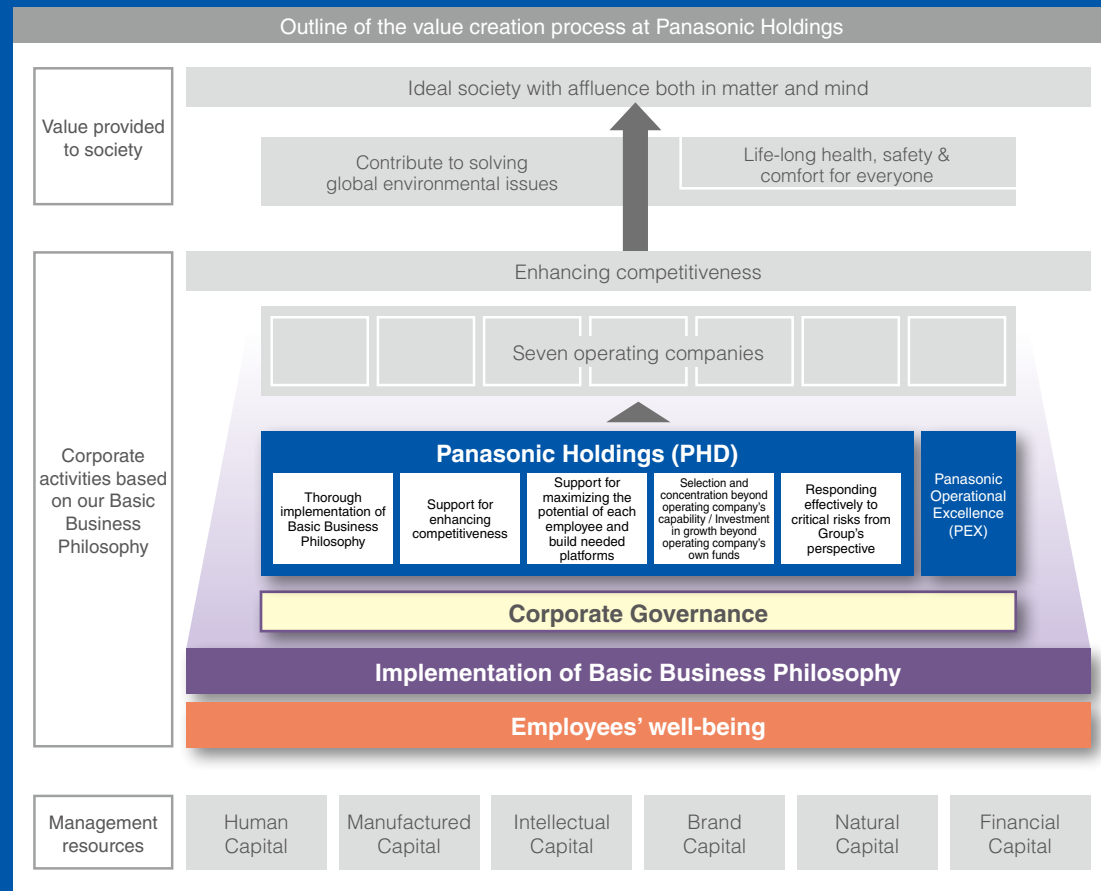


The Roles of Panasonic Holdings

Key points in this chapter

Explanation of how Panasonic Holdings contributes to the Group's development and strengthens its overall management foundation, including messages from each chief officer.

- 24** Human Resources Strategy (Group CHRO Message)
- 33** Environment and Technology Strategy (Group CTO Message)
- 41** PX Initiatives (Group CIO Message)
- 43** Brand Strategy
- 44** Compliance Initiatives (Group GC Message)



Human Resources Strategy

Message from the Group CHRO



A company where every employee can “unlock” their potential

Tatsuo Kinoshita

Executive Officer
Group Chief Human Resources Officer (Group CHRO)

Kinoshita started working for P&G Japan Limited in 1996, working in recruiting and HRBP. In 2001, Kinoshita joined GE Japan Inc. and took on the roles of HR Director of GE Capital Japan as well as Region Org and Talent Development Director of GE Capital Asia Pacific. Starting in 2012, Kinoshita worked as HR Director in GE Japan Inc. In 2015, Kinoshita moved to Kuala Lumpur, Malaysia, and took the Region Head of HR role for the Oil and Gas business as well as Organization and Talent Development Head for GE Asia Pacific. In 2018, Kinoshita joined Mercari, Inc., Japanese e-commerce Tech Startup, as Executive Officer and CHRO. Starting in July 2024, Kinoshita joined Panasonic Holdings Corporation as Executive Officer and Group CHRO.

I strongly resonate with the founding principles of Konosuke Matsushita, which led me to accept the role of Group CHRO.

To me, human capital management means creating a win-win relationship between individuals and the organization at a high level. For individuals, it means unlocking their potential and maximizing their abilities. For the organization, it means growing the business and fulfilling its mission.

The key to achieving this is culture. The world’s excellent companies build strong cultures centered on their missions and values, enabling continuous growth. The Panasonic Group has a steadfast axis of management principles, the Basic Business Philosophy that has been passed down for over a century. We will return to these fundamental principles and create a corporate culture where each individual can act autonomously and “unlock” their potential.

A company is a public entity. With the safety and protection of the human rights of all stakeholders as our foundation, we aim to ensure the well-being of each employee so that society can be transformed as our slogan “Live Your Best” suggests.

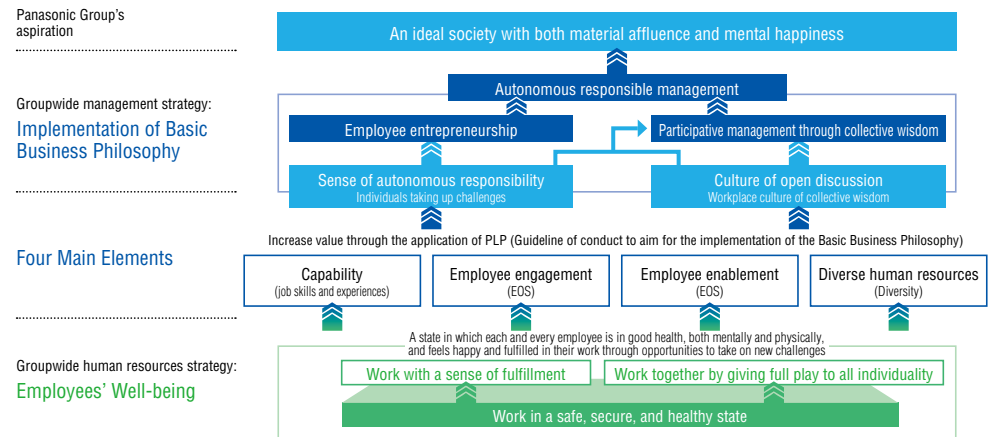
Policies

Since its founding, the Group has valued the principle of making people before products. In striving to achieve our mission, which is to achieve an ideal society with affluence both in matter and mind, it is crucial that each employee practices our Basic Business Philosophy. Ensuring this practice through the realization of employees’ well-being is the core of our human capital management.

Practicing our Basic Business Philosophy involves autonomous responsible management consisting of each individual engaging in employee entrepreneurship with a sense of autonomous responsibility, and practicing participative management through collective wisdom, where we openly share ideas and opinions. This is our management strategy that we apply across the Group to sharpen the competitive edge of our operating companies.

The Panasonic Leadership Principles (PLP) guide employees across all Group companies to practice the Basic Business Philosophy for achieving an ideal society. This framework translates our cherished principles that we have valued since our founding into specific, common actions that anyone, regardless of their background, can practice. By linking these principles with our personnel management measures, such as recruitment, development, evaluation, placement, and reassignment, we enhance each employee’s experience and drive further behavioral evolution and growth.

Through its actions, the Group creates higher added value for society. The four elements that are key to increasing the value are: “capability (skills development based on job ranks),” “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.” The foundation of these elements is the state where each individual feels physically and mentally healthy, and finds happiness and purpose through opportunities to take on challenges—in other words, employees’ well-being. We advance our common Group HR strategy based on this principle, focusing on three pillars: “work in a safe, secure, and healthy state,” “work with a sense of fulfillment,” and “work together by giving full play to all individuality.”



Employees’ well-being has been identified as one of the most critical issues for the Group through the materiality identification process and is fundamental to the Group’s autonomous responsible management approach.

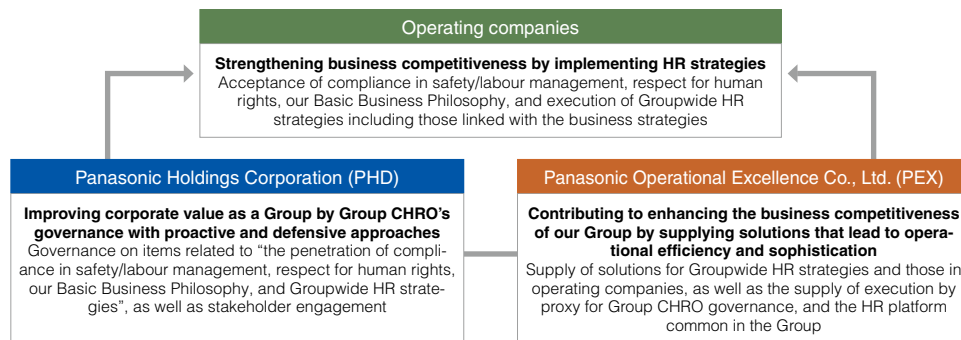
(For more details on materiality identification, please refer to “Materiality” on page 6.)

Human Resources Strategy

Group structure and roles

Under the holding company system established in April 2022, each operating company is committed to autonomous responsible management, aiming to build the optimal business structure to address the needs of each industry, customers, and competitors. Each operating company is responsible for planning and executing HR strategies, including talent acquisition, compensation and performance evaluation systems, organizational development, and talent development. (For more details on HR strategies in investment areas, please refer to the Sustainability Data Book 2024.) Panasonic Holdings Corporation (PHD) supports operating companies from a governance and stakeholder engagement perspective, while Panasonic Operational Excellence (PEX) provides solutions to enhance Group competitiveness.

The Group CHRO governance oversees safety and labour compliance and respect for human rights, the dissemination of the Basic Business Philosophy, and common Group HR strategies. To achieve this, the Group CHRO holds 1 on 1 meetings with the CHROs of each operating company and reviews the HR strategies reported to the Board of Directors Meeting. Additionally, the Group CHRO reports on the progress of common Group HR strategies and new initiatives to the PHD Board of Directors, fostering active discussions. In the fiscal year ending March 31, 2024 (fiscal 2024), discussions were held that focused on Group HR strategies to enhance competitiveness and the transformation towards a principles-based organizational culture.



Groupwide KPIs

The most critical Groupwide KPIs tied to employees' well-being include employee engagement and enablement, the ratio of female managers (in Japan), and the number of occupational accidents. As mentioned above, our Group's management strategies are based on autonomous responsible management, which involves employee entrepreneurship and participative management through collective wisdom. Employee engagement, which is the willingness of each individual to take on challenges autonomously to achieve the Group mission, is connected to employee entrepreneurship. Meanwhile, employee enablement, achieved through an environment that allows individuals to showcase their

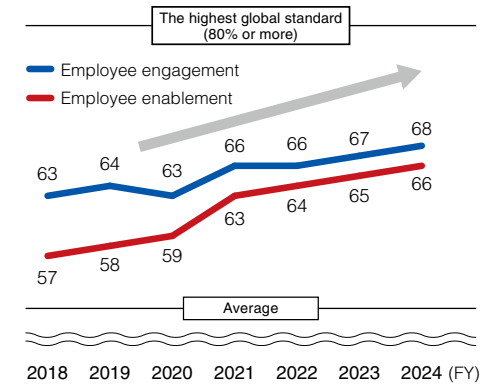
abilities, is linked to participative management through collective wisdom. Additionally, the ratio of female managers, particularly a challenge in Japan, is set as a representative indicator of diversity. Furthermore, maintaining a state with zero occupational accidents is fundamental to corporate activities. These KPIs are selected to measure the progress of HR strategies aligned with our management strategy. Moreover, the Group plans to add the diversity ratio (including female employees, employees who are non-Japanese citizens, and mid-career hires) in the executive management teams (executive officers and management meeting members) as a critical KPI to promote diversity, equity, and inclusion (DEI) initiatives.

The indices for employee engagement and enablement are measured by the favorable response rate (%) in the Employee Opinion Survey, which is conducted annually targeting all global employees to monitor their awareness (with approximately 157,000 respondents in fiscal 2024). Our goal is to achieve a global top level (at least 80%) for these indices by fiscal 2031. The survey results have shown an upward trend, with the fiscal 2024 employee engagement index at 68% and the employee enablement index at 66%.

The ratio of female managers (in Japan) is 7.0%. We will continue to promote DEI and aim to ensure diversity in management teams and managerial positions by appointing a more diverse range of talents, including female employees. Regarding occupational accidents, there were zero fatal accidents, two serious accidents, and zero severe accidents. We will continue to promote the creation of safe, secure, and healthy workplaces and aim to eliminate fatal, serious, and severe accidents.

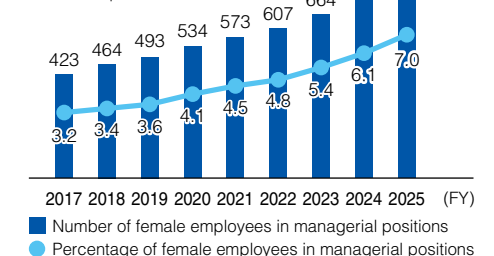
Employee Opinion Survey

Favorable response rates for "employee engagement" and "employee enablement" (%)



Number and ratio of female managers

Target: PHD, PEX, 7 operating companies



Work in a safe, secure, and healthy state

—Creating a safe, secure, and healthy workplace

Promoting a safe and secure workplace

The Group conducts regular risk assessments at least once a year on machinery, equipment, and hazardous substances to identify and mitigate potential risks of occupational accidents and illnesses,



Human Resources Strategy

starting with priority items, in accordance with the Industrial Safety and Health Act. We also promptly share incidents of occupational accidents within the Group via our intranet to implement cross-departmental measures across all sites and prevent recurrence.

Promoting health management

The Group has a clear policy to strengthen its health investments. Alongside its traditional “Panasonic Health Promotion Activities,” each operating company is implementing its unique initiatives. In Japan, we are aligning with the Ministry of Economy, Trade and Industry’s “Certified Health & Productivity Management Outstanding Organizations” program, with all operating companies certified by March 2024. Additionally, Panasonic Connect and Panasonic Corporation have been recognized in the White 500, which honors the top 500 large enterprises for their exemplary efforts in this program.

Harassment prevention initiatives for ensuring thorough compliance (Japan)

To create a harassment-free workplace where everyone can take pride, the Group has strengthened its initiatives in line with laws such as the Gender Equality in Employment Act, Child Care and Family Care Leave Act, and Power Harassment Prevention Act.

- December is designated as Zero Harassment Month, during which we conduct awareness activities about harassment.
- We have implemented stricter disciplinary measures against harassment across the Group to deter such behavior.
- Consultation desks are established in each operating company to facilitate easy access for employees, ensuring that procedures are well known, including follow-up flows after a consultation. Necessary investigations and corrective actions are taken based on the consultor’s wishes to resolve issues and prevent recurrence.
- In July 2023, we conducted harassment prevention training for about 89,000 employees in Japan, including managers (across 113 consolidated companies, including PHD, PEX, and operating companies), with approximately 94% attendance rate. (The training covered the prevention of harassment and the handling of harassment reports.)
- We conducted a survey on harassment awareness alongside the training and published the results on the intranet.

Work with a sense of fulfillment

—Supporting self-motivated endeavors and self-directed career development

Development of management executives

For the Group to achieve sustainable growth, having a diverse range of management executives is essential. To ensure this, we are actively creating a long-term pipeline of successors. At the Group level, we focus on 23 key positions, including PHD executive officers and operating company presidents. Our approach is based on a policy of “earlier discovery” and “the right person for the right job,” fostering a diversity of management executives across different nationalities, career histories, genders, and ages.

As we promote this initiative, we have established specific personnel requirements based on the behaviors sought by PLP (11 items), experience (in managing businesses and international bases, business creation, etc.), and knowledge and skills (decision-making, judgment, strategic planning, and execution). In addition, to advance our development of management executives from the perspective of Groupwide optimization, we have created the Group Talent Management Committee. This Committee plays a crucial role in searching, developing, assigning, and monitoring successors for the 23 key positions. Currently, the Group Talent Management Committee is working on the career development of around 100 successors, chosen based on short-, medium-, and long-term perspectives. From fiscal 2025 onwards, we aim to enhance the quality, quantity, and diversity of this pool. This includes implementing comprehensive development programs such as training for executive candidates, building a global executive development framework in collaboration with different geographic regions, and conducting selective training for younger employees.

In addition, similar talent management committees have been established within each operating company. These committees are responsible for searching, developing, assigning, and monitoring successors for key positions, such as division heads, within their respective companies. This ensures that our development of management executives achieves Groupwide optimization and alignment.



Compensation system for PHD directors (excluding outside directors) and executive officers

The compensation system includes a fixed basic salary, performance-based compensation that reflects short-term and medium-term achievements (split into short-term and medium-term segments), and long-term incentives in the form of restricted stock compensation. Performance-based compensation amounts are based on financial metrics emphasized in our current medium-term plan (such as EBITDA, ROE, and operating cash flow on a consolidated basis), as well as individually set non-financial metrics. Restricted stock compensation has its transfer restrictions lifted immediately after the directors or executive officers retire, ensuring they share more closely in the value they create for shareholders through continued stock ownership. Presidents of our main operating companies who are key drivers of our Group’s corporate value also follow a compensation system aligned with that of our directors (excluding outside directors).

Human Resources Strategy

Recruitment

To fully leverage the Panasonic Group's brand, we conduct promotional messaging activities across the Group to advertise itself as an attractive place to work. Our recruitment brand slogan, "Dare ka no shi-awase no tame ni massugu hataraku (translation: We work with integrity to help all 'Live Your Best.')" reflects our culture, which values a diversity of challenges and talent development across the wide range of business fields and job categories in the Panasonic Group. We communicate the appeal of working with us at every opportunity to build a community of like-minded individuals.

PHD Website (relevant news release in Japanese) <https://news.panasonic.com/jp/press/jn240311-1>

Global expansion of recruitment selection

Starting in fiscal 2025, we are rolling out a global recruitment selection process based on the PLP. This aims to attract individuals who not only align with the Group's Basic Business Philosophy but also exhibit behaviors consistent with the PLP. We have designed the selection process, including criteria based on the PLP and standard interview methods, to be adaptable for each country, region, and company, considering their unique labor markets and management environments.

Panasonic Career Design Program (Japan)

We promote the Panasonic Career Design Program to help students consider their future careers at a suitable time, regardless of what year they are currently in, and expand their growth and potential through company engagement.

Overview of the Panasonic Career Design Program

Type of Program	Purpose	Target	Content (examples)
Open Company	To know about Panasonic Group	Students in college/graduate school	-Seminars -Videos and leaflets
Career Start	-To know oneself better -To think about career development	Students in college (freshmen or sophomores)	-Program in line with career education at universities -Program to learn about careers -Providing contents related to careers
Career Discovery	-To gain a deeper understanding about work through experience -To think about selecting a career path	Students in college (juniors or seniors)	-Workshop to experience job content -Program in collaboration with universities and industry
Internship	-To have a clear idea about the ability required for the work -To have a clear direction for career path	Students in college (juniors or seniors), and graduate school students	Opportunities to experience jobs by assignment to actual workplaces

Recruitment with an ensured initial assignment (Japan)

The Group continues to implement a recruitment system that guarantees initial assignment (business sectors/functions) upon job offer for all job categories within each operating company. This approach aims to support independent career development by clarifying the initial career path and preventing mismatches in business fields and job categories. Detailed job descriptions and required qualifications for positions at each operating company are published on the Panasonic Group recruitment website

(about 150 positions). This initiative has been positively received by job seekers and has increased their motivation to join the Group.

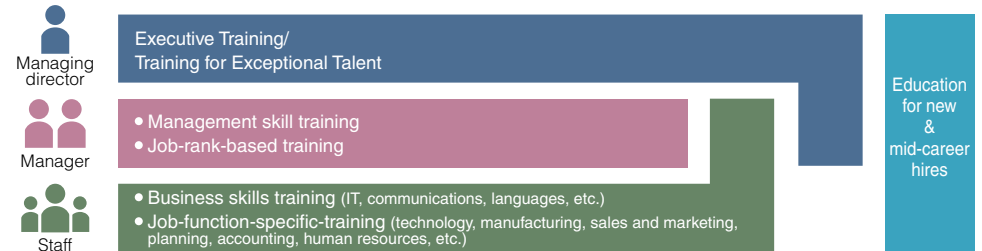
PHD website (recruitment information only in Japanese) <https://recruit.jpn.panasonic.com/newgrads/information/>

Human resource development

Core structure of human resource development

The Group's human resource development structure is built on numerous programs tailored by hierarchy and job type. These initiatives are primarily driven by individual operating sites and workplaces. We inspire personal growth in our employees through activities such as 1 on 1 meetings with supervisors. Daily, detailed on-the-job training forms the core of our development strategy. By combining the individual training with effective group training, we enhance and complement the knowledge, skills, and experience necessary for growth. We support employees in clearly envisioning their desired future selves and actively seeking learning opportunities, rather than just providing educational opportunities unilaterally.

Core training structure overview



Developing global talent

Our offices in various countries and geographic regions collaborate with Japan to plan and operate our own unique elective executive development training programs that strengthen business leadership. For example, in Europe, we run the Next Generation Talent Program (NGTP), a 12-month initiative that includes workshops on our Basic Business Philosophy and diversity, launching and promoting actual business projects, mentoring, and coaching. Participants work with peers from other European affiliates to enhance their overall business knowledge and skills. In India, we run the Middle Management Development Program (MMDP). In fiscal 2024, we formulated a training curriculum in partnership with the Indian Institutes of Management, with a total of 27 participants from India, Turkey, and other countries. In Japan, we host the Senior Management Development Program (SMDP) for senior managers (directors, GMs, and managers) from global regions, with 27 participants from 11 countries attending in March 2023. (The fiscal 2025 session was held in late July 2024.) Additionally, our Panasonic Global Mobility Policy supports inter-regional transfers, facilitating overseas assignments in Japan and other regions.

Human Resources Strategy

Evaluation and placement

■ Mechanism for rewarding individuals and organizations that take on challenges (Japan)

The Group has introduced the Role/Grade System, a grading system for jobs and roles that determines an individual's job placement based on the size of the job and role they are currently handling. The aim is to enhance the transparency and acceptability of the placements by evaluating diverse talents within the Group based on their current job and role size. This system also clarifies the goals for new challenges, encouraging individuals and organizations to actively and boldly take on challenges without fearing failure. Additionally, some operating companies are revising or restructuring their personnel systems to better suit their industries and markets. Through these efforts, we aim to create a vibrant organizational culture where individuals and organizations that take on challenges are rewarded.

■ Evaluation and compensation

The Group adopts a performance-based compensation system where the bonus levels for the current year are determined by reflecting the company's performance in the previous year. The degree to which company performance influences compensation decisions increases with higher executive levels. Additionally, individual bonus amounts are determined by reflecting the individual's performance in their respective duties from the previous year. By reflecting both company performance and individual achievements within a certain range in compensation, we aim to motivate employees towards performance and achievement improvements.

Transfers and assignments

The Group believes it is crucial to provide and fully support opportunities for each individual to voluntarily take on challenges that make contributions to society. In Japan, we promote initiatives such as "A Better Dialogue," open recruitment transfers, career and life design seminars, and career consultations. Globally, we also promote global mobility.

■ A Better Dialogue (dialogue between individuals and supervisors)

A Better Dialogue is a Groupwide initiative aimed at supporting the growth and challenges of each individual by enhancing the quality and quantity of dialogue between individuals and their supervisors. This initiative consists of 1 on 1 meetings to draw out individual thoughts, and three mechanisms: development of individual career and capabilities, goal setting and management, and behavior review using PLP. We promote the provision of various dialogue opportunities, and achieved an implementation rate of 83% and a satisfaction rate of 84% in Japan in fiscal 2024. In addition to daily communication, we are enhancing the implementation rate of 1 on 1 meetings through awareness activities for managers and employees and the dissemination of good practices in the workplace. We aim to maximize the individuality and abilities of each employee, enhance their job satisfaction, and provide opportunities to challenge themselves and thrive by enriching their experiences in various stages, from onboarding, career development, and evaluation to promotion, transfers or relocations.

■ Internal open recruitment

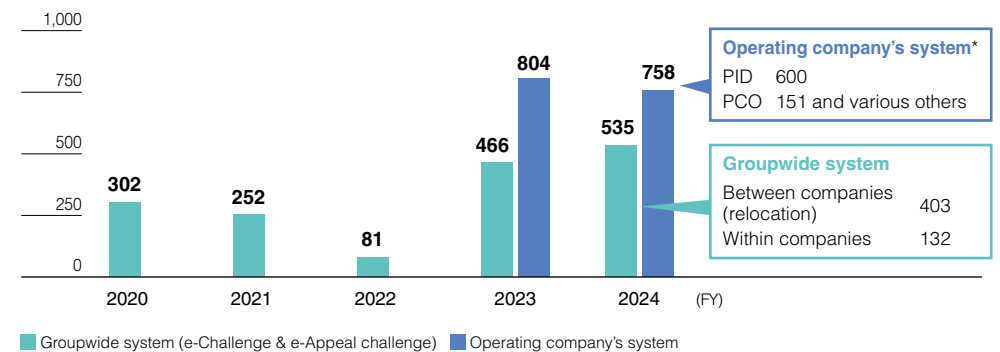
One mechanism supporting self-motivated endeavors and self-determined career formation is the open recruitment system. As common systems across the Group, we have e-Challenge, e-Appeal, and dual employment, allowing personnel exchanges across companies even after transitioning to an operating company system.

- e-Challenge: An open recruitment system for applications for open positions. Based on the application guidelines published by the operating divisions, individuals will determine whether or not they will take on the challenge.
- e-Appeal Challenge : A system where individuals can appeal directly to their desired departments. By showcasing their strengths to the desired department, individuals can take on new work challenges.
- Multiple Internal Role: A system for an opportunity to work at another department by applying for an open position within the Group while working in the current department. This system is intended to stimulate the personal growth of employees through trying out their abilities or potential.

In fiscal 2024, 1,692 employees applied for e-Challenge and e-Appeal Challenge, with 525 taking on the challenge. Additionally, 46 employees took on dual employment. Furthermore, unique open recruitment systems at operating companies are also becoming more active. Panasonic Industry, Panasonic Connect, and Panasonic Housing Solutions have introduced open recruitment transfers and promotions, allowing individuals to apply for managerial and higher-grade positions if they meet the application criteria. In fiscal 2024, a total of 758 people took on the challenge.

(Details vary by operating company.)

The Number of Internal Open Recruitment



*PID, PCO, and PHS have introduced a transfer/assignment system for internal open recruitment. Employees who meet the conditions for the requirement can apply for managerial or higher positions (depending on the operating company). Target employees: those in PHD, PEX, and the seven operating companies.



Human Resources Strategy

Work together by giving full play to all individuality

—Promoting diversity, equity, and inclusion (DEI)

The Group is promoting DEI from three perspectives, anchored by the Panasonic Group DEI Policy established in 2021. The first perspective is top management commitment. This means that our executives are committed to promoting DEI by incorporating it into our business strategies. The Group DEI Promotion Council meets regularly to determine actions and accelerate initiatives through dialogue between management and employees. The second perspective is creating an inclusive work environment. This involves recognizing and leveraging the diverse individuality of our employees through management and organizational settings. For example, we are promoting unconscious bias training in various geographic regions. The third perspective is support for every individual. We aim to support every individual with diverse characteristics, enabling them to face their challenges. This includes supporting community activities and building or revising systems and frameworks for various attributes such as women, LGBTQ+, people with disabilities, older employees, and those with childcare or caregiving responsibilities.

For information on employee-led community activities, please refer to the DEI website to check the various community activities. (only in Japanese) <https://holdings.panasonic.jp/corporate/sustainability/diversity-equity-inclusion/inclusive/community.html>

Support for every individual (Japan region)

■ Promoting diverse working styles

The Group aims to maximize results by accelerating innovation and enhancing competitiveness through improved productivity from an organizational perspective and achievement of well-being from an individual perspective. From the organizational perspective, we optimize the balance of in-office and remote work based on the situation of each business and the field each employee is involved in, thereby improving productivity. From the individual perspective, expanding the choices of the time and place to work contributes to realizing well-being. Many employees are striving to continue challenging themselves despite various circumstances. We aim to expand the options for working time and location to support each individual's efforts to grow and face challenges, ensuring that everyone can continue their careers without giving up.

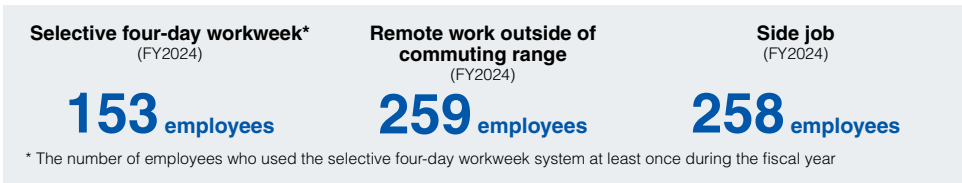
DEI website: Support for every individual—Diverse working styles and work-life balance <https://holdings.panasonic/global/corporate/sustainability/diversity-equity-inclusion/support-worklifebalance.html>

■ Expanding choices for the time and place to work

Each Group company is working on expanding options for working styles that support career and work-life balance. For example, by abolishing the minimum daily working hours, employees can flexibly choose their working hours and days, making flexible working styles (such as three-day or four-day workweek system) possible. By introducing such working styles and expanding work systems for career development, we support individuals in their self-determined career formation through external

side jobs, volunteering, self-learning, and more. Additionally, promoting fully remote work allows employees to work from places outside of commuting range, expanding the options for work locations. This supports the balancing of life events such as childcare, caregiving, or partner career transfers.

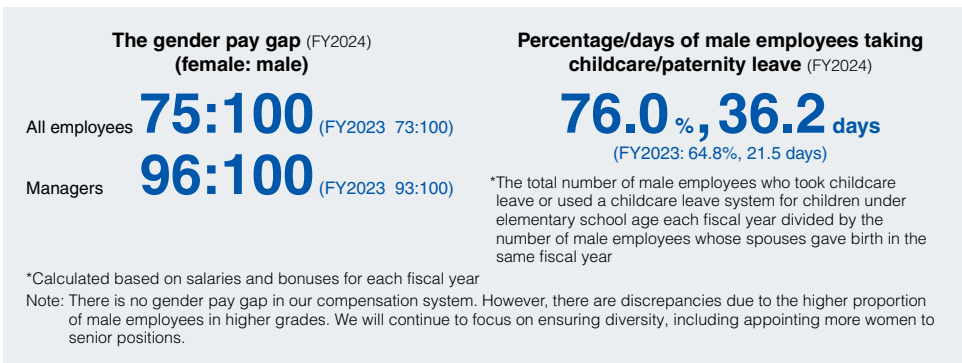
We also promote various and flexible working styles by expanding systems that allow employees, regardless of working style or attribute, to take annual paid leave in half-day or hourly increments, and to allocate time off during work hours, including breaks.



■ Promoting gender equity

The Group has no gender pay gap in our compensation system. However, particularly in Japan, we recognize the need to appoint more women to senior management and decision-making positions to ensure diversity. In addition to creating an inclusive work environment, we are reviewing evaluations and appointments from an equity perspective. We also hold study sessions for female employees and career stretch seminars for female leaders, and provide opportunities to learn from the values and work perspectives of role models.

At the end of fiscal 2022, we established guidelines within the Group to ensure fairness in managerial appointments and to reduce the burden of the selection process. Evaluations are also conducted based on the duration and hours worked, rather than a uniform one-year period, to accommodate diverse working styles.





Human Resources Strategy

Respect for Human Rights

For more details, please refer to "[Respect for Human Rights](#)" in our Sustainability Data Book 2024.

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 6.)

Policy

The Group has established the Panasonic Group Human Rights and Labour Policy (hereinafter referred to as the "Human Rights and Labour Policy"). This policy states that, predicated on compliance with international standards and the laws and regulations of each country that apply to our business activities and transactions, we are committed to respecting internationally recognized human rights; identifying, preventing, and correcting human rights violation risks; promoting remedy and other measures for victims; creating a rewarding working environment; and engaging in dialogue on these issues with various stakeholders. Following this policy, we have established internal rules, developed a promotion system, and advanced specific initiatives for respecting human rights and creating a rewarding work environment. We will regularly, and where necessary, review and improve the policy based on the opinions of external experts as well as stakeholders and their representatives affected by our business activities. Most recently, we revised the Human Rights and Labour Policy in August 2023 under the advisement of internal and external experts. This revision was meant to respond to the addition of occupational health and safety principles to the ILO Declaration on Fundamental Principles and Rights at Work, and for the

purpose of enhancing and consolidating efforts aimed at preventing forced labor in the supply chain. Moreover, the Panasonic Group Code of Ethics and Compliance ("Code of Ethics and Compliance") defines the commitments that all Group employees* must fulfill and positions respect for human rights as our social responsibility. We strive to raise awareness of this responsibility. In fiscal 2024, we provided trainings for all employees, with 150,000 taking part.

Also, with the aim of deepening an understanding of the Group's initiatives, including our Human Rights and Labour Policy, we run training sessions for managers of key departments and manufacturing sites in Asia mainly engaged in production activities.

*This collectively refers to all regular and contract employees having employment relationships with any Panasonic Group company, all temporary staff and seconded employees working under the control and supervision of any Panasonic Group company, and all board directors, executive officers, executive counselors, fellows, corporate auditors, supervisory board, and corporate advisors or equivalent person appointed by any Panasonic Group company. The definition also includes employees of key companies subject to some Group HR and other systems.

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) (as of August 2024). 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 the fiscal year ended 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 refer to "Corporate Governance" on page 46 for information about compensation.)

Crucial human rights issues are discussed by the Sustainability Management Committee, which is chaired by the Group CEO, and then reported to the Group Management Meeting and the Board of Directors. The Board of Directors also oversees these issues. In fiscal 2023, the committee discussed the responses to legislation in various countries regarding human rights and labor, and, in fiscal 2024, the Committee discussed the challenges in the Social-related information disclosure.

We have established an organization overseeing the Group's day-to-day efforts to respect human rights through human rights and labour initiatives within the Strategic Human Resources Department* under the Panasonic Holdings (PHD) CHRO. This organization works with all Group Operating Companies to promote initiatives at business sites in cooperation with related HR-centric functions.

*Starting April 1, 2024, the Social Sustainability Department will oversee the Group's human rights and labour initiatives after a reorganization. For detailed information about our initiatives in the supply chain, please refer to "Respect for human rights in the supply chain" on page 32.



Human Resources Strategy

Human rights due diligence

In line with the guiding principles of the United Nations, and with reference to the guidance of the OECD (Organisation for Economic Co-operation and Development), the Group conducts its own human rights due diligence. Also, in formulating the mechanisms and processes for due diligence, we incorporate the input of external experts and stakeholders.

We recognize the need to identify human rights issues in our business activities, including the value chain, which is why we have started analyzing priority issues. As we operate globally in a broad range of business fields, some of our businesses have extensive supply chains and we recognize the risk that workers at the Group's manufacturing sites and in the supply chain may be in vulnerable positions or unsafe working environments depending on the country or region. We therefore begin with the initiatives at our manufacturing sites and in the supply chain. We are engaged in dialogue, discussions, and collaboration with stakeholders from within and outside the Group regarding established frameworks and how to continuously improve them. Moreover, our initiatives are appropriately disclosed on our website, in our reports, and through other communication channels.

Since fiscal 2022 we have conducted detailed self-assessments of human rights and labor 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 the list before conducting another round of detailed self-assessments at some domestic manufacturing sites that were selected by our operating companies alongside our overseas manufacturing subsidiaries. By the end of March 2024, we had completed the corrective actions of issues identified in these self-assessments, particularly the inadequacies in the contracts between Group companies and recruitment agencies pertaining to the employment of foreign workers. In fiscal 2024, we conducted detailed self-assessments, including monitoring the progress of how issues identified in the previous year are being corrected, at all domestic and overseas manufacturing companies and sites in the Group. We collected questionnaires from nearly all the entities (202 in total). We will evaluate the results and the subsidiaries or sites in question will complete the corrective actions of any identified issues by the end of fiscal 2025.

In order to prevent the occurrence of the issues identified through the human rights due diligence process, we hold regional and thematic trainings. In fiscal 2024, in Malaysia, we delivered training on the prevention of forced labor to the management teams in Malaysia and Singapore, as well as personnel in charge of HR, accounting, procurement, legal affairs, and manufacturing from both countries (240 people in total). Also in Malaysia, in collaboration with the United Nations Development Programme (UNDP), we ran workshops for senior management about the Group's human rights initiatives, including business and human rights, the basics of human rights due diligence, and the Group's Human Rights and Labour Policy (182 people in total). A post-training survey indicated that the training helped improve

understanding of human rights due diligence and of the need for further engagement with employees and business partners. On the other hand, challenges in executing human rights due diligence were also identified. We will continue to identify priority issues and regions, and conduct appropriate training.

For details of our supply chain initiatives, please refer to "Respect for human rights in the supply chain" on page 32.

Grievance mechanism

In order for us to respond quickly to remedy any complaints we receive related to human rights violations, we have established a global hotline (supporting 32 languages) as a point of contact to which our employees and external stakeholders (including business partners) 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.

(Please refer to "Whistleblowing System" on page 45.)

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.

The Group proactively communicates its views on efforts to respect human rights through liaison with Japanese and international organizations. In fiscal 2024, PHD personnel participated in the Business and Industry Advisory Council (BIAC; an OECD public advisory body), led the Corporate Sustainability Committee of the Japanese Business Council in Europe (JBCE) as vice-chair, and continued contributions to policies related to human rights and sustainability due diligence in Europe. PHD has also provided speakers at the Responsible Business, Human Rights and Decent Work in Asia conference co-hosted by the ILO and the Ministry of Economy, Trade and Industry (METI) and a human rights conference organized by the Human Rights Commission of Malaysia (SUHAKAM).



Human Resources Strategy

Column

Respect for human rights in the supply chain (For more details, please see the "Responsible Supply Chain" chapter on page 109 of the Sustainability Data Book 2024.)

The Panasonic Group procures parts and materials used in the production of products from approximately 13,000 suppliers worldwide and is working with these suppliers to build a sustainable supply chain. We endeavor to conduct business with suppliers who fulfill their social responsibilities, such as respecting human rights, taking environmental impacts into account, maintaining healthy workplace environments, and engaging in fair transactions.

Framework

To respect human rights in the supply chain, and in keeping with the Panasonic Group Human Rights and Labour Policy, each operating company undertakes responsible procurement activities by implementing the PDCA cycle. The Global Procurement Division of Panasonic Operational Excellence Co., Ltd. is responsible for planning Groupwide measures and supporting the efforts of each operating company, mainly for auditing suppliers and requesting them to conduct self-assessments.

Supply chain due diligence

We abide by international norms and principles, including the United Nations' Guiding Principles on Business and Human Rights, and we request that suppliers endorse the Panasonic Group Code of Ethics & Compliance and the Panasonic Group Human Rights and Labour Policy. We also provide suppliers with a copy of the Panasonic Supply Chain CSR Promotion Guidelines (hereinafter, CSR Guidelines), which summarizes our CSR procurement requirements, and we make it mandatory for suppliers to comply with them through contracts and the like. We request existing suppliers to submit a letter of consent stating that they will comply with the CSR Guidelines. In addition, we request suppliers to communicate the requirements of the CSR Guidelines to their downstream suppliers and to confirm their compliance. For more details, visit the website "Procurement / For suppliers", whose URL is provided at the end of this page.

Furthermore, we periodically request suppliers to conduct CSR self-assessments. If issues such as the working conditions of migrant workers are identified in these assessments, we conduct audits mainly in the form of on-site inspections and interviews as necessary, and urge the supplier in question to take corrective actions. Since fiscal 2023, under the guidance of external experts, we have compiled a table to assess human rights risks among suppliers using risk indicators and indices published by international organizations. This allows us to identify suppliers for which action should be prioritized. In fiscal 2024, using this risk-based approach, we conducted supplier audits, either by ourselves or through a third-party organization, on a total of 141 companies (including 16 companies audited by a third-party organization). As shown in the examples in the table to the right, we request improvements from suppliers regarding the issues identified in supplier audits and confirm their progress on making such improvements.

Responsible minerals procurement

The Panasonic Group engages in the responsible procurement of minerals across the entire supply chain, particularly when it comes to tin, tantalum, tungsten, gold, cobalt, and mica, given the risk that

they can be the source of funds for armed insurgents in conflict affected areas and the various risks of human rights violations, child labor at mining sites, harsh working conditions, environmental destruction, and corruption in high-risk regions. We participate in the Responsible Minerals Initiative (RMI) and JEITA's Responsible Minerals Procurement Working Group, and we have requested over 3,000 suppliers to complete industry-standard surveys (CMRT and EMRT) issued by the RMI. We have collected responses from roughly 93% of these suppliers. If minerals associated with conflicts or violations of human rights are found in our supply chain, we ask our suppliers to take steps toward no longer using them. We also encourage refiners and smelters to participate in the Responsible Minerals Assurance Process (RMAP) through industry initiatives.

Internal training and external awareness-raising activities

We hold regular training sessions for procurement department employees on the basic aspects of CSR procurement, including human rights, labor practices, and health and safety in the supply chain. In the previous fiscal year, we ran a total of 11 sessions in Japan and overseas to train auditors tasked with conducting supplier audits. A total of 152 individuals were trained for this role. Also, we held six human rights due diligence workshops in collaboration with the United Nations Development Programme (UNDP) in Malaysia. Of the approximately 500 suppliers in Malaysia, 207 suppliers (228 people) with considerably large transaction volumes attended these workshops.

Systems for whistleblowing and seeking consultation

We have established a global hotline called EARS so that employees of the Group and its suppliers can anonymously report any kind of misconduct by the Company. We also have access to the industry-wide grievance platform known as JaCER, which serves as a contact point for suppliers or their employees to report any adverse impacts on human rights in the supply chain. We ensure that our suppliers are aware of these reporting systems by providing information about them on our supplier web portal and on the "For Suppliers" page of our website.

In addressing the human rights issues at our suppliers that have been reported via the contact point mentioned above, we have conducted audits through a third-party organization and verified that corrective actions have been undertaken by the suppliers in question.

Procurement / For suppliers
<https://holdings.panasonic/global/corporate/about/procurement/for-suppliers.html>

Global Hotline
<https://secure.ethicspoint.eu/domain/media/en/gui/104773/index.html>

Grievance mechanism of the Japan Center for Engagement and Remedy on Business and Human Rights (JaCER)
<https://jacer-bhr.org/en/index.html>

Examples of findings in supplier audits

Category	Example
Labor	Records of working hours, break times, and overtime hours have not been properly managed
Human rights	No break room has been provided that guarantees privacy for women
Health and safety	Evacuation routes in case of an emergency are unclear

Environment and Technology Strategy

Message from the Group CTO



Creating a world you would never see without us

Tatsuo Ogawa
Executive Officer
Group Chief Technology Officer (Group CTO)

Since 2021, as the Group CTO, I have been in charge of mainly technology development, the environment, and intellectual property, aiming to guide the Panasonic Group towards the realization of “an ideal society with affluence both in matter and mind” by harnessing the power of technology.

Based on the firm belief that R&D only has value when it makes a contribution to customers, or in other words, when it proves useful in business, together with the technology, design, and brand departments, we launched a new initiative to formulate our “Technology Future Vision”—a future concept for the vision for the year 2040. We aim to realize “Co-caring society built on thoughtful choices”.

Guided by this direction, we are also focusing our efforts on identifying and reinforcing the areas of technology right across the Group that need to be strengthened. In addition, we have long led the industry with a focus on the standardization of new technologies in each era; for example, we have helped develop industry and international standards for home appliances, devices, and industrial equipment.

Particularly regarding the environment, in line with the Panasonic GREEN IMPACT, we are practicing environmental sustainability management with a view to achieving carbon neutrality and a circular economy. As part of our efforts to recognize and add value to avoided emissions*1, we participate in international initiatives to discuss the social significance of avoided emissions and the need for international standardization. We also continue to proactively communicate our stance to the public at international events such as COP*2 and CES*3. Also, in response to the ongoing global adoption of sustainability-related regulations, we are working to visualize CO₂ emissions and circular economy-related data across the entire value chain (Scopes 1, 2, and 3) and accelerating efforts to formulate and implement a sustainable business strategy. In addition, we will press ahead with nature-positive initiatives, including those that benefit biodiversity, which has become an increasingly important issue in recent years.

*1 The difference in emissions over the entire lifecycle between continuing to use existing products and services and newly introducing products and services that contribute to reductions in CO₂.

*2 Conference of the Parties of UNFCCC (United Nations Framework Convention on Climate Change).

*3 The world's largest technology trade show held in Las Vegas every January.

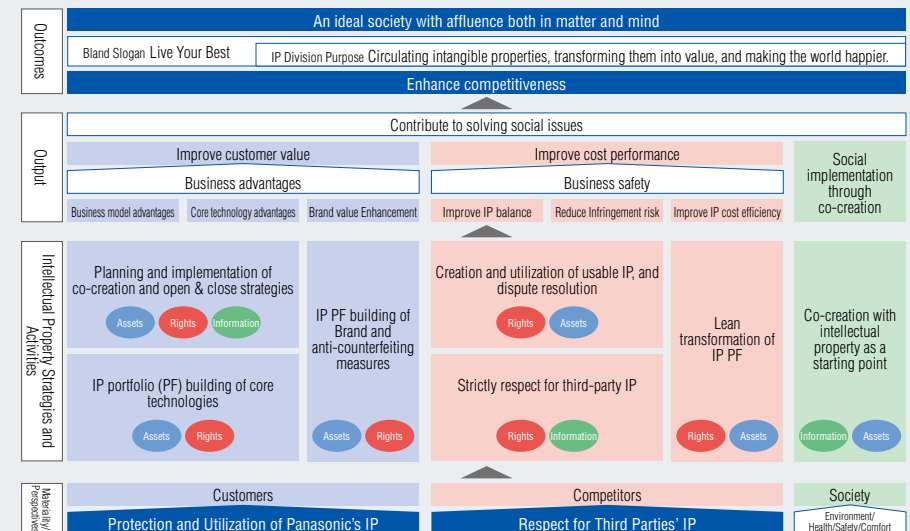
As for intellectual property (IP), in line with the Purpose of the Intellectual Property Department, “Circulating intangible properties, transforming them into value, and making the world happier,” we are focused on the distribution of intangible assets (including IP) and co-creation, towards solving social issues. For example, through initiatives like the Technology Index, which we publicly released in September 2023, we are promoting the matching of our intangible assets with external co-creation partners. In this way, especially in fields such as the environment and lifestyle where one company alone will struggle to deliver solutions, we hope to lead the way in helping to solve social issues by collaborating with external partners.

Following discussions about intellectual property at the meetings of the Board of Directors, we have formulated “Intellectual Property Strategy Framework” (Fig. 1). As illustrated, our IP strategies and activities lead to such outputs as “improvements in customer value”, “improvements in cost performance,” and “social implementation through co-creation.” They not only enhance our competitiveness, but also lead to the aforementioned Purpose of the Intellectual Property Department and our brand slogan.

Going forward, we will continue to propel both IP strategies and activities as we work towards realizing our goal of “an ideal society with affluence both in matter and mind.”

Please look forward to our efforts and challenges to promote technological development, new business creation, and environmental sustainability management, that will support the future of our Group.

Figure 1: Intellectual property strategy framework



Environment and Technology Strategy

Medium-term management plan

Environmental action plan — GREEN IMPACT PLAN 2024 (extract)

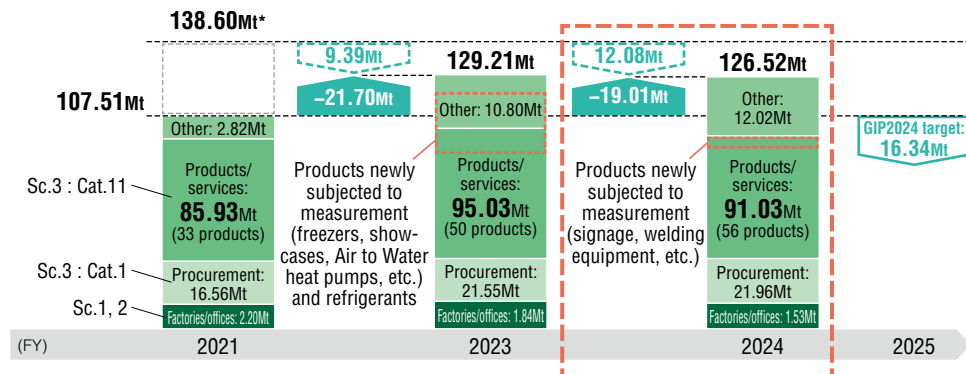
As milestones in reaching the 2050 targets set in “the Panasonic GREEN IMPACT”, our long-term environmental vision, we set out the fiscal year ending March 31, 2031 (fiscal 2031) target linked to our Groupwide business strategy, and formulated “the GREEN IMPACT PLAN 2024 (GIP 2024)”, the three-year environmental action plan from fiscal 2023 to fiscal 2025, for which we are working on.

Progress on the GREEN IMPACT PLAN 2024 is shown below in the form of fiscal 2024 results.

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

Item		Fiscal 2021 results	Fiscal 2024 results	Fiscal 2025 targets	Fiscal 2031 targets
GREEN IMPACT PLAN 2024					
CO ₂ /Energy	OWN IMPACT Emissions reduction in our own value chain*1	—	-19.01 Mt*8 (12.08 Mt)	16.34 Mt	
	Scope 1, 2 *2	Cumulative 7 factories	Cumulative 44 factories	Cumulative 37 factories	31.45 Mt*7
	Zero-CO ₂ factories				
	CO ₂ reductions	—	680 kt	260 kt	
	Scope 3 *2 (category 11)	CO ₂ reductions in use of our products by customers	—	-5.10 Mt	16.08 Mt
CONTRIBUTION IMPACT *Avoided emissions” (contribution to reducing CO ₂ emissions for society) through existing businesses *3		23.47 Mt	36.97 Mt	38.30 Mt	93.00 Mt
Resources/CE* *Circular Economy	Factory waste recycling ratio *4	98.7%	99.3%	99%	
	Recycled resin used *5 (GIP2024 target is total over fiscal 2023–25)	Fiscal 2000 to 2022 total 43.3 kt	Fiscal 2023 to 2024 total 29.6 kt	Fiscal 2023 to 2025 total 90 kt	
	Circular economy business models and products*6 (Cumulative)	5 businesses	13 businesses	13 businesses	

CO₂ emissions and reductions in our own value chain (tons)

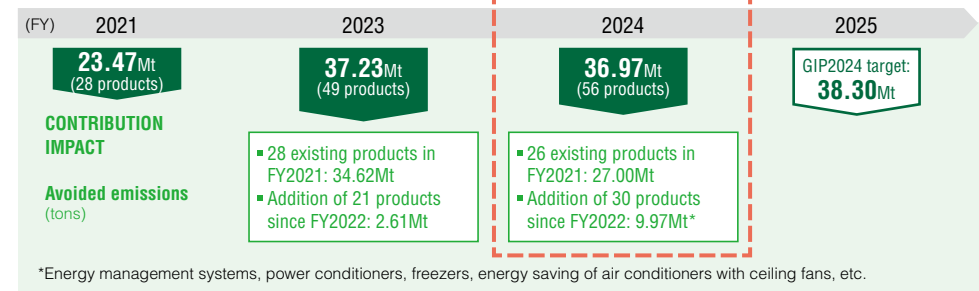


*If calculated with the businesses subject to measurements in fiscal 2024

The addition of products subjected to measurement meant that CO₂ emissions in our own value chain overall (Scopes 1, 2, and 3) rose from roughly 107.51 million tons in fiscal 2021 to around 126.52 million tons, an increase of 19.01 million tons (negative in OWN IMPACT). However, a comparison with the businesses subject to measurement in fiscal 2024 shows that we have achieved a reduction of 12.08 million tons since fiscal 2021.

For Scopes 1 and 2, owing to advancements in energy saving and renewable energy, 44 of our factories now have zero CO₂ emissions, contributing to a reduction of 680,000 tons. For Scope 3, category 11 (CO₂ emissions from the use of products sold), emissions increased by 5.10 million tons from fiscal 2021 due to the addition of products newly subject to calculations and higher sales. We will actively pursue improvements in accuracy by reviewing the calculation scope and calculation method for Scope 3 in order to accurately recognize where we can reduce our emissions as part of our responsibilities.

Avoided emissions (contribution to reducing CO₂ emissions for society) (tons)



*Energy management systems, power conditioners, freezers, energy saving of air conditioners with ceiling fans, etc.

Meanwhile, the “avoided emissions” that have helped lower CO₂ emissions for customers and society remained mostly flat from last fiscal year at 36.97 million tons, mainly because the calculation scope for EV batteries was expanded and refined to cover the entire lifecycle, even though the number of our products had increased from 28 products in fiscal 2021 to 56 in fiscal 2024.

As for resources and the circular economy (CE), we maintained our waste recycling rate of 99%, while the two-year cumulative amount of recycled resin used came to 29,600 tons. Achieving the three-year cumulative target of 90,000 tons will prove challenging, but we continue to strengthen the stable supply chain, from the collection of waste plastic through to its reprocessing and reuse. With the launch of three new businesses, we now have a total of 13 CE business models, which means we have achieved our fiscal 2025 target ahead of schedule.

*1 Includes all Scope 3 categories

*2 Categories based on the GHG Protocol (Corporate Accounting and Reporting Standard)

*3 The amount obtained by subtracting the emissions after the introduction of the Group’s products and services from the lifecycle emissions assuming they were not launched; emission factor for electricity calculated according to the IEC 2021

*4 Volume of resources recycled ÷ (volume of resources recycled + final disposal volume)

*5 The mass of recycled materials contained in the recycled resin used in the Group’s products

*6 Number of new businesses based on our definition (record of sales/disclosure of CE-related data)

*7 Emission factor for electricity calculated according to the 2°C scenario in the IEA’s World Energy Outlook

*8 Upper figures: Comparison between results of adding the amount of newly quantifiable products in each fiscal year with the original fiscal 2021 results

Lower figures: Comparison between results reflecting the amount of newly quantifiable products in each fiscal year with the base year of fiscal 2021 in the same product scope

Environment and Technology Strategy

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

Initiatives to reduce CO₂ emissions in Panasonic's value chain

In the Panasonic GREEN IMPACT, we aim to reduce the CO₂ emissions (Scopes 1, 2, and 3) of approximately 107.51 million tons*¹ in our own value chain to net zero by 2050 as "OWN IMPACT" to achieve carbon neutrality in business activities.

As a milestone, by fiscal 2031, we aim to achieve net-zero CO₂ emissions*² at the sites of all operating companies and to reduce CO₂ emissions from the use of products sold by the Group by 30% compared to fiscal 2020. In the medium-term environmental action plan, GREEN IMPACT PLAN 2024 (GIP2024), we have set ourselves the target of reducing emissions across the entire value chain by 16.34 million tons by fiscal 2025 compared to fiscal 2021.

The Group has realized zero CO₂ emissions at a total of 44 factories since fiscal 2019, with 13 factories newly achieving this status in fiscal 2024. We have therefore achieved our fiscal 2025 target of 37 zero-CO₂ factories set in GIP2024 ahead of schedule. As an example, Panasonic Energy Co., Ltd. relocated its dry batteries factory in April 2023 to Nishikinohama in Kaizuka City, Osaka Prefecture. Photovoltaic panels with the capacity to generate roughly 2MW of electricity were installed on the roofs of the factory, and through a PPA contract, the factory's CO₂ emissions were reduced by around 1,000 tons per year, thus achieving net-zero CO₂ emissions from the time operations came online. Going forward, pure hydrogen fuel cells and storage battery systems will be installed to accelerate efficient and clean manufacturing. In recognition of these initiatives, Panasonic Holdings Corporation and Panasonic Energy were jointly awarded the METI Minister's Award, the highest accolade in the 2023 New Energy Awards*³.

With many business sites in China, the Panasonic Group has been earnestly promoting a three-year energy-saving support initiative in the country since fiscal 2023 with the aim of realizing efficient energy-savings across the entire region in line with China's long-term state policy. More specifically, at our model sites we are lowering CO₂ emissions by undertaking energy-saving assessments in collaboration with experts from within and outside the Group and strengthening the training of personnel to equip them with extensive knowledge of energy saving. We are sharing best practices in each region to ensure that energy-saving actions are being properly implemented at each business site, and we are also endeavoring to make energy-saving initiatives more visible and efficient. To realize even more zero-CO₂ factories, we will continue to press ahead with energy-saving efforts at high speed and at low cost in a bid to enhance the level of energy saving in global regions.

Curbing CO₂ emissions from the use of products sold is the Group's greatest responsibility in mitigating climate change. Last fiscal year, to refine the scope of our responsibilities, we proactively added six products, including signage and welding equipment, to the range of calculations. Still, partly owing to our efforts to reduce emissions from large products such as lighting, air conditioners, and refrigerators, we managed to achieve a reduction of 4 million tons in fiscal 2024, bringing our emissions down to 91.03 million tons from 95.03 million tons in the previous fiscal year.

CO₂ emissions from the products and services we purchased amounted to 21.96 million tons*⁴. As part of our green procurement policy, we request our suppliers to urge their upstream suppliers to practice green procurement in order to popularize efforts aimed at reducing environmental impacts throughout the entire supply chain. In fiscal 2024, we once again sent out documents to our approximately 13,000 global suppliers to deepen their understanding of, and gain their cooperation on, the Panasonic GREEN IMPACT as part of our efforts to tackle global environmental issues through collaboration with our suppliers.

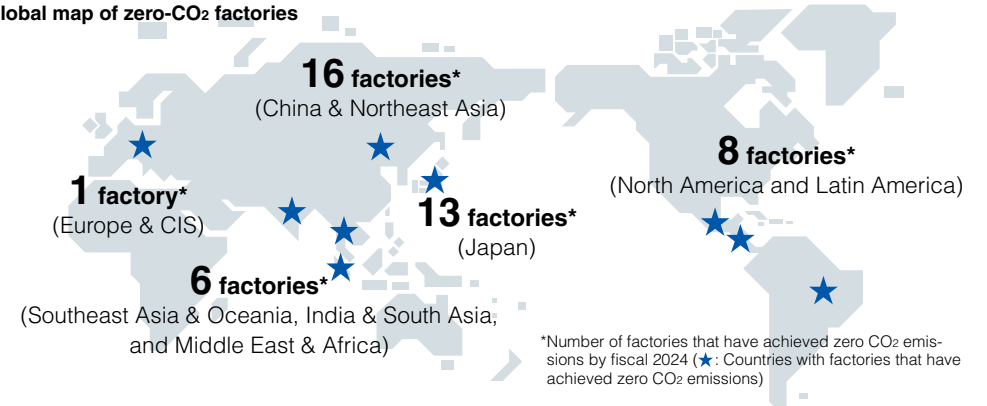
*1 FY2021 result

*2 Factories at which we have achieved net-zero CO₂ emissions from business activities through energy-saving efforts and the use of carbon credits and green energy certificates

*3 Hosted by the New Energy Foundation; the awards recognize outstanding products in the field of new energy and efforts aimed at adopting/raising awareness about new energy

*4 FY2024 result <https://holdings.panasonic/global/corporate/sustainability/pdf/sdb2024e.pdf>

Global map of zero-CO₂ factories



令和5年度
新エネルギー賞
経済産業大臣賞



(専任活動部門)
主催：一般財団法人新エネルギー財団

The METI Minister's Award of the 2023 New Energy Awards



Photovoltaic power generation system at the dry batteries factory in Nishikinohama

Environment and Technology Strategy

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

As we work towards creating impacts that contribute to a reduction in emissions worth 93 million tons by fiscal 2031, our reduction contribution of 36.97 million tons in fiscal 2024 mainly breaks down as follows. Approximately 14 million tons from electrification, such as EV batteries and Air to Water heat pumps, roughly 11 million tons from more efficient energy use, including air conditioners, lighting, and refrigerators, and some 2 million tons from the optimization of energy use, mainly owing to heat exchange systems, energy management systems, and other similar solutions. Primarily by developing products that make efficient use of electrification and energy, we will contribute to the reduction of CO₂ emissions in various fields worldwide.

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

The electrification of mobility is a significant driver of the carbon neutrality movement and the global transition to EVs will continue for a long time to come, however, growth in North America has temporarily slowed due to such factors as the cost of batteries for the most popular EVs, the development of energy supply infrastructure, and the planned relaxation of exhaust gas emission standards from 2027. Even over this period, in our automotive battery business, we aim to achieve net-zero CO₂ emissions by fiscal 2029, strengthen our customer base, improve productivity, and evolve our technological infrastructure with a view to establishing a robust competitive foundation. We aim to minimize CO₂ emissions across the entire lifecycle of batteries and plan to achieve net-zero CO₂ emissions at all of our sites in Japan in fiscal 2025.



Building our Kansas Factory for more EV battery production capacity (as of April 2024)

In the European market, where increasingly more consumers are switching from gas to electricity as an energy source, we are expanding our air quality & air-conditioning business with a focus on Air to Water heat pump systems that help lower CO₂ emissions. By visualizing and analyzing data accumulated by the apps and cloud services provided worldwide, we can remotely monitor the Air to Water systems of customers to deliver efficient equipment maintenance services.

Promote/optimize efficient use of energy

The Electric Works Company of Panasonic Corporation undertook a ZEB renovation of the Panasonic Kyoto Building in April 2023 as a case example of how an existing building can be transformed into a net-zero energy building. The building has now achieved the status of "ZEB Ready," which means that it has reduced its primary energy consumption by more than 50%. As a result, the development of this superior energy-saving performance was recognized in the 2023 Energy Conservation Grand Prize, with Panasonic Corporation collecting the highest possible METI Minister's Award*¹. In addition, one of Panasonic Corporation's top-selling products, the Hair Dryer nanocare, now uses less energy because its quick-drying performance has continued to evolve year after year. By enhancing airflow efficiency and optimizing the way air is delivered to shorten the drying time, we have been able to integrate advancements in dryer performance with avoided emissions.

*¹ Hosted by the Energy Conservation Center of Japan; the Panasonic Group won six awards in fiscal 2024

Column

Driving greater awareness and value of avoided emissions

Avoided emissions, which account for two thirds of the reduction impact established as a goal of the Panasonic GREEN IMPACT, refer to the difference in GHG emissions between the continued use of existing products and services and the introduction of new products and services. They quantify our contributions to mitigating the impacts of climate change in society as a whole. The Panasonic Group is spearheading discussions around the social significance of avoided emissions and the need for international standardization by involving government, industry, and financial sector players to ensure that avoided emissions are appropriately recognized as part of a company's contribution towards decarbonization. As a result of our efforts to continuously promote the significance of avoided emissions and the need for international standardization at various international events, the document agreed upon at the G7 Ministers' Meeting on Climate, Energy and Environment in Sapporo in April 2023 clearly stated that there is value in acknowledging "avoided emissions", while the document that was issued after the G7 Hiroshima Summit in May said that "We also encourage and promote private entities' work to foster innovation contributing to the emission reduction of other entities through decarbonization solutions." Since then, we have continued to drive societal awareness and add value to the concept of avoided emissions. For example, at the Japan Pavilion*¹ of COP28 held in Dubai in December 2023, we showcased some of the cutting-edge environmental technologies behind our Panasonic GREEN IMPACT vision, participated in seminars and panel discussions, and in the Group's Sustainability Data Book published in August 2023, we disclosed case examples and calculation formulas for avoided emissions for the very first time. Also, through our participation in the IEC (International Electrotechnical Commission), the GX League, and the WBCSD (World Business Council for Sustainable Development), we are engaged in standardization activities and the development of guidance with the goal of creating international standards for calculating avoided emissions.

*¹ <https://news.panasonic.com/global/stories/15089>



Group CEO Yuki Kusumi (second from left) taking part in a seminar hosted by Japan's Ministry of Economy, Trade and Industry at the Japan Pavilion of COP28

Environment and Technology Strategy

Panasonic GREEN IMPACT Progress (2)

CONTRIBUTION IMPACT 100 Million Tons

Column Intellectual property initiatives related to environment-related technologies

The Panasonic Group is propelling intellectual property strategies aimed at ensuring the advantage and safety of our business both now and in the future, while also helping to solve social issues, including environmental problems.

We are ranked second in the number of domestic patents held overall for environment-related technologies based on the Japan Patent Office's GXTI*¹, and we are also ranked among the top companies in the Group's focus areas mainly of solar cells and secondary batteries.

Also, in terms of the number of inventors over the past five years in focus areas such as solar cells, secondary batteries, etc., we are among the leading companies when compared to the leading players driving the development of environment-related technologies (Fig.1).

(Figure 1) Number of environment-related technology patents registered in Japan and number of inventors

Rank	Number of patents registered in Japan* ²			Number of inventors* ^{2,3}
	GXTI* ¹ overall	gxA01: Solar cells	gxCO1: Secondary batteries	
1	A (13,608)	Panasonic (569)	A (5,891)	A (3,295)
2	Panasonic (8,641)	E (342)	D (3,099)	D (2,664)
3	B (5,451)	F (321)	Panasonic (2,931)	Panasonic (2,391)
4	C (3,929)	G (303)	I (1,694)	K (1,034)
5	D (3,694)	H (226)	J (1,171)	L (1,029)

*1 Green Transformation Technologies Inventory (GXTI) prepared by the Japan Patent Office (<https://www.jpo.go.jp/e/resources/statistics/gxti.html>)

*2 Tallied by the Company with the use of PatentSQUARE (data obtained on March 11, 2024) using the above GTXI patent search formulas (name identification data referenced from PatentSight (data obtained on April 18, 2024))

*3 The number of individual of inventors listed in domestic patent applications filed on or after April 1, 2019 that are included in the seven GXTI categories of A01, A09, A10, B01, B06, C01, and C04.

As for the technologies in our current businesses, they are utilized in business by each operating company. Meanwhile, R&D and IP filings for advanced technologies such as perovskite solar cells, hydrogen production devices, DERMS, and all solid-state batteries, are handled by the Technology Sector of Panasonic Holdings Corporation. Groupwide synergies are generated through collaboration with operating companies.

Moreover, by strategically establishing co-creation relationships with other companies, regarding patents and know-how related to environmental technologies, we aim to advance their social implementation and contribute to solving social issues. We also believe that if we can create mechanisms for society to evaluate such efforts, it will promote the sharing of the intangible assets necessary to solve social issues. As a first step toward this, we are taking on the challenge of visualizations of the effects of CO₂ reductions, on a trial basis. For further details of case examples and the like, we refer you to the intellectual property section of our Sustainability Data Book 2024.

* Sustainability Data Book 2024 "Intellectual Property":

<https://holdings.panasonic/global/corporate/sustainability/social/intellectual.html>

Panasonic GREEN IMPACT Progress (3)

FUTURE IMPACT 100 Million Tons

In the Panasonic GREEN IMPACT, we are targeting a reduction of 100 million tons of CO₂ emissions by 2050 by maximizing and optimizing the use of renewable energy via new businesses and new technologies.

Our perovskite solar cells are next-generation solar cells made by directly depositing a power generation layer onto a glass substrate with the use of our own inkjet coating technology. Our practical size module (greater than 800cm²) has achieved the world's highest level of power generation efficiency. Perovskite solar cells can be produced with a more energy-efficient manufacturing process than traditional silicon-based solar cells, and they can also function as "energy-generating glass" with greater flexibility in terms of design. At Fujisawa Sustainable Smart Town (SST), we are conducting the world's first long-term demonstration test over a period of more than one year to validate their performance. In fiscal 2025, we are working on developing the production technology capable of manufacturing surface areas of around one meter, given that glass-integrated perovskite solar cells could potentially be used as a material in the various glass-based components of a building.



"Energy-generating glass" in harmony with the town and everyday life installed at a model house at Fujisawa SST for demonstration test

In the development of our green hydrogen production devices, which produce hydrogen with the use of renewable electricity, we are capitalizing on the expertise we have hitherto accumulated in the technology development of home fuel cells and pure hydrogen fuel cells. We are looking to make water electrolysis equipment less costly, smaller, and more efficient by using highly active catalyst materials that are free of precious metals as the electrode catalyst for hydrogen formation. We are aiming to ship out test samples as early as 2025 and we are also looking to set up a site in Europe.

In addition, in a society that is increasingly utilizing renewable energy, we believe it is essential that each region has a stable supply of power, which is why we are engaged in the technology development of distributed energy resource management systems (DERMS). By harnessing our technology and know-how in providing energy equipment and control systems, we aim to maximize renewable energy use and conserve energy consumption through distributed energy resource (DER) control without compromising on comfort. Moreover, we are devising and demonstrating methods to enable the early adoption of photovoltaic power generation equipment at factories and large facilities. At the same time, we are working to guarantee the security of these systems against cyberattacks.

Furthermore, we are actively exploring ways to contribute to the nature-positive initiative, including those related to biodiversity. For instance, we are working on Bio CO₂ transformation technology that uses atmospheric CO₂ as an input to generate and extract components from photosynthetic microorganisms that stimulate the growth of crops.



The Novitek growth stimulant aids the growth of crops. The Company is aiming to provide samples by the end of fiscal 2025

Environment and Technology Strategy

Panasonic GREEN IMPACT Progress (4) Circular Economy (CE) Initiatives

Circular Economy Group Policy

The objectives of the Panasonic GREEN IMPACT include the realization of carbon neutrality and a circular economy. Targets for achieving a circular economy have also been set in the GREEN IMPACT PLAN 2024. In November 2023, we established the Circular Economy Group Policy in order to accelerate efforts to achieve a circular economy. A circular economy is an economic system that aims to achieve the most efficient use of material resources throughout the entire product lifecycle. Each company in the Panasonic Group, based on our principles of circulation described on the right, is establishing their own targets and action plans with an approach tailored to the characteristics of their business. In this way, they are driving a transition from a linear to a circular business model.

Principles of circulation

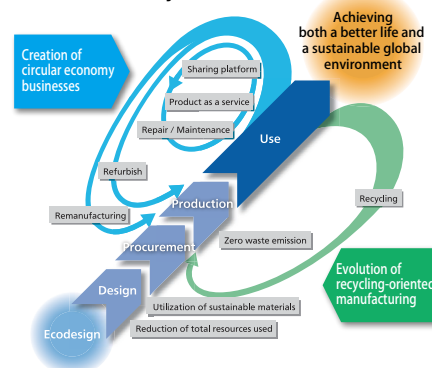
- (1) Maximize the product lifetime and maintain the material value with a focus on circular business models and product design, extended servicing, as well as through further enhancing recycling activities.
- (2) Minimize the use of materials and extend the usage of recycled and renewable materials.
- (3) Take a joint approach with customers and partners for establishing circularity-oriented business operations, information sharing, and product usage options.

Circular economy (CE) initiatives

There are two main aspects to the Group's circular economy initiatives: creating CE businesses and advancing recycling-oriented manufacturing (see diagram below). In creating CE businesses based on the Group Policy, we are employing an approach that hinges on the attributes of a certain business, such as sharing service, product as a service, repair/maintenance, refurbishing, or remanufacturing. At China International Import Expo 2023 and CES 2024 in the US, we showcased our proprietary developed kinari*1, refurbishing service*2, and promoted the concept of CE commerce for realizing the long-term use of products and resources. In addition, at the 7th meeting of the Resource Circulation Subcommittee of the Ministry of Economy, Trade and Industry, we had the opportunity to present some case studies of our CE businesses, focusing mainly on the importance of CE commerce and subscription-based services.

As for advancing recycling-oriented manufacturing, as a step towards the automation of recycling plants, we have developed an automatic dismantling system for covers of air conditioner outdoor units utilizing AI and robotics technology. In July 2023 we held a groundbreaking ceremony for the Panasonic Group pavilion at the upcoming Expo 2025 Osaka, Kansai. In its construction, we will be actively using eco-friendly products, including recycled materials from used home appliances, scrap and waste material from Group factories, PALM LOOP*3 wood boards made with the use of oil palm waste, and other eco-friendly wooden flooring material.

Panasonic's concept for actions toward a circular economy



Climate change initiatives (response to the TCFD)

Response to the TCFD

In May 2019, we expressed our support for the recommendations of the TCFD*1 and since 2020 we have disclosed the items recommended by the TCFD (governance, strategy, risk management, and metrics and targets) in our Sustainability Data Book. The table below has been taken from our Sustainability Data Book 2024. In addition, our scenario analysis shown on the next page has been evaluated quite highly by those outside of the Group. The Strategic Resilience through Scenario Analysis section of our Sustainability Data Book was referenced as an example of how to conduct a scenario analysis in a collection of TCFD scenario analysis disclosure case studies and tools as part of a practical guide for Scenario Analysis in line with the TCFD recommendations that was published by Japan's Ministry of the Environment.

Governance	Panasonic Group system to promote Groupwide environmental sustainability management is headed by board of directors, so that information on Groupwide environmental sustainability management from all of the operating companies are reported to the board of directors. Also, the progress and results of activities for the key environmental targets we promised to society to achieve under the GREEN IMPACT PLAN 2024 (GIP2024) are examined and determined on the directions, issues, and particularly key measures in the Group Management Meeting where Group CEO, presidents of operating companies, and senior managers participate. Matters of special importance are deliberated on by the Board of Directors Meeting. In promoting our environmental sustainability management, we have built a system with which all operating companies and business sites members effectively collaborate and promote Groupwide activities through determination by the Sustainability Management Committee (established in December 2021) led by the Group CEO.		
Strategy	We analyzed the impacts on certain items of Panasonic Group businesses that are likely to be affected by climate change, based on our assessment of the risks and opportunities in the Panasonic Group business operations. The results were used to develop a social scenario for the year 2030, focusing on matters with the greatest impact. We then used the scenario as the basis for examining strategies, and verified the business resilience in our strategy.		
Risk Management	As a tool to continuously reduce environmental risks, Panasonic Group is working to establish operating company-specific Environmental Risk Management Systems, in accordance with the basic risk management policy for all Group companies. The management policy includes identification of (1) environmental risks and group-wide risk management each year, and (2) ensuring quick responses to reported environmental risks. In addition, The Panasonic Group is promoting risk management based on the same process at Panasonic Holdings Co., Ltd. (PHD) and operating company. The PHD Enterprise Risk Management Committee conducts deliberations from the perspective of the Group's management and business strategies and social responsibilities, and decides the Group's significant risks. In FY2024, strategic risks in Panasonic Group's significant risks such as climate change, environmental regulations and development of circular economy, and operational risks such as natural disasters and supply chain management have been addressed.		
Metrics and Targets	The Panasonic Group has set its medium- to long-term target for reducing greenhouse gas emissions and was accredited as Science Based Target (SBT) 2.0°C in October 2017. Furthermore, in May 2023, our new greenhouse gas emissions reduction target was accredited as SBT 1.5°C.		
	GHG emissions reduction targets (SBT 1.5°C accreditation)	Targets	Progress rate
	Emissions from Panasonic Group business activities (Scope 1 and 2)	Reduction of 90% by 2030 (compared to FY2020)	38%
	Emissions from use of Panasonic Group products (Scope 3)	Reduction of 30% by 2030 (compared to FY2020)	—*2

*1 High-density cellulose nanofiber molding material
*2 Our business selling refurbished second-hand products
*3 <https://panasonic.net/phs/technology/palmloop/>

*1 TCFD stands for the Task Force on Climate-related Financial Disclosures. It was set up by the Financial Stability Board at the request of the G20 meeting of finance ministers and central bank governors; the TCFD publicly announced its recommendations in 2017
*2 Progress rate not calculated due to the increase in emissions from the expanded number of products subject to calculations

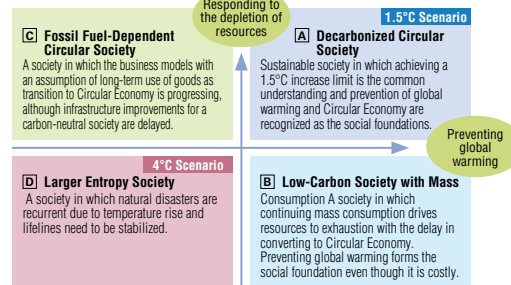
Environment and Technology Strategy

Climate change initiatives (impact analysis and scenario analysis)

In our impact analysis, we identified opportunities and risks specific to each mainstay business of the Group, and when we analyzed elements from the perspective of climate change, we identified the following items of materiality as having an extremely significant impact on the Group's operations: (1) prevention of global warming and (2) Responding to depletion of resources. Setting these two factors as the axes of a matrix, we created four scenarios toward 2030 in the following quadrants (see diagram to the right). We defined a society in which global warming is prevented and response to depletion of resources is taken as 'the 1.5°C scenario', and a society in which global warming is advanced and resources are depleted as 'the 4°C scenario'.

The table below shows some of the climate change strategies being implemented by seven operating companies to address each societal scenario.

Four Scenarios



Panasonic Corporation	
Living Appliances and Solutions Company	<ul style="list-style-type: none"> Build a circular value chain with customers through products and services. Achieve extension of the product life cycle and improve customer engagement looking ahead of circular economy.
Heating & Ventilation A/C Company	<ul style="list-style-type: none"> Provide the optimum and highest air and water quality values with low environmental impact, not found in conventional air conditioning, with a combination of our unique air and water technologies. Create unprecedented value with water and air heating systems with heat pump (A2W), chillers, and combination of air quality and air conditioning in the air conditioning business of water circulation type to contribute to improvement for decarbonization and air quality values.
Cold Chain Solutions Company	<ul style="list-style-type: none"> Promote energy conservation offering comprehensive support for our energy monitoring system covering from system installation to operations and maintenance. Our equipment refurbishing service prolongs system usage while contributing to a circular economy. Accelerate development of natural refrigerants with lower environmental impact through wider use of CO₂ refrigeration equipment.
Electric Works Company	<ul style="list-style-type: none"> Provide a sustainable and safe and secure facility infrastructure based on our wiring fixtures to contribute to electrification and disaster-resilient society with zero environmental impact in the world.
Direct Control (Hydrogen Related Businesses)	<ul style="list-style-type: none"> Achieve local production for local consumption of energy by developing a decentralized energy package business utilizing hydrogen.
Panasonic Automotive System Co., Ltd.	

- Contribute to electrification of vehicles through power chargers with high voltage/output using power electronics technology and devices that improve vehicle's weight saving and rate of electricity consumption.
- Promote to make own products more energy efficient and further expand the range of products that use recycled resin materials.
- In our sites that achieved net zero CO₂ emissions, we are further reducing energy usage through energy-saving activities and increasing the ratio of non-external dependency on renewable energy supply. Start operation using renewable energy purchased from a corporate power purchase agreement (PPA), and raise our nonexternal dependency rate of renewable energy to 10% by 2025.

Panasonic Connect Co., Ltd.	
	<ul style="list-style-type: none"> Reduce waste energy and waste goods by supply chain orchestration, including streamlining corporate customers' logistics and responsive tuning of demand and supply. Offer solutions to improve energy efficiency and automation at corporate customers.

Panasonic Industry Co., Ltd.	
	<ul style="list-style-type: none"> Develop and supply products that contribute to electrification of vehicles and improvements in vehicles electricity consumption rate and mileage. Reduce environmental impact through development and provision of products that contribute to product/equipment downsizing, light weight, low energy loss, and longer product life. Reduce CO₂ emissions by promoting energy conservation and increasing use of renewable energy in manufacturing activities.

Panasonic Energy Co., Ltd.	
	<ul style="list-style-type: none"> Increase avoided CO₂ emissions, by increasing the number of electric vehicle users through improving the competitiveness of our automotive batteries and enhancing our production capacity, and promoting electrification of power equipment such as construction machine through modularization and systematization of batteries for industrial use. Reduce to half the carbon footprint in fiscal 2031 comparing the fiscal 2022 level by making Zero- CO₂ Factories at own sites, locally procuring materials for lithium ion batteries, and establishing circular economy business models.

Panasonic Entertainment & Communication Co., Ltd.	
	<ul style="list-style-type: none"> Promote energy-saving per product category by introducing devices with high energy efficiency, improving their control methods, and the like. Promote circular economy through expansion of refurbishing businesses, acceleration for using recycled resin, adoption of eco packaging, and the like.

Panasonic Housing Solutions Co., Ltd.	
	<ul style="list-style-type: none"> Reduce CO₂ emissions in our value chain by thorough implementation of energy-saving initiatives and electricity generation, and at the same time, enhance product ranges that contribute to CO₂ emissions reduction in society. Increase use of recycled materials, plant-derived materials, and the like for resource circulation.

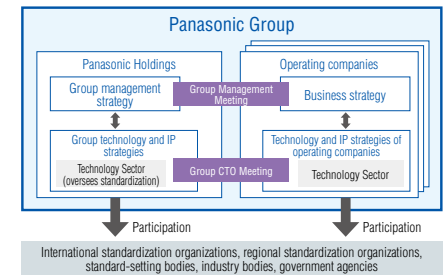
The scenario analysis found that we could always focus on at least one or more of our businesses in each of the four scenarios. In other words, the analysis successfully verified the resilience of our business strategies. The analysis also helped us understand that we can contribute to building a sustainable society through our businesses. We continue our efforts to build the 1.5°C world, represented by Society "A" defined in "Four Scenarios" above.

Standardization activities to support technology and business

The Panasonic Group is actively engaged in standardization activities for the purpose of expanding its global footprint. Under the guidance of the Chief Standardization Officer*, efforts are made to align the business and technology strategies of the Group overall and in each operating company through meetings between managers in charge of business and technology. In addition, we continue to train key personnel in matters of standardization as part of our efforts to drive forward standardization activities. Since the 1990s, we have been implementing standardization activities as an integral part of our intellectual property strategy, chiefly in the areas of functional safety in home appliances and equipment, as well as broadcasting and mobile phone standards.

In 2014, Dr. Junji Nomura (Former CTO of Panasonic) assumed the role of president of the IEC* and today, the Panasonic Group holds key positions in multiple standardization bodies, including the IEC and the ISO* and participates in more than 1,000 activities.

Furthermore, in helping to solve global environmental issues, the Group actively participates in standardization activities, such as private sector forums like the World Business Council for Sustainable Development (WBCSD), beyond the IEC and the ISO, to achieve carbon neutrality and a circular economy.



*The Group CTO also serves as the Chief Standardization Officer
IEC: International Electrotechnical Commission ISO: International Organization for Standardization

Technology platform supporting people's daily lives (health, safety, and comfort)

We are focusing on AI and robotics technology that is closely integrated into daily life and workplace environments.

In the field of AI, we are applying AI to the image recognition technology that we have honed over many years to develop technologies that contribute to people's everyday life. For example, we have developed technology that limits the decline in authentication accuracy of specific models with small data sets, technology that deals with "out-of-distribution" false detection problem, and technology that improves image recognition accuracy under bad weather conditions. All of these technologies have been accepted for presentation at prestigious international academic conferences in the fields of AI and image recognition. (For further information, please visit: <https://tech-ai.panasonic.com/en/>)

In the field of robotics, we have taken steps to alleviate the worsening labor shortage and contribute to greater efficiency in the logistics sector. Owing to our autonomous delivery robot technology and a track record of successful demonstration tests, we were the first in the industry to operate autonomous delivery robots for the real-world delivery of parcels under the notification system that was introduced following revisions to Japan's Road Traffic Act. In the logistics warehouse space, by combining robot control, sensing, and AI technologies, we have developed a robot control platform capable of handling the ever-changing and dynamic product needs of warehouses. We are also undertaking initiatives to address cybersecurity and ethical issues of AI so that these technologies and services can be used safely.

Going forward, we will continue to focus on AI and robotics technology, and make not only environmental contributions, but also help build a society in which every individual can enjoy lifelong health, safety, and comfort.

Environment and Technology Strategy

Technology Future Vision

The Corporate R&D Sector of Panasonic Holdings Corporation has formulated an ideal goal for the Panasonic Group that is based on technology to achieve “an ideal society with affluence both in matter and mind.” That goal is the Technology Future Vision, which is a vision for a future that the Company aims to achieve by 2040. Although this type of vision-formulating activity has been carried out in the past, mainly by the Corporate R&D Sector, the activity this time focuses on changes in society and technology together with Corporate R&D Sector, Design, Branding sectors and so on. They were formulated in a new framework as a practical project activity that also incorporates the perspective of design management.

The overall picture of value that should be provided, the ideal state of the Company, and the future to be attained

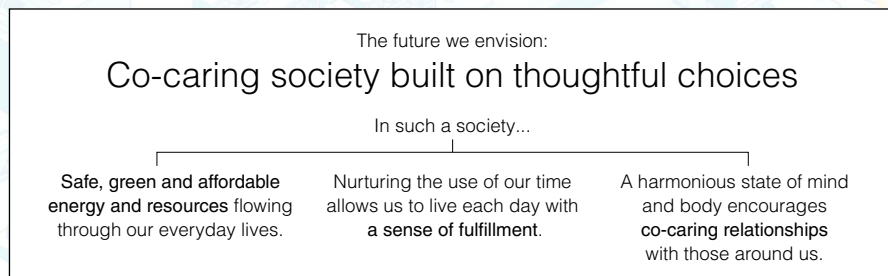
In the past, we have pursued material abundance and benefited greatly, but not without a cost. Now, as everyday norms change, the Holding’s Corporate R&D Sector has deliberated on what type of society should be left for the next generation by 2040, and established that the future society the Company wants to achieve is “co-caring society built on thoughtful choices,” society where individual choice naturally leads to caring for each other and the planet.

In a society like this, it is assumed that the following three factors will come into existence together.

- **Safe, green and affordable energy and resources** flowing through our everyday lives.
- Nurturing the use of our time allows us to live each day with **a sense of fulfillment**.
- A harmonious state of mind and body encourages **co-caring relationships** with those around us.

The first “safe, green and affordable energy and resources” is about maximizing the value of resources such as energy and food. The second “a sense of fulfillment” is about the pursuit of creating time that is meaningful. In order to achieve the third “co-caring relationships,” the Company aims to be true to itself and establish open-minded relationships with others. These factors are envisioned as being supported by various fields of technologies.

The Ideal Future with Technology Future Vision



A new tap water philosophy

Thoughts behind the Technology Future Vision include spreading affluence both in matter and mind widely and thoroughly through the three aforementioned factors. This can be said to be a reinterpretation of the “tap water philosophy” advocated by Konosuke Matsushita, the founder of the Panasonic Group. A system that provides green, safe, and affordable energy, resources, a sense of fulfillment, and compassion far and wide (just like tap water) is important. We will realize these and come up with a new tap water philosophy through technology and the creation of new businesses.

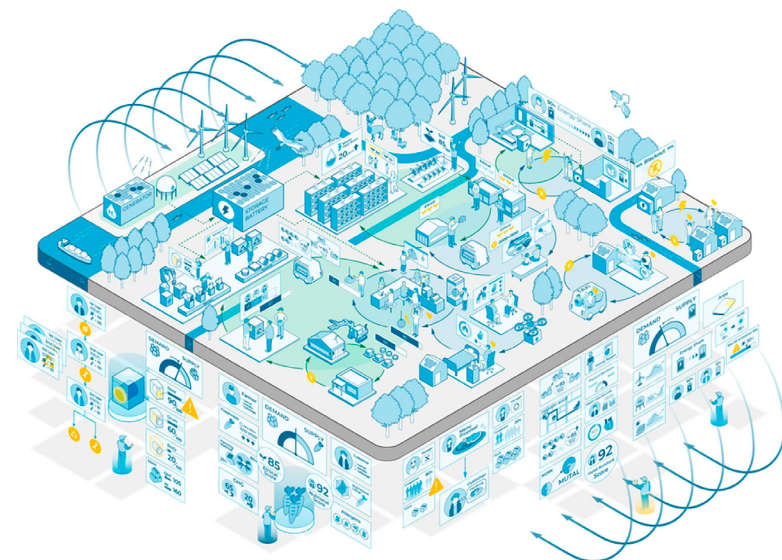
Regarding sectors to support this, in addition to technologies that maximize the value of resources, the Company will also continue to advance new initiatives to achieve our visions, such as “human insight” utilizing AI (artificial intelligence) to CPS* technology, which support a society where people live with a sense of fulfillment and build co-caring relationships.

*CPS: The abbreviation for Cyber-Physical Systems. This is an accumulation of diverse data from the real world (physical space) through sensor networks and other methods. This data is analyzed and built into knowledge using large-scaled data processing technologies in cyberspace, and the information and value created here are used to revitalize industries and resolve social issues.

Furthermore, to enable our initiatives based on the vision to reach our customers, business development functions have been enhanced for the Holding’s Corporate R&D Sector as well, and the Company will promote proactive cooperation and collaboration with co-creation partners.

Please look forward to the efforts and challenges made by the Holding’s Corporate R&D Sector.

* The special Technology Future Vision website
<https://holdings.panasonic/global/corporate/technology/technology-future-vision.html>



Panasonic Transformation (PX) Initiatives



Boldly challenge to change and transform our business models and management practices

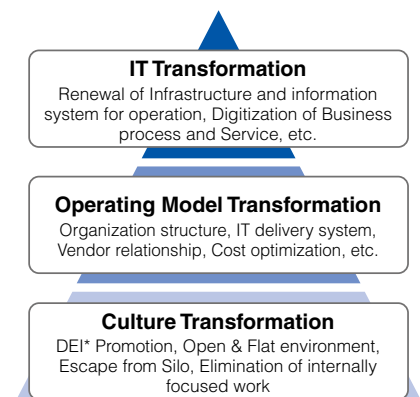
Hajime Tamaoki
Executive Officer
Group Chief Information Officer (Group CIO)



Shifting Gears of “Panasonic Transformation”

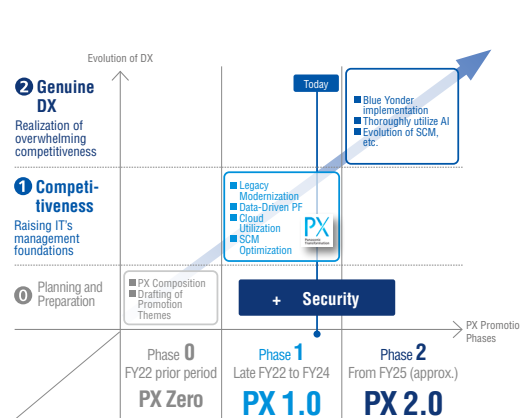
With digital transformation positioned as one of the key items of the Group strategy and, under the ownership of Group CEO Kusumi, we have been advancing our “Panasonic Transformation (PX)” project, which is a symbol for Groupwide transformation, since May 2021. There is no magic approach toward completing DX. The goal of PX is to create new value for the Group and help employees and customers “live their best by fundamentally re-examine the negative legacy accumulated over our more than 100 years of history (obsolete IT, internally focused work, outdated practices, etc.) and strengthen our management foundation. From a medium-term perspective, up until fiscal year ended March 31, 2024 (fiscal 2024), we have sought to uplift the Groupwide IT management foundation under PX 1.0. Alongside these existing initiatives, starting in fiscal 2025, we will undertake the challenge of creating new value, while transforming our business model and management through the utilization of cutting-edge digital technology under PX 2.0.

Framework of PX Transformation



*Diversity, Equity & Inclusion

PX Promotion Phase



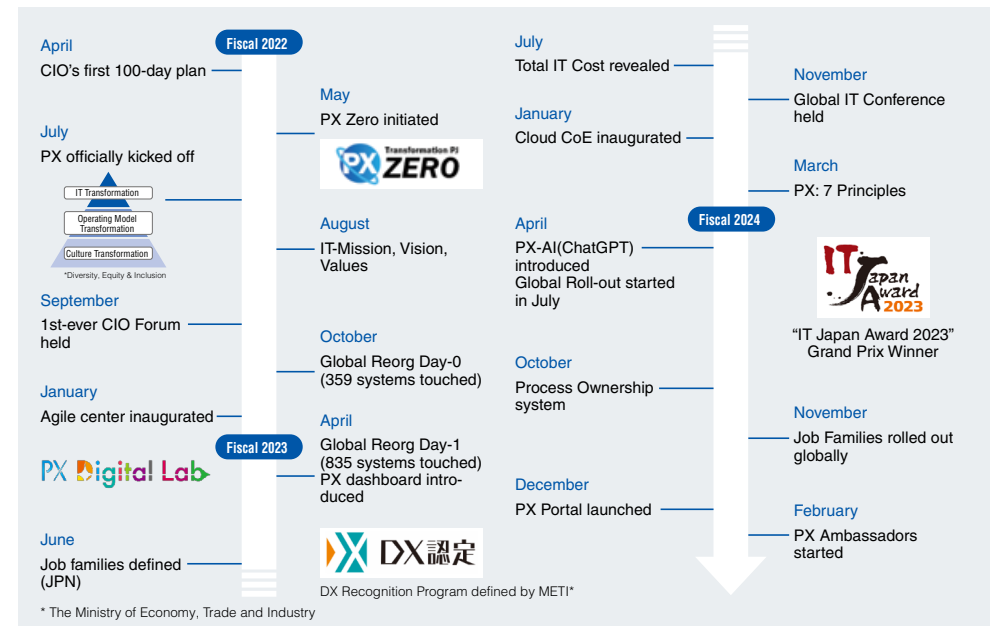
The Path of PX 1.0

Since assuming the position of Group CIO in May 2021, I have initiated on PX ZERO and updated the Information Systems Department's mission, originally formulated in 1995, under the slogan of “Bring happiness to life. Bring happiness to work. It's digital, it's our value.” PX is a transformation project aimed at placing the Panasonic Group back on the growth trajectory. Likewise, we have advanced PX within a three-tier framework consisting of “IT Transformation,” “Operating Model Transformation,” and “Culture Transformation.” And by the second year, two major changes had occurred.

1. PX had evolved into an initiative that was taken autonomously away from hands of the Information Systems Department
2. The members of the Group Management Meeting formulated the “PX-7 Principles”

At the Group Management Meeting held in March 2023, which were attended by Group executives from operating companies and subsidiaries, each executive took ownership of PX, discussed, and together formulated the “PX-7 Principles” in their own words as a “commitment” by the Panasonic Group's management team. In October 2023, we adopted a Process Owner system to ensure that the PX-7 Principles would not end up being a pie in the sky, optimize each operation, and visualize the outcomes. Starting in fiscal 2025, we will connect the key to PX, “X”, to strong determination to transform ourselves in the true meaning of the term “Transformation.”

PX HISTORY



Panasonic Transformation (PX) Initiatives

Outcomes of PX 1.0

Over the three-year period covering 2021 to 2024, we have focused on uplifting the IT management foundation and drove three transformations: information infrastructure, organizational information systems, and supply chain. Over this period, we have launched 298 projects and completed 133 of these projects, producing results on a consistent basis. The specific results include the following (as of June 30, 2024).

IT Transformation

We have been advancing to simplify and standardize our business systems and processes, and four programs: (1) Legacy Modernization; (2) Data-Driven Platform; (3) Cloud Utilization; and (4) SCM Optimization.

- Procurement DX: Achieved operational capabilities on a par with global excellence, accompanied by swiftness
 - Reduced non-recommended components by 21% through guidance encouraging the use of general-purpose components during the early stages of development, and reduced design rework loss by 5 billion yen
 - Took steps to rationalize 1.35 billion yen by consolidating product numbers for general-purpose components, and reduced 55% of orders through centralized purchasing of some general-purpose components
 - Shortened the time required for unit cost structuring by 30% by automatically calculating theoretical unit costs for manufacturing based on 3D schematics, etc.
- Manufacturing DX: Achieved a high level of standardization for global factory operations through the introduction of SAP S/4 HANA
 - Reduced add-on functions by 96% by utilizing and standardizing SAP templates at some domestic business sites
 - Simplified indirect operations to the amount of 84 million yen annually, halved manufacturing losses totaling 72 million yen annually, and shortened shipping lead times by 3 days, etc., by having some branch in China adopt a regional standardized SAP in which China-specific requirements are added to the Group's standard template

Operating Model Transformation

To ensure efficient and sustainable delivery of IT that creates a competitive advantage, we have been advancing an “operating model transformation” that extends to our Information Systems Department and its management resources, including talented people, products or services, and capital.

- Reached 24,002 users for the Group's data analysis tool (DIYA)
- Reached 50 PX ambassadors who provide Groupwide support for on-site challenges and DX initiatives
- Improved efficiency to the amount of USD 256,000 annually per region by standardizing IT delivery between overseas regions, etc.


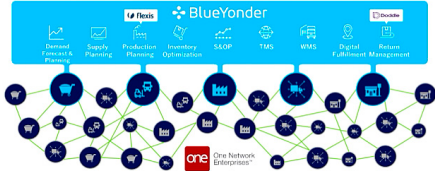
Culture Transformation

We have been engaging in promoting Diversity, Equity, and Inclusion (DEI) along with open and non-hierarchical work environments, bringing together the strengths of “One Panasonic IT”, and reforming the negative legacies of organizational inertia, the being tied to tradition, and 20th-century ways of working.

- Submitted a total of 14 IT-themed agendas to Group Management Meeting (Fiscal 2024 results)
- Held a total of 33 CIO Forums attended by CIOs from each company (153 themes)
- Reached 4,500 users/day (with 30,000 input prompts) for the “PX-AI” AI assistant service, etc.

Ambidextrous approach of Offensive and Defensive PX toward PX 2.0

With the advancement of technology, digital technologies that supported parts of our processes are undergoing a transformation into the form where the process themselves are being digitalized. In such an environment, we believe it is important to digitalize existing businesses in parallel with exploring new business models. In contrast to players from other industries with IT technologies and available capital who have begun to enter the manufacturing industry, the Group possesses knowledge based on our 100 years' worth of experience in creating actual products. Likewise, we will strengthen PX initiatives with the intention of leveraging these accumulated strengths in a way that creates a greater customer value.

Column	PX 2.0 Case Studies
<h4 style="color: #0056b3;">Cutting-edge Smart Factories</h4> <p>Our automotive battery factory in Nevada, USA, has produced 9 billion units since its commissioning in 2017. At our factory in Kansas, USA, which is scheduled for commissioning in the second half of 2024, we will incorporate roughly 500 improvements that have been identified, in addition to the latest digital technologies and OT*1 knowledge, including the edge-type AI*2 and predictive AI modeling used to improve production capacity and operations at the Nevada plant. This will allow us to realize high productivity at the new factory immediately after commissioning.</p> 	<h4 style="color: #0056b3;">Autonomous Supply Chain</h4> <p>Through the acquisition of Duddle and flexis AG, and in collaboration with Rapyuta Robotics Co. Ltd., we strengthened Blue Yonder's end-to-end supply chain solutions function. We also concluded an acquisition agreement with One Network Enterprises in order to expand our supply chain network in a way that includes the suppliers used by customers. This move aims to create a dominating game changer through the functional complementarity of the two companies.</p> 
<p>*1 Operational Technology: Control and operating technologies for optimizing the operations of physical equipment and systems used at manufacturing sites.</p> <p>*2 Refers to systems where the AI is directly equipped on a device, thereby allowing the device itself to operate on data and make inferences instead of relying on a cloud-based server</p>	

Further strengthening security measures

With regard to 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 organically have been integrating the three functions as One Panasonic as part of an accelerated and intensive initiative for 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.

Cyber security has been identified as one of the Group's highest priority issues through the process of identifying materiality. (For more details on identifying materiality, please refer to “Materiality” on page 6)

Brand Strategy



Live Your Best

In April 2022 we launched our brand slogan “Live Your Best.” The slogan expresses Panasonic’s mission as stated by Founder Konosuke Matsushita: “an ideal society with affluence both in matter and mind.” At the same time, it expresses our hope that each and every Panasonic employee will be attentive to the happiness of our individual customer.

Megumi Kitagawa

Director in charge of Brand and Communications Strategy

The Panasonic Group’s brand philosophy

The Panasonic brand has been built on the accumulation of customer trust and affection and other invaluable assets cultivated over the years since our founding, and has been reinforced at all points of contact, both direct and indirect, between Panasonic and our customers, including not just our products and services but also advertising, media coverage, sales activities, our employees’ various interactions, and online reviews.

Therefore, to increase the value of the brand, it is necessary to engage in appropriate brand communication activities based on the supply of competitive products and services as well as through the ethical conduct of each and every employee.

A valuable brand created in this way is an expression of responsibility and a sign of trust. The Panasonic brand contributes to people choosing Panasonic not only as a provider of products and services but as a business partner, an investment destination, and an employer.

In recent years, not only financial value but also non-financial value, such as our contribution to society, has been recognized as an important component of corporate value. We believe that appropriate brand communication activities will help increase non-financial value and contribute to the enhancement of corporate value.

Panasonic’s approach to enhancing brand value

For more than 20 years, the Panasonic brand has been ranked in the top 100 in Interbrand’s “Best Global Brands” brand value ranking, and it continues to enjoy a strong reputation not only in Japan but also globally.

Since the source of our brand power is our business, we believe that stronger brand value is achieved by creating a virtuous cycle in which a strong, competitive business builds a better brand

image and a good brand image contributes to further business growth.

When it comes to advertising, we continue to follow our founder Konosuke Matsushita’s idea that “if manufacturers can make good products, they have an obligation to communicate that quickly, widely, and correctly to their customers, and that is what advertising does.”

We will continue to steadily implement the basics of striving to increase brand value with integrity by providing the public with fair and accurate information on our management philosophy, as well as on our products, services and technologies.

We will also carefully evaluate each and every brand-related activity from the perspective of what value it creates for whom, thereby increasing the return on investment of our brand communication activities.

Responsible executive and framework

In the Panasonic Group, the Group CEO is directly in charge of Brand and Communications Strategy, and the director in charge of Brand and Communications Strategy is appointed directly under the Group CEO.

The brand communication divisions of Panasonic Holdings Corporation and Panasonic Operational Excellence Co., Ltd. are responsible for Groupwide corporate publicity and advertising, while the advertising personnel at each operating company are responsible for their own business and product publicity and advertising. All of these personnel work in cooperation with one another.

Activities to protect brand value

In recent years, we have particularly strengthened measures in the digital space to protect the value of important brand assets, including countermeasures against counterfeit goods, risk management for internet advertisements (ad verification), and social media monitoring.

We have also set up mechanisms that allow us to check all the advertising we produce against the relevant laws and industry regulations in each global region to avoid misunderstandings or misconceptions on the part of customers.

Konosuke Matsushita Museum (Kadoma City, Osaka Prefecture) and Matsushita Memorial Hall (Beijing)

We have established the Matsushita Konosuke Museum in Japan and the Matsushita Memorial Hall in China, where special exhibitions are held in spring and fall of each year to deepen understanding of our founder’s legacy. These sites offer visitors, including our business partners and government officials from various countries, an opportunity to gain an understanding of Panasonic’s philosophy. The sites are also a place for each employee to experience the management and life views of Konosuke Matsushita, and to learn the Basic Business Philosophy for themselves.



Konosuke Matsushita Museum

Compliance Initiatives

Message from the Group GC



Aiming to help enhance corporate value, I will spearhead compliance, the prerequisite for conducting business - as a driver for the entire Group.

Ayako Shotoku

Director, Executive Officer
Group General Counsel (Group GC)

The Group established the Basic Business Philosophy as the practice of, and mindset associate with, the Basic Management Objective, the Company Creed, and the Seven Principles that form the basis of the management philosophy established by our founder, Konosuke Matsushita. Because we conduct business as a “public entity of society” using the management resources it has entrusted to us, we must properly and effectively utilize these resources for the benefit of society, while also fulfilling our roles for various stakeholders. For this reason, as prerequisites for the Group’s business activities, we highly value “being fair and honest in all our business dealings and personal conduct” as well as abiding by laws, regulations, and social norms, always asking ourselves “What is right for society?” without indulging our self-interests.

We have also established the Panasonic Group Code of Ethics & Compliance so that our employees will embody the Basic Business Philosophy and engage in business activities while practicing compliance. Under this Code of Ethics & Compliance, we have organized internal rules, regulations, and systems; and engage in activities to educate, enlighten, and raise awareness of employees in terms of this Code; and observe the status of compliance with and implementation of this Code. In addition, along with fostering a culture in which employees report and consult on compliance concerns without hesitation, we investigate and address compliance incidents in a timely and appropriate manner. Through these compliance programs, we will realize compliance management throughout the Group.

Including myself, the Group is home to roughly 700 employees involved in legal affairs in Japan and abroad. I work in close connection with my colleagues across the globe to fully exercise the Group’s legal affairs function as One Team in an effort to ensure the Group practices compliance management, and to contribute to greater corporate value through the sound, sustainable growth of the Group.

Policy

We have established the Panasonic Group Code of Ethics & Compliance (the “Code of Ethics & Compliance”), to outline the commitments all Group companies and employees must fulfill while carrying out their business activities and embodying the Panasonic Group Basic Business Philosophy. It has been translated into 22 languages to ensure that it is understood by employees everywhere. The Code of Ethics & Compliance explains the positive impacts of implementing each of these commitments on society and our stakeholders in conjunction with the thinking behind our Basic Business Philosophy. It also clearly indicates what negative consequences the Group and individuals may face for violating these commitments.

Responsible Executive and Framework

The Group General Counsel (Group GC) is the Executive Officer responsible for the Group’s compliance initiatives, while Panasonic Holdings (“PHD”) is responsible for establishing a Groupwide compliance system, with the Group GC and PHD Legal Department playing critical roles under the Group CEO’s supervision. Each operating company is responsible for establishing and implementing a compliance system for its business area based on the principles of Autonomous Responsible Management, with the operating company CEO, Chief Legal Officer (CLO), and legal department mirroring their PHD counterparts’ roles. For overseas Group companies, Panasonic Operational Excellence Co., Ltd. (PEX) assigns the CLOs and legal departments for each overseas office. These officers and departments are responsible for ensuring compliance in their respective regions. Each CLO plays their role in the business and region under the Group GC, working as one legal team to ensure compliance.

Additionally, we have established a system whereby the Group GC and the CLO of each operating company regularly report on initiatives for compliance at the Board of Directors meetings of PHD and each operating company and receive appropriate supervision from these Boards.

Internal Communication and Training

We foster a compliance-first culture by regularly disseminating compliance-related messages from the Group CEO, each operating company’s CEO, and all business site general managers. Moreover, we implement specific compliance initiatives at each business site, through the CLOs and legal departments assigned to operating companies or overseas companies by PEX, officers responsible for observance of the Code of Ethics & Compliance, export control officers, and the heads of functional departments.

The Group’s legal departments, which play a leading role in these efforts, have their legal staff from around the world attend the Global Legal & Compliance Meeting, and the CLOs from operating companies, PEX overseas offices, and the PHD Legal Division attend the Direct Report Meeting chaired by the Group GC. Through these and other meetings, the Group’s legal departments learn about annual

Compliance Initiatives

updates to the Group's compliance policies and work toward achieving compliance in various areas. Moreover, whenever a legal revision, etc. is relevant to the Group's businesses, we notify and communicate it to the business site general managers, operating company CLOs, and relevant organizations. We also publish a quarterly compliance newsletter for business division heads.

In response to changes in the business environment and the Group's business, we are bolstering our efforts to accurately identify changes in risks and signs of legal violations and misconduct in specific business fields, divisions, countries, and regions. Throughout the year, we will implement initiatives to establish a global awareness of ethical and legal compliance and improve our ability to respond to risks. We provide training and awareness building for new hires and newly promoted employees, through a variety of educational materials, including e-Learning, on the Code of Ethics & Compliance that all employees are required to follow, as well as on other compliance-related materials throughout the year. Moreover, we included questions about compliance awareness and culture in the Employee Opinion Survey distributed to all Group employees around the world.

In addition, starting in fiscal year ended March 31, 2024 (fiscal 2024) we launched a field-specific compliance e-learning program for the acts of bribery & corruption, as well as violations of competition laws, which would significantly impact the Group in an event of such acts or violations. We are creating an environment in which directors and employees engaged in high-risk duties can regularly participate in the program while managing the participation of those who are eligible to enroll. Similarly, each operating company and PEX overseas office conducts compliance-related training for those who need it, according to the risk relevant to their businesses and regional characteristics.

Whistleblowing System

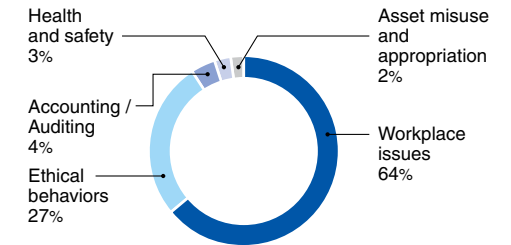
The Panasonic Group has established a Global Hotline, a Groupwide integrated reporting mechanism that accepts reports from domestic and overseas sites and from external stakeholders, available in 32 languages, 24 hours a day, 365 days a year, to prevent misconduct and facilitate rapid resolutions to a wide range of compliance issues. The Hotline can receive reports from those who want to remain anonymous. In addition to ensuring employees are well-informed about the system at domestic and overseas sites and workplaces, we encourage employees to have no hesitation to use the Hotline by posting the following items at our intranet: reporting statistics, case studies, instructions for using the reporting system, the flow from report reception to final report, and FAQs on reporting. We are also requesting our suppliers to make sure that their employees are well-informed about our whistleblowing system and to encourage them to have no hesitation to use the system when necessary.

In order to ensure proper operations of the Global Hotline, we prohibit retaliation against internal and external whistleblowers, those participating in investigations, and employees on investigation teams, among others. In addition, we articulate in internal rules that there should be frameworks necessary for appropriately receiving, investigating, and addressing, and reporting such internal cases to management, and that operating companies and subsidiaries should designate a department and managers in

charge of internal reporting, and also decide on the investigate method.

In fiscal 2024, we received approximately 1,100 reports and requests for consultation, with roughly 76% of these coming through the abovementioned Global Hotline. All the reports and consultation requests we received are investigated in cooperation with the relevant departments, and we address issues, prevent recurrence, handle confirmed cases as necessary, and we notify whistleblowers of this fact.

Content (FY2024)



* Ethical behaviors include concerns related to violation of internal regulations, conflicts of interest, violations of laws/regulations, bribery, vendor/customer issues, fraud, etc.

Serious Violations and Corrective Measures

Panasonic Industry Co., Ltd. (PID) has identified instances of irregularities in process of the US-based third party certification by UL Solutions (UL) for electronic materials products manufactured and sold by PID. In response to this, PID has established an external investigation committee comprised of external experts on January 12, 2024 to conduct thorough investigations, analyze the root causes, and formulate measures to prevent re-occurrence. PID communicates directly with customers who have purchased the identified products, discusses future actions, and fully cooperates with investigation possible to uncover all the irregularities in the process.

Moreover, in cooperation with an external law firm, the Panasonic Group's thorough self-assessments are underway, targeting inappropriate actions related to quality compliance, aiming to eradicate quality fraud.

Initiatives to Address Significant Compliance Risks

In areas of compliance that can have a significant impact on the Group, we engage in efforts to prevent legal violations and in initiatives to instill other forms of compliance on a global basis. Please refer to the section titled Initiatives to Address Significant Compliance Risks in Sustainability Data Book 2024 for the initiatives of Preventing Cartels, Preventing Bribery and Corruption, and Trade Compliance.

[Panasonic Group Sustainability Data Book 2024](#)