



Message from the Group CFO



Hirokazu Umeda
Representative Director,
Executive Vice President,
Group CFO

We aim to enhance corporate value by pursuing capital efficiency with improved profitability at individual businesses and Group-wide portfolio management, as well as by steadily investing in growth areas.

Basic approach to financial management

— What basic approach does the Company employ to financial management in advancing business operations?

Our basic approach to financial management emphasizes return on invested capital and financial stability. In terms of return on invested capital, we aim to stably achieve ROE of 10% or more in an effort to generate returns that exceed the cost of stockholders' equity by promoting management that is conscious of capital costs. As for financial stability, we are working to expand stockholders' equity through the accumulation of net profit and endeavoring to build a robust financial base that can drive investments for growth.

To that end, we have a capital allocation policy for cash generation and allocation. In keeping with that policy, the funds needed for investments and dividend payments are, in principle, generated from business cash flow and divestitures/sales of assets, but we also adopt a flexible approach when cash becomes necessary for investment opportunities such as an M&A deal before sufficient cash flow is generated from business.

Progress of the medium-term strategy and first-year review

— Fiscal 2023 was the first year of the medium-term strategy. What kind of progress has been made so far?

First, looking at our KGIs for fiscal year ended March 31, 2023 (fiscal 2023) to fiscal 2025, we will continue to work toward achieving cumulative operating cash flow of 2.0 trillion yen, ROE of a10% or more (in fiscal 2025), and cumulative operating profit of 1.5 trillion yen.

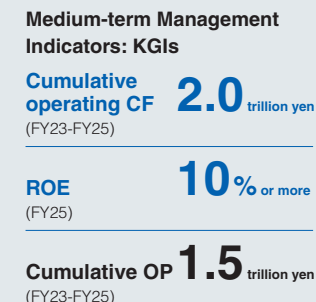
Overall group sales increased year on year in fiscal 2023 because of sales increases in the following segments: the Life-style segment due to steady sales in the air-conditioning business in Europe and the electrical construction materials business for Japan and overseas; the Energy segment due to increased production and sales of automotive batteries; and, the Connect segment due to increased sales in Avionics with the market recovery of the aviation industry. Also, the effect of currency translation contributed to the increase of group sales. While adjusted operating profit decreased year on year due mainly to the impacts of Shanghai lockdown and weaker market conditions, among other factors, net profit increased year on year due to recording of tax credit of Inflation Reduction Act (IRA) in the U.S. The impact of price hikes in raw materials and logistics was mostly offset with our efforts in price revisions and rationalization.

Progress in the medium-term strategy's three growth areas of (1) automotive batteries, (2) air quality & air-conditioning, and (3) supply chain management (SCM) software, is as follows.

- (1) Automotive batteries: We made a decision to build a new factory in the U.S. state of Kansas and started construction of the building. We are also making an effort to expand our sales channels in the U.S. One of its results is an agreement reached in December 2022 with Lucid Group, Inc. to supply automotive batteries for their luxury EVs.
- (2) Air quality & air-conditioning: The A2W (Air to Water heat pump) business in Europe is further growing and we announced a production capacity expansion for our factory in the Czech Republic. Also, for the purpose of strengthening business in the non-residential domain, we acquired the commercial air-conditioning business of Systemair AB. We will continue to actively invest in Europe and accelerate business growth there.
- (3) SCM software: Under the leadership of the new CEO, Blue Yonder has established a robust organizational structure geared toward further growth and is pressing ahead toward a shift to cloud-native SaaS. Sales, SaaS ARR*, and NRR* have steadily increased on a year-on-year basis across all four quarters. As for the stock exchange listing of the SCM business centered around Blue Yonder, which we announced in May 2022, we are continuing to evaluate the situation and will make a comprehensive decision after taking into account the circumstances concerning Blue Yonder's business and the market, among other factors.

*ARR: annual recurring revenue

*NRR: net revenue retention





Message from the Group CFO

— One year has now passed since the transition to an operating company system. How is the entrenchment of autonomous responsible management progressing and what role will Panasonic Holdings play up ahead?

The transition to an operating company system aims to position our operating companies at the front and center of their respective business fields where they can seriously compete with industry peers and double down on implementing autonomous responsible management. To achieve this, we have taken steps to ensure the operating companies can change their HR policies and make investment decisions quickly to suit their respective markets. For instance, by raising approval limits, the scope within which the operating companies can make decisions has expanded, which is partly why the speed of decision-making has increased. The acquisition of a commercial air-conditioning business in the air quality & air-conditioning field, as I mentioned earlier, is a good example of swifter decision-making under the authority of an operating company. I believe that if, from an outside perspective, the operating companies appear to be demonstrating a strong sense of independence and outward force, then that aligns with the intended aim of the operating company structure. On the other hand, in terms of an inward, or unifying force, both Group CEO Kusumi and myself sit on the boards of all the operating companies as outside directors for monitoring from a Group governance perspective in the sense that we are making sure everything is optimally aligned within the Group.

Also, to ensure financial discipline throughout the entire Group, even within the framework of autonomous responsible management, Panasonic Holdings Corporation (hereinafter referred to as “Panasonic Holdings”), implements financial discipline at each operating company, and if any of them continue to operate businesses with low profitability, the holding company is to intervene. I believe that autonomous responsible management cannot be achieved without discipline.

The primary objective of the operating company system is autonomous responsible management. When exerting control, we will do so whilst maintaining a balance between inward and outward forces with the entire Group working as one.

Initiatives for the second year and beyond of the medium-term strategy

— In advancing the Group strategy, what is the Group’s approach to the capital allocation policy already in place?

No changes have been made to the allocation policy for the three-year period from fiscal 2023 to fiscal 2025. Investments, dividends, and other expenditures are primarily carried out within the scope of funds generated from business operations. We have set cumulative operating cash flow of 2.0 trillion yen as one of our KGIs. Also, some of the cash we require is to be generated through the sale of assets and other measures. As for the allocation of cash and our rationale behind it, we plan to first invest a total of 1.8 trillion yen, of which 0.6 trillion yen will be directed toward and strategically invested in the automotive battery business as the priority investment area. Next, for shareholder returns, we will make every

Capital Allocation Policy (FY3/23–FY3/25)

Financial discipline

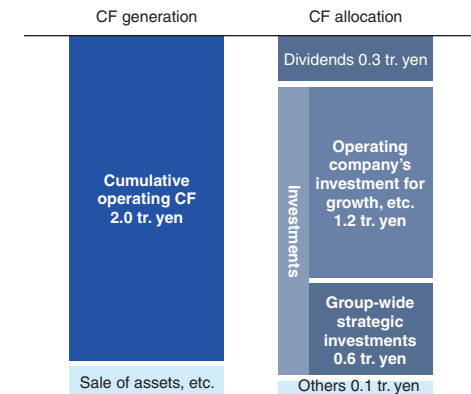
- Net Debt/EBITDA ratio: approximately 1.0x (FY3/23 results: 0.8x)
- Strengthen monitoring of operating companies

Dividends

- In principle, distribute profits to shareholders based on business performance and strive for stable and continuous dividend payments. Target dividend payout ratio of approximately 30% with respect to consolidated net profit*

Investment

- Prioritize investments in automotive battery (priority investment area)



*Dividends determined based on amount of net profit excluding IRA tax credit effect
Basic idea: Allocate cash from IRA tax credit to automotive battery business investment in the U.S. by taking into consideration the aim of IRA (reduce excessive inflation and promote energy policies in U.S.)

effort to continuously pay stable dividends, targeting a consolidated dividend payout ratio of approximately 30%. For financial discipline, we have set ourselves a net debt/EBITDA ratio target of approximately 1.0x as a financial indicator and will rigorously maintain Group-wide financial discipline.

— What is your approach to implementing business portfolio management?

After two years of dedicating our resources to enhancing competitiveness, our management approach is now shifting toward a growth phase starting in fiscal 2024. At the Group strategy briefing held on May 18, 2023, Group CEO Kusumi announced his intention to advance portfolio management. We intend to engage in business portfolio management based on two criteria that we established to ensure that we can continue to contribute to society and our customers in the future. The first is its relevance to the Group-wide common strategies. In the area of the environment, we look at the businesses from the perspective of whether they can make contributions to solving environmental issues and in the area of lifestyle, from the perspective of whether they can deliver value tailored to each customer's lifestyle. The other criterion is the market position and competitiveness of the business. More specifically, we assume such competitiveness of the business to be based on market growth & sustainability, relative market share, ROIC, and cash generation capability. For businesses that can make contributions into the future by staying within the Group, Panasonic Holdings and the operating companies continue to collaborate extensively so as to continually enhance their competitiveness to achieve growth. Panasonic Holdings will responsibly carry out business portfolio management as a key task for the Group overall.



Message from the Group CFO

— What is your outlook for fiscal 2024?

We expect the considerable impacts seen last fiscal year, such as price hikes in raw materials and semiconductor shortages, will be mostly resolved. Despite a slower-than-expected recovery in demand for ICT devices and the absence of signs of a full-fledged recovery in the Chinese FA market, we are forecasting sales and profit growth on the back of a recovery in auto production and aircraft demand, growth in EV demand, and the recording of profits related to IRA tax credit

Driving investment in the automotive battery business

— As Group CFO, what are your views on the Group's growth strategy of driving investment in the automotive battery business?

In pursuing this investment, the major premise is to generate earnings from the production and supply of competitive automotive batteries. The decision to invest in a new factory in Kansas was made in October 2022, while our customer side called for increased production. This came about from the favorable assessment of the energy density, safety, and cost of our automotive cylindrical batteries. And given our strategic focus on cylindrical batteries and business expansion plans, mainly in the North American market, we came to the conclusion that we would be able to guarantee a certain level of competitiveness. During the investment evaluation process, we took into account the fact that our plans had been accepted by the Kansas investment incentive program, which, along with other aspects, allowed us to assess the investment's feasibility especially in terms of investment returns. In addition, from a financial stability point of view, we reached the decision for the investment after ensuring it did not deviate from our capital allocation plans during the period of the medium-term strategy.

We know that multiple auto manufacturers considering and deciding to use automotive cylindrical batteries has been a tailwind for us in the last few years. Just recently we reached agreements with Mazda Motor Corporation and SUBARU CORPORATION to engage in discussions aimed at establishing medium- to long-term partnerships, and given that we have received inquiries from multiple auto manufacturers, we are currently focused on expanding our sales channels.

At this point in time, we have not yet officially decided any concrete plan for further investments, but we have set ourselves the goal of achieving a production capacity of 200 GWh by 2030 and achieving it will require a substantial amount of capital. As we have to consider lowering the amount of our initial investment and accelerating the speed of investment execution along with other things, we should further discuss whether we adopt a similar approach to the Kansas factory whereby we handle the entire investment process from land purchase to building construction. We realize that for our 200 GWh target, we must explore various options, including ones that improve efficiency of investment and lower our own investment amount. We expect to be able to source funds for investment from cash generated by businesses and by utilizing the IRA tax credit. However, there are temporary differences in the timing of when cash flows in and out, therefore, we will flexibly secure investment capital from various options.

Swift decision-making is required to capture business opportunities in a timely and appropriate manner, and therefore it is crucial for us to keep a good balance between checking and promoting of investment plans. Checking of investment plans should be based on financial discipline as well as competitiveness and profitability, while in the course of growth strategy, promoting of such investment plans should entail generating and securing funds.

Aiming to enhance corporate value

— In connection with the enhancement of our corporate value, what are your views on the PBR and what is your stance on dialogue with the capital markets?

PBR is comprised of ROE and PER. In terms of ROE, shareholders' equity (the denominator) has increased, resulting in a shareholders' equity of 45% as of the end of fiscal 2023, which represents a sharp increase of roughly 13% from the end of fiscal 2020. Of the three components that comprise ROE—profit margin, total asset turnover, and financial leverage—we consider profit margin to be the main challenge. We believe that boosting the profitability of individual businesses, implementing business portfolio management across the entire Group, and investing in high-margin businesses whilst taking steps to deal with businesses with low profitability, will be critical to improving the profit margin and ultimately enhancing ROE. As for PER, we recognize the importance of expectations for growth from the capital markets. We intend to further our dialogue with the capital markets concerning our growth areas and earn the trust of capital markets through our execution. Our PBR is currently at around the minimum level of 1.0x. With the aim of enhancing corporate value, we will carry out the Group's strategy with the intention of further improving the PBR.

As for dialogue with the capital markets, since fiscal 2023 we have been working to improve the Group's overall disclosure of information, including financial results briefing materials, and to enhance the content of disclosures from operating companies, including balance sheets and cash flows, as well as adjusted operating profit of some voluntarily disclosed businesses, and Blue Yonder's KPIs. Panasonic Holdings too will continue to further improve its disclosure of information regarding the businesses and areas that are of most interest to the capital market. Moreover, since transitioning to the operating company system in fiscal 2023, the operating companies have continued to embrace autonomous responsible management in an effort to demonstrate their accountability to the capital markets and all other stakeholders. This was especially evident at the strategy briefing of Group operating companies held in June of this year. Going forward, the heads of each operating company will engage with the capital markets themselves and fulfill their accountability. We will incorporate the feedback of capital markets into the management of the operating companies, thereby contributing to the enhancement of corporate value across the entire Group.

We are at a stage where we can reward shareholders through stable and continuous dividends, as well as the enhancement of corporate value by reinvesting the generated profits for future growth.



Environment and Technology Strategy

Message from the Group CTO



We will use technology to nurture and deliver a healthy planet and a happy life for each and every person

Tatsuo Ogawa

Executive Officer
Group Chief Technology Officer (Group CTO)

In order to achieve “an ideal society with affluence both in matter and mind” advocated by Group CEO Kusumi, the Panasonic Group has identified global warming and resource depletion as one of our most important management issues, and aims to contribute to the health, safety, and comfort of each and every customer throughout their lives (For more details on identifying materiality, please refer to P5). In this context, as Group CTO, I am in charge of not only technology development but also the environment and intellectual property, among other areas.

I will also continue to focus on carbon neutrality and circular economy initiatives under the Panasonic GREEN IMPACT vision. As Group CTO, I will provide leadership in building and utilizing technological infrastructure, including AI and robotics, to support daily life (health, safety, and comfort), and in creating new businesses. Working together with the CTOs of the operating companies on overall technology management and human resource development, we will continue to build a source of competitiveness for our business going forward.

Looking back on our long history, we have led the standardization of new technologies in each era, including industry standards and international standards for home appliances, devices, and industrial equipment. We are also working to develop and strengthen our efforts in the environment and energy fields. With regard to avoided CO₂ emissions in particular, our goal is to create a standard to increase global recognition and to ensure that corporate activities to contribute to reductions are properly evaluated. I believe these efforts will contribute to the realization of a carbon-neutral society and be recognized as useful to our customers, which will accelerate the efforts themselves.

Please join me in looking forward to the future of Panasonic GREEN IMPACT, the technological development that will support it and the creation of new businesses, and even more challenges to come as we take the next step forward.

Medium-term management plan

Environmental action plan “GREEN IMPACT PLAN 2024” (extract)

As a milestone toward the 2050 targets set in “Panasonic GREEN IMPACT,” which is the Panasonic Group’s long-term environmental vision, the entire Group has formulated and is working on the GREEN IMPACT PLAN 2024 (see below), a three-year environmental action plan covering fiscal year ended March 31, 2023 (fiscal 2023) to fiscal 2025 with targets for fiscal 2031 linked to our business strategy.

In fiscal 2023, CO₂ emissions across the Company’s entire value chain increased from 107.51 million tons in fiscal 2021 to 129.21 million tons, for a total increase of 21.7 million tons (but, reduced in OWN IMPACT). In Scope 1 and 2, progress in energy conservation and renewable energy resulted in significant improvements, with 31 factories achieving net zero CO₂ emissions and a reduction of 360,000 tons. Scope 3 emissions increased by 22.07 million tons from fiscal 2021 due to the addition of a relevant amount of newly quantifiable products and the refinement of the calculation of the impacts (leakage, disposal) of refrigerants in air quality equipment and air-conditioning equipment. Compared to the same target range in fiscal 2023 as a whole, the OWN IMPACT represents a reduction of 9.39 million tons from fiscal 2021. In order to accurately recognize the target of reduction as our responsibility, we will continue to actively work on improving accuracy by reviewing the calculation scope and calculation method of Scope 3 emissions. On the other hand, the “avoided emissions” that contributed to reducing CO₂ emissions from customers and society expanded and became more visible, reaching 37.23 million tons.

In the area of resources/CE*, the global waste recycling rate remained at a level of 99%, the volume of recycled resin used totaled 12,400 tons, and four new businesses were launched under the CE business model, bringing the total to 10 businesses.

*Circular Economy

GREEN IMPACT PLAN 2024 (fiscal 2025, 2031 targets and fiscal 2023 results)

Item			Fiscal 2023 results	Fiscal 2025 targets	Fiscal 2031 targets
			GREEN IMPACT PLAN 2024		
CO ₂ /Energy	OWN IMPACT				
	Emissions reduction in our own value chain* ²		-21.70 Mt* ⁶ (9.39 Mt)	16.34 Mt	
	Scope 1, 2* ¹	Zero-CO ₂ factories	Cumulative 31 factories	Cumulative 37 factories	31.45 Mt* ⁷
		CO ₂ reductions	360 kt	260 kt	
	Scope 3* ¹ (category 11)	CO ₂ reductions in use of our products by customers	-9.10 Mt	16.08 Mt	
Resources/CE*	CONTRIBUTION IMPACT				
	Avoided emissions (contribution to reducing CO ₂ emissions for society) through existing businesses* ³		37.23 Mt	38.30 Mt	93.00 Mt
	Factory waste recycling ratio* ⁴		99.1%	99%	
	Recycled resin used* ⁵ (GIP2024 target is total over fiscal 2023–25)		12.4 kt	Fiscal 2023 to 2025 total 90 kt	
*Circular Economy	Circular economy business models and products (Cumulative)		10 businesses	13 businesses	

*¹ Classification according to the GHG protocol (Accounting and Reporting Principles).

*² Amount obtained by subtracting the amount of emissions in the relevant fiscal year from the amount of emissions in fiscal 2021.

*³ Amount calculated by subtracting the lifetime CO₂ emissions after introduction from the lifetime CO₂ emissions assuming that the Group’s products and services do not exist, using the IEC 2021 value as the emission factor.

*⁴ Amount of resources recycled/(Amount of resources recycled + Amount of landfill).

*⁵ Mass of recycled materials contained in the recycled resin used in our products.

*⁶ Includes Scope 1, 2 and Scope 3 Category 11, plus increases or decreases in Category 1 (procurement), Category 12 (disposal), and other indirect emissions. Figures in parentheses indicate the case where fiscal 2021 (starting point) is calculated with the same boundary as the fiscal 2023 target.

*⁷ Emission factors for electricity are calculated using the IEA World Energy Outlook 2°C scenario.



Environment and Technology Strategy

Panasonic GREEN IMPACT Progress (1) OWN IMPACT 110 Million Tons

Initiatives to reduce CO₂ emissions in Panasonic's value chain

Under the "OWN IMPACT" component of "Panasonic GREEN IMPACT," Panasonic Group's long-term vision announced in January 2022, the Company aims to move faster to thoroughly reduce CO₂ emissions by 110 million tons*¹ across the Panasonic Group value chain, and to reduce CO₂ emissions by 16.34 million tons by fiscal 2025 from fiscal 2021 in order to achieve carbon neutrality across the Panasonic Group value chain by 2050. The GREEN IMPACT PLAN 2024 (GIP2024), which specifies our medium-term targets and environmental action plan, calls for all operating companies to achieve net zero CO₂ emissions*² at their own sites by fiscal 2031, and to reduce CO₂ emissions from the use of products sold by the Group by 30% from the fiscal 2020 level by fiscal 2031.

The Group has achieved zero CO₂ emissions at a total of 31 factories since fiscal 2019, with 22 additional factories newly achieving zero CO₂ emissions in fiscal 2023. We are on track to achieve the GIP2024 goal of "Zero CO₂: 37 factories."

CO₂ emissions from the use of sold products amounted to 95.03 million tons*³. Panasonic Group is aware that our greatest social responsibility for mitigating climate change lies in this area. Against this backdrop, Heating & Ventilation A/C Company, Panasonic Corporation was awarded the Energy Conservation Center, Japan (ECCJ) Chairman's Award (LX Series 2023 model)*⁴ in the "Energy Conservation Grand Prize in fiscal 2023" competition hosted by ECCJ in recognition of the development of products with outstanding energy-saving performance. This is the second year in a row that the Company has won the Energy Conservation Grand Prize, and the LX Series was the only residential room air conditioner to receive this award in fiscal 2023.

CO₂ emissions from purchased products and services amounted to 21.55 million tons*³. As an initiative to reduce these emissions, we have been implementing the ECO-VC Activity*⁵ with our suppliers since fiscal 2010. This program is a collaboration between Panasonic Group and our suppliers, aimed to both reduce environmental impact as well as reinforce product capability and achieve further

rationalization for Panasonic Group products and suppliers. In fiscal 2023, we received 264 suggestions (equivalent to 80,000 tons of CO₂) from suppliers.

CO₂ emissions from transportation amounted to 950,000 tons*³. We are working intensively with our logistics partners to reduce transportation distances and improve loading rates through modal shift, introduction of low-emission vehicles, introduction of biodiesel fuel, direct delivery, and other measures.

*1 FY2021 result

*2 The Group defines a "zero-CO₂ factory" as one that produces net zero CO₂ emissions from its business activities by utilizing credits and power certificates derived from energy conservation and renewable energy on top of making efforts to reduce CO₂ emissions through ongoing energy-saving activities, etc.

*3 FY2023 result <https://holdings.panasonic/global/corporate/sustainability/pdf/sdb2023e.pdf>

*4 Awarded the "Energy Conservation Grand Prize in fiscal 2023" <https://news.panasonic.com/jp/topics/204984> (Japanese only)

*5 ECO-VC Activity: Value Creation Activities



*Number of factories that have achieved zero CO₂ emissions by fiscal 2023

(★: Countries with factories that have achieved this goal)



PEDJM photovoltaic power generation systems



PECIN photovoltaic power generation systems

Column

Expanding the number of zero-CO₂ factories

All operating companies are working to establish milestones and promote initiatives to achieve net zero CO₂ emissions at their own sites by fiscal 2031.

As part of the Group's efforts to create zero-CO₂ factories, we will take the following steps, in the indicated order of priority, to ensure that CO₂ reductions are implemented: (1) Energy saving (reduction of operating loss by visualization with instrumentation, autonomous AI energy control); (2) Effective use of renewable energy utilization (integrated energy creation-storage linkage systems, hydrogen fuel cell solutions); (3) Procurement of renewable energy (100% renewable electricity, environmental value).

Specifically, we will first promote ongoing energy-saving activities, advanced energy-saving technologies such as factory energy management systems (FEMS), productivity improvement, and innovative manufacturing. In addition, we will promote the effective use of renewable energy through photovoltaic power generation systems, energy storage equipment, and pure hydrogen fuel cells, and procure electricity derived from 100% renewable energy. For the remaining emissions after reduction efforts, we will additionally make use of procurement of environmental value to achieve net zero CO₂ emissions from manufacturing at all global factories. As an example, Panasonic Electronic Devices Jiangmen Co., Ltd. (PEDJM) in China introduced a total of 3.94 MW of photovoltaic power generation systems in fiscal 2022, introduced a high-efficiency air conditioning system in fiscal 2023, and implemented energy-saving measures such as inverters for circulating water pumps. Furthermore, Panasonic Energy India Corporation (PECIN) introduced a 350 kW photovoltaic power generation system in fiscal 2023, in addition to continuing air leakage activities, optimal control of production facilities, and other energy-saving initiatives. Both sites have reduced CO₂ emissions to net zero by utilizing I-REC certificates and carbon credits.

In order to further expand the number of zero-CO₂ factories, we are promoting the introduction of photovoltaic power generation systems. In fiscal 2023, Panasonic Living Appliances and Solutions Company adopted a Power Purchase Agreement (PPA) model at its Yokaichi Factory. A total of 2,658 photovoltaic panels have been installed, with a power generation capacity of 997 kW, and a storage battery of 22.4 kW will be installed to make effective use of the power generated.



Environment and Technology Strategy

Panasonic GREEN IMPACT Progress (2) CONTRIBUTION IMPACT 100 Million Tons

We will contribute to avoided CO₂ emissions in various areas globally through electrification, development of products that use energy efficiently, effective use of hydrogen as a decarbonized energy source, and product replacement in order to achieve a reduction impact of 93 million tons in fiscal 2031.

Spread of EVs by electrification and use of non-fossil fuels

The electrification of mobility is highly effective in achieving carbon neutrality, and our automotive battery business contributes 60% of the Group's total avoided CO₂ emissions. In North America, where we are focusing our efforts, the EV market is expected to expand, and the U.S. government has made it a national policy to establish an EV supply chain. In the automotive batteries business, in addition to reducing our own CO₂ emissions to net zero by fiscal 2031, we aim to halve CO₂ emissions in the North American supply chain by fiscal 2031 (compared to fiscal 2023 emissions at our Nevada factory) by shortening the transportation distance of materials. Furthermore, the construction of a new factory in Kansas will promote the electrification of mobility by expanding the supply capacity of automotive batteries for EVs. The goal is to reach avoided CO₂ emissions of 59 million tons by fiscal 2031, which is five times the figure from fiscal 2023.



What the Kansas factory will look like upon completion

In Europe, where there has been a rapid shift away from gas, we are expanding our air quality & air conditioning business with a focus on Air to Water heat pump that leads to reduction of CO₂ emissions by changing energy source from gas to electricity. In particular, we are strengthening our business foundation by utilizing our advantages such as maintaining heating capacity at low temperatures and IoT remote monitoring capabilities. The Czech factory will be expanded to a global production system of 1 million units as a new air-to-water production base. Furthermore, anticipating the tightening of refrigerant regulations in Europe, we are the first Japanese manufacturer to introduce natural refrigerant products.

Promote/optimize efficient use of energy

In the area of lighting, which emits a large amount of CO₂ when in use, in addition to the conventional lighting that is designed to "light up a plane," by using an index that captures the feeling of brightness in space and techniques for spatial presentation with proper lighting at the right place, we can achieve energy reductions of up to 30% without compromising comfort, thereby contributing to avoided CO₂ emissions.

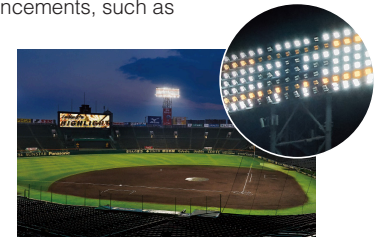
Expand use of zero-carbon energies through hydrogen

We started operation of a demonstration facility for the "RE100 solution" initiative located at our Kusatsu Factory in Shiga Prefecture, Japan, aimed at using renewable energy generated independently through a combination of pure hydrogen fuel cells and photovoltaic cells to supply 100% of the energy consumed by our business activities. Panasonic Energy (Wuxi) Co. Ltd. (PECW) in China, which started as a demonstration facility in February 2022, achieved net zero CO₂ emissions in fiscal 2022 by promoting

energy conservation, introducing solar panels, and procuring renewable energy. The medium- to long-term goal for this demonstration experiment is medium-scale commercialization at 300 kW and large-scale commercialization at 1 MW.

Decarbonization effect of product replacement

Switching to products with higher energy efficiency reduces CO₂ emissions during product use and reduces the load on grid power. In the case of air conditioners, which have become a necessity due to extreme heat with rising temperatures, Panasonic's energy-saving enhancements, such as winning the Energy Conservation Grand Prize for two consecutive years, have contributed to the replacement of older products with new ones. In addition, at the Hanshin Koshien baseball stadium, where HID lighting was replaced by LEDs in 2022, CO₂ emissions were reduced by approximately 60% compared to previous levels. The stadium lighting earned Electric Works Company, Panasonic Corporation the 41st Japan Lighting Award in 2023 from the Illuminating Engineering Institute of Japan in recognition of its image display effect using a tower-based light source.



LED stadium lighting at Hanshin Koshien Stadium

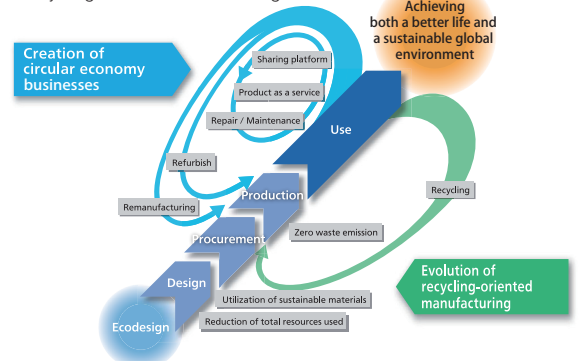
Column Circular economy (CE)

In Europe, building a circular economy (CE) for sustainable economic growth has become a major economic strategy. The CE activities promoted by the Group include the creation of CE businesses and the evolution of recycling-oriented manufacturing. Under GIP2024, our targets are to create 13 CE-type business models/products, use 90,000 tons or more of recycled resin (cumulative total for fiscal 2023-2025), and achieve a factory waste recycling rate of 99% or more.

CE-type business models include "Sharing Service," "Product as a Service," and "Repair and Maintenance, Refurbish and Remanufacturing." In fiscal 2023, we added four new businesses for a total of 10 CE-type businesses. With regard to the evolution of recycling-oriented manufacturing, in fiscal 2023 we were able to utilize 12,400 tons of recycled resin in our products by supporting the component characteristics required for utilizing recycled resin, ensuring a stable supply, making full use of the resin on the manufacturing side, and developing our recycling technology. We will maintain our factory waste recycling rate at 99% in fiscal 2023 and continue our efforts to achieve zero emissions.

Aiming to achieve both "A better life" and a "Sustainable global environment" as stated in the Panasonic GREEN IMPACT PLAN, we will increase resource efficiency in the processes of design, procurement, and production.

Panasonic's concept for actions toward a circular economy
We will promote effective utilization of resources and maximization of customer value by creating circular economy businesses and evolving recycling-oriented manufacturing





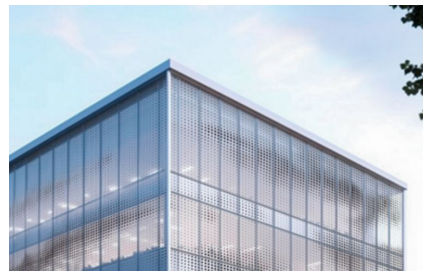
Environment and Technology Strategy

Panasonic GREEN IMPACT Progress (3) FUTURE IMPACT 100 Million Tons

The Panasonic GREEN IMPACT aims to reduce CO₂ emissions by 100 million tons by 2050 by maximizing and optimizing the use of renewable energy through new businesses and technologies. Currently, we are working on the practical application of perovskite solar cells, which are expected to become next-generation solar cells, and green hydrogen production devices, which produce CO₂-free hydrogen (green hydrogen) by electrolyzing water with electricity derived from renewable energy.

Perovskite solar cells use a hybrid of organic and inorganic materials, as opposed to conventional silicon solar cells that use inorganic materials. Its most important feature is that the power generation layer can be applied as a coating. In this way, even building windows and walls can be used as solar cells to generate electricity. The Group began development of the cells in fiscal 2015, and part of the R&D results were obtained from the results of commissioned work by the New Energy and Industrial Technology Development Organization (NEDO).

With perovskite solar cells, the power generation layer can be created by applying and drying the material to generate electricity on a substrate, which can be expected to reduce cost and energy during manufacturing. We have developed our own inkjet coating method as a manufacturing method for forming the power generation layer. The layout of coating can be freely changed, which makes this technology suitable for use as a “building integrated photovoltaic” (BIPV). We have already started a technology demonstration in Fujisawa Sustainable Smart Town, and are aiming for practical application within a few years.



Application image of Building Integrated Photovoltaic (BIPV)

(Please refer to the press release “[Panasonic Holdings Corporation to Start the World's First Long-term Implementation Demonstration Project for the Building Integrated Perovskite Photovoltaics Glass in the Fujisawa Sustainable Smart Town](#)” dated August 31, 2023.)

Meanwhile, for the green hydrogen production devices, we are working to reduce the size, cost, and power consumption of hydrogen generation equipment. The main methods for electrolyzing water to produce hydrogen are alkaline water electrolysis and PEM (proton exchange membrane) water electrolysis, but both have problems with power consumption and equipment costs. In our case, we are working on research to generate hydrogen and oxygen through the reaction of water with electricity, i.e., in a way that is the opposite of the reaction in fuel cells, by using the technology and knowledge obtained from our research on power generation that generates electricity by reacting hydrogen and oxygen, which we have accumulated in the technology development of household fuel cells and pure hydrogen fuel cells. Development is progressing steadily, with material device technology for the anode of alkaline water electrolysis unveiled at CES in January 2023, and we aim to begin providing evaluation samples in 2025.

(Please refer to the press release “[Panasonic Group to Exhibit at CES 2023](#)” dated January 5, 2023.)

Column

Reducing microplastics with fully biodegradable cellulose fiber molding materials

In response to environmental issues such as the recent ocean microplastics issue and global warming due to petroleum use, the United Nations has the efficient use of natural resources and the prevention and drastic reduction of marine pollution as development goals, and there is a global demand for reducing the amount of petroleum-derived resin.

In 2015, Panasonic began research and development activities to reduce the amount of petroleum-based resins. In 2019, we developed a composite processing technology to mix cellulose fiber, a plant-derived component, into resin at 55% concentration, and in 2021 we were able to boost the concentration to 70% biomass content. In March 2022, we developed a molding material using plant-derived resin with a plant-derived concentration of more than 90%. In addition, to achieve complete biodegradation of molding materials, we have been working on mixing cellulose fibers into biodegradable resins.

Existing biodegradable resins have lower strength and durability than general-purpose resins such as polypropylene, limiting their use. Furthermore, when mixed with cellulose fiber, they have low flowability, making it difficult to mold into complex shapes and further limiting their application. Thus, by blending several biodegradable resins containing plant-derived polylactic acid and adding appropriate additives, we were able to develop a molding material that combines biodegradability and high elasticity that can be molded into a thin wall of 1 mm. We also succeeded in making white resin pellets that offer a high degree of freedom of coloring. For example, the material itself can be browned to achieve aesthetic design features such as wood texturing. The molding material we developed has acquired the “Biodegradable Biomass Plastic” certification mark from the Japan BioPlastics Association.

In the future, we intend to utilize the characteristics and advantages of fully biodegradable cellulose fiber molding materials to develop applications for housings for household appliances, in-vehicle mechanical components, high-strength design-based home appliance packaging and beauty appliances, clothing, accessories, daily necessities, and beverage and food containers. Through these efforts, we will promote corporate activities to realize a sustainable society by reducing the use of fossil-based resins.

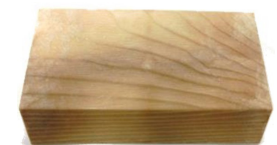
[Commercialization] “kinari,” a molding material containing 55% cellulose fiber, began mass production sales in December 2022.



kinari 55% concentration



High degree of freedom of coloring



Wood texture design through molding process technology



Environment and Technology Strategy

Panasonic
GREEN IMPACT
Progress (3)

FUTURE IMPACT 100 Million Tons

Column

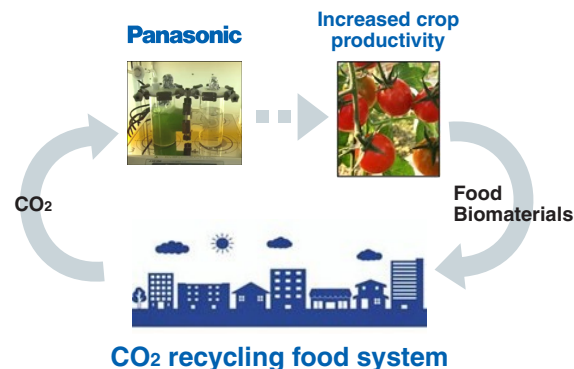
Initiatives to create value in the food and environment fields using CO₂ in the air as a raw material

We aim to apply biotechnology to create new value in the fields of food and the environment.

Our proprietary photosynthetic microorganisms secrete substances that promote plant growth, mainly from light and CO₂ in the air. When liquid materials containing the secretions are sprayed on crops, photosynthesis is activated, disease resistance is improved, and crop yields increase 1.1 to 1.4 times. The hope is that this can help achieve a sustainable food system that balances stable food production and the absorption and fixation of CO₂. Meanwhile, it will be necessary to resolve a series of issues such as the variation in efficacy in diverse natural environments and how to reasonably disseminate new biological functions to the frontlines of agriculture, which is a tradition-bound industry. We will continue to search for ways to create value and take on challenges while collaborating with the wider community.

Overview of our vision

- More from fewer resources
- Use of CO₂ for this purpose



Standardization activities to support technology and business

Since the 1990s, Panasonic has participated in various standardization organizations, played a leading role in establishing and promoting councils and consortiums, and carried out activities related to initiatives to establish rules through industry standards (de facto standards) and international standards (de jure standards) for the purpose of balancing orderly and sound global economic activities with an environment that allows consumers to use products safely and with peace of mind in the areas and themes that support daily life, such as functional safety in home appliances and equipment and communication methods such as broadcasting and mobile phones.

In recent years, we have been promoting activities to standardize avoided CO₂ emissions in the environment and energy fields.

While it is our responsibility to achieve net zero CO₂ emissions in our business activities, the amount of avoided CO₂ emissions can be a new metric to measure a company's environmental contribution. The WBCSD*¹ defines avoided CO₂ emissions as the difference in emissions between the continued use of existing products and services and the introduction of new products and services that contribute to CO₂ reduction, but this definition has not been standardized internationally and is not yet a corporate evaluation metric.

As a result of our efforts to have the value of avoided CO₂ emissions recognized internationally, in November 2022 an agreement was reached at the discussion in COP27 Japan Pavilion stating that "indexation and international standardization of avoided CO₂

emissions are important for balancing economic development and a decarbonized society." In addition, we have been leading and communicating discussions on the need for quantifying contributions to reducing emissions in the WBCSD, IEC, GX League, and other organizations*². Since then, efforts toward standardization have become more visible, such as the issuance of guidance by the WBCSD*³ on quantifying contributions to reducing emissions and the start of standardization activities for an IEC standard. The document agreed upon at the G7 Climate, Energy and Environment Ministers' Meeting in Sapporo in May 2023 clearly stated that "it is worthwhile to recognize avoided emissions."

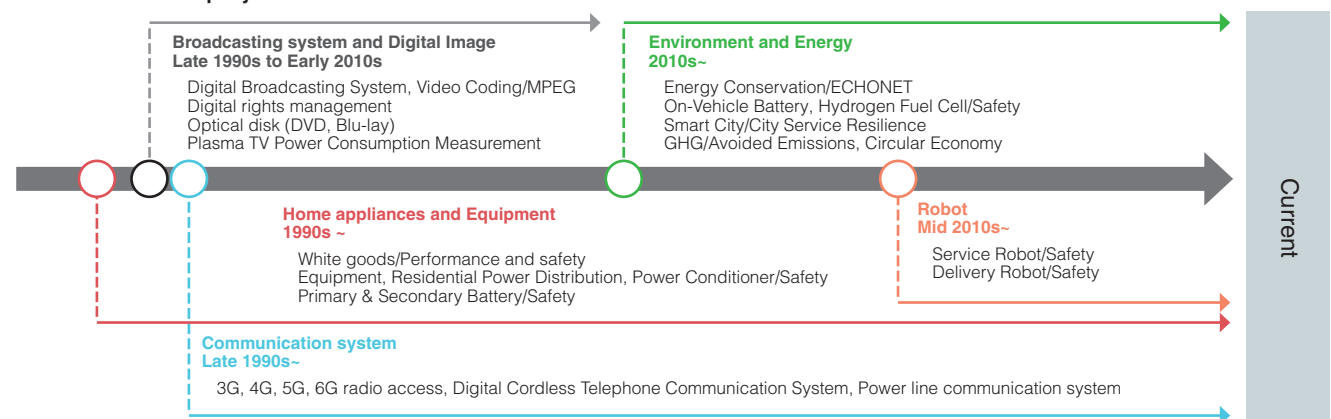
We believe that if avoided emissions are recognized by investors and the financial industry as a significant metric, this will encourage investments in businesses and companies that contribute to the environment, and accelerate decarbonization. This will lead to opportunities for Panasonic, which has strengths in this field, to enter a growth phase. Going forward, we will continue to actively promote activities involving companies, countries, and industries that share the same aspirations.

*1 WBCSD: World Business Council for Sustainable Development

*2 IEC: International Electrotechnical Commission; GX League: A forum hosted by the Ministry of Economy, Trade and Industry for companies aiming to achieve sustainable growth in the present and future to collaborate with people from government and academia engaged in similar initiatives.

*3 GX League, "Basic Guidelines for Disclosure and Evaluation of Climate-related Opportunities" https://gx-league.go.jp/aboutgxleague/document/GXLeague_guidance_en.pdf

Timeline of our company's efforts for international standardization





Environment and Technology Strategy

Technology infrastructure and new businesses that support people's lives (health, safety, and comfort)

With the goal of promoting lifelong health, safety, and comfort for each and every customer, Panasonic is developing technologies that contribute to their lifestyles by applying and advancing digital and AI technologies in situations closely related to daily life.



For example, our facial recognition technology is regarded as among the world's best, thanks to the application of image processing technology cultivated over more than 40 years in TVs, videos, and cameras to make images sharper, as well as deep learning technology that learns facial features. We are also pursuing secure personal information management for facial recognition technology as well as usability from the user's perspective. The convenience of our world-leading facial recognition technology for access control and authentication in offices and logistics facilities is contributing to the operational efficiency of workspaces and the resolution of labor shortages in logistics facilities, which have become a social issue in Japan.

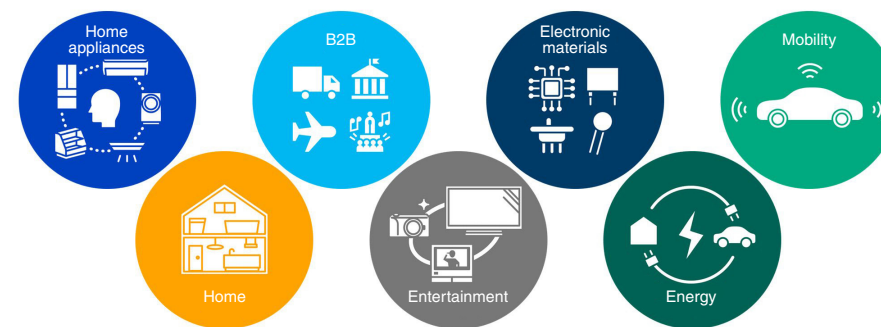
In terms of robot utilization, our AI-based remote-control system enables a single operator, without expert knowledge, to remotely monitor and operate a fleet of self-driving vehicles and handle errors and unexpected problems that arise while the vehicles are moving. The system is intended to solve the problem of labor shortages in different areas and improve the working environment.

In order to bring AI closer to more customers, we are also accelerating the use of “responsible AI” by advancing a consistent AI development process, from technology development to practical implementation. For example, we are currently developing AI technology that can be implemented with a small amount of data for quick delivery to all types of customers and AI that can be easily implemented in various physical spaces. We actively publish and present these cutting-edge research results at top conferences in the AI and robotics fields (ECCV, IROS, etc.).

Furthermore, in order to earn the trust of all our customers, we are setting up and implementing a program of AI ethics to realize “human-centered AI utilization” and working on AI quality assurance to ensure that customers can use it with confidence. In the case of “responsible AI” in particular, under the banner of “For Humans, By Humans, With Humans,” we will continue to contribute to “the lifelong health, safety, and comfort of each and every person.” Specifically, in addition to the AI Ethics Principles we established last year and our establishment of a Group-wide governance structure, we have initiated a system of ethics checks and are building a mechanism to integrate ethics into both basic technology and the development process.

We are also working to quickly connect cutting-edge AI technology to customer value through the world-class business development capabilities of our subsidiary Yohana, led by Yoky Matsuoka. The goal is to establish close collaboration with top researchers in the fields of AI and robotics, and speedy implementation in business, in order to link world-class technology and business development capabilities to customer value.

Going forward, we will continue to focus on AI technology that contributes to people's lives, including environmental contributions, with the goal of promoting the lifelong health, safety, and comfort of each and every customer.





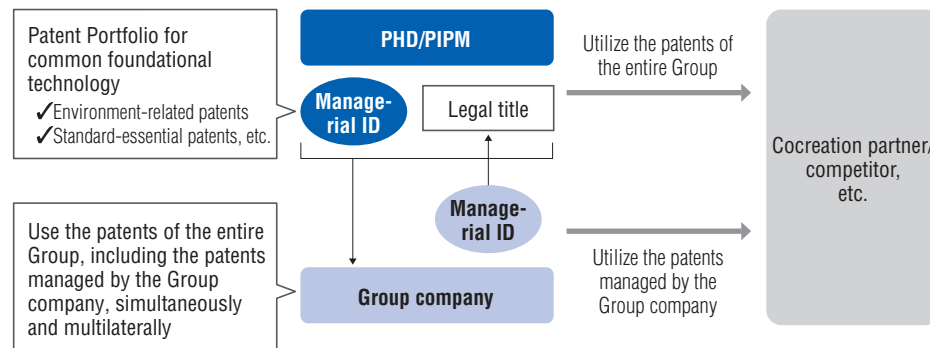
Environment and Technology Strategy

Column Intellectual property initiatives related to group synergies and environment-related technologies

The Group promotes intellectual property strategies by taking customer needs, competitors, and social issues as starting points, not only to ensure business advantages and safety now and in the future, but also to contribute to solving social issues.

In order to achieve the goals of “Panasonic GREEN IMPACT,” it is necessary to proceed innovation not only within Panasonic using the intellectual property of the entire Group, but also with business partners. In this regard, the Group has set up a mechanism to consolidate patents, including other forms of industrial property, to Panasonic Holdings Corporation (PHD) so that they can be used and utilized as assets of the entire Group simultaneously and multilaterally. PHD and its subsidiary, Panasonic IP Management, Co., Ltd. (PIPM) utilize the patents of the entire Group. Panasonic Group companies in Japan that are subject to this mechanism manage the patents they have created or obtained (i.e., they retain the “Managerial ID” (Managerial code) as the identification of responsibility to manage such patents), and such Group companies bear the costs of such patents and receive the revenues from them, even after the legal title of them has been consolidated to PHD. The Group company can then use the patents of the entire Group, and utilize externally the patents of which it holds the Managerial ID. The Group promote both internal and external innovation using the intellectual property through this mechanism (Figure 1).

(Figure 1) Mechanism of patent consolidation to create Group synergies



Next, regarding the status of the Group's environment-related patents, in an analysis of patent data by the Japan Patent Office based on the GXTI, a technology inventory that provides an overview of green transformation technologies (GX technologies), the Panasonic Group ranked fourth in the number of IPFs (International Patent Families) for all GX technologies worldwide. The Group also ranks high in its focus areas such as secondary batteries, fuel cells, and hydrogen technology (Figure 2). PHD and Electric Works Company of Panasonic Corporation (“EW”) are collaborating on hydrogen-related technologies. EW is building an intellectual property portfolio (IPPF) of differentiated technologies related to energy management and pure hydrogen fuel cells with the aim of promoting the distributed hydrogen-related market. Meanwhile, PHD is building its own IPPF with the aim to commercialization by the Group as well as cocreation with partners, utilizing its technological superiority in the area of precious metal-free highly active catalysts for lower cost and lower power

consumption of water electrolysis facilities for the production of green hydrogen. Development of fuel cells began in 1999 at the Head Office Research Division of Panasonic (currently PHD Research Division). General sales began in 2009, and a cumulative total of approximately 240,000 units have been sold in Japan and Europe to date. With regard to hydrogen-related technologies, we aim to implement them practically in various forms while maintaining and expanding the advantages of our current IPPF.

(Figure 2) Analysis of data on global environment-related patents based on GXTI*1

Rank in 2022	Overall GX technology (number of IPFs*2)	Individual fields (number of IPFs)		
		gxA09: Fuel cells	gxA10: Hydrogen technology	GXC01a: Secondary batteries
1	A (9,971)	C (1,535)	N (355)	B (4,937)
2	B (9,858)	E (1,065)	Panasonic (264)	A (4,613)
3	C (8,252)	G (862)	O (228)	C (2,855)
4	Panasonic (7,446)	D (772)	C (218)	D (2,168)
5	D (4,764)	J (637)	E (201)	Panasonic (2,154)
6	E (4,448)	Panasonic (588)	G (188)	SANYO Electric (1,327)
7	F (3,831)	A (444)	P (177)	R (1,110)
8	G (3,640)	K (443)	Q (175)	S (1,003)
9	H (3,521)	L (420)	J (135)	G (974)
10	I (3,109)	M (315)	D (129)	T (970)

*1 Prepared by Panasonic based on the JPO's “2022 Patent Information Analysis Based on GXTI (Abstract),” March 2023 (URL below)
https://www.jpo.go.jp/e/resources/statistics/gxti/report-results_patent-analysis.pdf

*2 The number of IPF (International Patent Family) means the number of inventions for which applications, including applications to the EPO or PCT applications, were filed to multiple countries or regions. (For more detail, see page 1 of the document the URL of which is indicated above)

In addition, the Panasonic Intellectual Property Department is pursuing new initiatives to realize its Purpose: “Circulating intangible assets, transforming them into value, and making the world happier.” As part of this effort, in September 2023, the “Technology Index,” a search system based on tens of thousands of pieces of intellectual property information held by the Group, was released. Addressing social issues such as climate change is not a task that can be handled by the Group alone. Going forward, the Panasonic Intellectual Property Department will continue to evolve and deepen its efforts, believing that its move to circulate intangible assets will be the starting point for various stakeholders to move forward, connect with each other, generate innovation in society, and make the world a happier place.

*Panasonic Intellectual Property Department website:
<https://holdings.panasonic/global/corporate/about/intellectual-property.html>

*Sustainability Data Book 2023 “Intellectual Property”:
<https://holdings.panasonic/global/corporate/sustainability/social/intellectual.html>



Panasonic Transformation (PX) Initiatives



**Bring happiness to life.
Bring happiness to work.
It's digital, it's our value.**



Hajime Tamaoki

Executive Officer

Group Chief Information Officer (Group CIO)

Further accelerating “Panasonic Transformation”

With digital transformation positioned as one of the key items of the Group strategy, we have been advancing our “Panasonic Transformation (PX)” project, which is a symbol for Group-wide transformation, since May 2021. The goal of PX is to create new value for the Group and help our employees and customers “live their best” by fundamentally re-examining the negative legacy accumulated over our more than 100 years of history (obsolete IT, internally focused work, outdated practices, etc.). With that in mind, I will be driving PX forward based on our management and business strategies under the ownership of Group CEO Kusumi.

Framework of PX Transformation

IT Transformation

Renewal of infrastructure and information system for operation, Digitization of Business process and Service, etc.

Operating Model Transformation

Strengthening of human resources management, organizational structure, IT delivery system, Vendor relationship, Cost optimization, etc.

Culture Transformation

DEI* Promotion, open and non-hierarchical work environment, Escape from Silo, Elimination of internally focused work

*Diversity, Equity & Inclusion

Formulation of “PX-7 Principles”

In March 2023, the Panasonic Group held a Group Executive Meeting with participants from Panasonic Holdings Corporation (hereinafter referred to as “Panasonic Holdings”), operating companies, and subsidiaries, with the goal of achieving a “Genuine DX” in which every single one of our 240,000 employees participates as a key player. At the Group Executive Meeting, PX was established as the Company-wide management agenda and as the foundation to support the transformation of Panasonic's business strategies and business portfolios. All participating group executives engaged in concentrated study to link PX to the enhancement of corporate value, formulated PX-7 Principles, and each signed a commitment statement.

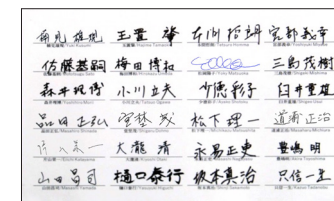
Panasonic Group

PX-7 Principles



1. Leverage data across our businesses to pursue the Panasonic Group's purpose: “Live Your Best.”
2. Management teams* are held accountable for value creation through data and process optimization.
3. Create value through data, turning diverse customer touchpoints into our strength. We want to understand customers and consumers better than anybody else.
4. Relentlessly improve business processes as our competitive advantage.
5. Do not underestimate the complexities of the current work processes. Clarify the rationale behind the existing processes and then simplify them if necessary. Clearly define what needs to be standardized.
6. Management teams are responsible for clearly defining what to standardize.
7. Commit to developing and nurturing data and tech-savvy human resources across all levels to create value.

Signed by
group executives



Case study

Realization of PX-7 Principles

Panasonic Holdings and its operating companies are formulating business policies and activity guidelines to enable each company to translate PX-7 Principles into action. In addition, senior management executives are asked to express the PX-7 Principles in their own words and communicate them to employees in an effort to raise awareness and inculcate the principles.

Commitment Statement from PID Officers 1/14



Owner of Digital management transformation
Shinji Sakamoto (CEO)

- AI活用が加速するが、今のDXの現場の取り組みは、4(5)です。
- 4. 業務プロセスを徹底的にデジタル化させ競争力の源泉とする
- 5. システム化の前に、現場の業務プロセスの現状を把握し、標準化の範囲を明確にする
- ◆ スピークカルチャーによって無くてはならないプロセスを特定し、廃止する
- ◆ 差別化できないが重要なプロセスは、標準化・標準化する。標準化しない場合はその理由を明確にする
- SCMのそれぞれの部門の担当者は、毎日の日々のタスクをこなしてまわっています。しかし、SCMの各プロセスを把握する、サプライチェーン全体のデータ活用、在庫管理が重要になってきます。結果、長いリードタイム・精度が低い・情報の伝達・顧客満足度の向上が実現できず、コストが膨れ上がります。
- このため我々の競争力を高め、本業投資に使える資金を確保しています。
- すでにDX全体を見直し、DX推進計画を立て、その実行による標準化で一気にスピードと精度を高めることになり、AI・AI活用を推進し、AI活用が加速する。また、この標準化でAI・AI活用が加速する。標準化の範囲を明確にして、AI活用が加速する。また、この標準化でAI・AI活用が加速する。標準化の範囲を明確にして、AI活用が加速する。

DX initiatives by and for the general operational frontlines

Make your work fun with the Power of Digital!
Anyone can do DX. Aren't you curious? The “DX Caravan” has set off!

DX Caravan Case Study of the Month

Even as an office worker, I was able to reform the field operations!
I joined the “DX Caravan” and took on the challenge of automating the sample period management process!

DX Caravanとは何か？
DX Caravanとは何か？
DX Caravanとは何か？

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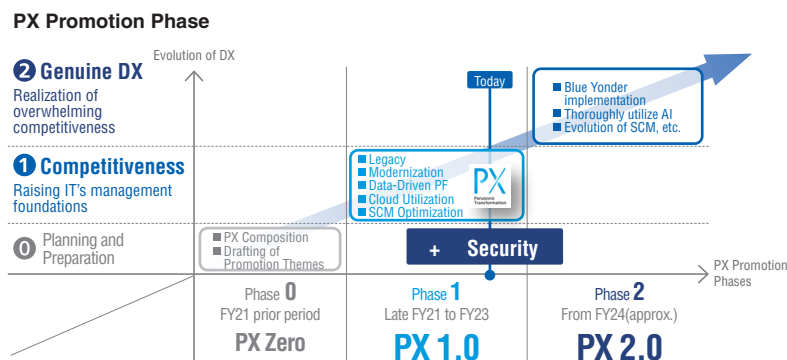
DX Caravanとは何か？
DX Caravanとは何か？
DX Caravanとは何か？



Panasonic Transformation (PX) Initiatives

Phase Change toward “Genuine DX”

For the two-year period from fiscal year ended March 31, 2021 (fiscal 2021) to fiscal 2023, we are focusing on laying the groundwork for raising the level of our IT management foundation, working to transform the organization of information infrastructure and information systems, and supply chain, and producing results on a consistent basis. As soon as the measures set forth in PX 1.0 are completed, the transition to PX 2.0 begins, which involves gradually evolving and expanding initiatives toward business model transformation, new business creation, and value creation utilizing the latest digital technologies. Some of the operating companies involved in PX 2.0 are creating new businesses, which will lead to “real business outcomes” in the future.



IT Transformation

In parallel with efforts to achieve thorough enforcement and standardization of business systems and business processes, we are transforming the IT itself through four programs: (1) Legacy Modernization; (2) Data-Driven Platform; (3) Cloud Utilization; and (4) SCM Optimization. The specific results include the following (as of June 30, 2023):

- Completed 85 out of 170 themes (50%) that are common priority measures for the Group
 - Saved more than 430,000 man-hours through higher efficiency of indirect operations and saved more than 420,000 sheets of paper through paperless work
- 460% increase in number of employees utilizing data (compared to previous year)
- Transitioned 57% of all OSs to the cloud, exceeding target of 40%

Operating Model Transformation

To ensure efficient and sustainable delivery of IT that creates a competitive advantage, we are promoting an “operating model transformation” that extends to our Information Systems Department and its management resources, including talented people, products or services, and capital. Specifically, we intend to push ahead with seven programs, including the following: incorporating IT into the management agenda; personnel management reforms; global vendor governance; and IT core company transformation. The specific results include the following (as of June 30, 2023):

- Defined 12 common human resource categories covering approximately 3,900 IT professionals around the world and started job category-specific training
- Professionalized strategic coordination and relationship building with global vendors to reduce costs and enhance quality

Culture Transformation

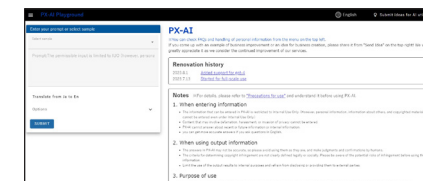
We continue to spread, both internally and externally, the concepts of One Panasonic IT, open and non-hierarchical work environment, a zero-tolerance policy (ensuring psychological safety at work), and the elimination of internally focused work. Meanwhile, we are working to reform the negative legacies of organizational inertia, the curse of tradition, and the remnants of 20th-century ways of working. The specific results include the following (as of June 30, 2023):

- Using Panasonic Operational Excellence Co., Ltd. as a model, introduced agile methods to white collar workers as a “small transformation,” saving 4,300 man-hours per year
- Held an “Agile Practice School/training hall” that graduated 61 students and implemented *gemba* kaizen using agile methods resulting in 80 employees acquiring agile-related certifications

Case study Company-wide deployment of AI assistant service “PX-AI”

Based on “ConnectAI,” the AI assistant service from Panasonic Connect Co., Ltd., we built our own Panasonic Group version called “PX-AI.” Starting in April 2023, PX-AI has been offered to approximately 90,000 Group employees in Japan, and has been used more than 700,000 times by 30,000 employees in three months. In July 2023, we expanded the service to our overseas sites, excluding Europe and China, making it available to approximately 170,000 employees worldwide. By introducing cutting-edge AI technologies and applying them to our operations across the entire Panasonic Group, we will increase the productivity of employees not only in technical positions but also in departments such as manufacturing and sales, promote the continuous evolution of our business processes, and encourage employees to realize their ideas and dreams and take on the challenge of creating new business ideas.

PX-AI main screen



Further strengthening cyber security measures

With regard to cyber security measures, which address risks to not only DX but all corporate activities, traditionally individual departments at the Group have been responsible for separate cyber security measures and promotion across the three functions of information systems, manufacturing systems, and product security. Starting in fiscal 2024, we will organically integrate the three functions as One Panasonic as part of an accelerated and intensive program of comprehensive measures covering the entire business. In addition, in order to increase the reliability of our products and contribute to greater social stability, we are focusing on developing cyber security talent through close exchanges between personnel from the three functions.

Note that cyber security has been identified as one of the Group's the highest priority issues through the process of identifying materiality. (For more details on identifying materiality, please refer to P5)



Human Resources Strategy

Message from the Group CHRO



We will achieve stable “employees’ well-being” and implement management that enables each employee to reach their full potential.

Shigeki Mishima

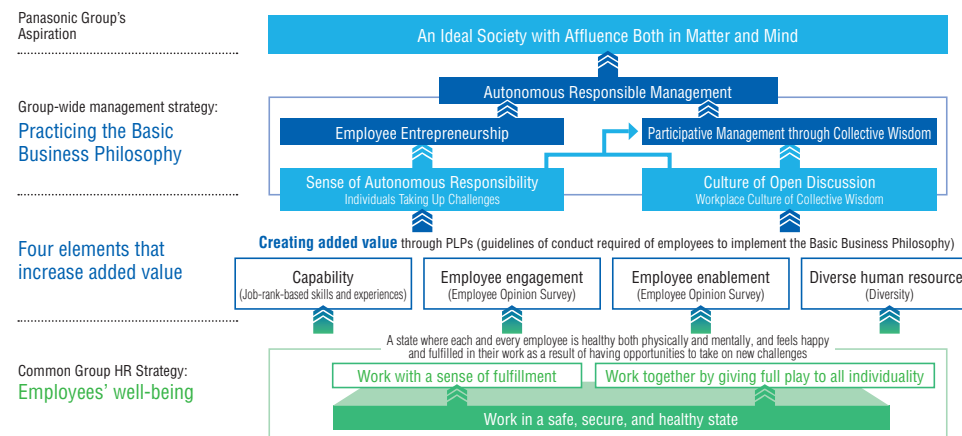
Executive Officer
Group Chief Human Resources Officer (Group CHRO)
In charge of DEI (Diversity, Equity & Inclusion) Promotion

Since its founding, the Panasonic Group has valued the concept of human capital management, which regards human resources as vital capital. We call the approach “autonomous responsible management,” which consists of “employee entrepreneurship,” which has individuals take on challenges based on their personal sense of responsibility, and “participative management through collective wisdom,” which asks people to share their wisdom by telling others what needs to be said. We implement this Basic Business Philosophy throughout the Group to improve the competitiveness of our operating companies, helping us realize our Group’s purpose of “an ideal society with affluence both in matter and mind.”

Furthermore, the premise of our autonomous responsible management, which is our Group-wide management strategy, rests on making sure that each and every employee is healthy both physically and mentally, and feels happy and fulfilled in their work as a result of having opportunities for taking on new challenges, or in other words, ensuring “employees’ well-being.” We have set this as our common Group HR strategy and identified three pillars of “Work in a safe, secure, and healthy state,” “Work with a sense of fulfillment,” and “Work together by giving full play to all individuality,” to promote initiatives and create added value. We monitor the added value with productivity indexes using financial indicators.

We have identified “employees’ well-being” as one of the highest priority issues for the Panasonic Group through the process of identifying materiality, and it is a precondition for our autonomous responsible management system.

(See P5 “Materiality” for details on materiality identification)



Four elements to increase added value

To further implement our Basic Business Philosophy, we have established the Panasonic Leadership Principles (PLPs) as a set of action guidelines for our employees, and will create higher added value for society through specific actions. The four key elements that increase the added value are: “capability (job-rank-based skills development),” “employee engagement (employees’ self-motivated endeavors),” “employee enablement (a working environment that makes employees feel comfortable and helps them reach their full potential),” and “diverse human resources.” Achieving “employees’ well-being” as mentioned earlier is the foundation of these four elements.

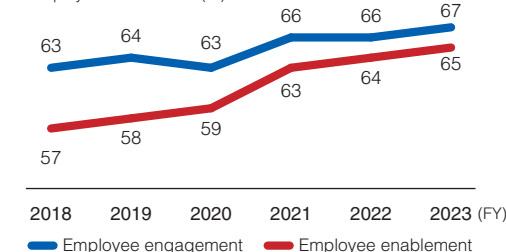
Group-wide Key Performance Indicators (KPIs)

The Panasonic Group has established indicators tied to the three pillars of initiatives to achieve the above-mentioned “employees’ well-being.” In particular, we have designated “employee engagement” and “employee enablement” indicators, the ratio of women in managerial positions (in Japan), and the number of occupational accidents as the four Group-wide key performance indicators.

The “employee engagement” and “employee enablement” indicators are measured using the Affirmative response rate (%) as assessed in the Employee Opinion Survey (hereinafter referred to as “EOS”). This is an annual survey of all global employees (approximately 150,000 respondents in fiscal year ended March 31, 2023) conducted in an effort to gain a fixed-point observation of employee awareness. Survey results have been trending upward each year, with fiscal year ended March 31, 2023 (fiscal 2023) results showing “employee engagement” at 67% (66% in the previous fiscal year) and “employee enablement”

Employee Opinion Survey (Group-wide)

Affirmative response rate for “employee engagement” and “employee enablement” (%)



Employee engagement: employees’ self-motivated endeavors
Employee enablement: the right person for the right job, comfortable working environment



Human Resources Strategy

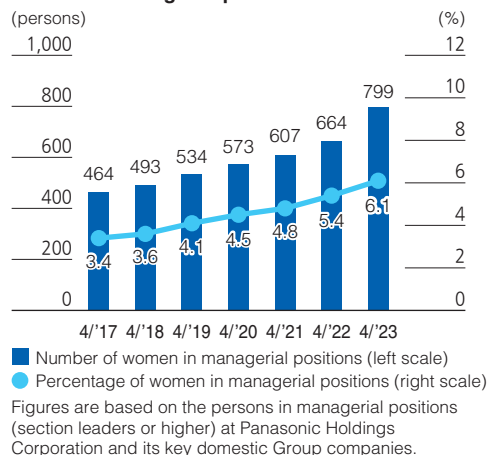
coming in at 65% (64% in the previous fiscal year)*. We will continue our initiatives based on the three pillars to achieve the highest global standards.

(Please refer to the [Sustainability Data Book 2023](#) for specific questions used to measure the “employee engagement” and “employee enablement” indicators.)

In addition, the percentage of women in managerial positions (in Japan) was 6.1% (compared to 5.4% in the previous fiscal year). We will continue promoting DEI and aim to ensure diversity in managerial positions by appointing more women.

In terms of the number of occupational accidents, there were no fatal accidents in the Group as in the previous fiscal year, while there were three serious and severe accidents in Japan and five overseas (compared with four in Japan and six overseas in the previous year). We will continue creating a safe, secure, and healthy workplace to eliminate all fatal, serious, and severe accidents.

Women in managerial positions



Work in a safe, secure, and healthy state

—Creating a safe, secure, and healthy workplace

Creating a safe and secure workplace

We regularly conduct risk assessments of machinery and equipment, hazardous substances, etc. at least once a year, based on the Occupational Health and Safety Act, in order to identify potential risks of occupational accidents and illnesses in the workplace and to reliably reduce risks starting with the highest-priority risks.

Health management

In addition to sending out a Group-wide health message and defining a policy of strengthening health investments to achieve employees' well-being, we are promoting various initiatives in Japan through Healthy Panasonic Actions, which are led by each operating company and involve the Company, labor unions, and health insurance organizations. We have sent out a message on health to the entire Group, clarifying our policy of strengthening health investments to realize employee well-being. In Japan, each Operating Company promotes various initiatives through Healthy Panasonic Actions, a unified effort from the Company, labor union, and health insurance association.

Efforts to prevent harassment and ensure 100% legal compliance (in Japan)

To encourage the Panasonic Group members to create a company free of harassment and a source of pride for all employees, we are strengthening our harassment prevention efforts in accordance with the Equal Employment Opportunity Act, the Child Care and Family Care Leave Act, the Power Harassment Prevention Act, and other relevant laws and regulations.

- We designated December as “Zero Harassment Month” and have been raising awareness about harassment.
- We are revising our disciplinary rules (with stricter disciplinary measures for harassment) as a Group-wide effort to deter harassment.

- Since 2021, we have worked toward establishing a consultation service, training the service's managers and staff.
- We are providing harassment prevention training to all Group members starting from July 2023.

Work with a sense of fulfillment

—Encouraging employees' self-motivated endeavors and supporting their self-determined career formation

Development of management executives

For the sustained development of our Group, a diverse pool of managers that can drive business forward is absolutely essential. To that end, we are working to create a pipeline of successors over the medium to long term. As specific Group-level initiatives, for the 26 key positions such as executive officers of Panasonic Holdings Corporation and presidents of operating companies, we are promoting the development of a diverse pool of management executives irrespective of nationality, work history, gender, age, or other attributes based on a policy of fast-tracking and “the right person for the right job.” Also, the Group Talent Management Committee has been established to discuss and promote the search, development, placement, and monitoring of successors from the optimal perspective of the entire Group, and is currently working on the career development of the 100 successors the Committee selected based on short, medium, and long-term perspectives. We will continue to enhance this group of successors' quality, quantity, and diversity. For the sustained development of our Group, a diverse pool of managers that can drive business forward is absolutely essential. To that end, we are working to create a pipeline of successors over the medium to long term. As specific Group-level initiatives, for the 26 key positions such as executive officers of Panasonic Holdings Corporation and presidents of operating companies, we are promoting the development of a diverse pool of management executives irrespective of nationality, work history, gender, age, or other attributes based on a policy of fast-tracking and “the right person for the right job.” Also, the Group Talent Management Committee has been established to discuss and promote the search, development, placement, and monitoring of successors from the optimal perspective of the entire Group, and is currently working on the career development of the 100 successors the Committee selected based on short, medium, and long-term perspectives. We will continue to enhance this group of successors' quality, quantity, and diversity.

Moreover, each Operating Company has a similar Talent Management Committee to discuss and promote identifying, training, assigning, and monitoring successors to important posts such as business division heads from a multifaceted perspective, helping develop managers for optimal Group-wide management.

Successor Readiness Rate

4.4
successors/post

*Total number of short-, medium-, and long-term successors to 26 key positions, including executive officers of Panasonic Holdings Corporation and presidents of operating companies, divided by 26.

Leadership Development Participation Rate

71.3 %
(82/115 persons)

*Percentage of successors to the 26 positions who have participated in internal leadership training.

Succession Readiness

Ready: **16.5 %**
Ready within 5 years: **31.1 %**
Ready within 10 years: **52.4 %**

*The percentages of successors preparing for 26 posts ready for appointment immediately or within five or ten years



Human Resources Strategy

Compensation system (Japan)

Panasonic Group has adopted a performance-linked compensation system that sets current fiscal-year bonuses based on the Company's previous fiscal-year performance. Corporate performance reflects in compensation more at higher levels of management. Moreover, individual bonuses are determined based on how individuals perform in their jobs the previous fiscal year. With corporate and individual performance impacting compensation to some degree, Panasonic inspires the desire to improve both aspects of performance.

(See P44 "Compensation" for compensation)

Global human resources development

In each country and region, we plan and operate our unique selective executive development training programs in cooperation with Japan to bolster our business leadership development. For instance, in Europe, we operate the Next Generation Talent Program (NGTP), a 15-month human resources training program. It includes workshops on the Basic Business Philosophy and diversity, launching and promoting actual business projects, mentoring and coaching, and various other activities. Participants work with partners from different European affiliates to improve their overall business knowledge and skills. In Japan, we hold the Senior Management Development Program (SMDP) for key senior managers (including directors, GMs, and managers) worldwide, with 27 participants from 11 countries attending the most recent program in March 2023.

Furthermore, we have a Group-wide Panasonic Global Mobility Policy that provides rules for inter-regional transfers and programs for inter-regional transfers and for overseas employees to work in Japan.

Career development support (in Japan)

We believe that the basis of "work with a sense of fulfillment" is to volunteer and take on challenges. Therefore, as a company, we support individuals' willingness to take on challenges and pursue self-directed career development. As a result, in fiscal 2023, approximately 2,000 employees volunteered for, and around 500 actually took part in a new challenge, such as job transfers across Operating Companies within the Group (relocation) and in-company multitasking (concurrent postings within the Company). One of the Group-wide initiatives to support the growth and endeavors of each employee is the "A Better Dialogue" initiative. This initiative is designed to enhance the quality and quantity of dialogue between employees and their managers. In addition to 1-on-1 meetings aimed at drawing out the thoughts of each employee, the initiative consists of three tracks: development of individual career and capabilities, goal setting and management, and competency review. The initiative helped promote various dialogue opportunities, achieving a 78% implementation rate and an 84% satisfaction rate in fiscal 2023 in Japan. To enable each employee to maximize their individuality and capabilities and enhance their job satisfaction, we strive to enhance the value of each employee's experience and create opportunities for them to take on challenges and play an active role in a variety of settings, including pre- and post-employment onboarding, career development, evaluation, promotion, and transfers and secondments.

Open job transfers within the Group

(persons)

	FY2019	FY2020	FY2021	FY2022	FY2023
Open job transfers within the Group (number of applications)	1,840	1,329	1,018	301	1,936
Open job transfers within the Group (number of transfers)	551	302	252	81	466
Concurrent postings (transfer record)	44	53	91	122	38

*Usage record of Group-wide programs. There was a temporary decrease in fiscal 2022 as applications were suspended due to the transition to an operating company system (holding company system).

Work together by giving full play to all individuality

—Promoting Diversity, Equity & Inclusion (DEI)

Top management commitment

The "top management commitment" means management members themselves are committed to promoting DEI and do so by incorporating it into business strategies.

■ Group DEI Promotion Council

All operating company presidents are committed to promoting DEI as a business strategy to achieve the goal "help maximize the potential of each employee." As a part of this initiative, we established a new Group DEI Promotion Council in fiscal 2022. The Council allows management to share a common understanding of the DEI issues that must be addressed and engage in an ongoing dialogue on Group-wide initiatives. The Group CEO serves as chairperson, with all operating company presidents and some employees as members. Its meetings determine and promote critical actions. In fiscal 2023, we accelerated our DEI initiatives by engaging in dialogue on diverse topics such as LGBTQ, disability, and disease, and sharing good examples of actions taken by each operating company.

Creating an inclusive work environment

Creating an inclusive work environment is about building an environment where every individual's diversity is valued and fully utilized.

■ Group DEI Forum

The Group DEI Forum is an internal event designed to provide an opportunity for each of us to enhance our understanding and empathy toward DEI and inspire us to take action. We have been holding this event each year since fiscal 2022 under the slogan "Dialogue. Discovery. Appreciating Differences." with the aim of making employees aware that DEI is something we must take seriously because it concerns all of us. In fiscal 2023, more than 14,000 employees watched the online live stream.

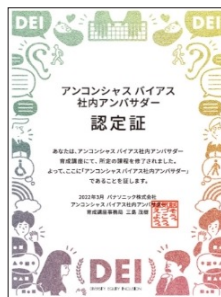




Human Resources Strategy

■ Unconscious bias training

Unconscious bias refers to prejudices and stereotypes people have based on past experiences and perceptions that they are not consciously aware of having. We conduct training to learn about and become aware of the existence of these assumptions that everyone makes about others. Through changing one-sided views and perspectives and considering other possibilities, we review communication in the workplace to create a workplace culture where everyone can work comfortably and where every individual's diversity can be fully utilized. As of April 2023, approximately 110 employees have been trained as internal unconscious bias ambassadors, and training will be continually provided to approximately 60,000 employees in Japan from fiscal 2023 onward. In addition, we also provide training in North America, Europe, Brazil, India, Singapore, and Vietnam, according to the circumstances of each region and country.

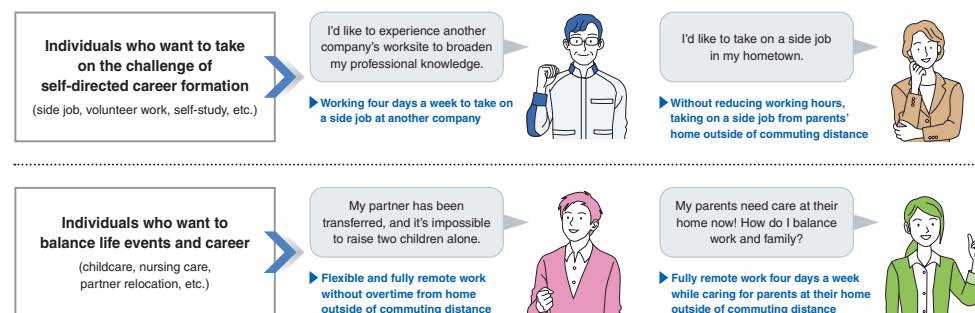


Support for every individual (in Japan)

■ Greater options for work hours and places

All Group companies are working to expand work options that support careers and encourage work-life balance. For example, we have introduced a system that allows employees to flexibly choose their working hours and days by eliminating the minimum daily working hours, enabling flexible work styles such as three- or four-day workweeks. By introducing such work styles and expanding the short-day scheduling system for career development, we encourage individuals to take on the challenge of self-directed career development, including moonlighting for other companies, volunteering, and self-learning. We are also working to expand options for working locations, such as by promoting full remote work, which allows employees to work from outside their commuting range. That allows employees to balance their careers with life events such as childcare, nursing care, or a partner's relocation.

Responding attentively to diverse needs and expanding options



■ Promoting gender equality

There are no gender-based inequalities in the Panasonic Group's compensation system. However, particularly in Japan, we are aware that there is a need to promote a greater number of women to senior management and decision-making positions, and the Panasonic Group is striving to ensure gender diversity. Therefore, in addition to creating an inclusive work environment, we are working on revising our evaluation and promotion processes from the perspective of equity. We are committed to undertaking activities such as holding study groups for female employees and career-advancement seminars for women leaders, and providing opportunities to encounter female role models' values and work ethics. In addition, we are working to improve the work system and foster a flexible workplace culture where anyone who wishes to can balance life events and career, and as one of the measures for that, we encourage male employees to take childcare/parental leave.

The gender gap in compensation (female: male)

All employees	73:100
Managers	93:100
*Calculated based on salaries and bonuses for fiscal 2023	

Percentage of male employees taking childcare/paternity leave

64.8%

*Total number of male workers who took paternity leave or leave for childcare for pre-elementary school children in fiscal 2023 divided by number of male employees whose spouses gave birth in fiscal 2023

■ Employee Voluntary Community Efforts

Under the theme of diverse individuality, a voluntary community of over 3,000 employees is carrying out various activities across the Panasonic Group's operating companies and departments.

Examples

- Career Crossover: An in-house community where mid-career hires can become virtual co-workers and consult with each other across organizational and business boundaries
- PWN (Panasonic Women's Network): An internal community centering on female employees who wish to contribute to the company by utilizing their own strengths
- PRN (Panasonic Rainbow Network): An internal community for LGBTQ persons and allies
- Diversity & Network (D&N): An internal community that aims to create an organization where employees with disabilities can contribute actively and demonstrate their abilities
- Panasonic Deaf Association/Silent Lab: Internal communities where people who can hear and those who cannot hear work together to think about creating a comfortable working environment and make changes

These efforts lead to the creation of a work environment in which each individual supports one another, knowledge and initiatives are disseminated widely within the Group, and everyone is able to demonstrate their individuality. The Company also recognizes the importance of these activities and encourages them, for example, by awarding the Group-wide CEO Award in fiscal 2023.



Respect for Human Rights

For more details, please refer to ["Respect for Human Rights" in our Sustainability Data Book 2023.](#)

The Panasonic Group's business activities are made possible by the support of many people, and as a corporation that upholds the management philosophy that a company is a public entity of society, we recognize that we cannot allow ourselves to develop at the expense of other people. We also acknowledge that we have a responsibility to protect their rights and contribute to the well-being and happiness of all these people. As a global company operating worldwide, we comply with all applicable laws and regulations in our business activities while considering the human rights of all our stakeholders and respecting internationally recognized human rights as expressed in the International Bill of Human Rights and the International Labour Organization's (ILO) Declaration on Fundamental Principles and Rights at Work. We strive to prevent, mitigate, and rectify any possible negative impacts our business activities, products, services, or related transactions have on individuals, workers, or society. We also ask our suppliers and business partners to understand and implement our human rights and labour compliance policies and measures, and we work with them to monitor supply chain risks and take appropriate measures to prevent and mitigate their occurrence, along with steps for rectification. We also seek the advice of external experts in this regard.

Respect for human rights has been identified through the materiality identification process as one of the highest priority issues in the Group. (For more details, please refer to "Materiality" on page 5.)

Policy

The Group has established the Panasonic Group Human Rights and Labour Policy, based on compliance with, referencing the below international standards and incorporating external experts' opinions. This policy states that, predicated on compliance with international standards and the laws and regulations of each country that are applied to our business activities and transactions. It stipulates our commitment to respecting internationally recognized human rights, identifying, preventing, and rectifying human rights violation risks, promoting victim relief measures, creating a rewarding working environment, and engaging in dialogue on these issues with various stakeholders. In accordance with this policy, we have established internal rules and developed a system for implementation. We are also propelling specific initiatives aimed at upholding respect for human rights and creating a rewarding work environment.

Responsible executive and framework

The executive officer responsible for the Group's initiatives on respecting human rights is the Group Chief Human Resources Officer (Group CHRO), who is also in charge of CSR and corporate citizenship activities (as of August 2023). Performance indicators related to sustainability in the areas the Group's executive officers are responsible for have been established and reflected in their compensation. In fiscal year ending March 2024 (fiscal 2024), the short- and medium-term performance-linked compensation indicators for the Group CHRO include the initiatives for human rights and labour compliance.

(Please also refer to "Compensation" on page 44 for information about compensation.)

Human rights due diligence

Based on the United Nations' Guiding Principles on Business and Human Rights and with reference to the OECD Due Diligence Guidance for Responsible Business Conduct, we conduct human rights due diligence to identify, prevent, and mitigate any adverse impact our operations could have on human

rights, correct issues that may arise, and explain the results of our actions to relevant stakeholders.

We incorporate input from external experts and stakeholders in formulating related mechanisms and processes.

The Group recognizes the need to identify human rights issues throughout its value chain and business activities and has begun analyzing priority issues. As we operate globally in a wide range of business areas, some of our businesses have extensive supply chains and we recognize the risk that workers in these supply chains may be in vulnerable positions or unsafe working environments in different countries or regions. We have therefore started by addressing human rights issues at our manufacturing sites and in our supply chain.

In fiscal 2022, we conducted a detailed self-assessment of human rights and labour issues at almost all of our overseas manufacturing companies to gain a bird's eye view of the Group's risks. In fiscal 2023, we reviewed and added questions to our list before conducting another detailed self-assessment of some domestic manufacturing sites that were selected by our operating companies alongside our overseas manufacturing companies (for a total of 127 companies and sites). To address the issues identified, the relevant companies and sites will formulate improvement plans by August 2023, and Panasonic Holdings will provide support, as appropriate, to complete the corrective measures by March 31, 2024.

In our supply chain, we use contracts and agreements to make it mandatory for our suppliers to comply with the Panasonic Supply Chain CSR Promotion Guidelines. And in line with these guidelines, we also request them to periodically complete a CSR self-assessment. From fiscal 2023 we started utilizing a risk-based approach with input from external experts to identify the suppliers we should audit first as a matter of priority. We have since carried out our own supplier audits and arranged for audits to be conducted by a third-party organization.

Grievance mechanism

In order for us to respond quickly to remedy any complaints we receive related to human rights violations, we established a global hotline (supporting 32 languages) as a point of contact where our employees or external business partners and their employees can report any issues. This hotline uses an external, independent system that prevents the identity of the internal or external person reporting from being revealed, and we have internal rules in place to ensure the confidentiality of reports and to make sure that the person reporting the violation is not subject to any form of retaliation or unfair treatment.

Participation in international and industrial partnerships

The Panasonic Group has been a participant in the United Nations Global Compact since January 2022. In addition to expressing our support of 10 fundamental principles in four different fields, including respect for human rights, we adhere to international standards in our human rights and labour initiatives, and we are fulfilling our duty to communicate with the public by disclosing the progress and results of our efforts.

We also belong to the Responsible Business Alliance (RBA) and other various industry groups, and through their activities, we are working to build a highly reliable management system.