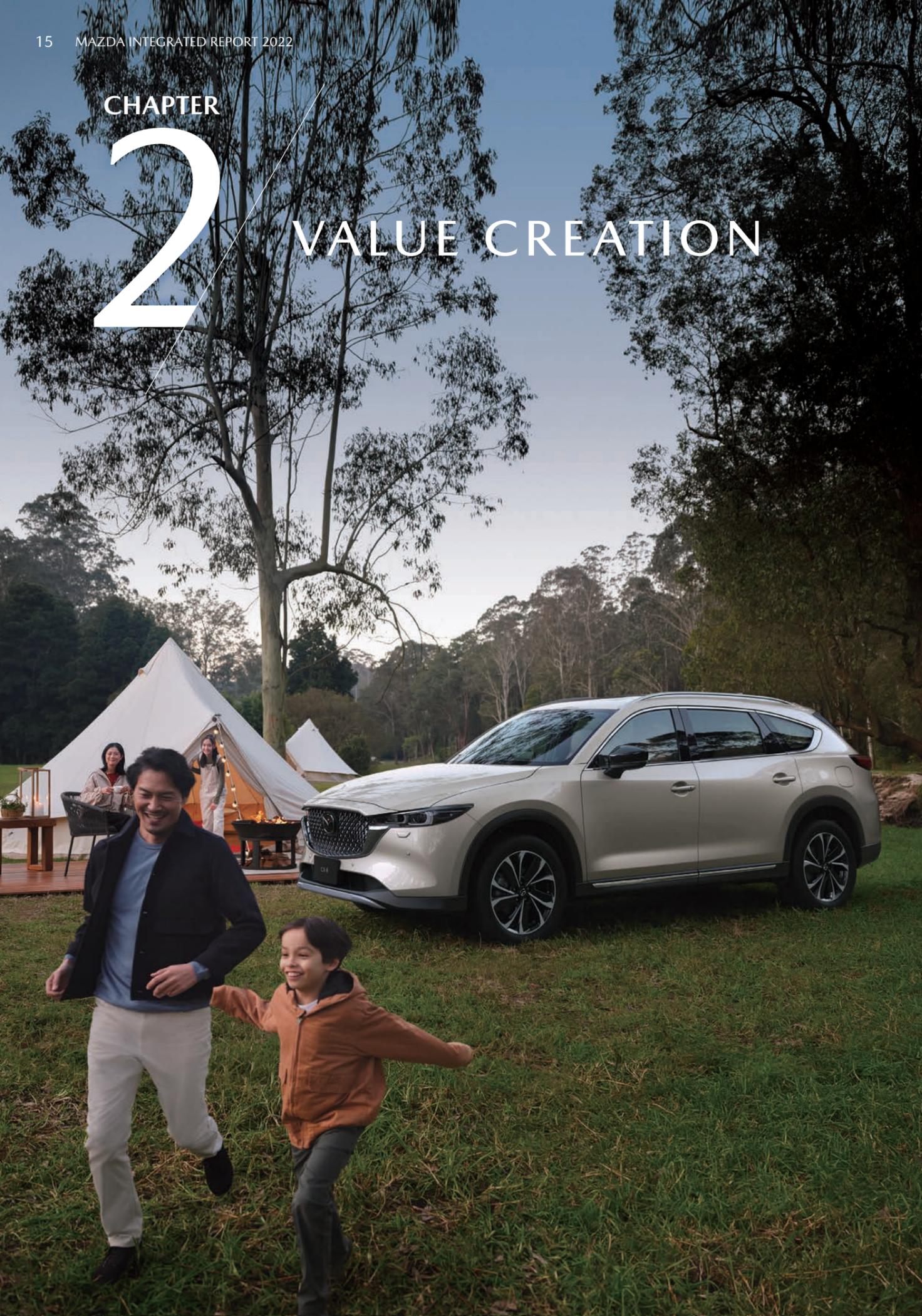


CHAPTER

2

VALUE CREATION



Value Creation

While adhering to its core values and understanding structural changes (megatrends) in the external environment, Mazda will Uplift and Energize People, Bringing More Enjoyment to Everyday Life through business activities that Create Moving Experiences.

■ Structural changes (megatrends) in the external environment and Mazda's insights

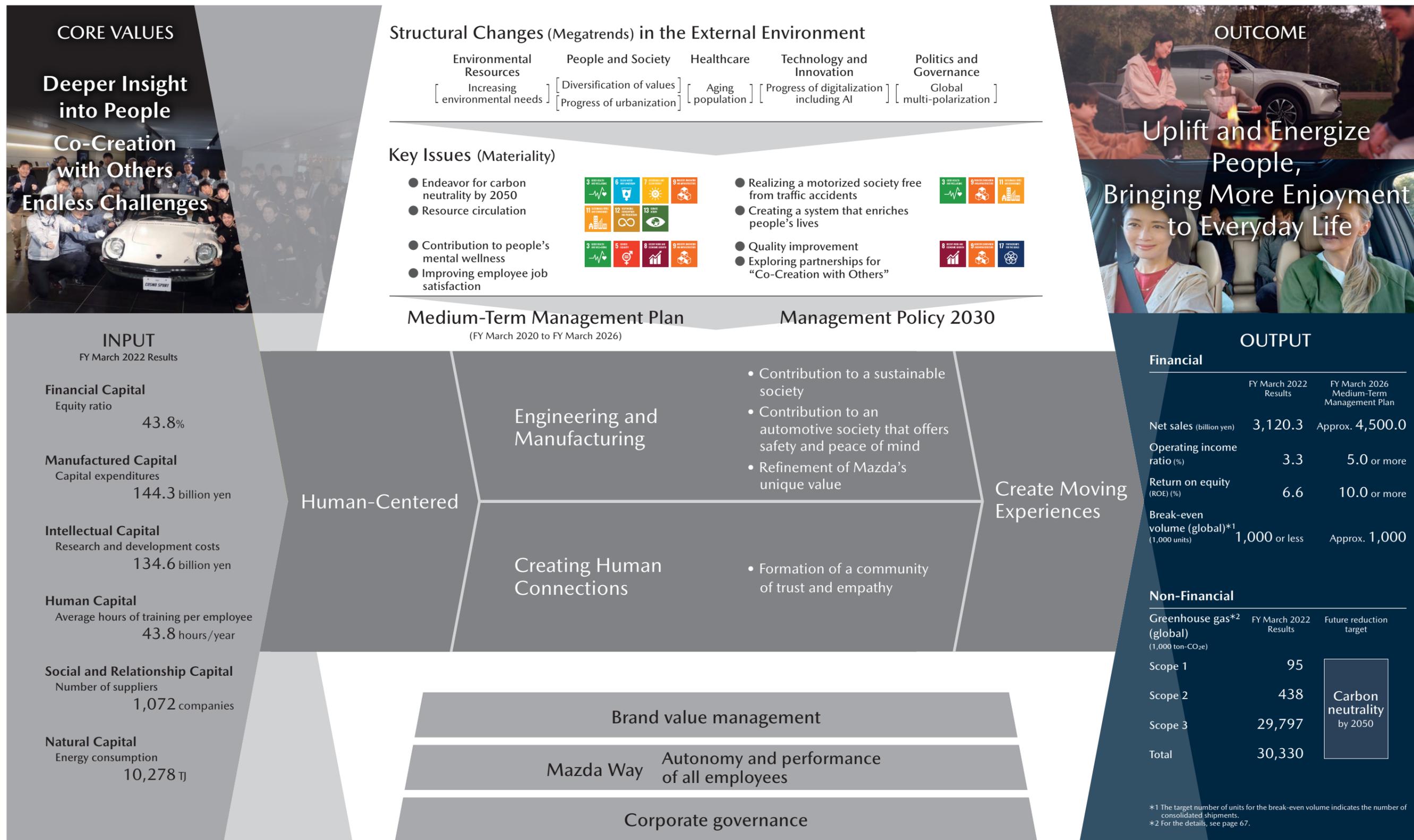
- Increasing environmental needs, including the protection of water and other natural resources and ecosystems, in addition to CO₂ reduction
- Tight supply and demand of rare earths
- Population aging and age gaps between continents
- Climate migration and uneven distribution of population due to climate change



CONTENTS

- 17 Value Creation Process
- 19 What Is Important for Value Creation
- 21 Medium-Term Management Plan
- 29 Interview with an Executive Officer | Research and Development Strategy and Sustainability
- 33 Interview with an Executive Officer | Mazda's Commitment to Carbon Neutrality
- 37 Financial Highlights
- 39 Eleven-Year Summary of Consolidated Financial Statements

Value Creation Process



*1 The target number of units for the break-even volume indicates the number of consolidated shipments.
*2 For the details, see page 67.



What Is Important for Value Creation



Products and services that Mazda delivers to its customers will continue to change with the times. However, there is no change in its policy of Creating Moving Experiences that Uplift and Energize People, Bringing More Enjoyment to Everyday Life through its products and services. With this policy in mind, the Company will promote Engineering and Manufacturing and Creating Human Connections based on its Human-Centered philosophy.

01 Human-Centered

No matter how much IT progresses, it is people that create value and make continuous improvements. Mazda believes that the Company can boast a history of more than 100 years due to personal relationships based on mutual understanding and trust with its customers, suppliers, dealers, and other business partners as well as its employees.

Based on this belief, the Company upholds Deeper Insight into People and Co-Creation with Others as core values. In a broad sense, the Company considers that its partners are a wide range of people, from its business partners to employees.

Thus, under the Human-Centered philosophy, the Company believes that it is important to take an interest in people, believe in their abilities and capabilities, and bring out their full potential.

- For its customers, the Company will be committed to research to provide products that energize customers by allowing them to operate their vehicles like extensions of their bodies. The

Company will also address the interests of customers to gain a deeper insight into them, thereby creating value through developing products and technologies and providing services so that they can Uplift and Energize People, Bringing More Enjoyment to Everyday Life.

- For its business partners, there is a limit to what the Company can do on its own. Accordingly, the Company will have work together with business partners to formulate common objectives, goals, and specific activities on a win-win basis, and implement them through co-creation.
- For its employees, the Company wants them to grow themselves while deepening mutual understanding and building relationships of trust with their co-workers. To this end, the Company is working to create an open atmosphere in workplace that allows for an honest dialogue through labor and management cooperation. Thus, the Company supports autonomy and performance of all employees.



02 Engineering and Manufacturing

Joy of Driving refers to the value of being able to (pleasantly drive their vehicles at their will without feeling concerns) drive a vehicle comfortably, safely, and with peace of mind as desired and of enabling both the driver and passengers to enjoy the experience of traveling. Through Engineering and Manufacturing, Mazda is working to refine the value of Joy of Driving, which creates moving experience.

- To make the best vehicle in the world, the Company has gone back to the basics of vehicles and has started **Skyactiv Technology** from scratch. This technology includes a series of engines, transmissions, vehicle platforms, Skyactiv-Vehicle Architecture as vehicle structural technologies, and Skyactiv-Vehicle Dynamics, as new-generation vehicle motion control technologies. These technologies achieve both Joy of Driving and excellent environmental and safety performance. The Company will continue to evolve them.
- **Mazda Proactive Safety** is the Company's safety philosophy, which aims to avoid danger instead of reacting to it after the danger has arisen. Through supporting the driver's recognition, judgment, and operation in various driving environments and minimizing the risk of accidents, the Company will contribute to the realization of an automotive society that offers safety and peace of mind.
- The **Kodo Design** continues to pursue forms that the driver makes the emotional relationship with his/her vehicle as if the horse owner was communicating with his/her beloved horse. The Company will continue to refine such unique value.

A prerequisite for the above technological developments is a highly efficient development and production system that fuses wisdom and digital technology.

The Company aims to create a system that highly combines development and production and makes conflicting requirements on both ends compatible at a high level. Specifically, the Company has taken the following actions.

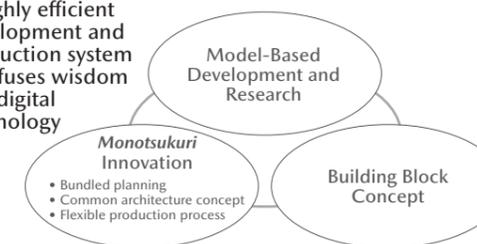
- Ahead of any other companies in this industry, the Company has developed **Model-Based Development and**

Research, which reduces time and costs by using models on computers instead of actual objects.

- The Company has developed the **Building Block concept** to efficiently deliver more superior technologies by building up electrification technologies on fundamental technologies including engines and transmissions with refining as Skyactiv Technology.
- The Company has promoted **Monotsukuri Innovation**, through which it has built up systems and processes that enable the development and production of a wide variety of different products in a short period of time with small investment. Specifically, *Monotsukuri Innovation* consists of Bundled planning, in which the Company plans several models to be introduced in a bundle beyond market segments and vehicle classes, anticipating the future market over a time frame of five to ten years, a Common architecture concept in which the Company commonalizes development concepts beyond market segments and vehicle classes by unifying development and production, and a Flexible production process with high efficiency, in which the Company can realize mixed flow production of several kinds of models on the same line by modularizing jigs and equipment so that different parts for different models can be assembled.

With continuous refinement of its unique manufacturing, the Company will contribute to the realization of a sustainable society through a multiple solution that enables it to respond flexibly not only to customer needs including electrification but also to the environmental regulations which diversify chronologically and geopolitically by region.

A highly efficient development and production system that fuses wisdom and digital technology



03 Creating Human Connections

Mazda believes that it is important to build emotional connections with customers through products and services.

Accordingly, the Company will emphasize relationships with person to person, through gaining a deeper insight into individual customers, even amidst the trend of digitalization, which enhances customer convenience.

At dealers, the Company will build relationships of trust with *omotenashi* the spirit of hospitality centered at all touchpoints

including mainly customer care process with customers.

In addition, the Company hopes to create a community where customers can connect with each other in the future. By providing close and proper support to customers from even before they purchase a vehicle to help enrich their car ownership after their purchase, the Company will deepen ties between them and the Mazda brand to formulate a community of trust and empathy.

Medium-Term Management Plan

Mazda's Unique Value of "Co-Creation with Others"

The automotive industry is experiencing a once-in-a-century transformation. It is therefore imperative for the industry to undergo a transformation in the entire value chain from product planning, development, production, and sales to customer care, including after-sales service, to enable it to respond to the demands of this period as represented by CASE. This transformation should be carried out on a global scale and all at once.

To ensure that Mazda overcomes this time of great change and achieves sustainable growth, the Company must focus on Mazda's unique value of "Co-Creation with Others." Based on this sense of value the Company is moving ahead with its Medium-Term Management Plan.

In line with the Plan, which designated the period up until the end of FY March 2022 as a foundation-building period, Mazda completed preparations as planned for stronger growth from FY March 2023. With its sights set on 2030 to realize its long-term vision for technology development, "Sustainable Zoom-Zoom 2030," the Company is now examining the transformation of its business structure in light of changes in the business environment due to the global tightening and acceleration of environmental regulations and competition in new value creation in an era characterized by CASE. Mazda will strive to achieve strong growth by leveraging the assets it has built to date and accelerate

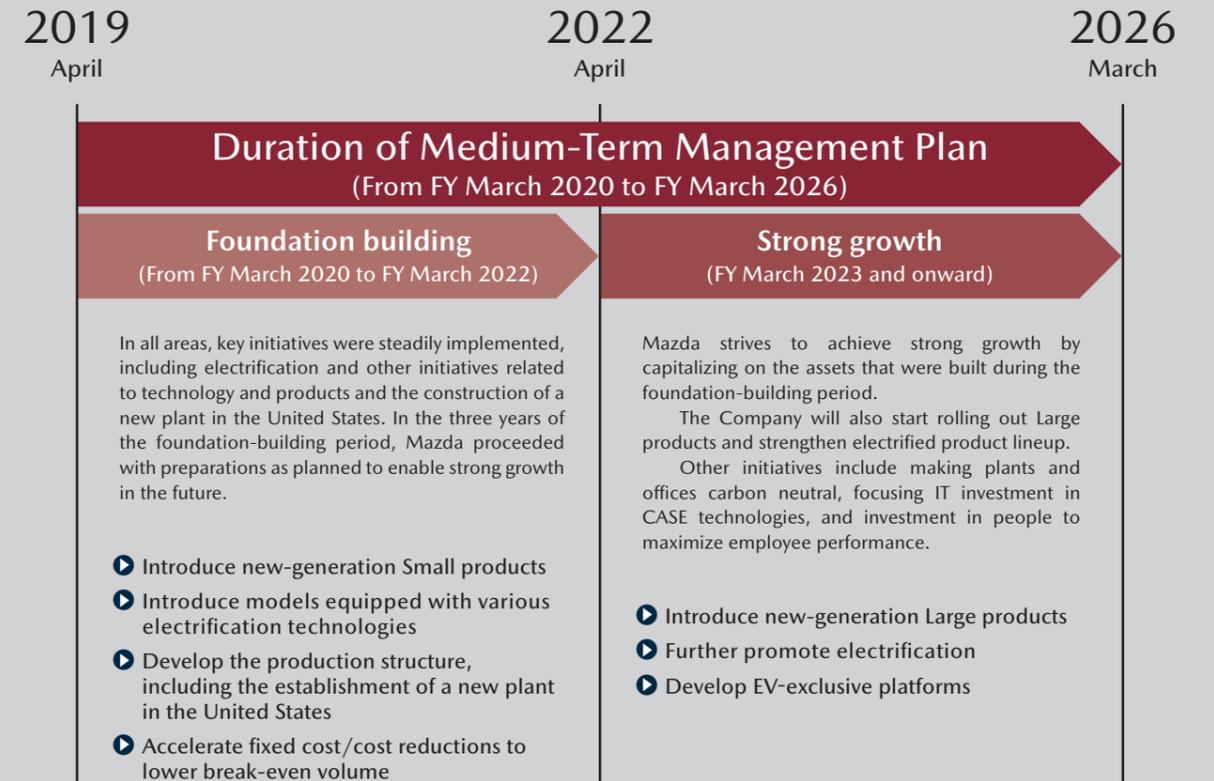
initiatives to establish a resilient management structure capable of withstanding major changes over time.

The following table lists financial metrics for FY March 2026, the final year of the Medium-Term Management Plan.

Financial metrics for FY March 2026

Net sales	About ¥4.5 trillion
Profitability	ROS* 5% or higher / ROE: 10% or higher
Investment for the future	<ul style="list-style-type: none"> • Capital investment and R&D investment: 7%–8% of net sales or lower • Actions for electrification, IT, and decarbonized society
Financial structure	Maintenance of net cash position
Shareholder returns	Sustainable payout ratio at 30% or higher
Break-even volume	About 1 million units (wholesale)

*Operating income ratio



Key Initiatives

1 Invest for raising brand value

To further improve its brand value, Mazda continues and expands investment in its unique technologies and products, production, and customer experience, which represent the Company's key strengths, so that many more customers will feel empathy for the value offered by Mazda.

Mazda promotes and evolves *Monotsukuri* Innovation, comprising Common Architecture and Flexible Production based on Bundled Planning, which has enabled the Company to efficiently develop and manufacture various products and technologies in a short-term period and with small investments. Taking full advantage of these technology assets, Mazda provides multiple solutions, namely, offering various power unit choices that adapt to each country's electric power generating infrastructure, environmental regulations, and diverse customer demands. The Company also works to establish a foundation for coping with significant changes in the environment surrounding the automotive industry, by, for example, reinforcing measures to prevent climate change.

2 Curb expenses that depreciate brand value

Initiatives are under way to reduce expenses that relatively depreciate brand value, such as sales incentives and quality costs, by enhancing the current value-based sales and through quality improvement activities.

3 Accelerate fixed cost/cost reductions to lower break-even volume

Mazda accelerates fixed cost and cost reductions, by setting a target to lower its break-even volume to under one million units, with the aim of transitioning to a lean management structure capable of overcoming crises.

4 Invest in areas where we need to catch up and start investment in new areas

In addition to optimization of production sites in view of local production for local consumption, such as construction of a new joint-venture plant in the U.S., Mazda is promoting investment for IT and decarbonization for the CASE era. The Company will also support both diversified work styles and efficiency and make investment in work environment, people and social contribution, in order to facilitate autonomy and performance of all employees.

5 Enhance alliances (CASE, new partnership)

While keeping a balance between "selection and focus" and "unique business and partnership," Mazda continues to explore new partnerships through which the Company can complement the areas that it is not good at and concentrate management resources on unique technologies and products, in order to create new value in the era of CASE.

Medium-Term Management Plan | Progress in Key Initiatives

During the foundation-building period up until the end of FY March 2022, Mazda implemented various measures in line with the five key initiatives set out under the Medium-Term Management Plan, to prepare for the next stage of strong growth starting from FY March 2023.

1 Invest for raising brand value

Initiatives to enhance brand value are making steady progress in each area of “technology and products,” “production” and “customer experience.”

Mazda advances its Building Block concept to efficiently deliver superior technologies by building up a set of fundamental technologies in stages as “blocks.” Based on the concept, the Company works to offer multiple solutions through efficient development and production using Bundled Planning, Common Architecture and other methods.

Technology and products

With regard to technology and products, Mazda enhanced the product lineup to make it more attractive to meet customer demand and steadily responded to electrification.

The Company reinforced its new-generation Small products, by launching the mild hybrid and EV models of the MX-30 and the CX-50, a new cross-over SUV for North American market. Mazda also released the CX-60, the first offering of its next-generation Large products. The Large product lineup comprises models featuring a straight-six engine on a longitudinal layout platform as well as incorporating electrification technologies, including the plug-in hybrid system. These products realize both high power and excellent environmental performance. Mazda plans to introduce four models from its Large product group to the in-high-demand global SUV market from FY March 2023 to FY March 2024.

The Company also continued product upgrades, through updating control technologies for Skyactiv-X, Skyactiv-D and i-Activsense.

To create new values as the CASE era begins, Mazda started to develop its unique platform exclusively for EVs.

Production

As for production, Mazda has established a structure to build various technologies and products in an efficient manner. With more advanced flexibility and mixed model assembly production, the Company made it possible to produce straight-four and straight-six engines, platforms of both longitudinal and transverse layouts, and also plug-in hybrid and 48V mild hybrid, using flexible facilities. In this manner, Mazda steadily laid a foundation to enable mixed production of electrified products and other new products to be launched in the future with small investments.

In the United States, which is Mazda’s most important market, a new plant jointly constructed with Toyota Motor Corporation (hereinafter “Toyota”) went into operation and began to produce the CX-50.

Customer experience

While promoting the opening of new-generation stores in the domestic market and overseas markets, Mazda endeavored to enhance sales finance and establish an efficient supply chain.

Taking the U.S. market as an example, the Company endeavored to advance the roll-out of new-generation stores, strengthen sales finance, and change the marketing methods. Its efforts to enhance sales abilities and improve the strength of Mazda brand are beginning to yield steady results. In the future, the Company aims for further growth by introducing Large products in addition to the CX-50.

In the Chinese market, Mazda implemented joint venture restructuring. The Company has laid the groundwork for enhancing customer experience and ensuring future growth by optimizing the business configuration and the operating structure.

Results of initiatives by area

Technology and products	<p>Enhancement of the product lineup to make it more attractive to meet customer demand, and steady response to electrification</p> <ul style="list-style-type: none"> Enhanced the lineup of Small products: Introduction of MX-30 EV/MILD HEV, CX-50, etc. Started to introduce Large products into market: CX-60 PHEV/MILD HEV, etc. Started to develop Mazda’s unique platform exclusively for EVs. <p>Continuation of product upgrades with control technologies</p> <ul style="list-style-type: none"> Updated control technologies for Skyactiv-X, Skyactiv-D and i-Activsense.
Production	<p>More advanced flexibility and mixed model assembly production</p> <ul style="list-style-type: none"> Established a structure to efficiently build various technologies and products. <p>Operational start of a new plant in the U.S.</p> <ul style="list-style-type: none"> Constructed a new plant in the U.S., Mazda’s most important market, and started to run the plant.
Customer experience	<ul style="list-style-type: none"> Promoted the opening of new-generation stores and sales network reforms. Enhanced sales finance. Established an efficient supply chain.

Operations in North America

Toward Further Growth of Operations in North America, Leveraging Our Strengthened Sales Network, New Products and New Plant as a Driving Force



Jeffrey H. Guyton

Senior Managing Executive Officer
Oversight of Operations
in North America; President and CEO,
Mazda Motor of America, Inc.
(Mazda North American Operations)

Since 2016, based on the Medium-Term Management Plan, Mazda has been engaged in initiatives to reform sales operations, including upgrading our U.S. retail partners to the “Retail Evolution” dealership design, in the most important market for the Company. On the manufacturing front, Mazda started production of the CX-50 mainly targeted at the North American market, in January 2022 at Mazda Toyota Manufacturing, U.S.A., Inc., a new plant constructed in Huntsville, Alabama. This means that we have established the three pillars—a sales network, production and supply chain, and new products—that support further development of our business in the U.S. Leveraging the above three elements as a driving force, we will continue striving to enhance the presence of Mazda to bolster our business growth in the U.S.

Rebuilding Our Sales Network and Reforming Dealerships

In the past six years, Mazda has worked to rebuild its sales network and transform its dealerships with upgraded facilities and stores. The Company has upgraded almost 300 stores in the Retail Evolution style. We have also strengthened dealership commitments to the brand through focused training and improved relationships. The number of these upgraded dealerships has now increased to 366 (including those under renovation, as of the end of September 2022). The percentage of the sales volume of Retail Evolution dealerships accounts for over 85% of the total sales volume in



Retail Evolution store in the U.S.

the U.S. In addition to revamping our sales network and dealerships, we have promoted operational reforms focusing on customer experience, which have also contributed to our sales volume and market share. Specifically, in 2021, Mazda sold approximately 330,000 units and achieved 2.2% market share in the U.S., both of which figures were the highest in the past 25 years. As for customer satisfaction 2022 ranking, Mazda moved up eight ranks from previous year, placing third* among non-premium manufacturers. As indicated above, our efforts have begun to produce steady results.

New U.S. Plant Coming into Operation

We commenced production of the CX-50 in January 2022 at Mazda Toyota Manufacturing, U.S.A., Inc., a new plant jointly constructed with Toyota. With starting operation of the new plant, equipped with the latest technology developed through the shared knowledge of Toyota and Mazda, we have put in place a production and supply system that enables timely delivery of high-quality products to our customers in the U.S. The plant will sustain Mazda’s business growth in the U.S., with stable annual production capacity of 150,000 units and product delivery capacity, taking advantage of its favorable location. As a good U.S. corporate citizen, this new production facility is taking root in the local community by offering employment opportunities and creating a supply chain in the region. We are committed to nurturing this new plant in order to continue a close connection with the local community in the future.

Launch of the CX-50

The CX-50 is a crossover SUV that has been added to our North American lineup to meet the needs of local customers, especially those in the U.S., who look for an SUV-like presence and off-road performance in their vehicle. As a core model that supports Mazda’s business operations in the U.S., the CX-50 was off to a good start, with around 16,000 units sold from its release in April to the end of October 2022.

We also plan to start production of the CX-90 as a new model for the North American market within FY March 2023. In this manner, Mazda has constantly strengthened its product lineup.



Production Start Ceremony at the new U.S. plant

*Source: 2022 U.S. Customer Service Index (CSI) Study | J.D. Power

Medium-Term Management Plan | Progress in Key Initiatives

2 Curb expenses that depreciate brand value

As for curbing expenses that depreciate brand value, Mazda carries out initiatives in the following three areas: variable marketing expenses, supply chain, and quality costs.

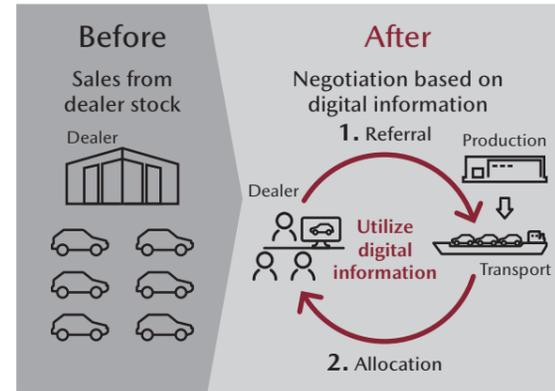
Through value-based sales and right-price sales, the Company could achieve a high residual value and increase the car value as customer's asset. In Japan, the United States, and Australia, Mazda has strengthened sales finance strategies through its partnership with Toyota. These measures have enabled the Company to reduce variable marketing expenses.

As an example of initiatives regarding the supply chain, Mazda has strived to evolve sales methods in the United States. There, its dealers have been moving away from the traditional method of selling vehicles from dealer stock, and shifting to a new car sales method of negotiation using digital information. To be more specific, in the new method, vehicles are allocated to stores while they are still in the pipeline and in the process of transportation for delivery to dealers. This fast turnover approach has been applied thoroughly so as to quickly deliver vehicles to customers.

With regard to quality costs, Mazda believes that continued improvement efforts are essential for reducing such costs. The Company also conducts initiatives, which include the utilization of Model-Based Development (MBD) for quality improvement, and the effective use of connectivity to

acquire driving data through communications devices to detect a sign of issues related to quality, thereby swiftly resolving these issues and preventing them from increasing.

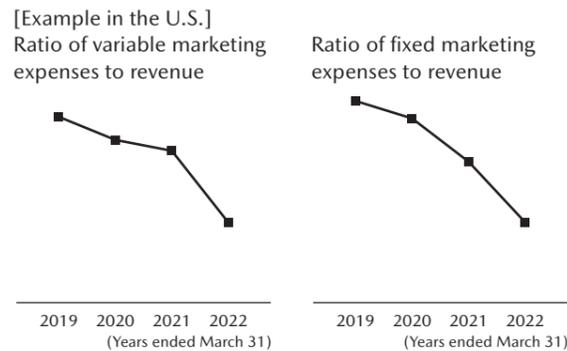
Evolution of auto sales practices



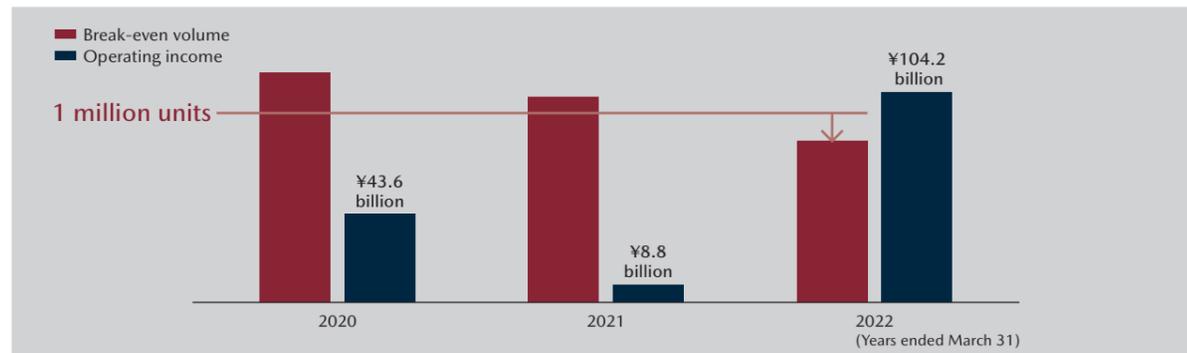
3 Accelerate fixed cost/cost reductions to lower break-even volume

As one of the financial metrics of the Medium-Term Management Plan, a target is set to lower the break-even volume to 1 million units. In FY March 2022, Mazda achieved the target ahead of schedule through activities for cost cutting and improving fixed cost efficiency.

As a specific measure taken in production, the Company reduces investment by frequently using flexible facilities. Also, continuous productivity improvements have enabled quality improvement and cost reductions. In the area of development, Mazda strives to expand the application of MBD and utilize AI, in order to enhance efficiency. As for sales efforts, the Company is making a transition to effective and efficient digital communication so as to substantially improve the efficiency of fixed marketing expenses such as advertising expenses.



Changes in break-even volume and operating income



*The break-even volume in each of FY March 2021 and FY March 2022 was calculated based on the operating income prior to transfer to extraordinary loss.

4 Invest in areas where we need to catch up and start investing in new areas

Investment for IT and decarbonized society for the CASE era

Mazda has continued to make investments in IT so far. However, now the Company recognizes the necessity to take another look at that to increase its scope, tighten security, and correct inefficiencies caused by many individual IT systems. As customer data, vehicle data and other various information will have greater value in the future, it will become more important to retain, analyze, and make effective use of data. While reviewing and rebuilding existing systems to improve their efficiency, Mazda will make new investments continuously.

In response to digital transformation, the Company has strengthened IT investment, so that its unique technologies centering around MBD have become a mainstay of efficient development. Going forward, the Company will further expand the scope of MBD applications to production, thereby improving operational efficiency in both areas of development and production.

Meanwhile, toward the realization of a decarbonized society, Mazda is making investment in phases from long-term viewpoints to decarbonize plants and offices, and is endeavoring to achieve carbon neutrality at its global plants by 2035.

Support both diversified work styles and efficiency and invest in work environment/people/social contribution

As for investment in people and the work environment, during the novel coronavirus (COVID-19), Mazda has promoted the creation of a work environment and systems to support various work styles. At the same time, initiatives are under way to help employees stabilize and improve their lives by introducing a system for extending retirement age and through other means.

In today's business landscape where the environment surrounding the automotive industry is dramatically changing, Mazda has pushed forward with initiatives to secure and develop human resources well-versed in new areas, such as electrification and vehicle software development. These initiatives include strengthening mid-career recruitments and personal development through education in technologies and skills in these new areas and promoting digital education group-wide. Mazda is systematically enhancing investment in people, based on the idea that the key to its growth is enabling employees' successful performance by maximizing their abilities.

5 Enhance alliance (CASE, new partnership)

In enhancement of its alliance status, Mazda aims to increase brand value and expand business while keeping a balance between "selection and focus" and "unique business and partnership." So far, the Company has broadened its range of partnership with Toyota, in such areas as advanced technology, sales finance, joint venture plant, and product complementation, as exemplified by Mazda2 Hybrid. Mazda will continue to reinforce collaboration with Toyota to secure compliance with the tightened environmental regulations. From Isuzu Motors Limited, Mazda has received supply of the BT-50 pickup truck.

Through these partnerships, the Company can complement the areas that it is not good at and concentrate its management resources on Mazda's unique technologies and products. To create new values in the CASE era, Mazda will continue to explore new partnerships.



MAZDA2 Hybrid

Medium-Term Management Plan | Medium-Term Management Plan Update and Management Policy up to 2030

On November 22, 2022, Mazda provided an update on its Medium-Term Management Plan and announced its management policy up to 2030.

Mazda has been promoting its Medium-Term Management Plan toward achieving financial targets up to FY March 2026. However, given increasing uncertainty surrounding its business environment, such as trends in environmental regulations in each country and social infrastructure development, as well as changes in the power mix and consumer choices, Mazda has presented its management policy and major initiatives based on the assumptions of global trends by looking further ahead to the period up to 2030.



Basic Management Policies up to 2030

Based on the belief that its corporate mission is to conduct business in a manner that is responsible for the earth and society, Mazda has established the following three basic management policies.

1	Basic Policy Contribute to resolving the social challenge to curb global warming through Mazda's electrification strategy suited to regional characteristics and environmental needs.
2	Basic Policy Conduct research on people, know their every detail, and shed light on their relationship with vehicles, with a view to realizing an automotive society that offers safety and peace of mind.
3	Basic Policy Maintain Mazda's brand value management, provide our unique values and continue to be a brand preferred by customers.

As the automotive industry undergoes a large transformation, due to the evolution of digital technology and the entry of new players in the automotive industry, more diverse products are introduced in the market. By connecting with IoT, various functions and services are possible and thus, values that vehicles can offer to the society are expected to continue to change and increase.

Mazda will continue to expand its brand essence, Joy of Driving, by developing technologies and adapting its business management to meet the needs of the times. By creating daily driving a more moving experience, it aims to Uplift and Energize People, Bringing More Enjoyment to Everyday Life.

To that end, Mazda will continue to undertake research on human based on Human-Centered philosophy, committing to Engineering and Manufacturing, Create Human Connections and develop people that uplift the mind and body.

Management Policies in Each Phase During the Period up to 2030

To respond to future uncertainties in society in a flexible manner, Mazda's approach is to divide the period up to 2030 into three phases.

Phase 1 (2022-2024)

In this phase, while storing resources for future electrification, Mazda will strengthen its technology development in its R&D and manufacturing areas in preparation for the full-fledged electrification. Maximizing the use of its U.S. plant, multiple electrification technology assets, and Large products, which Mazda has invested in, the Company will put its business on a growth path and strengthen its financial base to enable it to deal with another economic crisis like the novel coronavirus (COVID-19) pandemic with cash on hand. At the same time, the Company will build a business structure that is highly resilient to changes in the environment by strengthening its supply chains and cost reduction efforts.

Phase 2 (2025-2027)

As regulations become more stringent, this phase will be a transition phase to electrification. During this period, continuing to earn profits from Internal Combustion Engine (hereinafter ICE) vehicles to maintain and improve its financial base, Mazda will also strengthen its preparations for the age of full-fledged electrification. By closely monitoring market demand, government regulations and policies and a course of technological advancement, Mazda now has good prospects for procuring the batteries it needs from its business partners. In addition, Mazda will continue to strengthen its battery R&D and manufacturing technology development, to establish the necessary technology and secure its cost competitiveness. Mazda will further refine and fully use its multiple electrification technologies, and commence the launch of battery EV vehicles from the latter half of this phase.

Phase 3 (2028-2030)

In this phase with 2030 as the final year, Mazda will undertake a full-fledged launch of battery EVs. Toward the age of full-fledged electrification, by closely monitoring market demand, regulations, government policies and a course of technological advancement, the Company will consider matters such as investing in the batteries production.

Key Initiatives to Open up the Future

Based on the idea of "Co-creation and coexistence" Mazda values co-creation with partners when promoting collaboration projects with them. At the same time, the Company will build a framework for developing new technologies and resolving issues, and further refine its own strengths.

Carbon Neutrality

Toward endeavoring for carbon neutrality (hereinafter, "CN") by 2050, Mazda has announced its commitment to making Mazda factories CN worldwide by 2035 in an effort to reduce CO₂ emissions within the Group as interim plan. Mazda has also set a plan to promote initiatives under the following three pillars: reducing the use of energy, the shift to renewable energy sources, and the introduction of CN fuels. In addition to Mazda's efforts, those on the side of supply chains will also be necessary. Therefore, Mazda will proceed with CO₂ emission reduction activities with its logistics companies and suppliers in stages. In Japan, the Company will work on structural reforms in supply chains while expanding the use of CN fuels.

Value Creation Through Co-Creation Between People and IT

Based on its Human-Centered philosophy, Mazda will continue to invest in research of human beings in order to bring out the maximum potential of humans with model-based development and research as its platform. In line with its safety philosophy, Mazda Proactive Safety, Mazda will push forward with its ongoing efforts to develop human-centered advanced driver assistance technology through exhaustive exploitation of its IT technology to make vehicles that help both drivers and passengers feel safe and

peace of mind as well as people in the vicinity of vehicles. The Company aims for no new Mazda vehicle to cause a fatal accident that is avoidable with automotive technologies by 2040.

As for investment in human resources, Mazda has partnered with Aidemy and is promoting reforms in order to ensure that all of its indirect employees will have a certain level of digital competence in AI and IT by 2030.

In addition, Mazda aims to double its productivity by modeling each process of its operations by 2030, identify resources it can utilize for other processes and transfer such resources to tasks that produce more additional value.

Cost Reduction and Supply Chain Enhancement

Mazda will expand the scope of its cost reduction efforts. From a comprehensive viewpoint, the Company will also look into both value chains and supply chains in addition to its existing scope that looks to product cost and production cost, and change these to allow it to thoroughly eliminate waste, irregularities and overburdens to make costs ideally effective.

For its supply chains, Mazda has improved costs for each process, but from now on, it will work to optimize the entire process that spans from material procurement to product delivery to customers by making the flow of goods as smooth as possible at the highest speed. Furthermore, Mazda is working on innovative changes in its procurement system which includes fewer tiers in procurement of materials and parts and bringing places where various parts are produced closer to its production facilities as well as using more highly versatile materials and semiconductors. In this way, Mazda will minimize the impact of external changes in the environment such as geopolitical incidents, COVID-19 and earthquakes and other large-scale disasters.

Electrification Initiatives in Each Phase

During a period of transition to EVs, Mazda believes that it is effective to take a multiple-solution approach, in which the Company provides appropriate combinations of products that suit electric power generating infrastructure in each region. Meanwhile, Mazda assumes that its global EV ratio in 2030 will be between 25 and 40%, considering electrification policies and tighter regulations on emissions in each country. Based on this assumption, Mazda is promoting electrification in stages by working closely with its partner companies.

Phase 1: Strengthening development toward the age of electrification

By fully using its current technology assets of multiple electrification technology, Mazda will launch attractive products while also meeting market regulations. Through the launch of Large Products, including plug-in hybrid electric vehicles (PHEVs) and diesel engines with a mild hybrid system that achieve both environmental and driving performance, Mazda will enhance profitability while developing technologies for battery EVs in a full-fledged manner.

Phase 2: Transition to Electrification

In the phase of transition to Electrification, with the aim of reducing CO₂ by improving fuel economy, Mazda will further refine its multi-electrification technologies that it has cultivated thus far including introduction of new hybrid system. In addition to introducing battery EVs in China where electrification is advancing, Mazda will also begin launching battery EVs globally. As for ICEs, the Company will boost efficiency to the utmost in preparation of the application of technology to further improve thermal efficiency and

the possibility of the future use of renewable fuels.

In addition, in order to ensure sustainable development of local economies toward the advancement of electrification, Mazda thought it necessary to develop highly efficient production technology for electric drive units and to establish a production and supply-chain network for electric drive units. Therefore, Mazda established a joint venture company with Ondo Corporation, Hiroshima Aluminum Industry Co., Ltd., and Hirotec Corporation. Furthermore, to enhance the value of Joy of Driving, Mazda signed a joint development agreement with Imasen Electric Industrial Co., Ltd. and Rohm Co., Ltd. for the development of inverters, which are the core components of electric drive units, and established a joint venture with Imasen Electric Industrial Co., Ltd. As for motor technology, the Company signed a joint development agreement with Fukuta Elec. & Mach Co., Ltd., and established a joint venture with Chuo Kaseihin Co., Inc. and Fukuta Elec. & Mach Co., Ltd. to promote joint learning and development of motor technology.

As for batteries, Mazda will procure batteries from its partner companies while promoting the research and development of advanced battery technologies, which have been adopted as one of the Green Innovation Fund Projects, at the Company's end, during Phase 1 and Phase 2. In addition to its existing suppliers, Mazda recently concluded an agreement with Envision AESC to procure batteries for EV production in Japan.

Phase 3: Full-fledged launch of pure battery EVs

As Mazda moves forward in its efforts for the full-fledged launch of pure battery EV models, it will also consider the possibilities, including investing in battery production based on the extent of changes in the external environment and progress in strengthening its financial foundation.

Interview with an Executive Officer | Research and Development Strategy and Sustainability



Ichiro Hirose
Director and Senior Managing Executive Officer (oversight of R&D, Cost Innovation and Innovation)

Research and Development Strategy and Sustainability

Amid the growing calls for the whole society to address climate change, the movement toward decarbonization and electrification is accelerating in the automotive industry. During the transition period from internal combustion engine vehicles (ICEVs), which have been the mainstream in the market, to hybrid vehicles (HEVs, PHEVs) and then to electric vehicles (EVs), it is increasingly important to conduct research and development in a way that can respond to uncertainties while keeping a long-term perspective. Here is an interview with Ichiro Hirose, Director and Senior Managing Executive Officer about the research and development strategies that have been pursued by Mazda as well as initiatives toward the future.

Mazda's Basic Approach to Research and Development

— Please tell us Mazda's basic approach to research and development.

At the bedrock of our research and development strategy is "Sustainable Zoom-Zoom," Mazda's long-term vision for technology development.

Mazda announced its long-term vision for technology development "Sustainable Zoom-Zoom" in 2007. Later, in light of the significant changes in the global automobile industry, this vision was updated from a longer-term perspective, and in 2017 "Sustainable Zoom-Zoom 2030," a new long-term vision for technology development that looks ahead to the year 2030, was announced. Specifically, it declares that: "At Mazda, we see it as our mission to bring about a beautiful earth and to enrich people's lives as well as society. We will continue to seek ways to inspire people through the value found in cars." Upholding this as our guiding principle, we are promoting research and development with a consistent approach.

Regarding the earth, in order to substantively reduce CO₂

Sustainable Zoom-Zoom 2030

At Mazda, we see it as our mission to bring about a beautiful earth and to enrich people's lives as well as society. We will continue to seek ways to inspire people through the value found in cars.



emissions to address climate change, it is necessary to work on CO₂ reduction from a well-to-wheel perspective. Mazda currently operates in over 130 countries and regions around the world. Power supply conditions and environmental regulations that need to be observed vary by country and region. While some regions depend mainly on fossil fuels for power generation, other regions are rapidly shifting to renewable energy sources. Under these circumstances, we consider it necessary to provide multiple solutions, namely, offering various power unit choices including electrification, tailored to each country's environmental regulations and power generation mix. Mazda is unwaveringly pursuing a Multipule-Solution approach.

In the area of people, Mazda aims to provide people with experiences that Uplift and Energize People, Bringing More Enjoyment to Everyday Life through vehicles that offer exciting mobility experiences and Joy of Driving. In addition to further pursuing a *Jinba-ittai*—or sense that the car responds almost as though it were an extension of the driver's body—driving feel, which brings out potential of humans and uplifts the mind and body, we are working to further mature our Kodo Design language, which is grounded in a philosophy of bringing cars to life to enrich people's emotional lives.

In the area of society, in addition to realizing an accident-free society that offers safety and peace of mind, Mazda aims to provide people with mental satisfaction and revitalize communities. To this end, we are developing technologies that support drivers in driving safely and with peace of mind and help to prevent or reduce the damage

resulting from an accident if it were to occur due to a driver's mistake. Through development of these technologies, we want to offer safety and peace of mind not only to drivers but also to their family and people in the vicinity of cars.

To achieve this long-term vision, we have employed a product development strategy called Building Block concept.

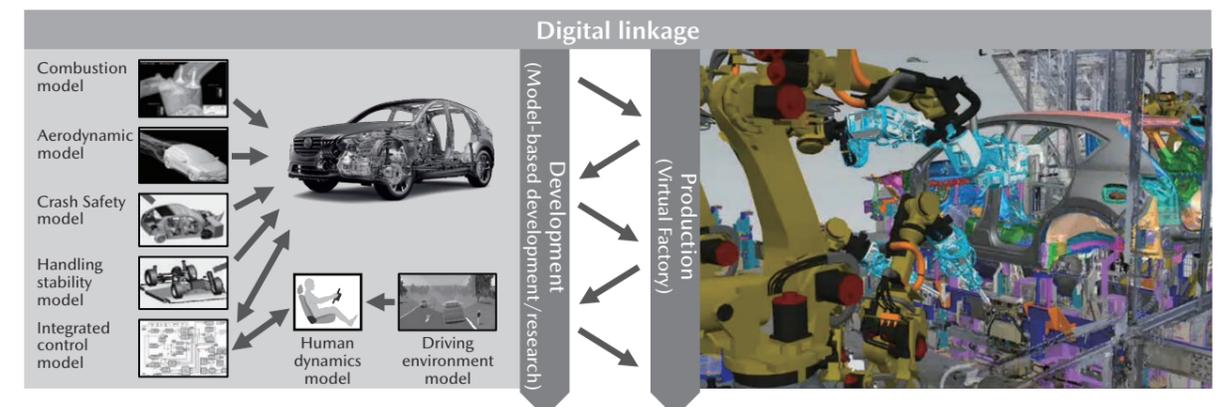
Under the Building Block concept, we have promoted *Monotsukuri* Innovation in stages to achieve a breakthrough in two contradicting goals of differentiation to enhance product appeal and of standardization for improved production efficiency. By pursuing the two pillars of *Monotsukuri*, which are Common Architecture concept and Flexible Production, it has become possible to develop and produce a variety of models with the same characteristics through bundled planning and development, realizing high-mix low-volume production that achieves both production efficiency and differentiation that leads to competitive advantage. Mazda has continued to build up assets created through *Monotsukuri* Innovation as building blocks, with each block serving as a foundation block upon which the next is built. By repeating this process, we have solidified our assets. I believe that continuing this process from a long-term perspective is indeed one of Mazda's strengths.

The Building Block concept involves two fields: process innovation and technological innovation. We have been promoting each innovation initiative in several phases.

From now, I will explain these two innovation initiatives in detail.

Model-Based Development and Research, and Virtual Factory (example)

Significantly increase investment efficiency for development and production by expanding the scope of application of model-based development through the use of AI and digital technologies



Interview with an Executive Officer | Research and Development Strategy and Sustainability

Accumulation of Digital Technologies Which Enables Building Block Concept into Reality

— Please tell us Mazda’s strengths in process innovation.

The beginning of process innovation is Mazda Digital Innovation (MDI), which started in the 1990s. Based on the digital mockup containing all 3D data necessary for product design on a computer, Mazda established a digital factory, which digitally connects its extensive supply chain and value chain from upstream to downstream and performs virtual design and testing on a computer during the prototype fabrication and manufacturing processes. In the 2000s, continual investments were made to expand the computer capacity, leading to the realization of “prototype-less design,” which enables the designing of subsequent processes without using physical prototypes, and “virtual testing,” which enables the execution of various tests in virtual environments. We have thus completed one block, or asset.

And now, based on that asset, we are building up a new block, which will realize Mazda’s unique digital twin that synchronizes development and production. Achievements of these efforts in the field of research and development include Mazda’s unique Model-Based Development and Research (MBD and MBR), which have enabled us to develop the intended products in shorter times and at lower expenditure. In the conventional development method, we built the quality to the product based on verification results obtained from the process of making design drawings, manufacturing prototypes and performing physical tests. In other words, it involved the use of physical objects. Therefore, speed and efficiency were very limited. Also, with the increasing sophistication of technologies, it was difficult to obtain an optimal solution. The introduction of MBD and MBR has enabled us to, by accumulating and using “models,” conduct development process from design drawing to testing/verification without depending on physical objects, while also making it possible to obtain an answer on a computer even in the case of combination of sophisticated technologies.

Furthermore, we are working to expand the scope of application of MBD and MBR. Starting with the combustion model of the engine, we have expanded the application of MBD and MBR to include major performance factors of a vehicle, such as aerodynamics, crash safety, handling stability, integrated control, ride comfort, and quietness. And as a virtual factory, MBD and MBR have also been applied in the

production technology field. We have created “models” of the vehicle, drivers/passengers and driving environments by incorporating the results of research on human beings that has been undertaken through industry-academia-government collaboration.

This series of efforts to strengthen digital technologies has also contributed to enhanced risk response. For example, let me cite the case of mass production preparation of the CX-50 at the U.S. plant. Amid restrictions on free movement due to the novel coronavirus (COVID-19) pandemic, the U.S. plant virtually designed and established a production line, achieving the reduction of man-hours and costs for new model introduction and the shortening of preparation period. I think this was possible because Mazda had promoted MBD and MBR far ahead of the rest of the industry.

Mazda will continue striving to further strengthen its strengths by deepening collaboration with business partners including suppliers and other companies in the industry through MBD and MBR and widening a circle of co-creation.

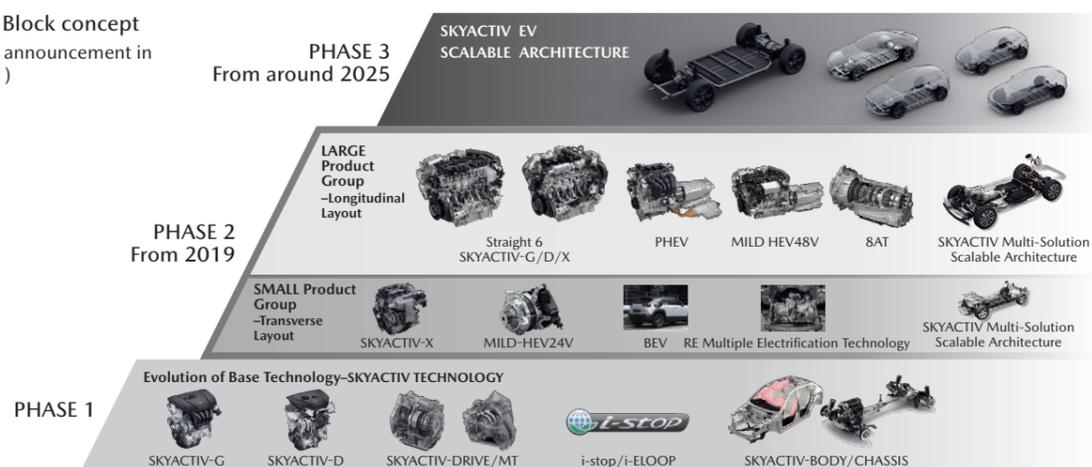
Accumulating Technological Assets in Line with Building Block Concept to Better Respond to the Electrification Era

— Next, please tell us about technological innovation.

As for technological innovation, we have finished Phases 1 and 2 and have just started Phase 3. In Phase 1, from 2007, in addition to upgrading technologies related to internal combustion engines centered on Skyactiv Technology, we built a base block on which to build up electrification technologies. In Phase 2, we continued to enhance our internal combustion engines and expand electrification technologies. Based on the Skyactiv Multi-Solution Scalable Architecture, we offer multiple choices of powertrains and architectures that combine various electric device technologies to meet various customers’ needs, and each country’s environmental regulations and power supply conditions. At present, technologies developed in Phase 2 are incorporated in our Large product. These technologies have been transformed into assets. In Phase 3, seeing the period up to FY March 2026, the final year of the current Medium-Term Management Plan, as an important period to accumulate electrification technologies in preparation for the full-scale electrification era, we plan to introduce our unique EV platform “Skyactiv EV Scalable Architecture” for EVs of various sizes and body types. While shifting our focus to EVs, we will

Building Block concept

(As of the announcement in June 2021)



strive to achieve our electrification goals. We expect that 100% of our products will have some level of electrification (including hybrid electric vehicles (HEVs) and plug-in hybrid vehicles (PHEVs)), and our EV ratio will be 25-40%* by 2030.

In addition to the environmental field mentioned above, we have also been building up blocks in the safety field since 2007 (see pp.55-56). In line with “Mazda Proactive Safety,” the Company’s safety philosophy, we have developed safety technologies based on research on human beings, with the aim of realizing an accident-free society that offer safety and peace of mind. As the first block, or the base block, in order to provide outstanding safety performance, we improved visibility and handling, and made improvements to vehicle body structures and layout to ensure ideal driving position by revamping vehicle body skeletons. These improvements have been installed into a wide-ranging lineup of models. As the second block, we added i-Activsense advanced safety technologies, including active safety technologies that support safer driving by sensing the vehicle’s surrounding area and alerting the driver when a potential hazard, like another vehicle or pedestrian, is detected. In the current third block, we are promoting the installation of technologies that help to avert collisions and other dangers by automatically decelerating and stopping the vehicle if it is deemed difficult for the driver to continue normal operation. Mazda’s basic approach is to provide safety and peace of mind to a greater number of customers by incorporating safety technologies that are currently available into its models instead of waiting until autonomous driving becomes pervasive and is put into practical use as social infrastructure.

While promoting these research and development strategies, we commence the launch of several new models in the Large product, which will become the pillar of our full-scale growth phase. As a first step, the CX-60 was released. In the European market, where electrification is already in full-swing, we introduced a PHEV model, Mazda’s first plug-in hybrid. In Japan, we will introduce a model equipped with e-Skyactiv D, which combines a straight-six diesel engine with a mild hybrid system. With regard to safety technologies, these models are equipped with the Driver Emergency Assist (DEA), which monitors the driver’s condition and automatically decelerates and stops the vehicle if it detects an inactive driver, and a series of functions to avoid collisions and other dangers and place an emergency call through connected care technology. Mazda plans to commence production of the CX-90 for the North American market in the fiscal year ending March 2023, and to introduce

the CX-70 for the North American market and the CX-80 in Europe and Japan.

Multiple-Solution That Seeks to Offer Multiple Practical Options to Help Realize a Carbon Neutral Society

— Please tell us Mazda’s policy for product and technology development toward 2030.

Mazda declared in 2021 that it would endeavor to achieve carbon neutrality (hereinafter, “CN”) throughout its supply chain by 2050. Such a declaration was possible only because of the blocks, or technological assets that the Company has built up one by one since 2007. We intend to achieve our CN goal by further building up new blocks.

The growing social movement toward CN is driving a shift toward EVs. However, to achieve this, there are still many challenges to overcome, and we don’t think the shift to EVs will happen overnight. Viewing the period up to around 2030 as a transitional period, we plan to promote the shift to EVs in stages, in accordance with the regulations and demand of each region. I think this is a realistic plan. We believe that during this transitional period, it is necessary to make strategic preparations toward full-scale popularization of EVs, while at the same time pursuing continuous evolution of internal combustion engines which will remain in use for decades to come.

Regarding the evolution of internal combustion engines, we believe the most important thing is to reduce the energy consumption. Biofuels and CN liquid fuels are expected to be realistic options by around 2030. Therefore, in preparation for the use of these CN fuels, it is still important to improve the efficiency of internal combustion engines to the highest level possible in terms of reduction of energy consumption.

Regarding EVs, Mazda plans to release several EV models during the period from around 2025 to 2030 by building up new blocks on top of the blocks of electrification technologies accumulated through the development of the MX-30 EV and the CX-60 PHEV.

By further evolving our technological assets accumulated through Building Block concept and by taking our unique Multiple-Solution approach which seeks to offer a variety of combinations of internal combustion engines and electrification technologies tailored flexibly to customer needs and each country’s conditions, we will promote our efforts to address climate change and social contribution activities.

Mazda has consistently pursued its own unique philosophy since the announcement of “Sustainable Zoom-Zoom” in 2007. Vehicles are responsible for people’s lives. The Company will continue to pursue car manufacturing that will contribute to society by enriching people’s lives and supporting safe and secure mobility. We will also strive to create cars that inspire people and bring out their potential and abilities by pursuing continuous evolution of Joy of Driving. We are committed to contributing to realizing a sustainable society by continuing to refine our technological strengths while working in collaboration not only with business partners, including local suppliers in Hiroshima and Yamaguchi prefectures, and other companies in the same industry, but also with companies in other industries.

[Crossover SUVs already introduced or to be introduced from 2022 onward]

Product group	Models	Major markets to receive the models
Large Product group	MAZDA CX-60 (Two rows)	Europe, Japan, etc.
	MAZDA CX-70 (Wide body, two rows)	North America, etc.
	MAZDA CX-80 (Three rows)	Europe, Japan, etc.
Small Product group	MAZDA CX-90 (Wide body, three rows)	North America, etc.
	MAZDA CX-50	North America

*Based on the information announced in November 2022 in the “Medium-Term Management Plan Update and Management Policy up to 2030”

Interview with an Executive Officer | Mazda's Commitment to Carbon Neutrality



Takeshi Mukai
 Director and Senior Managing Executive Officer
 (Oversight of Quality, Purchasing, Production and Business Logistics, and Carbon Neutrality)

Mazda's Commitment to Carbon Neutrality

In 2015, the Paris Agreement was adopted as a treaty for proceeding with climate change measures throughout the world including developing countries. Today, climate change is causing a wide variety of natural disasters in a tangible manner. Since the term "climate change" is no longer sufficient for indicating the current situation, the term "climate crisis" has been coined. Various initiatives and the development of new technologies are being accelerated around the world toward realizing a carbon neutral (hereinafter, "CN") society by 2050, and it is expected that this trend will further gain momentum in the future. The role to be played by an automotive manufacturer before and after the production phase is truly significant. In these circumstances, here is an interview with Director and Senior Managing Executive Officer Takeshi Mukai about Mazda's commitment to Carbon Neutrality.

Important Responsibility to Be Fulfilled by Automotive Manufacturer toward Realizing a CN Society

— Tell us about the significance of Mazda's commitment to carbon neutrality (CN).

Mazda's vision is to bring about a beautiful planet and to enrich people's lives as well as society. With the climate crisis growing year by year, we believe that the achievement of CN, which is closely related to the earth, people, and society, in the future, is a responsibility for the automotive industry that has large impact on CO₂ emissions.

With this background, last January, we announced our ambitious commitment to endeavoring to achieve carbon neutrality (CN) throughout the supply chain by 2050. This aligns with the common target set by many countries and regions including Japan to be achieved by 2050. In addition, we declared this June that we will take on the challenge of achieving CN at our factories around the globe by 2035 as a milestone to the target. To that end, we should not take the perspective of working alone for further efficiency and productivity as we have done so far, but expand our viewpoint to cover every process of vehicle production, including

manufacturing, transport, vehicle usage, and recycling, in the entire supply chain. On top of that, we need to understand the *genba* (actual place) and *genbutsu* (actual thing) correctly, involve all those concerned, including employees, the management, suppliers, and other business partners, in active discussions on CN, and ensure that not only the production but also all the other departments, such as planning, development, purchasing, and logistics, have higher awareness of achieving the target by 2035.

We believe that the first step that we should take is to reduce the use of energy and eliminate wastes throughout the supply chain. Specifically, we will review and optimize not only the processes and equipment usage at our factories, but also the locations of our suppliers and the style of our logistics, thereby striving to contribute to realizing an ideal world without energy loss. This approach will lead not only to the reduction of CO₂ emissions and the elimination of wastes, but also enabling us to respond more effectively to the recent enhancement of the regulations on energy, material procurement, etc., geopolitical risks, and environmental regulations. We believe that we can achieve both the reduction of the use of energy and the increase in efficiency.

Monotsukuri Innovation for Contributing to Achieving CN in the Area of Production

— Tell us about Mazda's previous initiatives and the current challenges to CN.

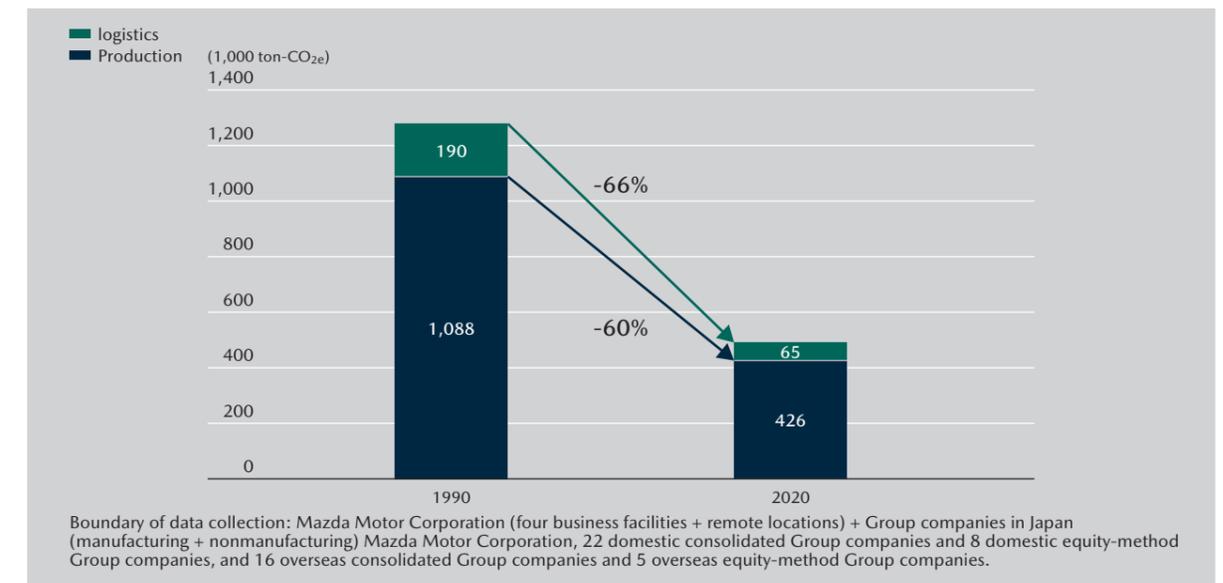
Prior to the Paris Agreement, the Kyoto Protocol was adopted as the first step for an international society to implement measures against climate change. With social call for action against climate change growing by this adoption, we set environmental targets in our business activities as our Medium-Term Environmental Plan, we steadily proceeded with our initiatives toward reducing our impact on the environment. Under the Medium-Term Environmental Plan whose final year was FY March 2021, we reduced the CO₂ emissions from all the Mazda Group's factories, offices and other facilities in Japan by 60% from FY March 1991. In the

area of logistics, including transportation, we made a reduction of CO₂ emissions by 66% from FY March 1991.

These results are underpinned by all-out efficiency ensured in the production process. In this process, painting and casting that is a phase where melted metal is poured into a cast, cooled, and hardened, generate particularly high CO₂ emissions, because they consume much energy. While focusing on the two phases, we have developed unique technologies for all the other phases and continued many innovative measures so far. For painting, we introduced the Three-Layer Wet Paint System in 2002. Previously, each of the three layers of paint (primer coat, colored base coat, and clear top coat) was dried in each process. Under the new system, however, the three layers of paint are applied in succession while wet, before the painting is finished with one-time drying. This system has reduced the energy consumption by approximately 15% compared from the conventional painting method. In 2009, we developed and introduced the Aqua-Tech Paint System. The improved paint and paint application technology have enabled primer coating, one of the above-mentioned three coating phases, to be omitted, resulting in a further reduction of the energy consumption by approximately 10%. Moreover, the system has considerably reduced volatile organic compounds (VOC) emissions and realized an improvement in quality by providing an even better finish for the paintwork. We think that the system contributes not only to reducing the impact on the environment, but also to making improvements in terms of costs and quality.

For casting, we have reduced the thickness and weight of cast items by leveraging our technological assets that we have accumulated by making an effective use of computer-aided engineering (CAE). Consequently, we have reduced not only the use of raw materials, but also the production cycle time (actual time for a single cycle from the beginning of the production process to the end), partly due to the decrease in the material cooling time in the casting phase, and the energy consumption. The benefits from the reduction of the thickness and weight of cast items do not lie only in the production process. The use of less thick and lighter items contributes to the weight reduction of the vehicles for which the items are used, ultimately contributing to increasing the vehicles' fuel economy.

Results of the Medium-Term Environmental Plan (Mazda Green Plan 2020)



Interview with an Executive Officer | Mazda's Commitment to Carbon Neutrality

We are proceeding with *Monotsukuri* Innovation with its cornerstone placed not only on the above-mentioned technological innovation in each phase, but also on *monotsukuri* (engineering and manufacturing), including our dedication to improving the efficiency of the entire production process. This innovation is an integrated commitment of highly-efficient development and production. For example, we have established an efficient and flexible production framework. Featuring a Flexible production process, the framework is intended to produce vehicles designed based on a Common architecture concept for sharing the development philosophy across the boundaries of segments (model classes). Specifically, by realizing the modulation of jig and equipment so that they can be used for assembly of various components depending on the model, we have made it possible to produce different types of models on the same production line. Put simply, whether the product to be produced is an internal combustion engine vehicle or an EV, and even if there is difference in the body size or engine layout (longitudinal or transverse engine layout), the same production line can be used for assembly. This enables the operating rate of each production line to remain high, which contributes to enhancing not only production efficiency but also energy efficiency, thereby reducing the impact on the environment. At the same time, this helps to minimize the replacement of the assembly lines to address changes in models and evolutions of materials and production methods, resulting in the minimization of disposal of resources and equipment and loss of energy. These measures are so flexible that they are effective not only for the vehicle production today, but also for an expected EV production in the future. They are technological assets that can serve as the cornerstone for manufacturers when they commit to CN.

We understand that our future challenge is to share and develop the above-explained energy-saving technology together with many business partners and to further accelerate our integrated efforts in entire supply chain. To do so, it is important to establish relationships between individuals so that they can understand and cooperate with one another, regardless of the differences in their companies, fields, positions, etc. As a result of continuing the *Monotsukuri* Innovation internally, we have cases where a development team and a production team have overcome differences in their views by understanding each



other deeply and finally establishing close relationships. We would like to extend such formation of in-house partnership to involve suppliers and sales partners.

Achievement of CN toward Reducing CO₂ Emissions throughout the Supply Chain and Invigorating Local Economy

— Tell us about Mazda's Medium-Term Management Plan toward CN and the Company's contribution toward realizing a decarbonized society.

To achieve CN, it is never sufficient to make efforts only in the field of production or make improvement only for products themselves. In addition, it is also never sufficient for only individual automotive manufacturers or business partners to make commitment. CN can never be achieved without cooperation of all those involved. To realize CN throughout the supply chain by 2050, we will proceed with initiatives based on the three main themes. The first theme is to make all-out efforts for reducing the use of energy. The second is, while reducing the use of energy, to make a shift to renewable energy sources for the remaining necessary energy. The third is to expand the introduction of CN fuels and consequently curb CO₂ emissions generated not only at the time of manufacturing but also at the time of component transportation. Based on these three main themes, we will make the necessary efforts not as in-house commitment, but as initiatives involving outside business partners, thereby striving to realize CN in the entire supply chain.

For the first theme, the reduction of the use of energy, we will leverage the technological assets that we have built up so far as mentioned before, to further raise efficiency in painting, material, processing and all the other phases. At the same time, we will share our technology and know-how regarding the reduction of the use of energy with local suppliers and other business partners. An in-depth consideration of the structure of the supply chain itself shows that the reduction of CO₂ emissions can ultimately lead to the elimination of wastes in the entire supply chain, covering logistics, and result in the improvement of the operating efficiency. The elimination of wastes will contribute not only to the reduction of costs, but also to the reduction of the impact on the environment through an effective use of materials and other resources and an improvement in energy efficiency, and even to an increase in the quality of the relevant products in some cases. We believe that the elimination of wastes is, thus, beneficial in terms of both the reduction of the environmental impact and management.

For the second theme, the shift to renewable energy sources, we will implement a wide variety of measures, such as low carbonization or decarbonization in power generation at our factories and procurement of power from renewable energy sources. The power output of renewable energy sources, such as solar power, varies greatly from day to day and from day to night. In addition, power is difficult to store. In the manufacturing industry, where a stable energy procurement is needed, it is important to take measures from various perspectives in order to complement the shortfall of each measure, for example by introducing an in-house power generation scheme. Moreover, to procure renewable energy, it is essential for us not to work alone, but to ensure local cooperation with power companies, local governments, and other renewable energy suppliers, as well as with manufacturers, service providers, and other power consumers who need to make a shift toward renewable energy for power generation as we do. In November 2021, the Chugoku Region

Carbon Neutrality Promotion Council was established by the Chugoku Economic Federation as a framework involving both power suppliers and consumers, such as the above-mentioned businesses and governments, toward expanding the supply and demand of CN power in the Chugoku Region. Set as one of the special subcommittees under the Council was the Carbon Neutral Electricity Promotion Subcommittee. Since the establishment, Mazda has been a member of the subcommittee and engaged in various initiatives for making active contribution. We believe that this framework will facilitate match-making between not only local power companies and governments, but also other power generators supplying renewable energy, including households doing so through solar power generation, and power consumers including companies like Mazda, that wishes to procure renewable energy on a stable basis. In other words, the ideal is to establish a good interaction between "secure generation" by those generating power from renewable energy sources and "secure use" by those using such power, thereby ensuring that economic circulation will benefit not only the companies concerned but also households. For global development, since the situation differs depending on the country and region, we would like to provide support for the establishment of the optimum energy cycle model, with consideration given to the region's situation.

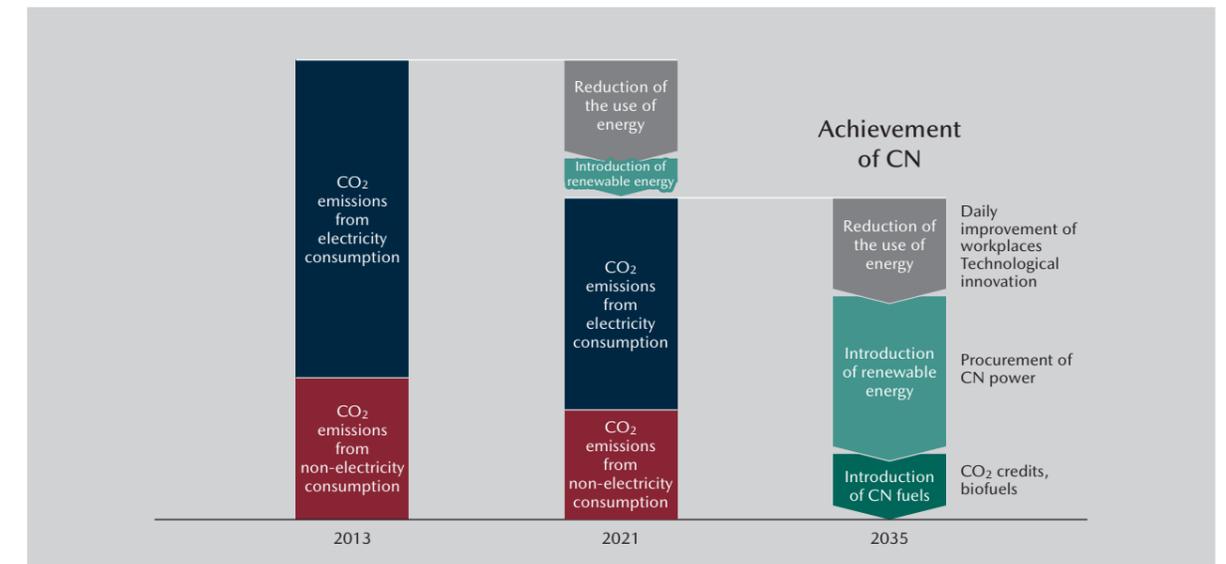
For the third theme, the introduction of CN fuels, we are conducting joint research with universities and companies regarding a practical use of next-generation biofuels made from microalgae oil. We are also working with the local consortium Hiroshima Council of Automotive Industry-Academia-Government Collaboration. By doing so, we are verifying CN fuels toward a widespread use of them. There is a global trend of spreading electric vehicles (EVs). As of now, however, EVs have problems with their driving range, charging infrastructure, etc. For an effective achievement of CN, we think that CN fuels, whose chemical properties are equivalent to those of petroleum-based fuels, present an attractive solution because CN fuels can contribute to reducing CO₂ emissions while allowing the existing infrastructure and engines to be used as they are. If such fuels are placed in practical use, they are expected to have great contribution to



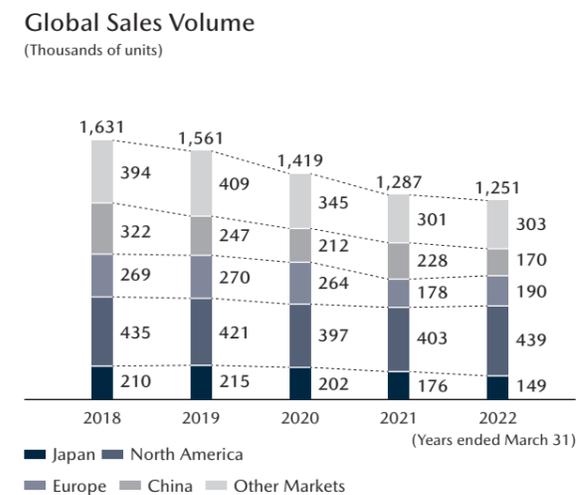
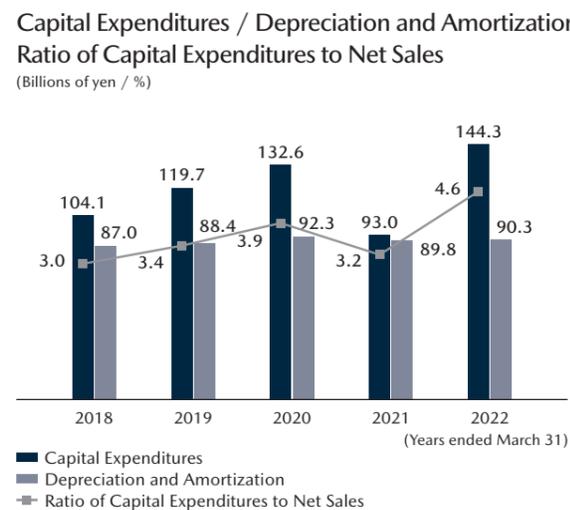
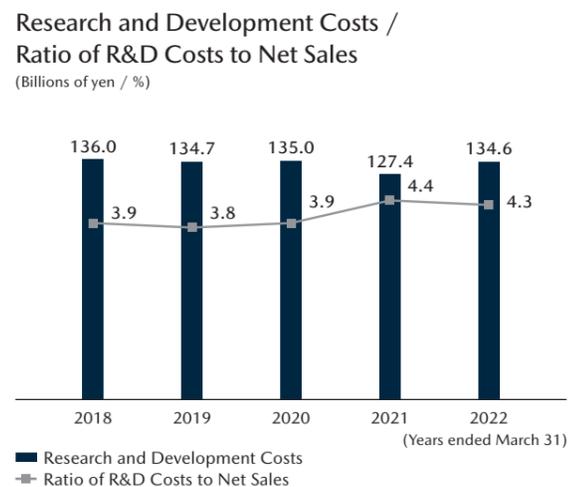
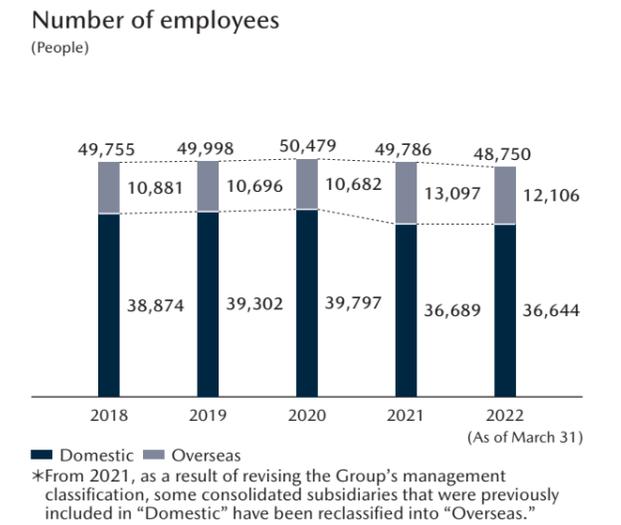
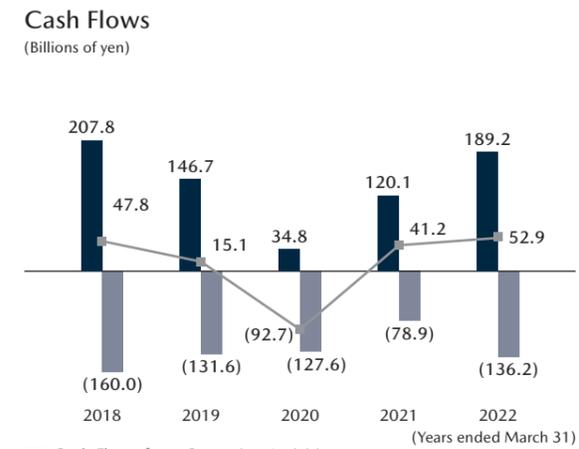
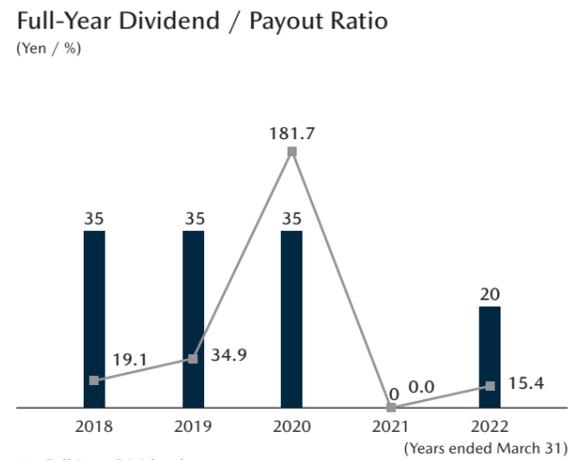
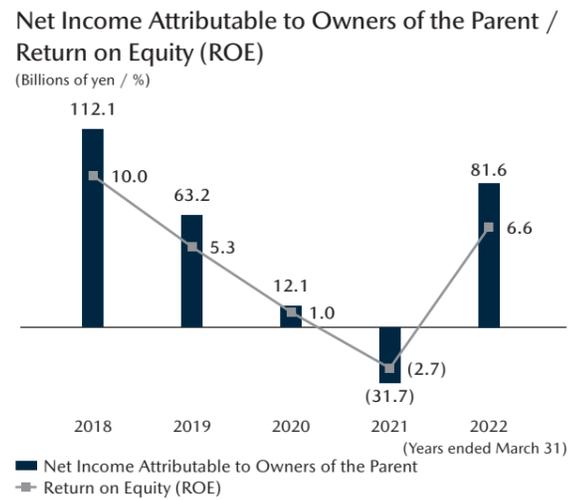
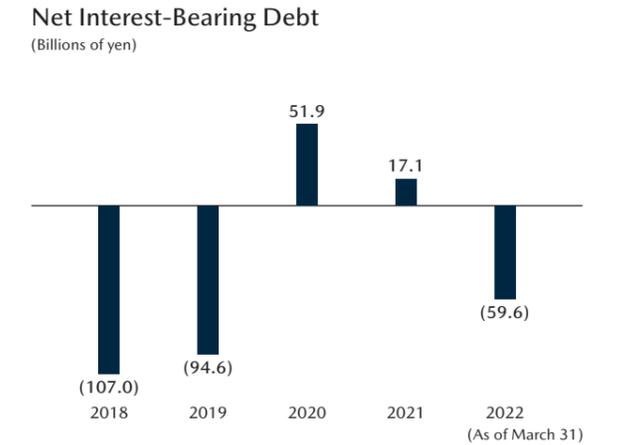
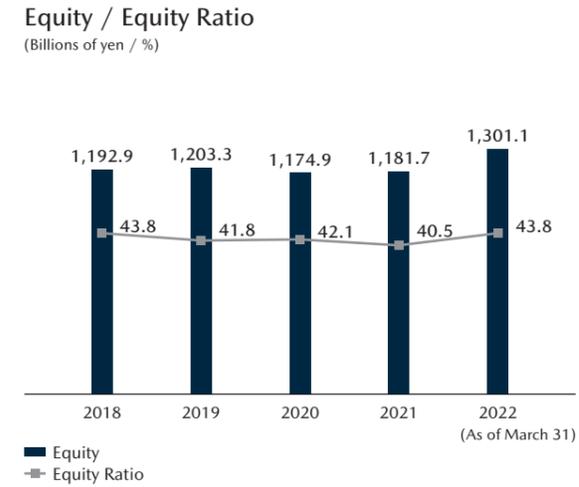
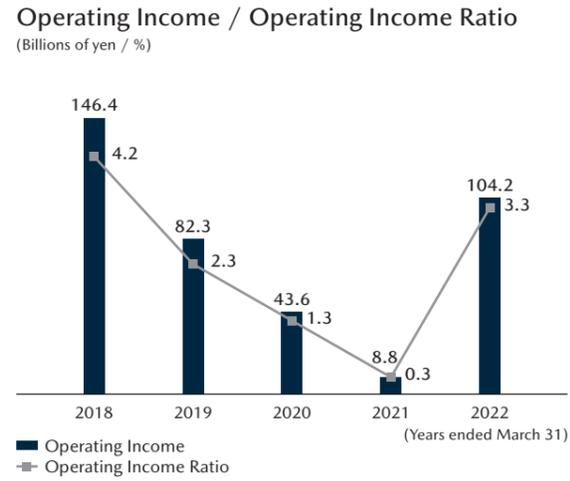
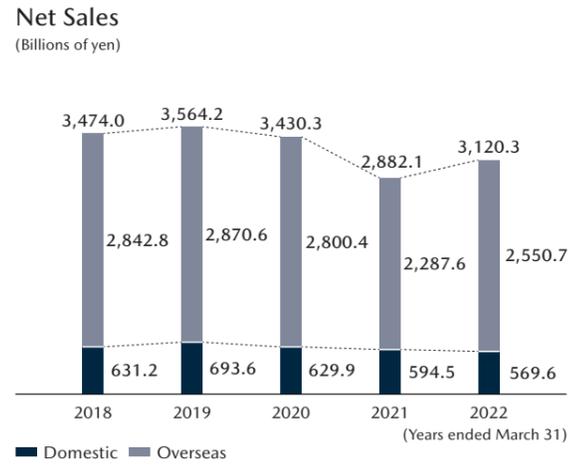
CN in corporate activities throughout the supply chain, including transportation of vehicles and components by trucks and other means. Furthermore, in the Super Taikyu, the racing series which we joined last year, we use next-generation biofuels to verify that such fuels are practical enough as a substitute for petroleum-based fossil fuels. We, of course, understand that CN fuels have problems in terms of mass-production, supply infrastructure, etc. Accordingly, we will continue to work with business partners toward achieving a future in which CN fuels will be used by many people.

As explained in each article, our measures for realizing CN are directly connected to the reduction of CO₂ emissions not only at Mazda, but also at those of local companies and other various businesses. In the age to come, when CN serves as the key to business growth in any industries, Mazda strives to realize both the reduction of CO₂ emissions and local economic growth and create a sustainable society together with partners sharing the same vision.

Carbon neutrality plan to be achieved by 2035 at our factories around the globe



Financial Highlights



Eleven-Year Summary of Consolidated Financial Statements

Mazda Motor Corporation and Consolidated Subsidiaries
Years ended March 31

	2012	2013	2014	2015	2016	2017	2018	2019*11	2020	2021	2022*13	2022
Business results (Millions of yen):												
Net sales*2	¥2,033,058	¥2,205,270	¥2,692,238	¥3,033,899	¥3,406,603	¥3,214,363	¥3,474,024	¥3,564,172	¥3,430,285	¥2,882,066	¥3,120,349	\$25,576,631
Domestic	560,216	588,042	655,716	617,397	660,935	587,025	631,229	693,581	629,911	594,490	569,568	4,668,590
Overseas	1,472,842	1,617,228	2,036,522	2,416,502	2,745,668	2,627,338	2,842,795	2,870,591	2,800,374	2,287,576	2,550,781	20,908,041
Cost of sales	1,662,592	1,729,296	1,993,643	2,247,720	2,567,465	2,448,184	2,653,600	2,772,184	2,683,647	2,268,422	2,432,645	19,939,713
Selling, general and administrative expenses	409,184	422,038	516,474	583,291	612,363	640,492	674,003	709,681	703,035	604,824	583,477	4,782,598
Operating income/(loss)	(38,718)	53,936	182,121	202,888	226,775	125,687	146,421	82,307	43,603	8,820	104,227	854,320
Income/(loss) before income taxes	(55,262)	39,101	97,409	209,335	166,986	128,413	157,484	107,567	49,282	2,202	112,399	921,303
Net income/(loss) attributable to owners of the parent	(107,733)	34,304	135,699	158,808	134,419	93,780	112,057	63,155	12,131	(31,651)	81,557	668,500
Capital expenditures*3	78,040	77,190	133,216	131,010	89,214	94,399	104,129	119,734	132,578	92,972	144,332	1,183,049
Depreciation and amortization	68,791	59,954	57,656	68,872	78,972	82,416	86,954	88,443	92,269	89,765	90,281	740,008
Research and development costs	91,716	89,930	99,363	108,378	116,610	126,915	136,009	134,660	135,009	127,432	134,622	1,103,459
Cash flows:												
Operating cash flows	(9,098)	49,033	136,379	204,459	262,770	161,097	207,795	146,690	34,834	120,058	189,155	1,550,451
Investing cash flows	(70,317)	(40,287)	(120,057)	(95,548)	(108,092)	(63,751)	(159,989)	(131,611)	(127,578)	(78,862)	(136,237)	(1,116,697)
Free cash flow*4	(79,415)	8,746	16,322	108,911	154,678	97,346	47,806	15,079	(92,744)	41,196	52,918	433,754
Financing cash flows	236,462	(57,181)	10,483	(62,776)	(94,062)	(149,898)	30,461	83,411	(24,274)	99,348	(86,405)	(708,238)
Financial position (Millions of yen):												
Total assets	¥1,915,943	¥1,978,567	¥2,246,036	¥2,473,287	¥2,548,401	¥2,524,552	¥2,724,092*10	¥2,877,613	¥2,787,640	¥2,917,414	¥2,968,148	\$24,329,082
Net assets	474,429	513,226	676,837	891,326	976,723	1,064,038	1,219,470	1,233,441	1,205,846	1,195,830	1,316,697	10,792,598
Interest-bearing debt	778,085	718,983	742,735	701,019	617,132	491,434	497,893	607,051	619,868	755,928	680,807	5,580,385
Net interest-bearing debt	300,778	274,108	262,981	171,871	48,418	(35,430)	(106,961)	(94,573)	51,874	17,135	(59,578)	(488,344)
Amounts per share of common stock (Yen):												
Net income/(loss)*5	¥ (57.80)	¥ 11.48	¥ 226.99*9	¥ 265.64*9	¥ 224.85	¥ 156.87	¥ 182.93	¥ 100.28	¥ 19.26	¥ (50.26)	¥ 129.49	\$ 1.06
Cash dividends applicable to the year*6	—	—	1.00	10.00	30.00	35.00	35.00	35.00	35.00	—	20.00	0.16
Net assets*7	156.85	166.04	1,105.21*9	1,454.61*9	1,595.83	1,738.70	1,894.29	1,910.67	1,865.63	1,876.40	2,065.74	16.93
Financial indicators (%):												
Operating income ratio	(1.9)%	2.4%	6.8%	6.7%	6.7%	3.9%	4.2%	2.3%	1.3%	0.3%	3.3%	
Return on equity (ROE) *8	(24.0)	7.1	23.5	20.8	14.7	9.4	10.0	5.3	1.0	(2.7)	6.6	
Equity ratio*8	24.5	25.1	29.4	35.2	37.4	41.2	43.8*10	41.8	42.1	40.5	43.8*12	
Average number of shares outstanding (in thousands)	1,863,949	2,989,171	597,829*9	597,823*9	597,819	597,816	612,554	629,757	629,781	629,786	629,852	
Number of employees (people)	37,617	37,745	40,892	44,035	46,398	48,849	49,755	49,998	50,479	49,786	48,750	

*1 The translation of Japanese yen into U.S. dollars is presented solely for the convenience of readers outside of Japan, using the prevailing exchange rate on March 31, 2022, of ¥122 to US\$1.

2 Net sales are categorized by the regions based on the customers' locations.

3 Capital expenditures are calculated on an accrual basis.

4 Free cash flow represents the sum of net cash flows from operating activities and investing activities.

5 The calculations of net income/(loss) per share of common stock are based on the average number of shares outstanding during each fiscal year.

6 Cash dividends per share represent actual amounts applicable to each fiscal year.

7 The amounts of net assets used in the calculation of net assets per share exclude non-controlling interests (and, for FY March 2012, FY March 2013, and from FY March 2017 to FY March 2022, stock acquisition rights) from net assets.

8 The amounts of equity exclude non-controlling interests (and, for FY March 2012, FY March 2013, and from FY March 2017 to FY March 2022, stock acquisition rights) from net assets.

9 A share consolidation was implemented on common stock with a ratio of five shares to one share on August 1, 2014. Average number of shares outstanding, net income per share, and net assets per share are calculated based on the assumption that consolidation of shares had been carried out at the beginning of FY March 2014.

10 The Company has adopted "Partial Amendments to Accounting Standard for Tax Effect Accounting" from the beginning of FY March 2019. The figures for FY March 2018 were adjusted retrospectively in accordance with this change.

11 The consolidated foreign subsidiaries that apply U.S. GAAP adopted ASU 2014-09 from the beginning of FY March 2020. The figures for FY March 2019 were adjusted retrospectively in accordance with this change.

12 Percentage after consideration of the equity credit attributes of the subordinated loan is 45.0%.

13 The Company has adopted "Accounting Standard for Revenue Recognition," etc. from the beginning of FY March 2022. The figures for FY March 2022 were adjusted in accordance with this change.