in doing so strengthen the group as a whole. Strong customer relationships and motivated associates enable us to contribute to society and satisfy shareholders with returns. These philosophies guide us in all decisions and activities and Musashi remains committed to these principals.

Musashi's resilience will be put to task during the 2nd half of FY 2022 as we continue to see sales fluctuations, supply issues, inflation and tight labour markets in many regions. The tools added to our toolbox the last couple of years will help us to react to these challenges. The gemba kaizen improvements combined with DX utilization and tighter KPI's will assist our associates to "Go Far beyond!". I'm excited to see the results!

10-year Change in Total Shareholder Return (TSR) (Comparison with TOPIX)



* Source: Created by IR Japan

Core businesses

Becoming a key device supplier in the EV era!

PT-Diff Business

Honing our gear technologies and optimizing transmission functions

In the PT-Diff business, we develop, manufacture and sell differential assemblies, a differential gear arrangement that receives torque from the engine via the input shaft and directs it to two output shafts (on the left and right wheels) with an appropriate difference in revolutions.

Musashi's strengths underpinning this strategic product lies in the gear design, development and production technologies we have accumulated over many years, and in our on-site manufacturing capabilities.

Electric vehicles are heavy partly because of the battery, and this makes it necessary to use compact and lightweight parts more than ever. In addition, due to the characteristics of EV engines which instantly produce high torque and on-board mechanisms such as regeneration, the gears used in the drive components of EVs require greater strength and machining precision than conventional vehicles.

By pursuing one of its core technologies - the optimization of transmission functionality - Musashi is enhancing its competitiveness in catering to the needs of the EV era. Through the consolidation of various technologies such as the pursuit of ideal gear tooth shapes, high-efficiency machining technologies utilizing integrated production and overwhelming development speed based on digital platforms, we have envisaged and implemented growth strategies to use changes in the EV era as opportunities for further growth.



Differential assembly Product lineup

Streamlining development through CAE analysis

PT-GB Business

Consolidating design and development capabilities to make next-generation products a reality

From April 2022, we implemented organizational changes aimed at the speedy reform of our core businesses and established the PT-GB (Gearbox) Business Division.

Electrification is accelerating in the automotive market, and new manufacturers entering the market are also on the rise. The ability to propose solutions based on knowledge of entire drive units rather than only standalone components translates into a competitive advantage.

In the PT-GB business, we are gaining a proper grasp of drive unit technologies for four-wheeled EVs and strategically implementing initiatives to achieve further growth in the expanding EV market.

To enhance the competitiveness of our units, we need to further push technologies in our areas of expertise such as differential assemblies, reduction gears and drive shafts, while also overcoming a host of issues such as assuring functionality as a unit, developing mass production technologies, building supply chains and developing a low-cost structure.

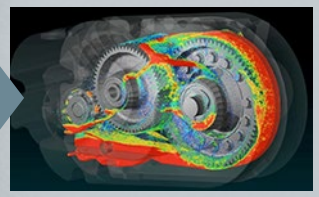
By consolidating its conventional design and development capabilities in the PT-GB Business Division, Musashi is working to quickly make next-generation products a reality and lay the foundations to becoming a key device supplier of the EV era.



Consolidating technologies where our expertise lies to bring unit products to fruition

Optimizing component functions and enhancing unit competitiveness

EV drive units



Lubricant fluid simulations

Core businesses

Becoming a key device supplier in the EV era!

L&S Business

Responding to the needs of the times with advanced design and evaluation technologies

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 to 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.

For electrification, our strength lies in technologies to freely control the characteristics of ball joints through the entire process from design and development to mass production. We can contribute to the needs for control stability and improved riding comfort by introducing low/constant friction to meet customer expectations.



Critical safety components that demand high reliability





Design utilizing high-precision simulations

Motorcycle Business

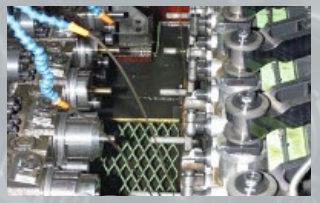
Developing new markets with transmission technologies boasting a leading worldwide share

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. Leveraging the design and production technologies cultivated to date as the world's largest producer of transmissions by volume, we deliver products with high quality and at a low cost to customers in Asia and South America, the two key markets for motorcycles.

For large premium models, we are proactively applying the technological capabilities that we have cultivated at our mother sites in Japan at our overseas locations. We are also promoting local procurement, aiming to cater to the needs of customers around the world.

In the area of product development, we have also enhanced our system for analyses and evaluations related to noise and vibrations, advancing environmental initiatives for the establishment of a carbon neutral society.

Presently, with the trend of electrification also becoming increasingly certain in the motorcycle market, Musashi will leverage its strength with the world's leading share of transmission technologies to develop original motorcycle drive units and take on the challenge of developing new markets.



High-speed cold forging using part formers



Motorcycle noise and vibration evaluations



Attaining low costs with advancements in design and production technologies



Enhancing added value through the pursuit of product qualities

Creating new value through new businesses

Open innovation network spanning the globe

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 FY2018.

In the four domains of mobility, energy, industry and well-being, we collaborate through investment in start-ups with innovative technologies, venture capitalists with broad networks, and other investment opportunities. Under solid partnerships with our investees, we are aiming for the sustainable growth of existing businesses, the speedy creation of new businesses, and the medium- to long-term expansion of our business portfolio.

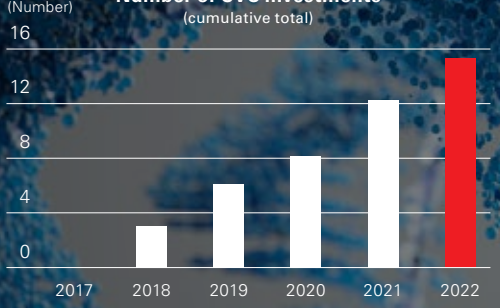
In May 2022 we invested in Kenya-based ARC Ride, followed by India-based Booma in September, launching joint ventures aimed at advancing the uptake of e-motorcycles in Africa and Asia.

In addition to supplying both companies with e-motorcycle drive units developed by Musashi, we are also exploring the rollout of software services based around the hardware with the aim of creating synergy.



CVC
CORPORATE VENTURE CAPITAL

Number of CVC investments
(cumulative total)



* As of October 2022

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

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

Start-ups

ABEJA ··· Social implementation of deep learning technologies I
634AI ··· 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 M E W
Sakuu ··· Multi-material 3D printing (for all-solid-state batteries) M 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
Icuco ··· Nap monitoring device, nursery business support app W
Tanaakk ··· Business development platform M E I W
ARC Ride ··· E-motorcycle business in East Africa M
Booma ··· E-motorcycle business in India M

M MOBILITY
E ENERGY
I INDUSTRY
W WELL-BEING

MOBILITY

E-mobility unit business

Creating beautiful skies with the widespread adoption of e-mobility

Bringing original e-motorcycle drive units to the world

As holder of the world's leading market share in motorcycle transmissions, we took our technologies and expertise and applied it to e-motorcycles, developing an original drive unit. We will provide the units not only to existing customers but to startups looking to promote e-motorcycle adoption in emerging markets, and are also exploring the provision of services that utilize the data gained from the units (hardware). These activities are part of our efforts to realize sustainable mobility that is friendly to people and the environment.





Promoting the shift to green energy with LIC* batteries

LIC is a type of high-powered power storage device that can charge and discharge in an extremely short time. By taking advantage of its characteristics, we will provide solutions for the efficient use of energy and to promote green energy in various fields including mobility, logistics, renewable energy utilization and backup power supply. We are also working with local communities to conduct demonstration testing of micro grids that will ensure the supply of electricity in an emergency.

* LIC: Lithium-Ion Capacitor

ENERGY

Energy solution business

Delivering sustainable energy devices to the world

INDUSTRY

AI solutions business

Giving people more person-centric jobs

Providing innovative automation solutions using AI and field capabilities

Using AI, we are providing automation solutions in fields that have traditionally relied on people's senses or manual labor, such as exterior inspections and conveyance between production lines. With Musashi's conventional expertise in hardware technologies combined with demonstration activities at our own manufacturing sites, we can now provide one-stop services from software to hardware. In the current fiscal year, we established a local subsidiary in Canada and have started expanding the business under a two-region structure.







Eliciting the potential of plants with biotechnology

Musashi is participating in Waphyto, a brand of care products that employs specialized methods to extract unique ingredients from plants cultivated in the East Mikawa region of Aichi Prefecture where our headquarters are located.

We are also working on joint research in the field of biotechnology with universities, in an effort to create new businesses that use the power of plants. Through these businesses, we aim to revitalize local communities and contribute to people's health and happiness.

WELL-BEING

Plant biotechnology business

Bringing beauty and health in the era of 100-year lifespans with the power of plants cultivated in the rich soil of the East Mikawa region

Special Feature

The EV Era Entering a New Growth Phase

The automotive industry is in the midst of a once-in-a-century revolution. Musashi is accelerating the implementation of its electrification strategy.



A forced and accelerated transition to the new normal era has begun.

Based on technological trends typified by CASE (connected, autonomous, shared, electric), the structure of the automotive industry has changed and the value of vehicles themselves are shifting from ownership to transportation services and the realm of software.

In this environment, Musashi will provide new value to society in the EV era as an essential company that has broken through the boundaries of an automotive parts manufacturer and supported society with technology.



Turning the changing times into opportunities through organizational reform

In April 2022, Musashi started business under a new organizational framework to fully demonstrate the strengths of its technologies and accelerate the reform of its core businesses facing the EV era. Then in July 2022 we newly established the e-PT Development Department with the aim of strengthening and accelerating the development of electric powertrains for two- and four-wheeled vehicles, and have quickly put in place a structure to seize the opportunities presented by the EV era.

Our Chief Monozukuri Officer (CMO) who is coordinating and strengthening Musashi's manufacturing and earnings capabilities globally, and our Chief Core-business Officer (CBO) who is embodying our strategies for the shift to EVs, are playing central roles in these efforts.

Under this structure, we are accelerating and expanding activities to accept orders for EV products and units in the PT-Diff, PT-GB (Gear Box), L&S and motorcycle divisions as a means to expand orders for our strategic differential and reduction gear products. We have also fielded many business inquiries and gained opportunities for joint ventures to commercialize unit products.

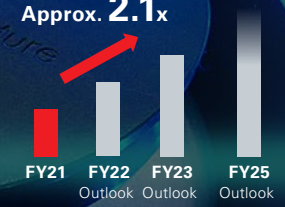
Structure to promote our core business in anticipation of the shift to EVs



*CRO: Chief R&D Officer

Net Sales of Products for 4-wheeled EVs

FY21 ▶ FY23
Approx. 2.1x

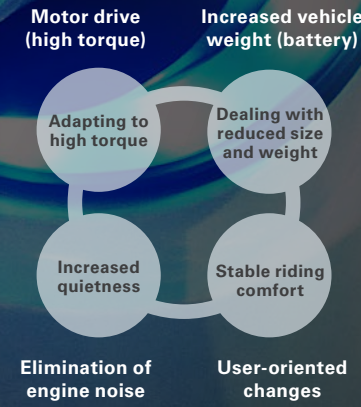


Capitalizing on technology needs emerging due to electrification

With electrification, requirements for our conventional products are also changing.

In the area of powertrains, existing products need to be made stronger and also face strict requirements for reduced size and weight in order to deal with high torque from the motor, as well as to accommodate increased space and weight for the installation of batteries. In addition, as engine sounds are eliminated, there are relatively stricter requirements regarding the noises made by gears engaging, requiring the gears to be machined with greater precision. Components for vehicle bodies need to demonstrate performance that contributes to riding comfort and maneuvering stability.

Rather than using customer drawings for piecework, we have accumulated our own designs and evaluation technologies. By adapting to changing customer needs in a flexible and speedy manner, we are turning the changes brought about by electrification into opportunities.



Business expansion through e-motorcycle drive units

Development of an original unit using technologies that boast a leading worldwide share

As holder of the world's leading market share in motorcycle transmissions, Musashi took its technologies and expertise and applied it to e-motorcycles, developing an original drive unit.

The first partnership formed on the premise of supplying the units was with ARC Ride, a Kenya-based e-motorcycle startup.

ARC Ride is trying to build an ecosystem in East Africa to realize clean mobility. In addition to supplying drive units to ARC Ride, Musashi also plans to collaborate with it for developing products to broaden the base of e-mobility and better enhance value and for data service businesses.

Emerging markets overflowing with potential

There is huge potential in emerging e-motorcycle markets such as Africa. Today, with rising interest in worldwide environmental issues, it is possible to start up a new e-motorcycle market instead of going through the steps of shifting from internal combustion engines to electric motors like the existing motorcycle market. In August 2022 we took part in the TICAD 8 conference held in Tunisia and became convinced that our units can help solve local environmental issues as green tech.

Results and Outlook for Unit Shipments in Each Market

	2020		2030
Africa	Start of market formation	▶	**1.5 million units**
India	40,000 units	▶	**6.7 million units**
ASEAN	130,000 units	▶	**1 million units**

Business expansion in terms of both hardware and software

Our motorcycle drive units, which integrate the motor and power control unit (PCU), demonstrate strengths as high-precision, high-efficiency pieces of hardware. However, we also have our sights set on a broader business expansion, including the utilization of battery technologies in coordination with our energy solution business, and the utilization of driving data creating various value when combined with our knowledge of hardware.

In addition to motorcycles we are also developing applications for three-wheeled taxi vehicles, which have become established as a regular means of transportation in emerging countries in particular.

In Africa, following our partnership with ARC Ride we have signed memorandums of understanding with government organizations and local partner companies with the aim of rolling out multi-layered businesses that combine hardware and software aspects.



TOPICS

Africa Joint venture with ARC Ride



TICAD 8 Tunisia Briefing presented to President Saied



Africa Signing of memorandums of understanding with government-run enterprises and partners



Monozukuri

In addition to developing leading-edge infrastructure supporting product development and production sites, we are focusing our efforts on the development of human resources who embody the vision, “Go Far Beyond!”.

Development

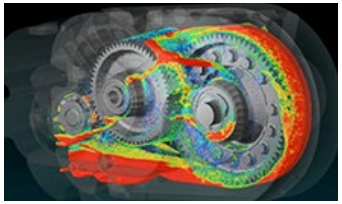
The market globalization has led to the requirement that products fulfill increasingly diverse needs, such as high quality requirements at low costs and environmentally friendly features. At Musashi, we proactively introduce advanced development testing devices and are building a system to enable the 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.



Advanced testing equipment (three-axis dynamometer)





Simulation analysis

Integrated production system

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

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.

Field capabilities



Evolution of manufacturing due to DX

Musashi is working on the evolution of manufacturing through digital transformation (DX). As part of these efforts, we have introduced digital signage and tablet devices at production sites, and worked to improve production efficiency and achieve paperless operations.



In-house fabrication and automation of production equipment

Our manufacturing lines incorporate our unique expertise, including automation. By fabricating our own production equipment in-house, we have achieved improved production efficiency and reduced costs.



Implementation of AI-based automated exterior inspection equipment

We have introduced product exterior inspection equipment that utilizes artificial intelligence (AI) in our manufacturing lines. AI-based exterior inspection has achieved accuracy that is equivalent to or greater than visual inspections conducted by experienced workers, and we are also making progress selling these solutions to outside customers for implementation at other production sites.

Quality

Quality Policy

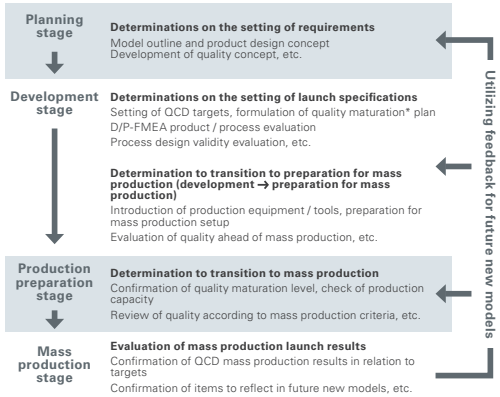
Identify the needs of customers around the world correctly, build a forward-thinking corporate culture, and provide world-leading products from the perspectives of quality, cost, delivery, morale, safety, and the environment, aiming to build a sustainable society.

We have developed a quality management system compliant with the requirements of IATF16949, and work on quality assurance activities from the launch of new models through to mass production management, along with reforms.

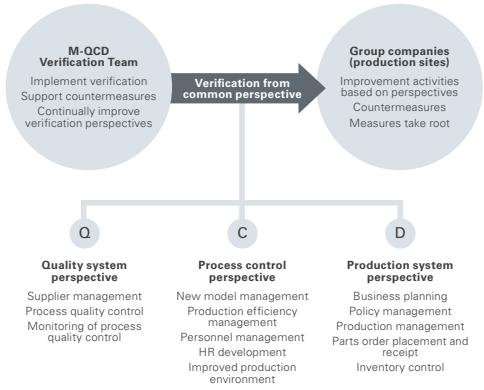
When a new model is launched, we use the new model launch management system (M-FLO) to conduct management and evaluation.

When implementing reforms, we designate approaches and standards that are indicative of the desired outcome, implement verification, and work on activities focused on prevention.

Overview of Quality Assurance Activities During the Launch of New Models (M-FLO)



Overview of QCD Constitution Improvement Activities (M-QCD)



* The quality level required after the transition to mass production should be ensured through prototyping and testing, etc.

DX for quality assurance

Activities aimed at achieving quality assurance utilizing data and digital technology are underway.

To build a system that "monitors whether a process is in a state of statistical stability and issues an alert if an anomaly is detected," we conceived of the concept in 2016 and in FY2022 used the MT method (machine learning) to begin the partial implementation of a system that monitors product status based on equipment data.

We aim to evolve this into a system that instead of relying on judgments from inspections, people or results, analyzes and utilizes various data to predict and forecast defects before they occur.

Culture of improvement and quality training

Quality training

We provide quality training to our employees in a well-planned manner in accordance with their internal qualifications and duties.

We conduct training on quality management systems and quality control and engage in group activities, striving to strengthen the development of our human resources. In addition, in an effort to raise awareness of quality compliance, we conduct behavioral surveys incorporating case studies once a year.

Main quality-related training conducted

- IATF-compliant training
  Understanding regulations, developing internal auditors, understanding core tools
- Quality control training
  ·J course (Junior Course)
  ·F course (Foreperson course)
- Small group "circle" training
  TQM training, manager training, leader training
- Quality training for new employees
  Basics of quality, practice with measurement instruments



Quality training at an overseas location

MM Circles (QC Activities)

The Group has 400 circles (3,606 members) continually working on business improvements through small group activities.

Since 2004, the MM Circle World Convention has been held, inviting select circles from all over the world. Even during the COVID-19 pandemic, the event continued to be held in an online format. Judges are selected from each site, establishing it as a global event.

In addition, since 2019 "circle reform" activities have been promoted to reinvigorate the system. With the stated vision of "all Musashi employees actively working toward improvements," "individuals and teams experiencing growth" and the development of a "bright and fun workplace," a range of measures have been implemented with employee satisfaction and motivation serving as guideposts. In the future, the circle system will continue to be used to present improvement results, engage in reciprocal communication and share improvement expertise.



Best circle in FY2021 (Brazil)

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

The Musashi Philosophy is a common set of values for all employees working for Musashi. It has taken root as the foundation of corporate activities and individual actions.

We have set Our Purpose with the mission of contributing to sustainable growth and the realization of a sustainable society through our business activities. We have set the Musashi 100th Year Vision, "Go Far Beyond!" as the slogan for achieving this.

By disrupting the existing frameworks, we aim to become an essential company that is needed by society.

To expand our business, we have specified key issues that we should work to improve after considering expectations, requirements, and the social issues that we have identified through communication with stakeholders in light of Our Vision and Our Purpose.

We work to address these key issues by creating new value through the development of core businesses and the creation of new businesses.

This means that contributing to the resolution of social issues through our business activities themselves is our approach to sustainability.

Communication with stakeholders



Materiality — Material issues



- Quality Policy
- Environmental Policy
- Health and Productivity Management Declaration
- Basic Policy for Musashi Corporate Governance
- Basic Policy for Compliance
  Our compliance

Musashi Philosophy

- **Purpose** (Mission)
- **Way** (Guidance for Conduct)
- **Origin** (Spirit of Foundation)

Musashi 100th Year Vision

Go Far Beyond!

Break barriers and go on adventures!

Becoming an Essential Company that Supports Society with Technologies

Business direction

Developing core businesses

Becoming a key device supplier in the electrification era by honing our monozukuri skills

Creating new businesses

Creating new value to help resolve social issues through open innovation

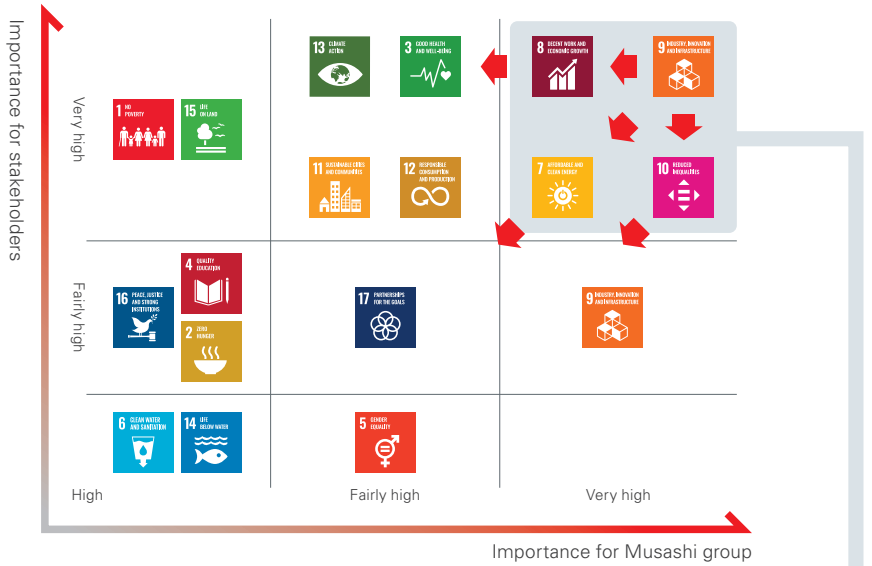
MATERIALITY
(Material issues)

Identification of material issues

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.

The 36 identified issues are mapped in terms of importance from 2 perspectives. As a result of studying business relations and the linkage with other themes, 3 directions are specified under one major theme.

We consider the characteristics of our businesses, including the value chain, to select priority themes based on the needs and expectations of society, to deepen the understanding we share with our stakeholders and more efficiently propel our sustainability initiatives.



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.

TOP PRIORITY ISSUE

Creating a sustainable social system for the next-generation

SECOND PRIORITY ISSUE

	Work style change Improvement in productivity	Creation of sustainable energy	Promotion of diversity and inclusion
Background social issues	Despite world-wide workforce is increasing, employment opportunities are decreasing. Quality of employment gets worse and poverty expands.	3 billion people rely on wood, coal, charcoal, and animal waste for cooking and heating. Greenhouse gas warms the globe.	A gap is expanding between rich and poor. Behind this, inequal job opportunities by race, ethnicity, gender, etc. exist.
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.	Responsibility for the automobile industry which emits vast amounts of CO_2. Keeping the global environment is essential for business continuity.	Responsibility as a global company. Human resources need to be assured for business growth. Personality of each employee can contribute to corporate growth.
	Infrastructure of economic growth P21	Sustainable energy system P31	Realization of diverse work styles Better quality of employment P33

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.

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.

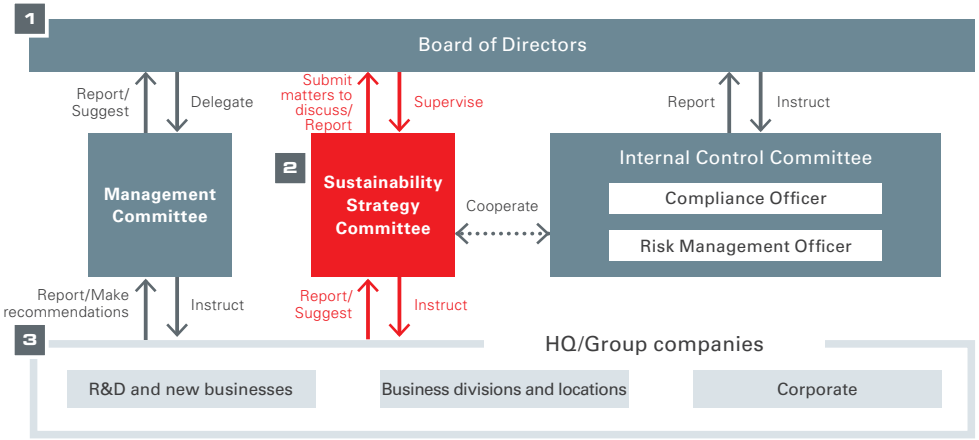
See our website for more information.
www.musashi.co.jp/en/sustainability/earth.html

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. >P.38

Risk Management

Musashi has put in place a companywide risk management system that covers all risks related to its corporate activities and conduct. Under the system, we identify, assess and monitor risks, including those related to climate change. In particular, climate change-related risks (physical risks) have been selected as critical risks for business continuity. The BCP Committee formulates business continuity plans and regularly conducts BCP-related training and drills. Given the perspectives of rapidly changing risks, we endeavor to minimize risks by actively incorporating social issues into our thinking and reflecting feedback from stakeholders and outside directors. >P.43



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.
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.

Chairperson	Frequency of meetings
Chief Executive Officer	At least twice a year

Members

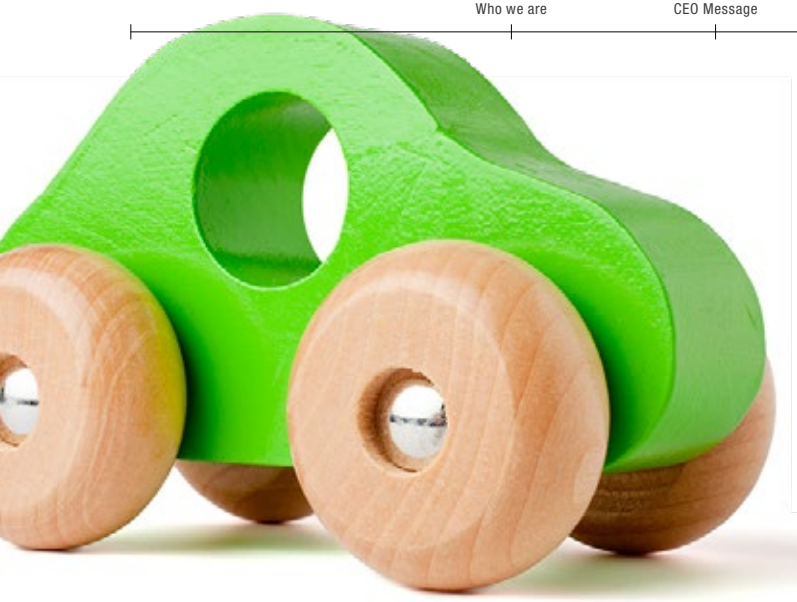
Directors, C-suite executives and external specialists

See our website for more information.
https://www.musashi.co.jp/en/newsrelease/musashi_set_a_new_middle_term_goal_to_achieve_carbon_neutrality.html

Risks and Opportunities

We try to minimize the risk and create new value by ascertaining the impact that climate change has on our business and analyzing the risks and opportunities, and promote initiatives that lead to sustainable business growth.

	Climate change risks	Expected risks	Opportunities	Musashi's response
Transition risks	**Government policy, laws and regulations** Advance of CO_2 emissions pricing Making CO_2 emissions reporting mandatory Strengthening of emissions regulations applied to existing products and services	Introduction and expansion of carbon taxes and environmental taxes in various countries More stringent lifecycle CO_2 disclosure requirements Stricter environmental regulations for the automotive industry	Promoting energy conservation and improved production efficiency, introducing new technologies Promoting carbon neutrality in ways that also involve suppliers *1 Common	Formulating Musashi Green Operation 100. Promoting the switch to renewable energy including thorough energy conservation efforts, improved efficiency and in-house power generation. We plan to ascertain CO_2 emissions throughout the entire lifecycle in a phased manner. >P.25-32 *2 Common
	Technology Replacement of existing products and services with low-carbon replacements Up-front costs to transition to low-carbon technologies Failure of investments in new low-carbon technologies	Declining sales due to products being deemed incompatible in connection with the shift to EVs Increased legacy costs due to incompatibility with requirements in connection with the shift to EVs Incompatibilities due to changing international rules and industrial standards	(*1) Development of low-carbon products and services, and creation of new businesses Optimization of existing product functions to comply with the shift to EVs, and the development of new products and services Evolution of existing technologies compliant with the shift to EVs Creation of new businesses due to the introduction of new technologies	(*2) **Expansion of products for EVs due to the exploration and in-depth pursuit of existing technologies** Improved competitiveness from pursuing the optimization of transmission functions in core technologies Development of electric drive units for next-generation products and business expansion Providing L&S products that achieve compact sizes, light weight, and low/constant friction Development and business expansion for e-motorcycle units that utilize Musashi's leading worldwide market share for motorcycle transmission technologies **Creation of synergy through active CVC activities and partnerships** **Development of solutions that utilize LIC that promotes the adoption of green solutions for energy** >P.06 >P.07 >P.14 >P.15 >P.17-22
	Market Changing awareness and behaviors of customers and consumers Sharply rising raw material costs	Lost orders and contracts due to nonconformance with requirements Sharply rising material costs due to fast-rising energy costs and added environmental value	*1 Common Process improvements incorporating the 3Rs Development through collaboration with suppliers	*2 Common Active 3Rs promotion and stronger waste management. Promotion of process innovation due to material changes or the introduction of new technologies >P.23 >P.30
	Reputation Changing awareness of the environment among customers and consumers Expanding criticism of relevant industries Increasing anxiety or criticism on the part of stakeholders	Cessation of business dealings due to inadequate carbon neutrality initiatives or disclosures Withdrawn investments or falling share prices Loss of corporate value due to falsified disclosure information	Improved engagement due to initiatives spanning the entire supply chain Improved engagement due to support for or participation in initiatives Strengthening governance	Development and implementation of systems to address environmental and social issues including climate change through support for the TCFD and participation in the CDP >P.25-30 >P.40-44
Physical risks	**Acute** Increased severity of abnormal weather events such as typhoons and flooding	Risk of employees being affected by a disaster while commuting, etc. Production stoppages of plants or equipment when affected by a disaster Production and shipping stoppages due to supply chain disruptions	Active introduction of remote work Strengthening of BCP measures (alternative production and standardization of infrastructure, etc.) Optimization of logistics processes Development of resilience-related businesses	Promoting the digitalization of business through the cultivation of DX-minded human resources >P.35 Formulation of business continuity plans and regular education/training by the BCP Committee >P.43 Promotion of a green strategy that "connects" Musashi with society through green solutions >P.31 >P.32
	Chronic Changes in precipitation patterns Extreme changes in weather patterns Rising sea levels Rise in average temperatures	Production downsizing or stoppages due to water restrictions caused by drought Decline in vehicle sales in response to the impact of sudden cool conditions in summer or unusually warm winters on GDP Decline in the regions capable of production activities Decline in work and occurrence of work-related accidents due to working under harsh conditions	Strengthening of improvement activities to conserve water Development of a flexible production system Acceleration of production line automation by utilizing DX Improved employee satisfaction due to improvements to the workplace environment	Water quality management and reduced water usage >P.30 Design of high-efficiency and flexible production lines that leverage Musashi's strengths in development, integrated production systems and field capabilities >P.23 Introduction of automation solutions utilizing AI technologies and development and promotion of systems aimed at health and productivity management >P.20 >P.23



Green Operation 100

Achieving 100% carbon neutrality in our business activities *1 by 2038 *2

We have implemented an array of initiatives to address environmental problems, including energy conservation activities. We have begun 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.
www.musashi.co.jp/en/sustainability/

Milestone 2030

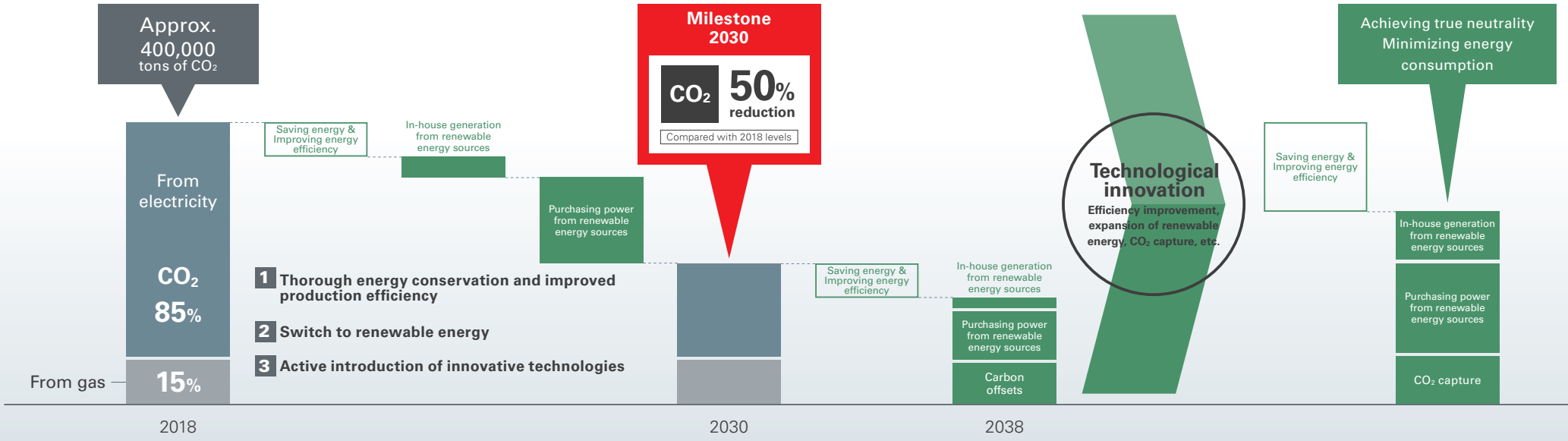
As a milestone on the way to achieving 100% green operations by 2038, we will aim to reduce 50% of CO_2 emissions from our business activities*1 by 2030.

Internal carbon pricing

To promote improved efficiency in manufacturing and achieve an evolution in production, Musashi has been making capital investments including the introduction of new technologies as appropriate. We have introduced internal carbon pricing to raise awareness and promote the implementation of carbon neutrality.

*1 Scope 1 & Scope 2 *2 100th anniversary of Musashi

Green Operation 100
Achieving 100% carbon neutrality in our business activities *1 by 2038 *2





Initiatives 01

Initiatives for reducing global CO_2 emissions

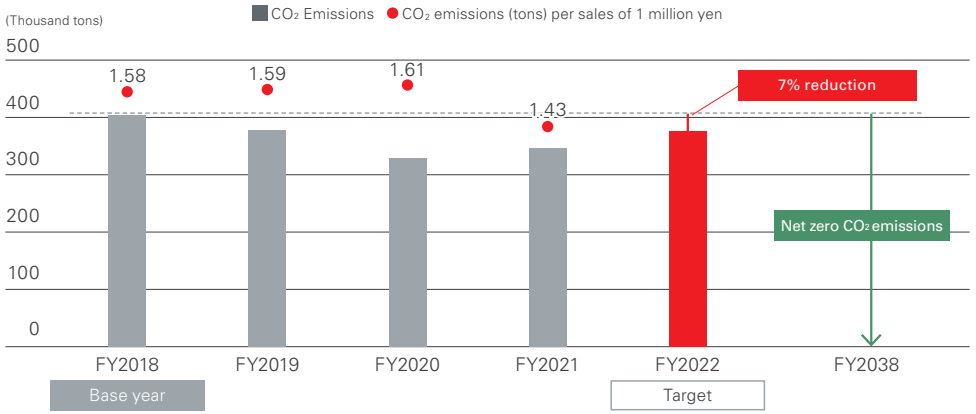
Musashi has made a carbon neutrality declaration (May 2021). To accurately ascertain CO_2 emissions in our business activities, we have established globally standardized measures for data collection. Having set FY2018 as the base year, we have now designated Milestone 2030 on the way to achieving 100% green operation by 2038. >P.29

In FY2021 we far surpassed our target reduction of 3% compared with FY2018 levels with an actual reduction of 14%, but this was in part affected by reduced production due to semiconductor shortages and the COVID-19 pandemic.

For FY2022 we have set the goal of reducing Groupwide CO_2 emissions by 7% and have also set energy conservation targets to achieve this goal.

We have built a system to set status indicators and manage progress globally so that steady reduction activities can be evaluated even in the midst of production fluctuations caused by external factors.

CO_2 emissions & CO_2 emissions per unit ~Scope 1 ,Scope 2~





Initiatives 02

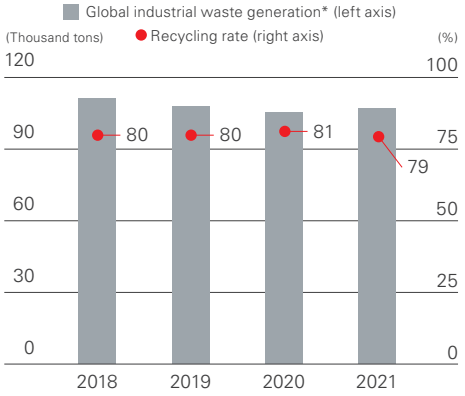
Initiatives to reduce industrial waste and the consumption of water resources

Initiatives to reduce industrial waste

In FY2021, we started to ascertain the waste management that had been performed by each Group company on a Groupwide basis. By accurately determining our impact and responsibilities in global society, we are promoting activities as indicators of improvement activities.

We have established and begun operating an internal recycling system to recycle the liquids used in the cleaning process during the cutting process, and utilize our strengths in integrated processing to return the steel scrap generated during casting to materials used prior to casting.

Industrial waste generation and recycling rates (global)



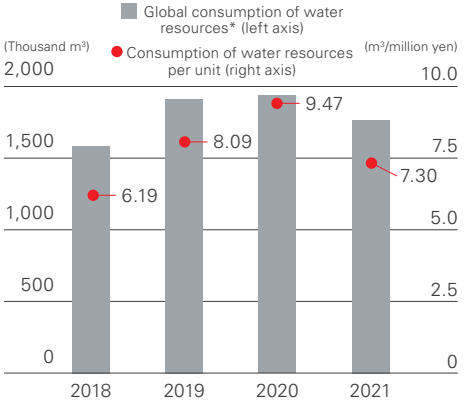
* Global data with a coverage rate of 90% from 2018 to 2020 and 100% in 2021

Initiatives to reduce the consumption of water resources

Musashi is also working to reduce the amount of water resources used. In FY2021, we managed to reduce the total amount used, as well as the amount used per unit of production. We have been conducting regular improvement activities, including reducing the number of times that coolant is exchanged due to spoilage, and reducing the number of times cutting water is changed during the winter months.

As other environmental activities, we engage in tree planting and cleaning efforts in each country, striving to preserve the environment in partnership with members of local communities.

Consumption of water resources and consumption of water resources per unit (Global)



* Global data with a coverage rate of 90% in 2018 and 100% for 2019 onwards

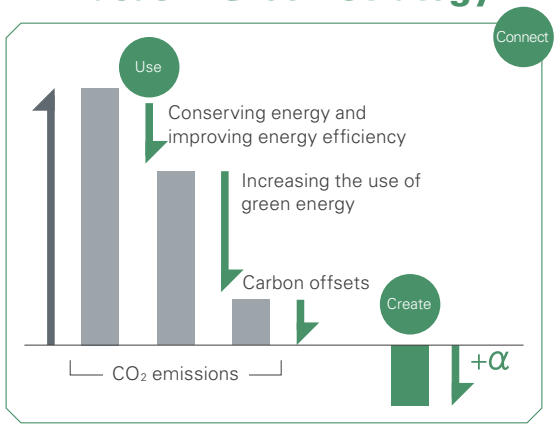
Initiatives
03 Green Transformation

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_2 emissions
- Providing products and services that are friendly to people and the environment

We are working to achieve GX through a combination of a shift to EVs >P.17,18,21,22 in our core business and new businesses.

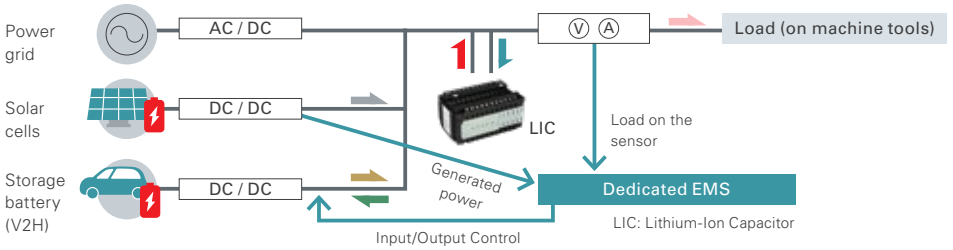
At our production sites with high electric load, the use of only privately generated power makes it difficult to maintain the balance between power demand and supply. We also face issues that cannot be solved only through energy conversion.

Industrial facilities can experience significant instantaneous loads during operation, and we have had to rely on grid power even while utilizing renewable energy for this reason. If instantaneous loads can be covered with FEMS* which utilizes lithium-ion capacitors (LICs), >P.20 we expect to control demand fluctuations due to the electric power peak shift of plants and reduce the amount of grid electricity used through the use of renewable energies. In addition, as this solution would make it possible to engage in independent operation for extended periods during power outages, it would also contribute to carbon neutrality and improved resilience. In 2021 Musashi completed a proof-of-concept (demonstration test) within its main plant and plans to apply the system to its mass production sites.

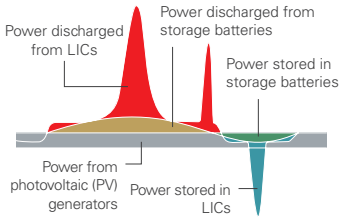
Additionally, AI-based autonomous mobile robots (AMR) >P.20 improve productivity and also aid the transition from gas- or gasoline-driven carriers to electric ones. These are issues faced by all manufacturers, and we are developing initiatives to deliver solutions to these challenges to manufacturing sites around the world.



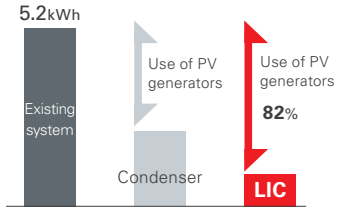
FEMS Factory Energy Management System



Conceptual rendering of load control enabled by the introduction of LICs



Improvement of renewable energy utilization



Use

Green Operation

- Improving energy efficiency and minimizing consumption
- Using renewable energy for all production processes

From the perspective of CO_2 emissions, electricity is 85% of the energy used in Musashi's production activities. The remaining 15% is mostly gas.

To achieve 100% green operation, >P.29 we are starting by working to thoroughly conserve energy and improve the efficiency of production. In addition to engaging in regular production improvement activities, we have incorporated various perspectives and feedback through MM circle (QC activity) initiatives. >P.23,24 We are also trying to accelerate the effects of our efforts by utilizing the strengths of our global production system to share improvement know-how and roll out measures across the Group.

Next we will introduce in-house power generation to cover our electric power needs and switch to sources of power that do not generate CO_2 emissions, such as renewable energy-derived power. Currently at MAP-ID#2 (No. 2 India plant: Karnataka State), we are using on-site PPAs to generate solar power and wind power and implement production with grid electricity. In addition, at MSB (four-wheeled vehicle part production plant in Brazil: Pernambuco State), since January 2022 we have implemented production activities by introducing grid power through water power generation.



Musashi Auto Parts India Pvt. Ltd. (MAP-ID(#2))
Karnataka State, India



Musashi do Brasil Ltda. (MSB)
Pernambuco State, Brazil

Connect

Green Communication

- Making all activities carbon neutral
- Commitments for local communities and society

As part of Musashi's initiatives aimed at strengthening disaster resilience in local communities, we launched a joint project with the local government of Toyohashi, Aichi Prefecture and had the project selected by the Ministry of Economy, Trade and Industry as a project building a regional microgrid utilizing solar power generation facilities[*1]. Towards the start of trial operation and disaster readiness training in FY2023, we are installing equipment and developing operations under the project. The power to be stored in an in-house power generation system will be used efficiently by utilizing 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.

In other activities, our effort to find practical application of a green energy management cloud in partnership with the town of Naraha in Fukushima Prefecture was adopted as a project to promote the development of practical application for regional reconstruction by Fukushima Prefecture. We will continue to work with the town of Naraha and Naraha Shin-Denryoku LLC to develop a digital cloud service for green energy management.

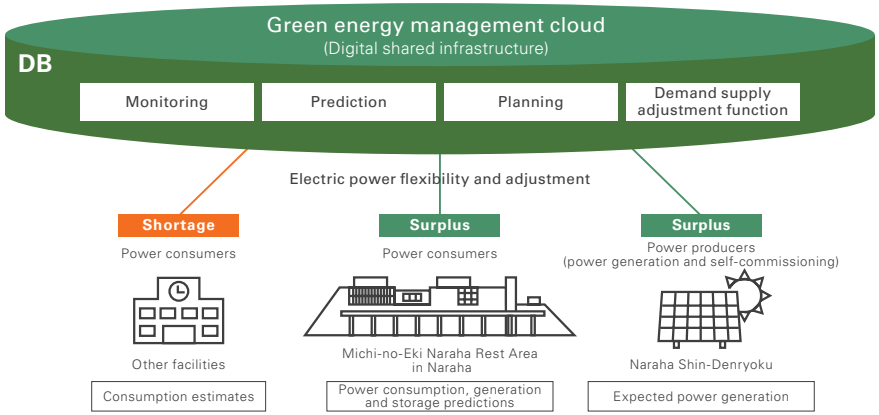
These initiatives are the first steps toward the future we envisage. By providing digital services in addition to LIC and FEMS products, they contribute to the achievement of the carbon neutrality and also help increase the disaster resilience of local communities.

*1 Official name: Regional Microgrid Project Utilizing Solar Power Generation Facilities in Toyohashi City by Musashi Seimitsu Industry Co., Ltd.

See our website for more information. (only in Japanese)
https://www.musashi.co.jp/newsrelease/post_57.html
https://www.musashi.co.jp/newsrelease/post_62.html

Conceptual image of the green energy management cloud service

We are developing a digital shared infrastructure that achieves carbon neutrality by utilizing AI technologies to predict electricity consumption, generation and storage on the part of power consumptions and producers, reciprocally share distributed green energy surpluses and shortages, and adjust supply and demand (electric power flexibility).





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.

Basic Human Resource Development Concept

Musashi has set a new vision for 2038: "Go Far Beyond!". To meet this vision in accordance with the Musashi Philosophy, for "a world where the earth and people coexist in prosperity and harmony," each one of us have become adventurers and will create a path forward into the future.

To adapt to the times and the changing business environment, and to create an organization that continues to innovate, Musashi aims to develop autonomous professional human resources, namely highly motivated talent who take on the challenge of change autonomously and constantly strive for self-improvement.

We have declared a new HR development policy of "autonomous professional human resources," are working to foster an organizational culture in which individuals can develop their capabilities based on the concepts of independence and self-reliance, and have launched a number of initiatives to revamp our training systems to produce human resources who can properly understand and develop the Musashi Philosophy and management policies (vision).

We position "Our Way," which is part of the Musashi Philosophy, as a core competency that is at the core of our human resource development efforts. Additionally, as key development themes to achieve our vision, we are actively pursuing efforts to provide opportunities for skills development in the areas of innovation and digital technology, and to cultivate global leaders.

Ensuring the Group's Philosophy and Vision Take Root

To produce human resources who understand and practice the Musashi Philosophy and who can take on the challenge of achieving our vision, we have established three programs to ensure that our philosophy and vision take root.

The first is a training program on the basics of the Musashi Philosophy designed for all employees. This is an interactive program designed for employees to understand and identify with the Musashi Philosophy, and by extension to put it into practice. Employees regardless of age, career history, position or department put their own names forward to take part in this training, deepen their understanding of the philosophy through dialogue, and make a declaration to put the philosophy into practice at the end of the training. The curriculum is shared not only within Japan but globally, with training being conducted in a way that reflects the characteristics of each region.

The second program is invite-only program for junior leaders. It is designed as a practical program to produce future leaders who will instill the challenge of "Go Far Beyond!" within the organization by forming teams to plan and propose themes of reform that go beyond conventional structures and approaches.

The third is an invite-only program for global leaders. This is a practical program to build the mechanisms to instill and firmly establish Musashi's philosophy and vision into the organization in a managerial capacity, and will be expanded as an HR development program for global leaders.

Diagram of the FY2022 Training Scheme

Elective | Tiered | Company-selected

Positioning	Tier	Competency Development	Theme-specific: Philosophy	Theme-specific: Philosophy	Theme-specific: Innovation	Theme-specific: DX	Theme-specific: English	Tier-specific / Job-specific	Tier-specific / Job-specific	Tier-specific / Job-specific	Tier-specific / Job-specific
Managers	CO				Innovation training	DX training	English instruction (self-development)		Quality training	Manufacturing training (proficiency testing)	Compliance and confidentiality management	Environment, health and safety
Managers	Middle management	Elective competency development training	Basic training on the Musashi Philosophy	Philosophy / innovation training for top management candidates Philosophy / innovation training for middle management				Newly appointed managers				
General	Senior staff			New business creation program				Newly appointed chiefs Career development				
General	Staff							New employee training				



Scene from basic training on the Musashi Philosophy (BEYONDER Training)



Scene from selection-based junior leader training (Go BEYONDER Training)

Developing Innovation-minded Human Resources

We see it as a key challenge to create technology-based innovation to shape an enriched Harmony between our lives and Earth, and with this in mind we actively work to cultivate innovation-minded human resources.

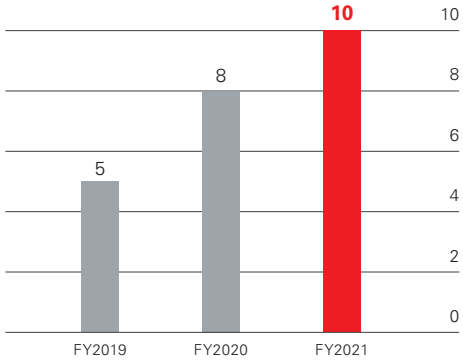
The stated mission of MUSASHi Innovation Lab CLUE, a hub of innovation that was opened in December 2018, is to create innovation originating in the East Mikawa region. CLUE has developed three factors needed to create innovation, namely Place (a space apart from day-to-day things), People (a highly diverse gathering of people) and Process (education on the creation of innovation including design concepts), and provides opportunities for not only employees but also local companies and individuals to create innovation.

CLUE runs programs and workshops aimed at the creation of new business, business growth, further business expansion through networking, and other topics. In particular, East Mikawa Innovator's Gate, an innovation creation-oriented program run annually since 2019, attracts a highly diverse range of participants including Musashi employees selected from internal postings who are serious about innovation, employees of various companies and local government, university professors and students. Through lectures and fieldwork directed by a highly experienced team of instructors, participants have developed new business plans. A Business Creation Workshop was also held to take on the challenge of the Musashi 100th Year Vision, "Go Far Beyond!". Musashi Outside Director Yoshie Munakata served as instructor for the workshop, which was conducted with the aim of promoting understanding of the basic concepts and fostering the mindset needed for Musashi's next-generation leaders to achieve business creation. For students in the local community, we offer creative workshops to develop future innovators and offer internship programs in cooperation with local universities and local government.

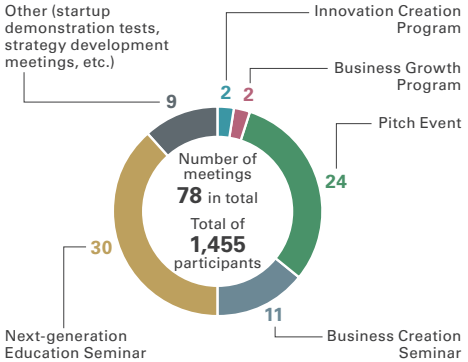
There is also a corporate partner system that enables the regular use of CLUE to create new business and facilitates exchanges with other companies. In FY2021, the number of partner companies increased to ten.

CLUE has been designated as a site of the Ino-vation network developed by the Ministry of Internal Affairs and Communications and as a member of the East Mikawa Startup Promotion Council. In this capacities CLUE develops pipelines with innovation-minded human resources in Japan and around the world, and enhances opportunities for exchange in both online and offline formats with Musashi employees and other members of the local community.

Number of CLUE corporate partners



Number of programs and events held (FY2021)





2022 Final Demo Day as part of East Mikawa Innovator's Gate where participants present their pitches for new businesses to business managers



Business creation workshop to brush up business plans using Lego blocks

Implementation of Open Innovation

As part of Musashi's CVC activities, joint ventures are pursued with startups and tech companies around the world, including in Silicon Valley and Israel. By having Musashi employees directly involved with these initiatives to create open innovation, we learn from employing methods such as agile development and lean startup, with the aim of accelerating the creation of new businesses.

Particularly for the future development of mobility and Industry 4.0, energy solutions that will support those endeavors with carbon neutrality, and the ultimate goal of new business rollouts in the field of wellbeing that leads to healthy and happy lives for people, we aim to see success with innovative initiatives that go beyond the boundaries of an automotive parts manufacturer.



Developing Digitally-minded Human Resources

Musashi sees opportunity in the changing times and believes it is important to take on challenges without fear of the new, and to continue to provide products and services that can contribute to society. Having continued to change with technologies at its core, Musashi also actively pursues the enhancement of its digital infrastructure and has focused on the importance of utilizing digital technologies in its business activities, including the development of new businesses utilizing AI. Accordingly, the cultivation of digitally-minded human resources who have full command of digital technologies is another priority.

Since 2014, we have aimed to boost our development capabilities through digital technologies based on CAE in the R&D field, making progress with the development of environments and human resources able to develop products virtually. On a global scale, we are making every effort to boost productivity by aggressively using technologies that maximize the value of manufacturing.

In 2021 we made the declaration of becoming a "top runner" in DX and began to provide all employees with opportunities for digital learning. We aim to improve IT literacy, promote learning starting with the basics of digital technologies such as tool utilization, and produce training with tiered steps of advancement in order to cultivate and identify digitally minded human resources with high-level expertise.

We will combine the business skills honed in our core businesses with digital skills, create and evolve a competitive advantage in our core businesses, and at the same time create new businesses to usher in a new era of change for Musashi.

Channeling a passion for technology and wisdom for innovation as Our Purpose, we will develop autonomous human resources that are flexible and adaptable to change through skill development and reskilling.



Structure of the DX human resource development program

	FY2021	FY2022		FY2023
	STEP			
	01	02	03	04
CO	✔	✔	✔	✔
Middle management	✔	✔	✔	✔
Senior staff	✔	✔	✔	✔
Staff	✔	✔	✔	✔
Completion results	740 employees	115 employees	–	–

High ↑ Business skills ↓ Low

Low → Digital skills → High

STEP 01 IT literacy training
Learn about digital technologies
Understanding IT
Fostering a digital-first mindset

STEP 02 Basics of tool utilization
Business improvement
Training on the use of digital tools
Understanding cloud technologies

STEP 03 The essence of DX and changing corporate culture
Corporate reform
Understanding the essence of DX
Acquiring a reform-oriented mindset

STEP 04 Expertise in digital technologies
Business reform
Mastery of digital technologies
Standardization of data utilization

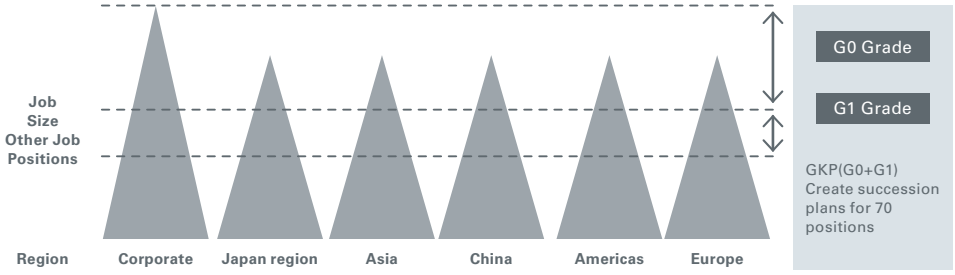


Systematic Development of Global Leaders

Musashi currently maintains a network of 35 sites in 14 countries, with overseas net sales and overseas employees making up more than 80% of total sales and employees. To date Musashi has cultivated a diverse range of human resources recruited irrespective of gender, age, nationality or disability, and has sought to develop environments in which these valued employees can succeed. Going forward, however, we will strengthen our efforts to foster the development of true global leaders who are able to exercise leadership not only in the operation of their own individual companies but throughout the entire region and Group.

We have currently set global management-level competency required of global leaders as a development target and are developing succession plans for 70 key global positions in senior management. At the same time, we are working to ascertain the need for developing and replenishing human resources in terms of both quality and quantity across the Group. In the future, we will provide training programs based on the need to develop candidate successors, allocate human resources with their development in mind, and develop a promotion structure to acquire human resources from the outside in a timely manner.

Group Key Positions (GKPs) and Succession Plans (SPs)



Directors As of June 23, 2022



President and CEO

Hiroshi Otsuka

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 Group.



Representative Director
Senior Managing Executive Officer

Tracey Sivill

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.



Director
Senior Managing Executive Officer

Kenji Morisaki

Mr. Morisaki has extensive experience and knowledge, particularly in the area of the Company's manufacturing, and is responsible for the manufacturing division and Japan region. He is responsible for achievements impacting the management and improvement of business efficiency of the Group.



Outside Director

Goro Kamino

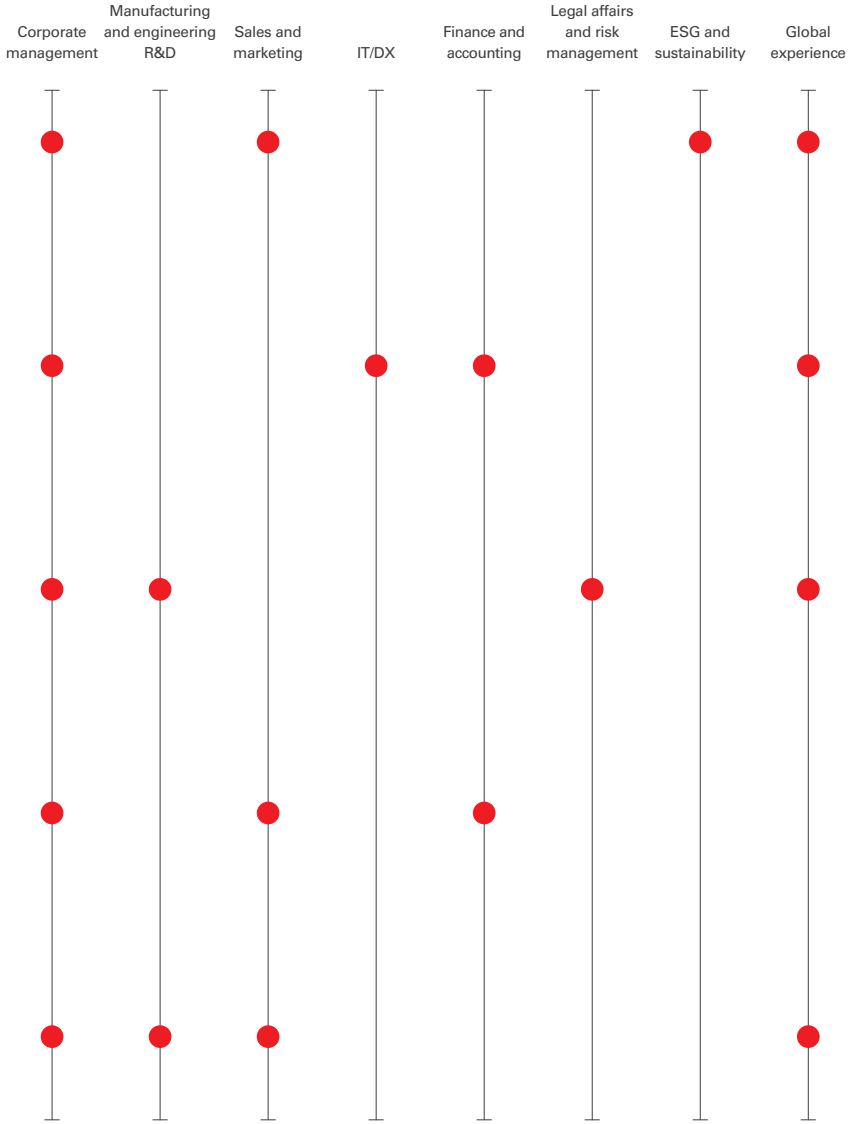
Having worked as a corporate manager of listed companies for many years, Mr. Kamino has extensive experience and a high level of knowledge in corporate management. He supervises the management of the Company from the perspective of a corporate manager of companies engaged in businesses that are different from those of the Company.



Outside Director

Hari N. Nair

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

Keisuke Tomimatsu

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

Yoshie Munakata

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.



Outside Director

Emi Onozuka

Ms. Onozuka possesses global knowledge and experience cultivated at asset management and investment firms. She supervises the management of the Company from the perspective of an investor.



Director serving as Audit & Supervisory Committee Member

Michi Miyasawa

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.



Audit & Supervisory Committee Member

Outside Director

Makiko Yamamoto

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.

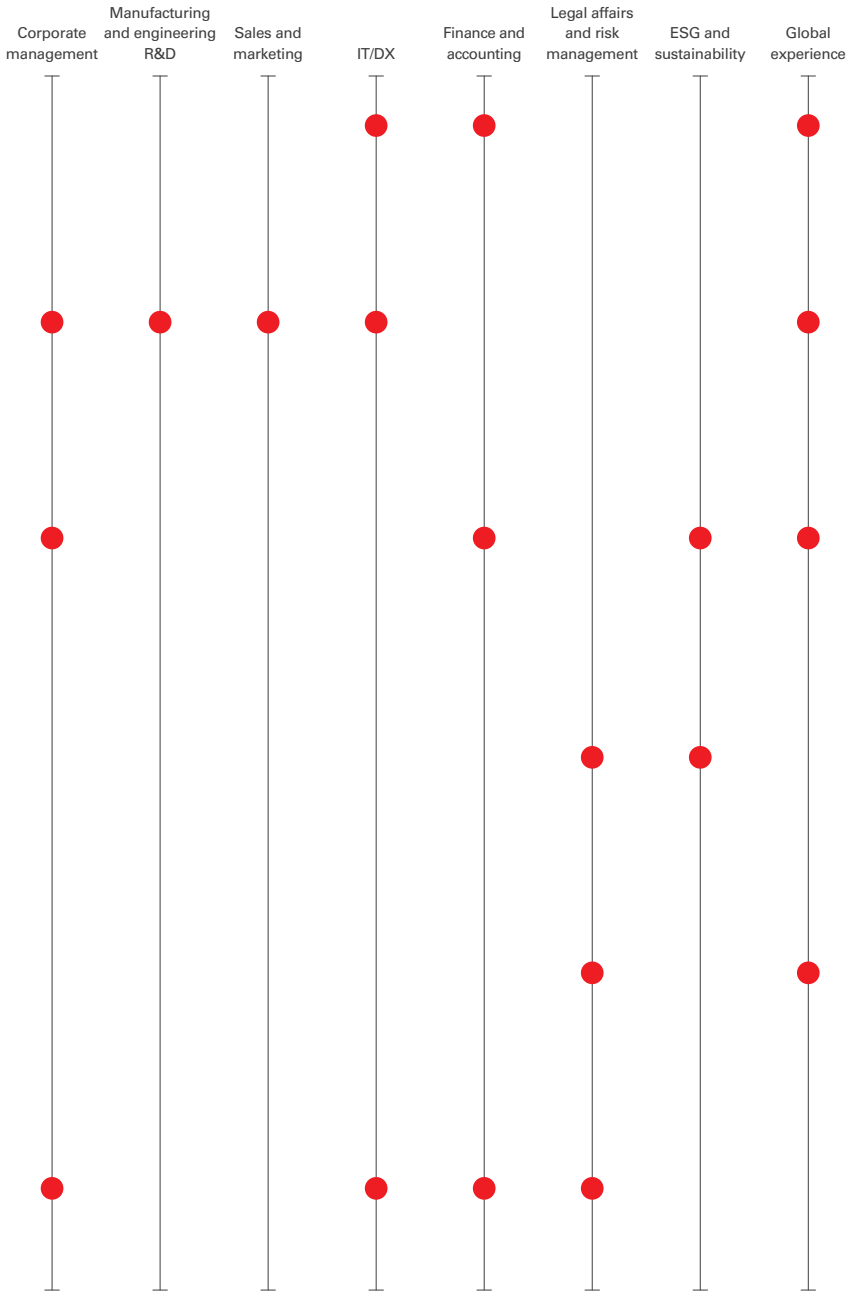


Audit & Supervisory Committee Member

Outside Director

Kazutaka Okubo

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 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

See our website for more information.
https://www.musashi.co.jp/en/ir/

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.

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.

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. >P.27

OUTSIDE DIRECTOR MESSAGE

Sustainable management driven by the Board of Directors
Pursuing a perfect balance between oversight and long-term strategic leadership

Expectations for Oversights by the Board of Directors

Publicly listed companies that operate based on other people's capital are required to create value from the six capital inputs (financial, manufacturing, intellectual, human, social/relationship-based and natural capital) and to be accountable for their results. In recent years, institutional investors have not only acted as the providers of financial capital, but have also sought to contribute to this value creation at a more sophisticated level through engagement (dialogue) regarding the appropriate provision of value to stakeholders.

As someone who has been involved with value creation from the outside of companies as an institutional investor for many years, I get a sense that the top management and front-line personnel (for example IR departments responsible for dealing with investors) at many companies understand the importance of dialogue, including on the topic of sustainability. However, it is difficult to understand the execution of oversight by a board of directors or the contributions to strategy formulation and execution from a long-term perspective when looking in from the outside, and based on disclosures and other materials, it appears that superficial involvement is the norm.

The Current State at Musashi

I actually attended a meeting of the Company's Board of Directors and got the sense that exercising these functions is more complex than investors think. However, at Musashi I witnessed first hand the current state of lively discussions including constructive criticism between internal and external directors. Particularly in the areas of sustainability and ESG where my expertise lie, I found that the Board of Directors and top management place a high value on coordination.

For example, at a sustainability strategy meeting, there were multifaceted discussions going on about corporate sustainability and how to make business models more resilient, including debate regarding the expansion of existing and new businesses, the handling of outside requirements in terms of the environment and human resources, and discussions concerning the direction of internal initiatives. In addition, I saw a willingness from the executive side to make use of expert insight from outside directors, such as workshops on more advanced topics and active follow-up outside of meetings.

The company also places high hopes in its outside directors with regard to dialogue with investors, and myself and other outside directors have actually met with institutional investors from dozens of companies. It is at these meetings that we have exchanged opinions on how female professionals, sustainability experts and those with backgrounds at financial institutions can contribute to increasing the Company's value.

Culture of the Board of Directors

I think that the culture of the Board of Directors itself rather than compliance with specific procedures plays a big part in the highly productive discussions that unfold at its meetings. As the saying goes, "culture runs from the top," the culture in the Board of Directors arguably determines the culture of the company as a whole. Fortunately, a majority of Musashi's board are outside members with diversity in terms of gender, backgrounds and expertise. I feel this lends a psychological safety to the board. In other words, there is a foundation for action (corporate culture) where the supervisory and executive sides, working together, are not afraid to bring up topics for discussion, ask one another questions and make up for areas of inadequacy, all with the aim of achieving the "Go Far Beyond!" long-term vision with a sense of purpose. Going forward, I hope this culture spreads as an awareness company wide, encouraging people to take on challenges, facilitating support for one another on the way to success, and giving a boost of positive energy toward the development of new and existing businesses.

Issues in Sustainable Management

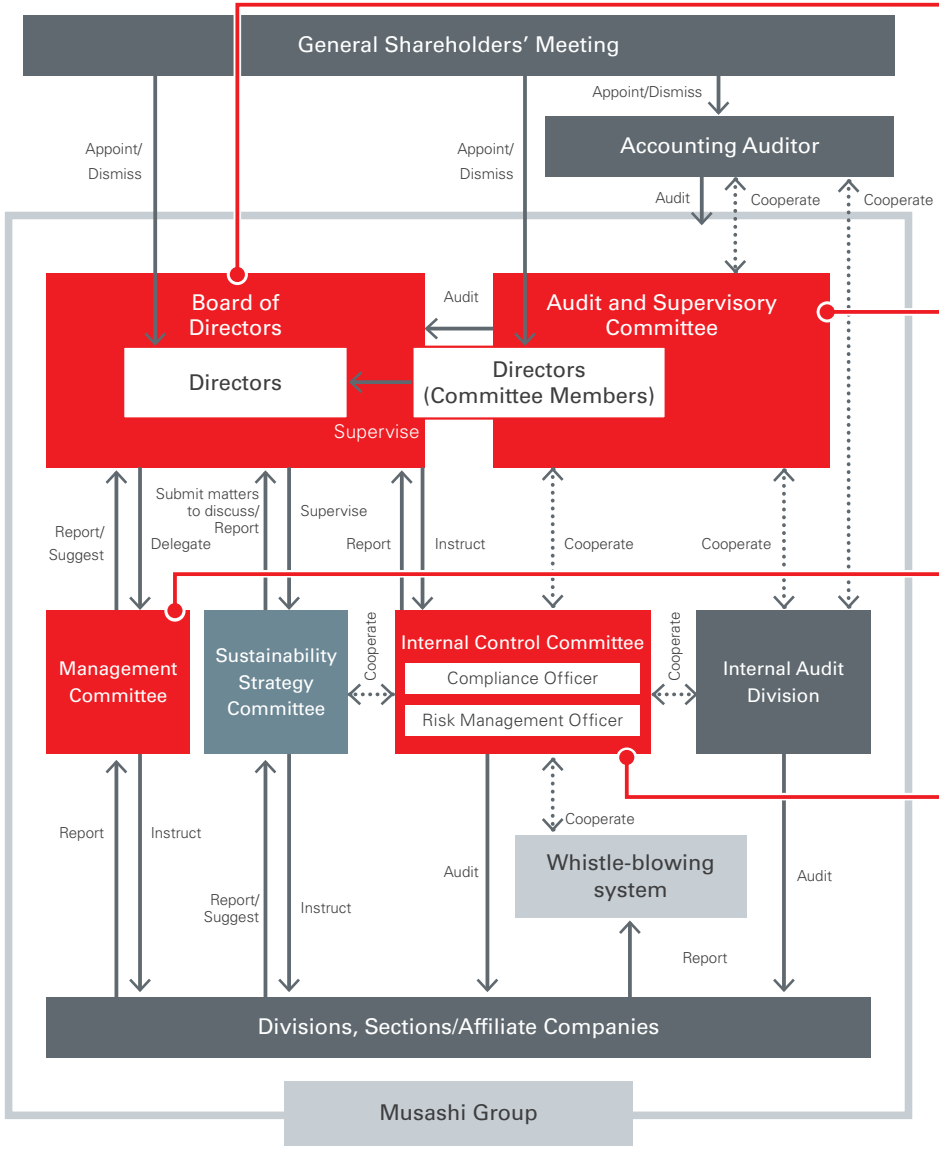
Overseas, ESG investment now faces headwinds with some treating the concept with criticism and skepticism. However, the principle that companies should create sustainable value in light of environmental, social and governance perspectives and respond to stakeholder (customers, employees, future generations, investors) expectations in multi-faceted ways remains unchanged. To the contrary, we are arguably in an era where companies are considering how they can have an even more positive impact on society.

The key to sustainable management at Musashi lies in the instilling of its purpose Groupwide, including global sites, and in how each individual and the company as a whole can transform to meet the current challenges surrounding the automotive industry. For example, the development of DX-minded human resources can only be achieved through a balance of management commitment, various measures and a change in employee awareness. And on the GX front, in addition to responding to external expectations, the company needs to cautiously verify operational efficiency and cost aspects while making use of the TCFD framework to give careful explanations. Additionally, on the visualization of results in new businesses, explaining the returns on invested capital and contributions to local communities, the Board of Directors recognizes the importance of supporting appropriate risk-taking, overseeing the appropriate allocation of the six forms of capital, and properly fulfilling its accountability requirements. As a member of the board, I am also committed to making use of my expertise while working diligently with a balanced sense of distance between the supervisory and execution sides of the business.

Outside Director
Emi Onozuka



Corporate Governance Chart





Chairperson
Yoshie Munakata

Board of Directors — Number of meetings held in FY2021 **8**

The Company's Board of Directors consists of 11 directors, and 3 of them serve concurrently as members of the Audit and Supervisory Committee. It is chaired by the outside director.

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, 7 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 FY2021. During these meetings the board deliberated over the formulation of business plans and the medium-term management plan.

From November 2022, an outside director replaced the President and CEO as chairperson.



Chairperson
Michi Miyasawa

Audit and Supervisory Committee — Number of meetings held in FY2021 **10**

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

Management Committee — Number of meetings held in FY2021 **51**

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.



Chairperson
Masaru Maeda

Internal Control Committee — Number of meetings held in FY2021 **9**

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.

Changes in corporate governance

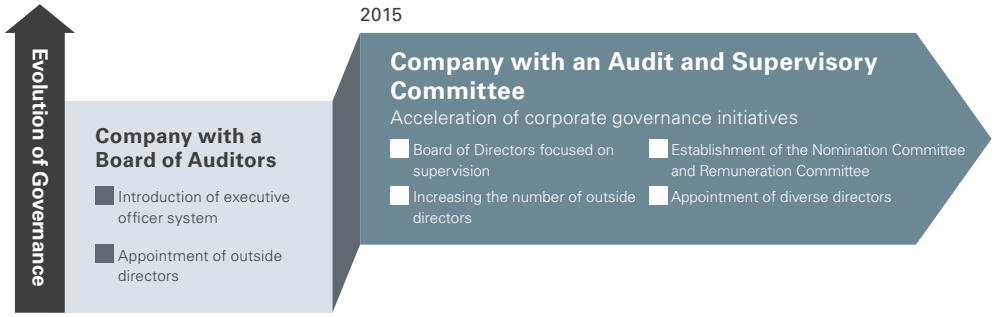
The Company has proactively enhanced its corporate governance, positioning it as a top management priority.

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.

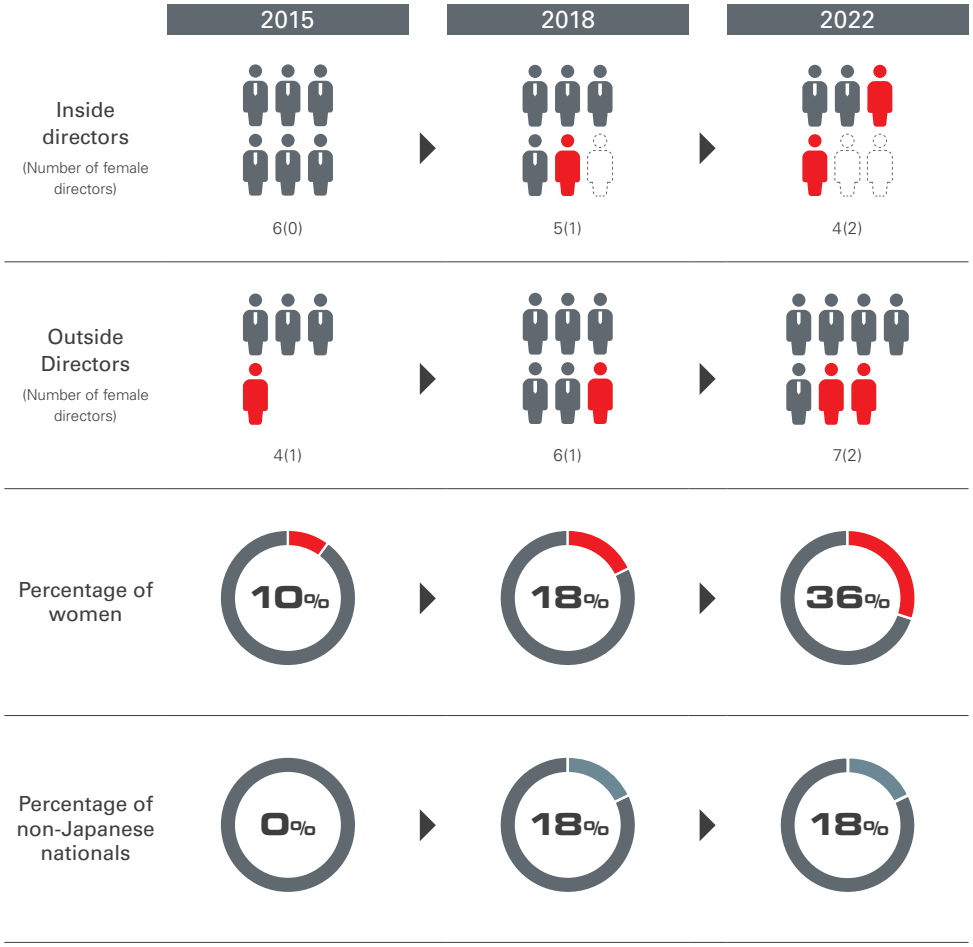
In 2015, the structure of a company with an Audit and Supervisory Committee was introduced as a new institutional design for companies. Judging that a company with an Audit and Supervisory Committee was an appropriate form for the corporate governance it aims to achieve, the Company transitioned to being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

In FY2021, each director answered a questionnaire in an environment that ensured anonymity. Acting on third-party recommendations, interviews were conducted based on the responses, and the results were analyzed. 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.

To improve the effectiveness of the Board of Directors, efforts are being made to verify the criteria used when making decisions on investment projects and monitor the results, to ensure the effectiveness of the Nomination and Remuneration committees, and to verify companywide risks from diverse perspectives.

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.

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.

Outside director Goro Kamino serves as chairperson of the committee. Its members are Hiroshi Otsuka, 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.

Outside director Keisuke Tomimatsu serves as chairperson of the committee. As with the Nomination Committee, its members are Hiroshi Otsuka, Goro Kamino, and Keisuke Tomimatsu, which means that 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. (Only in Japanese)

1 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.

2 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.

3 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 composition of the indicators used is as follows. Calculations are made based on coefficients determined by the Board of Directors. Non-monetary compensation is awarded as restricted stock compensation. As restricted stock compensation, in principle the Company grants monetary compensation claims in order to allot restricted stock to eligible directors based on their positions and responsibilities each fiscal year in accordance with a resolution of the Company's Board of Directors. By having the monetary compensation claims contributed in kind to the Company as investment assets, the Company's common stock shall be issued or disposed of, and held. The total amount of the Company's common stock issued or disposed of in this manner shall not exceed 200,000 shares per year.

Perspectives for evaluation	Reason for selection	Weighting	Evaluation items
Financial indicators	Linking to annual performance targets	20%	Net sales
		20%	Operating profit
		30%	EBITDA
Strategic indicators	Linking to medium-term strategic indicators, improved social value	10%	Net sales of new businesses
		10%	Percent of products for EVs
		10%	Achievement of ESG indicators

4 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.

5 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.

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. Domestically, we have adopted a business continuity plan that treats a large-scale earthquake as the greatest risk to business continuity. We operate a system that can quantitatively evaluate the level of countermeasures in relation to these details, and we periodically implement countermeasures to deal with issues that have become apparent, as well as training and drills. In addition, starting in FY2022 we defined "Risk 110 Items" in business continuity. We have begun operating a system that enables all sites including Group companies to evaluate issues based on the same criteria, in an effort to improve the identification of risks and our ability to respond to them.

Business continuity management system

BCP Committee
Chair: Risk Management Officer
(Overall plan promotion, Education/training. Sub-committee activity confirmation)

- **Sub-committee for Operation of Crisis Response Headquarter**
  (Action plan, Timeline, Set-up of evacuation sites)
- **Sub-committee for Production Recovery**
  (Production recovery plan, Checklist of production equipment)
- **Sub-committee for Supply Continuity**
  (Supply continuity plan, Critical part list, Important supplier list)
- **Each section**
  (Member list by section, Procedures for recovery of critical work)

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.

Cyber Security Measures

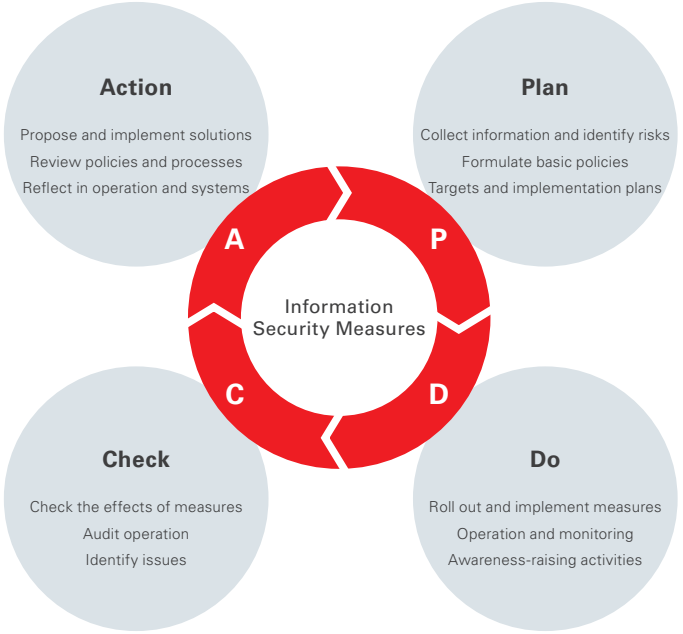
Initiatives to address cyber security also reflect the demands of society, and we believe they contribute not only to Musashi but to the development of society as a whole. Based on the ISO 27001 standard and JAMA/JAPIA guidelines, we have issued our own security guidelines and are working to enhance the level of cyber security countermeasures Groupwide while implementing efficient inspections.

People

We periodically conduct phishing email drills to raise the security awareness of employees. The information security awareness of each employee is vital to protecting information. We share the latest trends and case studies on security, and engage in awareness-raising activities to provide knowledge about security threats and recommend initial actions to be taken when a threat materializes.

Systems

We have installed a Security Operation Center (SOC) and built a monitoring system that operates around the clock. We have also developed multi-layered intrusion prevention and countermeasure systems, and are prepared to deal with information leaks such as social engineering and other forms of human error, as well as cyber attacks coming from outside the Group.



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 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.

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 are committed to developing an environment in which employees can demonstrate their individual qualities and take on a variety of new challenges.

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.

Internal reporting desk development status

Musashi has established the “Musashi Corporate Ethics Suggestion Desk” (colloquially referred to as the “Open Door”) as an internal reporting desk to accept proposals related to corporate ethics and compliance. We employ protections to safeguard the privacy of the people who have submitted proposals and to ensure they are not subjected to disadvantageous treatment for having done so, and we also field anonymous suggestions. There are three desks through which suggestions are fielded: the internal reporting desk, the Audit and Supervisory Committee Desk and outside legal consultation desk. These desks were set up in an effort to make it easier for employees to lodge suggestions and to improve the effectiveness of our response.

Open Door

Legal violations, improper conduct, harassment, etc.
Accepting compliance consultations
3 consultation desks

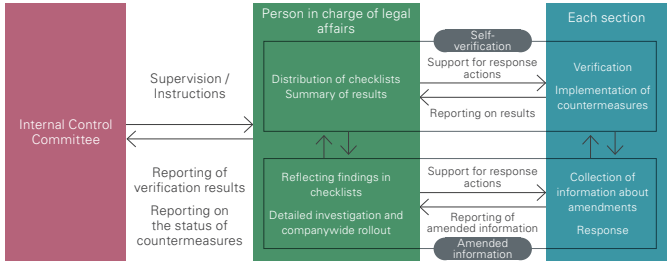
Open Door reception desk

1. **Musashi suggestion desk (internal reporting desk)**
2. **Musashi suggestion desk (Audit and Supervisory Committee desk)**
3. **Outside legal consultation desk**

Musashi Compliance Guidelines

1. We will act with decency and according to society’s expectations.
2. We will build positive relationships with our local communities and with wider society.
3. We will conduct fair and sound business transactions.
4. We will respect the human rights and diversity of every individual.
5. We will ensure high standards of health and safety, whilst keeping a well-ordered working environment.
6. We will treat the information held by the Company appropriately.

Compliance System Diagram





Intellectual property
In-house online training site

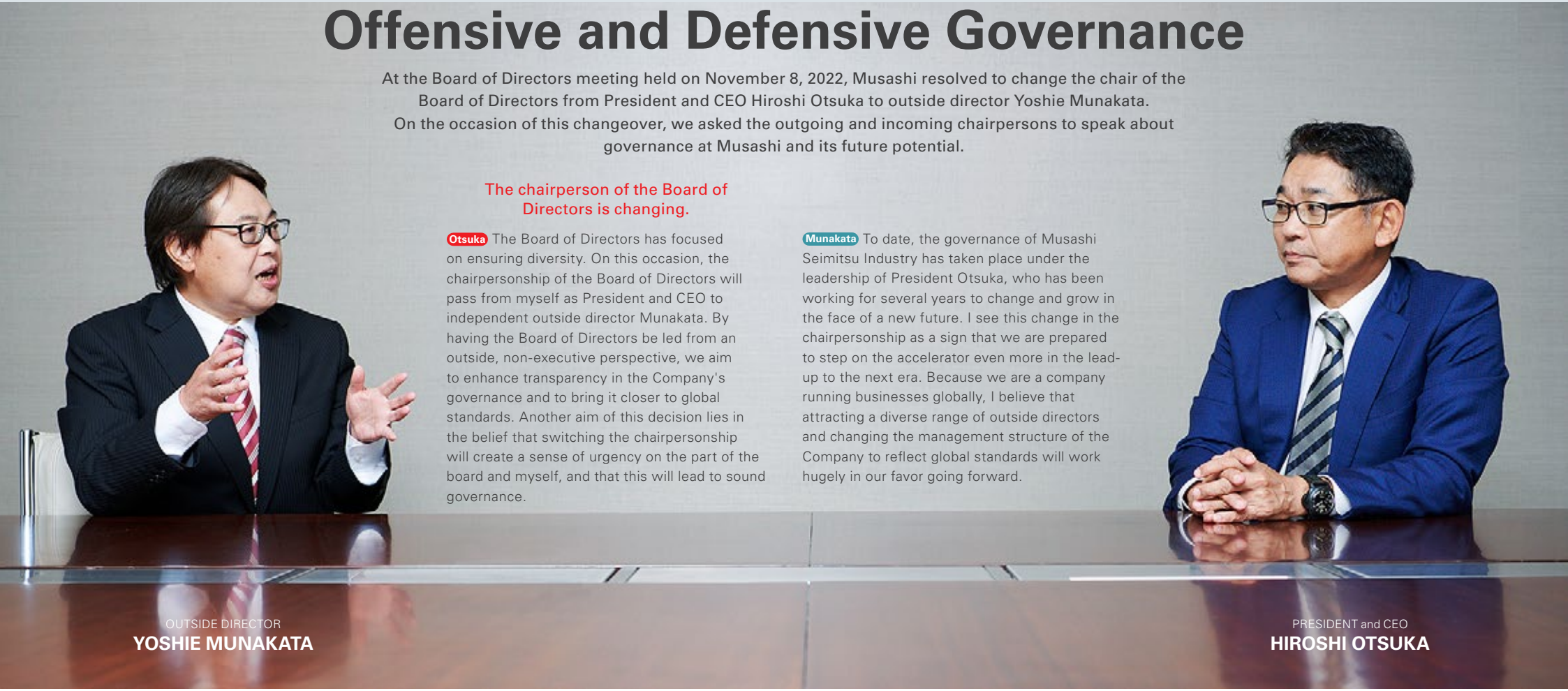


Internal compliance training materials

DIALOGUE WITH OUTSIDE DIRECTOR

Providing New Value to Society with Offensive and Defensive Governance

At the Board of Directors meeting held on November 8, 2022, Musashi resolved to change the chair of the Board of Directors from President and CEO Hiroshi Otsuka to outside director Yoshie Munakata. On the occasion of this changeover, we asked the outgoing and incoming chairpersons to speak about governance at Musashi and its future potential.



OUTSIDE DIRECTOR
YOSHIE MUNAKATA

PRESIDENT and CEO
HIROSHI OTSUKA

The chairperson of the Board of Directors is changing.

Otsuka The Board of Directors has focused on ensuring diversity. On this occasion, the chairpersonship of the Board of Directors will pass from myself as President and CEO to independent outside director Munakata. By having the Board of Directors be led from an outside, non-executive perspective, we aim to enhance transparency in the Company's governance and to bring it closer to global standards. Another aim of this decision lies in the belief that switching the chairpersonship will create a sense of urgency on the part of the board and myself, and that this will lead to sound governance.

Munakata To date, the governance of Musashi Seimitsu Industry has taken place under the leadership of President Otsuka, who has been working for several years to change and grow in the face of a new future. I see this change in the chairpersonship as a sign that we are prepared to step on the accelerator even more in the lead-up to the next era. Because we are a company running businesses globally, I believe that attracting a diverse range of outside directors and changing the management structure of the Company to reflect global standards will work hugely in our favor going forward.

How discussions are held by the Board of Directors?

Munakata Debate during Board of Directors meetings takes place between outside directors with high-level expertise and internal directors deeply familiar with our business operations, and each member brings their respective insight to discussions. The knowledge of outside directors with highly specialized backgrounds is incorporated throughout, and they bring fresh perspectives not present inside the company, and also provide partner networks for new business opportunities. We also conduct training sessions and workshops to install the knowledge of our outside directors internally, so that the knowledge of outside directors in new fields such as ESG can be spread in-house. Even in these activities, I feel we are reaping the benefits of having an extremely diverse board of directors.

Otsuka I was impressed by the discussions that took place in the process of formulating the Musashi 100th Year Vision. I think it is an excellent example of diversity on display. I think there was even a times when Mr. Munakata turned the table on everything when it was almost complete. The project to formulate the vision was made up of junior members and I think it was also a stimulating experience.

Munakata Employees were extremely enthusiastic in working on the task, but there was nothing novel about their output. We wanted the new vision to encapsulate a message that our colleagues around the world could take part in with excitement, but what we had was pedestrian, as if it was written in a textbook. I think it spoke out to communicate that it is important to put in our thoughts from the bottom of our hearts, as there are no right answers for the future.

What are outside directors at Musashi?

Otsuka My hope is that outside directors possess different perspectives and values from ourselves. If you consider that the automotive industry is in the midst of a major upheaval and that we have to aim toward a new future, we want people who have perspectives that we do not to proactively demonstrate that insight.

Even outside the operations of Board of Directors, Mr. Munakata is providing training related to business creation, Ms. Onozuka is serving as an instructor for in-house workshops, Mr. Tomimatsu is speaking with investors, and Mr. Nair is introducing us to many people in the United States. In fact each of our current outside directors are contributing to the value of the company. This is our greatest hope for outside directors.





Munakata My previous job was at a supplier. At the time, I went through the experience that by innovating the way we do things, we could create opportunities to go from being a supplier to becoming a business partner in the truest sense. Similarly at Musashi Seimitsu Industry, there is the potential to become a top global company as new forms of business emerge, by changing our perspective and broadening our field of view. For that reason, I am taking part based on the belief that my value lies in bringing in perspectives and experience that differ from the standards and conventional thinking of the automotive industry.

How do you feel about change at Musashi?

Munakata The Musashi Seimitsu Industry of today is continually changing, and I get a strong sense of the will to launch new business fields, and the hopes and passion of employees in the field and management to make that a reality. However, I think there is more room for improvement in terms of speed. By having a diverse range of outside directors such as ourselves make decisions at an early stage, I hope that we can help the entire company take these new businesses.

Otsuka What I see as a challenge is that we must develop diversity on the executive side just as top management has done in the Board of Directors. Our current management team is made up of people well versed in the automotive industry, but I feel we need some diversity that does not rely on past experience in that area. There are two ways to change that. One is to bring in human resources from the outside. Another is to change the awareness and conventional thinking among our internal human resources. In that sense, I think it will be important for our outside directors to inspire people internally and change their mindsets from within.

How will the Board of Directors change?

Otsuka There will be no changes in their purpose, at both the internal and outside directors and the executive side. The aim is to increase the value of the company. And to benefit the world. One of the big roles of the Board of Directors is "oversight," but in addition to that, we need to increase the number of people who bring diverse and new perspectives and values in order to increase corporate value. This is not only about the relationship between the oversight and executive functions, nor is it a one-way street where we only receive new perspectives and insight from outside directors; we want to create a two-way street in which we can also surprise and spark the curiosity of the outside directors in the future.

Munakata I think there are three elements that should be changed.

The first is that in "oversight," there are two aspects to governance, offense and defense. The defense part has to do with how we can minimize the risks of new fields and challenges. With a diversity of insight, we will be able to see the risks from various perspectives. In terms of offense, this is about how we will advance the evolution of existing businesses. I think it is important to engage in governance with a good mix of these defensive and offensive approaches.

The second element is progress on disclosure. We need to verbalize and communicate to the outside world where our value lies and what assets we possess. I think it would be good training to summarize information in the Board of Directors and put it into words, so I think we should do it. If we can do this, it will empower employees to work autonomously.

From the outset, if we cannot express our company in words, we cannot disseminate information about it, so I think every company officer should be able to engage with investors in IR settings and talk about the values of Musashi.

The third element is what I see as a need to select themes and organize issues for discussion to improve the effectiveness of the Board of Directors. If the points of discussion for each agenda item are clear, it is easy for members to share their knowledge and we can engage in discussions effectively and within a short time.

Based on these three points, I hope to contribute to the corporate value of Musashi Seimitsu Industry with a sense of speed.

Otsuka I think it is very important to decide on the themes and issues before engaging in discussion. By increasing those kinds of opportunities, I think we can enhance the value of the Board of Directors.

Munakata Ideally, decision making would be an extension of that process.

Otsuka And the outside directors taking part in those discussions must have values. Values that make them excited about coming over to Musashi, for instance. Under that kind of relationship, I think that the good initiatives underway at Musashi will be communicated to other companies through our outside directors, and ultimately that will create value for society. Perhaps that is the future vision for the Board of Directors.

How will you address the demands from society?

Otsuka That is all expressed in our philosophy and vision. We provide value to society through technology-driven innovation. We would like to make the company more open from a governance perspective.

To make it more open, we need to increase the level of transparency and be recognized by the world. I think communication that puts investors at ease is important.

That means clarifying our technological strengths and strategies and in doing so creating value that is beneficial to society. That is something we want to pursue while engaging in dialogue with the world. The aim of this change of chairpersonship is not to test some internal theory, but to give Musashi as a global organization a healthy sense of urgency and drive its evolution. We hope to publicize the value created from that move to the world.

Munakata Many companies tend to respond to the demands of society in tokenistic ways. As I think Musashi has ventured into this structural reform with the aim of utilizing the knowledge of diverse members of the board and becoming a truly global company, I feel both a sense of responsibility and also honor. With that in mind, I will do the best of which I am capable.



Key Questions and Answers in Dialogue with Stakeholders

Q Competitive advantage and position in the industry

A

The source of our competitive advantage is in our integrated production system that includes product development. We fabricate forging dies and machining tools in-house, and coordinate those efforts with design departments to supply customers with products as solutions to each of their issues.

In addition, by maintaining a production infrastructure at 35 sites in 14 countries around the world, we have built systems to assure quality in close proximity to customers. As a result, one of our strengths is that we boast a solid customer base that is well balanced globally.

As a dedicated manufacturer of gears and chassis components, we are responding to the new needs of the EV era.

>P.6 **Learn about our value creation process**

Q Initiatives for new businesses

A

In 2021, we formulated the Musashi 100th Year Vision - "Go Far Beyond! Break barriers and go on adventures!"- as our new slogan toward 2038, when we will celebrate our 100th anniversary.

To achieve further business growth by breaking through the boundaries of the automotive industry in a time of great change, we are actively working to create new businesses and enrich the global society with technology and innovation. We are currently aiming to help solve social issues through new businesses in the four key areas of mobility, energy, industry and well-being.

>P.20 **Learn about our new businesses**

Q Sustainability initiatives

A

We have set Our Purpose with the mission of contributing to sustainable growth and the realization of a sustainable society through our business activities, and we have declared the Musashi 100th Year Vision as the slogan for achieving this.

In business development, we identify key issues facing Musashi based on expectations, demands and social issues recognized through dialogue with stakeholders, and through Our Purpose - the mission we undertake to achieve our vision. Helping to solve social issues through our business activities is our approach to sustainability.

>P.25 **Learn about Musashi's sustainability efforts**

Q Electrification of the automotive industry

A

We see the electrification of vehicles as a major opportunity for Musashi. To take advantage of the shift to EVs for further growth, in our business segments of PT, L&S and motorcycles we are pursuing the development of high value-added products designed for EVs, and this has led to new orders.

Products designed for EVs have to clear more stringent requirements in terms of compact size, reduced weight, higher strength and quietness. We aim to further refine the knowledge of gear design and manufacturing that we have developed over many years to become a key device supplier playing a major part in the EV era.

>P.17 **Learn about our priority measures**
>P.21 **Learn about the new phase in the EV era**

Q CVC and investment

A

In the four domains of mobility, energy, industry and well-being, we are pursuing open innovation including investment through corporate venture capital (CVC) aimed at startups that possess innovative technologies and venture capitals with networks in cutting-edge technologies.

When making investment decisions, we place an emphasis on maximizing the synergistic effects with Musashi's technologies and strategies, and after considering the social significance and other factors we should aim for as a result, select partners and roll out joint ventures aimed at achieving those outcomes.

>P.19 **Learn about our CVC initiatives**

Q Dividend policy and the use of retained earnings

A

The Company recognizes shareholder return as one of its key management issues. Our basic policy is to continue to pay stable dividends commensurate with business performance while making every effort to ensure a sound financial position. Retained earnings are allocated to repayment of debt to improve our financial position, the expansion of production facilities and future R&D activities, all part of efforts to expand our business.

>P.16 **Please refer to the message from the CFO**

11-Year Financial and Non-Financial Data Summary

(Millions of yen)			(FY)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Financial data	Net sales			125,205	125,993	148,820	158,209	164,397	180,522	237,910	255,934	236,355	204,714	241,896
	Revenue	Total		125,205	125,993	148,820	158,209	164,397	180,522	237,910	255,934	236,355	204,714	241,896
	By region	Japan		35,465	35,353	35,421	31,156	27,717	27,221	28,778	33,699	35,316	32,543	34,277
		Americas		40,881	40,472	45,322	49,662	56,261	49,251	52,111	55,922	55,924	45,296	51,352
		Asia		42,166	45,016	62,771	71,333	73,772	69,779	63,703	64,955	61,678	44,262	56,322
		China		–	–	–	–	–	–	20,652	23,597	22,003	29,987	33,160
		Europe		6,690	5,150	5,305	6,055	6,645	34,269	72,665	77,759	61,433	52,624	66,783
	By customer	HONDA		–	–	–	–	–	–	125,858	128,525	122,905	105,355	120,244
		Global Customer		–	–	–	–	–	–	112,052	127,409	113,450	99,359	121,651
	Operating profit			10,377	938	8,567	11,588	13,398	11,166	15,767	14,107	7,285	7,507	8,413
	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	5,429
	Return on equity (ROE)			9.52	5.14	12.03	9.57	9.81	9.10	13.40	11.33	–	9.42	5.85
	Capital investment			18,182	22,907	24,314	16,324	9,295	13,303	12,792	16,276	17,368	12,469	19,273
	Depreciation			9,411	11,688	12,779	12,021	13,291	14,779	18,564	18,178	17,742	15,941	16,686
	R&D cost			1,539	1,481	1,563	1,880	2,373	2,910	3,489	3,587	4,369	4,353	5,439
	Cash dividends paid			1,060	1,247	1,372	1,497	1,559	1,622	2,060	2,695	2,053	2,284	2,935
	Net income per share (yen)*1			142.08	81.09	218.86	204.51	218.29	202.47	331.69	155.55	(105.95)	113.14	(83.20)
	Dividend per share (yen)			34.0	40.0	44.0	48.0	50.0	52.0	66.0	42.0	31.5	35.0	45.0
	Dividend payout ratio			23.9	68.1	20.1	23.5	22.9	25.7	20.0	27.0	–	30.9	54.1
	Total payout ratio			23.9	68.1	20.1	23.5	22.9	25.7	20.0	27.0	–	30.9	54.1
	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	1,512
	Dividend yield			1.7	1.9	2.1	1.9	2.2	1.8	1.8	2.8	3.8	1.9	3.0
	Price earnings ratio (PER)			13.88	25.84	9.71	12.43	10.23	14.06	10.84	9.64	–	16.70	18.17
	Price book-value ratio (PBR)			1.33	1.25	1.08	1.10	1.04	1.24	1.35	1.07	0.76	1.45	0.98
	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	5,805
	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)	(20,131)
	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	(14,326)
	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	100,587
	Total assets			110,448	133,441	155,162	169,539	155,152	248,482	247,778	244,450	207,333	226,066	259,960
	Ratio of equity attributable to owners of parent			41.95	39.09	39.53	42.49	43.07	28.81	33.52	37.43	34.45	37.66	38.69

11-Year Financial and Non-Financial Data Summary

(Millions of yen) (FY)		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Non-financial data	CO_2 emissions (t)	25,689	27,184	25,955	21,645	19,947	27,011	27,353	403,530*3	376,348*3	328,602*3	345,693*3
	CO_2 emissions per unit (CO_2 tons/million yen)*2	–	–	–	–	–	–	–	1.58*3	1.59*3	1.61*3	1.43*3
	Renewable energy ratio (electric power) (%)	–	–	–	–	–	–	–	0.7%*3	2.0%*3	2.5%*3	2.6%*3
	Water consumption (m^3)	82,373	90,475	89,960	94,340	91,410	98,313	102,764	1,585,470*4	1,912,981*3	1,939,067*3	1,766,488*3
	Water consumption per unit (m^3/million yen)	–	–	–	–	–	–	–	6.19*4	8.09*4	9.47*4	7.30*4
	Waste emissions (tons)	1,822	1,854	1,821	1,506	1,329	1,480	1,539	111,041*4	107,967*4	105,286*4	107,095*3
	Recycling rate (%)	–	–	–	–	–	–	–	80%	80%	81%	79%
	Number of employees	10,516	11,002	12,634	13,375	12,427	15,351	16,385	16,839	16,114	15,120	15,807
	Number of overseas employees	8,294	8,938	10,534	11,397	10,556	13,357	14,341	14,692	13,946	12,912	13,650
	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	1,227
	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%	7.87%
	Number of women in management positions (non-consolidated)	1	2	2	2	2	2	2	3	2	2	3
	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%	1.99%
	Percentage of heads of overseas bases who are local employees	7%	6%	6%	6%	11%	16%	16%	44%	53%	47%	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 90%.

Consolidated Balance Sheet

(Millions of yen)

Assets	Previous fiscal year. March 31, 2021	Fiscal year under review. March 31, 2022
Current assets		
Cash and deposits	24,143	27,554
Notes and accounts receivable - trade	33,776	39,188
Merchandise and finished goods	8,309	11,159
Work in process	8,077	9,308
Raw materials and supplies	21,417	26,477
Other	6,430	8,574
Allowance for doubtful accounts	(102)	(83)
Total current assets	102,053	122,180
Non-current assets		
Property, plant and equipment		
Buildings and structures	47,213	51,636
Accumulated depreciation	(24,197)	(27,388)
Accumulated impairment loss	(293)	(382)
Buildings and structures, net	22,722	23,864
Machinery, equipment and vehicles	223,359	251,601
Accumulated depreciation	(168,586)	(192,256)
Accumulated impairment loss	(527)	(753)
Machinery, equipment and vehicles, net	54,245	58,590
Tools, furniture and fixtures	13,057	14,566
Accumulated depreciation	(9,315)	(10,951)
Accumulated impairment loss	(15)	(20)
Tools, furniture and fixtures, net	3,726	3,594
Land	7,488	7,735
Construction in progress	14,065	17,912
Total property, plant and equipment	102,249	111,699
Intangible assets		
Goodwill	694	416
Customer relationship assets	2,807	2,543
Software	1,318	1,428
Software in progress	36	7
Other	1,559	1,130
Total intangible assets	6,416	5,525
Investments and other assets		
Investment securities	9,749	12,583
Investments in capital	777	997
Long-term loans receivable	65	224
Deferred tax assets	2,243	2,782
Other	2,556	4,023
Allowance for doubtful accounts	(43)	(56)
Total investments and other assets	15,348	20,556
Total non-current assets	124,013	137,780
Total assets	226,066	259,960

(Millions of yen)

Liabilities	Previous fiscal year. March 31, 2021	Fiscal year under review. March 31, 2022
Current liabilities		
Notes and accounts payable - trade	17,843	18,508
Short-term borrowings	38,932	42,380
Current portion of long-term borrowings	11,410	12,287
Accounts payable - other	3,967	3,738
Accrued expenses	7,614	6,257
Income taxes payable	1,954	1,393
Provision for bonuses	2,054	2,267
Provision for bonuses for directors (and other officers)	23	20
Provision for product compensations	235	212
Other	5,826	5,760
Total current liabilities	89,862	92,827
Non-current liabilities		
Long-term borrowings	27,151	41,914
Deferred tax liabilities	2,653	3,785
Retirement benefit liability	6,695	6,152
Other	3,788	3,010
Total non-current liabilities	40,289	54,863
Total liabilities	130,152	147,690

(Millions of yen)

Net assets	Previous fiscal year. March 31, 2021	Fiscal year under review. March 31, 2022
Shareholders' equity		
Share capital	5,394	5,427
Capital surplus	3,093	3,126
Retained earnings	85,992	87,724
Treasury shares	(8)	(8)
Total shareholders' equity	94,472	96,270
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	2,605	3,878
Foreign currency translation adjustments	(11,581)	215
Remeasurements of defined benefit plans	(354)	223
Total accumulated other comprehensive income	(9,330)	4,317
Non-controlling interests	10,773	11,681
Total net assets	95,914	112,269
Total liabilities and net assets	226,066	259,960

Consolidated Statements of Income and Comprehensive Income

(Millions of yen)

	Previous fiscal year. From April 1, 2020 to March 31 2021	Fiscal year under review. From April 1, 2021 to March 31 2022
Net sales	204,714	241,896
Cost of sales	175,035	209,861
Gross profit	29,679	32,034
Selling, general and administrative expenses	22,171	23,621
Operating profit	7,507	8,413
Non-operating income		
Interest income	229	346
Dividend income	150	194
Foreign exchange gains	499	1,061
Subsidy income	427	67
Other	362	362
Total non-operating income	1,669	2,032
Non-operating expenses		
Interest expenses	543	648
Foreign exchange losses	79	107
Loss on valuation of investment securities	–	37
Other	276	217
Total non-operating expenses	899	1,010
Ordinary profit	8,277	9,435

(Millions of yen)

	Previous fiscal year. From April 1, 2020 to March 31 2021	Fiscal year under review. From April 1, 2021 to March 31 2022
Extraordinary income		
Gain on sales of non-current assets	130	47
Gain on bargain purchase	877	–
Gain on reversal of liabilities	557	–
Insurance claim income	45	–
Total extraordinary income	1,610	47
Extraordinary losses		
Loss on sales of non-current assets	7	17
Loss on retirement of non-current assets	136	371
Impairment losses	–	273
Loss on litigation	–	108
Total extraordinary losses	144	770
Profit (loss) before income taxes	9,744	8,712
Income taxes - current	3,098	3,910
Income taxes - deferred	(665)	(774)
Total income taxes	2,433	3,136
Profit (loss)	7,310	5,576
Profit (loss) attributable to non-controlling interests	(67)	147
Profit (loss) attributable to owners of parent	7,378	5,429

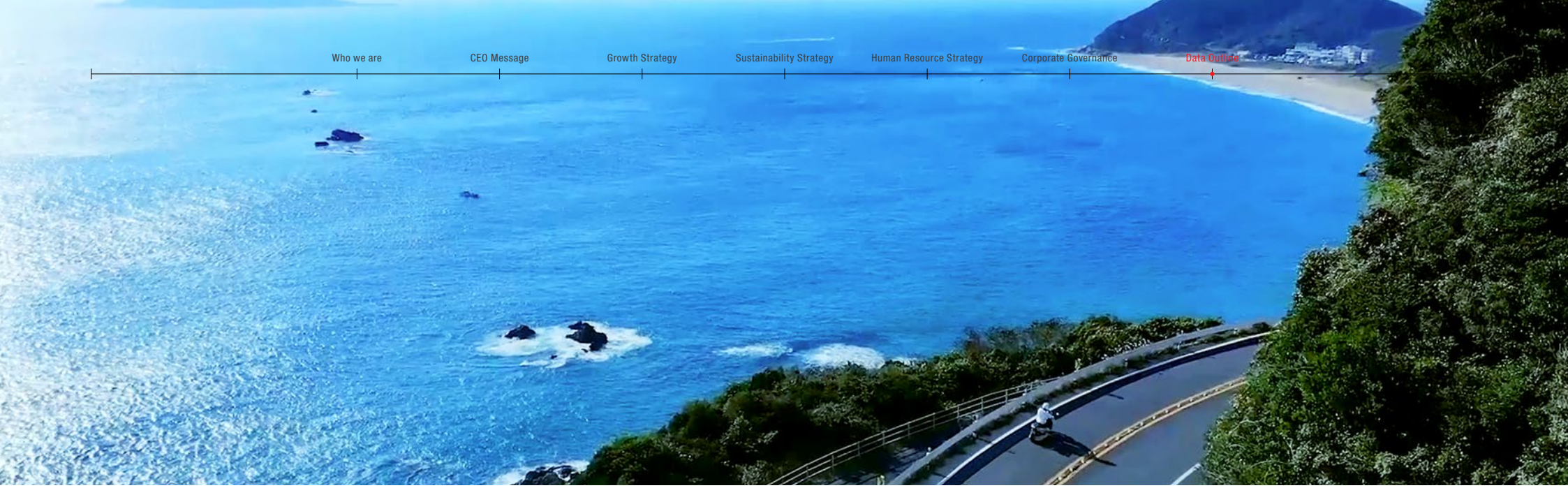
Consolidated Statements of Cash Flow

(Millions of yen)

	Previous fiscal year. From April 1, 2020 to March 31 2021	Fiscal year under review. From April 1, 2021 to March 31 2022
Cash flow from operating activities		
Profit (loss) before income taxes	9,744	**8,712**
Depreciation	15,941	**16,686**
Impairment losses	–	**108**
Amortization of goodwill	278	**278**
Gain on reversal of liabilities	(557)	–
Gain on bargain purchase	(877)	–
Share of loss (profit) of entities accounted for using equity method	–	37
Increase (decrease) in allowance for doubtful accounts	18	**(13)**
Increase (decrease) in provision for bonuses	(256)	**122**
Increase (decrease) in provision for bonuses for directors (and other officers)	(19)	**(3)**
Increase (decrease) in provision for product compensations	(942)	**(30)**
Increase (decrease) in retirement benefit liability	(827)	**111**
Interest and dividends income	(380)	**(541)**
Interest expenses	543	**648**
Foreign exchange losses (gains)	(939)	**(2,697)**
Loss (gain) on sale and retirement of property, plant and equipment	13	**340**
Insurance claim income	(45)	–
Loss (gain) on valuation of investment securities	79	381
Decrease (increase) in trade receivables	(6,035)	**(2,294)**
Decrease (increase) in inventories	(871)	**(5,849)**
Increase (decrease) in trade payables	857	**(1,138)**
Other	5,308	**(4,198)**
Subtotal	21,034	**10,658**
Interest and dividends received	385	**535**
Interest paid	(535)	**(644)**
Income taxes paid	(2,669)	**(4,742)**
Proceeds from insurance income	45	–
Cash flows from operating activities	18,259	5,805

(Millions of yen)

	Previous fiscal year. From April 1, 2020 to March 31 2021	Fiscal year under review. From April 1, 2021 to March 31 2022
Cash flows from investing activities		
Purchase of property, plant and equipment	(12,524)	**(16,811)**
Proceeds from sales of property, plant and equipment	702	**280**
Purchase of intangible assets	(321)	**(982)**
Purchase of investment securities	(639)	**(1,705)**
Loan advances	(724)	**(1,213)**
Collection of loans receivable	125	**496**
Purchase of shares of subsidiaries	(5)	–
Proceeds from purchase of shares of subsidiaries resulting in change in scope of consolidation	1,176	–
Other	12	**(195)**
Cash flows from investing activities	(12,198)	**(20,131)**
Cash flows from financing activities		
Net increase (decrease) in short-term borrowings	6,397	**1,632**
Proceeds from long-term borrowings	10,039	**26,107**
Repayments of long-term borrowings	(19,523)	**(9,401)**
Purchase of treasury shares	(0)	**(0)**
Dividends paid	(1,010)	**(2,936)**
Dividends paid to non-controlling interests	(335)	**(255)**
Proceeds from purchase of shares of subsidiaries without change in scope of consolidation	(2,122)	–
Other	(329)	**(388)**
Cash flows from financing activities	(6,886)	**14,758**
Effect of exchange rate changes on cash and cash equivalents	**2,469**	**2,972**
Net increase (decrease) in cash and cash equivalents	**1,644**	**3,405**
Cash and cash equivalents at beginning of period	**23,246**	**24,891**
Increase (decrease) in cash and cash equivalents resulting from change in closing dates of consolidated subsidiaries	–	**29**
Cash and cash equivalents at end of period	**24,891**	**28,325**



An electric scooter equipped with a Musashi EV drive unit speeding around Cape Irago on the Atsumi Peninsula

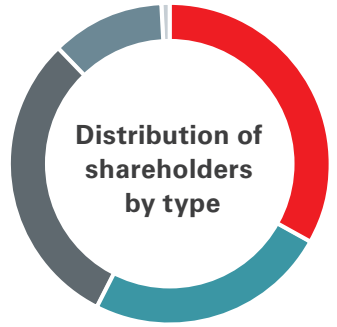
Company Outline As of September 30, 2022

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)	16,412	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	65,333 thousand shares	Trading unit	100 shares
Number of shareholders	5,100		

Status of shares As of September 30, 2022

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)	11,022	16.8
Custody Bank of Japan, Ltd. (trust account)	3,384	5.1
Joint Stock Company Otsuka Holdings	2,603	3.9
JPMorgan Chase & Co.	1,986	3.0
Hiroshi Otsuka	1,507	2.3
The Bank of New York Mellon 140044	1,460	2.2
J.P. Morgan Bank Luxembourg S.A. 381572	1,182	1.8
Northern Trust AVFC Mondrian Small Cap Equity Fund	1,159	1.7
Juniper	1,100	1.6



- Japanese corporations 33.2%
- Financial institutions 24.3%
- Foreign corporations and others 30.4%
- Individuals and others 11.4%
- Financial instruments business operators 0.6%