Panasonic ENERGY

Integrated Report 2024

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Editorial policy

This report is compiled and published annually as a communication tool for customers, business partners, and employees of Panasonic Energy, Panasonic Holdings shareholders, and other stakeholders to help them understand the full scope of our corporate activities and our approach to improving corporate value over the medium to long term.

Period covered by the report

Fiscal year 2024 (April 1, 2023 to March 31, 2024)
The report includes some activities before and after this period as well as future goals.

Organizations covered by the report

Panasonic Energy Co., Ltd. and its consolidated subsidiaries in Japan and overseas
(company names are current as of April 2024)

Guidelines used as reference

- GRI Standards
- IFRS Foundation, "The International Integrated Reporting Framework"
- Ministry of Economy, Trade and Industry, "Guidance for Integrated Corporate Disclosure and Company-Investor Dialogue for Collaborative Value Creation"

Disclaimer regarding forward-looking statements

Forward-looking statements in this report, such as forecasts of performance (of Panasonic Energy or the Panasonic Energy Group), growth strategies, and perceptions and evaluations of facts, include future prospects based on the judgments of Panasonic Energy in light of the information currently available to it. Please note that actual results may differ materially from these statements due to a variety of factors. Furthermore, we undertake no obligation to update or announce future prospects to reflect new events, situations, or circumstances.

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Click to return to the table of contents.

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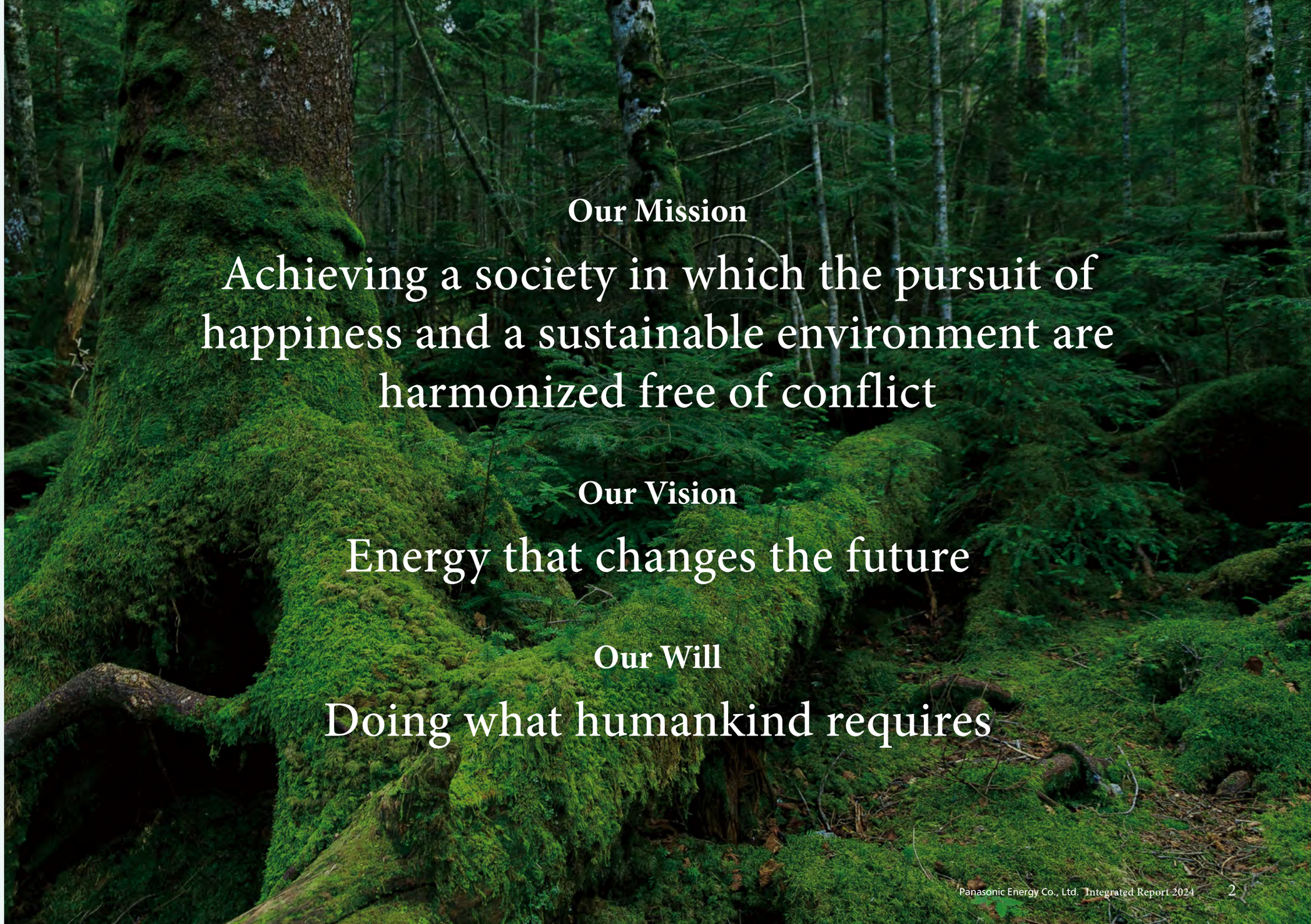

Our Mission

Achieving a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict

Our Vision

Energy that changes the future

Our Will

Doing what humankind requires

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Our goals remain unchanged

Kazuo Tadanobu
President, CEO

Message from the CEO

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Message from the CEO

Even stronger commitment to our Mission, Vision, and Will

Since the establishment of Panasonic Energy in 2022, we have worked towards realizing our Mission of "achieving a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict." During this period, natural disasters such as floods and heatwaves have occurred in different parts of the world, increasingly affecting our daily lives. It can be said that a trade-off has become apparent in which the enormous strain placed on the global environment for the happiness of people living today is paring back the happiness of future generations. Every time I recognize this kind of trade-off in my daily life, my commitment to our Mission grows even stronger. It is because of this Mission that we have been able to move forward without wavering in any way.

When we look at society, we can see that everything supporting human activity and industry is now powered by electricity. As such, batteries are underpinning the shift from gasoline vehicles to EVs and directly contributing to reductions in CO_2. Also, by adding the energy "storage" function of batteries to the conventional process of generating, transmitting, and using electricity, we are contributing to the use of precious electrical power without waste. In addition, the development of AI and other information infrastructure is supporting people's convenient and comfortable lives, even though it requires a tremendous amount of electricity. Behind all of this are batteries, which ensure that data centers continue to operate around the clock. In this way, the role of batteries in contributing to people's happiness and global environmental conservation is undoubtedly expanding.

Given that we operate a business that can help eliminate the trade-off I just mentioned, I believe that if we tackle challenges with all our might and make it our top priority to contribute to the society, expansion of our business will follow as a result. I am once again convinced of the mission that Panasonic Energy has set forth, and I am even more determined to be "the energy that changes the future."

Even in the maelstrom of change, our goals remain the same

In fiscal 2024, series of unexpected events occurred including global inflation and conflicts in various regions. Particularly in the EV market, some believe that growth has reached a plateau, mainly because of reports that the automakers have lowered their EV targets. In my view, the situation has shifted from overheating—during which the international community and governments worldwide made a strong push towards the adoption of EVs—to an adjustment phase to deal with the current situation where the actual development of social infrastructure and technology has failed to keep up. To move past this phase, it will be essential for battery manufacturers and automakers to work together to create vehicles with both price level and performance that more people are looking for. Nevertheless, many companies are finding this task difficult.

In response to this situation, our focus is entirely on achieving our Mission. As the world of energy continues to gather momentum, we will need to modify and optimize our course in response to policies of governments economic fluctuations, and unexpected moves by industry players. However, I believe the most important thing will be to continue taking steps towards the realization of our Mission without becoming shortsighted. Now is the right time for us to pave the way for market growth by leveraging the technological capabilities we have hitherto developed over the years. During the establishment of the Nevada Factory in North America, we had a hard time achieving a production level in excess of 30 GWh. Building on this experience, we will press ahead with the establishment of the Kansas Factory and look to develop technologies aimed at achieving price and performance acceptable to as many consumers as possible. We will tenaciously and assuredly continue down the same path we have been on, together with our customers.

From a medium-to-long-term perspective, the broader societal movement toward decarbonization will undoubtedly progress, and even if the pace of expected market growth slows down, the EV market will continue to expand as long as there is innovation. Accordingly, in line with EV market trends, we will revise the timing of when we expect to achieve net sales of more than ¥3 trillion and an EBITDA margin of 20% (actual basis not including IRA* tax credit), the management targets of our medium- to long-term strategy that we announced in fiscal 2024, but the numerical targets will remain unchanged. We also have no intention of changing our investment plans through fiscal 2028, including operations at the Kansas Factory.

*Inflation Reduction Act in the US

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Message from the CEO

Ushering market growth in medium- to long-term through innovation

On top of that, when looking back on our activities in fiscal 2024, it is true that we found it hard to respond to increasingly intense competition, rising inflation, and other changes. Particularly in North America, the enforcement of the IRA changed the pace of market changes, which meant that we had to make some major adjustments to the speed and approach of our efforts. On the other hand, we can confirm that we were able to enhance our global presence more than ever by getting our production sites up and running and pursuing technological innovation as quickly as possible by bolstering our resources with a view to our medium-term targets and plans, and also by closely collaborating with governments and various partners. In that sense, I believe it was a year in which we were able to steadily lay the groundwork for a profit expansion phase from a medium- to long-term perspective.

Our strategy going forward will be to reduce our environmental footprint and contribute to the development of society on multiple levels with our "two-pillar management" approach driven by both the in-vehicle business and the industrial and consumer business.

In the in-vehicle business, while continuing to improve production capacity and profitability for the North American market, we will also step up our efforts in the Japanese market, where the EV market has started to expand. Our aim is to shift from a focus on North America to a dual-region focus on Japan and North America. As part of this, we are advancing discussions on the building of medium-to-long-term partnerships for battery supply with major Japanese automakers Subaru Corporation and Mazda Motor Corporation. Together, we will aim to create new value and promote the development of Japanese industry.

In the industrial and consumer business, we will deploy advanced systems that bring together our high-safety and high-reliability cells with control technology in an effort to maximize the value we provide. We will especially focus on areas expected to grow in the medium-to-long term, such as information infrastructure centered around data centers, which are becoming more prevalent with the rise of generative AI, and the electrification of power equipment like electrically assisted bicycles, construction machinery, and agricultural machinery.

Going forward, I believe we can create a new movement to make further strides in electrification by taking our innovation to the next level. Given the need for all-encompassing innovation that includes not just our technology, but also our operational capabilities, we will aim to bring together all of our strengths, demonstrate our solutions to the world, and lead the way forward in the industry.

Leading the way to achieving a decarbonized society

In addition to two-pillar management, "ESG management" is also a key strategic framework of our medium- to long-term strategy. We are focused on achieving decarbonization and a circular society, as well as on human capital management that enhances the value of employees, the source of our competitive advantage.

For decarbonization, we have our sights set on halving our fiscal 2022 carbon footprint by fiscal 2031, and we also seek to reduce CO_2 emissions across the entire supply chain, from the upstream resource mining to the processing of raw materials, logistics, and battery manufacturing at our own factories. In particular, we are accelerating our efforts towards our goal of virtually zero CO_2 emissions at all our factories by fiscal 2029. Globally, we have achieved virtually zero at 17 of our 20 factories, while in Japan, we have already met this target at all sites ahead of schedule (as of September 2024).

In addition, to reduce emissions in the upstream supply chain, which accounts for over 80% of CO_2 emissions, we engage in local procurement practices, use recycled materials, and endeavor to reduce our use of rare metals, among other initiatives. In using recycled materials, there are challenges that are difficult for a single company to solve, so we are working on developing a mechanism to promote innovation by acting as a core player in bringing companies together for the purpose of collaboration.

Furthermore, Panasonic Energy is driving efforts to achieve the Group's Panasonic GREEN IMPACT target of avoided CO_2 emissions of 93 million tons by 2030. In addition to automotive Li-ion batteries, we intend to support the electrification of mobility by providing batteries for new initiatives such as electric bikes. As these efforts we aim to achieve avoided CO_2 emissions of approximately 60 million tons by fiscal 2031 (roughly four times the amount in fiscal 2023).

Building a culture of excitement where employees are not afraid to take on challenges

I believe that value can only come from people, so my focus is on creating a culture in which employees can freely and enthusiastically take on as many challenges as possible. As it stands now, with the EV and battery markets moving towards the next stage, no solutions will come to us if we continue in the same way as before. In my view, our collective strength as a company is the most important aspect. We need to face challenges without fear, share our stumbling blocks, or failures, with each other as the starting point for learning, and never stop trying to find solutions. The achievements gained at the end of a challenge can become a source of competitiveness that others cannot easily replicate. Even when we summon the courage to take a bold leap, there will be times when we fall. But I want to reassure everyone that there is a trampoline below to catch them. For this reason, we are kicking off a wide variety of initiatives.

Supporting these challenges accompanied by changes in our own behavior are our action guidelines, called the Seven Paths to Transformation. They define the mindset for going about one's work from both an offensive and defensive point of view, which is not fully expressed in our Mission and Vision. These

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guidelines also aim to encourage each employee to conquer their own struggles in their work and to provide a sense of reassurance that they can break through whatever has been holding them back. We aim to be a "20,000-person venture" that has speed and flexibility, and a creative company that always maintains a feeling of excitement. Accordingly, we hope to produce innovations in line with the times as soon as possible.

Doing what humankind requires, together with like-minded partners

There is no way we can achieve our Mission by ourselves. As such, we will require the cooperation of many of our partners. In the two years since the establishment of Panasonic Energy, we have actively communicated our aspirations, and in response, many like-minded partners willing to work with us have come forward. Not only in Japan and North America but also in many other countries, through meetings with government officials, customers, and suppliers, I feel that the regions and industries we are involved with are expanding at an accelerated pace. Moreover, collaboration between partners centered around us has also begun. We are grateful that such high expectations have been placed on us and for the opportunities we receive from various quarters.

By innovating together with these partners, we will undoubtedly achieve further growth in the battery market. We are currently in the middle of an investment phase, but I am confident that within a few years, when operations at the Kansas Factory come online and we have started to supply new customers in the in-vehicle business, we will be able to develop a stable business. In the industrial and consumer business, we are making progress on initiatives aimed at the stable and efficient utilization of electricity by providing the "storage" function of batteries I mentioned earlier to the power grid supply network. We are working on contributing to society through these businesses, and I hope that our stakeholders have strong expectations for growth in the battery industry and at Panasonic Energy.

This painting depicts our current situation. Many different companions are working together to get to the other side of a chasm. A bright future can be seen in the distance, so the party has certainly not lost its bearings. Just like in this illustration, if each and every employee and partner can unleash their full potential, we can definitely cross the divide. My wish is for the children of the future to inherit a better environment than the one we have now. Doing what humankind requires—this is my will.

We Aim for

Achieving a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict

We will continue to pursue the happiness of humanity as we tirelessly protect the future of the environment. Harmonizing these two goals without conflict will require us to completely eliminate all excess environmental impacts made by humankind. And with complete determination, we must engage in this effort with a greater commitment than anyone to succeed as part of humanity.

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Our DNA, the Source of Our Strengths

In accordance with the management philosophy of Panasonic's founder, Konosuke Matsushita, we have developed batteries for more than 100 years with the goal of freeing humanity from inconvenience and impossibility. Having positioned the Basic Management Objective and the Company Creed, which constitute the heart of his management philosophy, as our spiritual pillars, we will continue to undertake the challenge of creating unprecedented value in order to deliver energy to a society that harmonizes enriched lifestyles with the environment.

Konosuke Matsushita
Founder

Management Philosophy of the Panasonic Group

Panasonic Group "The Basic Business Philosophy"
https://holdings.panasonic/global/corporate/about/philosophy.html

The Basic Management Objective

Recognizing our responsibilities as industrialists, we will devote ourselves to the progress and development of society and the well-being of people through our business activities, thereby enhancing the quality of life throughout the world.

The purpose of the Panasonic Group's business and its mission remain unchanged since the proclamation of Meichi, and the Basic Management Objective captures this philosophy concisely. Every day, we continue to strive for progress by providing society with unparalleled products and services to improve the well-being and quality of life of people around the world.

Company Creed

Progress and development can be realized only through the combined efforts and cooperation of each employee of our company. United in spirit, we pledge to perform our corporate duties with dedication, diligence and integrity.

The Company Creed expresses our attitude toward the way the Panasonic Group conduct our work on daily basis. It is essential for everyone to collaborate and work together with sincerity every day. Only when each organization sets its own high goals, its members understand them fully and make them their own, and there is teamwork based on mutual trust, can the goals of the organization and ultimately the development of society be realized.

Company history

Note: Company names are written using the names at that time only on this page.

1918 — Battery business founded
Konosuke Matsushita found Matsushita Electric Housewares Manufacturing Works

1923 — Sanyo Electric Works was established

1929 — Management objective and company creed announced

1931 — Acquired the Komori Dry Battery's factory and starts in-house production of dry batteries

1935 — Reorganized as Matsushita Electric Industrial Co., Ltd.; established National Storage Battery Co., Ltd.; established Matsushita Dry Battery Co., Ltd.

1947 — SANYO

1950 — Established Sanyo Electric Co., Ltd.

1979 — Established Matsushita Battery Industrial Co., Ltd.

2008 — Established Panasonic Corporation Energy Company

2011 — SANYO Electric Co., Ltd. became a wholly owned subsidiary

2013 — Established Panasonic Corporation Automotive & Industrial Systems Company

2014 — Established Panasonic Energy Corporation of North America(PENA) Factory starts operation in 2017

2019 — Established Panasonic Corporation Industrial Solutions Company and US Company

2021 — Established Panasonic Corporation Energy Company based on the energy business area of the Industrial Solutions Company; the Tesla Energy business of the US Company; and the Energy Technology Division under the Panasonic head office

2022 — Established Panasonic Energy Co., Ltd. following transformation into an operating company system

2024

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History of Freedom

——History of Practicing the Management Philosophy

Throughout our century-long history, we have engaged with the challenges faced by society during each era. And through the creation and development of new batteries, this history of freeing humanity from numerous inconveniences and impossibilities has in and of itself served as the practice of our management philosophy, including the Basic Management Objective and the Company Creed.

Freedom from the darkness

In an era when bicycle lights were dominated by candles and oil lamps, we perfected an innovative bullet-shaped battery-powered lamp by combining an Excel bulb and an Excel battery. This approach extended the life of bicycle lamps from a mere two to three hours, to more than thirty to forty hours, freeing bicycle riders from the darkness.

1923
- Invented and released bullet-shaped battery-powered lamp

- Released Excel dry batteries for bullet-shaped battery-powered lamps

Freedom from short service life

After developing National Hi-Top, last longer than conventional batteries with twice and have a longer shelf life, we went on to develop NEO Hi-Top with 1.5 times the service life of the original design. In response to the strict dimensional restrictions on length, width, and height demanded by international standards, we delivered the longest lasting energy in the world to every corner of the planet.

1963
- Released National Hi-Top manganese dry batteries

1964
- Started production of Cadnica nickel-cadmium Batteries

1969
- Released National NEO Hi-Top manganese dry batteries

Freedom from use-and-discard

Despite the fact that dry batteries had already become standard throughout the world upon entering the 21st century, these faced environmental challenges because they were, by nature, disposable. In response to this social issue, Sanyo Electric Co., Ltd, as it was then known, bet the entire company on developing eneloop and together with the subsequent rechargeable EVOLTA battery overturned the common assumption that batteries are disposable.

1989
- Developed nickel-metal hydride batteries

2005
- Released eneloop nickel-metal hydride batteries

2008
- Released EVOLTA alkaline dry batteries
- Released Rechargeable EVOLTA nickel-metal hydride batteries

Freedom from size, weight, and lack of power

The development of countless different electronics products has led to the needs for smaller, lighter, more powerful energy sources, ultimately leading to the demand for unprecedented performance from batteries. The Li-ion batteries that we developed enabled compact, lightweight laptop computers and smartphones, and have therefore contributed significantly to today's information society.

1994
- Developed Li-ion rechargeable batteries

2006
- Started mass production of high-capacity cylindrical Li-ion batteries using nickel-based cathode materials

Freedom from environmental impact

The electrification of mobility is playing a critical role in the solutions to climate-change related issues. Ever since delivering the batteries for the world's first mass produced HEVs, we have supplied the electric vehicle market with high-capacity cylindrical Li-ion batteries that ensure long driving ranges, thereby freeing the world from the environmental impacts of human mobility.

2008
- Started mass production of automotive Li-ion batteries(1865 size)

2017
- Started mass production of automotive Li-ion batteries(2170 size)

2024
- Scheduled the start of mass production of cylindrical automotive Li-ion batteries (4680 size)

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The Seven Paths to Transformation

——Practicing the Management Philosophy Handed Down through to Today

[The Seven Paths to Transformation]

Inevitable Evolution
<Offensive paths>

Set impossible goals.

Raise a flag of overwhelmingly high goals for transformation that will change the future. Even if you don't have the means yet, if like-minded people work together, the content contained in this flag is certain to become a reality.

Laugh at illogical things or situations with your friends and overcome them.

The path to evolutional change is not always friendly to common sense. Dreams and the future await us ahead of illogical things. No worries. The smiles of your friends will always give you strength.
All you have to do is to keep taking on your challenge with resilience and flexibility.

Push forward until you arrive at the unimaginable solution.

There's a solution to change the future, but you merely haven't realized it yet.
Use all of your senses and try everything. After a series of remarkable mistakes and coincidences, you will be sure to find the "it" that will allow you to solve your problem.

Ultimate Adaptation
<Defensive paths>

To maintain the status quo is to abandon the future.

Learn from the past, think about the future, understand yourself, know the world, and discern the changes of the times.
There is no future if we stand still. Keep imagining the next step at all times.

Attack completely to defend completely.

We need to think offensively to evolve to meet the demands of the future, rather than resting on our current achievements.
Every day, continue to set the next goal and keep pushing forward until you surpass your best.

Keep your passion burning.

No matter what your job is, if you keep pouring your heart into it, you can continue to improve yourself forever.
Keep the fire in your hearts alive and pass it on to the next generation.

Absolute Transformation
<Path for mankind>

For future generations.

We're not just working for the present.
Always keeping our children and our children's children in mind, without fail we must transform our company to one with an energy that will change the future.

Our Mission, Vision, and Will illustrate the destination for which we aim, yet the mission we have envisioned will be extremely difficult to achieve if we ourselves do not evolve. Therefore, we established the Seven Paths to Transformation as a new set of guideposts for evolving our everyday activities. These guideposts present the activity guidelines that will help each of our employees modify their behavior in a way that is required to arrive at our destination.

The Seven Paths to Transformation can also be considered an equation that corresponds to our business in that it represents the fundamental law of evolution, which all life undergoes through repeated mutation and adaptation. Our belief is that we will arrive at our mission by achieving absolute transformation (pillar of mankind) through inevitable evolution (pillars of offense), which ultimately give rise to what had never existed before, and through ultimate adaptations (pillars of defense), which perfect what already exists to the greatest extent possible.

Seven Paths Heroes Award

Encouraging the Practice of the Seven Paths to Transformation through Awards

In order to maintain our position as a global leader and achieve our mission, we believe that each of our employees must act independently, not by extension of what is, but in a way that calculates backwards from our mission. We have therefore set out to hold an annual event in which we select the Seven Paths Heroes as a means of encouraging every employee to deepen their understanding of the Seven Paths to Transformation and to take ownership of the kinds of action we expect of them. The first event was held in fiscal 2024.

Award Example

Developing an innovative lithium battery technology and efficiently introducing it for mass production

"To maintain the status quo is to abandon the future" by the award winner
Mr. N, Research & Development Center

We have been working to enhance the performance of lithium batteries which have a long history.

Based on my own knowledge of electrolytes, we engaged in technological research and development that aggressively incorporates peripheral technologies. As a result, we discovered a breakthrough technology that upended the established concepts of the time, and thereby helped to enhance the performance of new products. At the same time, we supported the efficient introduction of this technology to the business division, and helped to bolster the motivation of those in charge. I received this award in recognition of these efforts.

Strengths of Panasonic Energy

Technological capabilities, market creation, reliability and track record cultivated in the 100 years since our founding

Even in a future world of intense uncertainty, we will create new markets using our steadfast technological capabilities, and leverage the trust of our partners and our track record to maintain our business and to expand our contributions to society.

1 Technological capabilities

- Material development and cell design
- Intellectual property

9,100 patents

2 Market creation

- Strategic relationships with customers
- Ability to solve customer problems

Contribution to the evolution of lifestyles

3 Reliability and track record

- Manufacturing that supports high reliability
- Brand

Zero recalls of automotive Li-ion batteries*

*Battery-attributed

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1 Technological capabilities

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Another Level of Know-how Accumulated Over 100 Years

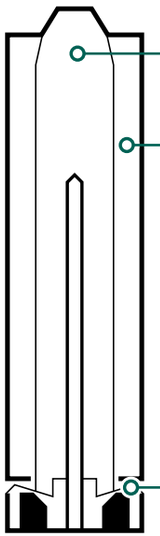
Ever since we launched our battery business in 1923, more than 100 years ago, we have been involved in the development of batteries. And the material development capabilities acquired from the manufacture of dry batteries, the know-how for improving the packing density of materials, and the sealing and can manufacturing technologies that enable longer battery service life are all alive and well in the way we manufacture secondary batteries today Moreover, we have focused on cylindrical secondary batteries that leverage the technologies we have accumulated in this field.

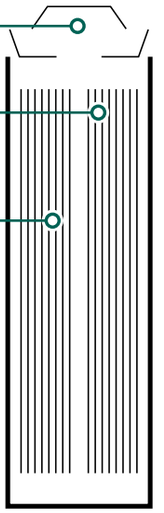
The breadth of know-how we possess, ranging from primary to secondary batteries, constitutes our technological capabilities – our strengths. And we will continue to leverage these technological capabilities as we increase the capacity of batteries and realize a greater level of safety in an effort to maintain and continuously expand our battery business.

—Technologies for Creating High-capacity, Highly Reliable Batteries—

Dry Batteries
Since 1923
Longest lasting in the world*1

Li-ion batteries
Since 1994
Highest capacity in the industry*2





Materials Technology

We possess the advanced process control and other peripheral technologies required to fully utilize battery materials. Likewise, we are able to manufacture high-capacity, highly reliable batteries in a way that addresses battery material reactivity, expansion, contraction, and other challenges.

Electrode Structuring Technology

Increasing battery capacity relies on the technology for packing materials into a limited space. We possess the production technology for packing powders of different geometries in an efficient, uniform manner, thereby allowing us to achieve higher capacities.

In regard to Li-ion batteries with a cylindrical configuration consisting of a wound three-ply cathode-separator-anode structure, we possess winding technologies that create high-precision cylinders, thereby enabling us to manufacture highly reliable batteries.

Sealing/Can Manufacturing Technology

The seals and cans that come into contact with air-borne moisture and oxygen are a critical part of ensuring the safety and security of batteries. We possess sealing techniques that prevent leaks, and sealing and can manufacturing technologies that restrict gas generation, which allows us to manufacture highly reliable batteries.

Analysis Technology

Leveraging observation techniques suited to the materials, measuring know-how with a deep understanding of electrochemistry, and other advanced analysis capabilities, we are able to make accurate performance assessments and discover problems, thereby enabling us to manufacture highly reliable batteries.

*1 EVOLTA NEO: Certified by Guinness World Records™ on October 2, 2017, as the longest lasting AA-size alkaline battery (LR6). Recertified on February 28, 2024. Based on the average value under full-discharge mode in accordance with IEC standards. 250 mA; one-hour discharge cut-off voltage per day of 0.9 V, etc. (temperature: 20±2°C, relative humidity: (55+20, 55-40)%).

*2 According to research by Panasonic Energy

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2 Market creation

Pioneering New Battery Applications through Technological Innovation

We have provided solutions to social issues by using our advanced technological capabilities and have created new markets by disrupting existing understandings.
And we have supported the lifestyles of people, by creating markets for cylindrical Li-ion batteries that ensure a high level of safety, by entering the telecommunications infrastructure business with an eye to the coming future, and by creating markets for dry batteries designed to be stored in preparation for disasters.
Through our ongoing, tireless efforts to evolve our technologies, we will solve challenges faced by society and create new markets.

Creating Markets for Cylindrical Li-ion Batteries

Amid the deep understanding that automotive batteries are square in shape, we began developing and manufacturing cylindrical Li-ion batteries from the perspective of safety.

In-vehicle battery packs are composed of multiple cells connected in parallel and serial. The cells in cylindrical batteries can be more efficiently cooled, which keeps battery temperatures from rising even during rapid recharging, in turn preventing battery deterioration.

We began mass producing cylindrical automotive Li-ion batteries in 2008, at which time we pioneered new markets for these. In 2017, we commissioned a cylindrical automotive Li-ion batteries plant in Nevada, USA, and worked to expand mass production in an effort to create a larger market for these batteries.

Entering the Telecommunications Infrastructure Market

In 2014, we entered the storage battery systems market for data centers.

More recently, the demand for data centers has expanded with the growing use of generative AI. We therefore began developing and manufacturing these storage battery systems in anticipation of growing demand for data center backup power supplies.

Given their need to operate consistently even in emergencies, the most important issue for data centers is the reliability of their backup power supplies. We have captured a high share of the market because our exceedingly safe, highly reliable storage battery systems are ideal for data centers.

We have also horizontally deployed the technology accumulated in targeting data centers to residential storage battery systems, thereby contributing to various parts of the social infrastructure.

Creating Markets for Storage-use Dry Batteries: EVOLTA NEO

Dry batteries deteriorate when stored long-term, regardless of whether they are used or not, so we face challenges in terms of capacity drops and leaks.

Applying the technological capabilities we have built-up over the years, we revolutionized the dry battery materials, production methods, and structures to create EVOLTA NEO. This battery can be stored for ten years, thereby allowing us to establish a market for dry batteries intended to be stored as a means of providing support in the event of disasters or emergencies.

As a dry battery that helps people enjoy safe, secure lifestyles at all times, even in the event of disasters, EVOLTA NEO has the longest-lasting performance in the world, a fact certified by Guinness World Records™, and is designed to prevent leaks using the “battery leakage preventing manufacturing process Ag+”.

Our DNA and Strengths
Our DNA, the Source of Our Strengths
Strengths of Panasonic Energy
Message from the CTO

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3 Reliability and track record

Reliable market performance and brands

We have supplied a cumulative total of over 15 billion cylindrical automotive Li-ion battery cells to date.
The most important part of battery manufacturing for us is the extent of product safety and quality, which is why we have made tireless efforts involving quality innovation with a top priority on product safety.
In the field of automotive Li-ion batteries, these efforts have manifested in the fact that no recalls have stemmed from our batteries.

Battery Manufacturing Innovation Based on Manufacturing Technology Advancement

We have committed to transforming our manufacturing technologies as batteries have evolved. Today, our advanced manufacturing processes enable us to manufacture high-quality cells at high speeds, with production reaching 80 automotive Li-ion battery cells every second, or more than 7 million cells every day. Specifically, this capability is founded on the in-house manufacturing relying on the technologies we have accumulated to date, the traceability system which detects abnormalities and contaminants, conducts causal analysis of such abnormalities and corrects them, and the advanced production line management which is based on regular condition-based maintenance.

Manufacturing Strengths

- ☑ **Highly productive, high-quality production processes**
- ☑ **Product safety management**
- ☑ **Perfected traceability systems**

Materials → **Electrodes** → **Assembly** → **Inspection** → **Modules** → **Market**

Key process: In-house manufacturing

- Proprietary development of production process technologies
- In-house manufacturing of key process equipment

Traceability & Production Monitoring

- Sensing and monitoring systems
- Traceability from plant to market

Production Line Management

- Process visualization, condition detection and feedback
- Condition-based maintenance

Message from the CTO

Shoichiro Watanabe
Executive Vice President
Chief Technology Officer (CTO)

Driving the energy transition in both in-vehicle business and industrial and consumer business

Accelerating technological development and partnership building to transform the future

An energy transition is currently underway as the world moves towards decarbonization. This involves shifting away from fossil fueled energy systems to sustainable energy systems that use renewables or hydrogen. To further accelerate this movement, electrification and storage batteries will be key to the uptake of renewable energy. In all of this, we have a proven history of driving innovation for the future ever since we started making batteries 100 years ago. In particular, our lithium-ion battery business, which is currently in the spotlight, has celebrated its milestone of 30th anniversary. We have consistently been a world leader with our technological capabilities.

Since taking office as CTO two years ago, I have focused mainly on two things. First, I have focused on guiding the Technology Department towards our future vision by closing the gap between where we are and where we want to be so that technology never becomes a bottleneck during this historic growth stage. Second, to give tangible shape to our Mission and Vision, I have clearly communicated to our external stakeholders what we are aiming to achieve from technical perspectives, and I have taken the lead in gaining their understanding while also building partnerships. Even though the pace of growth in the rapidly expanding EV market has slightly slowed down, we expect it to continue growing up in the medium and long term, which is why we will continuously accelerate these initiatives.

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Propelling different technology strategies in each of our in-vehicle and industrial and consumer businesses

Our business is centered on cylindrical batteries in which we have accumulated technology, but our technology strategy is distinctly different for the two businesses.

In the in-vehicle business, realizing EVs with a better cost performance than gasoline vehicles is a key factor for further EV adoption and reducing environmental impact, so we need to bring down the battery cost per vehicle to affordable prices. To achieve this, it is crucial to realize a best balance between battery performance and costs, and we are striving for that. All in the industry have been aware for a decade of which materials are most effective to simply improve performance. The key challenge lies in not just improving performance, but in developing production technology to guarantee quality in mass production, as well as in securing safety for the batteries with higher capacity. In addition, driving innovation even in upstream processing of resources and raw materials is inevitable to dramatically lower costs while minimizing environmental burdens, and we are working to transform raw material processes and use recycled materials.

Meanwhile, we consider the industrial and consumer business to be a field where we ought to take risks and embrace challenges in anticipation of a society built around digitalization and electrification. We are therefore approaching technological development with the mindset of creating new markets. More specifically, we will look to expand into electrifying areas such as motorcycles, construction and agricultural machinery, and ships and aircraft. Our technological value proposition is brought about by system solutions rather than just standalone battery cells, contribute to solving various challenges, and hasten the energy transition in order to curb CO_2 emissions.

Leveraging our advantage in cylindrical batteries and targeting an energy density of 1,000 Wh/L

Cylindrical batteries have an advantage that we can evolve the performance by means of only changing their battery chemicals inside without altering the shape of their battery cases. In other words, there is no need for capital investment to switch to new production equipment for battery performance upgrades, which can bring us a cost advantage after the recovery of initial investment.

Leveraging this advantage, we aim to increase the energy density of our batteries from the current 800 Wh/L to 1,000 Wh/L by fiscal 2031 in order to provide greater value with higher capacity. That said, achieving this will require ingenuity in both cathode and anode materials.

Since 2012, we have been mass producing automotive batteries using silicon alloy for anodes. Compared to graphite, which is widely used as anode materials in Li-ion batteries, silicon materials are expected to provide theoretically about ten times higher energy density. By harnessing our proprietary technology, which we applied for more than 10 years to silicon alloy that is characterized by significant volumetric changes during charging and discharging, we intend to enhance the performance of our batteries by further increasing the usage ratio. In order to secure the increased volume required in the future, we concluded purchase agreements in fiscal 2024 with UK-based Nexeon Limited and US-based Sila Nanotechnologies Inc.

In order to reduce the volume of rare metals used in cathode materials, we are working to establish cobalt-free technology and develop cathodes that significantly reduce the ratio of nickel, which currently accounts for about 90% of cathode raw materials.

It should also be mentioned that in recent years, all-solid-state batteries have made remarkable progress in terms of performance, and some say they could be commercially viable as early as 2027 or thereabouts. However, we believe a rapid commercial adoption will unlikely happen due to their challenges in cost competitiveness. Indeed, all-solid-state batteries carry the advantage of being usable in extreme environments, such as high or low temperatures, and we recognize that makes them highly valuable. Even though we are developing all-solid-state batteries, we would consider using them for automotive applications when their cost competitiveness becomes comparable to that of Li-ion batteries.

Securing stable suppliers and reducing our environmental footprint

We aim to halve the carbon footprint (CFP) of our automotive Li-ion batteries by fiscal 2031 compared to fiscal 2022.*1 However, because 86%*2 of the CFP arises from the processes such as resource mining, raw material processing, and logistics, we are not only addressing the reduction of the CFP in our manufacturing processes, but also working to reduce environmental impacts upstream in the supply chain as a key management issue.

In particular, for graphite for use in anodes, we have signed long-term agreements with Canada-based Nouveau Monde Graphite Inc. for the supply of natural graphite and with NOVONIX Limited for the supply of synthetic graphite. Procuring graphite from these two companies will lead us to greatly reduce our CO_2 emissions associated with the production of anode materials in the future. Moreover, in addition to reducing our environmental footprint, we are endeavoring to fortify our battery supply chain in North America by procuring materials from factories located in the region.

*1 CO_2 emissions per unit of battery capacity produced at the North American factory
*2 Panasonic Energy estimate for fiscal 2022

Our DNA and Strengths

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Message from the CTO

Developing manufacturing personnel with a “glocal” approach

On the topic of developing manufacturing personnel, by implementing initiatives suited to each region, we are working to enhance productivity and improve quality losses. At our factories in Japan, where the retention rate is high, employees with over 10 years of experience, who are capable of handling multiple roles, are serving as site leaders. Even automated production lines require human intervention. In reality, frequent machine stoppages are a major factor in reduced productivity. The employees minimizing the impacts of these breakdowns are multi-skilled, experienced technicians who have a solid understanding of various machines and can handle all aspects of their management and maintenance. At our factories in Japan, these technicians hold the key to improving productivity and establishing mass production systems, which is why we are focused on their development over the medium- to long-term.

Also, in Japan, we have plans to hire around 1,000 people in recent three years. To mitigate the OJT workload at our manufacturing sites, in fiscal 2024 we opened the Academy of battery Technology & Manufacturing with the aim of streamlining the OJT process. This program aims to quickly arm employees, including mid-career hires, with the skills needed to work effectively on the operational frontlines within their first two years. Considerable progress was made with this initiative in the space of 12 months, so for the next step, we will be also focusing our efforts on developing programs for employees tasked with high-level innovation roles and middle management responsible for overseeing operations.

On the other hand, in North America where employee turnover is higher, things did not work out the same way as in Japan. When we first established the Nevada Factory, we deployed the automated production lines from Japan and standardized the working styles of the all-round Japanese workers and dispatched skilled technicians from Japan. But despite this, productivity failed to improve. To address this situation, we divided the roles in each production process into smaller tasks to enable the acquisition of skills in a short period of time and established a production system that does not rely on the skill proficiency levels of individual employees. As a result, the productivity of the Nevada Factory has notably improved.

Improving mass production processes and strengthening innovation

If we are to enhance our manufacturing competitiveness, it is imperative that we not only develop battery materials and battery performance, but also strengthen production technology for mass production and carry out efficient proof-of-concept testing. Accordingly, in April 2024 we established a new R&D facility to help develop production processes on the premises of the Suminoe Factory in Osaka. Our R&D bases had been split across multiple locations, but going forward, the new facility will consolidate them and significantly streamline the development of production technology. Also, a new R&D facility for cell development in Nishikadoma, Osaka will be completed in April 2025, which means we will have the largest battery R&D setup in Japan. With this R&D facility, we plan to speed up mainly the development of next-generation Li-ion batteries.

Going forward, not only will we improve battery performance, but we will streamline entire supply chains, lower our CFP, reduce costs through productivity improvements, generate higher added value with the “layering up” of system solutions, and drive the evolution of the energy transition.

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Value Creation Process

External environment

- Tighter environmental regulations
- Climate change
- Resource depletion
- Poverty
- Child labour/ forced labour
- Health care crisis
- Technological innovation
- Growing ESG awareness

Panasonic Energy will utilize its diverse capital, including its human resources and technology, to promote solutions to social issues with our strengths at the core and achieve sustainable enhancement of corporate value.

Our Will
Doing what humankind requires

Our Vision
Energy that changes the future

Inputs P.19

[Human capital]
Strengthening of human resources

[Natural capital]
Strengthening responses to resource and environmental issues

[Social and relationship capital]
Sustainable and resilient supply chain

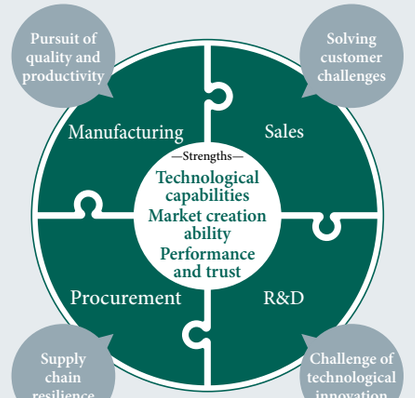
[Intellectual capital]
Strengthening R&D to improve battery performance and reduce environmental impact

[Manufactured capital]
Improvement of productivity, pursuit of quality and product safety

[Financial capital]
Generation of operating cash flow and expansion of investment for growth

Business activities P.24

Building a strong management foundation and promoting solutions to social issues with our strengths at the core

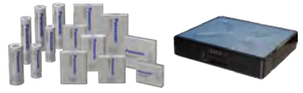


[Related materiality]
- Promoting human capital management and respecting human rights
- Responsible supply chain
- Thorough compliance
- Corporate governance

Outputs P.20

Mobility Energy
Reduce CO_2 emissions by supporting electrification of mobility

Energy Solutions
Contributing to a safe and secure social infrastructure that does not stop even in emergencies



Energy Device
Providing convenient and comfort-able living with eco-friendly batteries

[Related materiality]
- Providing energy for the pursuit of happiness
- Achieving decarbonization
- Realizing a circular society

Value proposition P.21

Our Mission
Achieving a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict

Further capital reinforcement for sustainable corporate value enhancement

Source of Value Creation: the six capitals (inputs)

We regard human capital, natural capital, social and relationship capital, intellectual capital, manufactured capital, and financial capital as the six critical components of corporate value, which we are always working to improve.

Enhancing human resources

[Human capital]

To expand our business in Japan and overseas, we aim to increase the number of employees, focusing on technical and manufacturing human resources. In addition, we will enhance our business competitiveness by developing systems and environments and fostering an organizational culture in which each and every employee can thrive. We also focus on improving the wellbeing of our employees by promoting health and safety activities and "Health and Productivity Management".

Consolidated Group employees	Overseas personnel	Work-related fatalities
Approx. 19,000 →	70% →	0 →

Strengthening responses to resource and environmental issues

[Natural capital]

We will reduce our CO_2 emissions and contribute to the reduction of CO_2 emissions in society as we move towards decarbonization. We are also stepping up our efforts to maximize the positive impact and minimize the negative impact on both achieving decarbonization and the realization of a circular society to use limited resources efficiently and reduce our environmental footprint.

Zero-CO_2 factories*1	CO_2 avoided emissions*2	Factory recycling rate*3
14 sites worldwide ↑	12.71 million tons →	98% →

*1 Factories that have achieved virtually zero CO_2 emissions by promoting energy conservation, introducing renewable energy, and using carbon credits.
*2 The amount of CO_2 emissions reduced by customers and society through the use of our products compared to the baseline level without our products.
*3 Factory waste

Sustainable and resilient supply chain

[Social and relationship capital]

We will work with various stakeholders to fulfill our social responsibilities with regard to human rights, labour, health, and safety while also establishing a robust supply chain for stable supply by promoting recycling and local procurement of battery materials.

Rate of implementation of self-assessments related to human rights and labour
100% →

Strengthening R&D to improve battery performance and reduce environmental impact

[Intellectual capital]

In addition to improving battery performance such as higher capacity, we will focus on minimizing the use of rare metals by transition to cobalt-free and less-nickel batteries, thereby contributing to a reduction in environmental impact. We will also focus on the development of lightweight batteries for the electrification of future aircraft.

Number of patents held
9,100 ↑

Improvement of productivity, pursuit of quality and product safety

[Manufactured capital]

While working to improve productivity at each site through human resource development and the promotion of automation, we are promoting quality innovation with product safety as the top priority. In addition, we will make efficient capital investments to expand production capacity to meet the growing demand for electric vehicles (EVs).

Manufacturing sites worldwide	Number of serious product accidents	Capital investment
20 sites →	0 →	¥292.1 billion ↑

Generation of operating cash flow and expansion of investment for growth

[Financial capital]

We will improve our ability to generate future operating cash flows by strengthening our profitability structure through productivity improvements and streamlining and by increasing production capacity. We will also seek to improve capital efficiency.

Total assets	Operating cash flow
¥1,373.5 billion ↑	¥139.3 billion ↑

ROIC
14.6% ↑ (0.4% excluding the impact of the U.S. Inflation Reduction Act [IRA] tax credit)

All figures in the table are results for fiscal 2024.

Panasonic Energy's Contributions (outputs)

Panasonic Energy contributes to society every day through our cutting-edge technologies and diverse products, which are used in various scenes of life.

In-vehicle Business	Industrial and Consumer Business	
Contributing to reduce CO_2 emissions by supporting electrification of mobility	Contributing to a safe and secure social infra-structure that does not stop even in emergencies	Providing convenient and comfortable living with eco-friendly batteries
Mobility Energy Business Division	Energy Solutions Business Division	Energy Device Business Division

Space

The recovery capsule of the asteroid probe Hayabusa 2 uses a lithium primary battery that is resistant to environmental changes.

Illustrations: Akihiro Ikeshita

Data centers

Safe, long-lasting, and highly reliable storage battery systems based on Li-ion batteries are used as a backup power source.

Commercial buildings

Nickel-metal hydride batteries, which are characterized by their long life, are used in guide lights and emergency lights.

Hospitals

A variety of batteries, such as nickel-metal hydride batteries and lithium primary batteries, are used in medical devices that require high safety and reliability.

Houses

Dry batteries are used in familiar products such as remote controls and clocks. In addition, long-term, reliable lithium primary batteries are used in state-of-the-art gas and water smart meters. Furthermore, Li-ion batteries are used for household storage batteries.

Solar cell systems

Nickel-metal hydride batteries are used as rechargeable batteries for solar-powered ocean buoys, which can be used in harsh environments with large temperature differences.

Cars

Li-ion batteries, which are characterized by their high-capacity and safety, are used as a power source for electric vehicles. Also, nickel-metal hydride batteries are used for the TCU, which is the system that communicates between the car and the external network, and e-call, which is an emergency reporting system for vehicles.

Bicycles

Electric-assist bicycles use Li-ion batteries, which are characterized by their high-capacity, small size, and light weight.

In-vehicle Business + Industrial and Consumer Business

Industrial and Consumer Business

Value Creation

Value Creation Process

Source of Value Creation: the six capitals (inputs)

Panasonic Energy's Contributions (outputs)

Panasonic Energy's Value Proposition (outcome)

Material Issues for Value Creation (Materiality)

Process for Enhancing Corporate Value

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Panasonic Energy's Value Proposition (outcome)

Panasonic Energy achieves sustainable value creation by providing a variety of value to stakeholders and collaborating with them.

Realization of a lower environmental impact society

By promoting the electrification of mobility, including EVs, we will make a significant contribution to the decarbonization of society. We also aim to realize a circular society that reduces consumption of natural resources by expanding recycling and reducing waste.

Value proposition

Achieving decarbonization

- Increasing avoided CO_2 emissions
- Reduction of CO_2 emissions during battery production

Realizing a circular society

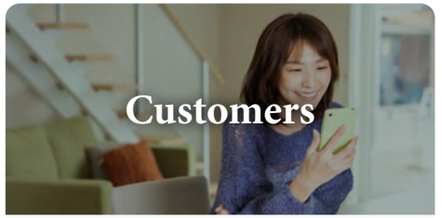
- Reduced consumption of natural resources
- Waste reduction

Providing energy for the pursuit of happiness

- Contributing to safe and secure lifestyles
- Contributing to learning among children

Major Initiatives

- Reduction of CO_2 emissions at our own factories
- Use of in-house and external renewable energy
- Reduction of CO_2 emissions through technological innovation
- Promotion to utilize recycled materials
- Research and development to promote recycling/reuse
- Promotion of social contribution activities



Supply of safe and reliable battery products

By supplying safe and reliable battery products to our customers, we contribute to the popularization of EVs and support social infrastructure (such as IoT, data centers, medical care, and gas and water meters), thereby helping to make our daily lives more convenient and comfortable.

Value proposition

In-vehicle area

- Safety with zero recalls attributable to our batteries
- Increased cruising range due to higher capacity
- Widespread use of EVs due to lower costs

Industrial and consumer areas

- High safety and reliability
- High-capacity and long life
- Improved living convenience through miniaturization and wireless operation
- Provision of power supply in the event of a disaster

Major Initiatives

- Material development
- Improvement of volumetric energy density
- Product safety management
- Improvement of production capacity
- Up one layer and new market development
- Stable supply of products

Growing together by solving social issues

With our collaboration partners, we work together to maintain and improve the quality of purchased products, realize competitive prices, and respond to market changes based on mutual trust and cooperation. We also grow together while studying to solve social issues.

Value proposition

- Resolution of social issues through collaboration
- Partnership that continues to grow together
- Maintenance and improvement of product quality
- Realization of competitive prices
- Response to market changes

Major Initiatives

- Local procurement of materials
- Promotion of procurement of materials with low environmental impact
- Compliance with CSR Guidelines
- CSR risk reduction through voluntary assessment
- CSR education and training
- Support for suppliers
- Human rights due diligence
- Responsible minerals procurement
- Promotion of joint research through industry-academia collaboration
- Promotion of projects in cooperation with national governments

Improving employee well-being

We strive to enhance the wellbeing of our employees by creating a work environment in which each and every employee, with their diverse values, can work with high engagement and vitality in a safe, secure, and healthy environment.

Value proposition

- Resonance with Mission, Vision, and Will (MVW)
- Personnel system to accelerate challenge and growth
- Various personalized training programs
- Securement of diverse and talented human resources
- Respect for each individual's personality, experience, and values
- Creation of safe and secure workplaces
- Employee health promotion

Major Initiatives

- Transitioning to job-based human resource management
- Formulation and encouragement of the Seven Paths to Transformation
- Implementation of Forest Conference, an approach to promoting Mission, Vision, and Will (MVW)
- Raise the wage level
- Conduction of internal forums
- Measurements to increase job satisfaction and workplace flexibility
- Enhancement of leave systems
- Thoroughly strengthen measures to prevent industrial accidents
- Acquisition of certification in the White 500 (goal)

Material Issues for Value Creation (Materiality)

We have identified material issues (materiality) that we must address from an environmental, social, and governance (ESG) perspective in order to contribute to a sustainable society.

Materiality identification process

Panasonic Energy identified seven material issues using the following four steps.

Step 1 List social issues

We listed 71 social issues that are candidates for materiality.

Step 2 Evaluate their importance from the perspective of Panasonic Energy

For each item on the list of social issues, we evaluated its impact on our business and relevance to our policies from Panasonic Energy's perspective.

Step 3 Evaluate their importance from a stakeholder perspective

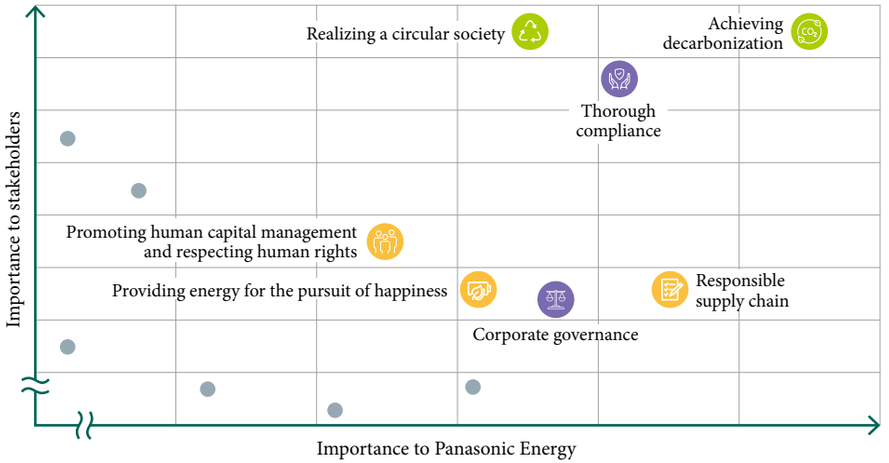
For each item on the list of social issues, we evaluated its importance from the perspective of all stakeholders, based on the opinions we have obtained through dialogue with stakeholders to date and the interest of investors and certifying organizations.

Step 4 Deliberate and identify

After sorting out our thoughts on ESG management and what we aim to achieve, we identified seven material issues through multiple rounds of deliberations between the officers, including the Representative Director, and staffs of the relevant departments.

Materiality matrix

We evaluated social issues from two perspectives: their importance to Panasonic Energy and their importance to our stakeholders, and plotted the most important of these issues in the materiality matrix below.



Seven identified material issues and specific examples of initiatives

- Materiality relating to the environment (E)
- Materiality relating to society (S)
- Materiality relating to governance (G)

Realizing a circular society

P.46

- Building a recycling-oriented supply chain
- Development of recycling-oriented products
- Waste reduction
- Promotion of recycling

Promoting human capital management and respecting human rights

P.53

- Ensuring occupational safety and health
- Promotion of human resource development
- Promotion of Diversity, Equity & Inclusion (DEI)
- Prevention of discrimination and child/forced labour

Corporate governance

P.62

- Strengthening the functions of the Board of Directors and management team
- Ensuring transparency

Achieving decarbonization

P.40

- Reduction of greenhouse gas (GHG) emissions
- Contribution to reducing CO_2 emissions in society
- Effective use of renewable energy
- Local procurement

Providing energy for the pursuit of happiness

P.48

- Contributing to a safe and secure society
- Eradication of poverty and hunger
- Contributing to local communities

Responsible supply chain

P.60

- Responsible procurement of minerals
- Respect for human rights in the supply chain
- Supply chain management

Thorough compliance

P.66

- Pursuit of quality and product safety
- Compliance with laws and regulations
- Ensuring information security

Process for Enhancing Corporate Value

We have broken down the factors that contribute to increasing corporate value into three categories: created value, growth potential, and cost of capital. Note that we also promote both financial and non-financial initiatives from each of these perspectives. We are promoting initiatives to ensure that all measures based on "two-pillars" management will enhance financial performance and ESG management to support non-financial performance, which will lead to enhance corporate value. Taking two material issues of ESG management, such as "achieving decarbonization" and "realizing a circular society," certain measures such as reducing CO_2 emissions in battery production, contributing to CO_2 reduction through products, and establishing a recycling model for batteries will contribute to "enhancing created value" as a solution to the climate change and resource depletion faced by society as a whole. At the same time, the technological capabilities and partner relationships fostered in this process can be seen as drivers of "enhancing growth potential" in the future. We believe that the combined effect of each materiality or measure leads to an increase in corporate value.

Our Mission

Achieving a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict

Maximizing contributions — Enhancing created value ↑

Sustainable growth through future transformation — Enhancing growth potential ↑

Strengthening management foundation — Reducing capital costs ↓

Corporate value calculation formula: Corporate value ↑ = Created value ↑ / (Capital cost ↓ − Growth potential ↑)

Materiality
In-vehicle Business Strategy
Industrial and Consumer Business Strategy

"Two-pillars" management

We will maximize our contributions by supporting social and lifestyle infrastructure in the industry and consumer businesses, which drive profitability and by reliably meeting robust demand in the in-vehicle business, which drives growth. P.26

- Enhancing competitiveness
  - Enhancement of productivity
  - Commercialization of next-generation products
  - Creation of added value through systemization
- Investment for growth
  - Expansion of production capacity
- Supply chain resilience
  - Promotion of local procurement
  - Promotion of recycled material use / Establishment of battery recycling scheme
- Providing energy for the pursuit of happiness P.48
  - Supplying energy to areas without electricity
  - Contributing to the happiness of people's lives through business
- Achieving decarbonization P.40
  - Contribution to CO_2 reduction through products
  - CO_2 reduction in battery production through use of renewables
  - CO_2 reduction through collaboration with partners and technological innovation
- Realizing a circular society P.46
  - Waste reduction from the factory
- Promoting human capital management and respecting human rights P.53
  - Enhancing human resource competitiveness
  - Improving employee wellbeing
  - Strengthening human rights due diligence
- Responsible supply chain P.60
  - Expansion of audits and support to suppliers
- Thorough compliance P.66
  - Thorough compliance with CSR guidelines
  - Fostering a culture of emphasis on laws / regulations
- Corporate governance P.62
  - Establishment of a system for early detection of incidents
  - Enhancing the effectiveness of the Board of Directors
  - Promotion of accurate risk management

ESG management

We have set target KPIs and activities for each of the seven material issues with the goal of achieving results. The ESG Committee checks the state of progress and implements a PDCA cycle to make improvements. P.38

At a Glance (as of March 2024)

Snapshot

In the battery business
101 years

Employees
Approx. 19,000*1

Employee engagement
70pt

Zero-CO_2 factories*2
14 sites

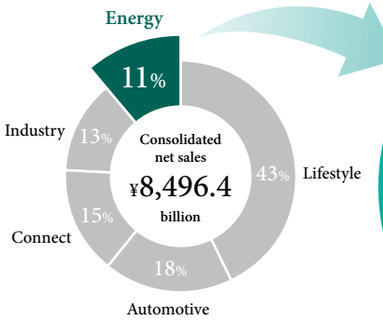
Number of patents
Approx. 9,100

Automotive Li-ion batteries
Zero recalls*3

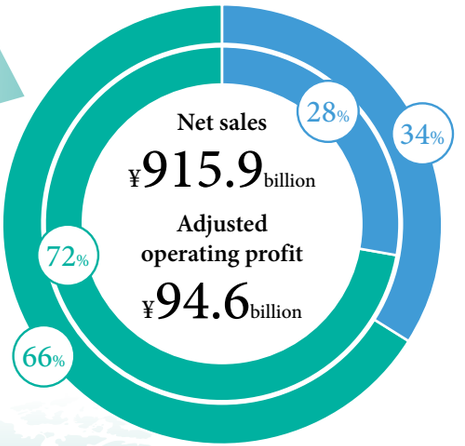
*1 Global consolidated
*2 Factories that have achieved virtually zero CO_2 emissions by conserving energy, introducing renewable energy, and using credits.
*3 Recall attributable to batteries

Business structure (FY2024)

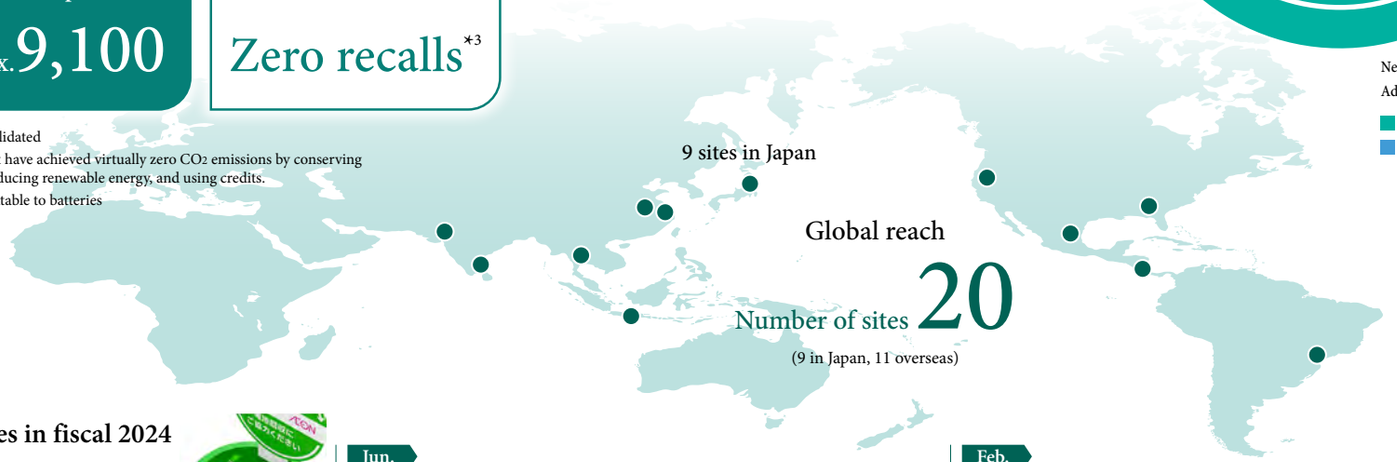
Panasonic Holdings net sales composition



Panasonic Energy sales and adjusted operating profit composition



Net sales composition (outer circle)
Adjusted operating profit composition (inner circle)
- In-vehicle Business
- Industrial and Consumer Business



Main initiatives in fiscal 2024

2023

Jun.
Started dry battery recycling demonstration in Japan

2024

Feb.
Accelerated local procurement in North America (NOVONIX, NMG, and H&T)

Nov.
Full-scale operations began at the Nishikinohama Factory, a dry battery production site

Mar.
Signed collaboration agreements with Subaru Corporation and with Mazda Motor Corporation

Press release
https://www.panasonic.com/global/energy/news.html

Growth Strategy

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Business Situation

Latest business status
(Performance in fiscal 2024 and forecast for fiscal 2025)

Business performance in fiscal 2024

Net sales were 915.9 billion yen, with 94% of the previous fiscal year's level. Although automotive battery production in North America was strong due to increased demand for automotive models powered by our batteries, overall sales decreased due to lower demand for automotive batteries produced in Japan and for consumer and power applications. Furthermore, this was also due to the impact of the accounting treatment*1 related to the effective use of U.S. IRA*2 tax credit with customers (sales would have increased by 5% excluding that impact).

In the in-vehicle business, sales increased at the North American factories, where demand was strong, owing to productivity improvements. However, factories in Japan were affected by the decline in demand for high-priced models in the U.S. (which were no longer eligible for subsidies for electric vehicle buyers), thereby resulting in an overall decrease in sales (which would have increased if the accounting treatment effects had not been excluded).

In the industrial and consumer business, sales of storage battery systems for data centers were strong due to the expansion of the generative AI market. Nonetheless, sales of Li-ion batteries for consumer and power applications, such as electrically assisted bicycles, continued to decline due to the slow recovery of the market.

Adjusted operating profit, which indicates the strength of our core business, was 94.6 billion yen. There was a loss due to lower sales in the industrial and consumer business, the impact of production cutbacks at factories in Japan in the in-vehicle business, an increase in fixed costs for future growth, and the provision of expenses for past manufacturing defects. However, increased sales due to improved productivity at automotive battery factories in North America and the IRA tax credit in the U.S. actually resulted in a rise in profit of 55 billion yen from the previous fiscal year. (Excluding U.S. IRA tax credit, income decreased by 31.8 billion yen) Meanwhile, measures for future business expansion are making steady progress.

In the in-vehicle business, we have signed collaboration agreements with Subaru and Mazda and are continuing specific discussions. In addition, to expand our business in North America, we accelerated the start-up of our new site in Kansas, which is scheduled to begin mass production in early 2025, invested in Nouveau Monde Graphite of Canada, and signed a long-term graphite supply contract. In this way, we are promoting the establishment of a regionally complete supply chain. Furthermore, we are steadily advancing efforts to commercialize next-generation products, including preparations for mass production of 4680*3 cells at the Wakayama Factory by the end of second quarter fiscal 2025 and completion of a production process development building at the Suminoe Factory to promote the development of next-generation cells and manufacturing.

In the industrial and consumer business, we have started mass production of power supply systems for data centers that support the evolution of generative AI and have completed the development of a residential battery storage system with safe and space-saving integrated storage system. In terms of the development of our supply system, the Nishikinohama Factory, which is our global flagship dry battery factory, is now in full-scale operation.

*1 Although the method of effective utilization with customers has not yet been determined, the "Accounting Standard for Revenue Recognition" will be applied and sales will be recorded as a negative amount.
*2 Inflation Reduction Act
*3 Cylindrical battery sizes: The first two digits indicate diameter (mm) and the second two digits indicate height (mm).

Business forecast for fiscal 2025

For fiscal 2025, we expect a decrease in sales and increase in profit, with net sales of 877 billion yen (96% year on year) and adjusted operating profit of 111 billion yen (+16.4 billion yen year on year). Despite a decline in sales in the in-vehicle business due to the revision of selling prices following a drop in raw material prices, net sales are expected to recover from the second half of the fiscal year through supplies for power applications and strong sales for data centers in the industrial and consumer sectors. Furthermore, despite an increase in upfront costs in the in-vehicle business, adjusted operating profit is expected to increase from the previous fiscal year due to the higher sales profit in industrial and consumer products and the absence of certain critical factors in the previous year.

Business performance in fiscal 2024

	Fiscal 2024 results*4 (billions of yen)	YoY /difference
Net sales	915.9	94%
In-vehicle Business	605.0	92%
Industrial and Consumer Business	307.1	99%
Adjusted operating profit	94.6	+55.0
In-vehicle Business	68.1	+57.4
Industrial and Consumer Business	26.1	-2.4
EBITDA*5	160.4	+61.9
(EBITDA margin)	17.5%	+7.4%

Forecast for fiscal 2025

	Fiscal 2025 target*4 (billions of yen)	YoY /difference
Net sales	877.0	96%
In-vehicle Business	523.0	86%
Industrial and Consumer Business	361.0	118%
Adjusted operating profit	111.0	+16.4
In-vehicle Business	70.0	+1.9
Industrial and Consumer Business	40.0	+13.9
EBITDA*5	187.0	+26.6
(EBITDA margin)	21.3%	+3.8%

*4 Includes IRA tax credit
*5 Additional adjustment for depreciation of the underlying asset to which the lessor's lease accounting treatment is applied

R&D facility to help further develop production process at the Suminoe Factory

Business Situation

Medium- to long-term strategy

To achieve sustainable growth, we will practice "two-pillars" management, seeking sales growth in the in-vehicle business and profitability in the industrial and consumer business. In addition, we will enhance our contribution to society through ESG management with a focus on environmental contributions as the cornerstone of our strategy.

The in-vehicle business will continue to develop its proven cylindrical platforms and commercialize next-generation products to drive company-wide sales growth. In addition to stabilizing earnings from primary batteries (including dry batteries), the industrial and consumer business will drive the company's profitability improvement by maximizing our value proposition with advanced solutions based on battery-applied systems.

In response to changes in the business environment that occurred in fiscal 2024, we are partially revising and reinforcing our strategy.

In the in-vehicle business, although we have previously been focusing on North America, we will shift from "focus on North America" to "Japan and North America dual-region focus", thereby capturing the growing popularity of electric vehicles (EVs) based on Japan's storage battery industry strategy. In the industrial and consumer business, we will accelerate the strengthening of our business portfolio by solidifying the strong business for data center and promoting business expansion in new domains.

As our social responsibility grows with the expansion of our business scale, we regard ESG management as an important element of our business strategy. In particular, in terms of environmental contributions, we are committed to reducing CO_2 emissions and addressing resource issues while also promoting efforts to halve our carbon footprint (CFP) and reduce our environmental impact through resource recycling.

Our medium- to long-term management goal is to raise net sales to over 3 trillion yen, about three times the current level, and to achieve an EBITDA (operating income + depreciation and amortization) margin of at least 20%, not including IRA tax credit. As of last year, the target achievement period was set for fiscal 2031. However, amid the current dramatic changes in the market environment, especially for EVs, we will work toward achieving the target by flexibly executing investments while keeping a close eye on the market environment.

Fiscal 2025 is the final year of the medium-term management goal. Although we expect to achieve our operating profit and EBITDA targets, including IRA tax credit, our return on invested capital (ROIC) is expected to remain at 9.1%, partly due to upfront investments for growth. By further strengthening our profitability, we will proceed with a focus on achieving a cumulative operating cash flow of 330 billion yen.

[Strategic framework]

"Two-pillars" management

In-vehicle — Drive sales growth

- Expand cylindrical battery platforms and commercialize next-generation products
- Shift from "focus on North America" to "Japan and North America dual-region focus"

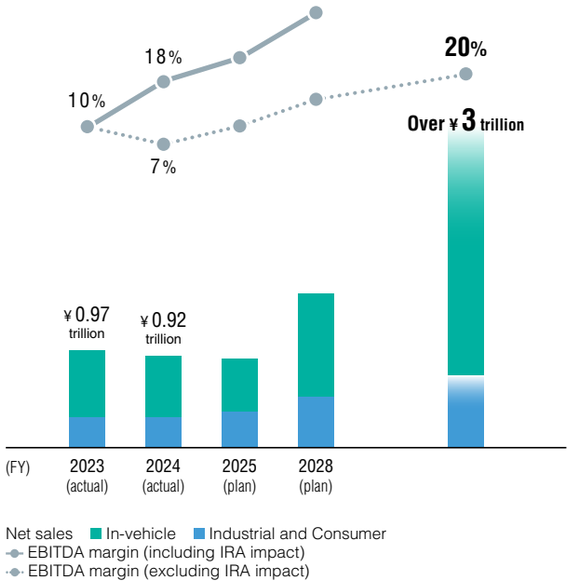
Industrial and Consumer — Drive profitability

- Maximize value proposition by battery-applied systems
- Solidify business for data center and strengthen portfolio in new areas

ESG management

- Reduce CO_2 emissions and address resource issues
- Promote human capital management and human rights due diligence

[Management goals]



Medium-term management goals

KGI	Target (excluding IRA tax credit)	Forecast (excluding IRA tax credit)
Operating profit (FY2025)	¥87.0 billion	¥109.0 billion (¥22.0 billion)
EBITDA (FY2025)	¥150.0 billion	¥187.0 billion (¥100.0 billion)
Cumulative operating cash flow (FY2023-2025)	**¥330.0 billion**	**¥330.0 billion*** (¥330.0 billion)
ROIC (FY2025)	12% (excluding new investments in Kansas, etc.)	9.1% (2.2%)

*Progress in FY2023-2024: 64%; FY 2025 operating cash flow target: 120.1 billion yen

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Message from Executive Vice President Yasuaki Takamoto

Given the ongoing challenge of achieving a decarbonized society, all means of transportation, including cars, are beginning to shift away from internal combustion engines and towards electrification. This structural change is expected to be much greater than any industrial change humanity has ever experienced, and will likely drive the biggest social change in history. We at Panasonic Energy stand at the very center of this movement, boldly taking on the challenge of squarely addressing issues in society.

Building social infrastructure is our business

It was some time ago that Panasonic responded to the ambitions of a pioneering automaker to tackle environmental issues, and since then we have contributed as a leading battery manufacturer to the history of vehicle electrification, from hybrids to EVs. Developing and producing the highest quality batteries demanded by our customers has been our role in society. However, as global warming begins to destroy our world, not just cars, but all means of transportation, including ships and airplanes, are now transitioning en masse to electrification on an unprecedented scale, and as such, our business is beginning to move beyond being just a battery business and take on the aspect of being a business that builds social infrastructure. As seen by the Inflation Reduction Act (IRA) in the US, governments worldwide are positioning the battery industry as a national policy and beginning to invest public funds. This can be interpreted as if highways, power grids, and other public works projects have evolved into infrastructure developments designed for the 21st century. It means that countries have begun to position the battery industry as a core piece of social infrastructure development in anticipation of an era in which electrified means of transportation comprise the foundations of society and electricity can be wirelessly transferred to where it is needed, when it is needed.

We have been entrusted with such an enormous challenge by society. The cornerstone of our business is the development and manufacturing of batteries. However, there is no doubt that in the future, everything—including our business partners, the way funds are generated, and the very significance of doing business—will be essentially different, making it a completely new business. The question is how quickly can we sense the demands of society that have not yet fully materialized and how accurately can we transform ourselves? We have neither precedent nor textbooks to guide us, so the path forward will likely be challenging. Still, we will forge our own path without hesitation. Even if it means overturning a decision already made, we will change what needs to be changed and not waver from our core objective of contributing to society. Instead of the passive approach of taking action after receiving a customer request, as pioneers in the battery industry, we will lead from the front, raise the flag, gather allies, and drive change in society. This is our mission and our aspiration.

Partnerships are the core of our business strategy

Having positioned our business as one that builds social infrastructure, what becomes particularly important is who we do it with, or in other words, how we form our partnerships. We have absolute confidence in our technology and know-how as a battery manufacturer. However, we cannot undertake such a gigantic and history-making project of building next-generation social infrastructure only by ourselves. This is why “partnerships” is the keyword in our business development. By specializing in geographic regions where partnerships between the public and private sectors are possible, and by establishing strong

Message from Executive Vice President Yasuaki Takamoto

partnerships with not only customers, but also with many stakeholders in the supply chain, we will look to deploy a business strategy conducive to long-term and sustainable development.

Our two key regions are Japan and North America, where we have a strong presence already.

Let me discuss Japan first. We have the longest history and track record of all the Japanese battery manufacturers, combined with world-class quality and supply capabilities. We have long positioned our sites in Japan as export hubs for mainly the US market. However, we will respond to the Japanese government's policy in recent years of bolstering the development of the battery industry and the implementation of Japanese automakers' plans for electrification and will accordingly turn our sites in Japan into supply hubs for domestic customers over the next few years.

As for North America, ever since we began exporting and supplying Japanese products in 2011, the US has consistently been the most important market for our automotive battery business. Also, we were the first in the industry to localize production; in 2017 we commenced production at Panasonic Energy of North America (PENA) in Nevada. After initially starting with an annual production capacity of 35 GWh, PENA has created local jobs for more than 4,000 people, and through tireless efforts to improve operations, it expects to be able to expand production capacity by 17% to 41 GWh annually by the end of fiscal 2025, leading to cumulative shipments of 10 billion cells (as of July 2024). For our next move, we have decided to establish a second site in Kansas with an annual production capacity of over 30 GWh. The factory is currently in the final stages of construction, with operations slated to come onstream sometime in fiscal 2025. When we first established PENA in Nevada, we faced indescribable hardships due to the unprecedented scale and speed of the project. Still, owing to the united and unwavering efforts of employees in both Japan and the US, we can proudly say that we built the world's largest automotive battery production facility. So, in establishing the Kansas Factory, we plan to heed all of the lessons we learned in Nevada to achieve the fastest possible launch of mass production by horizontally deploying our know-how through the

integrated operation of both factories. Incidentally, this investment is the largest in the 163-year history of Kansas as a state of the United States, so it carries special significance as a history-making event for the region. In other words, we literally share the same destiny with the state government and local municipalities, and by further strengthening this partnership, we are committed to doing everything in our power to meet the expectations of the local community.

Meanwhile, we will go about building strategies with a focus on making partnerships with customers and suppliers even stronger than before. Operating a business related to social infrastructure means that long-term collaboration spanning 10 to 20 years or more will be key. Therefore, in constructing a partnership strategy, we will prioritize partners who identify with our fundamental values, or in other words, we will place utmost importance on whether we can share our basic ideology with them. We place particular emphasis on concepts related to product safety and quality. EVs will play an integral role as part of the social infrastructure of the future, and the core component, the battery, is a mass of energy. If it is not made or used correctly, it can potentially lead to serious safety incidents. Also, as technology continues to evolve in the future, the energy density of batteries will be even greater, and the volume required will also sharply increase. Achieving this will require the development of incomparable safety and quality assurance technologies, so we plan to strengthen our business competitiveness by concentrating our technology investments in this area. We will obviously look to establish such technologies, and we will also aim to set in motion a cycle that enhances reliability and safety across the entire supply chain with the aim of achieving the common goal of realizing a safe and secure electrified society together with the partners who share our basic ideology. As part of this process, even the boundaries of business areas and responsibilities among partners may need to be largely altered, if we think it necessary for the future. In our key regions of Japan and North America, we will expand and evolve our partnerships from a long-term point of view, and with much determination, press ahead with the building of a stronger business foundation.

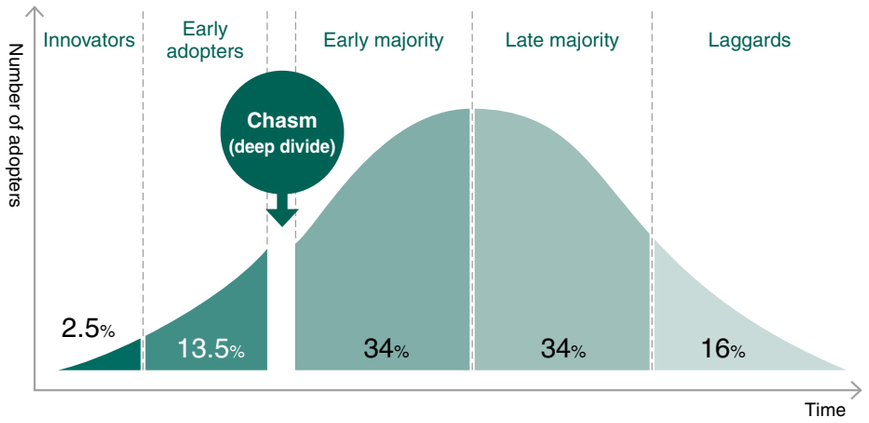
Message from Executive Vice President Yasuaki Takamoto

The changing EV market

The EV industry is undoubtedly on the verge of a major turning point. With the saturation of "early adopters" demand, it looks like the EV market has entered the so-called "chasm" before transitioning to the "early majority" stage.* The reason for this is clear: the introduction of appealing vehicles, including in terms of cost, has not kept pace with the lofty expectations of society, while the development of infrastructure, such as charging stations, has also lagged behind. A few years ago, when colossal subsidy schemes were announced in rapid succession, primarily in Europe and the US, it seemed that investments in EVs would go through the roof. However, it has become clear that the building of a supply chain that can meet the conditions necessary for receiving subsidies—such as restrictions on the origin of materials and increasingly stringent environmental regulations—has not kept up. In short, the current situation should not be seen as a slowdown in EV adoption, but rather as an accurate recognition of the challenges that need to be addressed to achieve electrification. It does not negatively impact our long-term business development, and we believe that opportunities are actually expanding. In this extremely complex situation, not to mention the geopolitical risks, there is no guarantee that we can maintain a favorable position going forward. However, we have always acted calmly, without being swayed by temporary excitement or pessimism. Based on accurate information, we are confident that by adapting to the market calmly and objectively, the path forward will inevitably open up for us.

*Chasm theory: In the diffusion of innovations theory—which analyzes how new products or services penetrate the market by classifying consumers into five categories, as shown in the diagram below—there is a significant gap between "early adopters" and the "early majority." The theory suggests that acceptance by early adopters alone does not guarantee acceptance by the majority of the market.

Diffusion of innovations theory



Advancing without fear to make history

The electrification of transportation is a monumental change in society, marking a new chapter in industrial history. The scale and speed of this transformation is overwhelming, and consequently, it is incredibly challenging, causing many people to hesitate. Should we give up now because it is simply too difficult? Should companies with trust and a proven track record, like ourselves, be the ones to take on this challenge? If we, with our technology for producing the world's best performing battery cells, do not take on this challenge, then who will? We are in a position to act because we have the capacity to do so, and I personally do not want to look back with regret, thinking that we did not take action when we had the chance.

Our job is to create history. It is a job that contributes to society and is something we can be proud of, for ourselves and for our family. We should face this once-in-a-lifetime experience head-on and move forward without hesitation. We can undoubtedly expand the future of mobility.

We will do what we need to do for the benefit of society. This is the path we will take.

In-vehicle Business

Business overview

The in-vehicle business is engaged in the development, manufacture, and sale of Li-ion batteries for automotive use, providing power energy with performance and safety features that are compatible with the evolution and adoption of electric vehicles.

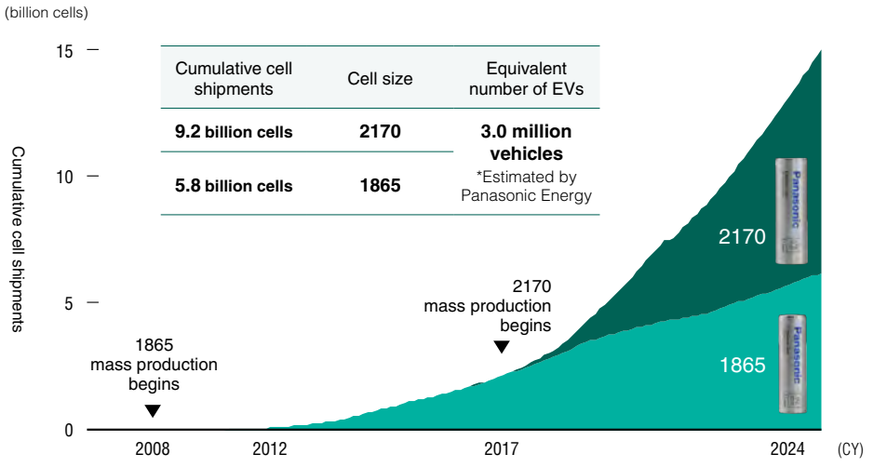
Looking back on our history of technological evolution as a pioneer in automotive Li-ion batteries, we have always led the industry in the development of cylindrical battery platforms and higher capacity. We started mass production of 1865*1 size in 2008 and 2170*1 size in 2017 for the first time in the world and have continuously improved battery capacity through advances in materials and manufacturing.

By the end of March 2024, we have supplied a cumulative total of approximately 15 billion cells*2 of Li-ion batteries for automotive use, equivalent to 3 million EVs. Particularly at the Nevada Factory, we have achieved a cumulative supply of 10 billion cells by July 2024. By working together with our customers to create safe products, no recalls attributable to our batteries have occurred since the start of mass production in 2008.

To realize a sustainable society, we will promote the reduction of CO_2 emissions and expand our contribution to society through the promotion of EVs and the electrification of all types of mobility.

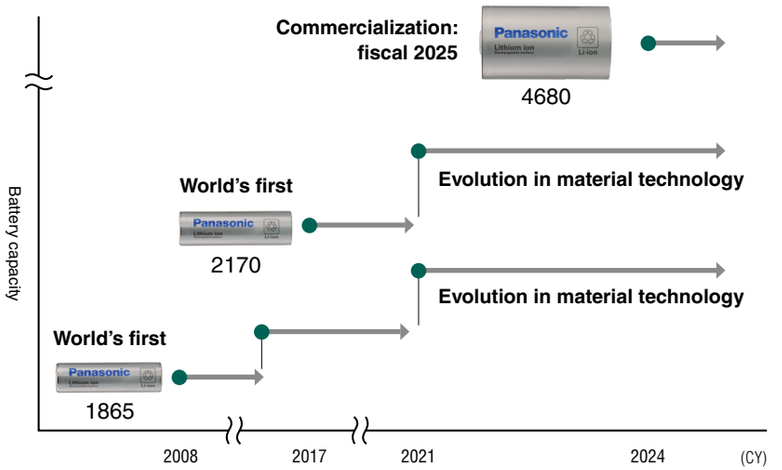
*1 Cylindrical battery sizes: The first two digits indicate diameter (mm) and the second two digits indicate height (mm).
*2 The smallest structural unit of a Li-ion battery

Cumulative shipments (as of March 2024)



Cumulative cell shipments	Cell size	Equivalent number of EVs
9.2 billion cells	2170	3.0 million vehicles
5.8 billion cells	1865	*Estimated by Panasonic Energy

Evolution of automotive Li-ion battery technology



In-vehicle Business

Business strategy

Electrification of mobility is one of the most effective ways to realize a decarbonized society, and the EV market is expected to expand further in the future, supported by governments and other factors. Particularly in the U.S., high environmental regulatory targets have been set at the federal and state levels, and automakers must continuously increase production and sales of compliant vehicles in order to meet the standards. Currently, the EV market has reached a plateau as fashion-conscious consumers have completed their purchases while the market is also in a transitional phase for further widespread use. Nonetheless, the EV market is expected to continue steadily expanding in the future.

	USA	Japan
Regulation and Policy	CAFE*1 Regulations (Federal) **ACC*2 II Regulations (State)**	**Green Growth Strategy**
Guideline	CY32 BEV 35～56%	CY 30 EV 20～30%
EV Penetration Rate (CY23 to CY30)	9%→30%	3%→24%

Regulatory standards announced by governments, and the EV penetration rate is our estimate based on various survey data.
*1 Corporate Average Fuel Efficiency
*2 Advanced Clean Car

Panasonic Energy has focused on the North American market by developing an automotive battery plant in the U.S. ahead of its competitors, which produces batteries on a GWh scale. We will continue to improve the performance of cylindrical batteries for North America, where long-range EVs are in demand. We will also focus on the Japanese market, which—like North America—requires high performance and quality and is expected to accelerate EV market expansion based on government strategies. To achieve medium- to long-term growth, the North American business will maximize profitability through the Nevada Factory and the Kansas Factory, while the business in Japan will convert existing factories into supply bases for Japanese customers.

With regard to the North American business, we will maximize profitability by thoroughly improving operations and expanding production capacity at the existing Nevada Factory to meet the increasing demand for U.S.-manufactured products. While the Nevada Factory is experiencing an imbalance in production capacity due to continuous production improvements, we will promote capacity expansion at an early stage while making partial investments in additional assembly facilities, etc. We will begin partial operation in 4Q fiscal 2025 and increase capacity by about 5% in fiscal 2026.

A new concept line will be introduced at the Kansas Factory, which requires about 30% less manpower per GWh than the Nevada Factory. Furthermore, the cell energy density will be increased by 5% by utilizing new materials compared to the previous model, and the new 2170 cell, which has the world's highest energy density of 800 Wh/L, is planned to start mass production at the beginning of 2025.

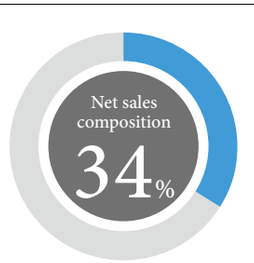
Kansas Factory (2nd site in North America)

In the short term, we will improve profitability in Japan by shifting personnel and improving costs at the Osaka Factory. We will also start mass production of the much higher capacity 4680 at the Wakayama Factory as planned and stabilize its production. In the medium- to long-term, we will strengthen our customer base through collaboration with Japanese OEMs and switch from the current 1865 size to a production line that is centered on the competitive 2170 size at the Osaka Factory. We plan to introduce the expertise of the latest production line for Kansas in North America into 2170 and to increase the efficiency of the assembly personnel by 35% in fiscal 2029 compared to fiscal 2023.

WAKAYAMA Factory

We are also working to strengthen the supply chain that supports battery manufacturing in order to cope with future increases in production volume, including capacity expansion at our Nevada Factory and the start of operations at our Kansas Factory. We will steadily promote the conclusion of procurement contracts from North America and other countries (mainly for anode materials) while also promoting the use of recycled materials and low-CFP materials completed in the U.S. region, which contributes to reducing environmental impacts.

Industrial and Consumer Business



Business overview

The industrial and consumer business offers an extensive product lineup, including manganese and alkali dry batteries, cylindrical and coin-shaped lithium primary batteries, and nickel-metal hydride and Li-ion batteries that can be recharged repeatedly. From home appliances and industrial equipment to data centers and other social infrastructure, this business supports a daily abundance of life in a wide range of fields and applications.

In the past, bicycle lamps were used to illuminate the darkness, and dry batteries were used to make equipment portable. In recent years, small, high-capacity Li-ion batteries have helped make PCs and phones smaller and more wireless, and highly reliable lithium primary batteries have supported the IoT in water and gas meters. Most recently, we have developed an advanced battery-applied system business with highly stable and reliable cells and control technology to support the rapid evolution of generative AI servers and contribute to improving lifestyle convenience.

In the future, digitalization and electrification throughout society are expected to progress at an even faster pace than ever before. We see these social changes as an opportunity to co-create solutions with our industry-leading business partners by leveraging our high-capacity, highly reliable technologies and products cultivated over many years and our ability to pioneer new markets, thereby expanding the areas in which we can contribute.

Overview of Industrial and Consumer Business

Energy Solutions Business Division


Data centers


Laptops


Electrically assisted bicycles


Storage battery modules/systems


Li-ion batteries

Energy Device Business Division


Electric lights


Water and gas meters


TPMS
(tire pressure monitoring system)


In-vehicle e-call


IoT devices

Dry batteries


Lithium primary batteries


Nickel-metal hydride batteries

Pin type Li-ion batteries

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Energy Solutions Business Division

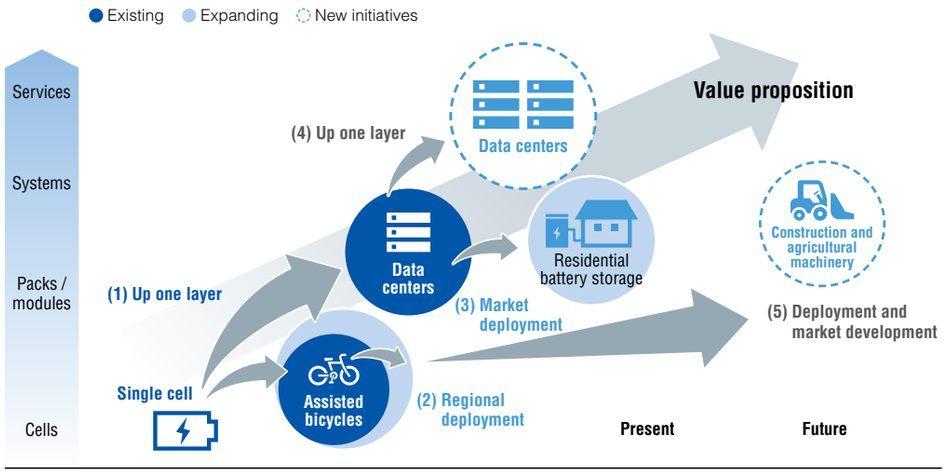
Business strategy

The market for Li-ion batteries for industrial and consumer use, which is the business domain of the Energy Solutions Business Division, is expected to steadily expand in the future due to the accelerating electrification of society and the expansion of information infrastructure through the evolution of generative AI. We aim to expand the scale of our business by focusing on the areas of data centers (DC), which will continue to grow over the medium to long term, residential battery storage systems, and the electrification of motorcycles, construction machinery, and agricultural machinery.

DC is required to operate stably and continuously 24 hours a day, 365 days a year, and not stop even in the event of a disaster. We will expand sales of backup power supplies for DC servers by providing compact, high-capacity Li-ion batteries as the core, with enhanced safety through packs and modularization.

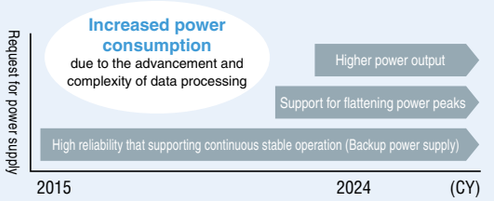
In terms of electrification, we will focus on new markets such as electrically assisted bicycles, which are expanding in Europe and Japan; motorcycles, which are becoming increasingly electrified, mainly in emerging countries; and construction and agricultural machinery, which are expected to be electrified in the future. We will build partnerships with industry-leading customers and provide optimal solutions for their needs by combining highly safe and reliable battery cells with control technology.

In terms of production, the Tokushima Factory in Japan is positioned as the mother factory, increasing the production of cells optimized for specific applications and the assembly capacity of packs and modules in Japan and at the base in Mexico. Together with our existing base in China, we will respond to future demand growth on a global basis.



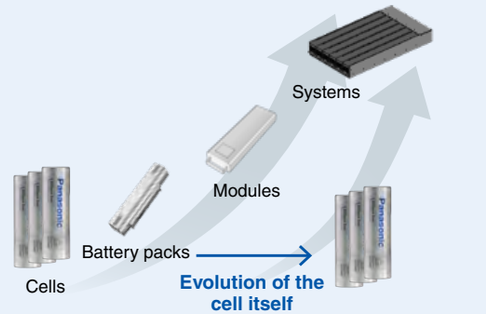
Maximizing our contributions with power supply solutions

The recent expansion of generative AI has led to a rapid increase in the amount of data processed by data centers. In response, servers are becoming more sophisticated and complex in their data processing, thereby resulting in increased power consumption. Given this background, in addition to the conventional applications as backup power supplies, we have required power supplies to have functions that support the flattening of power peaks and higher output power to support high-speed data processing.



Further to our highly durable and safe cylindrical cells, our strength lies in the power management expertise we have cultivated over many years and in our development capabilities that enable vertical integration, moving up the layers from cells to battery packs, modules, and systems. In response to recent changes in demand, we will leverage these strengths to expand our contribution to society by providing unique value to our systems.

Expanded contributions



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Energy Device Business Division

Business strategy

The Energy Device Business Division has two business areas: B-to-C (for consumers) and B-to-B (for businesses). Products include dry batteries, lithium primary batteries, and nickel-metal hydride batteries.

Since dry batteries are a necessity in everyday life and have the mission of supporting lifelines in the event of a disaster, we are working to develop products that are long-lasting and can be stored for a long period of time. With our high market share in the Japanese market, we will lead the industry by adopting environmentally friendly ethical packaging and recycling initiatives with our distribution partners. We will also focus on Southeast Asia, Central and South America, and India—all of which have high demand—to seize opportunities to replace manganese with alkali and expand sales by improving our distribution network and strengthening our brand power.

We will expand sales of lithium primary batteries by developing products suitable for smart meters, medical equipment, and tire pressure monitoring system, which are used in a wide range of environmental conditions and require long-term operation. In addition, we will focus on the market for nickel-metal hydride batteries where their wide operating temperature range features can be utilized, mainly for independent, vehicle-mounted emergency contact power sources.

As a site strategy, we started the production and shipment of lithium primary batteries at our Wuxi Factory in China in fiscal 2024. In addition, we terminated the production of dry batteries at our Moriguchi Factory and launched a new factory in the Nishikinohama Industrial Park in Kaizuka City, Osaka Prefecture. We will strengthen our operational capabilities with a smart production system that does not depend on human labour by incorporating automated transfer and warehouse systems, etc., to create clean, safe, and attractive factories that will fulfill our responsibility to supply products into the future.

Environmentally friendly Nishikinohama Factory

Aiming to manufacture in harmony with the environment, we have made maximum use of renewable energy sources, including the installation of solar panels on the entire rooftop. Since the operation started in fiscal 2024, we have achieved virtually zero CO_2 emissions. By introducing pure hydrogen fuel cells and energy storage systems in fiscal 2025, we will further accelerate efficient and clean manufacturing through energy management for the entire factory. P40

NISHIKINOHAMA Factory

Core devices

Various operating environment/ Long-term reliability

Dry batteries

Nickel-metal hydride batteries

Lithium primary batteries

Nickel-metal hydride batteries

Business opportunities

B-to-C

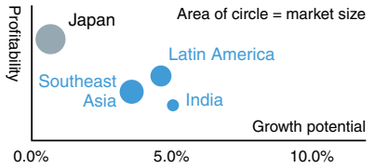
- More natural disasters due to climate change
- Increased demand for equipment in emerging countries

B-to-B

- IoT for infrastructure for daily life
- Independent power supply for greater system stability

Focus areas

Japan + regions with high profitability and growth potential



Focus on markets where long-term reliability is important

Power source for emergency communication
Power supply for tire pressure monitoring system

Power supply for meters

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Message from the CFO

Aiming to enhance corporate value with an offensive/defensive mindset

It has been three years since Panasonic Energy was established under the operating company system of the Panasonic Group and we have continued to engage in an independent style of management that the Group calls "autonomous responsible management. " From the perspectives of Group financial discipline and capital efficiency, all of our financing is conducted through borrowings or capital from Panasonic Holdings, but the fact remains that these funds have been entrusted to us by society. Our aim is to solve issues for society and change the future through "energy." While we expect to achieve significant growth up ahead, the businesses we operate have extremely high capital demands. We have set EBITDA, cumulative operating cash flow (CF), and return on invested capital (ROIC) as KGIs in an effort to strengthen our management structure.

As we face this significant business growth, I am mindful of both "offense" and "defense." For us, offense is about strengthening our ability to generate profits and capital to underpin growth and building a robust business structure with which we can execute our management strategy to realize our Mission. Defense, on the other hand, is about maintaining a suitable governance structure and business operations in the midst of rapid growth, and leveraging internal controls to prevent malpractice and mistakes. My role, therefore, is to enhance corporate value with this balance of offense and defense.

Basic policy on financial strategy

To enhance corporate value, and from a financial stability point of view, our fundamental approach is to reinvest the cash we generate with an awareness of capital efficiency, thereby further strengthening our business. In doing so, we aim to build a financial structure that can support investment for growth.

Currently, we lack the cash-generating capacity on our own account, so we are utilizing the Group-wide strategic investment framework of Panasonic Holdings to invest in the Wakayama Factory and the Kansas Factory in North America. So that we can create value in a sustained manner going forward, in addition to strengthening our existing businesses, we need to be able to generate more cash from our investments. First, we are focusing on our ability to generate operating cash flow and improving underlying EBITDA and the cash conversion cycle (CCC) by pursuing enhancements in operational capabilities. Our ROIC is currently low because we are in an investment phase, but in order to secure an ROIC that exceeds WACC (weighted average cost of capital) in the future, we will aim to contribute to the ramp up and management of the Wakayama and Kansas factories at the earliest possible time and conduct business operations that are mindful of returns on invested capital.

Reviewing fiscal 2024

Even though the impacts of skyrocketing material prices and global logistics issues seen in fiscal 2023 have normalized, fiscal 2024 was a year in which market structures and the competitive environment underwent drastic changes due to inflation and other economic conditions, trends in the EV market, and the policies and regulations of countries worldwide.

In the in-vehicle business, both the positive and negative effects of the Inflation Reduction Act (IRA) in the US became particularly apparent. Automotive batteries produced in North America benefited from the IRA tax credit (IRA Section 45X) and demand also increased. On the other hand, our automotive batteries we make in Japan are for high-end vehicle models and not eligible for consumer subsidies (IRA Section 30D), so orders for these products declined sharply. Despite lower profits at factories in Japan and expenses related to past manufacturing-process issues increased productivity and quality loss improvements at our North American factories enabled us to meet greater demand and ultimately record profit

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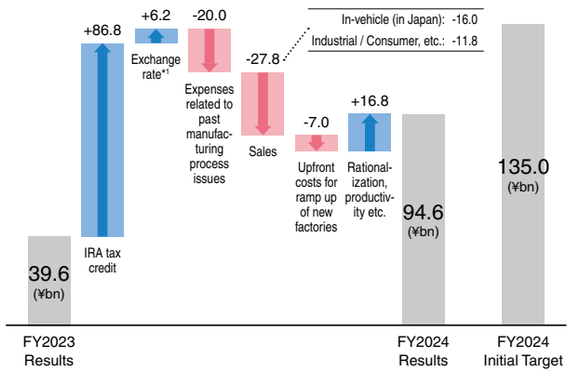
growth. IRA tax credit also contributed to the profit growth.
In the industrial and consumer business, storage battery systems for data centers grew due to the booming generative AI market. However, profit declined due to the sluggish market for Li-ion batteries used in mobility like power-assisted bicycles and ICT applications.

As a result, in fiscal 2024, sales came to ¥ 915.9 billion (94% vs. fiscal 2023; 105% after excluding the impact of IRA accounting treatment), operating profit was ¥88.8 billion (+¥55.6 billion year-on-year), EBITDA was ¥160.4 billion (+¥61.9 billion year-on-year, and ROIC was 14.6% (+9.6% year-on-year). Adjusted operating profit—an indicator of the strength of our core business—increased by ¥55 billion from fiscal 2023. However, after excluding the impact of IRA tax credit, profitability remains low, partly reflecting the upfront costs of launching new factories.

Business performance in fiscal 2024

	FY2024 Results [¥bn] Including IRA tax credit	YoY
Sales	915.9	94%
Adjusted operating profit	94.6(10.3%)	+55.0
Operating profit	88.8(9.7%)	+55.6
EBITDA	160.4(17.5%)	+61.9
ROIC	14.6%	+9.6pt

Analysis of Adjusted Operating Profit (year-on-year)

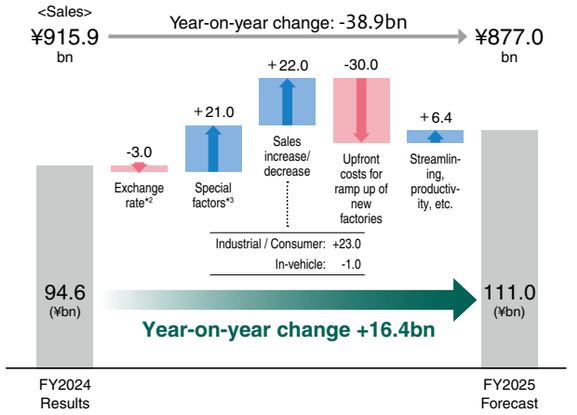


*1 FY24 exchange rate: 1USD = 145JPY

Fiscal 2025 forecasts and progress on the mid-term management plan

In fiscal 2025, production of 4680 size-cells is scheduled to begin at the Wakayama Factory by the end of the first half, while production of 2170 size-cells should commence at the Kansas Factory by the end of the second half. Profit growth in the in-vehicle business will remain low with a slight increase. Even though earnings will rebound from the expenses related to past manufacturing processes in fiscal 2024, and we expect profitability improvements at our factories in North America and Japan, they will be offset by the costs of bringing these operations online. On the other hand, we forecast Company-wide growth in adjusted operating profit in fiscal 2025 in the industrial and consumer business due to strong demand for storage batteries for data centers and the likelihood of brisk primary battery sales.

Fiscal 2025 adjusted operating profit forecast Year-on-year analysis



*2 Exchange rate used in FY2025 business plan: 1 USD = 140 JPY
*3 The impact of previous year's expenses related to past manufacturing-process issues

Our mid-term management plan targets were operating profit of ¥87 billion and EBITDA of ¥150 billion in fiscal 2025, cumulative operating CF of ¥330 billion from fiscal 2023 to fiscal 2025, and an ROIC of 12%. These figures that we initially announced did not take into account the launch of Kansas Factory operations and the IRA impacts, but we expect to achieve our operating profit and EBITDA targets with the inclusion of the IRA tax credit. ROIC will likely remain at 9.1% as we step up investments, but we are on track to achieve our three years cumulative operating CF target of ¥330 billion given that we reached approximately 65% after two years and we have made progress on normalizing inventory.

Leveraging "two-pillar management" to balance growth with a stronger revenue foundation

We previously announced that we would augment Li-ion battery production capacity to 200 GWh by fiscal 2031 and target sales of ¥3 trillion and a 20% EBITDA margin. Currently, the pace of growth in the North American EV market is slowing, but this is merely a normalization of the previous overheating. The longer-term outlook for significant growth in demand for automotive batteries remains unchanged. Instead of dwelling on the fiscal 2031 target of 200 GWh, we will remain flexible with our decisions according to market conditions and steadily press ahead with investments in the Wakayama and Kansas factories by confirming the backing of demand with customers.

As I mentioned already, operations at our domestic in-vehicle business factories are sluggish. Not only will we look to mainly improve costs and shift resources, but we will also aim to achieve both growth and a stronger management foundation by focusing on the Japanese market, primarily by exploring the possibility of collaboration with Japanese OEMs. In the industrial and consumer business, in addition to

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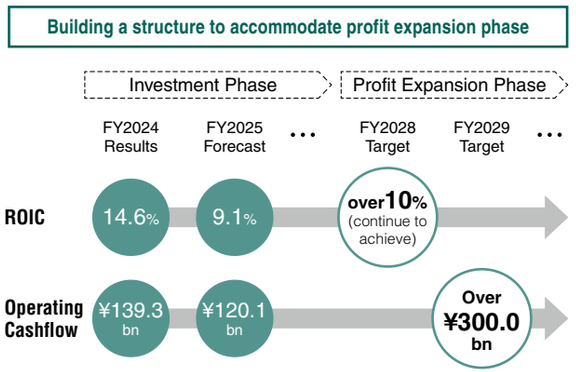
primary batteries, which is a stable source of earnings, we expect to see demand growth in secondary batteries due to increased adoption in the field of information infrastructure, such as data centers, and the electrification of power equipment. By leveraging the strengths of our cells and advancing module/system integration, we will look to be of greater service to our customers by providing solutions, thereby shoring up our "two-pillar management" approach with the in-vehicle business and the industrial and consumer business.

In this way, we will make some adjustments to our strategy as we work towards strengthening our management foundation. We are targeting ROIC of 10% or more in fiscal 2028 when earnings from the Wakayama and Kansas factories will have started to expand, and annual operating CF of ¥300 billion in fiscal 2029.

Approach During the Next Medium-term



Aiming to be self-sufficient to finance investments ourselves

As I mentioned earlier, our operations require sizeable upfront investments. Our goal is to be capable of making upfront investments to further strengthen our businesses with cash we have generated ourselves. In other words, a state of self-sufficiency. To reach this goal, we are aiming to generate ¥300 billion in annual operating CF. We have also set an EBITDA margin of 20% as a prerequisite for realizing such a scenario of becoming self-sufficient, taking into account higher levels of working capital due to business expansion and improvements in the CCC. Until we achieve this state of self-sufficiency, we will utilize Panasonic Holdings' Group-wide strategic investment framework, as well as the IRA and subsidy schemes in the US and Japan. We recognize these to be evaluations of our businesses to date and expectations for the future, and will use them in accordance with their stated purposes. We will continue to monitor market and customer trends, and, in addition to prioritization and investment efficiency, we will also examine schemes that could potentially minimize initial investments. We intend to get ourselves into a financial position that supports sustained growth in terms of both the generation and allocation of cash.

Also focusing on the non-financials essential to the enhancement of corporate value

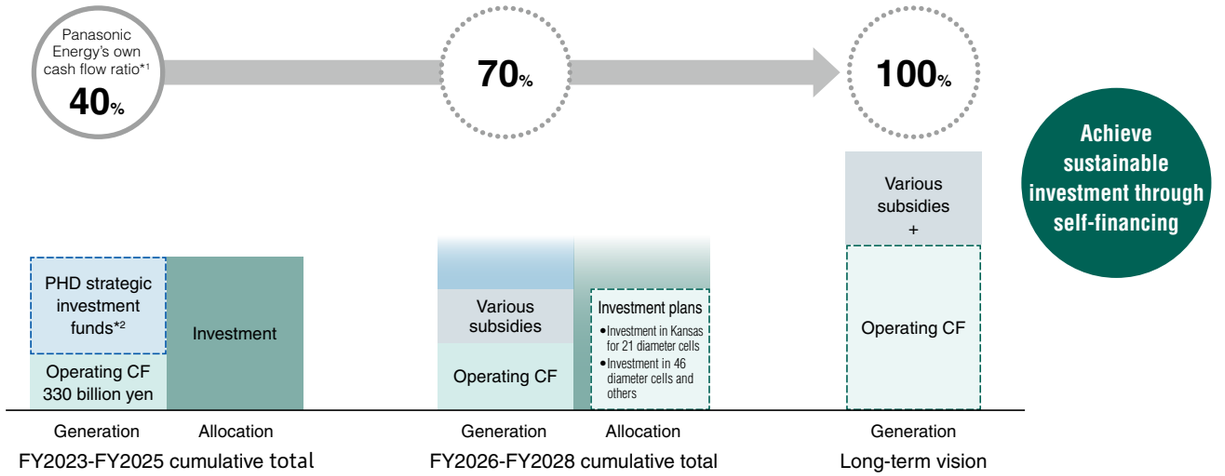
Corporate value is made up of not only the financial indicators I have discussed here, but also non-financial indicators.

Regarding natural capital, in order to solve global environmental issues through decarbonization, we aim to achieve sustainable growth by investing not only in production facilities, but also in R&D and initiatives for reducing environmental impacts, as well as equity investments aimed at strengthening our supply chain. Our Nishikinohama Factory for dry batteries in Osaka, which launched full-scale operation in November 2023, has achieved net-zero CO_2 emissions with the use of clean energy. As for intellectual capital, in April 2024 we completed the construction of a new R&D facility to help develop production processes at the Suminoe Factory in Osaka for the purpose of beefing up our manufacturing capacity for Li-ion batteries for in-vehicle use. Also, an R&D facility for cell development in Nishikadoma in Osaka is slated for completion in April 2025, which means we will have the largest battery R&D setup in Japan.

Alongside investments for growth, I believe it is the Company's responsibility to invest in human capital and extend returns in the form of compensation. By investing in human capital, we can improve employee engagement and productivity, which leads to further business development and greater resilience.

We will pay full attention to these non-financial values, invest appropriately, and drive forward a financial strategy that enhances our corporate value in a sustained manner.

Capital allocation policy



*1 (Operating cash flow + various subsidies) ÷ Investment amount *2 Capital allocation from Panasonic Holdings

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  - Promoting Human Capital Management and Respecting Human Rights
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Promoting Sustainability(ESG) Management

The Panasonic Group has established its Basic Business Philosophy, which outlines its approach to management practices and the way employees carry out their work, and conducts its business based on this policy.

Unraveling the Basic Business Philosophy (BBP) from an ESG perspective, it stipulates from the perspective of the environment and society that we make unparalleled contributions to solving global environmental problems, including climate change, and to the physical and spiritual health and well-being of people. Additionally, we will return the profits we obtain to the society and invest in further contributions. From the perspective of governance that sustains such contribution to the environment and society, the BBP also stipulates autonomous responsible management, the practice of each employee's entrepreneurship, maximizing human resources and management based on collective wisdom, and the principle of "Fairness and Honesty" including the compliance.

As one of the operating companies in the Panasonic Group, Panasonic Energy will help resolve environmental and social issues through its corporate activities in accordance with the above ideas. At the same time, we are committed to promoting ESG-focused management in order to establish a transparent and fair management foundation, realize a sustainable society, and enhance medium- to long-term corporate value.

This is in line with our Mission, which is to "achieve a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict," and represents an essential initiative for us.

The Basic Business Philosophy of the Panasonic Group
https://holdings.panasonic/global/corporate/about/philosophy.html

The Promotion of Sustainability Management of the Panasonic Group
https://holdings.panasonic/global/corporate/sustainability/management/structure.html#management

ESG promotion structure

In fiscal year ending March 31, 2024 (fiscal 2024), Panasonic Energy established its ESG Committee, chaired by the President, to formulate an overall ESG plan, monitor its progress, and evaluate its achievement status. Based on the outcomes of its deliberations, the Committee makes annual reports and recommendations to the Board of Directors to ensure that ESG considerations are integrated into the management decision-making process.

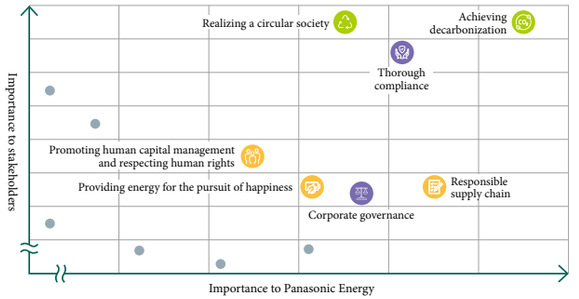
In promoting specific measures, we designate Executive Officer, or other person to take charge of addressing each of the seven material issues, set medium- to long-term visions and key performance indicators (KPIs) for each material issue, and formulate action plans to achieve them. Based on progress reports from the aforementioned persons in charge, the ESG Committee monitors and evaluates activities, estimates the effectiveness of measures, and encourages their improvements. In these ways, we have established the PDCA cycle throughout the year.

We conducted a progress review of our annual activities in fiscal 2024 at the first meeting of fiscal 2025. In addition, the three material issues that are particularly important for improving our company's growth potential—namely achieving decarbonization, realizing a circular society, and promoting human capital management and respecting for human rights—were also reviewed during fiscal 2024 to encourage steady implementation of measures.

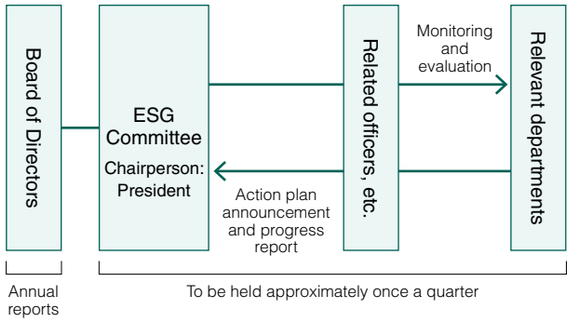
The Committee also conducts regular study sessions that utilize outside knowledge to keep abreast of ESG-related social demands.

Furthermore, in the remuneration system for executive officers, performance-based remuneration linked to short term and med-long term business results is based on both ESG indicators as well as financial indicators, thereby strengthening the motivation to promote measures.

Identified materiality P22



Our ESG management promotion structure



Dialogue with stakeholders

We place great importance on dialogue with a wide range of stakeholders around the world, including customers, investors, suppliers, governments, industry associations, NPOs and NGOs, local communities, and employees, and engage in dialogue at various stages of our operations. We also provide information on our activities to our stakeholders, and at the same time receive feedback from them regarding their expectations and concerns about us. We will incorporate such feedback into our business, product development, and ESG management activities to further enhance our corporate value.

Major stakeholders

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Contribution to the Environment

Approach to environmental initiatives
–Two material issues for realizing our Mission–

Our Mission is to "achieve a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict." With this in mind, we believe that our fundamental value is to play a leading role in transforming society into a sustainable one. At the same time, we have a responsibility to reduce our own environmental impact as we fulfill this role.

Based on our approaches and the expectations of our stakeholders, we have identified two material issues related to the environment: "Achieving decarbonization" and "Realizing a recycling-oriented society." To maximize the positive impact and minimize the negative impact on each of these, we have set seven KPIs and their targets for fiscal 2031 as shown in the figure on the right.

The Panasonic Group announced its long-term vision, "Panasonic GREEN IMPACT," which aims to reduce its own CO_2 emissions and contribute to CO_2 emission reduction in society. Its goal is to achieve an impact of at least 300 million tons in CO_2 emission reductions for the entire Panasonic Group by 2050. Prior to that, the Group aims to achieve a reduction of 93 million tons by fiscal 2031. To this end, Panasonic Energy has set an avoided CO_2 emissions target of around 60 million tons, or about two-thirds of that number, toward the material issue of "Achieving decarbonization."

We also established our own Environmental Contribution Index, which indicates the avoided CO_2 emissions in society through use of our batteries divided by net CO_2 emissions from our battery production. Our target for fiscal 2031 is 15 times.

The Panasonic Group has further established the Panasonic Group-wide Circular Economy Policy to continue committing to the realization of a sustainable society based on the recognition that resource efficiency contributes to decarbonization and the need to reduce consumption of the earth's limited natural resources. This policy is based on the principles of extending the useful life of products, maintaining and enhancing the value of resources throughout their life cycles, and minimizing the use of materials while increasing the proportion of recycled and renewable materials used. These principles are committed to working together with customers and partners to create new ways of recycling-oriented management, information sharing, and product use.

In accordance with this policy, Panasonic Energy is promoting a circular economy-type business that extends product life and reduces material use.

Panasonic Group "Environment : Mid-term to Long-term Environmental Vision"
https://holdings.panasonic/global/corporate/sustainability/environment/vision.html

Our Mission

"Achieving a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict"

Two material issues on environment

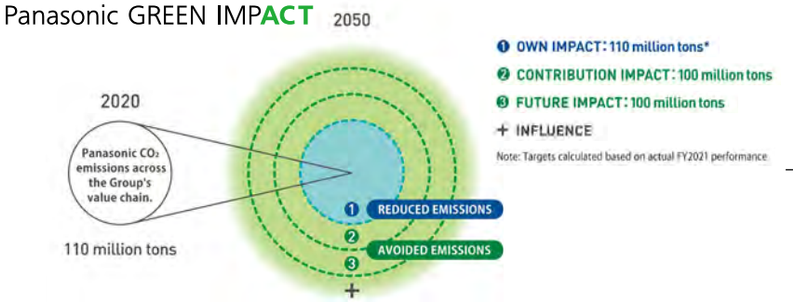
Achieving Decarbonization | **Realizing a Circular Society**

Environmental Contribution Index **15** (FY2031)

Carbon footprint **50 %*1 reduction (vs FY2022)** (FY2031)

Avoided CO_2 emissions*2	Zero-CO_2 factories*3	Electricity renewable energy ratio*4	Recycled material utilization rate (cathode materials, copper foil)	Recycling rate (in-house waste)
Approx. **60** million tons FY2031	**All sites** FY2029	**100%** FY2029	**Compliance with local regulations in each country** FY2031	**99% or higher** Every year

*1 CO_2 emissions per unit capacity of lithium-ion batteries for automotive use produced at the North American factory.
*2 The amount of CO_2 emissions reductions achieved for our customers and society as a result of the introduction of our products, compared to the baseline level where no products were introduced.
*3 Factories that have achieved virtually zero CO_2 emissions by conserving energy, introducing renewable energy, and using credits.
*4 Percentage of electricity, fuel, etc. used by Panasonic Energy that is derived from renewable energy sources (includes certificates, credits, and other externally procured items).



Environmental Contribution Index calculation formula

$$\frac{\text{Environmental contribution amount: Avoided } CO_2 \text{ emissions in society through use of our batteries}}{\text{Environmental impact: Net } CO_2 \text{ emissions from our battery production}} = \text{FY2031 } \mathbf{15}$$

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Achieving Decarbonization

KPI	FY2024	FY2031
Environmental Contribution Index	**4.0**	15
Avoided CO_2 emissions*1 (10,000 t-CO_2)	**1,271**	6,000
Zero-CO_2 factories* All sites	**14 sites**	All sites (FY2029)
Electricity renewable energy ratio*3	**32%**	100%
Carbon footprint*3	**100%**	Vs FY2022: –50%

*1. The amount of CO_2 emissions reductions achieved for our customers and society as a result of the introduction of our products, compared to the baseline level where no products were introduced.
*2. Factories that have achieved virtually zero CO_2 emissions by conserving energy, introducing renewable energy, and using credits.
*3. Percentage of electricity, fuel, etc. used by Panasonic Energy that is derived from renewable energy sources (includes certificates, credits, and other externally procured items).
*4. CO_2 emissions per unit capacity of lithium-ion batteries for automotive use produced at the North American factory.

Policy

Our Mission is to "Achieve a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict," and therefore, responding to climate change, an urgent issue common to all humankind, is our most important challenge. To address this challenge, we will work to increase avoided CO_2 emissions (when our products are used by end-users, mainly in the in-vehicle business) and reduce CO_2 emissions during battery production (from raw material procurement to product completion at our factories). By increasing our environmental contribution and reducing our environmental impact, we are working together as a Group and in collaboration with our stakeholders to maximize the value we provide.

Increasing avoided CO_2 emissions

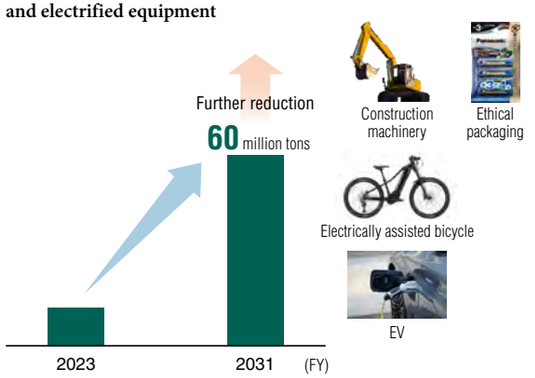
Contribution to the environment through our products

Since the introduction of lithium-ion batteries for in-vehicle use into the market in 2008, we have supported the shift from gasoline-powered vehicles to electric vehicles (EVs) by greatly extending the driving range per charge through tireless technological innovation. To date, we have supplied batteries for a cumulative total of 3 million EVs. In addition to the proliferation of electrically assisted bicycles powered by our battery packs, the replacement of gasoline-powered vehicles with EVs powered by our batteries avoided CO_2 emissions of approximately 12 million tons in fiscal 2024.

By contributing to the environment through our products, including the electrification of mobility, we are targeting avoided CO_2 emissions of around 60 million tons in fiscal 2031 (roughly four times the fiscal 2023 level).

To achieve this goal, we will increase our production capacity for automotive batteries and expand our products and services into the field of construction machinery, where electrification has not yet progressed due to the need for higher output and longer operation time compared to automotive batteries. Furthermore, our efforts will be extended to the aerospace sector, where both high output power and weight reduction are required.

Increasing contribution from the spread of EVs and electrified equipment



Reducing CO_2 emissions during battery production

Initiatives to reduce CO_2 emissions at Panasonic Energy

In addition to helping reduce CO_2 emissions in society through our business, we are working to reduce our own environmental impact by both introducing renewable energy and conserving energy.

To introduce renewable energy, we promote its use through photovoltaic power generation systems, energy storage devices, hydrogen fuel cells, and other means. We are also working to achieve virtually zero CO_2 emissions in our business activities through a combination of various initiatives, including the procurement of 100% renewable energy-derived electricity and environmental value.

Launched in fiscal 2024, the Nishikinohama Factory aims to achieve manufacturing in harmony with the environment, making maximum use of photovoltaic-powered renewable energy and procuring environmental value to achieve virtually zero CO_2 emissions from when the factory begins operations.

In addition, the factory has adopted a new method of installing photovoltaic power generation throughout the entire rooftop. That eliminates the need for significant modifications to the factory's substation, reducing construction costs and shortening the construction period. As a result of our highly evaluated efforts, the company won the Minister of Economy, Trade and Industry Award in the "Introduction Activity Category" of the fiscal 2024 New Energy Award sponsored by the New Energy Foundation (jointly with FD Corporation and Panasonic Holdings).

Nishikinohama Factory

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At the Tokushima Factory, which has achieved virtually zero CO_2 emissions since 2023, we have launched a demonstration test to install a storage battery container that utilizes reused batteries. Specifically, used batteries collected from the data center are reused and utilized as modules for high-voltage systems, thereby storing electricity generated by solar panels to power lighting and other devices at night.

Storage battery container (Tokushima Factory)

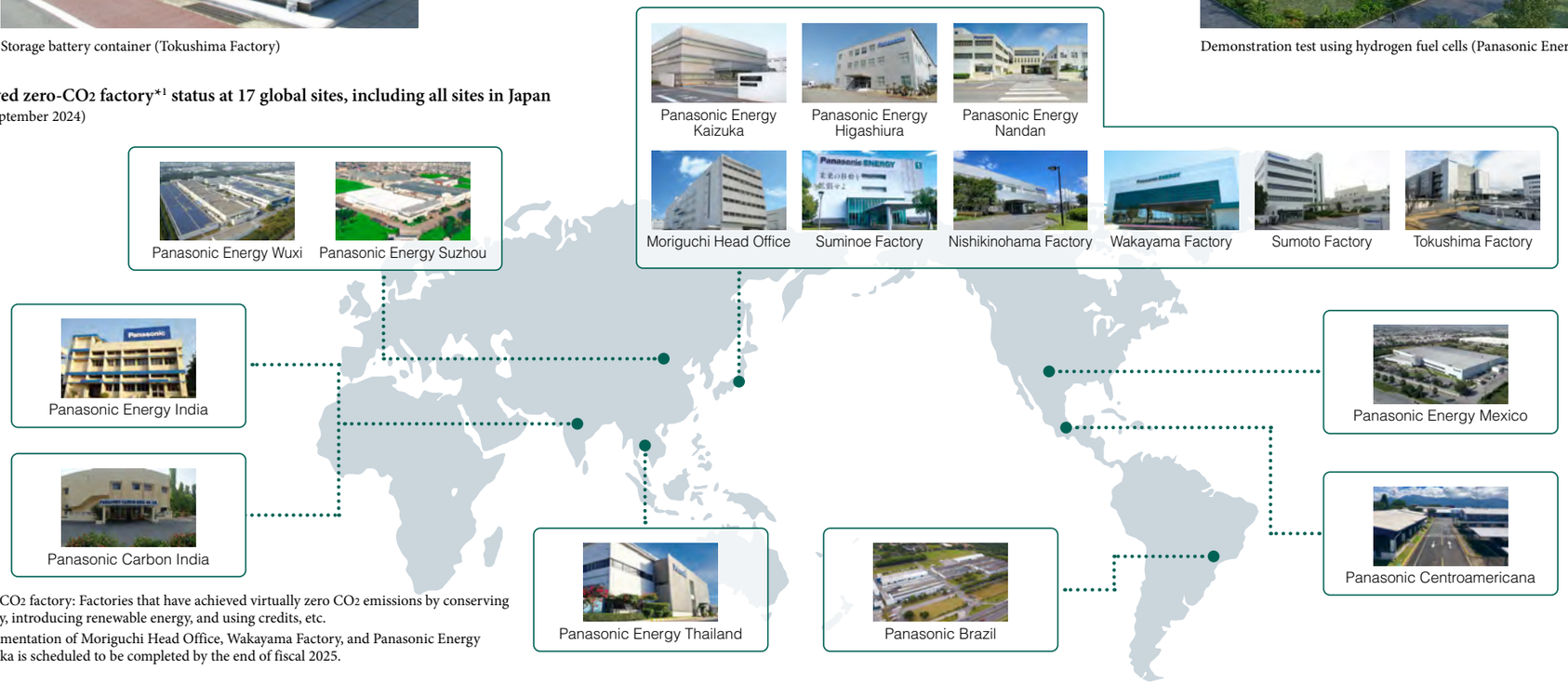
In addition to installing on-site photovoltaic power generation at our sites, we are actively promoting off-site power purchase agreements (PPAs). The newly concluded off-site PPA for onshore wind power generation will encourage the use of renewable energy during outside daytime hours. Together with the photovoltaic off-site PPA that were installed in the last fiscal year, we have converted approximately 15% of our domestic electricity use to renewable energy.

As a further initiative, we will continue to conduct demonstration tests of electricity and heat supply to the factory using pure hydrogen fuel cells at Panasonic Energy Wuxi and introduce pure hydrogen fuel cells and storage battery systems at the Nishikinohama Factory. We plan to continue accelerating efficient and clean manufacturing through energy management of the entire factory.

Through these efforts and the use of environmental values such as non-fossil certificates and CO_2 credits, all domestic sites have achieved virtually zero CO_2 emissions*1 as of September 2024, bringing the total to 17 sites in Japan and overseas. In addition, the ratio of renewable energy to electric power is approximately 32%. The achievement of zero CO_2 emissions at these factories has been verified by a third-party organization*2.

Demonstration test using hydrogen fuel cells (Panasonic Energy Wuxi)

Achieved zero-CO_2 factory*1 status at 17 global sites, including all sites in Japan
(as of September 2024)



*1 Zero-CO_2 factory: Factories that have achieved virtually zero CO_2 emissions by conserving energy, introducing renewable energy, and using credits, etc.
*2 Implementation of Moriguchi Head Office, Wakayama Factory, and Panasonic Energy Kaizuka is scheduled to be completed by the end of fiscal 2025.

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Panasonic Energy's battery manufacturing process consumes a large amount of energy through the use of drying and air conditioning equipment. For this reason, we are actively promoting energy conservation initiatives. To continue existing efforts, we include optimizing HVAC controls, reducing loss (air, steam, and pumps), and improving visualization systems. In the context of manufacturing innovation, we are promoting various initiatives, such as the innovation of production and manufacturing methods, fuel electrification, and upgrading of high-efficiency equipment. Furthermore, to maximize the potential of energy-saving activities, we are strengthening inter-departmental cooperation within the factory.

As one of these initiatives, Panasonic Energy Kaizuka, one of our automotive cylindrical Li-ion battery production sites, is implementing the "Energy Minimum Production Promotion." We re-established a cross-departmental promotion system and launched an initiative to both improve production efficiency and reduce CO_2 emissions. As a result, more than 50 energy-saving proposals were collected annually, enabling us to improve productivity and reduce CO_2 emissions. Since this initiative won the Gold Award in the Environmental Category of the Panasonic Manufacturing Awards in fiscal 2024, we expect to expand it to other factories.

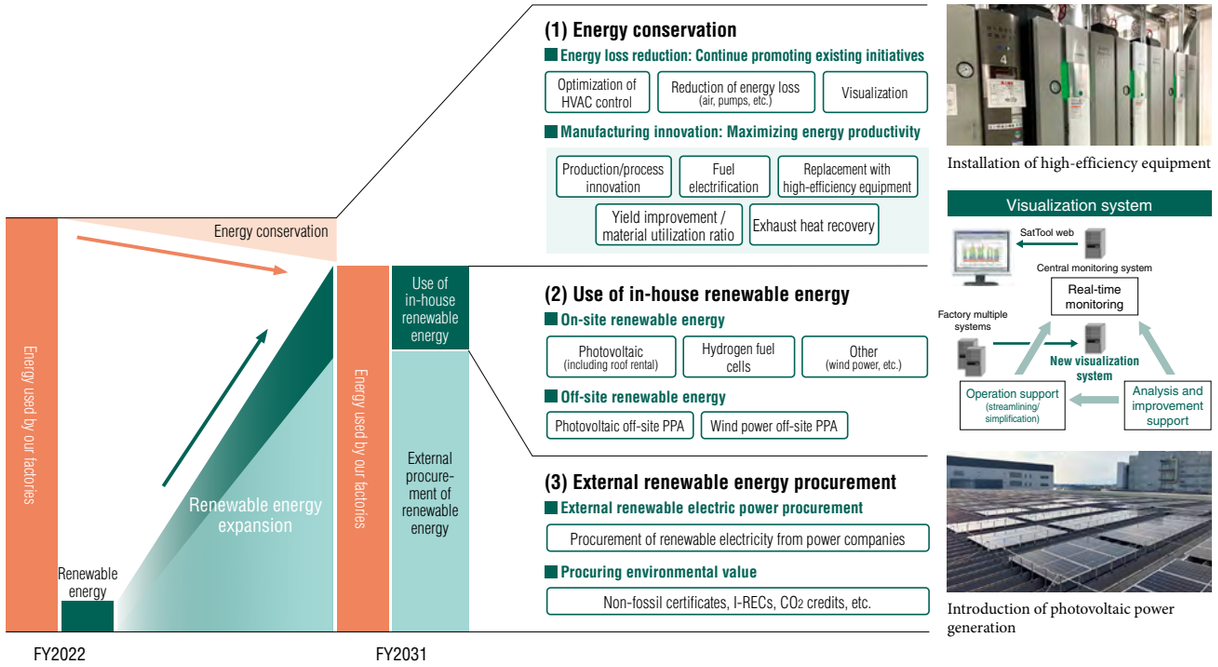
Members of the Kaizuka Factory's Energy Conservation Promotion Team (Panasonic Energy Kaizuka)

In fiscal 2024, Panasonic Energy established a CO_2 Subcommittee and launched an initiative to share expertise on energy conservation initiatives within the Company and to standardize related activities. From each factory, energy conservation activity staffs gather to share information on energy conservation efforts at their factories, introduce the latest energy conservation technologies, and come up with ideas for resolving problems. We will also discuss the visualization of energy use and fuel electrification and promote initiatives centered on energy conservation diagnostics in the future.

Furthermore, we also share examples of energy conservation efforts and issues at each manufacturing site through commendation and reward systems, such as the Environmental Commendation System.

We will continue to focus on the above initiatives to achieve virtually zero CO_2 emissions at all of our global manufacturing sites by fiscal 2029.

CO_2 subcommittee meeting



Installation of high-efficiency equipment

Introduction of photovoltaic power generation

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Initiatives to reduce CO_2 emissions upstream in the supply chain

Nearly 90% of our CO_2 emissions (carbon footprint) from the production of batteries comes from resource extraction, raw material processing, and logistics prior to the manufacturing process at our company. To achieve our target of halving the carbon footprint of our battery production by fiscal 2031 (vs fiscal 2022), we are collaborating with a wide range of stakeholders, including suppliers, partner from other industries, and research institutes, leveraging their knowledge and experience.

1. Initiatives with suppliers

We are working to reduce CO_2 emissions in cooperation with suppliers across all processes involving the materials used in our company, including resource mining, raw material processing, and distribution. Specifically, we are building a system to reduce CO_2 emissions in cooperation with our suppliers, who have gained an accurate understanding of our policy toward fiscal 2031 through annual partners' meetings and other forums. In fiscal 2024, we have determined reduction targets for parts and materials that have a high impact on the carbon footprint per unit volume of batteries, and we are currently discussing reduction initiatives with our suppliers.

In addition, to meet the growing global demand for EVs, we are working to establish a sustainable supply chain to expand the production of automotive batteries, with North America as a key region.

Partners' Meeting 2023

Graphite (one of the anode materials for Li-ion batteries) is composed of natural and synthetic graphite.

For natural graphite, we signed a memorandum of understanding with Nouveau Monde Graphite of Canada for an offtake agreement (long-term supply contract) in October 2022. Subsequently, we have been developing technology and optimizing processes to meet our product specifications and quality standards to establish an integrated graphite production business in North America. In February 2024, we then invested in the company and signed a seven-year off-take agreement. The integrated production of anode materials from mining to production in Canada, which has a high ratio of electricity derived from renewable energy sources (such as hydroelectric power generation), allows for the procurement of anode materials with significantly reduced CO_2 emissions.

In addition, we have concluded a long-term supply agreement with NOVONIX, Inc. for synthetic graphite, which is scheduled to be supplied from NOVONIX's factory in Tennessee, U.S.A., starting in 2025. The continuous graphitization furnace technology developed by NOVONIX is expected to reduce CO_2 emissions during the production of synthetic graphite compared to conventional methods, making it strategically significant by reducing the environmental impact of the supply chain.

Furthermore, as part of efforts to increase the local procurement ratio of materials, we signed a long-term supply agreement with H&T Recharge for battery exterior cans. Given that H&T has been a partner in supplying exterior cans for Li-ion battery production to our Nevada Factory in the U.S., H&T will, in accordance with the agreement, also begin supplying equipment to our Kansas Factory, which is scheduled to begin operations in fiscal 2025.

In other efforts to reduce our carbon footprint going forward, we are looking at resource mining and raw material processing, especially nickel and lithium, which are important minerals. Here, we will identify suppliers with low CO_2 emissions, such as those that employ a high percentage of renewable energy, and position them as strategic procurement partners over the medium and long terms. We will also work together with those suppliers to promote the introduction of renewable energy sources, such as photovoltaic and wind power, the use of EV trucks in mines, the use of recycled materials, the development of low-CO_2-emission processes, the reduction of energy use, and tree planting activities. At the same time, we will encourage the governments of the countries concerned to offer incentives.

NOVONIX continuous graphitization furnace (as of February 2024)

Disclosure Based on TCFD Recommendations

Response to TCFD

In May 2019, the Panasonic Group endorsed the TCFD*1 recommendations. Recognizing that risks and opportunities related to climate change are critical management issues, the Panasonic Group is identifying risks and opportunities based on the recommendations and examining the resilience of its strategies through scenario analysis.

Based on the above recognition and verification results, Panasonic Energy will deepen its consideration of risks and opportunities specific to our business and proactively disclose the required information. As recommended by the TCFD, we will disclose information on 'governance', 'strategy', 'risk management', and 'indices and targets' to strengthen our dialogue with our stakeholders.

Panasonic Group "Environment : Response to TCFD"
https://holdings.panasonic/global/corporate/sustainability/environment/tcfd.html

*1 TCFD: an abbreviation of Task Force on Climate-related Financial Disclosures. The task force was set up by the Financial Stability Board (FSB) in response to a request by the G20 Finance Ministers and Central Bank Governors. TCFD published its recommendations in 2017.

Governance

At Panasonic Energy, the Board of Directors oversees risks and opportunities related to climate change based on reports and recommendations from the ESG Committee at least once a year.

Chaired by the president, the Committee includes all executive officers responsible for divisions related to climate change, such as business divisions, human resources, and legal affairs, as well as divisions in charge of the environment. The Committee formulates overall plans, monitors progress, and evaluates the status of achievement in a cross-organizational framework.

The Committee also discusses our contribution to the Panasonic Group's long-term environmental vision—Panasonic GREEN IMPACT (PGI)—based on progress reports from the executive officers in charge of environmental departments and discusses measures to realize the vision. In parallel, we analyze risks and opportunities related to climate change and, based on the results, confirm the relevance of our business strategy from a resilience perspective.

In addition, to strengthen the commitment of our executive officers, performance-based remuneration (which is an incentive linked to short term and mid-long term business results) is structured to reflect climate change-related results as well as financial indicators.

Strategy

As a plan for its society's transition to a low-carbon economy, the Panasonic Group is promoting the realization of PGI, aiming to achieve virtually zero CO_2 emissions at all operating companies and create an avoided CO_2 emissions of approximately 100 million tons in fiscal 2031.

Panasonic Energy has also set the following corresponding targets.

- FY2029: Zero-CO_2 factories*2 All sites
- FY2031: Create approx. 60 million tons of avoided CO_2 emissions

To establish the above goals and verify the resilience of our strategy, we have initiated a scenario analysis in line with the framework of the TCFD recommendations.

This fiscal year, we are conducting the following activities in the mobility energy business and part of the energy solution business, which account for a large proportion of our financial performance and contribute significantly to CO_2 emission reductions.

- Assumed timeframe: FY2031 and FY2051
- Adopted scenarios: Risks and opportunities were identified based on a set of scenarios (including the 1.5°C scenario and the 4°C scenario), which were adopted in the Panasonic Group scenario analysis. For more details, please refer to the four scenarios in the Panasonic Group entitled "Environment: Strategy Resilience through Scenario Analysis."

*2 Factories that have achieved virtually zero CO_2 emissions by conserving energy, introducing renewable energy, and using credits.

Panasonic Group "Environment : Response to TCFD"
https://holdings.panasonic/global/corporate/sustainability/environment/tcfd/resilience.html

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The risks and opportunities that we have identified are shown in the table below.

We will analyze the quantitative impact of the identified items on our financial performance and consider specific measures to continue improving our resilience.

	Item	Impact on Panasonic Energy	1.5℃	4℃
Transitional risks	Cost of implementing carbon pricing	Increase in procurement costs due to the levy on the company and the price shift of the levy to suppliers/logistics providers due to the tightening of the carbon pricing system	■	
	Higher costs of complying with environmental regulations related to products and services	Increase in costs to comply with stricter battery-related regulations (including carbon footprint disclosure and traceability management) and mandatory GHG emissions reporting	■	
	Increase in R&D and capex costs for higher battery performance	Increase in R&D and capital investment costs to develop next-generation batteries for EVs and storage battery systems and to lead other companies in improving environmental performance	■	
	Increase in costs for energy conservation measures and renewable energy installations	Increase in procurement costs due to higher investment costs related to energy conservation/renewable energy and price shifting of GHG emission reduction costs from suppliers	■	
	Increase in procurement costs due to soaring raw material prices and material switching	Increase in raw material procurement costs resulting from intensified competition for raw materials due to increased demand for batteries and increased protectionism	■	
Physical risks	Lower sales/increased costs due to damage to the company's sites and supply chain caused by severe wind and flood damage	Increase in opportunity loss and recovery costs due to damage to the company's sites and upstream/downstream supply chain caused by severe wind and flood damage		■
	Lower sales/increased costs due to damage to own facilities and supply chain caused by sea level rise	Opportunity losses and increased costs of recovery and countermeasures due to damage to the company's facilities and supply chain sites near the coast caused by sea level rise		■
	Lower sales/increased costs due to employee health risks from heat and cold	Opportunity losses due to disruption of employee health caused by extreme weather and increased capital investment costs for air conditioning and other equipment		■
Opportunities	Cost reductions through increased resource efficiency and increased sales through improved production efficiency	Decrease in procurement costs due to recycling resources through resource recycling and increase in sales by developing the battery reuse market	■	
	Decrease in energy procurement costs due to lower energy prices	Decrease in energy costs at the Company due to lower prices for renewable energy and in raw material procurement costs due to lower energy costs at suppliers	■	
	Increase in sales due to higher demand for environmentally conscious products and services	Increase in sales due to growing demand for products that contribute to GHG reduction, such as automotive batteries and stationary storage batteries for use alongside renewable energy sources	■	
	Increase in sales of disaster preparedness products and services	Increase in sales due to higher demand for disaster preparedness products, such as storage batteries to prepare for disruptions in energy infrastructure and battery products that contribute to the weather observation/space business		■

Risk Management

Panasonic Energy has established an Enterprise Risk Management Committee ("ERM Committee") to manage various risks, including those related to climate change, in an integrated manner.

Based on the PDCA cycle of risk management, the ERM Committee reports regularly to the Management Meeting and the Board of Directors on essential risks and the progress of countermeasures. Each year, the Committee identifies risk items in terms of "impact" and "possibility of occurrence" while also defining "operational risk" as events that have the potential to affect business activities and pose an operational threat. In fiscal 2024, we identified earthquakes and tsunamis as the risk and managed progress on measures such as flooding.

Regarding the transitional risks, such as an increase in the cost of compliance with environmental regulations, the relevant departments closely monitor trends and take appropriate measures while the Management Meeting continues to manage the progress.

Metrics and Targets

In addition to disclosing actual GHG emissions (Scope 1, 2, and Scope 3 Categories 1, 5, and 6 P71), we have set a goal of achieving all of Zero-CO_2 factories* by fiscal 2029 and are working hard to reduce emissions.

We have also set targets for GHG emissions outside of our own company, including the amount of CO_2 reduction that we contribute to society and the reduction of the carbon footprint of our products, including those upstream in our supply chain.

Furthermore, we have established our own "Environmental Contribution Index" (an index that indicates the ratio of avoided CO_2 emissions to the actual CO_2 emissions from our battery production), which is a composite of the above indicators. We are working to improve this to 15 in fiscal 2031. For more details of our efforts to set and achieve our goals, please refer to the Environmental page of this report. P39

*Factories that have achieved virtually zero CO_2 emissions by conserving energy, introducing renewable energy, and using credits.

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Realizing a Circular Society

KPI	FY2024	FY2031
Recycled material utilization rate (cathode materials, copper foil)	—	Compliance with local regulations in each country
Recycling rate (in-house waste)	**97.6%**	99% or more (less than 1% going to landfill)

Policy

As a company that uses large amounts of natural resources in its business, we believe that using the earth's limited resources in a sustainable manner and passing them on to the next generation is crucial. For the future of children born today, we are increasing recycling to reduce the consumption of new natural resources while reducing waste to lower our environmental impact. We are also working to reduce CO_2 emissions related to the production of materials and disposal of products. We will advance these efforts in tandem with our commitment to achieving decarbonization.

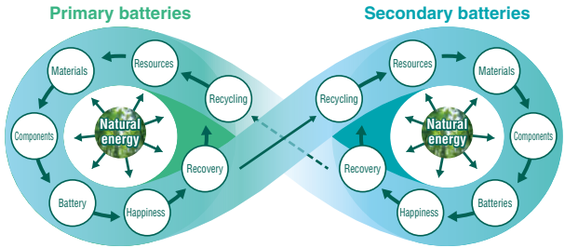


Image of the "Yarushika Circular Concept," which transcends the boundaries between primary and secondary batteries to realize resource recycling

Circular economy initiatives

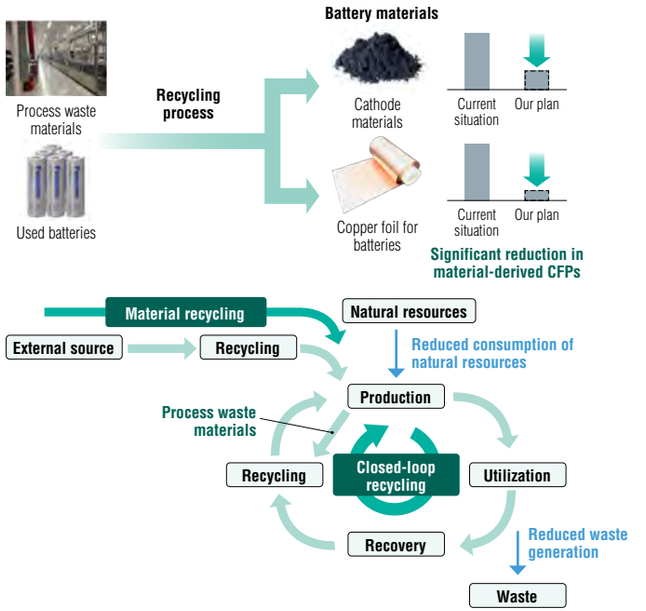
Activities with co-creation partners

In our battery production, we have been using recycled materials, mainly recycled PET and other plastics, because using such materials instead of newly manufactured materials leads to lower consumption of natural resources and lower CO_2 emissions. Committed to realizing a recycling-oriented society and reducing CO_2 emissions, we are also stepping up efforts to extend the use of recycled materials to electrode materials and other components.

In fiscal 2023, we signed an agreement with Redwood Materials Inc., a U.S. battery recycling company, to purchase recycled cathode materials and copper foil for EV lithium-ion batteries. Under the agreement, we will establish a system to recycle process waste and used batteries into lithium-ion battery materials, such as cathode materials and copper foil. Recycled cathode materials derived from waste generated at our US factories will be used at our new factory in Kansas, while recycled copper foil will be used at our factory in Nevada. By also increasing the local procurement rate, this initiative will also lead to lower CO_2 emissions in the resource extraction and logistics processes.

In addition to the United States, we will verify the use of material recycled*1 cobalt, nickel, and lithium cathode materials with material suppliers and gradually start using cathode materials containing recycled materials in some of our products. In addition, we aim to start utilizing our process waste and other materials as battery materials. To this end, we have established a recycling system for reusing black mass*2 generated from process waste materials and used lithium-ion batteries, as a cathode material. In 2024, we gradually started to use this material.

*1 Reuse of waste as materials or raw materials for products
*2 Black powder containing cobalt, nickel, lithium, etc., obtained by heat-treating batteries



Establishing a battery recycling scheme in collaboration with stakeholders

1. Initiatives related to secondary batteries

For secondary batteries, countries around the world are developing legal systems and mechanisms for recycling aimed at using resources more effectively and preventing environmental pollution. In Japan, we are a member of Japan Portable Rechargeable Battery Recycling Center (JBRC), a recycling promotion organization established mainly by Matsushita Battery Industrial Co., Ltd. and SANYO Electric Co., Ltd. (our predecessors). In this role, we engage in collection and recycling of secondary batteries from cooperating stores, municipalities, and businesses nationwide. In fiscal 2023, the industry as a whole collected and recycled 1,700 tons of secondary batteries (around 50% of which were made by our company). In North

Contribution to the Environment

America, we collaborated with other battery manufacturers to launch the Call2Recycle program, which offers recycling schemes for secondary batteries in the United States and Canada. We are also helping various other countries create the most efficient systems that match the actual recycling infrastructure situation in each country.

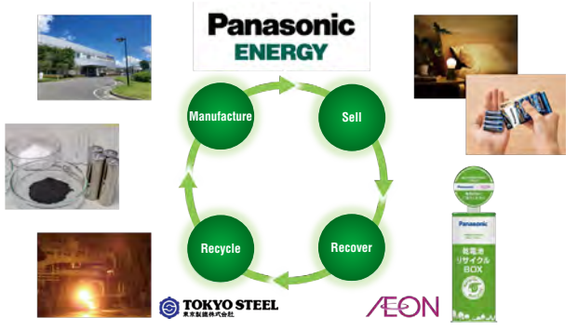
2. Initiatives to end the use of disposable dry cell batteries

For dry batteries, which are primary batteries that cannot be used repeatedly, we are conducting demonstration tests of dry battery collection and recycling efforts.

In Thailand, where the battery collection system is still underdeveloped, we have started a demonstration test to collect and recycle waste dry batteries at 31 stores in cooperation with CP ALL (a convenience store operator) from fiscal 2023. This initiative is to be expanded to 1,000 stores in fiscal 2025. In Japan, a similar demonstration test has been started in cooperation with AEON Retail and Tokyo Steel Manufacturing since fiscal 2024. Recycling of collected dry batteries as steel materials has been started in both Japan from June 2023 and Thailand from March 2024.

We will continue to expand our collection areas and full-scale operations in Thailand and Japan while also expanding the expertise that we have gained to other regions. In terms of recycling, we are promoting research and development with a view to future use in dry battery components, aiming to realize "battery-to-battery" recycling.

Dry battery recovery model in Japan



Initiatives to reduce plastic use

While plastic is an indispensable material in modern society, its impact on climate change and the challenges it poses as a waste material are driving our efforts to reduce plastic use and recycle resources.

As one of our initiatives, we launched dry batteries in "ethical packages" in both Japan in fiscal 2022 and Thailand in fiscal 2023. These packages are designed to reduce packaging materials and eliminate plastics, as products that appeal to the ethical consumption orientation (consumption activities that consider not only the functional value of products and services but also their ethical value). The introduction of this ethical packaging reduces the amount of packaging materials used (including plastic) by 38–59% compared to conventional products. It also contributes to a reduction in total CO_2 emissions throughout the lifecycle of packaging materials, including obtaining raw materials, manufacturing, use, and disposal.

From 2023, we expanded our lineup to include the rechargeable nickel-metal hydride battery "eneloop" and coin cell batteries* with ethical packaging. We have also accelerated our business globally, starting with the Asia-Pacific region.

Furthermore, in September 2023, we received the Japan Star Award (Minister of Economy, Trade and Industry Award).

*Sold only through certain online shopping websites.

In addition, customers have requested further use of recycled resin in response to growing environmental concerns, such as the reduction of waste volume and CO_2 emissions.

To continue reducing environmental impact, we have therefore raised the ratio of recycled resin used in battery pack outer cases from 25% to 50% for some models. This contributes to the reduction of energy required for plastic production and the recycling of plastics scheduled for disposal. Since mechanical properties such as strength and heat resistance are reduced with the use of recycled resin, risk verification was also conducted before introduction.

In the future, we will contribute to environmentally friendly activities by expanding the use of recycled resin and other measures.

Products with ethical packaging

Waste reduction initiatives

Reduced waste from the factory

We work continuously to reduce waste generated by our factories and increase the volume of valuable materials and resources recycled. Our aim is to reduce the final disposal amount (amount of waste ending up in landfill) to as close to zero as possible. We have set the factory recycling rate (Amount recycled ÷ [Amount recycled + Final disposal amount]) as a KPI, with a target of 99% or higher. In fiscal 2023, we achieved a factory recycling rate of 97.6% globally.

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Working to Solve Social Issues

Providing Energy for the Pursuit of Happiness

KPI	FY2024*1	FY2031*2
Sales of stationary storage batteries that support clean energy	**1.9**	4.0
Sales of healthcare storage batteries that support everyday life	**0.7**	2.4
Sales of dry batteries that provide support in emergencies*2	**1.2**	2.2
Sales of batteries that protect the security of mobility*3	**1.1**	8.2

*1 Sales volume with fiscal 2022 set as 1
*2 Sales in the three key regions
*3 Automotive batteries excluding those for drive applications

Policy

Electrical supply and power sources serve as the foundation for convenient, comfortable, safe, and secure lifestyles, which is why securing these has become an indispensable part of contemporary society. With a focus on building a better world through electricity, Panasonic Energy genuinely confronts the environmental issues being faced throughout the world, and continues to undertake the further challenge of engaging in businesses centered on batteries to realize a society in which enriched lifestyles and a sustainable environment are harmonized free of conflict.

As an example of these efforts, we support safe, secure social infrastructure that remains active even in the event of disasters and other emergencies, and contribute to sustainable urban development with the inclusion of disaster prevention. In addition, we contribute to solutions for hunger and poverty by supplying energy to regions without electricity. To enable these efforts, we will continue to undertake the challenge of developing world-first and one-of-a-kind technologies, and to encourage innovation.

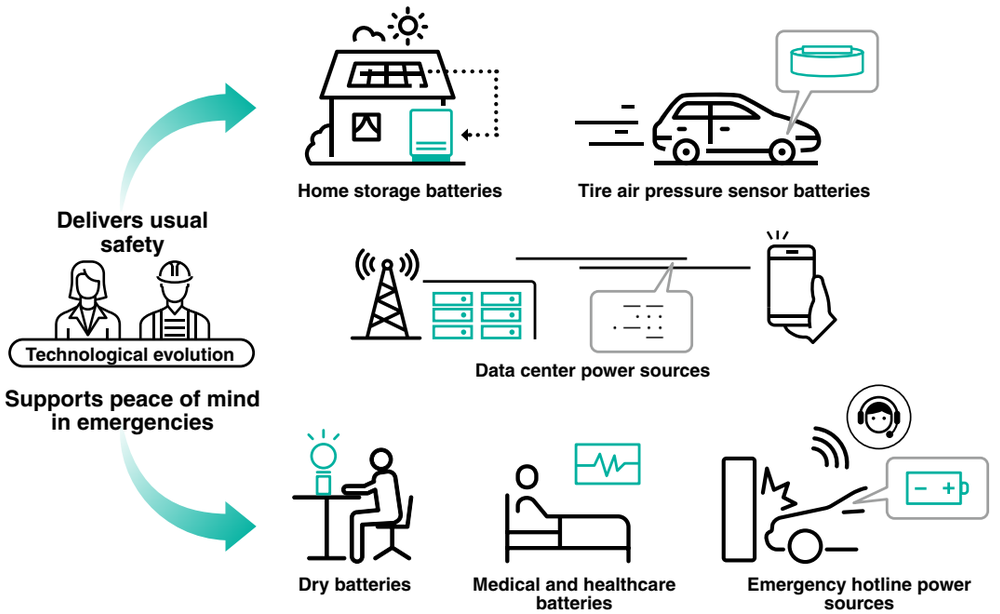
Social contribution through business activities

We also contribute to the happiness of people's lives in a wide range of fields.

The Energy Solutions Business Division provides high-quality, high-capacity Li-ion batteries and storage battery systems for stationary power sources, which are used as data center power sources that enable stable operations 24 hours a day, 365 days a year, and as home storage batteries that support the efficient use of electric power. In addition, these batteries have also been adopted for various healthcare devices that assist in aspects of medicine and everyday life requiring stable operations. In this way, these products support social infrastructure, and contribute to the expansion of clean energy and to lasting health for people.

The Energy Device Business Division provides high durability, high reliability batteries as power sources for automobile tire air pressure sensors and emergency hotlines, which help deliver peace-of-mind for mobility. Moreover, the Division's dry batteries go beyond serving as more than common daily necessities as they play an important role in supporting lifelines as reserve stocks in the event of an emergency. Social contributions made through these businesses are supported by technological developments that pursue safety and security. For example, we achieve high-quality for our Li-ion batteries by employing safety technologies that rely on separators with high heat resistance, as well as by implementing uncompromising control of manufacturing processes through the establishment of strict design control standards. In addition, we enable long storage lives for our dry batteries using our proprietary "battery leakage preventing manufacturing process Ag+," which utilizes a silver compound for the cathode materials.

We will continue to provide the driving force for the advancement of society through tireless technological evolution.



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Social contribution activities

We engage in a wide range of social contribution activities for the varying challenges and demands of each region and country. In the following pages, we will introduce several examples of our initiatives.

Contributing to safe and secure lifestyles

1. Supporting the improvement of living environments in India

Each year, our India site conducts support activities with the goal of bettering living environments in the region. In fiscal 2024, we supported the expansion of an examination room at a public hospital to improve the health of people in the community where our site is located. We also undertook activities to build bright and safe public restrooms with photovoltaic power generation in the communities where our company's site is located.

Furthermore, we are working to improve the educational environment for children and have supported local schools by donating study desks, upgrading school lunch facilities, paving school grounds, and improving schoolyards in fiscal 2024.

We will continue to create an environment that allows local residents to live in peace and children to grow up healthy.

Photovoltaic-powered public restrooms

Donations to local schools

2. Supporting the livelihoods of senior citizens in China

At our sites in Wuxi and Suzhou, China, our employees support senior citizens during the Chrysanthemum Festival in October each year, which is part of China's Respect-for-the-Aged Day. In fiscal 2024, a total of approximately 90 employees attended this activities.

As one example of our initiatives, we visited the homes of senior citizens living alone in the community and utilized our knowledge of electricity to check any problems that they may have there. In any hazards that were identified, we donated and even installed electrical outlets and non-slip handrails manufactured by the Panasonic Group. Furthermore, we also visit local nursing homes to donate daily necessities.

In addition to our business activities, we contribute to the creation of a safe and secure society for everyone of all ages.

Patrol activities for senior citizens living alone

Visiting a nursing home

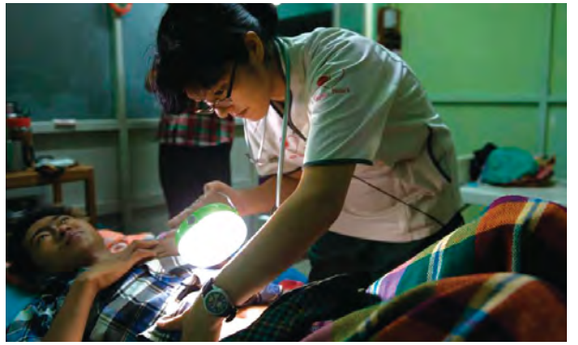
3. LIGHT UP THE FUTURE

The Panasonic Group is working as a unified entity on the LIGHT UP THE FUTURE project to illuminate the future of regions without electricity. In collaboration with NGOs, NPOs, international organizations, and various other partners, this project delivers light using renewable energy to local regions, and contributes to the building of a sustainable society free from poverty through support programs.

Through this project and its predecessors, we delivered a total of nearly 120,000 solar lanterns made by Panasonic Energy to regions in Asia, Africa, and elsewhere without electricity from fiscal 2010 to fiscal 2023.

By replacing kerosene lamps with solar lanterns, we are reducing CO_2 emissions as we help to prevent fires and mitigate the health impacts of smoke.

The light from these solar lanterns also enables learning, medical activities, and manual labour at night, thereby helping to create opportunities for education, health, and higher incomes. Moreover, these reliable light sources also help invigorate family time and community.



Utilization of solar lanterns

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The funds for providing these solar lanterns came from donations collected through the AKARI Action Project, which calls for support among employees and citizens, as well as from funds collected through the donation of used books and recycled items.

In order to support and transform society through the provision of energy, we will continue to contribute to regions without electricity.

AKARI Action Project
https://holdings.panasonic/global/corporate/sustainability/citizenship/lutf/akari.html

Disseminating science and fostering the next generation

1. Battery and Necklight School, Factory Tours

Panasonic Energy has contributed to local communities through educational activities on the types, history, and proper ways of using batteries. Since 1966, we have organized battery workshops and factory tours as educational programs to extend classroom learning covering science, social studies, environmental studies, and other subjects. Following the Great East Japan Earthquake, we also planned and organized Necklight School in support of recovery efforts, and have continued to engage in activities around Japan that convey the value and importance of batteries and light during the many earthquakes, typhoons, and other disasters.

Since 1995, we have expanded the region covered by our Visit Battery School first held at elementary schools in Osaka prefecture. And to enable as many children as possible to participate in the Company's Battery School, in 2002 we began holding Remote Battery School (renamed Online Battery School in July 2022) using teleconferencing systems. These later workshops entered their 20th year in September 2022.

Since 2007, we have also held these workshops globally in Thailand, Iran, Australia, Myanmar, Tanzania, and elsewhere a total of 153 times. (Held 40 times on-site and 113 times online as of September 2023)

We have also undertaken the role of delivering the light of hearts to bring smiles to children. Currently, we are incorporating a broader range of course content that includes the environment, the Sustainable Development Goals (SDGs), and disaster prevention. And we will continue to engage in this project as an activity that embodies energy in the pursuit of happiness.

Factory tours and hands-on learning intended to teach about and provide experience on batteries
https://www.panasonic.com/jp/energy/study.html

Visit Battery School

Online Battery School

Global Battery School for regions without electricity (Myanmar)

Cumulative number of participants at factory tours and battery schools (as of March 31, 2023)

Factory tours

1,020,511 persons

Battery schools

Japan	Overseas
195,227 persons	5,466 persons

Participant feedback

Teachers

" I became familiar with Japan and batteries through the workshop. And I really enjoyed the class."

" This program was my only opportunity to make a dry battery. And it was a great hands-on opportunity to learn about science and the environment."

Children

" I want to make life better and the environment more beautiful using batteries."

" I didn't really like science before, but now I want to study more and become a battery scientist."

" We were so overjoyed by the opportunity given by Panasonic and we are very grateful for them giving us a chance."

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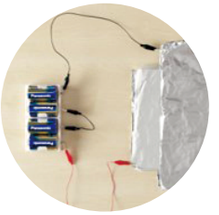
2. Battery Education Academy

Through our website, we have made our Battery Education Academy publicly available for all to learn about batteries and their close connections with everyday life. The site provides easy-to-understand explanations regarding experiment methods for making batteries from everyday objects, as well as knowledge on using batteries safely. Along with videos on making batteries from fruit and capacitors from aluminum foil, the site is full of text-based content explaining the detailed mechanisms behind these.



We will continue to communicate these activities in a way that fosters the desire among children to ask why and to learn more with a sense of wonder.

Battery Education Academy
https://www.panasonic.com/global/energy/study/academy.html

3. Work Experience & Career Education

As an activity intended to help foster work ethics and professionalism through work experience, since 2008 we have offered the Work Experience & Career Education program for elementary school students. As part of this program, Panasonic Energy employees in various occupations act as lecturers and hold classes to convey the fun and satisfaction of work. In light of today's situation where the use of ICT is becoming a normal part of every corner of society, this activity is primarily held online as part of the GIGA School Program administered by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) to ensure one device for each student. In this way, we actively engage in efforts while collaborating with the government and local authorities to teach about society and foster the capability of children to remain relevant in the society of the future.

Work Experience & Career Education

4. Contributing to STEM education in the United States

Our North American sites have been contributing to the dissemination of Science, Technology, Engineering, and Math (STEM) knowledge to a broad cross-section of the local community.

For example, in Reno, where our Nevada Factory is located, we jointly established the Advanced Manufacturing Training Center with Truckee Meadows Community College (TMCC) to develop the community through the development of STEM human resources.

Reaching out to young women is also seen as the key to spreading greater knowledge in STEM fields. With this in mind, we launched a Clean Energy and Manufacturing workshop for local Girl Scout children in 2024 to get those interested in the field at an early age.

At the workshop, a female employee of the Company served as the instructor. She used a model to teach the children how batteries work and shared with them the excitement and satisfaction of her work as a woman actually working in STEM fields.

By further accelerating these efforts, we will contribute to the sustainable development of society through the dissemination of science and the nurturing of the next generation.

Our employee acting as an instructor and a child learning how batteries work

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Message from the CHRO

Masaru Miki
Director, Managing Executive Officer
Chief Human Resources Officer (CHRO)

Promoting human capital management, both quantitatively and qualitatively, in response to unprecedented business growth

Enhancing business competitiveness and improving the well-being of employees

We aim to solve the issues society is faced with, such as climate change, through our business activities; and are working to take on major challenges with further growth expected for us up ahead. To achieve this aim, we are pressing forward with human capital management, which calls for the enhancement of our business competitiveness and the greater well-being of our employees. We want to attract a diverse workforce that resonates with our Mission and Vision and can live up to those principles by continuously, and independently, embracing challenges. We also want to have all employees work safely, securely, and healthily so that they can fully capitalize on their individuality and capabilities to generate a level of competitiveness that far surpasses the competition. This is the kind of company we want to create. The realization of this is my primary mission.

Securing human resources and focusing on the development of a conducive environment for employees

Our human resources have been out of synchronization with the speed of growth in our business, so resolving this issue has been my biggest mission since I took office. To that end, over the three-year period through to the end of fiscal 2026, we plan to hire approximately 1,000 new employees in Japan and some 4,000 overseas, mainly at our Kansas factory in North America. So far, we are tracking ahead of plan in Japan and no changes are in store for our hiring schedule overseas. In Japan, we are establishing such programs as the Academy of battery Technology and Manufacturing so that new recruits can acquire the necessary skills early on. And to support the active participation of mid-senior employees, we are rolling out a scheme that lets individual employees extend their retirement age to 65 by choice.

Supporting middle management, which is the key personnel in our organizational development

From a qualitative point of view, we are driving reforms in our human resources systems to reward employees who challenge themselves with lofty goals with a view to achieving our grand vision. We have also established our very own action guidelines, called the Seven Paths to Transformation, to encourage changes in employee behavior. Furthermore, over 30% of our employees in Japan are mid-career hires, and we are fostering an inclusive organizational culture by increasing and harnessing the talent of human resources with diverse values, regardless of nationality, gender, or age.

We are focusing our attention on the EOS* scores for the categories of “employee engagement” and “employee enablement” with the aim of recording world’s top class scores. These EOS scores, which had been increasing steadily since the company’s establishment due to considerable confidence in management and the realization that the company is growing, have now leveled off. The reason for this is that those in middle management (general managers and section leaders) have been burdened by heavy workloads. They are required to manage rapidly changing businesses, organizations, and human resources while also delivering results as individual players. This is why, in fiscal 2025, we will provide opportunities for the sharing of organizational development know-how and coaching to general managers and section leaders who are integral to organizational development. We also hope to alleviate the burden on general managers and section leaders with the help of digital transformation tools.

*Employee Opinion Survey

Respect for human rights in the supply chain is essential

It is absolutely essential that any company doing business takes steps to respect human rights across the entire supply chain. Especially when it comes to minerals, the key materials in batteries, we steadily implement a human rights due diligence P59 process because we procure these materials from many different locations in North America, South America, Australia, and China, and there are some suppliers whom we have invested are engaged in mineral resources development in those locations.

Using tools based on the international standards of the Responsible Business Alliance(RBA), an international CSR organization, we conduct annual self-assessments on our manufacturing subsidiaries. We map the risks of suppliers based on the risk indicators of international organizations and the impact they may have on our business, and take various measures to address suppliers deemed to be high risk, such as performing on-site CSR audits in collaboration with third-party organizations.

Going forward, we will continue to promote human capital management and respect human rights across the entire supply chain, thereby supporting the growth of the company, which is expanding at an unprecedented scale and speed.

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Promoting Human Capital Management and Respecting Human Rights

KPI	FY2024	FY2031
EOS Score: Employee engagement	**70pt**	80pt
EOS Score: Employee enablement	**62pt**	75pt
Percentage of women in managerial positions (non-consolidated)	**6.5%**	15%
Rate of childcare leave taken among men and women (consolidated, Japan)	**Women 100% Men 58%**	Men/Women 100%
Health management index (Japan: Ministry of Economy, Trade and Industry)	**55.7 pt**	White 500
Number of fatalities due to industrial accidents (global)	**0 incidents**	0 incidents
Number of industrial accidents (lost time incidents in Japan)	**5 incidents**	0 incidents
Percentage of implementation of self-assessments related to human rights and labour (overseas manufacturing subsidiaries) and percentage of executed corrective plans	**100%**	100%

—Promoting Human Capital Management—

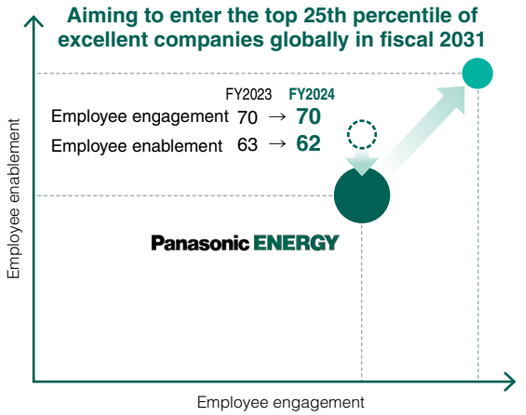
Policy

To realize Panasonic Energy's Mission and Vision, the Company positions human resources as its most important management asset and aims to both strengthen business competitiveness and improve individual well-being.

These aims result in the Company stating as follows: (1) a diverse group of people who strongly resonate with our Mission and Vision and who are autonomously taking on the challenges of achieving them and (2) a safe and secure environment in which these people can maximize their abilities to create a competitive advantage over other companies.

We will continue to promote human resources and organizational initiatives based on the following two main pillars: "Individuals who take on challenges autonomously" and "An organization that enables employees to reach their full potential." We aim to become one of the top 25% of the most outstanding companies in the global marketplace by improving Employee Engagement score and Employee Enablement score in the Employee Opinion Survey (EOS), which serves as a benchmark for these efforts.

Fiscal 2024 results were flat for Employee Engagement and slightly down for Employee Enablement. Taking these results seriously, we will accelerate improvement activities in each workplace by introducing human resources and organizational management support measures for department and section managers and by carefully analyzing the issues behind the results as part of our efforts in fiscal 2025.



Individuals who take on challenges autonomously

Promoting the Mission, Vision, Will (MVW), and Seven Paths to Transformation

Since its launch in fiscal 2023, Panasonic Energy has conducted the Forest Conference as an approach to promoting MVW throughout the entire company. The Forest Conference serves as a unique Panasonic Energy forum for learning, where participants immerse themselves in a forest as a world in which plants and animals coexist in harmony as they experience the MVW of Panasonic Energy first-hand. At the same time, the Forest Conference is intended to help participants connect this experience to their everyday actions through discussions with their colleagues on the Seven Paths P10 to Transformation and a sense of mission toward achieving the MVW. The forest is a world in which living organisms and nature coexist in harmony. And by immersing themselves within the forest, participants can experience a world in which the pursuit of happiness and a sustainable environment are harmonized free of conflict as aimed for by the Mission. This environment is precisely why we value holding these meetings in the forest.

As part of the two-day, one-night program, attendees travel to Nishiawakura-son in Okayama prefecture. During the first day participants walk along the virgin forest under the guidance of a natural cycle professional, experience nature first-hand, and learn about harmony from the forest, particularly how living organisms in a virgin forest harmonize with nature. During the second day, all participants declare what their departments must do, along with their own efforts, in order to realize the Mission and Vision based on what stimulated them and what they learned the first day.

Forest Conference: Talking together with colleagues about MVW while surrounded by the harmonious world of the forest

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By the end of fiscal 2024, a total of 33 Forest Conferences had been held, with 467 employees participating. Although participants originally only included those from the top and middle management tiers who serve as key persons in promoting MVW, we invited regular employees as well in fiscal 2024, thereby allowing for the participation of all employees possessing a strong will and desire. During each event, roughly 15 participants and Panasonic Energy directors, the latter who volunteer to serve as chairpersons of conferences actively exchange ideas in a way that supersedes departmental boundaries. Having already scheduled 16 meetings for roughly 240 participants for fiscal 2025, we will accelerate our efforts so that the employees not only implement their own declaration upon returning to the workplace but also start sharing information about the MVW with other persons around them.

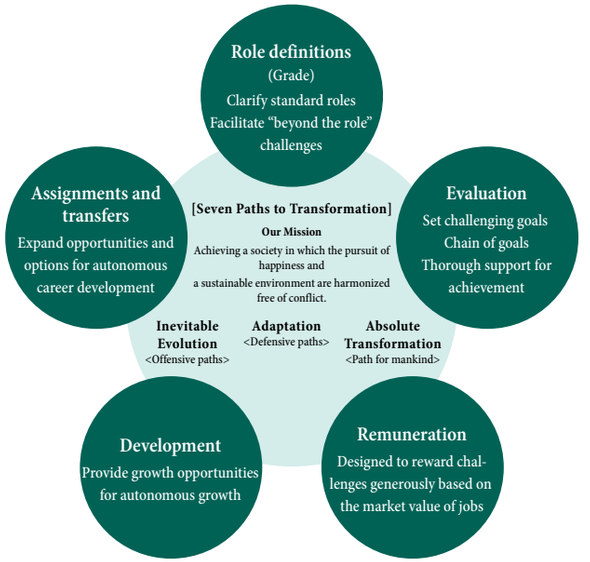
Creating an environment that encourages autonomous challenges

We are shifting toward job-based human resource management that encourages the autonomous growth of each individual, rewards challenge and achievement, and maximizes individual capabilities. We have defined the expected roles for each job category and grade, set remuneration levels based on the job's market value, and established an evaluation system that generously recognizes challenges beyond the expected roles.

In April 2024, we revised the remuneration system for management positions to set competitive remuneration levels that are higher and more competitive than those of competing companies in the human resources market and to shift toward a flexible system that provides generous rewards for challenge and achievement. In terms of the evaluation system, we will specify the Company's challenging goals to ensure that we go beyond the past and present to anticipate the future. After carefully matching them with the individual's willingness to take on challenges, we will thoroughly implement an operation where the challenging goals of the organization and the individual are linked. We will support the realization of challenges that exceed role expectations through frequent follow-up from the Company led by middle managers (e.g., goal setting at the beginning of the term, sharing and supporting progress during the term, and 1-on-1 meetings to confirm results at the end of the term).

In April 2024, we launched the Middle and Senior Partnership Program to foster an organizational culture where everyone—regardless of age—can take on challenges with passion and fulfillment. The retirement age will be extended to 65 on an individual basis if the employee meets the definitions and requirements of the job and human resources that significantly impact the continuity and growth of the business and also wishes to do so. By presenting an image of the type of human resources that the Company is looking for and introducing a system that encourages them to take on challenges resolutely, we aim to see human resources with advanced skills and technologies continue to drive our business growth. Furthermore, we will continue to promote the creation of an environment in which diverse human resources can come together while also taking on challenges and growing autonomously.

Overall of human resources management



Identifying and training management executives to support the business

In the Company's rapidly changing business environment, we believe that it is essential to have management executives who can drive business growth by responding flexibly and quickly from a medium- to long-term perspective. To this end, we are promoting the development of a robust pipeline of next-generation management personnel. To ensure a stable supply of management talent at an early stage, we actively seek out the next generation of management personnel at a young age, developing their skills and gaining new experience.

Specifically, we will define succession requirements for business division directors and CxO positions with business responsibility as target positions while also selecting succession candidates for immediate appointment and 3-, 5-, and 10-year time horizons. We then formulate a succession plan for the candidate and design a specific career development plan for the candidate's appointment. This plan is discussed in detail at a Talent Management Committee meeting attended by the President, business division directors, CTO and CHRO to implement the career development of candidates. In order to appoint next-generation management candidates to executive positions, we clarify the abilities and skills to be acquired in comparison with the requirements for successors and formulate career development plans with a view to challenging assignments. Going forward, we will organize Off-JT, which underpins career development, as an executive development training system. To this end, we will customize appropriate and effective training for each next-generation management candidate to accelerate their growth.

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In addition, two other types of tutoring activities are offered as executive development training. The first is Top Juku, in which the President, serving as the head of that cram school, conducts group discussions and gives feedback to each student. In Top Juku, the next-generation management candidates for the next 5 to 10 years are asked to formulate a "transformation scenario" as if they were management themselves while thoroughly refining and strengthening their skills through self-practice. Furthermore, through individual coaching, we will encourage self-reflection and self-transformation for further growth. The second is Ito Juku, a top management cram school in which Vice President Ito serves as the instructor and conducts regular dialogues and self-practice on issues. Ito Juku is a program for young next-generation management candidates to broaden their perspectives through overseas activities and strengthen their "ability to formulate global issues" by taking an overall understanding of the business. They will also experience the importance of taking action, making suggestions and recommendations independently, and strengthening their sense of autonomous responsibility.

Group photo with Ito Juku participants and Panasonic Energy India employees

An organization that enables employees to reach their full potential

Supporting career realization and promoting human resource development

To realize each individual's mid- to long-term career vision, we support the career development that the individual desires.

At Panasonic Energy, we formulate individual human resource development plans for the autonomous career and skill development of all employees through regular one-on-one meetings between superiors and subordinates. We also support development and growth by providing—irrespective of role, age or gender—a variety of training opportunities that meet the motivation of each individual to learn.

In fiscal 2024, we introduced the Learning Management System called "Manabico" to visualize and centrally manage various training courses and start supporting employees' autonomous learning. We will continue to support learning by enhancing content to support each individual's autonomous career development.

In addition, we place particular emphasis on monitoring the growth of new graduates during their first three years of employment so that they can adapt smoothly to our culture and climate and fully demonstrate their individuality, talents, and expertise.

In fiscal 2024, we conducted group interviews with new graduates and mid-career recruits, listening to their specific suggestions and requests to begin efforts to understand and resolve issues. We are also actively investing in human resource development for the next generation of executives and middle management, who are key personnel in workplace management, promoting recurrent education to support the active participation of motivated human resources regardless of their age, and responding to employees' strong desire for personal growth.

Our education and training system is based on the acquisition of management philosophy, knowledge and skills that are commonly required of all employees. We also have systematized, rank-based training according to the growth of each individual and specialized training by function to hone their expertise in the tasks of which they have been placed in charge. We are developing learning on a global basis by enhancing and upgrading online learning that enables learning with high-quality teaching materials regardless of time and place. At the same time, we are working on the matching of business management and human resource development by, for example, individually developing customized training in accordance with business needs. Based on training courses at an in-house training institution, we are currently conducting human resource development training sessions, such as specialized training and external training, in accordance with personal growth.

Basic education and training system

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Supporting the early success of new employees

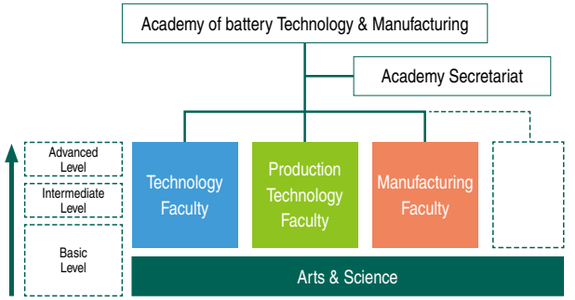
Considering three years as the training period for new graduates, we conduct the new employee onboarding program to ensure they acquire the skills necessary for their work. We have introduced a mentor system and put in place a system by which senior employees with whom they are familiar are able to provide consultation and support for concerns related to their non-work lives and careers. This initiative is not limited to just training new employees; instead, it is also positioned as a place for the mentors themselves to gain insights and broaden their opportunities to learn and grow.

Mid-career recruits are able to adapt smoothly to our culture and climate through the career joining onboarding program and, for example, through opportunities for communication with management, the understanding of our mission and vision, and Group management philosophy training. We are working to make the most of the individuality, desire, and ability that each person possesses.

In addition, we offer a Basic Battery Course to a diverse group of human resources who are joining the Company, helping to make mid-career recruits from various industries to acquire basic know-how. As a mechanism that enables human resources to learn specialized skills in a short period of time by providing basic education centered on technology and skills, we established the Academy of battery Technology & Manufacturing in April 2023. Consisting of technology, production technology, and manufacturing faculties with our highly certified technicians as instructors, this academy has programs in place so that even mid-career hires with no battery-related knowledge or experience can acquire the necessary skills at an early stage. To confirm the level of retention after joining Panasonic Energy, we also conduct a pulse survey*1 once a month, and superiors and the human resources departments work together to discover issues and provide support. Pulse surveys are also conducted in the same way for new hires.

*1 Employee Opinion Survey

Chart showing Academy of battery Technology & Manufacturing system



Supporting the success of diverse human resources

Panasonic Energy promotes the DEI initiative with the goal of creating a company where a diverse group of employees can coexist in harmony, individuals will be happy and fulfilled in their work, and the environment will be conducive to sustainable challenges.

1. Promoting diversity

To create an organization and environment where diverse human resources create value, we aim to increase the ratio of mid-career hires to 40% by fiscal 2026. This will create groups of human resources that possess diverse individuality and experiences while also pursuing the desire to undertake challenges. While working to increase the ratio of women among our new graduate and mid-career hires, we will also strive to raise the percentage of women in managerial positions (6.3% as of the end of fiscal 2024). In addition to more actively recruiting external female human resources in management positions, we are working to carefully align employee career plans between our employees and their superiors. At the same time, we provide support for expanding roles, including dialogues with managers.

Furthermore, to help each individual succeed, we will conduct individual interviews to clarify essential issues, provide opportunities (including career development programs, dialogues with management executives, mindsets, and interaction with role models), and work to build a network.

In addition, we will create employment opportunities that carry us above the statutory employment rate by organizing workplace environments in which it is easy for those with disabilities to work. In an effort to further increase diversity, we are also actively engaged in expanding employment at Panasonic Farm Miyoshi*2 and Panasonic Farm Higashiosaka*2, which provide support for independence among persons with disabilities.

Group photo with employees working at Panasonic Farm Miyoshi

Panasonic Farm Higashiosaka employees washing harvested vegetables with water

*2 Panasonic Farm Miyoshi and Panasonic Farm Higashiosaka
We aim to create a workplace where staff with disabilities can play an active role in vegetable production.

2. Promoting equity

To realize an approach to management that enables employees to reach their full potential and determines their growth on an individual basis, Panasonic Energy emphasizes the need for balance between life events and career development. As a result, we are moving forward toward the evolution of work styles and creating environments that maximize the value of human resources and match the diversity of lifestyles and value sets. Specifically, we will increase the rate of childcare leave taken among men (58% in fiscal 2024), expand options for work locations, and reform the promotion screening process.

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In particular, we encourage male employees to take childcare leave by holding explanatory meetings once a month for those who plan to take leave and send follow-up e-mails to those who are eligible.

To address the needs of employees with diverse value sets and backgrounds, we are designing mechanisms that encourage them to challenge difficult goals and smoothly produce outcomes, namely by allowing each employee to select the ideal work style for their individual circumstances. Specifically, we are establishing an environment that conforms to their various working needs, such as introducing the fully remote work system to increase the flexibility of work locations, enhancing leave systems, and revising the housing system to address various lifestyles. In addition, we are establishing horizontal connections between departments through the use of IT systems and designing mechanisms to promote community activities and invigorate interactions between human resources.

We are also promoting office reforms to create a more comfortable workplace. On the floor of the Technology Department, we are continually making improvements that go beyond just eliminating workspace shortages but also promoting the creation of spaces where employee interaction leads to innovation. As a leading example, we are spreading similar initiatives to other sites. These initiatives have received high external recognition, including the Award for Encouragement as part of the Nikkei New Office Awards in 2022 and the 2nd JOIFA Office Award Grand Prize in May 2024.

The office that won the Grand Prize at the 2nd JOIFA Office Awards

3. Promoting inclusion

We promote measures that create value through the active participation of diverse human resources and spontaneous collaboration.

In fiscal 2024, we conducted unconscious bias training sessions for approximately 540 management-tier employees, who play an important role in communicating with subordinates to maximize each person's individuality and abilities. We also continued to hold in-house forums. The third forum, entitled "How to Be a Company Full of Happy People.," featured Ryuji Nakatake of Teambox co., ltd. presenting a lecture on "Creating a team that embraces diverse individuality and values." Furthermore, the fourth forum featured alpinist Ken Noguchi discussing "Creating an environment that celebrates and supports individuals who take on new challenges." Through these activities, we will continue to create a happy company in which each employee can reach their full potential.

Mr. Nakatake giving a lecture at the Hamarikyu Office

Mr. Noguchi participates in a panel discussion with employees at the Tokushima Factory

Human resources and organizational management support for department and section managers.

It is essential to evolve organizational management and create an organizational climate in which each and every employee can truly thrive to keep up with the rapidly changing business environment and deliver corporate competitiveness and organizational capabilities.

Particularly in organizations, the management of human capital and organizations by department and section managers has become even more complex as the values of human resources have become more diverse. Therefore, to solve problems and concerns that cannot be resolved by the middle management tier alone, we will implement systematic human resources and organizational management support measures starting from fiscal 2025 with support for department and section managers as a core component.

Specifically, we will use an organizational management tool (Motivation Cloud) to understand the details of the actual organizational situation and increase the clarity of issues while also implementing basic organizational development training to develop the management skills of each department and section managers. In addition, personal coaching will be provided for department and section managers who wish to receive accompaniment and support in resolving their concerns as soon as possible in accordance with their individual issues.

These efforts will be not only led by department and section managers but also supported by a commitment from top management to ensure the effectiveness of solutions while fostering an organizational climate in which each employee can reach their full potential.

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Working to Solve Social Issues

Creating safe and secure workplaces

To create safe and secure workplaces, the Company has set its KPIs as zero fatalities due to industrial accidents (global) and zero lost time incidents in Japan. In fiscal 2024, there were zero fatalities due to industrial accidents and four lost time incidents in Japan. Therefore, having reviewed the structure of management leadership and all employee participation, the Company is redoubling its efforts to (1) thoroughly strengthen measures to prevent industrial accidents and (2) further improve the risk sensitivity and safety awareness of each and every employee.

1. Thoroughly strengthening measures to prevent industrial accidents

We regularly conduct mechanical equipment and hazardous substance surveys and work environment risk assessments at least once a year, identify the latent risks of industrial accidents in the workplace and thoroughly consider and introduce preventive measures.

We are also sharing examples of industrial accidents that have occurred within the Company, thoroughly investigating the causes of industrial accidents and measures to prevent any recurrence, and developing activities to prevent recurrence at each business site.

Risk assessments by on-site verification

2. Further improving the risk sensitivity and safety awareness of each and every employee

We are implementing *Shin Kakarichokai* and *Shin Hanchokai*, which are cross-learning activities that go beyond individual sites targeting supervisors and group leaders who play a key role at manufacturing premises. Furthermore, the section leaders are also conducting on-site confirmation assessments. While conducting mutual safety patrols of the manufacturing processes at each site, we are working to identify potential industrial accident risks and eliminate unsafe areas. We are also promoting the establishment of or upgrades to the Anzen Dojo (experience-based safety practice simulation spaces) at each site. As a result, each and every employee will be made directly aware of the risks posed by industrial accidents and work to eradicate unsafe behavior.

With regard to new domestic and global sites associated with future business expansion as well, we are aiming for zero lost time incidents while working to strengthen the foundation for continuous business activities.

Group leaders from each site meet to exchange opinions through on-site confirmation

Promotion of "Health and Productivity Management"

To improve employees well-being, we position mental and physical health promotion for employees and their families as well as enhancement of job satisfaction and purpose in life as important issues while fostering a workplace culture in which employees can play active roles. Specifically, we are working to maintain and promote employee health by holding online seminars on sleep, nutrition education, and walking and by organizing walking events for employees and their families.

In Japan, we are advancing efforts under the Certified Health & Productivity Management Outstanding Organizations Recognition Program promoted by the Ministry of Economy, Trade and Industry. As one of our KPIs, we aim to acquire certification as one of the top 500 companies in the White 500 health management survey by fiscal 2026. Currently, we have been certified as a Health & Productivity Management Outstanding Organization for two consecutive years, with 52.5 points/1,375th place in fiscal 2023 and 55.7 points/1,075th place in fiscal 2024. Going forward, we will continue to promote various health promotion programs involving all employees in cooperation with the health insurance organization and labour union.

Walking event party with the President and CHRO

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—Respecting Human Rights—

Policy

The Panasonic Group has established the Panasonic Group Human Rights and Labour Policy (Human Rights and Labor Policy), which refers to the content of the following international standards and incorporates the opinions of outside experts. The policy is predicated on compliance with international standards and the applicable laws in countries where we do business and includes our commitment to respecting internationally recognized human rights to identify, prevent, and correct risks related to human rights, to promote remedies for people affected by those risks, to create working environments where people are fulfilled by their work, and to engage in dialogue related to these topics with all our stakeholders. In accordance with this policy, we have established internal rules to develop a promotion system and promote specific initiatives for respecting human rights and creating working environments where people are fulfilled.

The Panasonic Group Code of Ethics & Compliance (Code of Ethics & Compliance) stipulates the promises that each employee must fulfill while also including respect for human rights as a part of our social responsibilities, and we are making efforts to raise awareness of them among all our employees.

[Main international standards used as reference]

- The United Nations' Guiding Principles on Business and Human Rights
- The United Nations' International Bill of Human Rights (Universal Declaration of Human Rights, International Covenant on Civil and Political Rights, and International Covenant on Economic, Social and Cultural Rights)
- ILO Declaration on Fundamental Principles and Rights at Work and ILO Core Conventions

Human rights due diligence

Panasonic Energy has established a Human Rights Due Diligence system based on the United Nations Guiding Principles on Business and Human Rights to respect and ensure the human rights of people associated with our business activities, products, services, and transactions. The system is intended to identify, prevent, and reduce negative impacts related to human rights with regard to the relevant business, correct issues, and explain the response results to the relevant stakeholders. Reflecting the issues that have been identified based on the requirements of society and the operation of the system, we continuously implement and improve the system with the advice of outside experts.

From fiscal 2022, we utilized a self-assessment tool—based on the international standards of the Responsible Business Alliance (RBA) and the adaptation to our Company—to conduct self-assessments related to human rights and labour at our Group's manufacturing companies. In fiscal 2023, we conducted a self-assessment focused on the International Labour Organization (ILO) core labour standards by using the questionnaires that we reviewed to identify issues more clearly, achieving that both the implementation and correction rates were 100%. In fiscal 2024, we conducted a self-assessment of our manufacturing sites in Japan (5 sites) in addition to our Group's manufacturing companies outside of Japan (10 sites). Through this self-assessment, it was confirmed that there were no events that could be considered forced labour or child/juvenile labour. In the years to come, we will promote initiatives geared toward the prohibition of forced labour, the protection of children and young workers, the appropriate management of working hours and wages as well as the prohibition of discrimination to improve the working environment on an ongoing basis.

Implementation of human rights education

We provide training in 22 languages of our Code of Ethics & Compliance, including "Respecting Human Rights," and provide regular opportunities (including when first starting work and upon promotion) to ensure employees know about the topic of respect for human rights included in the Code. In fiscal 2023, we revised the Code of Ethics & Compliance and began conducting training on the Panasonic Group Code of Ethics & Compliance for all employees. The training has been conducted regularly since fiscal 2024, and the course completion rate has reached 100% for two consecutive years. We also provide training to all individuals, including executives, who will be dispatched from Japan to overseas posts before their assignment begins. Training is given on international standards and national laws regarding corporate responsibility to respect human rights.

In addition, as part of our efforts to improve understanding of ESG issues, we conducted video-based training on social issues related to human rights and our initiatives. A comprehension test will also be administered, which will then be used to plan future training programs.

Panasonic Group Human Rights and Labour Policy
https://holdings.panasonic/global/corporate/sustainability/social/human-rights/policy.html

Panasonic Group Code of Ethics & Compliance
Chapter 5. Our Social Responsibilities, 1. Respecting human rights
https://holdings.panasonic/global/corporate/about/code-of-conduct/chapter-5.html#Sec_01

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Responsible Supply Chain

KPI	FY2024	FY2031
Written CSR consent acquisition rate from tier 1 suppliers	**62%**	100%
Ratio of tier 1 suppliers with an A-rank CSR self-assessment	**81%**	100%
Ratio of assurance provided by conducting CSR audits of tier 1 suppliers	**10%**	100%
CMRT/EMRT collection rate	**99%**	100%
Utilization ratio of conformant/ active smelters	**82%**	100%

Policy

At 20 global production sites, the Group procures such raw materials as active materials for batteries as well as various components ranging from various processed parts to electronic devices, from about 1,000 tier 1 suppliers in Japan and overseas. We recognize that, among them, we are required to fulfill our corporate social responsibility not only between the tier 1 suppliers and the Company but also through-out the entire supply chains that spread in elaborate networks in various countries, from manufacturers of raw materials, such as upstream resources and minerals, to tier 1 suppliers and delivery to the Group's domestic and overseas production sites.

To fulfill this social responsibility, we build partnerships with our suppliers on a global basis. Based on mutual trust and cooperation, we maintain and improve the quality of purchased products, realize competitive prices, promote responses to market changes, and create the product value required by our customers while studying together with our suppliers, who are our indispensable partners. For the realization of this product value creation, it is essential to comply with laws and regulations, social norms, and corporate ethics, and to fulfill social responsibilities, such as human rights, labour, health and safety, global environmental conservation, and information security. Together with our suppliers, the Group promotes procurement activities that can guarantee that we are fulfilling our social responsibilities while building a sustainable supply chain with low environmental impact.

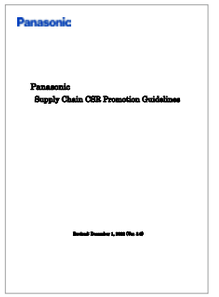
Details of initiatives

Compliance with CSR Guidelines

To clearly communicate its approach to CSR procurement to suppliers, the Panasonic Group formulated the Panasonic Supply Chain CSR Promotion Guidelines with reference to laws and international norms such as the UN Guiding Principles on Business and Human Rights.

In line with the Panasonic Group's activities, from fiscal 2023 the Group has started to conclude basic transaction agreements that require new suppliers to comply with the Guidelines. We have also requested that existing suppliers submit a written agreement to comply with the Guidelines. In fiscal 2024, 62% of all tier 1 suppliers submitted a written agreement. We will continue to explain the Panasonic Group's CSR policy to suppliers who have not yet submitted their written agreements and gain their understanding while promoting our goal of achieving 100% agreement.

Panasonic Supply Chain CSR Promotion Guidelines
https://holdings.panasonic/global/corporate/about/procurement/for-suppliers.html



Reducing CSR Risks through collaboration with industry initiative

Amid growing demands in the international community for human rights initiatives, in 2021 Panasonic Holdings joined the RBA, a global organization that promotes social responsibility, and is developing initiatives to strengthen CSR procurement in its supply chain.

As part of those initiatives, we are distributing the Supply Chain CSR Promotion Guidelines to all tier 1 suppliers and requesting that they not only check contracts and agreements but also conduct regular self-assessments. The assessment results are classified into three ranks, A, B, and C, in ascending order according to risk. The precondition for starting transactions with a new supplier is an evaluation of B rank or higher in the CSR assessment. In fiscal 2024, we had 351 tier 1 suppliers conduct self-assessments, and of the 351 companies, 284 (81%) were ranked A, 59 (17%) were ranked B, and the rest of the companies were either ranked C or those who had yet to submit a self-assessment result sheet. For B-ranked suppliers, our Procurement Department works together with them to promote risk reduction by implementing improvement activities aimed at strengthening the CSR management system. We will review our transactions with C-ranked suppliers and continue to request submissions from suppliers who still need to do so.

In fiscal 2024, we also joined the Global Battery Alliance (GBA), an international battery industry initiative with more than 150 member companies, governments, and international organizations. We will accelerate our efforts to collaborate with member companies and organizations toward the initiative's goal of establishing a sustainable and responsible battery value chain by 2030.

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CSR-related education and training

To realize responsible procurement activities, we believe that it is essential to educate and train our personnel who are in charge of procurement and who come into contact with our suppliers on a daily basis. There are CSR Level 1 and CSR Level 2 systems according to the degree of proficiency in CSR, with 5% of the personnel acquiring Level 1 and 50% acquiring Level 2 in fiscal 2024. With the goal of all procurement personnel acquiring Level 2 or higher, we promote education and training by creating an annual course plan. We are also conducting e-learning sessions for all domestic employees to promote their understanding of CSR compliance and prevention of legal violations in purchasing operations.

Support for suppliers

As stipulated in our regulations, we conduct an audit before commencing a new transaction with a material supplier. Based on the audit results, if necessary, we provide support that will lead to improvements in, for example, the management level of our suppliers with regard to the control methods for processes, chemical substances and health and safety. We also hold a Partners' Meeting once a year to further strengthen cooperative relationships with suppliers by understanding our management policy. In fiscal 2024, 358 people from 183 companies participated.

Human rights due diligence initiatives

With regard to its suppliers, the Panasonic Group performs risk mapping based on the risk indicators of international organizations and the impact the risks would have on business. In fiscal 2024, we began on-site CSR audits of our suppliers that we have identified as "high risk" in cooperation with an external organization, which include items related to human rights, labour, health and safety. During that fiscal year, we also conducted on-site CSR audits of 12 suppliers. Going forward, we will promote human rights due diligence, including the identification and countermeasures of supply chain risks, by conducting on-site CSR audits.

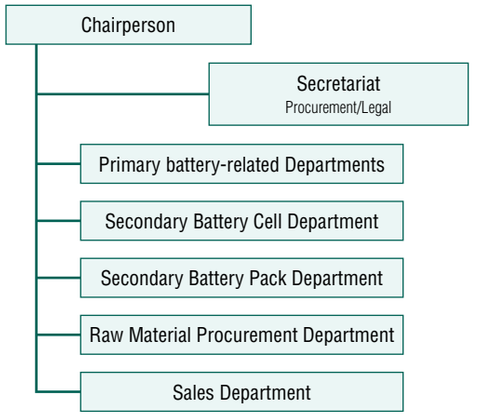
Responsible minerals procurement

The supply chains of minerals, which are the main materials in batteries, pose a variety of CSR risks, such as human rights violations, poor working conditions, environmental destruction around mines, and the involvement of armed groups. In contrast, such supply chains represent an important economic activity for mineral-producing countries, and appropriate due diligence with regard to CSR risks is essential. In accordance with the Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas established by the Organization for Economic Co-operation and Development (OECD), we have formulated a responsible mineral procurement policy and are promoting activities. As a member of the Panasonic Group, which is a member of RMI*1, a global organization that promotes responsible mineral procurement, we identify smelters and confirm their compliance with RMAP*2 every year with the cooperation of our suppliers. In addition to encouraging non-compliant smelters' participation in RMAP, in the unlikely event that conflict-affected minerals are found, we would ask that they take steps to change suppliers or eliminate the use of such materials. Collecting survey forms from all our suppliers on an ongoing basis, we aim to procure only from conformant/active smelters*3.

Due to the need to respond sensitively to the changing environment surrounding responsible mineral procurement activities, we have also established a Responsible Minerals Committee, which consists of relevant functions, such as procurement, legal and sales, and hold general meetings on a regular basis. Along with sharing the recognition of environmental changes in collaboration with relevant departments, at the general meetings we are promoting CSR risk responses by reporting, for example, the policy and status of responses to relevant problems and cooperating with related departments.

In fiscal 2024 (as in the previous fiscal year), we held a semi-annual general meeting (twice a year), as shown in the structure on the right, to confirm our policies and goals and to share global trends and results of our activities.

Responsible Mineral Procurement Committee Structure



Activities Regarding Tantalum, Tin, Tungsten and Gold

Item	Data
CMRT*4 collection rate	99%
Ratio of conformant/active smelters	94.5%

Cobalt and mica related activities

Item	Data
EMRT*4 collection rate	99%
Ratio of conformant/active smelters	61.4%

*1 RMI: Responsible Minerals Initiative, an organization that provides industry-standard survey tools, etc. for companies to conduct responsible mineral procurement.
*2 RMAP: Responsible Minerals Assurance Process program stipulated by RMI
*3 Conformant smelters: Smelters that have been audited to be RMAP compliant
Active smelters: Smelters that are at the preparation stage to be audited
*4 CMRT, EMRT: RMI-issued conflict minerals survey forms

Panasonic Energy Responsible Minerals Procurement
https://www.panasonic.com/global/energy/sustainability/social/minerals.html

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Policy

Since its founding, the Panasonic Group has been guided by the management philosophy of "contributing to the progress and development of society and the well-being of people worldwide through its business activities." Then, in April 2022, the Group shifted to an operating company system (holding company system) with Panasonic Holdings Corporation as the parent company, in order to advance our corporate management from a medium- to long-term perspective, as the changes in the business environment become more drastic and uncertain each year. Panasonic Energy, one of the Group's operating companies, views corporate governance as an important foundation. We are striving to build and strengthen an effective corporate governance structure by setting up the Board of Directors, which makes decisions on important business operations related to the entire Company and supervises the directors' execution of their duties, and the Audit & Supervisory Board System, which is independent from the Board of Directors and audits the directors' execution of their duties, as well as the Nomination and Compensation Advisory Committee and other important committees.

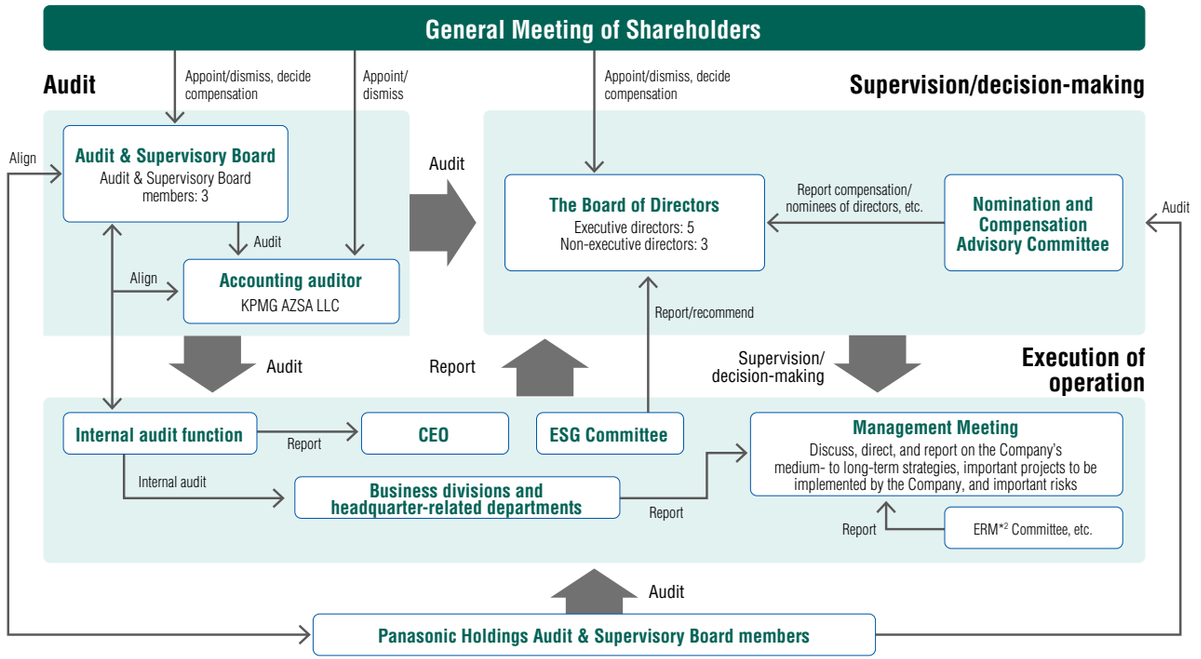
Corporate governance structure and initiatives

The Board of Directors

The Board of Directors of the Company consists of eight directors*1, all of whom have excellent insight into the Company's business areas along with sophisticated business execution skills. Three of the Company's eight directors are non-executive directors who supervise the directors' execution of their duties. The Board of Directors meets at least once a month for the purpose of promoting appropriate business activities by making prompt and accurate management decisions. In addition, the Board of Directors is able to respond quickly to sudden changes in the business environment and to situations where strong business execution is required, by flexibly making extraordinary resolutions and reports at actual meetings or in writing as necessary. In fiscal 2024, the Company's Board of Directors held 12 regular meetings and four extraordinary meetings, including written resolutions. The attendance rate of directors at the Board of Directors meetings during the fiscal year was 100.0%, and that of Audit & Supervisory Board members was 100.0%.

*1 as of April 2024

Corporate governance structure (as of April 2024)



*2 ERM: Enterprise Risk Management

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Audit & Supervisory Board Members

The Company appoints two Senior Audit & Supervisory Board members selected from among those with advanced auditing capabilities who are familiar with the Company's operations. In addition, the Company also appoints Audit & Supervisory Board member with knowledge and experience in finance and accounting to monitor the governance system of the Panasonic Energy Group and its operations, and to ensure an efficient and organizational audit system. Under an independent appointment system that allows them to exercise their auditing functions solely in accordance with their discretionary judgment, rather than by majority vote, Audit & Supervisory Board members attend Board of Directors meetings to express their opinions, conduct regular on-site inspections, including field inspections and interviews with employees and other relevant personnel, and audit daily management activities, including the execution of duties by directors. In addition, Audit & Supervisory Board meetings are held regularly among Audit & Supervisory Board members to formulate audit policies and exchange information, and the Audit & Supervisory Board members also cooperate with the internal auditing departments and accounting auditors by regularly exchanging information.

Meeting Bodies/Committees

The Company has established a Management Meeting, consisting of executive officers, as a preliminary body to the Board of Directors, which makes practical decisions and enables more in-depth discussions at subsequent meetings of the Board of Directors.

The Company has twelve executive officers, each of whom holds deep knowledge and experience in their respective fields. The Management Meeting meets twice a month in principle to make decisions based on prompt and appropriate discussions and reports on matters related to the overall management of the Company, and to establish and strengthen the Company's governance by clarifying the process and scope of decision-making in the Company.

Furthermore, we have established the Nomination and Compensation Advisory Committee to strengthen objectivity and transparency in the appointment, dismissal, and compensation of directors and executive officers. In addition, we have established an ERM Committee to identify, assess, and formulate measures to address cross-organizational risks at the Panasonic Energy Group. Furthermore, we established an ESG Committee, which is responsible for formulating an overall plan for ESG, monitoring progress, assessing progress, and reporting and making recommendations to the Board of Directors.

Initiatives to improve the effectiveness of the Board of Directors

Based on the Corporate Governance Code Supplemental Principle 4-11 (3), each director and Audit & Supervisory Board member conducted a self-evaluation of the operation of the Board of Directors in fiscal 2023. The self-evaluation included the following questions: (1) Is the current composition of the Board of Directors appropriate for effective discussions, (2) Has the Board of Directors sufficiently demonstrated its supervisory function, (3) Are issues of importance to the Company set as agenda items for Board of Directors meetings, (4) With regard to agenda items, are issues and points to be discussed and examined clearly defined, and are possible risks and their analysis properly explained at Board of Directors meetings, and (5) Are medium- to long-term strategies adequately discussed at Board of Directors meetings? The evaluation was an anonymous survey, and each evaluation item was rated on a 5-point scale, with a comment section.

As a result of the self-evaluation, there were opinions that the Board of Directors needs to further improve its effectiveness. We are therefore creating opportunities to discuss an important management foundation that supports our business expansion, such as SCM reform, human resources strategy, and IT; enhancing deliberations by using summary sheets that organize arguments based on prior discussions at management meetings; and establishing and operating a mechanism to make decisions based on an appropriate understanding and assessment of major risks in transactions and contracts. These initiatives have resulted in the effective operation of the Board of Directors and strengthened corporate governance.

Overview of the executive remuneration system

The remuneration system for executive officers consists of fixed based salary and performance-based remuneration as an incentive linked to short term and mid-long term business results.

Performance-based remuneration is determined based on the degree of achievement against financial targets, such as operating cash flow and EBITDA, and non-financial targets, such as KPIs in the function for which the executive officer is responsible and environmental contribution from an environmental, social and governance (ESG) perspective.

By incorporating environmental contributions, serious accidents, and compliance as ESG perspectives in our non-financial targets, we are working to enhance corporate value not only from a financial perspective but also from a non-financial perspective.

Internal control

The Company's Board of Directors has formulated the "Basic Policy for the Establishment of Internal Control Systems" which stipulates the following: ensuring the adequacy of business operations and reporting systems in the Group, ensuring the legality and efficiency of the execution of duties by directors, risk management, and ensuring the independence and effectiveness of corporate auditors.

Based on each of these basic policies, the Company establishes and operate various regulations, committees, etc., provides education, conducts on-site inspections and audits including those of subsidiaries, and operates a fraud prevention and early detection hotline, as well as a transaction and contract risk management system. By establishing these internal control systems, we continuously strive for effective governance, sound and efficient business operations, and a stronger management foundation.

Strengthening Governance

ERM Committee

The Company considers it an important management issue to ensure the achievement of its business objectives and sustainable and stable development by accurately managing risks and taking appropriate countermeasures and establishes "Risk Management Basic Regulations" and promotes risk management based on these rules.

As a framework for promoting risk management within the Company, the "Enterprise Risk Management Committee" ("ERM Committee"), which is chaired by the Officer in Charge of Risk Management and includes the heads of Legal, Human Resources, Accounting, and other functional departments and Audit & Supervisory Board members, has been established to manage risks arising from business and operations. The ERM Committee is responsible for managing risks arising from business and operations. The ERM Committee reports regularly at the Management Meeting and the Board of Directors meetings on significant risks and the progress of countermeasures based on the PDCA cycle of risk management. In this way, the Board of Directors supervises and verifies the effectiveness and efficiency of risk management.

The Company defines "operational risk" as events that have the potential to affect our business activities and pose an operational threat. The Company also updates its "risk inventory" once a year by comprehensively identifying possible operational risks based on changes in external and internal factors, and conducts risk assessment of all risks in the inventory, using both financial and non-financial evaluation axes. In addition, when formulating management and business strategies and making decisions, uncertain events that may present opportunities or threats to the achievement of business objectives are considered and extracted as "strategic risks" in conjunction with operational risk assessments.

The ERM Committee deliberates on the results of the risk assessment from the perspective of the Company's management and business strategies and social responsibility, and selects candidates for material management risks. The candidate material risks selected by the ERM Committee are submitted to the Management Meeting, which deliberates on them and determines the Company's material risks. Once material risks are determined, the risk owner takes the lead in formulating and implementing countermeasures and monitoring progress, with the goal of continuous improvement.

ERM structure

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Director experience

Kazuo Tadanobu

Representative Director, President
Chief Executive Officer (CEO)

Apr. 1992 Joined Matsushita Electric Industrial Co., Ltd.
Jul. 2020 Vice President of Industrial Solutions Company, Panasonic Corporation
Oct. 2021 President of Energy Company of the company
Apr. 2022 Representative Director, President, and Chief Executive Officer (CEO) of Panasonic Energy Co., Ltd. (incumbent)

Yasuaki Takamoto

Representative Director, Executive Vice President
Director, Mobility Energy Business Division

Apr. 1993 Joined Matsushita Electric Industrial Co., Ltd.
Apr. 2019 Vice President of US Company, Panasonic Corporation
Oct. 2021 Executive Vice President of Energy Company of the company
Apr. 2022 Representative Director, Executive Vice President of Panasonic Energy Co., Ltd. (incumbent)

Yuki Kusumi

Director

Apr. 1989 Joined Matsushita Electric Industrial Co., Ltd.
Apr. 2014 Executive Officer of the company
Apr. 2019 Managing Executive Officer of the company
Apr. 2021 Chief Executive Officer (CEO) of the company
Jun. 2021 Representative Director and President of the company (incumbent)
Oct. 2021 Group Chief Executive Officer (Group CEO) of the company (incumbent), Group Chief Strategy Officer (Group CSO) of the company (incumbent)
Apr. 2022 Director of Panasonic Energy Co., Ltd. (incumbent)

Tetsuro Homma

Director

Apr. 1985 Joined Matsushita Electric Industrial Co., Ltd.
Oct. 2013 Executive Officer of the company
Apr. 2015 Managing Executive Officer of the company, President of Appliances Company / in charge of Consumer Business
Jun. 2015 Managing Director of the company
Apr. 2016 Representative Director and Senior Managing Director of the company
Apr. 2019 CEO, China & Northeast Asia Company and Regional Head for China & Northeast Asia of the company
Jun. 2019 Representative Director and Senior Managing Executive Officer of the company
Apr. 2020 Chairperson, Panasonic Corporation of China (incumbent)
Apr. 2021 Representative Director and Executive Vice President of Panasonic Corporation (incumbent)
Apr: 2022 Group Regional Head for China & Northeast Asia of the company(incumbent) / President, Panasonic Operational Excellence China and Northeast Asia, Panasonic Operational Excellence Co., Ltd. (incumbent) / Director of Panasonic Energy Co., Ltd. (incumbent)

Hirokazu Umeda

Director

Apr. 1984 Joined Matsushita Electric Industrial Co., Ltd.
Apr. 2017 Executive Officer of the company / in charge of Accounting and Finance / General Manager, Corporate Management Support Department, Corporate Strategy Division / in charge of Groupwide Cost Busters Project, BPR Project
Jun. 2017 Director, Executive Officer, and Chief Financial Officer (CFO) of the company
Apr. 2018 Director, Managing Executive Officer of the company, President, Panasonic Equity Management Japan Co., Ltd. (currently Panasonic Equity Management Japan Godo Kaisha) (incumbent)
Sep. 2019 CEO, Panasonic Holding (Netherlands) B.V. (incumbent)
Apr. 2021 Director, Senior Managing Executive Officer of Panasonic Corporation / in charge of Facility Management(incumbent)
Oct. 2021 Group Chief Financial Officer (Group CFO) of the company (incumbent) / in charge of Group Cost Busters Project, in charge of Prime Life Technologies Corporation (incumbent)
Apr. 2022 Director and Executive Vice President of the company / in charge of Group MUDA Busters Activity (incumbent)/ Director of Panasonic Energy Co., Ltd. (incumbent)
Jun. 2022 Representative Director and Executive Vice President of Panasonic Holdings Corporation (incumbent)

Masaaki Mizoguchi

Director, Managing Executive Officer
Chief Financial Officer (CFO)

Apr. 1994 Joined Matsushita Electric Industrial Co., Ltd.
Apr. 2016 Director of Panasonic Liquid Crystal Display Co., Ltd., AIS Company, Panasonic Corporation
Oct. 2021 Managing Officer of Energy Company
Apr. 2022 Director, Managing Executive Officer, and Chief Financial Officer (CFO) of Panasonic Energy Co., Ltd.

Kunio Tanaka

Director, Managing Executive Officer
Chief Strategy Officer (CSO)

Apr. 1983 Joined Matsushita Electric Industrial Co., Ltd.
Apr. 2017 Managing Officer, AIS Company, Panasonic Corporation
Apr. 2019 General Manager, Global Business Promotion Department, Corporate Strategy Division and Vice President of Panasonic North America, US Company of the company
Oct. 2021 Managing Officer of Energy Company
Apr. 2022 Director, Managing Executive Officer, and Chief Strategy Officer (CSO) of Panasonic Energy Co., Ltd. (incumbent)

Masaru Miki

Director, Managing Executive Officer
Chief Human Resources Officer (CHRO)

Apr. 1991 Joined Matsushita Electric Industrial Co., Ltd.
Jun. 2014 Seconded to Panasonic India Private Ltd., Director, Chief Human Resources Officer (CHRO) of the company.
Apr. 2017 Seconded to Panasonic India Private Ltd., Director, Chief Human Resources Officer (CHRO) of the company / General Manager, Global Human Resource Department of Panasonic Corporation
Oct. 2021 Managing Officer of Energy Company
Apr. 2022 Managing Executive Officer, Chief Human Resources Officer (CHRO) of Panasonic Energy Co., Ltd. (incumbent)
Apr. 2024 Director, Managing Executive Officer of the company (incumbent)

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Thorough Compliance

KPI	FY2024	FY2031
Number of serious product incidents*1	**0**	0
Number of serious legal and compliance violations	**0**	0
Number of information security incidents	**2**	0

*1 Number of product incidents leading to safety-related recalls
*2 The criteria are based on internal rules and regulations, etc.

—Pursuit of Quality and Product Safety—

Policy

As the level of quality demanded by society increases, product safety and superior quality are important elements that demonstrate our brand power. We have positioned quality as the driving force behind the advancement of our business, defining quality as "our competitive edge to win customer trust and satisfaction," and setting our quality policy as "maximizing our competitive edge to achieve 100% customer satisfaction." Maximizing competitiveness requires maximizing the sum of the competitiveness of all job functions, including design, manufacturing, quality, sales, among others, and we are promoting initiatives from the following perspectives to maximize our competitiveness.

Defense: Initiatives to make existing frameworks and processes more robust*3.

Offense: New initiatives aimed at advancing our business

Foundation: Initiatives that form the basis for business promotion

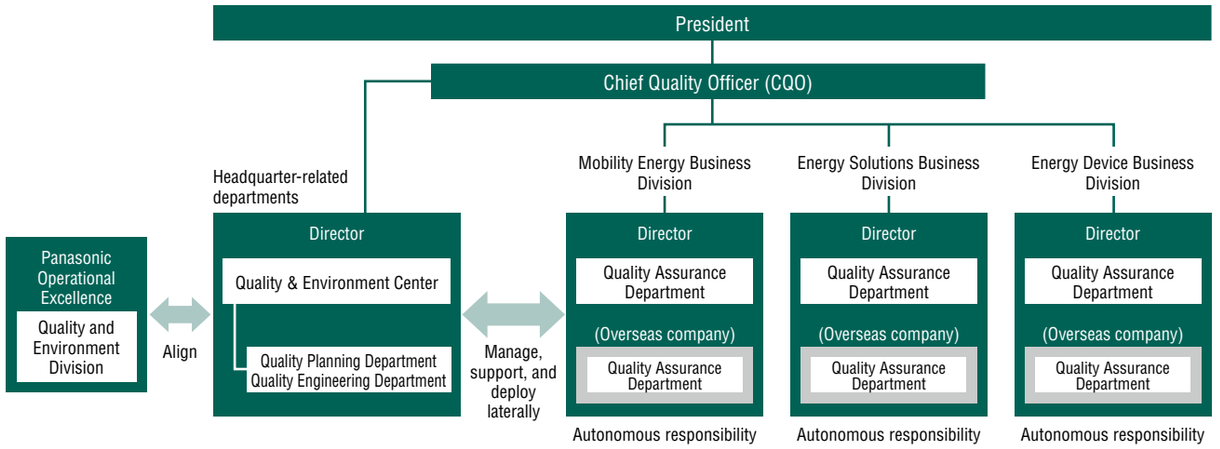
Through these activities, we aim to eliminate all serious product incidents.

*3 The strength of a system or machine against external forces.

Quality assurance system

The Chief Quality Officer (CQO) is the officer in charge of quality, directly reporting to the President who is responsible for managing the Company. For each business division, a quality manager reports to the Director of the respective business division and autonomously promotes quality assurance. The Quality & Environment Center, a department directly under the Company, formulates quality policies, checks quality status, assists each business division in addressing quality issues, and disseminates quality information, recurrence prevention measures, best practices, and other information across the Company. In addition, the Center implements a variety of educational and awareness-raising measures to create a corporate culture that places the highest priority on safety and quality. Specifically, quality manager meetings and liaison meetings are held monthly among Headquarter-related departments and each business division to share information on quality losses and important quality issues, and to discuss and decide on policies and specific measures to address common issues of the Panasonic Energy Group. Furthermore, for major issues that could affect the entire Panasonic Group, the Center works closely with the Quality and Environment Division of Panasonic Operational Excellence to discuss and address the issue.

Our quality assurance system



Activities to ensure product quality and safety

The batteries we sell are devices that store high-density energy in large capacities, and their safe and reliable use is an absolute necessity. In particular, Li-ion batteries, our main products, have inherent risks that can lead to smoke and fire; these risks include high energy density, which can cause the battery to reach high temperatures in the event of a short circuit, and the use of flammable liquid as an electrolyte. Given these product characteristics, we issued a recall notice to prevent unsafe accidents, which caused great concern and inconvenience to our customers and other concerned parties.

Based on these reflections and lessons learned, we continue to promote quality innovation, including making quality assurance processes more robust, enhancing safety design, and fostering a quality- oriented culture, to ensure high quality standards with the utmost priority on product safety, and we had no serious product incidents in fiscal 2024. We will continue to work toward the goal of zero incidents going forward.

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Strengthening Governance

Making quality assurance processes more robust

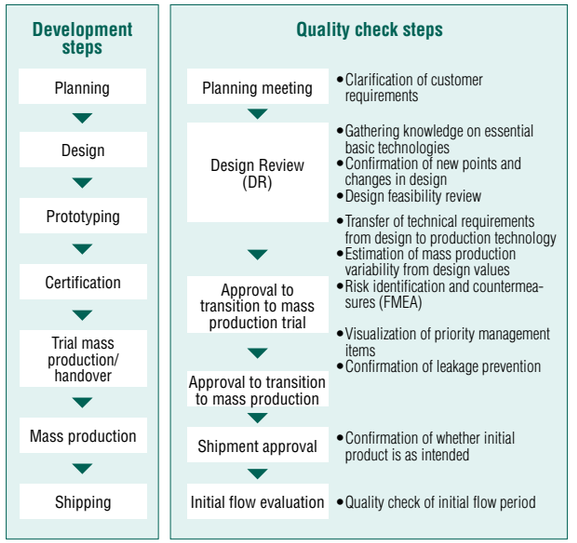
To establish a quality assurance process, we have built a quality management system that complies with ISO 9001, IATF 16949, and other global standards, and regularly check its effectiveness through internal and external audits. We also conduct our own quality audits of operating divisions through our Quality & Environment Center to identify weaknesses and issues in terms of quality assurance and compliance, and work with operating divisions to make improvements toward better quality assurance through the horizontal application of best practices.

The environment, fields, and devices in which batteries are used are changing with the evolution of society. To address these changes in the design process, we identify and verify risks together with our customers (B-to-B and B-to-C) and supplier. The identified risks are fed back to product design, component design, and process design to confirm their validity as key verification items in the development process. To prevent problems in the manufacturing process as well, we identify risks and take countermeasures by visualizing key data (DX) and FMEA* in all processes from source to shipping, thereby bolstering management. We are also committed to developing human resources capable of putting these initiatives into practice. The Quality & Environment Center takes the lead in providing training in quality tools and statistical management methods, as well as support for hands-on activities.

In addition, we are working to prevent product incidents and claims by establishing risk management guidelines, and we have also established a system to ensure that the Panasonic Energy Group works together to take appropriate countermeasures and responses in the event of a serious product incident, with customer safety as our top priority. The risk management guidelines have been established to take appropriate measures against market incidents based on past unsafe accidents and the reflections and lessons learned from the recall notices. The fiscal 2024 revision specifies procedures, deadlines, etc. for reporting market quality issues to government and other public agencies.

*Failure Mode and Effects Analysis

New product development flow



Developing human resources and fostering a quality-oriented culture

The base of fostering a corporate culture is human resource development, and we are building an education system according to rank and skill, as well as holding various events. We provide training for new technical employees to learn the basics of statistical quality management methods as well as the fundamentals of quality. For young quality personnel, we have established training courses that enable intensive learning and are working to enhance their development. Furthermore, we regularly hold various training sessions and events for all employees to foster a culture of placing the highest priority on product safety. In particular, every November is designated as “Quality Month” to pass on the details and lessons learned from past product incidents. In fiscal 2024, we carried out the following various initiatives.

1. Message from management executives

The CEO, CTO, Director of the Quality and Environment Center, and Directors of each business division delivered messages on the importance of quality, in order to reaffirm that quality is an absolute requirement for our business.

2.Product Safety Forum

With the aim of passing on the lessons learned from our mistakes to the human resources of the new era, the first forum in fiscal 2024 was held with the former quality manager of a Panasonic Group operating company, we supply batteries, who reflected on the recall problems that had occurred in the past for consumer products. The manager spoke about how quality problems can cause great inconvenience to customers using the products, citing case examples, and reminded us of the importance of safety and reliability. In addition, at the second forum, participants learned the basic principles of battery safety from in-house technical experts. In a post-forum survey, we received feedback from young employees and mid-career employees who had not experienced specific cases that the forum was beneficial, and we will continue to provide opportunities for this type of education and handing down of knowledge. In fiscal 2024, we also made a presentation on Li-ion battery characteristics, safe use, and product design at a product safety forum hosted by Panasonic Operational Excellence Co., Ltd. to raise quality and safety awareness throughout the Group.

Product Safety Forum

3.Quality compliance learning

Participants learned the importance of quality compliance through educational cartoon materials and confirmation tests on the subject of fraud issues. Although there were no quality compliance issues due to fraud in fiscal 2024, we will continue our efforts to foster a culture of compliance.

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—Compliance with Laws and Regulations—

Policy

The Basic Business Philosophy of the Panasonic Group describes the ideas and action guidelines that are important to us in carrying out our business activities while practicing compliance, such as ensuring social justice, realizing co-existence and mutual prosperity with our stakeholders, respecting diversity, contributing to ensuring harmony with the environment, and fulfilling our corporate social responsibility. We believe it is important not only to comply with laws and social morality, but also to always think about what is right for society from selfless motives and act with integrity and fairness. In accordance with the Basic Business Philosophy of the Panasonic Group, we carry out fair business practices in all situations based on the belief that compliance is the foundation of our business activities, and fulfill our Mission of "achieving a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict."

Compliance system

The Panasonic Energy Group ensures the legality of the execution of duties by officers, employees, and others by thoroughly promoting compliance awareness, implementing initiatives in accordance with the policy, and establishing an effective governance system, including an appropriate monitoring system. Furthermore, we have established a system that ensures effective auditing by having Audit & Supervisory Board members collaborate with the accounting auditor and internal auditing departments in accordance with the Audit Plan formulated annually.

Details of initiatives

Promoting understanding of the Code of Ethics & Compliance

The Panasonic Group Code of Ethics & Compliance embodies the Basic Business Philosophy of the Panasonic Group and defines the commitments that each Panasonic Group company must fulfill, the responsibilities that all employees must fulfill, and the additional responsibilities that all officers and organization leaders must assume with respect to the organizations for which they are responsible, which are essential for carrying out our business activities while ensuring compliance.

To ensure that this Code is understood and instilled, we conduct a variety of compliance-related training programs for all global employees. Compliance-related content is incorporated in new employee training, training for newly appointed employees and other rank-specific training, training for employees assigned overseas, and other training programs. We also provide risk-based, field-specific compliance training, including anti-cartel and anti-bribery training, security export control training, etc., as needed. In particular, we designate September of each year as "Compliance Month" to provide an opportunity to reflect on the importance of compliance. We have also begun holding anti-fraud management training for organizational leaders to provide them with opportunities to learn what role they should play in creating a fraud-free organization. We will continue to implement initiatives to raise awareness and knowledge of compliance.

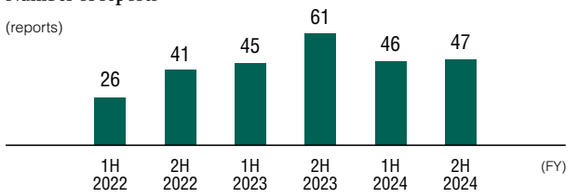
Operation of various committees

We have established a various committees system to ensure compliance with laws and regulations, including the Compliance Committee, the Trade Compliance Committee, and the Subcontract Act Compliance Committee. Through these committee activities, we ensure the thorough implementation of our policies, share information on incidents, laterally deploy measures to prevent recurrence, and conduct education and awareness-raising activities.

Effective operation of the whistleblowing system

We have established a global hotline (EARS) as a communication channel for both internal and external parties to report and consult on suspected misconduct. All reports received by EARS are properly investigated in accordance with the relevant rules and regulations, and feedback is provided to the whistleblower. In addition, a response system is in place, which is designed to ensure prompt escalation to the Compliance Committee and senior management as necessary. Whistleblowers can report anonymously to EARS. Retaliation against whistleblowers is clearly prohibited in our internal rules and regulations and is communicated to all employees, providing an environment where whistleblowers can secure psychological safety upon reporting incidents.

Number of reports



*For fiscal 2024, the standard applied until fiscal 2023 has been changed. Cases reported to EARS and the Equal Partnership Consultation Office were counted.

There were no significant legal or compliance violations in fiscal 2024. We will continue working to prevent legal and compliance violations from occurring going forward.

Compliance with laws and regulations in the supply chain

In response to the international security situation and increasing social demands on human rights issues, policies, laws and regulations in various countries and regions are growing and becoming more complex than ever before. By monitoring these policies and regulations globally, the Company strives to understand their impact on its business and respond in a timely manner. In particular, with respect to policies and regulations that may affect the entire supply chain, the Legal and Procurement divisions play a central role in establishing a company-wide compliance system, reporting to the Board of Directors and the Management Meeting as appropriate, and determining how to respond.

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—Ensuring Information Security—

Policy

In today's world, where the convenience of digitalization has also brought with it the great risk of losing trust due to information leaks, the financial impact of information security on our business is significant and must be a point of focus. We position information security as one of our important management strategies and ensure information security by establishing an information security system, educating our employees, and appropriately managing our information assets. Two information security incidents occurred in fiscal 2024, which did not cause any inconvenience to customers, but we are working to strengthen the management of information assets by implementing individual preventive measures and providing training on countermeasures.

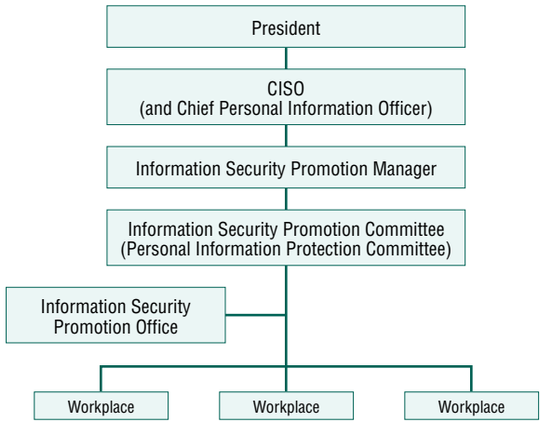
We believe that it is important to work together as a company for everything we do. Our such efforts will be centrally managed and improved to a high standard by adopting initiatives in line with the Panasonic Group's management systems as a reference. In addition, we will build systems and rules optimized for the Company by drawing on the collective wisdom of our employees, thereby protecting the information of our customers around the world and everyone involved in our business. To work toward fulfilling our Mission of "achieving a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict," we aim to ensure customer satisfaction and trust by having zero information security incidents.

*Refers to the following incidents that threaten the safety of information held and managed by the Panasonic Group, including trade secrets, personal information, customer information, etc. (including information of other parties).
- Information leaks or suspected leaks outside of the Company
- Unauthorized access or suspected unauthorized access to the Company's information from inside or outside the Company
- Destruction or falsification of information, or suspected destruction or falsification of information

Basic Information Security Policy
https://www.panasonic.com/global/energy/information-security-policy.html

Information security system

The Chief Information Security Officer (CISO) is the officer in charge of information security and personal information protection, directly reporting to the President. The promotion system is designed to enable the Information Security Promotion Office, appointed by the CISO, to interact with the workplace to gather knowledge and engage in initiatives.



Details of initiatives

Management of information assets

The department that created information or the person in charge of the department that received information from other parties, establishes the confidentiality, scope of disclosure, and handling of the information as the owner of the information, and protects the information appropriately. Information disclosed by and received from other parties under a confidentiality agreement will be managed as confidential information in accordance with the provisions of the Panasonic Group Global ISM (Information Security Management) Regulations and related rules. Departments that hold information will conduct periodic inventory checks to identify the confidential information and check its management status, thereby proving that the confidential information is properly managed in the Company.

Education and training

The Information Security Promotion Office regularly plans and implements education and training to prevent information leaks. Specific initiatives include e-learning using the Panasonic Group's training systems and targeted attack e-mail drills. In our rank-based training, we also bring in outside instructors to train management and organizational leaders. Through these initiatives, we are working to thoroughly enforce our information security rules and raise employee awareness.

Audit and ISO27001 certification

The Information Security Promotion Office conducts internal audits in accordance with the Panasonic Group Information Security Audit Guidelines to confirm the implementation status of information security management measures in each department. When deficiencies are discovered, we provide instructions for improvement and monitor the situation. Acquisition or continuation of ISO27001 certification is determined by each business site based on the nature of its business, customer requirements, etc., and we annually review those business sites that must acquire or maintain the certification.


Management education by outside instructors

Compliance with laws and regulations, protection of personal information

We comply with laws, regulations, and other norms related to information security. In recent years, personal information protection laws have been enacted and enforced in many countries, and we believe that protecting personal information is an important matter. We strive to protect privacy by acquiring and managing personal information in accordance with the Panasonic Group's response manual, as well as by educating our employees.

Personal Information Protection Policy
https://www.panasonic.com/global/energy/privacy-policy.html

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- Non-Financial Highlights
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Financial Highlights*1 (Including US IRA tax credit)

Profit and Loss Statement

(Billions of yen)

	FY2023	FY2024
Sales	971.8	**915.9**
In-vehicle	654.1	**605.0**
Industrial/ Consumer	310.7	**307.1**
Adjusted operating profit	39.6	**94.6**
In-vehicle	10.7	**68.1**
Industrial/ Consumer	28.5	**26.1**
Other income/loss	–6.4	**–5.8**
Operating profit	33.2	**88.8**
(OP % to sales)	3.4%	**9.7%**
Depreciation (tangible)*2	65.3	**71.6**
EBITDA*2	98.5	**160.4**
(EBITDA % to sales)	10.1%	**17.5%**

*1 Unaudited
*2 Additionally adjusted with the amount equivalent to depreciation corresponding to underlying assets that are applied with Lease accounting treatment as a lessor

Balance Sheet

(Billions of yen)

	FY2023	FY2024
Cash and cash equivalents	120.2	**222.6**
Trade receivables	261.6	**229.9**
Inventories	204.2	**160.9**
Other current assets	33.7	**54.7**
Current assets	619.7	**668.1**
Property, plant and equipment	181.5	**464.1**
Right-of-use assets	6.9	**6.6**
Goodwill and intangible assets	3.1	**5.9**
Other non-current assets	10.6	**228.8**
Non-current assets	202.1	**705.4**
Total assets	821.8	**1,373.5**
Trade payables	204.1	**180.7**
Debt (1)	129.7	**169.2**
Lease liabilities (2)	7.0	**6.7**
Other liabilities	106.9	**258.2**
Liabilities	447.7	**614.8**
Equity (3)	374.1	**758.7**
Invested capital (1)+(2)+(3)	510.9	**934.7**
ROIC	5.0%	**14.6%**

Statements of Cash Flows

(Billions of yen)

	FY2023	FY2024
FCF	0.5	**–174.0**
Operating CF	70.6	**139.3**
Investing CF	–70.1	**–313.3**
Capital investment (tangible)	90.6	**292.1**
Investment in intangible assets	1.1	**3.4**
R&D expenditures	25.1	**23.2**

Data Section

Financial Highlights
Non-Financial Highlights
Corporate Information

1.What We Aim for
2. Our DNA and Strengths
3. Value Creation
4. Growth Strategy
5. Sustainability
6. Data Section

Non-Financial Highlights (As of March 31, 2024)

Please refer to our website for all ESG data we disclose.
https://www.panasonic.com/global/energy/sustainability/esgdata.html

		Scope	Unit		FY2022	FY2023	FY2024
Greenhouse gas emissions							
Scope 1 emissions		Consolidated*1	kt-CO_2		42.00	40.18	**23.46**
Scope 2 emissions		Consolidated*1	kt-CO_2		393.85	319.52	**257.03**
Scope 3 emissions	Category 1	Consolidated*1	kt-CO_2		—	2,534	**2,367**
	Category 5	Consolidated*1	kt-CO_2		0.032	0.042	**0.111**
	Category 6	Consolidated*1	kt-CO_2		2.60	2.47	**2.49**
Environment-related figures							
Zero-CO_2 factories*2		Consolidated	Sites		—	10	**14**
Avoided CO_2 emissions		Consolidated	kt-CO_2		13,150	14,930	**12,710**
Environmental contribution index		Consolidated	—		—	4.5	**4.0**
Electricity Renewable Energy Ratio*3		Consolidated*1	%		12	22	**32**
Human resources							
Total number of employees		Consolidated	Persons		—	18,716	**19,036**
Ratio of employees (Japan)		—	%		—	27.5	**30.1**
				Female	14.9	14.6	**14.5**
				Male	85.1	85.4	**85.5**
Ratio of employees (Overseas)		—	%		—	72.5	**69.9**
				Female	—	32.9	**32.2**
				Male	—	67.1	**67.8**

		Scope	Unit	FY2022	FY2023	FY2024
Diversity, Equity & Inclusion						
Percentage of employees in managerial positions	Female	Consolidated	%	17.0	17.7	**17.7**
	Male	Consolidated	%	83.0	82.3	**82.3**
Rate of childcare leave taken	Female	Consolidated (domestic)	%	—	100	**100**
	Male	Consolidated (domestic)	%	—	56.2	**53.4**
Occupational safety and health						
Number of work-related fatalities		Consolidated	Persons	0	0	**0**
Human rights						
Percentage of implementation of self-assessments related to human rights and labour		Consolidated*4	%	100	100	**100**
Governance						
Number of occurrences of cases involving serious compliance violations		Consolidated*5	Cases	0	0	**0**
Total number of identified leaks, thefts, or losses of customer data		Consolidated*6	Cases	0	0	**0**

*1 Head office MORIGUCHI sites (manufacturing/non-manufacturing) and Panasonic Energy Group manufacturing sites
*2 Factories that have achieved virtually zero CO_2 emissions by conserving energy, introducing renewable energy, and using credits.
*3 Percentage of electricity, fuel, etc. used by Panasonic Energy that is derived from renewable energy sources (includes certificates, credits, and other externally procured items)
*4 Only overseas manufacturing subsidiaries until FY2023
*5 All Panasonic Energy Group corporations excluding overseas sales companies
*6 All Panasonic Energy Group corporations excluding overseas sales companies, and PANASONIC DO BRASIL

Notation in scope column

Consolidated subsidiaries (domestic)
Panasonic Energy Kaizuka, Panasonic Energy Higashiura, Panasonic Energy Nandan

Consolidated subsidiaries (overseas)
Panasonic Centroamericana, Panasonic Energy (Wuxi), Panasonic Industry Europe, Panasonic Energy (Suzhou), Panasonic Energy Mexico, Panasonic Energy Corporation of America, Panasonic Industry(China), Panasonic do Brasil, Panasonic Energy India, Panasonic Energy (Thailand), Panasonic Gobel Energy Indonesia, Panasonic Carbon India, Panasonic Industrial Devices Sales Company of America, Panasonic Energy of North America, Panasonic Industry Sales Asia Pacific, Panasonic Industrial Devices Sales Taiwan, Panasonic Hong Kong

Sales companies
Panasonic Industry Europe, Panasonic Industry(China), Panasonic Industrial Devices Sales Company of America, Panasonic Industry Sales Asia Pacific, Panasonic Industrial Devices Sales Taiwan, Panasonic Hong Kong

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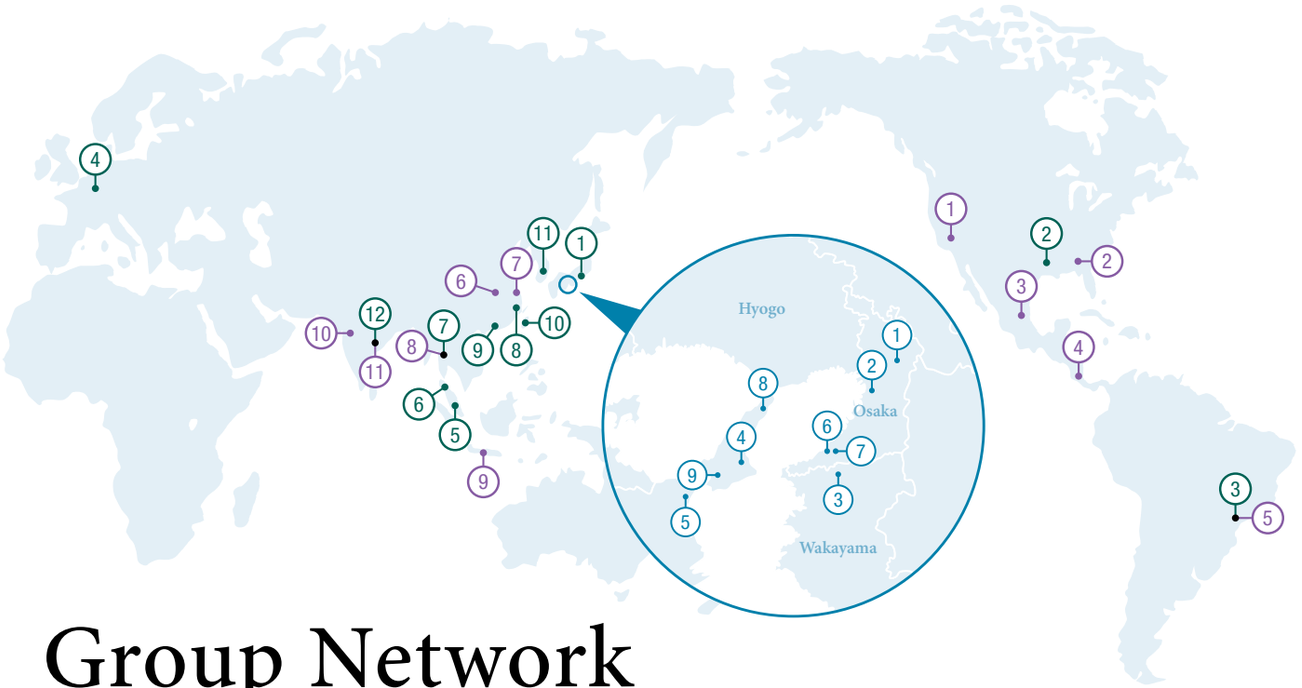

Corporate Data

Company Name	Panasonic Energy Co., Ltd.
Address	1-1, Matsushita-cho, Moriguchi-shi, Osaka 570-8511, Japan
Founded	April, 2022
President, CEO	Kazuo Tadanobu
Business Details	The development, manufacture and sale of primary batteries (dry batteries, lithium primary batteries), cylindrical-type lithium-ion batteries for in-vehicle use, lithium secondary batteries, storage battery modules, nickel-metal hydride batteries, etc.
FY2024* Business results	Sales: ¥915.9 billion Operating profits: ¥88.8 billion
Number of Employees (as of March31, 2024)	Approx. 19,000 (Consolidated)

*"FY2024" refers to the year ended March 31, 2024.

Group Network

Manufacturing Sites (Japan)

1. Head Office Function, R&D, MORIGUCHI Factory
2. SUMINOE Factory
3. WAKAYAMA Factory
4. SUMOTO Factory
5. TOKUSHIMA Factory
6. NISHIKINOHAMA Factory
7. Panasonic Energy Kaizuka Co., Ltd.
8. Panasonic Energy Higashiura Co., Ltd.
9. Panasonic Energy Nandan Co., Ltd.

Manufacturing Sites (Overseas)

North America
1. Panasonic Energy of North America
2. Panasonic Energy Corporation of America
3. Panasonic Energy Mexico S.A. de C.V.

South and Central America
4. Panasonic Centroamericana S.A.
5. Panasonic do Brasil Limitada

China
6. Panasonic Energy (Wuxi) Co., Ltd.
7. Panasonic Energy (Suzhou) Co., Ltd.

Southeast Asia
8. Panasonic Energy (Thailand) Co., Ltd.
9. PT.Panasonic Gobel Energy Indonesia

India
10. Panasonic Energy India Co., Ltd.
11. Panasonic Carbon India Co., Ltd.

Sales Sites

Japan
1. Panasonic Energy Co., Ltd. Global Marketing & Sales Division

North America
2. Panasonic Industrial Devices Sales Company of America

South and Central America
3. Panasonic Do Brasil Limitada

Europe
4. Panasonic Industry Europe GmbH

Southeast Asia
5. Panasonic Industry Sales Asia Pacific
6. Panasonic Industrial Devices Sales (M) SDN. BHD.
7. Panasonic Industrial Devices Sales Thailand Co., Ltd.

China & Northeast Asia
8. Panasonic Industry (China) Co., Ltd.
9. Panasonic Hong Kong Co., Ltd.
10. Panasonic Industrial Devices Sales Taiwan Co., Ltd.
11. Panasonic Industrial Devices Sales Korea Co., Ltd.

Southwest Asia
12. Panasonic Life Solutions India Pvt. Ltd.

Goodbye old energy

Hello new world.

Bid farewell to the folly of fossil fuels. Say goodbye to daily routines that emit mammoth amounts of CO_2.

Say hello to forging forward with fresh, inventive approaches. Extend a warm welcome to new ways of thinking. Resolve—with us—to do whatever it takes to get the hard work done.

We're Panasonic Energy.

Our outlook for the future is a more beautiful planet—by the time today's children have kids of their own. We envision outcomes that embrace everyone, from all walks of life.

And so we begin—setting forth to bring about the better world we desire. To weave energy into every corner of life, transforming it into a force as essential and enduring as the elements themselves. Partnering with kindred spirits, we aspire to cultivate a society where prosperity is attainable for all.

Go with Panasonic Energy.

Energy that changes the future.

Panasonic ENERGY

Panasonic Energy
Brand Message

Panasonic ENERGY

Energy that changes the future.