

Sustainability

Data Book 2025

The “Joy in Motion” design company

Panasonic
AUTOMOTIVE

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About the Sustainability Data Book 2025

In December 2024, Panasonic Automotive Systems Co., Ltd. (PAS) transitioned to a new management structure following a strategic partnership with the Apollo Group. According to the new management structure, PAS now publishes its own Sustainability Data Book, which compiles and reports on our sustainability policy and approach, and provides performance data. See also the “Our Impact” page on our official corporate website for details of our sustainability initiatives and the latest information.

 [Sustainability Site “Our Impact”](#)

Scope of Reporting

Except when noted otherwise, results are calculated based on the following:

- Period: Fiscal 2024 (April 1, 2024 to March 31, 2025)
- Organization: Panasonic Automotive Systems Group (Panasonic Automotive Systems Co., Ltd. and its affiliates.) In this data book, “the Company” means Panasonic Automotive Systems Co., Ltd., and “we”, and “the Group” mean the Panasonic Automotive Systems Group mentioned above.
- Data:
 - Data concerning manufacturing sites cover all the manufacturing sites that constitute our environmental management system (Matsuzaka Plant is not included as it started in the middle of fiscal 2024.)
 - Energy data and CO₂ emissions data from energy sources are added for non-manufacturing sites
 - Data for which the fiscal year and region are not expressly stated are global results for fiscal 2024

Assurances

Main data relating to the environment have been assured by LRQA Limited. For details on the indicators covered by the assurance, please refer to the Independent Assurance Statement on [page 5](#).

Reference Guidelines

- Reporting requirements of the Global Reporting Initiative (GRI) Standards
- Japanese Ministry of the Environment, “Environmental Reporting Guidelines 2018”

Contact

Corporate Planning Center | Panasonic Automotive Systems Co., Ltd.
4261, Ikonobe-cho, Tsuzuki-ku, Yokohama City, Kanagawa 224-8520, Japan

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Corporate Profile

Company name: Panasonic Automotive Systems Co., Ltd.

Head office location: 4261, Ikonobe-cho, Tsuzuki-ku, Yokohama City, Kanagawa Prefecture 224-8520, Japan

Phone: +81-45-938-1435

Incorporated: April 2022

Representative Director, President and CEO (Chief Executive Officer) :
Masashi Nagayasu

Number of employees: Approx. 21,000 (consolidated)

Business

The Panasonic Automotive Systems Group's major business, are as follows:

Development, manufacturing, and sales of in-vehicle cockpit systems, ADAS (Advanced Driver Assistance Systems) and related devices, On-Board charger, xEV systems and devices, etc.

Panasonic
AUTOMOTIVE

Mission
Create a sustainable mobility-society to
promote a better life for everyone

Vision
The “Joy in Motion” design company


Value


Integrity


Teamwork


Adaptability


Challenge


Productivity

Heartmotive
Connecting our hearts to the journey

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External Recognition

Honored with ECCJ Chairman's Award

In recognition of our efforts in “aiming at carbon neutrality and achieving zero-CO₂ factories through global employees’ participation,” we were honored with the Energy Conservation Center Japan (ECCJ), ECCJ Chairman’s Prize, in the Best Practice category, under the Energy Conservation Grand Prize 2024. This award is hosted by the ECCJ and sponsored by the Ministry of Economy, Trade and Industry (METI).

The Energy Conservation Grand Prize aims to promote energy conservation awareness and spread related products by awarding excellent energy conservation activities and energy-efficient products based on technological developments.

We will maintain our practical energy-saving efforts mainly in our work sites aiming to achieve 3% in energy saving rate every year.



Panasonic Automotive Systems Group Three Group Companies Recognized in the 2025 Outstanding Organizations of KENKO Investment for Health

The Recognition Program for the Outstanding Organizations of KENKO Investment for Health is hosted by METI to promote sound and healthy business practices. Panasonic Automotive Electronics Co., Ltd. was listed in the 2025 recognized organizations in the large enterprise category, and Panasonic Automotive Systems Co., Ltd and Panasonic ITS Co., Ltd. were listed in the White 500 (Top 500 companies in the large enterprise category). The Group continues to focus on realizing well-being for our employees and their families’ mental and physical health.



Independent Assurance Statement by LRQA Limited



LRQA Independent Assurance Statement

Relating to Panasonic Group’s Environmental Data within its Sustainability Data Book 2025 for the fiscal year 2024

This Assurance Statement has been prepared for Panasonic Holdings Corporation in accordance with our contract.

Terms of Engagement

LRQA Limited (“LRQA”) was commissioned by Panasonic Holdings Corporation (“the Company”) to provide independent assurance on its environmental data within its Sustainability Data Book 2025 (“the report”) for the fiscal year 2024 (from 1 April 2024 to 31 March 2025) against the assurance criteria below to a limited level of assurance and materiality of the professional judgement of the verifier using ISAE 3000 (Revised) and ISO 14064-3:2019 for greenhouse gas (GHG) emissions.

Our assurance engagement covered the Company’s operations and activities relating the Company and its consolidated subsidiaries in Japan and overseas ¹, and specifically the following requirements:

- Verifying conformance with the Company’s reporting methodologies for the selected datasets:
- Evaluating the accuracy and reliability of data for only the selected indicators listed below: ²
 - CO₂ emissions in Business activities (tCO₂e)
 - GHG emissions other than CO₂ from energy use (tCO₂e)
 - Scope 1 GHG emissions (including the breakdown of the GHGs) (tCO₂e)
 - Scope 2 GHG emissions (including the breakdown of the GHGs) (tCO₂e)
 - Scope 3 GHG emissions Category1-15 (tCO₂e)
 - Amount of renewable energy consumption in Business activities (MWh)
 - Energy consumption in Business activity (MWh)
 - Amount of Total Wastes and revenue-generating waste (kiloTonnes)
 - Water withdrawal (m³)
 - Release / Transfer of Substances Requiring Management (Total) (Tonnes)
 - Net Zero CO₂ emissions (13 Districts) ³

LRQA’s responsibility is only to the Company. LRQA disclaims any liability or responsibility to others as explained in the end footnote. The Company’s responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of the Company.

LRQA’s Opinion

Based on LRQA’s approach nothing has come to our attention that would cause us to believe that the Company has not, in all material respects:

- Met the requirements of the criteria listed above
- Disclosed accurate and reliable environmental data

The opinion expressed is formed on the basis of a limited level of assurance⁴ and at the materiality of the professional judgement of the verifier.

Table 1. Summary of Toray’s Environmental and Social data in 2023

¹ Energy consumption in Business activities, Energy-oriented CO2 emissions among Scope 1 GHG emissions, Scope 2 GHG emissions cover 12 manufacturing sites and 3 non-manufacturing sites, and GHG emissions other than CO2 from energy use, Amount of Total Wastes and revenue-generating waste, Water consumption, Release / Transfer of Substances Requiring Management (Total) cover 12 manufacturing sites in the Company and its consolidated subsidiaries in Japan and overseas. CO₂ emissions in Business activities means the sum of Scope1 and Scope2 GHG emissions.

² GHG quantification is subject to inherent uncertainty.

³ The scope is 13 Districts are shown in the Annex.

⁴ The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.



Scope		Unit
Energy consumption in business activities	180,838	MWh
Renewable energy in business activities	156,720	MWh
CO2 emissions from business activities	72,918	tCO ₂ e
GHG other than energy-related CO2	1,564	tCO ₂ e
GHG emissions (Scope 1 emissions)	3,937	tCO ₂ e
Non-energy	1,564	tCO ₂ e
CH ₄ , N ₂ O	113	tCO ₂ e
HFC etc.	1,451	tCO ₂ e
SF ₆	0	tCO ₂ e
NF ₃	0	tCO ₂ e
GHG emissions (Scope 2 emissions)	68,981	tCO ₂ e
Scope 3 emissions	6,613,884	tCO ₂ e
Category 1	3,405,762	tCO ₂ e
Category 2	67,962	tCO ₂ e
Category 3	7,859	tCO ₂ e
Category 4	56,429	tCO ₂ e
Category 5	256	tCO ₂ e
Category 6	2,663	tCO ₂ e
Category 7	9,806	tCO ₂ e
Category 8	15,589	tCO ₂ e
Category 9	6	tCO ₂ e
Category 10	0	tCO ₂ e
Category 11	2,993,155	tCO ₂ e
Category 12	54,396	tCO ₂ e
Category 13	0	tCO ₂ e
Category 14	0	tCO ₂ e
Category 15	0	tCO ₂ e
Waste and valuable material generation	9,139	Ton
Water usage (all sites)	376	km ³
(excluding non-manufacturing sites)	340	km ³
Managed Chemical Substance Emissions and Movements	103	Ton
Emissions		Ton
Emissions to the atmosphere	101	Ton
Emissions to public water bodies	0	Ton
Emissions to soil	0	Ton
Landfill disposal	0	Ton
Consumption	148	Ton
Removal/treatment amount	1	Ton
Transfer	2	Ton
Recycling	13	Ton

LRQA’s Approach

LRQA’s assurance engagements are carried out in accordance with ISAE 3000 (Revised) and ISO 14064-3:2019 for GHG emissions. The following tasks were undertaken as part of the evidence gathering process for this assurance engagement:

- Auditing the Company’s data management systems to confirm that there were no significant errors, omissions or misstatements in the report. We did this by reviewing the effectiveness of data handling procedures, instructions and systems, including those for internal verification.
- Interviewing with those key people responsible for compiling the data and drafting the report.
- Sampling datasets and traced activity data back to aggregated levels;
- Verifying the historical environmental data and records for the fiscal year 2024; and

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- Mtsumoto Plant to confirm the data collection processes, record management practices, and to physically check the main facilities in the scope of the site.
- In order to achieve practically zero CO₂ emissions, verified that each site has achieved full renewable energy use through the use of renewable energy contracts or non-fossil certificates for electricity, and each site has achieved carbon neutrality by using available carbon credits for carbon offset.⁵

Observations

In order to ensure completeness in the extraction of activities for environmental data aggregation, it is effective to be reflected it in the procedure manual and make it known to the sites.

LRQA's Standards, Competence and Independence

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 *Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition* and ISO/IEC 17021-1 *Conformity assessment – Requirements for bodies providing audit and certification of management systems – Part1: Requirements* that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the *Code of Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

LRQA is the Company's certification body for ISO 9001, ISO14001, IATF16949 and AS9100. These certification services do not compromise LRQA's independence or impartiality with respect to the assurance services that LRQA provides to the Company.

Signed

Dated:30July 2025

Takahiro Iio
LRQA Lead Verifier
On behalf of LRQA Limited
10th Floor, Queen's Tower A, 2-3-1 Minatomirai, Nishi-ku, Yokohama, JAPAN

LRQA reference: YKA00001141

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⁵ The Company's total GHG emissions are offset by the carbon credit. While LRQA confirmed that these offset credits have been obtained by the Company and offset appropriately, but LRQA has not taken any action against the provider of these carbon credits and expresses no opinion as to whether the offset credits will result in a reduction in CO₂.



Annex

Zeroization of CO₂ emissions (13 Districts)

1. Matsumoto Area
2. Kusatsu Area
3. Tsuruga Area
4. Shirakawa Area
5. China PASDL: Panasonic Automotive Systems (Dalian) Co., Ltd.
6. China PASSZ: Panasonic Automotive Systems (Suzhou) Co., Ltd.
7. Thailand PASAP: Panasonic Automotive Systems Asia Pacific Co., Ltd.
8. Malaysia PASMY: Panasonic Automotive Systems Malaysia Sdn. Bhd.
9. Mexico PASMT: Panasonic Automotive Systems Monterrey Mexico S.A. de C.V.
10. Mexico PASRY: Panasonic Automotive Systems Reynosa Mexico S.A. de C.V.
11. Mexico PASMx: Panasonic Automotive Systems de Mexico S.A. de C.V.
12. Czech Republic PASCZ: Panasonic Automotive Systems Czech, s.r.o.
13. Yokohama Area(Ikonobe HQ BLD, Saedo test field)

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GRI Standards Content Index

Statement of use	Panasonic Automotive Systems Co., Ltd. has reported the information cited in this GRI content index for the period from April 1, 2024 to March 31, 2025 with reference to the GRI Standards.
GRI 1 used	GRI 1: Foundation 2021

DISCLOSURE		LOCATION	TITLE
		* Except the Corporate Information Website, these are to chapter name in this Sustainability Data Book.	
GRI 2: General Disclosures 2021			
1. The organization and its reporting practices			
2-1	Organizational details	Panasonic Automotive Systems Co., Ltd. Corporate Information Website Corporate Profile	Corporate Profile
2-2	Entities included in the organization's sustainability reporting	About the Sustainability Data Book 2025	
2-3	Reporting period, frequency and contact point	About the Sustainability Data Book 2025	
2-4	Restatements of information	—	
2-5	External assurance	Independent Assurance Statement by LRQA Limited	
2. Activities and workers			
2-6	Activities, value chain and other business relationships	Corporate Profile Structure for Promoting Sustainability Management Responsible Supply Chain	Value Chain
2-7	Employees	Employee Well-being Panasonic Automotive Systems Co., Ltd. Corporate Information Website	Human Resources Data DEI
2-8	Workers who are not employees	—	
3. Governance			
2-9	Governance structure and composition	Corporate Governance System and Initiatives	Basic Policy
2-10	Nomination and selection of the highest governance body	Corporate Governance System and Initiatives	Basic Policy > Board of Directors
2-11	Chair of the highest governance body	Corporate Governance System and Initiatives	Basic Policy > Board of Directors
2-12	Role of the highest governance body in overseeing the management of impacts	Structure for Promoting Sustainability Management	The Promotion Structure of Sustainability Management
2-13	Delegation of responsibility for managing impacts	Structure for Promoting Sustainability Management Each chapter	The Promotion Structure of Sustainability Management "Environmental Governance," "Responsible Executive and Framework," or "Promoting Organization"
2-14	Role of the highest governance body in sustainability reporting	Structure for Promoting Sustainability Management	The Promotion Structure of Sustainability Management
2-15	Conflicts of interest	Corporate Governance System and Initiatives	Basic Policy > Board of Directors "When making decisions, the PAS Board of Directors must respect the SJH Board of Director's decisions"
2-16	Communication of critical concerns	Risk Management	Major Risks in Fiscal 2025
2-17	Collective knowledge of the highest governance body	Corporate Governance System and Initiatives Corporate Governance System and Initiatives	Basic Policy > Board of Directors Basic Policy > Expected Expertise and Experience for Directors and Executive Officers
2-18	Evaluation of the performance of the highest governance body	Corporate Governance System and Initiatives	Basic Policy > Auditor
2-19	Remuneration policies	Corporate Governance System and Initiatives	Basic Policy > Board of Directors, Executive Officers "Appraised by the SJH Board of Directors according to predetermined financial and non-financial indices, and confirmed by the PAS Board of Directors"

DISCLOSURE		LOCATION	TITLE
2-20	Process to determine remuneration	Corporate Governance System and Initiatives	Basic Policy > Board of Directors, Executive Officers "Appraised by the SJH Board of Directors according to predetermined financial and non-financial indices, and confirmed by the PAS Board of Directors"
2-21	Annual total compensation ratio	—	
4. Strategy, policies and practices			
2-22	Statement on sustainable development strategy	Basic Approach to Sustainability Panasonic Automotive Systems Co., Ltd. Corporate Information Website	Panasonic AUTOMOTIVE PHILOSOPHY
2-23	Policy commitments	Structure for Promoting Sustainability Management Each chapter Respect for Human Rights Employee Well-being Employee Well-being Compliance and Business Ethics	Respecting Applicable Legislation, Global Standards, Norms, Guidelines, and Initiatives "Basic Policy" Policy > Panasonic Automotive Systems Co., Ltd. Human Rights and Labour Policy Policy Safety and Health > Panasonic Automotive Systems Occupational Health and Safety Policy Policy > Panasonic Group Code of Ethics & Compliance
2-24	Embedding policy commitments	Promotion of Sustainability Management Each chapter	
2-25	Processes to remediate negative impacts	Compliance and Business Ethics Respect for Human Rights Responsible Supply Chain Employee Well-being	Whistleblowing System Grievance Mechanism Systems for Whistleblowing and Seeking Consultation Contacts for Whistleblowing and Seeking Consultation
2-26	Mechanisms for seeking advice and raising concerns	Compliance and Business Ethics Respect for Human Rights Responsible Supply Chain Employee Well-being	Whistleblowing System Grievance Mechanism Systems for Whistleblowing and Seeking Consultation Contacts for Whistleblowing and Seeking Consultation
2-27	Compliance with laws and regulations	Environmental Risk Management Raising Product Quality Levels and Ensuring Product Safety Responsible Publicity and Advertising Compliance and Business Ethics	Quality Management System Performance Evaluation
2-28	Membership associations	Structure for Promoting Sustainability Management Respect for Human Rights Responsible Supply Chain	Examples of Stakeholder Engagement Government/Industry Organizations Participation in International and Industrial Partnerships Participation "through Panasonic Group" Responsible Minerals Procurement > Due Diligence Efforts We use RMI's reporting templates (CMRT and EMRT) for responsible mineral auditing, tracing back to the supply chain upstream.
5. Stakeholder engagement			
2-29	Approach to stakeholder engagement	Structure for Promoting Sustainability Management	Stakeholder Engagement
2-30	Collective bargaining agreements	Respect for Human Rights	Addressing Key Human Rights Risks > ■Respect for the Freedom of Association and the Right to Collective Bargaining
GRI 3: Material Topics 2021			
3-1	Process to determine material topics	Structure for Promoting Sustainability Management	Materiality
3-2	List of material topics	Structure for Promoting Sustainability Management	Materiality
3-3	Management of material topics	Structure for Promoting Sustainability Management	Materiality

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Topic Standards

DISCLOSURE		LOCATION	TITLE
GRI 201: Economic Performance 2016			
201-1	Direct economic value generated and distributed	Panasonic Automotive Systems Co., Ltd. Corporate Information Website	Innovation
		Panasonic Automotive Systems Co., Ltd. Corporate Information Website	What we do
		Panasonic Automotive Systems Co., Ltd. Corporate Information Website	Our Impact
		Panasonic Automotive Systems Co., Ltd. Corporate Information Website	Joy in Motion design studio
201-2	Financial implications and other risks and opportunities due to climate change	Response to TCFD Recommendations	
201-3	Defined benefit plan obligations and other retirement plans	Employee Well-being	Diversity, Equity & Inclusion (DEI)> Support for Every Individual (Japan)> Securing Employment Opportunities for Older Employees
201-4	Financial assistance received from government	—	
GRI 202: Market Presence 2016			
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	—	
202-2	Proportion of senior management hired from the local community	—	
GRI 203: Indirect Economic Impacts 2016			
203-1	Infrastructure investments and services supported	Panasonic Automotive Systems Co., Ltd. Corporate Information Website	Support for the recovery after the Noto Peninsula Earthquake (Japanese article only)
203-2	Significant indirect economic impacts	—	
GRI 204: Procurement Practices 2016			
204-1	Proportion of spending on local suppliers	—	
GRI 205: Anti-corruption 2016			
205-1	Operations assessed for risks related to corruption	Compliance and Business Ethics	Performance Evaluation
205-2	Communication and training about anti-corruption policies and procedures	Compliance and Business Ethics	Initiatives for Compliance Risks > Preventing Bribery and Corruption
		Compliance and Business Ethics	Internal Communication and Training
205-3	Confirmed incidents of corruption and actions taken	Compliance and Business Ethics	Performance Evaluation
GRI 206: Anti-competitive Behavior 2016			
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Compliance and Business Ethics	Initiatives for Compliance Risks > Preventing Cartels
GRI 207: Tax 2019			
207-1	Approach to tax	—	
207-2	Tax governance, control, and risk management	—	
207-3	Stakeholder engagement and management of concerns related to tax	—	
207-4	Country-by-country reporting	—	
GRI 301: Materials 2016			
301-1	Materials used by weight or volume	Overview of Environmental Impact and Environmental Accounting	Overview of Environmental Impact from Business Operation
301-2	Recycled input materials used	Resource	Evolution of Resource-Recycling Manufacturing
301-3	Reclaimed products and their packaging materials	Resource	Evolution of Resource-Recycling Manufacturing
GRI 302: Energy 2016			
302-1	Energy consumption within the organization	Overview of Environmental Impact and Environmental Accounting	Overview of Environmental Impact from Business Operation
302-2	Energy consumption outside of the organization	Overview of Environmental Impact and Environmental Accounting	GHGs from the Whole Supply Chain (by Scope)
302-3	Energy intensity	—	
302-4	Reduction of energy consumption	Reducing CO₂ Emissions in Factories	
302-5	Reductions in energy requirements of products and services	Environment Policy	Mid-term to Long-term Environmental Vision
		Eco-conscious Products and Factories	

DISCLOSURE		LOCATION	TITLE
GRI 303: Water and Effluents 2018			
303-1	Interactions with water as a shared resource	Water Resource Conservation	
303-2	Management of water discharge-related impacts	Water Resource Conservation	
303-3	Water withdrawal	Water Resource Conservation	
303-4	Water discharge	Water Resource Conservation	
303-5	Water consumption	Water Resource Conservation	
GRI 304: Biodiversity 2016			
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Biodiversity Conservation	
304-2	Significant impacts of activities, products and services on biodiversity	—	
304-3	Habitats protected or restored	Biodiversity Conservation	
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	—	
GRI 305: Emissions 2016			
305-1	Direct (Scope 1) GHG emissions	Overview of Environmental Impact and Environmental Accounting Reducing CO₂ Emissions in Factories	GHGs from the Whole Supply Chain (by Scope)
305-2	Energy indirect (Scope 2) GHG emissions	Overview of Environmental Impact and Environmental Accounting Reducing CO₂ Emissions in Factories	GHGs from the Whole Supply Chain (by Scope)
305-3	Other indirect (Scope 3) GHG emissions	Overview of Environmental Impact and Environmental Accounting	GHGs from the Whole Supply Chain (by Scope)
305-4	GHG emissions intensity	Reducing CO₂ Emissions in Factories	
305-5	Reduction of GHG emissions	Environment Policy Reducing CO₂ Emissions in Factories	Mid-term to Long-term Environmental Vision
305-6	Emissions of ozone-depleting substances (ODS)	—	* If we use such a material, we are ready to cease its use immediately.
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Chemical Substance Management	Initiatives to Reduce Negative Environmental Impact at Factories
		Environmental Risk Management	* It is included in the released into air, however, it is controlled so as not to exceed the standard allowance. Environmental Compliance Management at Factories and Field Surveys
GRI 306: Waste 2020			
306-1	Waste generation and significant waste-related impacts	Environmental Risk Management	Environmental Compliance Management at Factories and Field Surveys
		Eco-conscious Products and Factories	
306-2	Management of significant waste-related impacts	Overview of Environmental Impact and Environmental Accounting	
		Environmental Risk Management	Environmental Compliance Management at Factories and Field Surveys
306-3	Waste generated	Overview of Environmental Impact and Environmental Accounting	
		Resource	Evolution of Resource-Recycling Manufacturing
306-4	Waste diverted from disposal	Overview of Environmental Impact and Environmental Accounting	
		Resource	Evolution of Resource-Recycling Manufacturing
306-5	Waste directed to disposal	Overview of Environmental Impact and Environmental Accounting	
		Resource	Evolution of Resource-Recycling Manufacturing
GRI 308: Supplier Environmental Assessment 2016			
308-1	New suppliers that were screened using environmental criteria	—	

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308-2	Negative environmental impacts in the supply chain and actions taken	Collaboration Across the Supply Chain	Activities for Green Procurement
		Responsible Supply Chain	Supply Chain Due Diligence
GRI 401: Employment 2016			
401-1	New employee hires and employee turnover	Employee Well-being	Human Resources Data
		Panasonic Automotive Systems Co., Ltd. Corporate Information Website	Human Capital Management
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	—	
401-3	Parental leave	Employee Well-being	Diversity, Equity & Inclusion (DEI)> ■Support for Every Individual (Japan)> ◇Support for Employees During Pregnancy and Childcare
GRI 402: Labor/Management Relations 2016			
402-1	Minimum notice periods regarding operational changes	—	
GRI 403: Occupational Health and Safety 2018			
403-1	Occupational health and safety management system	Employee Well-being	Safety and Health> ■Creating a Safe and Secure Workplace> Promoting External Certification> ◇ISO45001
403-2	Hazard identification, risk assessment, and incident investigation	Employee Well-being	Safety and Health> ■Creating a Safe and Secure Workplace> Risk assessment initiatives (Japan)
403-3	Occupational health services	Employee Well-being	Occupational Health
403-4	Worker participation, consultation, and communication on occupational health and safety	Employee Well-being	Safety and Health> ■Creating a Safe and Secure Workplace> Risk assessment initiatives (Japan)
403-5	Worker training on occupational health and safety	Employee Well-being	Occupational Health > Training (Japan)
		Employee Well-being	Safety> ◇Equipment Safety Education System
403-6	Promotion of worker health	Employee Well-being	Occupational Health > ■Promoting Health and Productivity Management
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Employee Well-being	Safety and Health Safety Occupational Health
403-8	Workers covered by an occupational health and safety management system	Employee Well-being	Safety and Health
403-9	Work-related injuries	Employee Well-being	Safety> ◇Serious/Severe Accidents in Recent Years and Prevention Measures
403-10	Work-related ill health	Employee Well-being	Occupational Health > ■Promoting Health and Productivity Management> ◇Health Issues and Initiatives (Japan) ◇Environmental Improvements (in Japan) ◇Stress Check (Japan)
GRI 404: Training and Education 2016			
404-1	Average hours of training per year per employee	Employee Well-being	Employee Empowerment> Developing Human Resources> Training (Japan)
404-2	Programs for upgrading employee skills and transition assistance programs	Employee Well-being	Employee Empowerment> Developing Human Resources
		Employee Well-being	Employee Empowerment> Transfer and Deployment - Career Development Support
404-3	Percentage of employees receiving regular performance and career development reviews	Employee Well-being	Employee Empowerment> Transfer and Deployment - Career Development Support> A Better Dialogue (Between Employees and their Managers)
GRI 405: Diversity and Equal Opportunity 2016			
405-1	Diversity of governance bodies and employees	Employee Well-being	Human Resources Data
		Panasonic Automotive Systems Co., Ltd. Corporate Information Website	DEI
405-2	Ratio of basic salary and remuneration of women to men	Employee Well-being	Basic Policy> Expected Expertise and Experience for Directors and Executive Officers
			Diversity, Equity & Inclusion (DEI)> ■Support for Every Individual (Japan)> Promoting Gender Equality
GRI 406: Non-discrimination 2016			
406-1	Incidents of discrimination and corrective actions taken	—	

DISCLOSURE		LOCATION	TITLE
GRI 407: Freedom of Association and Collective Bargaining 2016			
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Respect for Human Rights	Addressing Key Human Rights Risks > ■ Respect for the Freedom of Association and the Right to Collective Bargaining
		Responsible Supply Chain	Supply Chain Due Diligence
GRI 408: Child Labor 2016			
408-1	Operations and suppliers at significant risk for incidents of child labor	Respect for Human Rights	Addressing Key Human Rights Risks > ■ Prohibiting Child Labour and Protecting Young Workers
		Responsible Supply Chain	Supply Chain Due Diligence
GRI 409: Forced or Compulsory Labor 2016			
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Respect for Human Rights	Addressing Key Human Rights Risks > ■ Prohibiting Forced Labour
		Responsible Supply Chain	Supply Chain Due Diligence
GRI 410: Security Practices 2016			
410-1	Security personnel trained in human rights policies or procedures	—	
GRI 411: Rights of Indigenous Peoples 2016			
411-1	Incidents of violations involving rights of indigenous peoples	—	
GRI 413: Local Communities 2016			
413-1	Operations with local community engagement, impact assessments, and development programs	Community Relations	Employee Participation and Supporting Systems
413-2	Operations with significant actual and potential negative impacts on local communities	—	
GRI 414: Supplier Social Assessment 2016			
414-1	New suppliers that were screened using social criteria	Responsible Supply Chain	Supply Chain Due Diligence
414-2	Negative social impacts in the supply chain and actions taken	Responsible Supply Chain	Supply Chain Due Diligence
GRI 415: Public Policy 2016			
415-1	Political contributions	Compliance and Business Ethics	Initiatives for Compliance Risks > ■ Preventing Bribery and Corruption We do not make political donations as of now.
GRI 416: Customer Health and Safety 2016			
416-1	Assessment of the health and safety impacts of product and service categories	Raising Product Quality Levels and Ensuring Product Safety	Quality Assurance Activities and Initiatives
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Raising Product Quality Levels and Ensuring Product Safety	Responding to Product-Related Incidents
GRI 417: Marketing and Labeling 2016			
417-1	Requirements for product and service information and labeling	Raising Product Quality Levels and Ensuring Product Safety	Internal Company Rules Concerning Product Labeling
417-2	Incidents of non-compliance concerning product and service information and labeling	Raising Product Quality Levels and Ensuring Product Safety	Internal Company Rules Concerning Product Labeling * There have been no instances of product labeling violations subject to fines or penalties in the Group (as of August 2025).
417-3	Incidents of non-compliance concerning marketing communications	Responsible Publicity and Advertising	* There have been no incidents of non-compliance concerning marketing communications in the Group (as of August 2025).
GRI 418: Customer Privacy 2016			
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Cyber Security and Data Protection	Data Protection * There have no substantiated complaints concerning breaches of customer privacy and losses of customer data in the Group (as of August 2025).
GRI 306: Effluents and Waste 2016			
306-3	Significant spills	Chemical Substance Management	Initiatives to Reduce Negative Environmental Impact at Factories * There have not significant spills in the Group (as of August 2025).

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The mission of the Panasonic Automotive Systems Group is to create a sustainable mobility society to promote a better life for everyone.

The sustainable mobility society that we are striving to create is an ideal society that can resolve social issues associated with the means of mobility including environmental issues due to automobile emissions, urban traffic congestion, the elimination of traffic accidents and the need for safe and secure moving world as realized due to the coronavirus pandemic.

The role of companies is to contribute to solving environmental issues worldwide from a long-term perspective. We are dedicated to becoming a mission-driven company where all of our decisions and actions are aimed achieving this goal.

To fulfill our mission and to work for sustainable growth and enhanced corporate value, we are pursuing initiatives that upgrade the quality of governance while flexibly adapting to changing social issues and the business environment.



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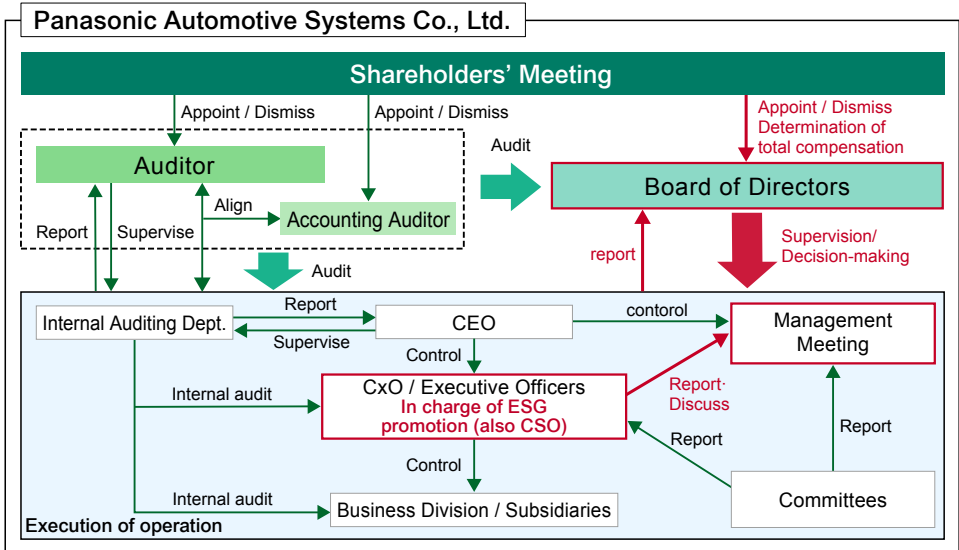
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Basic Policy

Panasonic Automotive Systems Group believes it is important to increase corporate value by fulfilling accountability through dialogue with various stakeholders such as shareholders and customers, making effort to execute transparent business activities, and swiftly conducting business activities with fairness and honesty based on its basic philosophy of “a company is a public entity of society.”

From December 2024, the Group adopted a new management structure based on a strategic partnership with the Apollo Group inclusive of Apollo Global Management Inc. (Apollo). On December 2, 2024, Panasonic Holdings Corporation (PHD) transferred all the shares of Panasonic Automotive Systems Co., Ltd. (the Company), which was wholly owned by PHD, to Star Japan Acquisition Co., Ltd. (SJA). SJA, the new parent company of the Company, is wholly owned by Star Japan Holdings Co., Ltd. 80% of the shares of Star Japan Holdings are owned by Apollo, and 20% are owned by PHD. Within the Company, important business operations are discussed in Management Meetings, which comprise the President and executive officers, while the final decisions are made by the Board of Directors. The Board of Directors carefully monitors the company’s businesses and operations. We also have auditors to monitor the activities of the directors.

Corporate Governance Structure



Board of Directors

- The PAS Board of Directors makes decisions in aligning with the SJH Board of Director’s decisions to ensure they reflect the intentions of both Apollo and PHD, PAS’s owners, into PAS’s business.
- Taking account of the expertise that the Board of Directors should possess, secure the diversity of knowledge, experience, and capability of the entire Board of Directors.
- All PAS directors are re-selected at the annual general meeting of shareholders (i.e. their serving term is one year).
- PAS directors are nominated by the SJH Board of Directors and appointed at a general meeting of PAS shareholders.
- The remuneration of PAS directors is appraised by the SJH Board of Directors according to predetermined financial and non-financial indices, and confirmed by the PAS Board of Directors.

Auditor

- The auditor is responsible for monitoring the conduct of directors and executive officers, examining whether there has been any violation of laws or other wrong doing, and confirming that the board’s managerial decisions follow resolutions made in the general meeting of shareholders.
- The auditor is commissioned to play a role to prevent problems and misconduct in the organization, ensure legal compliance and corporate ethics, and control business conduct to ensure the trust of stakeholders.

Executive Officers

- The remuneration of PAS executive officers, who are not directors, is appraised by the SJH Board of Directors according to predetermined financial and non-financial indices, and confirmed by the PAS Board of Directors.

Management Meetings

- Discussions in such meetings include preliminary deliberations concerning decisions to be made in meetings of the Board of Directors, deliberations on corporate-wide strategic issues, monthly financial reports, confirmation of managerial information, etc.
- The meeting members comprise all 13 PAS executive officers and two SJH directors from Apollo.

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Expected Expertise and Experience for Directors and Executive Officers

- (1) Business management
- (2) Industrial structure and megatrends
- (3) Utilization of AI and data
- (4) Awareness of global/international political situation
- (5) Financial and investment judgement
- (6) Technology, manufacturing, and supply chain
- (7) Governance and risk management
- (8) Sustainability management
- (9) Human capital management

The following table shows a list of the top four areas of expertise in which all directors, auditors, and executive officers are expected to demonstrate their skills (five areas for the president).

It does not always represent all of the knowledge, experience, and capability of individual members.

	Name	Gender	Position	Attendance after December 2024 (Held: 8)	Expertise and Experience								
					Business Management	Industrial Structures / Megatrends	AI/Data Utilization	Global/ International Political Situation	Financial/ Investment Decisions	Technology/ Manufacturing/ Supply chain	Governance/ Risk Management	Sustainable Management	Human Capital Management
Directors/ Auditors	Masashi Nagayasu	Male	Representative Director, President	8	○	○		○	○				○
	Masashige Mizuyama	Male	Representative Director, Executive Vice President	8		○	○	○		○			
	Hisayoshi Nakao	Male	Director, Executive Officer	8		○	○	○				○	
	Yuta Suzuki	Male	Auditor	8				○	○		○		
Executive Officers	Scott Kirchner	Male	Executive Vice President		○			○	○	○			
	Susumu Ibaraki	Male	Executive Officer			○	○			○			
	Takashi Kumagai	Male	Executive Officer			○		○	○				
	Yasuyuki Nagira	Male	Executive Officer					○		○	○	○	
	Tomoka Ohashi	Male	Executive Officer								○	○	○
	Keiko Ohta	Female	Executive Officer		○			○	○	○			
	Keita Sasaki	Male	Executive Officer					○			○	○	
	Takayuki Tanabe	Male	Executive Officer		○			○	○	○			
	Yoshinori Tokuda	Male	Executive Officer		○				○	○	○		
	Tomoaki Yamaguchi	Male	Executive Officer		○	○		○					

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Basic Approach to Sustainability

Panasonic Automotive Systems Group’s Sustainability Management

Our founder Konosuke Matsushita pursued both of ‘material and spiritual prosperity’, that is ‘an ideal society with affluence both in matter and mind’ in his entire life. In 1932, he set forth a 250-year plan, consisting of ten successive phases of 25 years, to reach the ideal society he envisioned. Since then, we have been fulfilling this lofty mission by addressing various social issues through our business activities for the wellbeing of people all over the world.

However, today’s society falls short of the ideal state of our founder’s aspirations. Although people in developed nations now live a life full of material goods, many emerging issues are threatening social sustainability. These include environmental destruction and depletion of natural resources, problems that are rapidly worsening year by year, as well as population trends such as global-scale population growth and, at the same time, the aging populations with low birthrates in developed nations. These issues will only become more severe for the next generations.

Taking our founder’s principle as our heritage, the Panasonic Automotive Systems Group will directly face to social issues. To deliver a more comfortable life to everyone, we aim to create a sustainable mobility society by working to resolve social issues concerning transportation. For this purpose, we are furthering our sustainability management to address issues concerning the global environment from a long-term viewpoint.

Through our sustainability management process, we identify materialities, or important opportunities and risks, related to sustainability from the two perspectives of “financial impact on the Group” and “impact on society.” Among the materialities, we regard the following issues to have a potentially significant impact across the Group: climate change, resource use and the circular economy, own workforce, workers in the value chains, consumers and/or end-users, and business conduct—including cyber security and data protection.

The ideal society at which we aim cannot be built solely by us. It is something to be formed in relationships among stakeholders—including customers, suppliers, employees, and local communities—and with Apollo and Panasonic Holdings, as shareholders. Advancing together with all stakeholders—we believe this is the only way to build the ideal society. We remain as a public entity of society and we pursue the building of an ideal society together with all our stakeholders. In this way we constantly enhance our corporate value.

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The Promotion Structure of Sustainability Management

The Panasonic Automotive Systems Group thoroughly implements autonomous responsible management and enhances the competitiveness of our business through prompt decision-making in response to external changes and flexible system design depending on our business characteristics. Important items are reported across the Group, through the Board of Directors meetings and Management Meeting, to provide dynamism in discussing and directing specific measures. We thus strive to improve the Group’s overall corporate value.

To reinforce sustainability management, the CEO and executive officers responsible for ESG promotion supervise the Sustainability Planning Meeting formed by every corporate business function and overseas companies. The Meeting discusses and determines the direction of important issues related to Group sustainability. Important agenda items and working results are reported across the Group, mainly through our quarterly Management Meetings. The details are also reported and shared in the Board of Directors meetings, as necessary, to ensure Groupwide decision making.

For more details, see “Corporate Governance Structure” in “Corporate Governance Structure and Initiatives” ([page 11](#)).

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Materiality

Purpose of Identifying Materiality

We assess materiality based on the double materiality approach: one concerns identifying both positive and negative impacts from our business on the external environment and society; the other covers external impacts on our business development and finances that could generate both risks and opportunities. We continue to improve our sustainability management by maximizing business opportunities while minimizing risks identified through this materiality.

Process of Identifying Materiality

Among social demands and anticipated future issues, we identified issues related to our business activities' impacts on the external environment and society, and issues that could provide us with risks and opportunities. Then, we identified the value chain processes where these issues could occur, and the time span of possible occurrence (short-, mid-, or long-term). As for the impacts, we evaluated the scale, scope, remediability, and likelihood. Regarding risks/opportunities, we evaluated their financial effect and likelihood. As a result, we identified critical issues in six areas, their impact, and related risks and opportunities. Then we analyzed these aspects from the viewpoints of important stakeholders, including customers, investors, employees, and business partners. We have also examined the validity of the analysis procedure and the identified critical issues together with external experts. Materiality is identified after deliberations in the Sustainability Planning Meeting, Management Meeting, and the Board of Directors meeting.

The identified issues, their impact, risks and opportunities, and our response to them are summarized on the following page.

Note: Some of the materiality items are similar to the names of "Group Major Risks / Major Strategic Risks" determined by risk management activities; however, due to different objectives and identification processes, their corresponding initiatives are partly different. For more details, see "Risk Management" chapter ([page 20](#)).

Qualitative Assessment (Impacts & Risks/Opportunities)

1 What are impacts on and risks/opportunities from environment and/or humans?



2 Where do the impacts or risks/opportunities occur in the value chain of?



3 When will the impacts or risks/opportunities occur?



Quantitative Assessment (Impacts) [0-5]

- 4 Scale ("How serious is the impact?")
- 5 Scope ("How widespread is the impact?")
- 6 Remediability ("How difficult is it to counteract this?")
- 7 Likelihood ("How likely is it that the impact will occur?")

Quantitative Assessment (Risks/Opportunities) [0-5]

- 8 Financial Effect ("How large is the financial effect it generates?")
- 9 Likelihood ("How likely is it that the risk/opportunity will occur?")

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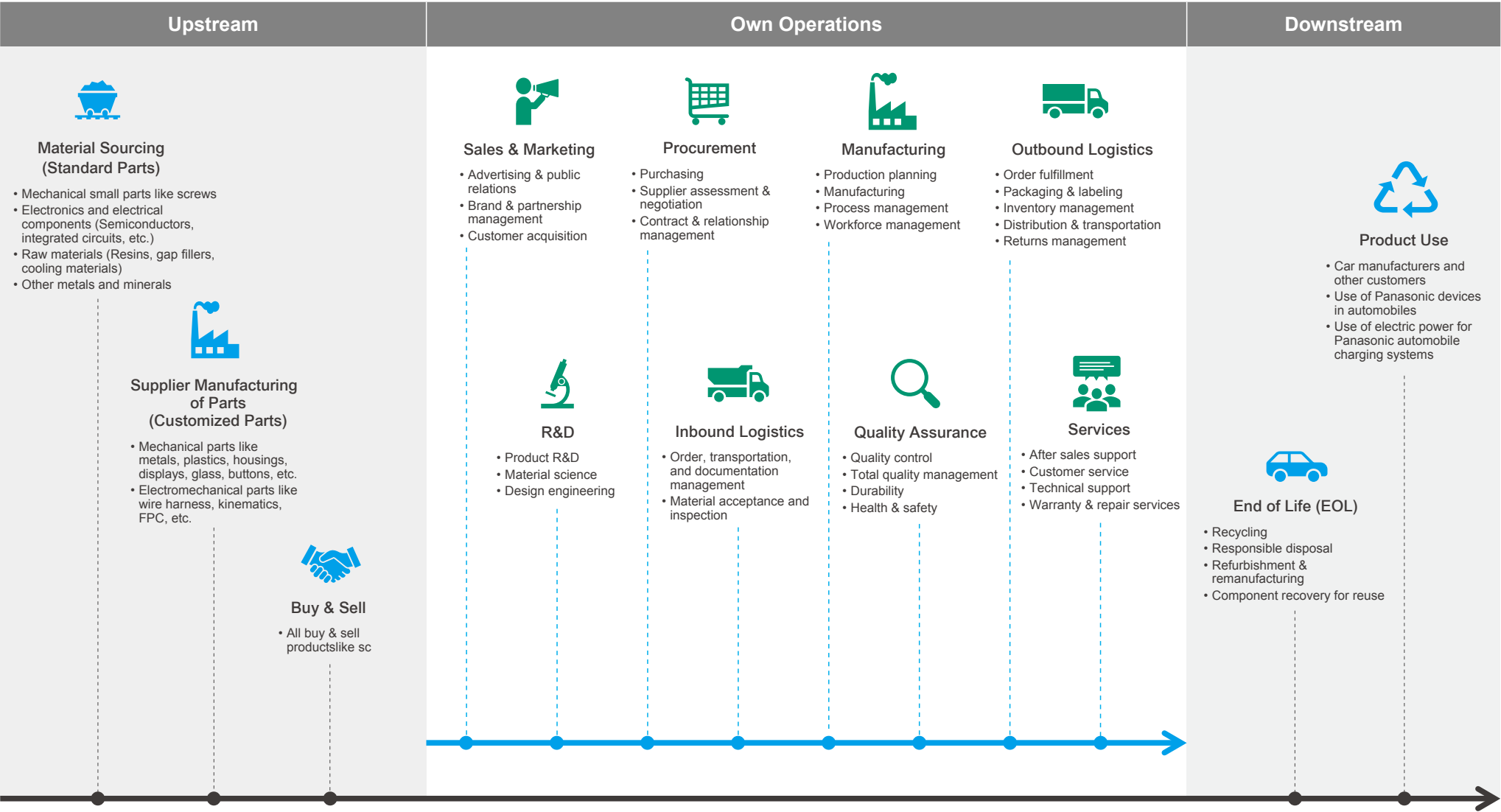
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Impact on External Environment and Society, and Issues That Could Become an Opportunity or Risk to Us

				Related section in this report
Climate Change	People and Planet	Negative impacts (Actual)	1 Greenhouse Gas (GHG) emissions in our value chain (Scope 3) 2 Greenhouse Gas (GHG) emissions in our own operations (Scope 1) 3 Greenhouse Gas (GHG) emissions through the purchase of energy (Scope 2) 4 Energy consumption in manufacturing operations	Overview of Environmental Impact and Environmental Accounting
		Positive impacts (Actual)	1 Offering products that support the low-emission E-Mobilities sector	Eco-conscious Products and Factories
	Finance	Risks	1 Rising costs of energy-intensive materials and manufacturing operation due to high energy prices 2 Increased operating costs due to transition to renewable energies at the manufacturing site 3 Customer project loss/termination due to incompliance with their climate protection requirements	Reducing CO₂ Emissions in Factories
		Opportunities	(None above the threshold)	
Resource Use and Circular Economy	People and Planet	Negative impacts (Actual)	1 Consumption of natural and non-renewable resources 2 Products not designed for disassembly can lead to higher waste	Eco-conscious Products and Factories
		Positive impacts (Actual)	1 Increased recycled rates in own operations promote resource efficiency	
	Finance	Risks	1 Customer requirements require increased R&D investments 2 Higher costs for the purchase of more sustainable material	Resources
		Opportunities	1 Circularity innovation in products contributes to market differentiation	
Own Workforce	People and Planet	Negative impacts (Actual / Potential)	1 Workplace accidents at manufacturing sites leading to physical strain and injuries 2 Workforce reduction from market changes and industry trends 3 Organizational transformations may result in a weakened sense of connection to the company 4 Workplace discrimination and harassment, as a result of the lack of adequate mechanisms	Respect for Human Rights
		Positive impacts (Actual)	1 Support services to enhance employee work life balance 2 Workplace health initiatives for employees 3 Promotion of social dialogue with employees 4 Training opportunities enhance skills and support career progression	
	Finance	Risks	1 Increased recruitment costs due to a shortage of specialists in the market 2 Reduced talent retention & attractiveness due to PAS's separation from the Panasonic Group	Employee Well-being
		Opportunities	1 Improved efficiency and innovation potential because of targeted training and individual support	

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Impact on External Environment and Society, and Issues That Could Become an Opportunity or Risk to Us

Related section in this report

Workers in the Value Chain	People and Planet	Negative impacts (Potential)	1 Sourcing from companies in regions prone to poor working conditions 2 Reduced upstream workers' wages to cut costs 3 Business with suppliers in countries where occupational safety is not/poorly observed 4 Sourcing from companies involved in unequal treatment of employees in the value chain 5 Sourcing from companies in risky countries or sectors, potentially supporting child or forced labor in the value chain 6 Lack of traceability in the mineral supply chain leading to labour or human rights issues	Responsible Supply Chain
		Positive impacts	(None above the threshold)	
	Finance	Risks	(None above the threshold)	
		Opportunities	(None above the threshold)	
Consumers and/or End-Users	People and Planet	Negative impacts (Potential)	1 Non-compliance with functional safety standards may cause injuries	Raising Product Quality Levels and Ensuring Product Safety
		Positive impacts (Actual)	1 Through safety features, products improve user's well-being and public health	
	Finance	Risks	1 Reputation harm and escalated liabilities from safety or security incidents 2 Functional safety incidents may lead to liability claims and product replacements 3 Increased compliance costs due to stricter car manufacturer safety requirements	
		Opportunities	(None above the threshold)	
Business Conduct (incl. Cyber Security & Data Protection)	People and Planet	Negative impacts (Potential)	1 Insufficient whistleblower protection promotes a culture of mistrust 2 Product level cyber security issues may cause safety, financial, operational, and privacy damages	Compliance and Business Ethics Cyber Security and Data Protection
		Positive impacts (Actual)	1 Transparent whistleblowing systems for reporting violations 2 Information security protects key assets, ensuring business continuity and stability 3 Cyber security protects data, embedded software, and connected vehicle components	
	Finance	Risks	1 Financial loss and legal consequences because of leakage of critical information	
		Opportunities	(None above the threshold)	

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Respecting Applicable Legislation, Global Standards, Norms, Guidelines, and Initiatives

The Panasonic Automotive Systems Group conducts its business based on applicable legislation, as well as global standards, specifications, norms, guidelines, and various initiatives.

These concepts are reflected in the Panasonic Group Code of Ethics & Compliance with which we maintain compliance.

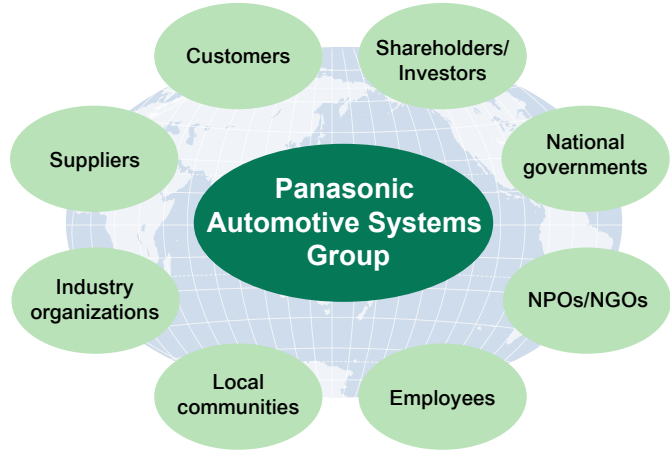
Global Standards, Norms, Guidelines and Initiatives

OECD Guidelines for Multinational Enterprises on Responsible Business Conduct	ISO26000	UN Global Compact
Code of Conduct of RBA (Responsible Business Alliance)	Japan Business Federation Charter of Corporate Behavior	Global Reporting Initiative (GRI) Standards
TCFD (Task Force on Climate-related Financial Disclosures)	RE100	Universal Declaration of Human Rights
ILO Core Labour Standards	UN Guiding Principles on Business and Human Rights	

Stakeholder Engagement

The Group conducts dialogues with its wide range of stakeholders around the world on various aspects of its business. We incorporate the opinions we receive into our business activities and product creation.

Major Stakeholders



Examples of Stakeholder Engagement

Customers	Business activities, Website, Customer care center/Call center, etc. Cf.) Sustainability Data Book > Customer Relations Page 86
Shareholders/Investors	General meeting of shareholders, Individual meetings, etc. Cf.) Sustainability Data Book > Corporate Governance Structure and Initiatives Page 11
Suppliers	Procurement activities, Partner's meeting, CSR self-assessment, Supplier audit, etc. Cf.) Sustainability Data Book > Responsible Supply Chain Page 80
Employees	Employee opinion survey, Messages from senior management, Dialogues/networking event, Intranet & in-house SNS, etc. Cf.) Sustainability Data Book > Employee Well-Being Page 63
Government/Industry Organizations	Participation in business and industrial organizations, lobbying international organizations and governments, etc. Cf.) Sustainability Data Book > Respect for Human Rights > Participation in International and Industrial Partnerships Page 62

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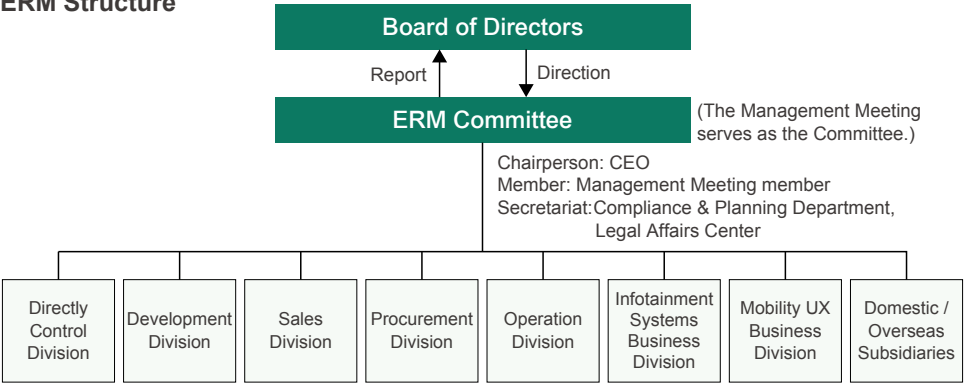
Our founder, Konosuke Matsushita, coined numerous aphorisms which are still used at the company: “Hardship now, pleasure later,” “There are signs before all things,” and “Small things can create big problems; one must be alert to signs of change and act accordingly,” among many others. Inheriting these ideas as the cornerstone of our thinking, we conduct risk management activities.

Policy and Management Structure

Panasonic Automotive Systems Co., Ltd. considers it a vital management issue to accurately identify risks that could affect its business activities and take appropriate countermeasures to ensure the achievement of its business objectives and sustainable and stable development. Thus we have formulated the Basic Rules for Risk Management (the “Basic Rules”), and we promote risk management based on these. The Basic Rules list the three objectives of risk management:

The Chief Risk Management Officer (CRO) is responsible for risk management across the Group (as of August 2025). We also established the Enterprise Risk Management Committee (ERM Committee) led by the CEO as the chairperson to control major risks in business management. The committee members are the Management Meeting members that comprise executive officers from each function, headquarters, and business divisions. Also, the CRO and the Legal Affairs Center operate the committee secretariat. The Board of Directors receives a report from the Committee on major risks, countermeasures and their progress, in order to monitor and verify the validity, effectiveness, and viability of the risk management measures.

ERM Structure



Basic Framework

Our company promotes risk management processes that are integrated with management and/or business strategies based on Basic Rules based on international standards and frameworks, such as ISO31000 and COSO-ERM (2017).

We define a “strategic risk” as an uncertain event that could either be an opportunity or a threat when achieving a business objective while making a plan or decision concerning related management and/or business strategies. We also define an “operational risk” as an event that could affect our business activities and be a threat to business operations. Based on these definitions, we identify strategic risks and operational risks through an annual risk assessment, designed to explore any possible risks across the business taking account of changes in the business environment.

Based on the results of this risk assessment, the ERM Committee determines the major business risks following deliberations made from the viewpoints of management and business strategies and social responsibility. Of the determined major risks, the response to strategic risks and their aims is discussed and decided by the CEO and the Management Meeting members at Board of Directors meetings, Management Meetings, and Business Strategy Review Meetings. Regarding operational risks, the risk owners formulate and implement countermeasures under the supervision of the ERM Committee.

Major Risks in Fiscal 2025

The following are identified as major risks to our business in fiscal 2025.

Major Strategic Risks

Changes in Business Structure Due to Changing Vehicle Structure and the Automotive Market

The automotive industry is now undergoing a major once-in-a-century change. Against this backdrop, we determined our primary factors in strategy planning as “intelligent vehicles” and “diversified values.” We also set two priority areas: “cockpit high performance computing (HPC);” and “cabin user experience (UX).” In the area of cockpit HPC, we are focusing on cockpit domain controllers (CDCs) and advanced computing, aiming to become a leader in in-vehicle computing technology that utilizes software defined vehicle (SDV) and AI technologies. In the area of cabin UX, the emphasis on value is shifting from individual product

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functions to the overall in-vehicle space. Therefore, we aim to offer a new mobility experience centered around our “human understanding logic,” which we have been developing to date.

Success in Collaboration with Apollo and Standalone

In December 2024, we commenced business operations under a new structure with capital participation by Apollo. Regarding this significant change as an opportunity, we are reinforcing governance , strengthening management structure from the perspectives of the capital market, prompting management reforms, and accelerating our efforts to maximize our potential.

Geopolitical Risks (Decoupling and Tariffs)

Conflicts between countries and regions, and policy changes in the U.S. following the change of government, along with the responses from major countries, exacerbate market decoupling and harden global economic security policies, including tariffs. Such global changes deliver a significant impact on our business strategy, therefore, we continuously monitor the rapid changes occurring in the business environment. We are also optimizing these strategies, including diversifying our supply chains and reviewing and restructuring our production systems from the mid- to long-term viewpoint.

Securing Human Resources in Strategic Areas

Business strategy and securing the necessary human resources are inextricably linked. It is also essential to secure employment in preparation for the Initial Public Offering (IPO). We have established a clear direction and are monitoring the progress of employing appropriate human resources and placing them in strategic areas.

Major Operational Risks

Risks in Business Continuity Management (BCM) (Natural Disasters and Supplier Damage)

Understanding the necessity of continuing our business as a corporate social responsibility, we are actively implementing Business Continuity Management (BCM) activities. This is to avoid any business interruption in the event of natural disasters, fires or explosions, epidemics and pandemics, and cyberattacks. Also, the activities include the early recovery of essential functions after experiencing an unavoidable business interruption. Our in-vehicle system business has a high demand for business continuity from customers. We are diligently maintaining BCM to pursue our supply responsibilities.

Supply Chain Risks Concerning Taiwan’s Contingency

Geopolitical risks related to the Taiwan Strait impose a potential risk for our business. In particular, when considering the supply chain of a business, the impact of supply shortages or interruptions in Taiwan-related critical parts could be severe. Therefore, we are working to formulate a BCP for the risk in addition to our usual Business Continuity Plan (BCP).

Critical Quality Issues

Based on the management principles of our founder, Konosuke Matsushita, we understand that it is our social responsibility to deliver a sense of security to our customers by ensuring the safety of the products that we manufacture and sell. Cars in particular are directly linked to people’s lives, therefore, we fully adhere to quality management system standards, such as ISO9001 and IATF16949, along with close monitoring and auditing to remain in compliance with them across all business procedures.

BCM and BCP Implementation

As mentioned earlier, we run our business under BCM with the commitment to continue our business as a corporate social responsibility. We have also specified business continuity risks as a major operational risk while implementing continual countermeasures.

Major Efforts

We have established the Emergency Management Rules, which stipulate the basic policy for responding to emergencies that could have a significant impact on our company as a whole, including the escalation and decision-making process, the system and roles to be played in responding to such emergencies, as well as initial responses. Our Business Continuity Plan (BCP) is established based on three aspects: business continuation policy, including recovery process etc.; emergency response; and disaster prevention and minimization practices. Through an annual assessment, various ad hoc inspections, and regular emergency drills, we test and revise this BCP to reinforce our BCM and business resilience. We have also conducted a company-wide emergency safety drill based on a scenario in which extensive damage has occurred in the West-Japan region due to a Nankai Trough Earthquake. Each business site also holds regular emergency drills and evacuation practices with the support of local authorities in their respective areas.

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Compliance and Business Ethics

Our CEO presented the following compliance-related message for fiscal 2025.

“As I have mentioned frequently, compliance is essential to our business. However, we are still striving to achieve zero compliance incidents. In this rapidly changing business environment, simply following the rules is not enough to cultivate a compliance culture. Therefore, last year, I emphasized the importance of ‘Integrity’ to encourage proactive compliance initiatives, by doing the right thing at following our hearts. Additionally, we have incorporated ‘Integrity’ into The PAS WAY. This not only supports our compliance initiatives but also highlights the Group capability to drive business excellence. ‘Integrity’ shows our commitment to creating value for all stakeholders, including customers, suppliers, and employees. We deeply cherish ‘Integrity’ as a core value in all our business activities.”

Along with safety and quality, compliance forms an important foundation. It is essential to strengthen this foundation for us to advance further. Aiming to the “Joy in Motion” design company as we stated in our vision, we are driving our groupwide efforts in compliance under the banner of “Compliance First.”

Policy

In December 2024, the Group transitioned to a new management structure through a strategic partnership with the Apollo Group. After the transition, the Group continues to uphold the values centered on the management philosophy of its founder Konosuke Matsushita. We continue to place great value on our conventional policies, guidelines and internal rules, and maintain compliance with them. Therefore, each Group company continues to comply with the Panasonic Group Code of Ethics & Compliance.

 [Panasonic Group Code of Ethics & Compliance](#)

(Redirected to the website of Panasonic Holdings Corporation)

Responsible Executive and Framework

The Chief Legal Officer (CLO) is the executive officer responsible for group compliance. Basic Rules for Compliance clarify the roles and responsibilities related to compliance in the Group. The CLO and the legal department (Legal Center) are mainly responsible for establishing and implementing a compliance system. For major overseas sites, officers/managers in charge or legal departments are assigned to ensure compliance in their respec-

tive sites and regions, working together with the Legal Center to ensure compliance in their sites and regions. Additionally, the CLO regularly reports on initiatives for compliance at the Management Committee. We also include compliance-related metrics in the compensation calculations for our Executive Officers.

Internal Communication and Training

Internal Communication

We promote a compliance-first culture by regularly sharing compliance-related messages from the CEO, CLO and business directors. The Legal Center, which plays a leading role in these efforts, updates the annual compliance policies in response to social changes and legal trends. Whenever a legal and regulation change is relevant to the Group’s business, we share and communicate it via the CLO blog and internal SNS.

Training

We are working to update our employees’ awareness and understanding to recognize changes in risk and signs of legal violations and misconduct in different business areas, divisions, countries and regions. 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. We also included items about compliance awareness and culture in the Employee Opinion Survey distributed to all employees.

Additionally, each business department and overseas site conducts compliance-related training for those who need it, according to the risks relevant to their businesses and regional circumstances.

Whistleblowing System

We have established a Global Hotline - a Groupwide integrated reporting system that accepts reports which can be made anonymously from domestic and overseas sites and business partners or other external stakeholders to prevent misconduct and facilitate rapid resolutions to a wide range of compliance issues, including ethical issues, prevention of corruption, and harassment. We raise awareness of the system through various compliance trainings and

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posters at domestic and overseas workplaces and business sites to encourage employees to use it. Moreover, we have an Equal Partnership Consultation Office in Japan that provides consultation on fair treatment in the workplace, sexual harassment, and power harassment, as well as an Auditor Reporting System for assessing the legality of duty execution and investigating fraud perpetrated by directors and executive officers. Establishing the above hotlines and contact points does not prevent employees from using other reporting and grievance mechanisms. The Code of Ethics & Compliance stipulates that “Panasonic does not tolerate any retaliation or other action that discriminates against or disadvantages anyone who acts in good faith to raise a compliance concern.” Retaliation against whistleblowers is strictly forbidden, and their confidentiality is assured through anonymous reporting. We prohibit retaliation against internal/external whistleblowers, employees, those participating in investigations, and investigation teams, ensuring proper operations in our whistleblowing systems. We immediately conduct internal investigations when potential violations are identified through hotline reporting, audits, and the like. If these internal investigations conclude that illegal activities have taken place, we immediately address the violations while analyzing their root causes, implementing measures to prevent recurrences, and taking disciplinary actions against relevant parties as necessary, and we make necessary reports to whistleblowers.

 [Global Hotline EARS](#)
(Redirected to the website of Panasonic Holdings Corporation)

Performance Evaluation

We monitor the status of implementation of the Code of Ethics & Compliance annually, including appointing an officer responsible for observance of the Code at each Group company, providing education and training on the Code, and obtaining written pledges regarding the observance of the Code.

Serious Violations and Corrective Measures

If we become aware of any serious violation of laws or internal policies, we will cease the violation immediately and, after sufficiently investigating facts and causes, consider countermeasures. We report on such matters to the Management Committee or the Board of Directors as necessary and consider countermeasures of the violation swiftly and across the entire Group.

Initiatives for Compliance Risks

Preventing Cartels

The Group takes seriously the facts raised by the authorities in the past in connection with the auto-parts cartel, and are working to prevent and eliminate cartel activities. We take comprehensive and detailed measures to prevent any such involvement, as it would have a variety of negative impacts on our business. If we were to become involved in a cartel, we would not only lose the trust of our customers but also be required to pay huge amounts in penalties and compensation, and they would have negative impact to our business activities. Therefore, we are making thorough efforts to prevent cartels, specifically, we have a prior approval system for contact with competitors, give training on cartel elimination, and obtain written pledges from sales employees.

Preventing Bribery and Corruption

In addition to preventing the bribery of public officials, we prohibit offering benefits of any kind—regardless of whether they are offered in the form of entertainment, gifts or in any other form—or receiving any personal benefits in any situation in which these would be in violation of laws or business ethics. Specifically, we have a clear prior approval process for offering a gift, meal or hospitality, or travel invitation and accepting a gift, meal or hospitality or travel invitation for public officials or private business partners. We do not make political donations as of now.

To reduce the risk of indirect bribery and corrupt practices, we have introduced a risk due diligence tool and risk screening process that we use for transactions with sales intermediaries and outsourcing partners.

Trade Compliance

The Group has stipulated global trade compliance rules in its Code of Ethics & Compliance. We have also stipulated policies and guidelines such as export control policy. Based on these, we ensure trade compliance through adherence to import/export regulations and the trade-related laws and sanctions laws in each country. Specifically, we have established an export control system headed by the CEO and a customs law compliance system headed by the CLO respectively, and are promoting these initiatives in cooperation with business departments.

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Cyber Security

Recently, cyberattacks have become increasingly sophisticated and creative, raising the risk of large-scale incidents and damage, including targeting our business partners and supply chains. Simultaneously, companies must deploy enterprise cyber security measures, as society demands responsibility for addressing security incidents.

■ Policy

Panasonic Automotive Systems Group promotes Groupwide cyber security measures to protect data and personal information entrusted to us by clients from cyberattacks and ensure stable operations in our information systems, facilities, and the products and services we provide to customers. Specifically, we established the Automotive Cyber Security Basic Rules that apply across the Group alongside other guidelines all employees must follow involving information security, factory system security, and product security. We also regularly evaluate and review these initiatives.

■ Responsible Executive and Framework

The executive officer responsible for cyber security is the Chief Information Officer (CISO). The Chief Information Officer (CIO) is responsible for information system and information security, the Chief Operation Officer (COO) is responsible for factory system security, and Chief Technology Officer is responsible for product security (as of August 2025).We established the Cyber Security Promotion Office, headed by the CISO, to oversee the three aspects of information, factory system, and product security, accelerate and focus cyberat-tack countermeasures, and promote cyber hygiene (prevention under normal conditions) and cyber resilience (response and recovery during incidents).

■ Major Initiatives

Information Security

To mitigate stoppages, unauthorized operation, content falsification, and other damage to the Group’s internal systems, internal and external web services, and other IT systems, we take a multifaceted approach to ensure that our IT systems maintain stable operations. We build and update systems following our security policies, conduct periodic vulnerability as-sessments, and use periodic committee meetings and other means to ensure that IT system managers at Group companies thoroughly implement our strategies.

Factory System Security

We established guidelines for breach prevention, anomaly detection, and incident response covering defense against cyberattacks on its factories. We review these guidelines on an ongoing basis. All of our sites worldwide defend against cyberattack risks following these guidelines. We also conduct response training for plant personnel on the assumption that security incidents will occur to help raise awareness.

Product Security

As consumers use various products that are conveniently equipped with software and connected to a network, we must ensure product security to prevent harm from attacks initiated by malicious third parties whose aim is to leak or alter data or cause device malfunctions. Automotive suppliers are required to comply with UN Regulation UNR-155 and ISO/SAE21434, which aim to protect vehicles from cyber-attacks. We comply with regulations such as UNR-155 and have established an internal structure and rules, including guidelines for security-conscious development, and regularly reviews these structure and rules to ensure customer peace of mind when using products. We also provide training on risk analysis and secure coding to acquire the skills necessary to ensure product security in order to prevent damage from cyber attacks.

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Joint Initiative

To jointly tackle the above three initiatives, we have a dedicated team that regularly collects and monitors information about threats and vulnerabilities and implements countermeasures as necessary, while another team is dedicated to conducting drills in response to an assumed cyberattack.

Data Protection

In the course of business, companies may handle their business partners' data assets and customers' personal information. Improper management of such data may harm stakeholders, including information theft, leakage, and falsification. The Group is well aware of the importance of protecting personal information and other data entrusted by its business partners and customers through joint research, customer service, and marketing. Thus, we strive to ensure information security Groupwide to prevent data leaks and data tampering.

■ Policy

In order to gain customer satisfaction and trust through our products and services, the Group believes it is important to recognize various information including personal information entrusted to us by stakeholders such as business partners and customers as important assets for these stakeholders and valuable management resources for the Group. We believe it is important to protect and handle such information appropriately. Furthermore, since the enactment of the EU General Data Protection Regulation (GDPR), personal information protection legislation has been enacted and/or revised in various countries, and its importance is growing as our Group's data utilization business expands. Therefore, based on management rules and guidelines related to information security, and the Basic Information Security Policy and Personal Information Protection Policy, we strive to ensure security and protect personal information. By implementing organizational, technical, and physical security management measures, we accurately record information; properly manage, use, and dispose of it; and prevent its theft, leakage, and falsification. Additionally, we periodically conduct awareness building activities as part of our employee training, and evaluate how we handle information, review it, and implement improvement through internal audits. We also take necessary and appropriate measures, including thorough management and contract execution, to ensure that contractors properly manage security for the information we provide to them.

■ Responsible Executive and Framework

The executive officer in charge of information security and protection of personal information is Chief Information Officer (CIO) (as of August 2025). We has appointed responsible person in charge of information security and personal information protection in each Group company, and each Group company promotes information security initiatives in line with the Basic Information Security Policy and Global Rules, established by Panasonic Automotive Systems Co., Ltd.

■ Personal Information Protection and Compliance

In recent years, many countries have enacted or revised personal information protection laws and regulations. We recognize the importance of thorough compliance with personal information protection. As our business grows recently, our employees are increasingly likely to handle customer lifelogs and other personal information worldwide. Therefore, we are striving to improve our data management to provide a higher level of privacy protection. Additionally, to comply with the EU General Data Protection Regulation (GDPR), and other laws in various countries, we have prepared response manuals and are strengthening our efforts to ensure compliance and accountability to society through employee education and other measures. The Group strives to protect personal information based on the Personal Information Protection Policy established by each Group company, which mirrors PAS's policies. In addition, we are responding to risks by classifying personal information according to its sensitivity and the impact of its disclosure, and then implementing organizational, technical, and physical security control measures depending on that classification. We have mechanisms in place to check how the Group is actually handling personal information, and regularly assess risks related to personal information (privacy).

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■ Responding to Incidents

We have established reporting and response systems in its incident response rules and thoroughly trains employees to minimize harm during an incident. In the unlikely event of an incident, we also work to uncover the cause and prevent recurrence.

■ Training

Each year, we provide all employees with the necessary training to increase their security awareness and promote changes in behavior. Using content tailored to each employee's needs (level-specific for newly hired or promoted employees, or company-wide training), we carry out training on appropriate information management and cyber security along with drills to respond to targeted attacks.

FY2024 Groupwide training achievements

Information security:

- Training content: Enforcing information security and personal information protection
- Target trainees: All employees of the Group affiliated companies

Cyber security:

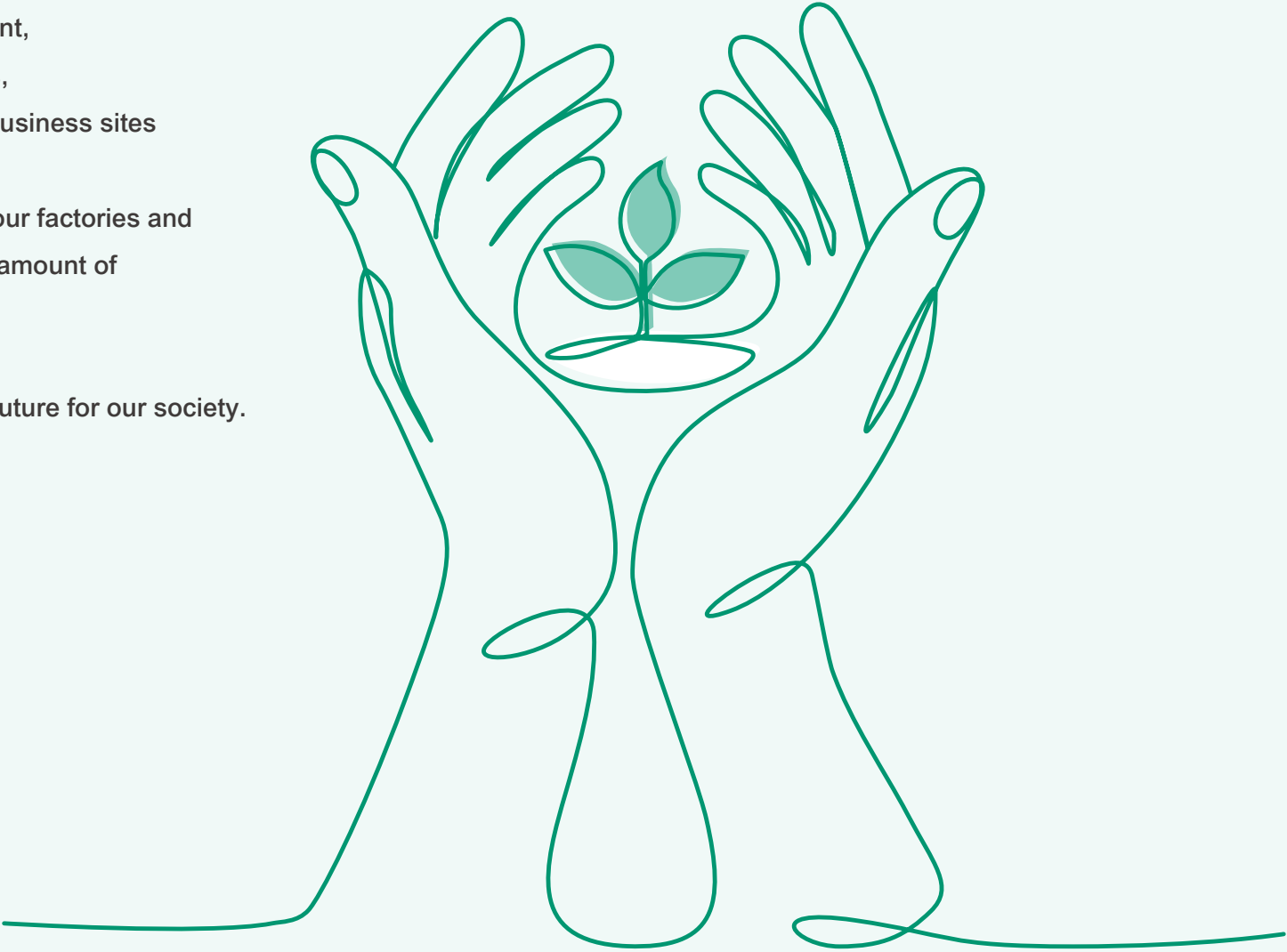
- Training content: Cyber security training and drills
- Target trainees: All employees of the Group affiliated companies

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Environment

To implement environmental management, we have introduced a range of initiatives, including net-zero CO₂ emission for all business sites under our management, reductions in the waste discharge from our factories and zero waste emissions by increasing the amount of valuables and recycled materials.

We are working to create a sustainable future for our society.



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Environment Policy

To achieve a better life for each person, we will create sustainable mobility society and new user value, fulfilling both improvement of environmental contribution and business growth.

[Action Policy]

1. In a wide variety of our product groups, we will make efforts to develop products with lower environmental load, and contribute to global environmental protection through providing them.
2. We will work toward achieving carbon neutrality in our business activities through rigorous energy conservation measures and the introduction of renewable energy optimized for each region.
3. We will promote recycling-oriented manufacturing through minimization of input resources and maximization of recycled resources.
4. We will strive to reduce waste and hazardous chemicals, prevent environmental pollution of air, water, soil, and groundwater, and protect the global environment and ecosystems by preventing deforestation and preserving biodiversity.
5. Through communication with our stakeholders, we will seek to understand expectations and requests related to ESG and respond appropriately.
6. We will comply with laws and other requirements applied in our business activities.
7. To improve environmental performance in our business activities, we will promote continual improvement for the Environmental Management System.
8. We will develop environmental human resources and establish an Environmental Management System on a global basis, practicing environmental sustainability management.
9. We will extend these initiatives across our entire supply chain to help reduce environmental impact.

We will make this Environmental Policy to the public, disseminate it to all employees and parties concerned, implement on a global basis by developing it to specific objectives or targets, and promote environmental management in all divisions.

July 1, 2025

Panasonic Automotive Systems Co., Ltd.

Contributing to society has been the management philosophy for the Panasonic Automotive Systems Group ever since its founding, and we have been working for environmental activities. We established the Environmental Policy, clarifying our approaches to fulfill both improvement of environmental contribution and business growth. Since then we have been carrying out initiatives including matters on global warming prevention and resources recycling, aiming to attain a sustainable, safe, and secure society. We established an Action Policy on environmental activities and announced it for stakeholders. We also fully notified all employees engaging in our business and related parties of this Policy. According to this Policy, we set concrete objectives and targets in each global division to further promote environmental management.

We strive to grow and develop our business through the creation of environmental value for customers with our technical strengths while each and every employee follows the Environmental Policy to address environmental challenges. Therefore, collaboration with stakeholders including our partners is essential. We will continue to sincerely work on environmental management through further collaboration with stakeholders.

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Mid-Term to Long-Term Environmental Vision

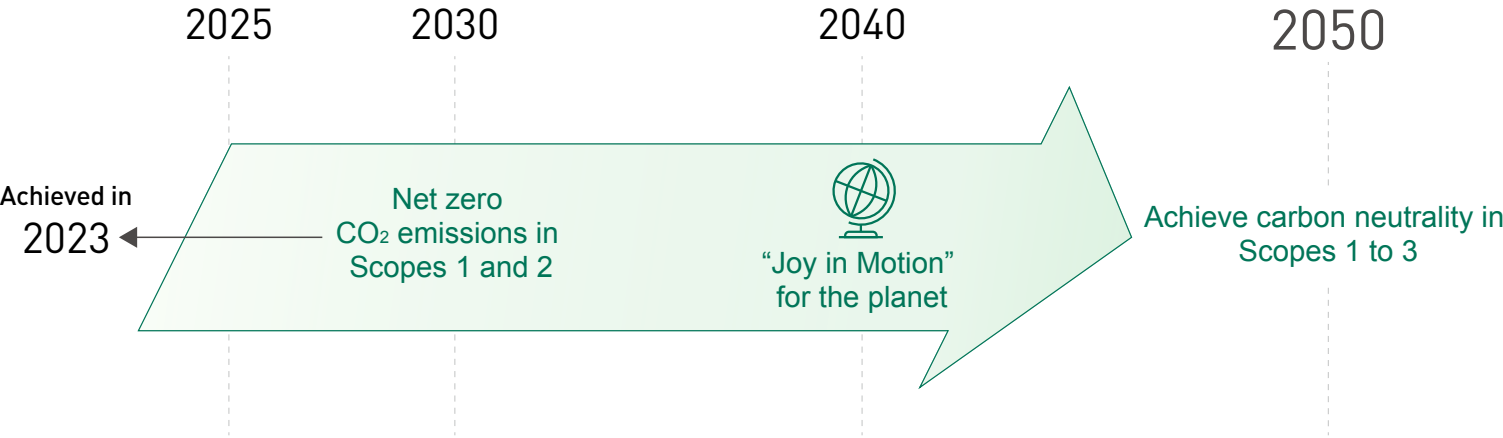
■ World’s leading "Joy in Motion" design company that considers the environment

Under our mission of “creating a sustainable mobility society to promote a better life for everyone,” our reason for existence is to contribute to solving issues in the global environment taking a long-term perspective.

To realize this mission, we aim to achieve net-zero CO₂ emissions for the Company, and are expanding CO₂ emissions reduction activities across the entire value chain to mitigate urgent issues of climate change and global warming. We are directing our activities toward building a circular economy that prevents resource depletion and contributes to realize a decarbonized society.

Specific Targets

- 2030: Net zero CO₂ emissions in Scopes 1 and 2 *Achieved in 2023
- 2050: Achieve carbon neutrality in Scopes 1 to 3



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Panasonic Automotive Systems Group uses electricity and fossil fuel in our production processes, which generates GHG. At the same time, we have decarbonization technology in the area of transportation, and technologies and knowhow to create products and automotive space that contribute to energy saving. We recognize risks and opportunities related to climate change as our important management issues. We analyze and evaluate our business according to the TCFD recommendations to reinforce our sustainability management.

Governance

To comprehensively manage our ESG activities, we appoint an Executive Officer in charge of ESG Promotion who organizes a cross-functional Sustainability Planning Meeting. Under the monitoring of plans and progress by the ESG Promotion Executive Officer, relevant functions and members address climate change and other environmental issues on a practical level. Among the important issues identified in the Sustainability Planning Meeting, those that require decisions by the management are presented by the ESG Promotion Executive Officer to the Management Meeting for discussion and conclusion. As for the climate change, we also set KPIs that link with the management's remuneration, thereby reinforcing commitment to achieve our carbon neutrality target.

(Reference) Promotion of Sustainability Management ([page 14](#))

Strategy

We carried out a scenario analysis based on the TCFD recommendations, and identified the business risks and opportunities related to climate change. Based on the results of this analysis, we are directing our efforts toward achieving our carbon neutrality target and reinforcing our business resilience, as well as developing closer communications with stakeholders.

■ Scenario Analysis Overview

- We used two scenarios: the 4°C scenario (IPCC SSP5-8.5 and IEA STEPS), where global average temperatures reach 4°C above preindustrial levels; and the 1.5°C scenario (IEA NZE).
- Based on the TCFD Framework,^{*1} we evaluated the impact from climate change on our businesses, identified related risks and opportunities, assessed their financial impact, and undertook relevant measures.

^{*1} Practical Guide for Scenario Analysis of Climate Change Risks and Opportunities in Accordance with TCFD Recommendations, Ver. 2.0, Ministry of the Environment

■ Scenario Analysis Results

Strategy Overview

- Stabilize business by introducing and expanding renewable energy and energy-saving technologies to reduce carbon tax and energy costs.
- Create a new mobility value to reduce risks of conflict between social demand for carbon neutrality and our business models.
- Choose appropriate renewable energy suppliers and manage renewable energy usage risks to prevent such renewable energy use from leading to new environmental and waste issues.
- Implement our 1.5°C scenario to reduce natural disaster risks at our business sites.
- Taking account that average global temperatures have already risen 1.5°C above preindustrial levels, analyze further risks, diversify supply chains, and use renewable energy from various sources.
- Create new business opportunities through electric conversion of parts and products, CO₂ emissions reduction in production processes, and eco-conscious product design.

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Risks and Opportunities Concerning Climate Change

The following table shows identified risks and opportunities concerning climate change, and estimated financial impact.

Risk and Opportunity Types* ¹		Priority Items	Influence on Our Business	Temperature rise ²	Time span ³	Financial Impact ⁴	Countermeasures
Transition Risks	Policy and Legal	Restrictions on business from environmental regulations	○ Business costs increase due to rising energy costs driven by introduction and expansion of carbon pricing ○ Manufacturing limits due to environmental regulations	4°C	Mid- to long-term	Middle 4°C > 1.5°C	[A] Reduce business costs through energy-saving facilities and schemes. [B] Promote eco-conscious design. [C] Select appropriate supply chains and establish material traceability.
				1.5°C	Short- to long-term		
	Market	Changes in business models (expansion of car sharing and subscription)	○ Loss of business opportunities and reduced sales due to slowdown in car sales	4°C	Mid- to long-term	Large	[D] Create new mobility value.
				1.5°C	Mid- to long-term		
	Policy and Legal (Legal responsibility risks)	Aging renewable energy facilities	○ Failures in renewable energy facilities due to natural disasters and aging	4°C	Mid- to long-term	Small	[E] Select appropriate facility providers and waste disposal operators.
				1.5°C	Long-term		
Physical Risks	Chronic	Frequent major natural disasters	○ Interruption of material supply and factory operations due to lowered supply chain functionality	4°C	Mid- to long-term	Large	[F] Regularly review Business Continuity Plans (BCPs). [G] Establish and implement measures against evaluated water risks. [H] Diversify supply chains and reinforce measures. [I] Diversify renewable energy facilities (solar, wind, etc.).
				1.5°C	Mid- to long-term	Middle	
Opportunities	Products/ Services	Climate change responses	○ Demand increase for disaster-ready products	4°C	Mid- to long-term	Large 4°C > 1.5°C	[J] Offer in-vehicle products and automotive space that can provide environmental information (e.g. disaster & flood warnings, power charging points, etc.).
				1.5°C	Mid- to long-term		
	Products/ Services	Adaption of eco-conscious design (changes in customer needs)	○ Demand increase for electrification-related products ○ Demand increase for eco-conscious products	4°C	Mid- to long-term	Middle	[K] Expand electrification-related products. [L] Establish net-zero CO ₂ emissions production processes. [M] Promote eco-conscious design and green procurement.
				1.5°C	Short- to long-term	Large	
	Energy Source	Renewable energy utilization	○ Business costs minimization by utilizing renewable energy	4°C	Long-term	Middle 1.5°C > 4°C	[N] Utilize renewable energy and expand energy saving.
				1.5°C	Short- to long-term		

*1 Categorized according to TCFD risks and opportunities

*2 The 4°C scenario: Assumes that major natural disasters would occur more frequently due to failure in acting against climate change in some countries.
The 1.5°C scenario: Assumes that the frequency of major natural disasters remains the same as now thanks to action against climate change across the globe.

*3 Short term: One year; Mid-term: Three years; Long-term: More than three years

*4 Small: 0 to 500 million yen; Medium: 500 million to 10 billion yen; Large: More than 10 billion yen

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The following are our initiatives with regard to countermeasures [A] to [N] in the table above.

- Contribute to spreading EVs through vehicle weight reduction and devices that reduce electricity costs. [K]
- Advance further energy-saving performance in products and expand the product range that uses recycled resin. [B] [M]
- In our major net-zero CO₂ emission factories, reduce further energy consumption through energy-saving activities. Also, start using the corporate PPA program to reduce external energy dependency. [A] [E] [I] [L] [N]
- Offer delivery streamlining services and delivery options that suit diversifying customer needs. [D]
- Offer more comfortable automotive space by combining cabin UX, sensor technologies and vehicle control models. Enable setting of optimum temperatures and cabin temperature control using thermal sensors and cameras to maximize comfortability for each passenger. [D] [J]
- Use VR simulators to test the car cockpit human machine interface (HMI) in a virtual space. [D]
- Vehicle camera as installed in compact satellite, CURTIS. [D]
- Carry out Scope 3 calculation and identify the categories where CO₂ emissions should be reduced. [B] [C] [H] [L] [M]
- Climate change adaptation into business continuity plan [F] [G] [H]

Risk Management

According to our approach to risk management, we identify risks concerning climate change, and confirm and discuss risk management status. Issues related to scenario analysis based on the TCFD recommendations; evaluation of risks, opportunities, and financial impact; and related countermeasures are reported to the ESG Promotion Executive Officer in the Sustainability Planning Meeting, and to the Management Meeting.

(Reference) Risk Management Responsible Executive and Framework [\(page 20\)](#)

Metrics and Targets

In fiscal 2022, we started a project to promote energy saving and renewable energy usage. Under management led by the President, we have been monitoring and discussing the progress of energy-saving schemes and renewable energy usage through the quarterly Progress Report Meeting and the six-monthly Owner Report Meeting, attended by the site manager of each site. Regarding KPIs, we set the “Energy-Saving Rate” to reduce energy consumption, and the “Non-External Dependency Rate on Renewable Energy” to increase our own renewable energy. We scrutinize the progress of these KPIs every year, and identify and discuss the issues causing delays in achievement, if any.

The following table shows the achievement rate for each KPI. The results for the Energy Saving Rate and the Non-External Dependency Rate on Renewable Energy Supply for fiscal 2024 exceeded the target figures.

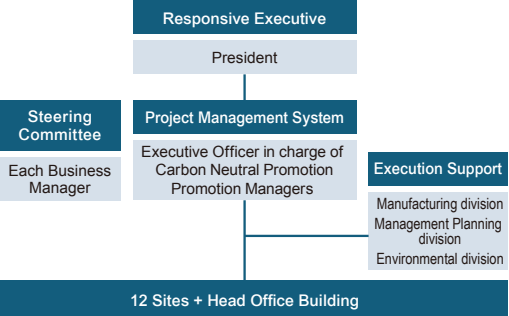
KPIs and Their Progress

KPI	Target	Current Status (as of end of March 2024)	Target Achievement Rate
Energy Saving Rate (YOY)	3%/year	4.6%	153%
Non-External Dependency Rate on Renewable Energy	10% (2025)	14.8%	148%

(Reference) Mid-term to Long-term Environmental Vision [\(page 29\)](#)

(Reference) Reducing CO₂ Emissions in Factories [\(page 43\)](#)

Environmental Innovation Project



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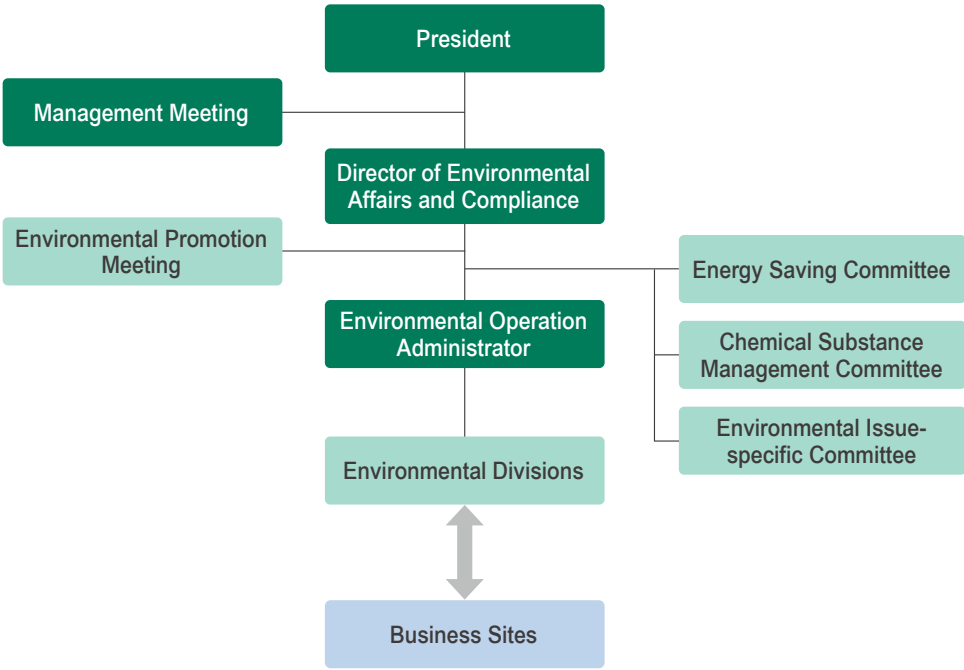
Environmental Governance

Environmental Management Promotion System

Striving for the creation of a sustainable society, we are promoting environmental management under the Representative Director, President, and Chief Executive Officer (CEO) (Masashi Nagayasu, as of July 2025) with an appointed Director of Environmental Affairs and Compliance, and working to fulfill our corporate social responsibility through eco-conscious business activities as well as resolve environmental issues such as climate change, resources, water, etc. through our products and services.

Taking account of the energy and environmental situations in each region and site, we manage environmental issues by establishing and implementing plans to address the respective issues. As a part of this plan, the Energy Saving Committee promotes energy-saving activities and monitors their progress. Also, the Chemical Substance Management Committee deliberates and ensures management and legal compliance concerning chemicals in products.

We will further enhance domestic and global networks to promote environmental activities that suit the situations specific to each region and site.



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Environmental Management Systems

Implementation of Environmental Sustainability Management Based on Environmental Management Systems (EMSs)

We have an ISO14001-compliant Environmental Management System and continue to improve working procedures. Through this system, we can identify risks and opportunities based on the external and internal situations surrounding our business. We mitigate such risks by addressing their causes and reflect the opportunities to our core business, which leads to improvement of our corporate value.

We have established EMSs in four domestic manufacturing sites, and non-manufacturing sites in Yokohama and Nishikadoma, as well as eight overseas manufacturing sites. ISO14001 certification is regularly updated in these sites (ISO14001 certified in all sites with primary responsibility).

Regarding environmental education, across the globe we provide all employees with general knowledge, and specialized education for those engaged in environment-related work. Updated environmental education materials are released for all employees every year. Also, we provide occasional seminars as needed, such as education on factory wastes and emissions, chemical management programs, and energy conservation exchange meetings. These programs are offered both as face-to-face lectures and online lectures so that employees have learning opportunities regardless of time or location from colleagues who have environment-related expertise. All new employees receive a seminar on our environmental activities.

ISO 14001 Certification in Japan

In Japan, we are ISO14001 certified in four domestic manufacturing sites, and non-manufacturing sites in Yokohama and Nishikadoma. We plan, create, and provide ISO14001 education program contents. We also offer specialist programs, such as seminars to train internal environment auditors, and workshops for qualified auditors.

ISO 14001 Certification Overseas

All our overseas manufacturing sites across the world have received ISO14001 certification. EMS-related activities are in operation taking account of differences in the environment and regulations in each region and site. In China, where environmental regulations are being rapidly reinforced, we keenly provide seminars on the environment and on management standards for factory wastes and chemicals to minimize future risks. In the Asia Pacific region, we promote local environmental activities through education covering our own management standards, as well as direct checkups to improve frontline practices.



Environmental internal auditor training seminars

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Acquired Status of the ISO 14001 Certification (as of March 31, 2025)

Certification Sites			Certified by	Certification No.	Certified Date
Site		Location			
Japan business sites (Multiple-site Certification Group)	Automotive Non-manufacturing (Ikonobe Site, Saedo Site, Saedo Vehicle Test Field, Nishikadoma Site, Panasonic System Networks Evaluation Technology Co., Ltd.)	Yokohama City (Kanagawa) Moriguchi City (Osaka)	JACO	EC21J0016	December 2021
	Matsumoto Site Tsuruga Site Shirakawa Site Kusatsu Site	Matsumoto City (Nagano) Tsuruga City (Fukui) Shirakawa City (Fukushima) Kusatsu City (Shiga)			
Overseas business sites	Panasonic Automotive Systems (Dalian) Co., Ltd.	China	TÜV Rheinland	01 104 075521	December 1998
	Panasonic Automotive Systems (Suzhou) Co., Ltd.	China	CQC	00121E30817R4L/3200	January 2006
	Panasonic Automotive Systems Monterrey Mexico S.A. de C.V.	Mexico	DNV GL	CERT-02193-2005-AE-USA-ANAB	February 1999
	Panasonic Automotive Systems de Mexico S.A. de C.V.	Mexico	BSI	EMS538591	July 2008
	Panasonic Automotive Systems Reynosa Mexico S.A. de C.V.	Mexico	BSI	EMS53398	January 2000
	Panasonic Automotive Systems Czech, s.r.o.	Czech Republic	CQS	CQS38 /2024	February 2003
	Panasonic Automotive Systems Asia Pacific Co., Ltd.	Thailand	SGS	TH08/1764.03	July 1998
	Panasonic Automotive Systems Malaysia Sdn. Bhd.	Malaysia	SIRM QAS	EMS00130	December 1998

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Integrated Management of Corporate Environmental Information

In order to implement the PDCA cycle for environmental sustainability management, it is essential to collect a significant amount of data, such as amounts of used energy, waste and valuables, discharged and transferred chemical substances, and used water, etc. at each business site in a prompt and accurate manner.

We are using the Environmental Performance Management System (Eco System) to centrally collect and handle all environmental data. The monthly data measured in each site is monitored by the Group environmental division through the system to identify any issues.

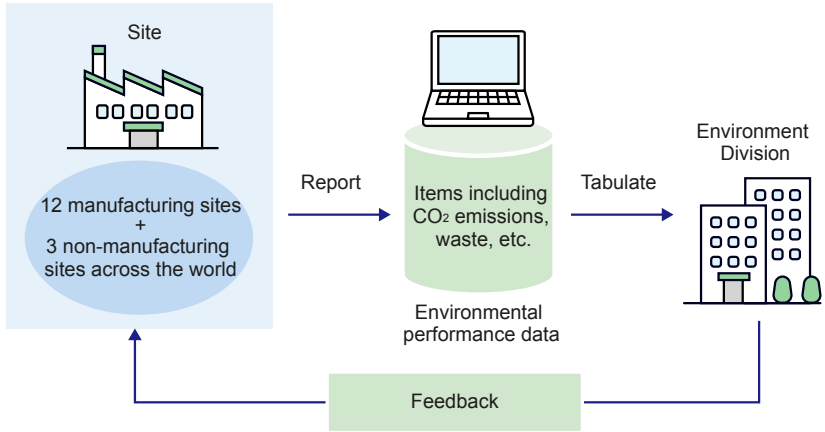
As for CO₂ emissions management, which is directly linked to our climate change countermeasures, we check the progress of efforts for emissions reduction in each site and explore any related issues together with management once every quarter. The topics under discussion are then shared and analyzed, and countermeasures fully implemented. This system therefore plays an important role in our global CO₂ emissions reduction activities.

Automating Information Sharing

The Environmental Performance Management System is also functioning as a scheme for sharing information on the status of compliance among sites across the world. In the event of complaints from local community residents or when a specific value exceeds ordinance regulated levels, as soon as the person in charge at the site inputs the data on the system, information of the data is instantaneously e-mailed to relevant persons in charge of the environment. Thereby, the system enables rapid information-sharing and appropriate actions.

In addition, the System has a function aiming to store the data necessary for disclosure and appeal of the environmental data, in order to respond to legal demands appropriately and efficiently for environmental information disclosure and stakeholders' requests.

Mechanism of the Eco System



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Enhancing Management Product Environmental Information

As for products, legislation relating to chemical substances in products is becoming more stringent in the world, for example, and communication and disclosure of chemical information in the EU supply chain are mandatory under the REACH Regulations. It is necessary for us to provide data of chemical substances in products along the supply chain to comply with the EU ELV Directive. The Company has developed own management system for chemical substances in products based on industry-standard information handling methods in order to respond to a wide range of regulations and requirements.

In January 2017, we renewed our product chemical substance management system to adopt the JAMA/JAPIA integrated data sheet^{*1}, the standard material data format for the Japanese automotive industry. In addition, to strengthen the response to laws and regulations on chemical substances in products relevant to our automotive businesses, in October 2020 we enhanced the function to operate in conjunction with IMDS^{*2}, the standard system for the global automobile industry.

Furthermore, under the EU Waste Framework Directive, the requirements for information disclosure on substances of very high concern (SVHC^{*3}) to waste disposal companies and consumers have been enhanced, and registration of SVHCs with the SCIP^{*4} database of the European Chemicals Agency (ECHA) has become compulsory (starting on January 5, 2021). For handling registration with the SCIP database, we have strengthened the system-based coordination of information and started registration via the Group system.

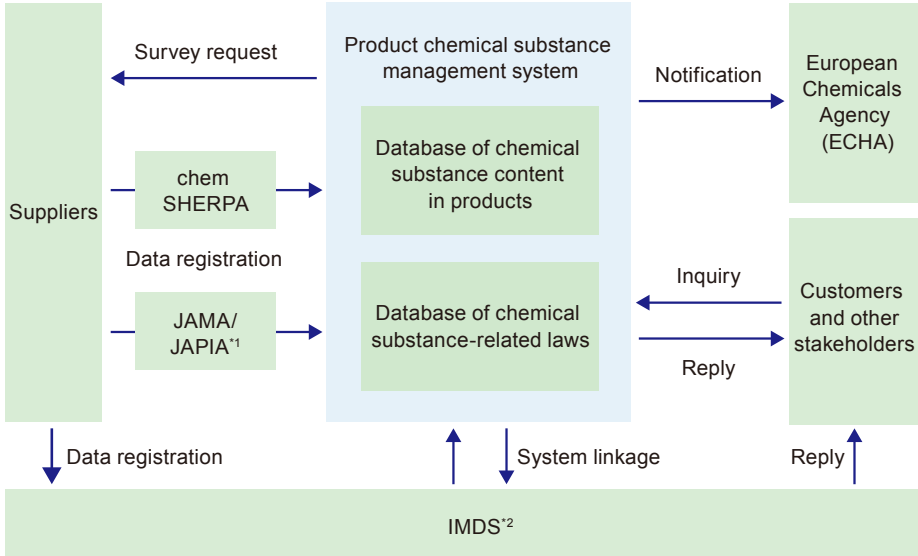
^{*1} A standardized survey datasheet for contained chemical compounds in Japan's automotive industry. The JAPIA Standard Material Datasheet prepared and introduced by the Japan Auto Parts Industries Association (JAPIA) is currently used as its successor tool.

^{*2} International Material Data System (IMDS): Material data system for the automobile industry that are operated on a global scale.

^{*3} Substances of Very High Concern

^{*4} Substances of Concern In articles as such or in complex objects (Products)

Mechanism of the Product Chemical Substance Management System



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Eco-Conscious Products and Factories

Initiatives for Product Environmental Assessment

Based on a quality management system, we conduct environmental assessments to evaluate our products' environmental impact in advance from the development stage. The assessment is conducted on those products made under the concept of contributing to environmental conservation with excellent environmental efficiency, using four characteristics: (1) energy saving; (2) resource saving; (3) waste reduction; and (4) non-use of hazardous substances. Furthermore, we are receiving more and more requests to provide data for our customer companies to achieve their sustainability targets. We also conduct a carbon footprint (CFP) assessment that is a quantitative analysis and an assessment using conversion of GHG to CO₂ emissions discharged from each stage of the product life cycle upon request from our customers.

Initiatives for Eco-Conscious Factories (Green Factories)

We are enhancing our contribution to environmental impact reduction and building a sustainable society. Our efforts in building green factories form the core of our sustainability strategy and is an important factor to establish both environmental protection and sustainable business growth.

1. Improvement of energy efficiency	<ul style="list-style-type: none">• Introduction of energy-saving facilities: Reduce energy consumption across the entire factory by using the latest energy-saving equipment and LED lighting• Introduction of Energy Management System: The system monitors and manages energy consumption in real time to minimize losses
2. Utilization of renewable energy	<ul style="list-style-type: none">• Installation of solar photovoltaic systems: Install solar panels on factory roofs and in the factory premises to generate power in-house• Green power purchasing: Procure a part of the required power from renewable energy
3. CO ₂ emissions reduction	<ul style="list-style-type: none">• Setting emissions reduction targets: Set factory-wide CO₂ emissions reduction targets and implement a concrete action plan• Carbon offset activities: Where CO₂ emissions reduction is difficult, we offset emissions by purchasing the value of environmental certifications
4. Waste reduction and recycling promotion	<ul style="list-style-type: none">• Separation of wastes: Separate wastes generated during production to recycle or reuse as a resource• Aiming at zero waste: Establish optimal production processes to minimize waste generation
5. Using eco-conscious materials	<ul style="list-style-type: none">• Adopting recyclable materials: Encourage use of renewable and recyclable materials for products and packaging• Hazardous substance reduction: Encourage use of materials with less environmental impact to enhance product safety and environmental consideration
6. Water resource management	<ul style="list-style-type: none">• Water usage reduction: Use water efficiently to minimize water usage in factories• Enhancing discharged water treatment: Conduct suitable discharged water treatment and periodical measurements to maintain water quality standard
7. Introduction of Environmental Management System (EMS)	<ul style="list-style-type: none">• Obtaining ISO14001 certification: Obtain environmental management standard ISO14001 for continuous improvement• Employee education and awareness raising: Provide environmental education to all employees to encourage them to participate in activities for sustainable business
8. Establishing sustainable manufacturing process	<ul style="list-style-type: none">• Conducting Life Cycle Assessment (LCA): Assess the environmental impact of a product over its entire life cycle, from planning and designing to disposal, and create impact reduction measures• Environmental consideration across supply chains: Set environmental standards for suppliers to reduce environmental impact across the entire supply chain

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Collaboration Across the Supply Chain

Collaboration with Suppliers and Transportation Partners

As the Company backed by a number of suppliers, we must consider the environmental impacts of our entire supply chain, and not just of our own operations. Through our coordination efforts with suppliers and transportation partners, who form an integral part of our business operations, the Company strives to minimize our environmental impact across the entire supply chain, focusing on the reduction of CO₂ emissions, resource recycling, chemical substance management, and biodiversity conservation.

Activities for Green Procurement

Activities for Green Procurement since the publication of the “Green Procurement Standards” in 1999, the Company has been promoting the manufacture of eco-conscious products in partnership with our suppliers. In the “Green Procurement Standards”, we set up groups of suppliers who support our Policy in supplying products and goods in order to materialize the targets in supplier collaboration with our Group. In addition to cooperation in ‘reducing environmental loads in supplier’s business operation areas’ and ‘sharing achievements through collaboration with the Group’, we are asking our suppliers to ‘seek the cooperation of upstream business partners’ to expand the scope of activities of reducing environmental impact throughout the entire supply chain. In fiscal 2023, we submitted a letter to all of approximately 1,400 suppliers who have business with the Company across the globe to deepen understanding of our activities aiming at CO₂ emissions reduction. We are promoting our initiatives toward global environmental issues through cooperation with our suppliers. In fiscal 2024, we conducted surveys at some of our suppliers to monitor their efforts to reduce GHG emissions and their ability to calculate their GHGs.

Estimation and Reduction of Environmental Impacts in Business Activities by Suppliers (ECOVC)

ECOVC is a program covering our procurement activities, aimed at achieving the goals of reducing GHG emissions and recycling-oriented manufacturing while also streamlining costs through eco-conscious business activities at our suppliers and products. We plan to contribute to reducing CO₂ emissions together with our suppliers through ECOVC.

Every year, our suppliers submit information on their eco-conscious activities, such as energy conservation, use of recycled materials and greater transport efficiency in all of their processes in manufacturing, sales, logistics, corporate activities and the supply chain. After an internal review, an award ceremony is held and exchange meetings organized with suppliers.

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Overview of Environmental Impact from Business Operation

In order to mainly manufacture and market automotive products, we consume petroleum and electricity as energy sources and resources as raw materials of parts and components. As a result, we emit CO₂ and wastes into the environment. The figure on the right shows the overview of our environmental impact, from procurement to disposal and recycling.

Production: Manufacturing sites (7 sites in Japan including 3 non-manufacturing sites and 8 sites overseas).

Logistics: Logistics stage of procurement, production, marketing and waste by partner companies and Panasonic Automotive Systems.

Use: Lifetime power consumption (a) of major products^{*5} with large amounts of energy use and CO₂ emissions (b) associated therewith.

a = Annual power consumption of a model sold^{*6} x Sales quantity x product life^{*7}

b = a x CO₂ emission factor^{*8}

*1 Included renewable energy by deemed certifications such as non-fossil certificates.

*2 Target substances defined by Panasonic Automotive Systems.

*3 The latest figures from the “IEA Emissions Factors 2023” issued by the International Energy Agency (IEA) is used for the CO₂ emission factors for electricity purchased from different countries use. The factors related to fuels are based on “the Guidelines for Calculation of Greenhouse Gas Emissions (version 4.7)” published by the Japanese Ministry of the Environment.

*4 Release amount: Includes emissions to air, public water areas, and soil.
Transfer amount: Includes transfer as waste and discharge into the sewage system.

*5 Car navigation systems, connected display audio, drive recorder, premium sound systems, head-up display, full-display meter, electronic inner mirrors, rear seat entertainment equipment, seat heater, steering heater, on-board ETC, in-vehicle cameras, ADAS, battery heater device, electric compressor, in-vehicle chargers, etc.

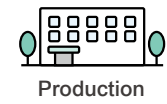
*6 For each product category, the model that was sold in the largest quantity in the region was selected.

*7 Lifetime operating time of four-wheel passenger cars in the JAPIA LCI Calculation Guidelines used.

*8 World average CO₂ emission factors 0.464 (kg- CO₂ /kWh) in the “IEA Emissions Factors 2023” issued by International Energy Agency (IEA) used.

Overview of Environmental Impact from Business Operation

Input	
Energy use	180,838 MWh
	Purchased electricity
	158,074 MWh
	including renewable energy ^{*1}
	156,720 MWh
	Production of renewable energy in our own sites
	2,338 MWh
Town gas	552 thousand m ³
LPG	66 t
Diesel oil	149 kL
Kerosene	266 kL
Volatile oil	23,680 GJ
Resource utilization	
Resin	68,973 t
	including recycled resin
	836 t
Metals	83,459 t
Water usage	376 thousand m ³
Chemical substances ^{*2}	264 t



Output	
CO ₂ ^{*3}	72,918 t
	From energy source ^{*3}
	71,354 t
From non-energy source ^{*3}	
1,564 t	
Total wastes including revenue-generating waste	
9,139 t	
Final disposal amount	
106 t	
Water discharged	
310 thousand m ³	
Release and transfer of chemical substances ^{*4}	
103 t	

Energy use	121,590 MWh
------------	-------------



Energy use	6,449 GWh
------------	-----------



CO ₂ global	51,836 t
domestic	4,600 t

CO ₂	2,990 thousand t
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Generated product waste	66,220 t
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GHGs from the Whole Supply Chain (by Scope)

We calculate our GHG emissions across the supply chain for Scopes 1, 2, and 3, respectively, according to the GHG Protocol and the guidelines provided by the Ministry of the Environment.

Our CO₂ emissions in fiscal 2024 Scopes 1 to 3 were reduced by approximately 960,000 tons compared with those in fiscal 2023. This was affected by the increase of CO₂ emissions in some categories, while approximately 16,000 tons of the CO₂ emissions in the Scopes 1 and 2 were reduced through implementation of steady activities for energy conservation at each factory (see [pages 43 to 45](#)), and approximately 95,000 tons of the CO₂ emissions in the category 11 was reduced due to increase of sales rate of relatively low electric power consumption products.

We continue to disclose our emission data for transparency.

*9 Direct emissions from facilities owned and controlled by the Group (e.g., emissions from use of town gas or heavy fuel oil).

*10 Emissions from production of energy consumed at facilities owned and controlled by the Group.

*11 Other indirect emissions, excluding Scope 1 and Scope 2.

*12 Transportation procurement for supplier (cost-bearer) is included in Category 1.

*13 There are no such business activities of the Company.

*14 Calculated emissions for the disposal of resin in the product.

Scopes and Categories		Emissions (t-CO ₂)	
		FY2023	FY2024
Scope 1 (Direct emissions) ^{*9}		3,529	3,937
Scope 2 (Indirect emissions from energy source) ^{*10}		85,569	68,981
Scope 3 ^{*11}	1. Purchased goods and services	3,388,650	3,405,762
	2. Capital goods	61,635	67,962
	3. Fuel- and energy-related emissions not included in scope 1 or scope 2	10,880	7,859
	4. Upstream transportation and distribution ^{*12}	51,697	56,429
	5. Waste generated in operations	267	256
	6. Business travel	2,885	2,663
	7. Employee commuting	10,599	9,806
	8. Upstream leased assets	14,932	15,589
	9. Downstream transportation and distribution	8	6
	10. Processing of sold products ^{*13}	0	0
	11. Use of sold products	3,948,178	2,993,155
	12. End-of-life treatment of sold products ^{*14}	69,077	54,396
	13. Downstream leased assets	0	0
	14. Franchises ^{*13}	0	0
	15. Investments ^{*13}	0	0
Scope 3 total		7,558,808	6,613,884
Scope 1-3 total		7,647,906	6,686,802

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Environmental Accounting

Panasonic Automotive Systems globally collects data on its environmental conservation costs and economic benefits obtained through its environmental activities in relation to generated/controlled environmental impact. This data is internally utilized as basic information for our continuing environmental sustainability management.

Environmental Accounting for Fiscal 2024

Environmental Conservation in Factories	
Investments* ¹⁵	242 million yen
Economic effect* ¹⁶	106 million yen

*15 Divided in proportion to the amount of investment in environmental conservation at some sites where we can calculate the amount.

*16 Energy reduction expenses from energy saving. Divided in proportion to the amount of benefit at some sites where we can calculate the amount.

Environmental Conservation Benefits for Fiscal 2024 (in physical terms)

Categories	Emission Reduction	Reference Indicator: Environmental Impact	
		FY2023	FY2024
CO ₂ emissions from production activities	16,180 t	89,098 t	72,918 t
Discharged and transferred chemical substances	23 t	126 t	103 t
Final disposal amount	-54 t	52 t	106 t
Water consumption	75 thousand m ³	451 thousand m ³	376 thousand m ³

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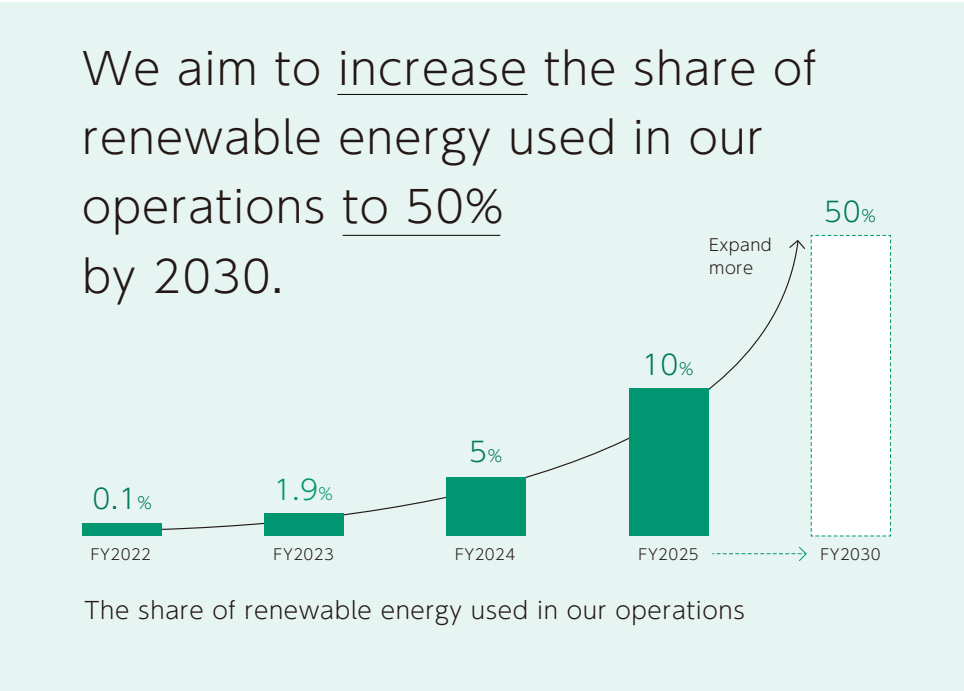
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Reducing CO₂ Emissions in Factories



Reducing the Amount of Energy Used and CO₂ Emissions in Business Activities

Under the banner of “ultimate carbon neutrality^{*1},” we are working to achieve 3% energy-saving rate every year^{*2} and increase usage ratio of the renewable energy in our own sites^{*3} to 50% by 2030. These targets were set in the Environmental Innovation Project established in April 2022.

This project is led directly by the president and representative director to accelerate energy conservation schemes and renewable energy usage in all sites across the world, under a collaboration of manufacturing, procurement, environment, and other related divisions. We award excellent energy conservation practices globally, and provide study sessions in different countries.

In fiscal 2024, our efforts led by this project received the ECCJ Chairman's Award in the Best Practice Category, under the Energy Conservation Grand Prize,^{*4} which is hosted by the ECCJ and sponsored by METI. The report on this project will be displayed in ENEX2025.^{*5} We will expand this best practice to other workplaces.

^{*1} Ultimate carbon neutrality: Efforts toward zero GHG emissions, including CO₂, without relying on external schemes.

^{*2} To reduce energy consumption by 3% against the previous year with energy-saving initiatives.

^{*3} Renewable energy in our own sites: Non-fossil power sources installed by electricity users themselves, without relying on the renewable energy publicly available, such as commercial utilities or environmental certificates.

^{*4} Panasonic Automotive Systems honored with ECCJ Chairman's Award in Best Practice Category under Energy Conservation Grand Prize 2024 for efforts by all employees. Press Release, Panasonic Newsroom Japan.

^{*5} Panasonic Automotive Systems, participant details. ENEX2025.

Initiatives for Net Zero CO₂ Factories

We have been maintaining net zero CO₂ emissions^{*6} in all global sites^{*7} since January 2023, thanks to utilization of renewable energy and adoption of electricity generated using 100% renewable energy. The press seminar held on January 27, 2023, was attended by 69 journalists, institutional investors, and financial analysts.

In fiscal 2024, Matsuzaka Plant started operations as a new manufacturing site already achieving net zero CO₂ emissions. We maintain this net zero CO₂ emissions in our sites through continuous energy-saving initiatives. We plan to expand renewable energy without relying on external procurement, such as environmental certificates, setting a mid-term target of 50% usage ratio by 2030.

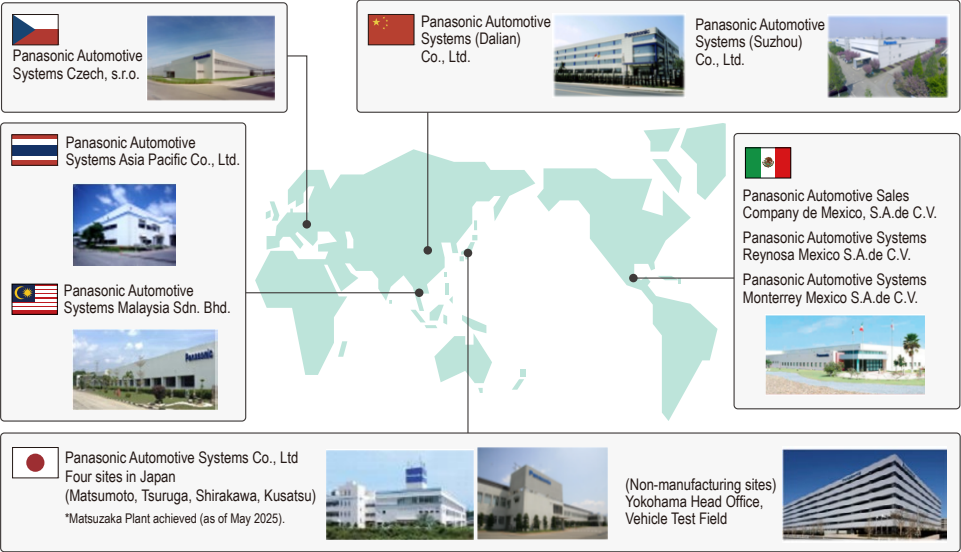


A scene from the press seminar

^{*6} Panasonic Automotive Systems Co., Ltd. Achieves Net Zero CO₂ Emissions at All Global Sites. Press release, Panasonic Newsroom Japan.

^{*7} All 14 sites in 13 regions under our management in 2023: (Japan: two in Yokohama, Shirakawa, Matsumoto, Tsuruga, and Kusatsu. Overseas: two in China, Thailand, Malaysia, Czech Republic, and three in Mexico).

Initiatives for Expansion of Net Zero-CO₂ Factories



Expanding Renewable Energy Usage

We are increasingly introducing solar photovoltaic systems to expand the percentage of self-production of renewable energy. In addition to installing solar panels on building roofs for our own consumption, we also introduced solar photovoltaic systems under a corporate Power Purchase Agreement (PPA). In fiscal 2024, Panasonic AS Malaysia Sdn. Bhd. and Panasonic AS (Suzhou) Co., Ltd. introduced a total of 5.3 MW solar photovoltaic systems using onsite PPA power supply schemes.

Five domestic sites (Yokohama, Shirakawa, Matsumoto, Tsuruga, and Kusatsu) started electricity procurement through off-site PPAs from January 2024, and completed the installation of total 4.1 MW solar photovoltaic systems by March 2025. Also, through self-financing, Matsumoto Site additionally



Photovoltaic power generation systems at Malaysia Site



Photovoltaic power generation systems at Panasonic Automotive Systems (Suzhou) Co., Ltd.

installed a 170 kW system, and a car testing site in Yokohama installed a 22 kW system. This new system in Yokohama includes carport solar panels, storage batteries, V2H (Vehicle-to-Home), and an energy management system. It covers approximately 38% of the energy demands of the car testing site and enables power to be supplied from electric vehicles in the case of an emergency.

Panasonic Automotive Systems Czech Republic, s.r.o. uses electricity derived from 100% renewable energy sources through a utility company contract.

The usage rate of our own renewable energy reached 14.8% at the end of fiscal 2024, achieving the 10% target one year early. Although our current focus for renewable energy introduction is solar power, we are also considering other types of renewable energy, such as wind, water, and biomass power generation toward achieving our mid-term target.



Photovoltaic power generation systems at Matsumoto Site



Carport-type photovoltaic power generation systems at Saedo Vehicle Test Field

Activities to Provide Support for Energy Saving for Global Sites

To achieve the target for 3% energy-saving rate every year, we share energy-saving manuals and tools that contain the Panasonic Group's expertise and provide mutual support among different sites. Further, members form the energy-saving technology team in the Yokohama head office visit each site to offer energy-saving diagnoses and study sessions, supporting and communicating with site members on energy saving and accelerating their efforts.



Diagnosis of energy saving diagnosis

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Fiscal 2024 Results

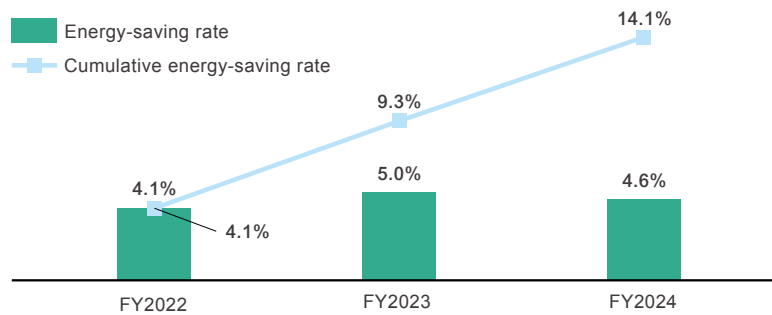
The fiscal 2024 results covering energy consumption from our business activities in 14 global sites were equivalent to 67,807 tons of CO₂ emissions and achieved net zero CO₂ emissions by offsetting with CO₂ credit. The target for the energy-saving rate^{*8} is 3% against the previous year, and the result was 4.6%. This is the third consecutive year of achievement since fiscal 2022.

The cumulative energy-saving rate^{*9} reached 14.1% by fiscal 2024 compared to the total energy usage in fiscal 2021.

^{*8} The energy-saving rate : The percentage of reduced energy consumption in the current fiscal year compared to the consumption result of the previous year.

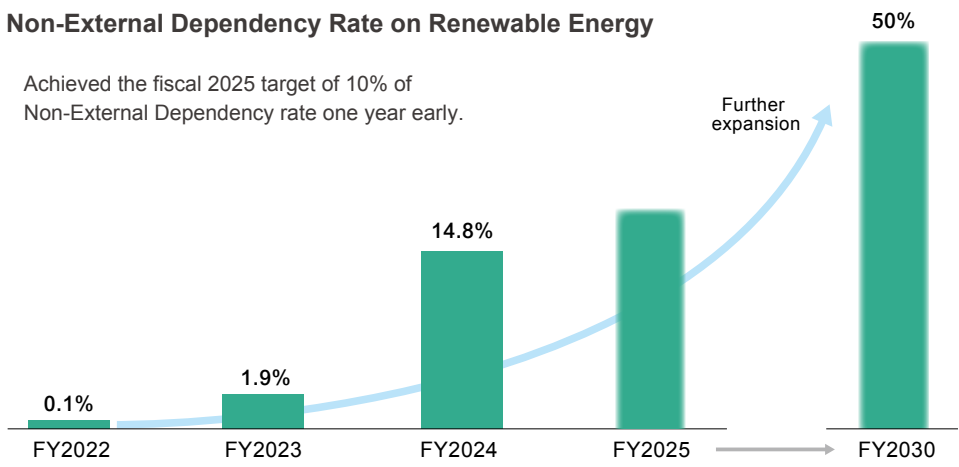
^{*9} The cumulative energy-saving rate: The total energy-saving rate accumulated every fiscal year based on the total consumption in fiscal 2021.

Energy-Saving Rate



Non-External Dependency Rate on Renewable Energy

Achieved the fiscal 2025 target of 10% of Non-External Dependency rate one year early.



Initiatives for Net Zero CO₂ Emissions in Factories

Breakdown of CO₂ Emissions from Energy Sources in Manufacturing Activities^{*}

[Unit: t-CO₂]

	FY2022	FY2023	FY2024
Scope 1	1,296	1,482	1,376
Scope 2	82,132	83,001	66,431
Carbon offset by CO ₂ credit, etc.	-83,427	-84,483	-67,807
Total	0	0	0

^{*} Results in 14 global sites under our management

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Promoting the Circular Economy

In Europe, the shift to a circular economy as a sustainable economic system that does not depend on resource consumption, was identified as one of the economic strategies. This trend is spreading around the world along with the change in values of customers and society. Amid this development, the Panasonic Automotive Systems is introducing the idea of circular economy and moving forward in efforts to promote effective utilization of resources and maximization of customer value.

The circular economy activities we promote have two aspects: 1) creation of circular economy businesses, and 2) evolution of recycling-oriented manufacturing.

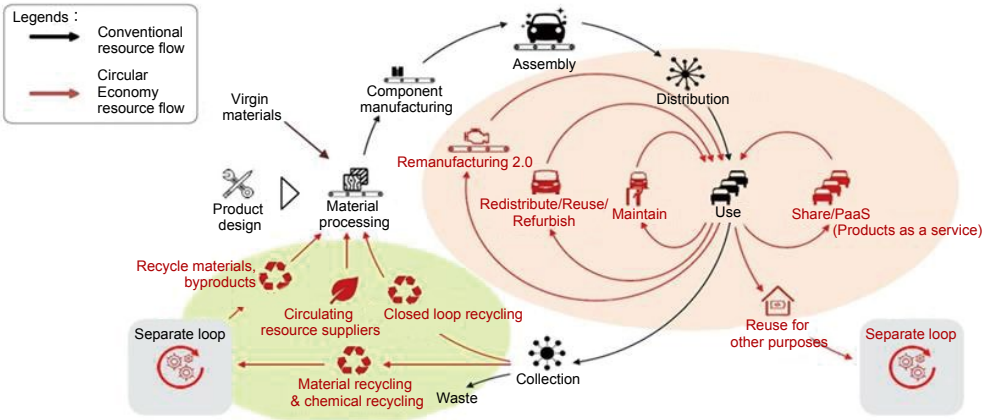
Our in-vehicle equipment business not only supplies automotive parts essential for car assembly but also maintains optimal inventories for automotive parts to supply replacement parts when necessary. We are moving forward in our drive to build a business founded on the circular economy, focusing on creating the new value perspective of using functions rather than material products and on instigating “product as a service” by enhancing and upgrading services based on product functions.

Alongside this, we continue to implement recycling-oriented manufacturing by reducing the total amount of resources used, utilizing sustainable resources, and striving toward zero waste emissions.

Through all these activities, we aim to realize sustainable mobility society, based on our concept which maximizes customer value in use by increasing resource efficiency at each process in design, procurement, and production.

Conventional Resource Flow and Circular Economy Resource Flow, Using the Automotive Industry as an Example

Source: Agency for Natural Resources and Energy website "Ene Kore"



We plan to improve materials to meet both the characteristics requirements and environmental safety, ensure stable supplies, advance production technology to use new materials, and improve recycling technology, through which we aim to use more recycled resin. Additionally, zero waste emissions are important for us as a part of efficient usage of resources and we will continue our efforts to achieve a recycling rate of 99%.

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Evolution of Resource-Recycling Manufacturing

We use many kinds of resources, such as iron and plastic. In recycling-oriented manufacturing, we are further working on reducing the input of virgin resources, while increasing the amount of recycled resources. And in that context, we are working to establish a circular system according to resource type and features.

■ Utilization of Recycled Resin

We use recycled materials actively, conducting reviews and evaluations of recycled materials to ensure that the characteristics of the parts and components satisfy customer specifications. The volume of recycled resin material in fiscal 2024 was 836 tons.

Example of Recycled Resin Use

- Car speaker

With the application of separation technology that enables the extraction of high-purity polypropylene from mixed plastic, which is a mix of various types of plastic and metals, kneading technology for effective use of recycled polypropylene and integration with quality control methods, we have developed the industry's first car speaker system that makes use of recycled polypropylene in its frame and started mass production in February 2011.■Reducing Resources Used



Car speaker frame

■ Reducing Resources Used

We worked aggressively to improve yield and to use resources efficiently by reviewing our design and manufacturing processes and ultimately minimizing the total resources used.



Resin waste from the mold injection process pulverized for use as recycled material

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Resource-Recycling Manufacturing

To achieve a recycling-oriented society, we are working toward our goal of zero waste emissions (Zero Emission).

■ Reducing Waste Emissions (Zero Emission)

For effective utilization of resources, we are continually working to reduce waste emissions and increase the volume of valuables and recycled materials with the goal of eliminating Final disposal amount^{*1} to as close to zero as is possible.

In fiscal 2024, waste output and final disposal volume increased as a result of changes in the layout at our domestic manufacturing sites. As a result, the waste recycling rate^{*2} was 98.84%, falling short of the goal.

Again this year, we are moving forward toward zero emissions^{*3} by continual improvements in the waste recycling rate.

^{*1} Final disposal amount= Amount of waste disposed at landfill site
^{*2} Recycling rate = Amount of resources recycled / (Amount of resources recycled +Final disposal amount)
^{*3} Zero emission = Waste recycling rate: 99% or higher (Definition by the Company)

Activities to Reduce Factory Waste

We are implementing the following waste reduction measures on a global scale to cut down on waste.

1. Improving productivity at process facilities
2. Improving yield ratio
3. Reusing liquid medicine and resin
4. Recovering valuables from waste
5. Holding network event for waste reduction and recovering valuables from waste to share case examples



Waste management seminar in Japan



On-site inspection of waste management in Thailand

	Global Result of Wastes and Valuables		Target
	FY2023	FY2024	
Amount of generation [t]	9,427	9,139	Recycling rate: 99% or more
Final disposal amount [t]	52	106	
Recycling rate ^{*2} [%]	99.5	98.8	

We are taking action to recycle waste plastics.

In fiscal 2024, generated waste and final disposal volume increased as a result of changes in the layout at our domestic manufacturing sites. As a result, the recycling rate fell slightly comparing to the previous year.

Initiatives to Recycle Waste Plastics in Japan

	Result of Waste Plastics in Japan		Target
	FY2023	FY2024	
Waste plastic generation [t]	713.49	794.42	Waste plastics recycling rate Japan: 99% or more
Recycled amount [t]	695.04	754.23	
Final disposal amount [t]	18.45	40.18	
Recycling rate ^{*2} [%]	97.4	94.9	

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Biodiversity Conservation

Ways of Thinking about Biodiversity

Our social lives and business activities are based on various benefit provided by the natural capital (NCP: Nature’s contributions to people). It has been recognized that conservation of biodiversity is as important as measures for climate change and resource recycling and they are closely linked each other in establishing a society where humans and nature coexist in harmony which is a long-term vision of the Sustainable Development Goals (SDGs) and the United Nations Convention on Biological Diversity. We base our business activities on sites located in regions where diverse forms of life are found in the surrounding areas. To prevent any adverse impact on biodiversity, we are working to reduce the impact on and restore ecosystems.

Initiatives for Sustainable Procurement of Raw Materials

We have announced our policy for biodiversity conservation in our Green Procurement Standards, working in cooperation with our suppliers to promote sustainable procurement and preserve the global environment.

(Reference) Collaboration Across the Supply Chain ([page 39](#))

Eco-Conscious Use of Greenery Areas at Our Business Sites

Matsumoto Plant^{*1} acquired JHEP^{*2} A ranking in September 2015. Although we have not updated this certification, we have seen a current growth in the bird and insect populations through the silver grass fields that we created, the dead trees we left standing and by preventing the ingress of foreign species. We will continue to conserve biodiversity in our company’s greenery areas.

^{*1} The name of the company at the date of certification was Panasonic Corporation Automotive & Industrial Systems Company.

^{*2} The method for quantitative assessment of biodiversity developed by the Ecosystem Conservation Society-Japan, based on the Habitat Evaluation Procedure (HEP) employed in environmental assessment.



Matsumoto Plant Harmony Forest

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Water Resource Conservation

Ways of Thinking about Water Resource Conservation

Usable freshwater is a valuable resource that accounts for only 0.01% of water resources on Earth. In recent years, the chronic increase in water use as a result of economic growth and population growth chiefly among developing countries, combined with acute factors represented by natural disasters and abnormal weather conditions caused by climatic change, have made appropriate control of water resources increasingly necessary.

Under our environmental policy, our goals are to prevent pollution of water and its quality, and to continue working on the protection of the global environment and ecosystems. From the perspective of risk control, we are conducting assessments of the scale of water-related risks for each of our sites as well. Specifically, we are employing WWF's Water Risk Filter (WRF) in identifying and assessing sites that require priority action in terms of water risks, flood risks and water quality contamination.

Initiatives for Conserving Water Resources

We are working on reducing the environmental impact on water resources by promoting greater efficiency in production processes.

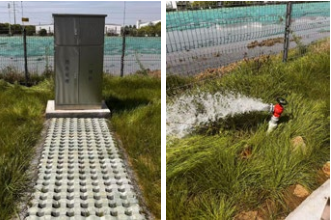
Water consumption in fiscal 2024 was 376,000 m³, down by 16.6% over the previous fiscal year. Water discharge was 310,000 m³, down by 15.8% over the previous fiscal year.

Panasonic Automotive Systems (Suzhou) Co., Ltd., was able to conserve water by approx. 70 liters each month by reusing water discharged in the product grinding process. In addition, the water used in watering greenery area within our site premises has been switched from tap water to rainwater collected in our rainwater collection system. This has achieved nearly zero consumption of water needed for the greenery area. We expect these activities to mitigate damage in case of flooding.

We plan to continue to actively conserve water resources.

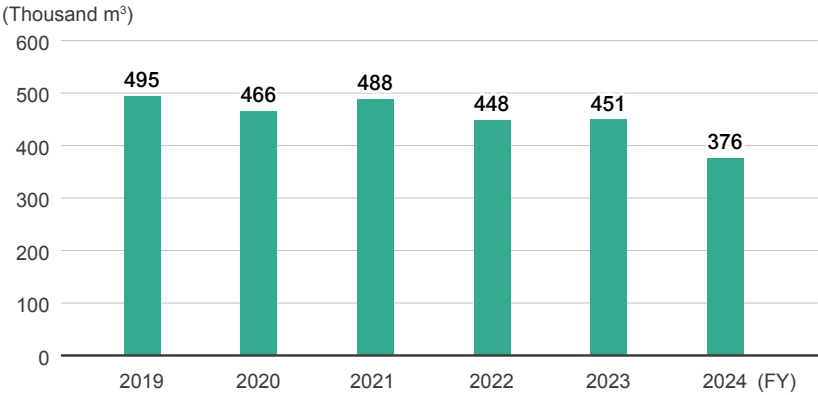


Rainwater collection system



Reusing discharged water from the grinding equipment

Water Consumption in Business Activities



FY2024 Breakdown of Water Consumption and Water Discharged (by region)

(Unit: thousand m³)

Region	Consumed					Discharged		
		Municipal Water/ Industrial Water	Ground-water	Rivers/ Lakes	Ground-water		Sewer System	Waterways
Japan	105	63	1	0	41	73	73	0
China	39	39	0	0	0	31	31	0
South East Asia	144	144	0	0	0	132	116	16
North America & Latin America	54	54	0	0	0	47	47	0
Europe	34	34	0	0	0	27	27	0
Total	376	334	1	0	41	310	294	16

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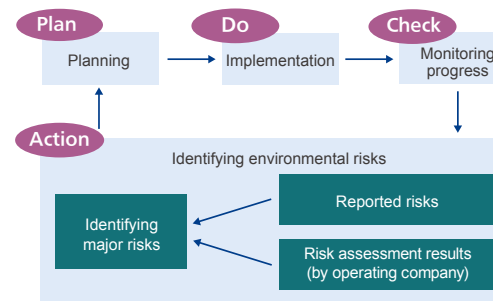
Environmental Risk Management

Group-Wide Systems to Manage Environmental Risks

For uninterrupted efforts to reduce environmental risks, we have organized site-based environmental management systems and have conducted annual reviews and implemented measures to identify and minimize environmental risks, in line with our basic approach to risk management. Regarding major risks that we regard as having a particularly huge impact, we conduct quarterly inspections and follow-up in the PDCA cycle.

When an environmental risk is found, the relevant sites and related job functions collaborate to promptly implement emergency measures and recurrence prevention measures adapted to the risk level. Also, the management flow in case of risk discovery is standardized to prevent the occurrence of secondary risks as a result of confusion.

Classification of Environmental Risks and Countermeasure Implementation



Environmental Compliance Management at Factories and Field Surveys

We conduct regular monitoring and management of exhaust gases, discharged effluents, noise and foul odors in compliance with local laws and regulations, and we have voluntarily established our own standards that are more demanding than regulatory values as preventive action on these issues.

Field surveys on laws and regulations using checklists were conducted on a global scale to confirm comprehensive implementation of environmental compliance, and we also conducted verification of the effectiveness of various measures. As a result of these measures, there have been no violations of environment-related regulations across the world for five years.

We continue our efforts for thorough legal compliance.

Development of Core Human Resources

In order to assure compliance with laws and regulations, as well as other requirements, we have set up environmental education lectures via the company intranet for all of our employees and specialized programs for employees who are engaged in environment-related business operations. Specifically, we are working on developing core human resources for environmental management, including waste management, chemical substance management, effluent & emission control and information exchange activities.

Compliance with Environmental Regulations Relating to Products

We manage compliance with regulations relating to our products through a quality management system. Environmental compliance of products is being managed with our quality management system. We have also created a product environmental assessment scheme that covers assessment and inspection of laws and regulations in the areas of controlled substance management, energy conservation and the 3Rs. Through this scheme, we review compliance with laws and regulations in Japan and other countries and at the same time work on reducing the environmental impact from product manufacturing to end-of-life disposal and create products that deliver environmental performance levels that are rated among the top in the industry. For compliance with the EU ELV Directive and other regulations on hazardous substances, we conduct acceptance inspections focused on risks involving procured parts, as well as environmental quality assurance system audits of suppliers, to upgrade the level of product chemical substance control in cooperation with our suppliers.

Preventing Soil and Groundwater Contamination and Air Pollution

Because of the possibility that soil and groundwater contamination will have serious adverse effects on the environment and human health, countermeasures against these risks are important.

To prevent such risks, we have developed a concrete program of countermeasures against soil and groundwater contamination risks, in compliance with the Soil Contamination Countermeasures Act of Japan.

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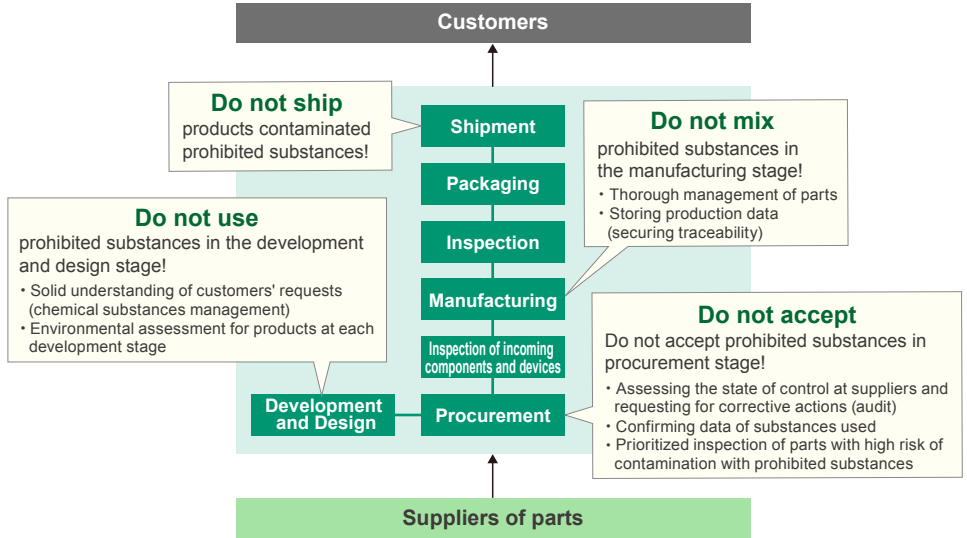
Approaches to Reducing the Environmental Impact of Chemical Substances

In order to prevent contents of hazardous substances prohibited under the EU ELV Directive and EU RoHS Directive in our products, it is important not only to pay attention to the contents at the stage of product design, but also to ensure that specified substances are not contained in products to purchase.

Therefore, the Panasonic Automotive Systems has rolled out the “Do not use!, Do not accept!, Do not mix!, Do not ship!” campaign throughout each production process from designing to shipment inspection in production activities at business sites across the world.

Specifically, as for the stage of inspection for incoming parts and materials, we have established a mechanism to check and analyze whether specified chemical substances are included by introducing an analyzer.

Process to Reduce the Environmental Impact of Chemical Substances



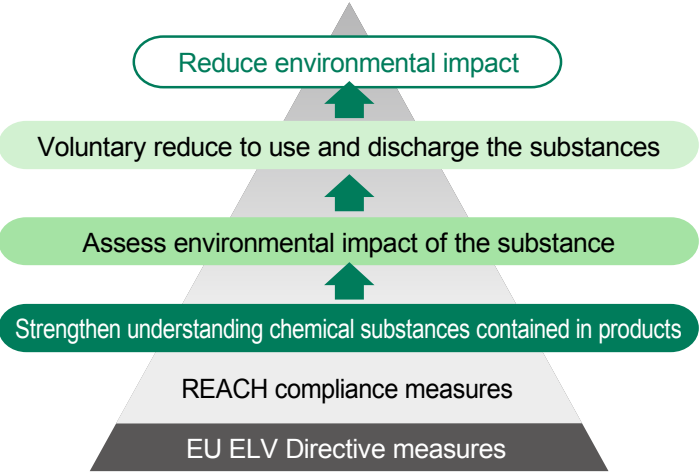
In addition, we have supported to establish a Product Chemical Substances Management Structure for suppliers, by periodically conducting environmental quality assurance audits for parts which may have high risks of containing specified chemical substances.

Meanwhile, as represented by the enforcement of the REACH regulation in the European Union, the world implemented measures toward the goals agreed at the World Summit on Sustainable Development (WSSD) held in 2002, which is to produce and use all chemical substances in a manner that minimizes their impact on human health and the environment by 2020. Although the subsequent discussion was delayed as the conference could not be held due to the COVID-19 pandemic, in the fifth International Conference on Chemicals Management (ICCM5) held in Germany September 2023, a new international framework that succeeds the activities up to 2020 was discussed; concerning appropriate chemical management, a new international frame work for voluntary and diverse actors to be involved was formulated. We have been supporting the precautionary approach proposed in the Rio Declaration at the Earth Summit in 1992, and have continued our efforts for appropriate chemical management on a global scale even after 2020 that is the final target year of the WSSD framework. Furthermore, in order to continue implementation of product manufacturing in line with our basic policy of reducing the use of chemical substances that might adversely affect human health and the environment throughout their lifecycles, we are constantly working to reduce environmental loads of the chemicals used in our business activities and products. In concrete activities, we comply with the relevant regulations such as the EU ELV Directive as a matter of course. In addition, we have worked to reduce adverse environmental impacts caused by our Company's products as much as possible by restricting the use of substances with high environmental loads as requested by customers who have an advanced response to the environment, and collecting and conveying the correct information on chemical substances in products throughout the supply chain. We will continue to implement appropriate management of these chemical substances while monitoring global environmental trends.

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Process to Reduce the Environmental Impact of Chemical Substances



Managing Chemical Substances in Products

To minimize the environmental impact of chemical substances contained in products, we endeavor to identify chemical substances used in the components and materials of our products. In addition, for substances that are prohibited in products in major developed countries because of laws and regulations such as the European RoHS Directive, we manage the substances not to be used and/or contained in our products by designating them as prohibited substances except the substance for specific usage which is unavoidable to use its substitution. We will also conduct environmental impact assessments for the managed substances contained in our products. As for a substance whose impact on human health and/or the environment cannot be ignored, we plan to reduce or prohibit use of the substance.

■ Continuously updating information on chemical substance contents

The automotive products and electrical/electric products the Company manufactures and sells consist of a long supply chain from material manufacturers to many component manufacturers. To contribute to the achievement of the global targets set at the WSSD and the new framework adopted by ICCM5, it is important for us to disclose and communicate information on the

chemical substances used in our products across the supply chain, for which we must promote cross-industrial initiatives to establish and disseminate an effective system.

We have started up a product chemical substance management system in fiscal 2004, and suppliers of parts and components provided us the data on chemical substances contained in their products.

In view of the action taken by Japanese car manufacturers to shift from the JAMA/JAPIA Standard Material Datasheet*¹ that had been used in the Japanese automobile industry to communicate the chemical substance content in products and to standardize under IMDS*², which has become the de facto standard in the global automotive industry, our automotive product business also implemented the shift to communicating information through IMDS datasheets in October 2020. To implement this shift, we organized briefings for our more than 200 suppliers and successfully completed a smooth transition. This has enabled access to information on chemical substance content in components and parts supplied by our suppliers from our own product chemical substance management system via IMDS. At the same time, it has also become possible to supply the chemical substance content in our own products to our customers, reducing the burden of information communication in the supply chain.

*1 Chemical data analysis datasheet standardized by Japan's automotive industry (Japan Automobile Manufacturers Association and Japan Auto Parts Industries Association)

*2 International Material Data System: System for communicating material data in the automotive industry employed on a global scale.

Initiatives to Reduce Negative Environmental Impact at Factories

We have focused our management on major global laws and regulations related to chemical substances. From the chemical substances listed in these laws and regulations, we select those considered hazardous or carcinogenic as target chemical substances to evaluate and manage.

In addition, we are working on mitigating the effects on human lives and the environment through the use of alternative materials, by developing methods aimed at reducing the discharge/transfer volume and giving more prominence to waste recycling.

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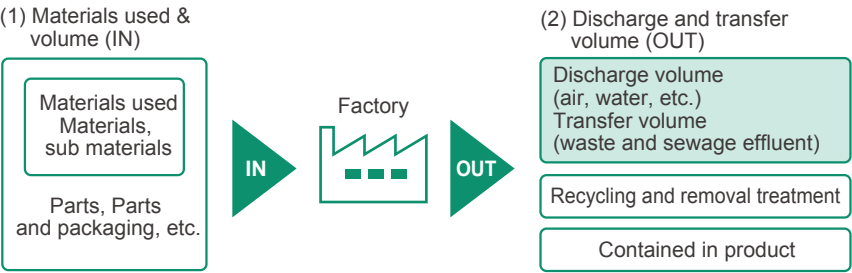
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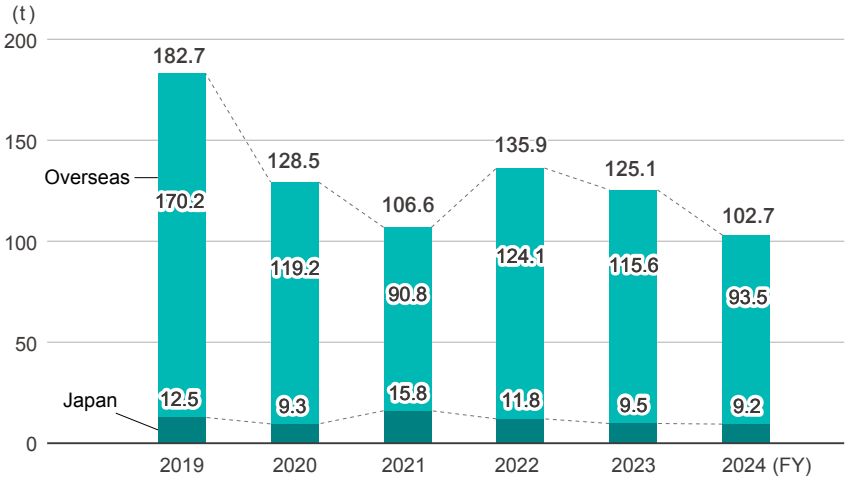
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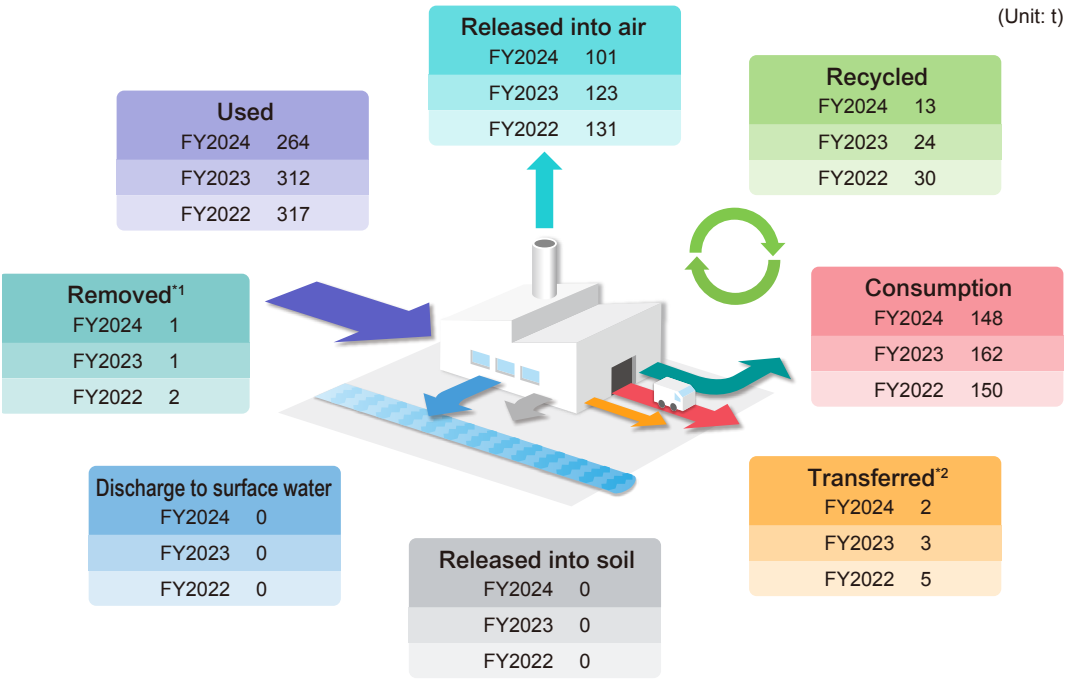
Environmental Balance Assessment



Discharge/Transfer of Substances Requiring Management



Material Balance of Managed Chemical Substances



*1 Removed: The amount of substances converted into other substances through neutralization, decomposition, or other chemical treatment.

*2 Transferred: Substances transferred as waste, as well as those discharged into the sewage system.

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Environmental Data

■ Energy

*See [Page40](#)

		FY2023	FY2024
Energy		195,612 MWh	180,838 MWh
	Purchased electricity	173,839 MWh	158,074 MWh
	Renewable energy	168,702 MWh	156,720 MWh
	Installation of renewable energy facilities in our own sites	135 MWh	2,338 MWh
	Town gas	612 thousand m ³	552 thousand m ³
	LPG	62 t	66 t
	LNG	—	—
	Heavy oil	—	—
	Diesel Oil	142 kL	149 kL
	Kerosene	—	—
	Volatile	268 kL	266 kL
	Steam	24,475 GJ	23,680 GJ
	Hot Water	—	—

■ Breakdown of Total GHG Emissions in Business Activities

* CO₂ -equivalent *See [Page 40](#)

		FY2023	FY2024
Scope 1		3,529 t	3,937 t
	CO2 from energy sources	2,462 t	2,373 t
	CO2 from non-energy	1,067 t	1,564 t
	CO ₂	0 t	0 t
	HFCs*	963 t	1,451 t
	SF ₆ *	0 t	0 t
	NF ₃ and others*	0 t	0 t
	Others (CH ₄ , N ₂ O etc.)*	104 t	113 t
Scope 2 Energy sources		85,569 t	68,981 t
Carbon offset by credit		-84,483 t	-67,807 t
Total		4,615 t	5,111 t

■ GHGs (by Scope) * CO₂ -equivalent

*See [Page 41](#)

		FY2023	FY2024
Scope 1		3,529 t	3,937 t
Scope 2		85,569 t	68,981 t
Scope 3		7,558,808 t	6,613,884 t
	1. Purchased goods and services	3,388,650 t	3,405,762 t
	2. Capital goods	61,635 t	67,962 t
	3. Fuel- and energy-related emissions not included in scope 1 or scope 2	10,880 t	7,859 t
	4. Upstream transportation and distribution	51,697 t	56,429 t
	5. Waste generated in operations	267 t	256 t
	6. Business travel	2,885 t	2,663 t
	7. Employee commuting	10,599 t	9,806 t
	8. Upstream leased assets	14,932 t	15,589 t
	9. Downstream transportation and distribution	8 t	6 t
	10. Processing of sold products	0 t	0 t
	11. Use of sold products	3,948,178 t	2,993,155 t
	12. End-of-life treatment of sold products	69,077 t	54,396 t
	13. Downstream leased assets	0 t	0 t
	14. Franchises	0 t	0 t
	15. Investments	0 t	0 t
Scope 1-3 total		7,647,906 t	6,686,802 t

■ Resources

*See [Page 47,48](#)

	FY2023	FY2024
Recycled resin	926 t	836 t
Total generation of wastes and valuables	9,427 t	9,139 t
Final disposal amount	52 t	106 t
Recycling rate	99.5 %	98.8 %

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■ Water

See [Page 50](#)

	FY2023	FY2024
Water Consumed	451 thousand m ³	376 thousand m ³
Municipal water	394 thousand m ³	334 thousand m ³
Industrial water	10 thousand m ³	1 thousand m ³
Rivers/lakes	—	—
Groundwater	47 thousand m ³	41 thousand m ³
Water discharged	368 thousand m ³	310 thousand m ³
Sewer systems	346 thousand m ³	294 thousand m ³
Waterways	23 thousand m ³	16 thousand m ³

■ Chemical substances

*See [Page 54](#)

	FY2023	FY2024
Input	312 t	264 t
Release	123 t	101 t
Released into waterways	0 t	0 t
Released into air	123 t	101 t
Released into soil	0 t	0 t
Transfer	3 t	2 t
Recycled	24 t	13 t
Consumption	162 t	148 t
Removed	1 t	1 t

■ Environmental Accounting

*See [Page42](#)

	FY2023	FY2024
Investments	352 million yen	242 million yen
Economic effect	192 million yen	106 million yen

- Respect for Human Rights
- Employee Well-Being
- Responsible Supply Chain
- Raising Product Quality Levels and Ensuring Product Safety
- Customer Relations
- Community Relations
- AI Ethics
- Intellectual Property
- Responsible Publicity and Advertising

Social

Our businesses rely on the support provided by the customers who use our products and services, our partner companies involved in our purchasing and sales, and many other people.

As our founder Konosuke Matsushita said, “a company is a public entity of society.” We believe that a company is able to contribute to social development not only through its business activities but by responding to the expectations of our stakeholders in the areas of human rights and labor, health and safety, compliance and corporate ethics and procurement. We are committed to creating a sustainable mobility society to promote a better life for everyone.



Social

Respect for Human Rights

Employee Well-Being

Responsible Supply Chain

Raising Product Quality Levels and Ensuring Product Safety

Customer Relations

Community Relations

AI Ethics

Intellectual Property

Responsible Publicity and Advertising

Respect for Human Rights

As an automotive equipment manufacturer, Panasonic Automotive Systems Group develops, produces, sells, and provides services in relevant sectors through close cooperation with Group companies in Japan and abroad. All our business activities depend on the support of many people, including our Group employees*, customers who use our products and services, suppliers involved in procurement and sales, and our business partners. Therefore, our business activities may impact them positively or negatively. Under our mission to “create a sustainable mobility-society,” we recognize that we cannot allow ourselves to develop the expense of these people, and that we have a responsibility to protect their rights and contribute to the well-being and happiness of these people.

Furthermore, 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 correct any possible negative impact our business activities, products, services, or related transactions have on individuals, workers, and society.

We also seek our suppliers and business partners to understand and implement our human rights and labour compliance policies; in cooperation with our partners, we strive to monitor supply chain risks and take appropriate measures to prevent, mitigate, and correct the occurrence of such risks.

Specifically, we conduct following activities, in consultation with external experts as appropriate:

- Formulating and reviewing human rights policies;
- Raising awareness on human rights and conducting human rights due diligence;
- Responding to human rights risks in the supply chain;
- Establishing and operating grievance mechanisms;
- Engaging with stakeholders.

Respect for human rights is one of the utmost material sustainability issues to the Group. For more details, see the “Materiality” section ([page 15](#)).

* Employees: All regular and contract employees having employment relationships with any Panasonic Automotive Systems Group company, all temporary staff and seconded employees working under the control and supervision of any Panasonic Automotive Systems Group company, and all board directors, executive officers, corporate auditors, or equivalent person appointed by any Panasonic Automotive Systems Group company. The definition also includes employees of Panasonic Automotive Systems Co., Ltd. subject to some HR and other systems.

Policy

In December 2024, the Group transitioned to a new management structure following a strategic partnership with the Apollo Group. With this management transition, we established the Panasonic Automotive Systems Co., Ltd. Human Rights and Labour Policy (the “Human Rights and Labour Policy”), referencing the below international standards and incorporating external experts’ opinions. This policy states that, predicated on compliance with international standards and the laws and regulations of each country that 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.

Moreover, the Code of Ethics and Compliance defines the commitments that all Group employees must fulfil and positions respect for human rights as our social responsibility. We strive to raise awareness of this responsibility.

<Main international standards used as reference>

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

📄 [Panasonic Automotive Systems Co., Ltd. Human Rights and Labour Policy](#)

📄 [The Panasonic Group’ Code of Ethics & Compliance, 5. Our Social Responsibilities, 1. Respecting human rights](#)
(Redirected to the website of Panasonic Holdings Corporation)

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We will regularly, and periodically as necessary, review and improve these policies based on the opinions of external experts, relevant stakeholders, and their representatives. We also demand that all our suppliers respect human rights by complying with the Panasonic Supply Chain CSR Promotion Guidelines.

 [The Panasonic Supply Chain CSR Promotion Guidelines](#)
(Redirected to the website of Panasonic Holdings Corporation)

Responsible Executive and Framework

As of August 2025, the executive officer responsible for the Group's initiatives to respect human rights is the Chief Human Resources Officer (CHRO). In fiscal 2025, our executive officers' compensations are linked to relevant evaluation factors which reflect their responsible filed in human capital management.

Crucial human rights issues are discussed and reported to the Management Meeting and the Board of Directors. The Board of Directors supervise these issues.

We have appointed a person promoting the Group's day-to-day efforts to respect human rights through human rights and labour initiatives within the Human Resources Division. We are promoting initiatives at all Group business sites in cooperation with related functions but primarily with HR. For more details on our supply chain initiatives, see the "Responsible Supply Chain" chapter ([page 80](#)).

Raising Awareness

We provide regular opportunities for employees to learn about the Code of Ethics and Compliance, which includes respect for human rights at the time of entry into a company and promotion. We have translated it into 22 languages to ensure that it is understood by employees everywhere.

Human Rights Due Diligence

To respect the human rights of the stakeholders in its business activities, products and services, and transactions, the Group conducts human rights due diligence based on the UN Guiding Principles on Business and Human Rights and in reference to the OECD Due Diligence Guidance for Responsible Business Conduct. We incorporate input from external experts and stakeholders in formulating related mechanisms and processes. The Group recognizes the need to identify human rights issues across its business activities, including

its value chain and has begun analyzing priority issues. We operate globally in a wide range of business areas, so some of our businesses have extensive supply chains. We recognize the risk that workers in our Group's manufacturing sites and these supply chains may be in vulnerable positions or unsafe working conditions in different countries or regions. Therefore, we begin with initiatives at our Group manufacturing sites and in our supply chains. For more details on our supply chain initiatives, see the "Responsible Supply Chain" chapter ([page 80](#)). We engage in dialogue, discussion, and collaboration with relevant internal and external stakeholders regarding our established frameworks and their continuous improvement. Moreover, we adequately disclose our initiatives on our official website and through relevant reports and other communication channels.

■ Risk Assessment

Self-Assessment of Group Manufacturing Sites

In November 2023, we conducted a detailed self-assessment of human rights and labour issues at all of our overseas manufacturing companies to gain a bird's eye view of the Group's risks. The questions we asked referenced the self-assessment metrics from the Responsible Business Alliance (RBA) that applied to the Group. Through this process, we gained a general understanding of human rights and labour issues. Moreover, we recognized that we need to formulate a correction plan to quickly address them.

Based on the assessment results, we identified high risk sites and requested them to create a correction plan, together with the completion date (fiscal year). During fiscal 2024, while these sites were working to reduce their risks, HR staff members from the Company visited the sites to explore the real causes of the risks. We then provided them with detailed support, including revision of their correction plans. According to the correction plan made by each site, all the issues identified during this procedure were addressed and corrected by the end of March 2025.

In fiscal 2025, we plan to conduct self-assessment concerning human rights and working conditions, not only in manufacturing sites but also in sales sites.

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Addressing Key Human Rights Risks

We consider forced labour as the specific risks to be prioritized at our manufacturing companies and sites based on their business characteristics and past self-assessment results. Our process for prioritizing identified potential and existing human rights risks is as follows:

- 1) List all aspects of human rights issues that the Group’s activities could adversely impact;
- 2) Evaluate the severity (scale, scope, and remediability) and likelihood of occurrence (based on publicly available data and past self-assessment results);
- 3) Collaborate with external and internal stakeholders to review the validity of methods and results.

We will continuously improve our process for identifying material risks, and review the results of our efforts, especially in the event of imminent human rights risks, to ensure immediate prevention/mitigation/remediation of identified human rights risks as soon as possible.

Prohibiting Forced Labour

Our Human Rights and Labour Policy clearly states the prohibition of “any and all forms of forced labour.” We recognize that migrant workers who cross national and regional borders to work at our manufacturing sites and in our supply chain are particularly vulnerable. In light of this recognition, while the Group respects the human rights of such workers, we promote efforts to establish a recruitment and employment environment free from forced labour and unfair treatment, following all applicable laws, regulations, and internal rules and referencing international standards and guidelines the ILO and other organizations established. In fiscal 2023, we revised our internal rules to better clarify the procedures for initiatives to prevent forced labor throughout our supply and value chains and the roles we should play in these initiatives. Specifically, in the unlikely event that the Group or a third party, such as a supplier or business partner, is found to be engaged in, or suspected of being engaged in, forced labour or any of the 11 ILO Indicators of Forced Labour*, our internal rules stipulate that we must promptly address the negative impact on human rights, including by working to cease, correct, or mitigate such conduct or providing remediation for the victims. In the supply chain, we make similar requests to our suppliers through the Panasonic Supply Chain CSR Promotion Guidelines. For more details, see the “Responsible Supply Chain” chapter ([page 80](#)).

* The 11 ILO Indicators of Forced Labour: abuse of vulnerability, deception, restriction of movement, isolation, physical and sexual violence, intimidation and threats, retention of identity documents, withholding of wages, debt bondage, abusive working and living conditions, and excessive overtime

In addition to our efforts against forced labor, we are also working on the following issues.

Prohibiting Child Labour and Protecting Young Workers

Our Human Rights and Labour Policy includes a clear expectation to work toward the effective eradication of child labour.

When we hire employees, in addition to complying with all applicable laws, we also require the staffing firms, suppliers, and other companies we work with to do the same. We also do not permit any midnight work, heavy labour, or dangerous labour for workers under 18 years old.

Efforts to Protect the Rights of Children

Through the programs below, we show respect for the human rights of children and supports their healthy growth.

[Programs supporting employees raising children \(Japan\)](#)

Prohibition of Discrimination and Harassment

Our Human Rights and Labour Policy clearly seeks to eliminate discrimination in the field of employment and occupation. Moreover, in our Code of Ethics and Compliance, the Group prohibits discrimination, behaviour that leads to discrimination, and harassment on the basis of age, gender, race, skin colour, beliefs, religion, social status, citizenship, ethnicity, marital status, sexual orientation, gender identity and expression, pregnancy, medical history, viral infection status, genetic information, disability status, political affiliation or orientation, labour union affiliation, veteran status, or any similar status or characteristic. We also strive to raise awareness of this prohibition. By doing so, we work on creating workplaces where it is possible for diverse talents to form critical partnerships with mutual respect and work together dynamically.

In Japan, we are engaged in the following efforts to prevent sexual discrimination, including sexual harassment, as well as harassment based on power differentials, and to comply with the Act for Eliminating Discrimination against Persons with Disabilities in order to create a more fair, equal, and pleasant workplace:

- Establishing, publishing, and thoroughly implementing sexual harassment policies
- Distributing leaflets and manuals on sexual harassment
- Holding seminars and training on preventing sexual harassment and harassment based on power differentials, and workplace culture revitalization
- Conducting training for managers on not engaging in harassing behavior and how to respond to reports of harassment

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- Running LGBTQ-related training
- Distributing educational materials to help employees understand the difficulties of and necessary considerations for people with disabilities

For more details, please see the “Employee Well-Being” chapter ([page 63](#)).

About Hiring Decisions

We work to continuously improve awareness with reference to the laws and guidelines for each country and make sure we apply them consistently based on the appropriateness, ability, and desire of the candidate. After identifying issues, we strive to correct them in the short term while ensuring that we take measures to prevent recurrence through awareness-raising and education.

■ Respect for the Freedom of Association and the Right to Collective Bargaining

Our Human Rights and Labour Policy clearly expresses our support for freedom of association and the effective recognition of the rights to collective bargaining. In each country and region, we make efforts to establish healthy relations with employees and to solve their issues by active dialogue with them. In addition, based on our Human Rights and Labour Policy, we pursue ways to respect internationally recognized human rights principles at our locations in countries that do not legally permit the formation of labour unions.

In Japan

We have stipulated in the collective agreement concluded with the labour unions that unions retain the right to organize, collectively bargain, and strike, as well as prohibitions on discrimination against union members and interference with union activities. The union membership rate is 75.0% of all managers and employees, rising to 97.2% of all non-managerial employees. Based on a common understanding that the Company’s sound development, improvements in labour and welfare conditions for employees, and social development are inseparable, the Company and the Union have established a system of Union participation in management based on equality and robust trust between labour and management. The Company and the Union discuss essential management matters in Labor-Management Council.

In Europe

Following an EU directive* adopted in 1994, we have set up a voluntary labour agreement to provide a venue for healthy discussion between labour and management, and employee

representatives and company representatives also meet to exchange opinions and discuss business issues including management strategies and living support for employees.

* EU directive: A directive that obliges all companies employing 1,000 or more employees in two or more European Union countries to establish a pan-European labour-management consultation committee.

In China

Companies in China have labour unions (gōnghuì). We hold regular opinion exchanges and discussions surrounding compensation, welfare and benefits, training, and the like through initiatives including periodic labour-management dialogues, proactive joint labour-management recreational events, and advance briefings to unions concerning critical management decisions, with a focus on building good relations between labour and management.

Southeast Asia

We are currently establishing systems to hold dialogues between employers and employees in each Group company, so that we can build industrial relations that suit the culture and laws and regulations of each specific country. We are working to improve workplace safety and welfare, through opinion exchanges covering management policies and labor environment improvement by means of labor-management councils and employee representative systems. We are also extending corporate recreational activities and training programs for better engagement with employees.

Latin America (Mexico)

Based on local laws, we formed a labor union called Sindicato de Trabajadores, and hold regular labor-management dialogues. We have organized the system to reflect the employees’ opinions and discuss issues concerning salaries, welfare, and working condition improvement. Actively organizing events and training programs for smooth industrial relations, our efforts to create a comfortable working environment for our employees continue.

■ Occupational Health and Safety

“Realizing a safe and healthy work environment” is also a priority, as stipulated in our Human Rights and Labour Policy. For more details, please see “Safety and Health” in the “Employee Well-being” chapter ([page 64](#)).

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■ Managing Working Hours

We have included provisions in our work rules related to proper management of working hours, break times, overtime work, holidays, leave, and other matters based on labour laws in each country and labour-management agreements (e.g. collective bargaining agreements). Our work rules also prohibit forcing workers to work overtime without their agreement as a form of present or suspected forced labour.

In Japan, the standard working day is set at 7.75 hours per day, and any extra hours worked are eligible for extra pay, going beyond the minimum required by law. We have also established internal working hour management standards that are even stricter than legal standards as part of our efforts to eliminate excessive overwork.

We also provide more annual paid leave than legally required, and employees may accumulate up to 50 days of remaining leave. We have made our system more flexible to accommodate individual needs for using annual leave, such as making hourly or half-day leave available. On top of these system enhancements, we address the physical and mental health management of employees by allocating human resources in ways optimized for preventing uneven overtime workload distributions among specific employees, and by providing additional medical examinations for employees who have worked long hours.

■ Wage Management

We aim to achieve competitive compensation levels, wherein we have set guidelines for appropriate wages, allowances, bonuses, and other types of occasional compensation or retirement pay, all based on national laws governing labour, labour-management agreements (such as collective agreements), and the like.

We also establish work rules for each country in compliance with all wage-related laws and regulations concerning minimum wages, statutory benefits, and overtime. We operate according to these regulations, pay employees directly for an agreed-upon period at agreed-upon time and provide employees with notifications of pay through pay statements or electronic data.

Furthermore, in countries and regions where the law permits monetary penalties, we recognize and allows these penalties as an option of disciplinary action. However, this permission is predicated on the penalty procedures and amounts being set within legal limits.

Grievance Mechanism

To ensure that complaints about human rights violations are addressed promptly and enable redress, we have established a global hotline (with service in 32 languages) for our employees, business partners, or other external stakeholders to report any compliance violations (including human rights or labour violations) they notice or suspect. This hotline uses an external, independent system that prevents the identity of the internal or external person reporting being revealed, and we have internal rules in place such that we are careful to protect the confidentiality of such reports and to make sure that the person reporting the violation does not suffer any acts of retaliation and detrimental treatment. For more details, see the “Whistleblowing System” in the “Business Ethics” chapter (page 23).

In addition, to encourage wider acceptance of complaints from outside our group, we participate in the industry joint grievance platform established by the Japan Electronics and Information Technology Industries Association (JEITA) CSR Committee. For more details, see the “Systems for Whistleblowing and Seeking Consultation” section under “Responsible Supply Chain” chapter (page 83).

 [Japan Center for Engagement and Remedy on Business and Human Rights \(JaCER\)](#)

Participation in International and Industrial Partnerships

We have been a participant in the United Nations Global Compact since January 2022 through Panasonic Group. In addition to declaring 10 fundamental principles in four different fields, including human rights, we are working to make our efforts related to human rights and labour reference international standards, and we fulfil our duty to communicate with the public by disclosing the progress and results of those efforts.

We also joined the Responsible Business Alliance (RBA)—an international CSR organization involved in the electronics, ICT, and automotive sectors—in October 2021 and utilize their self-assessment tools and guidance document for solving of issues. Furthermore, we participate in the Responsible Mineral Initiative (RMI) under RBA, for the promotion of responsible mineral procurement.

We are working to build a highly reliable management system through the above efforts.

 [United Nations Global Compact](#)

 [Responsible Business Alliance \(RBA\)](#)

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Employee Well-Being

Panasonic Automotive Systems Group is committed to realizing happiness and job satisfaction by creating a work environment where every Employee*1 can work in a safe, secure, and healthy state with their individuality respected, regardless of gender, age, nationality, or any other differences. We also aim to eliminate the risk of infringement on their rights and opportunities through unfair treatment, discrimination, or prejudice.

*1 Employees: All regular and contract employees having employment relationships with any Panasonic Automotive Systems Group company, all temporary staff and seconded employees working under the control and supervision of any Panasonic Automotive Systems Group company, and all board directors, executive officers, corporate auditors, or equivalent person appointed by any Panasonic Automotive Systems Group company. The definition also includes employees of Panasonic Automotive Systems Co., Ltd. subject to some HR and other systems.

Policy

The Panasonic Automotive Systems Group values the idea of our founder, Konosuke Matsushita, “making people before products.” Under the banner of “creating a sustainable mobility society to promote a better life for everyone,” we offer higher added value for society through our actions. The four key elements that enhance this added value are “capability (skill development at each job level)”; “engagement (willingness to take on challenges)”; “employee enablement (environment where employees can best demonstrate their abilities and work comfortably)”; and “diverse human resources.” The source of these elements is “employee well-being,” a state in which every individual is healthy in mind and body and feels happy and fulfilled through challenging opportunities. Here, we introduce the Group well-being initiative around the three pillars of “Safety and health,” “Engagement and career self-reliance,” and “Diversity, Equity & Inclusion (DEI).”

Responsible Executive and Framework

The executive officer responsible for creating and promoting the HR strategy of the Group is the Chief Human Resources Officer (“CHRO”).

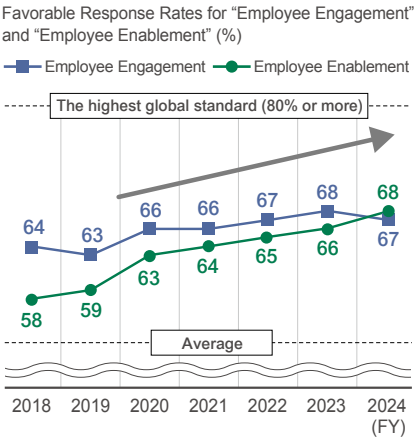
Key Groupwide Indicators

We place great importance on indicators linked to “employee well-being” are as follows: employee engagement, employee enablement, the ratio of female managers (in Japan), and the number of occupational accidents. Furthermore, the rate of diversity (female employees, employees who are non-Japanese citizens, and mid-career hires) for the executive officers will be added to the key indicators. The employee engagement and employee enablement indicators represent the favorable response rate (%) as measured in the Employee Opinion Survey, an annual survey of all global employees with approximately 10,000 responding in fiscal 2024. We have set the goal for fiscal 2030 as the highest global standard (80% or more). The survey results have been trending upward year by year. In fiscal 2024, the indicator showing a favorable response rate was 67% for employee engagement and 68% for employee enablement.

The ratio of female managers (in Japan) is 3.7%. We will continue our efforts toward ensuring diversity in the management team and at manager level. As for the occupational accident in fiscal 2024, there are no fatal accidents, serious accidents, and severe accidents. We will continue to promote safe, secure, and healthy workplaces to eliminate fatal, serious, and severe accidents. The questions used to measure employee engagement and employee enablement are as follows:

- Employee Engagement: willingness to work beyond expectations, motivation from the company or the supervisor, pride to work in this company, intention to recommend this company as a good place to work, intention to work in this company over a long period .
- Employee Enablement: challenging and interesting work, making good use of skills and abilities, workplace enhancing productivity, barriers at work

Employee Opinion Survey (EOS)



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Setting Values

Based on our Group vision to become the world’s leading “Joy in Motion” design company, we set five values as a foundation of our groupwide principle. By applying these values to our human resource management measures, including recruitment, development, evaluation/ treatment, and transfer/assignment, we enhance the value of each employee’s experience, which nurtures their further behavioral evolution and growth.

 [Panasonic Automotive Philosophy](#)



Safety and Health

Our policy is to ensure the health and safety of the Group employees in accordance with the Panasonic Group Code of Ethics & Compliance (“Code of Ethics & Compliance”) with which we maintained compliance, and the Panasonic Automotive Systems Human Rights and Labour Policy (“Health and Safety Policy”) sent out by the Supervisory Safety Officer. The Health and Safety Policy is applied across the entire Group to ensure the health and safety of our employees, as well as dispatched employees and contractor’s employees by rolling them out at all Group companies. We also strive to ensure the safety of all persons not affiliated with our Group when they visit our workplaces.

-  [Panasonic Group Code of Ethics & Compliance](#)
Chapter 2. Our Workplace, 1. Respecting each other, 2. Safeguarding health and safety
(Redirected to the website of Panasonic Holdings Corporation)
-  [Panasonic Automotive Systems Human Rights and Labour Policy](#)
-  [Panasonic Automotive Systems Occupational Health and Safety Policy](#)
(Redirected to the website of Panasonic Automotive Systems Co., Ltd.)

To put these policies into practice, we have established the Health and Safety Management Rules for the Group, thereby building a foundation for health and safety management activities with the aim of both preventing Occupational Accidents and maintaining or improving the health of employees so that they can contribute to business development. These rules apply to all work performed at business sites within the Group. Additionally, to ensure thorough compliance, we are also working to prevent harassment in accordance with the laws and regulations of each region. We also make sure that everyone from the Groupwide perspective, domestic or abroad, is well informed about our key initiatives by distributing messages from the Group Health and Safety Management division during National Safety Week in July and National Occupational Health Week in October each year.

■ Creating a Safe and Secure Workplace Risk Assessment Initiatives (Japan)

The Panasonic Automotive Systems Group conducts regular risk assessments at least once annually for mechanical equipment, chemical substances, and the like according to the Occupational Health and Safety Act in order to identify hidden risks such as the potential for occupational accidents, injuries or illness and reliably reduce the risks in order of greatest priority. Moreover, cases of occupational accidents that have occurred within our Group are shared on the intranet immediately after happening for the horizontal deployment of countermeasures. Then, the related activities are implemented at each workplace to prevent the recurrence of such cases. Each of our business sites in Japan has a Safety and Health Committee composed of both employees and management (representatives of the union committee and the company committee) which is charged with investigating measures to prevent danger to workers, prevent the causes and recurrence of occupational accidents, prevent damage to workers’ health, promote the maintenance or improvement of workers’ health, and other similar topics. To prevent occupational accidents among contractors’ employees operating on our premises, we also regularly hold Health and Safety Meetings with those contractors operating on our premises and manage health and safety overall, including facilitating communication between operations.

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Promoting External Certification

◇ISO45001

Workplaces within the Panasonic Automotive Systems Group are working to obtain ISO 45001 certification, a process which involves clarifying the roles of all employees using the standard, setting goals and driving health and safety activities forward while also conducting regular reviews by the head of the business site, revising those activities based on those reviews. As of the end of 2024, 40 business sites globally have obtained ISO 45001 certification.

◇The 2025 Outstanding Organizations of KENKO Investment for Health (Japan)

In Japan, the Group has been working on efforts toward being recognized as Certified Health & Productivity Management Outstanding Organization by the Ministry of Economy, Trade and Industry. As of March 2025, Panasonic Automotive Systems Co., Ltd and Panasonic ITS Co., Ltd. are recognized as White 500 (Top 500 companies excellent in their initiatives within the large enterprise category). Panasonic Car Electronics Co., Ltd. was listed in the Health & Productivity Management Outstanding Organization in the large enterprise category. We position health and productivity management as an important measure for “Management that Enables Each Employee to Reach Their Full Potential” and work to promote the “mental and physical health” of our employees and their families while fostering a workplace culture where all employees can thrive. We also support the well-being of our employees and leverage it as a driving force in our corporate activities toward realizing an ideal society offering material and spiritual affluence.



 [List of certified business sites \(in Japanese only\)](#)
(Redirected to the website of Panasonic Health Insurance Organization)

Safety

◇Providing the Guidelines for Formulating Equipment Safety Standards

To prevent the risk of occupational accidents involving equipment, we identify risks and implement protective measures from the design stage of the equipment based on the Equipment Safety Standards, when developing, introducing, or purchasing new production equipment and technology/quality evaluation equipment or devices at our business sites. After multiple

conformity assessments using our unique evaluation tools, the Safety and Health Committees reviews the conformity assessment at the final use stage, ensuring that we use equipment that meets safety standards. The “Guidelines for Formulating Equipment Safety Standards” provide global guidelines for the “Equipment Safety Standards” of each business site, and systematize international machinery safety standards, laws, and regulations, safety know-how accumulated within the company, and measures to prevent the recurrence of accidents. It is revised, updated, and publicized the standards (translated into multiple languages). In addition, we ensure work safety by conducting compatibility assessment of hazards related to the potential for harm resulting from incompatibility with human behavioral characteristics and capabilities, and by taking ergonomic considerations and measures into account in the usage environment.

◇Response to Occupational Accidents

When an occupational accident occurs, we follow our “Steps to Take in an Emergency Situation Like an Industrial Accident” and the Operating Site Supervisory Health and Safety Administrator where the occupational accident has occurred makes a prompt and accurate report to the Operating Company Supervisory Health and Safety Administrator. We have established mechanisms to manage occupational accidents at each site globally, report serious occupational accidents that happen within 24 hours and monitor them for 365 days, and share case studies and the like on occupational accidents with the entire Group. At business sites where an occupational accident has occurred, in addition to investigating the cause and implementing measures to prevent it from happening again, the details of the accident are shared within the entire Group to enable other business sites to undertake preventive measures with reference to past accidents.

◇Serious/Severe Accidents in Recent Years and Prevention Measures

Thanks to our continuous initiatives to eliminate serious accidents (those causing long-lasting physical disability) and severe accidents (those involving at least three employees), in fiscal 2024 there were no serious accidents and severe accidents. To prevent serious accidents from occurring, we conducted emergency inspections at domestic and overseas sites in April and July, and identified unsafe areas. Such issues have been remedied at each site.

Lost-Time Injury Frequency Rate and Intensity Rate (Japan)

	FY2022	FY2023	FY2024	Target
Lost-Time Injury Frequency Rate	0.000	0.087	0.000	0
Intensity Rate	0.0000	0.0002	0.0000	0

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Number of Fatal Accidents (Global)

	FY2022	FY2023	FY2024
Group employee	0	0	0
Dispatched employee	0	0	0
Contractor's employee	0	0	0

Number of Serious/Severe Accidents (Global)

		FY2022	FY2023	FY2024
Serious accidents	Japan	0	0	0
	Outside of Japan	0	0	0
Severe accidents	Japan	0	0	0
	Outside of Japan	0	0	0

◇ Equipment Safety Education System

Reinforcing Equipment Safety Education

		Learning about International Standards		Learning about Group Standards
		A. Seminar on Equipment Safety for Engineers	B. Seminar on Equipment Safety for Managers	C. Drafting and Operating Workshop on Equipment Safety Standards
Target participants	Legal Definition	<ul style="list-style-type: none">Design engineers belonging to machine manufacturingUsers of machines including design engineers belonging to business operators that design and improve machines	Production engineering manager belonging to business operators using machinery	None, Panasonic Internal Standard
	Internal Job Function	<ul style="list-style-type: none">Production engineeringEquipment maintenanceHealth and safety, etc. <div>Those who make equipment</div>	<ul style="list-style-type: none">Production engineeringEquipment maintenanceHealth and safetyProduction line leaders (contractors) <div>Those who use equipment</div>	<ul style="list-style-type: none">Production engineeringEquipment maintenanceHealth and safetyProduction line leaders (contractors) <div>Those who share standards</div>
Curriculum		<ul style="list-style-type: none">e-Learning: 24 hours + In-person: 2 days	<ul style="list-style-type: none">e-Learning: 6 hours + In-person: 1 day	<ul style="list-style-type: none">e-Learning: 6 hours + In-person: 1 day
		<ul style="list-style-type: none">Overview of functional safety and safety systems designRisk assessment and reduction in design and production stages, notification of machine dangerPractice (Equipment design risk assessment)	<ul style="list-style-type: none">Technical theory, relevant lawsFunctional safety and safety systems designPractice (Equipment design risk assessment)	<ul style="list-style-type: none">Explaining our standardsPractice (Conduct a safety standard review of actual equipment)

Occupational Health

Regarding special tasks such as handling chemical substances, we conduct hazard reviews using Safety Data Sheets (SDS), provide appropriate protective equipment, and attempt to reduce the necessity of such work. In response to the mandatory risk assessment of chemical substances (from June 2016), we have reviewed the applicable substances and are conducting risk assessments. In addition to the substances stipulated by laws and regulations, we also perform environmental measurements and health checkups for substances we have identified by ourselves and continue to monitor them.

As in 2023, the Ministry of Health, Labour and Welfare has also revised parts of its regulations aimed at preventing on-the-job accidents involving chemical substances, including regulations on occupational safety and health in 2024. These revisions are premised on the national government expanding infrastructure for communicating information about dangers and hazards posed by harmful chemicals as well as standards for upper limits on exposure it has set, including harmful chemical substances that have not as yet become subject to regulations, and requires businesses to take appropriate measures to prevent exposure (self-driven management). Our domestic Group companies have appointed chemical substance managers and personal protective equipment administrators, taking into account trends in amendments to relevant laws and regulations. We thereby work to establish a companywide initiative to ensure “autonomous management” of chemical substances.

◇ Chemical Substance Management Standards

We established the Standards in April 2022 with regard to measures that are required based on changes to the Industrial Safety and Health Act, Fire Service Act, Poisonous and Deleterious Substances Control Act and other relevant laws. The goal of these standards is to enable us to appropriately and effectively work toward eliminating and reducing sources of danger or hazards to prevent work-related illness caused by chemical substances or the like in the workplace, as well as implement health and productivity management.

◇ Promoting Organization

The CEO appoints the Supervisory Safety Officer who determines Group policy and initiatives. We also have a Groupwide Health and Safety Office to oversee groupwide safety, and a Safety and Health Committee in each site implements concrete measures.

Training (Japan)

We utilize facilities such as Anzen Taikan Dojo (safety training hall), to provide safety educa-

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tion to employees, dispatched employees, and contractors at the start of their work. We also provide and promote training for managers, specialized training tailored to each manufacturing process, and training to develop qualified personnel. In addition, we provide necessary information and educational content for employees as well as contractors to raise their awareness.

■ Promoting Health and Productivity Management
Employee Health (Japan)

As for the employee health, the CEO has sent out Health and Productivity Management Declaration to the entire Group, clarifying our policy of strengthening health investments to realize employee well-being. In Japan, Panasonic Automotive Systems Co., Ltd. promotes various initiatives through a unified effort from the Company, labor union, and health insurance organization. We also review the results of periodic health checkups, Employee Opinion Surveys (EOSs), and stress checks to confirm that our efforts have succeeded and further enhance initiatives.

📄 Health and Productivity Management (Only in Japan)

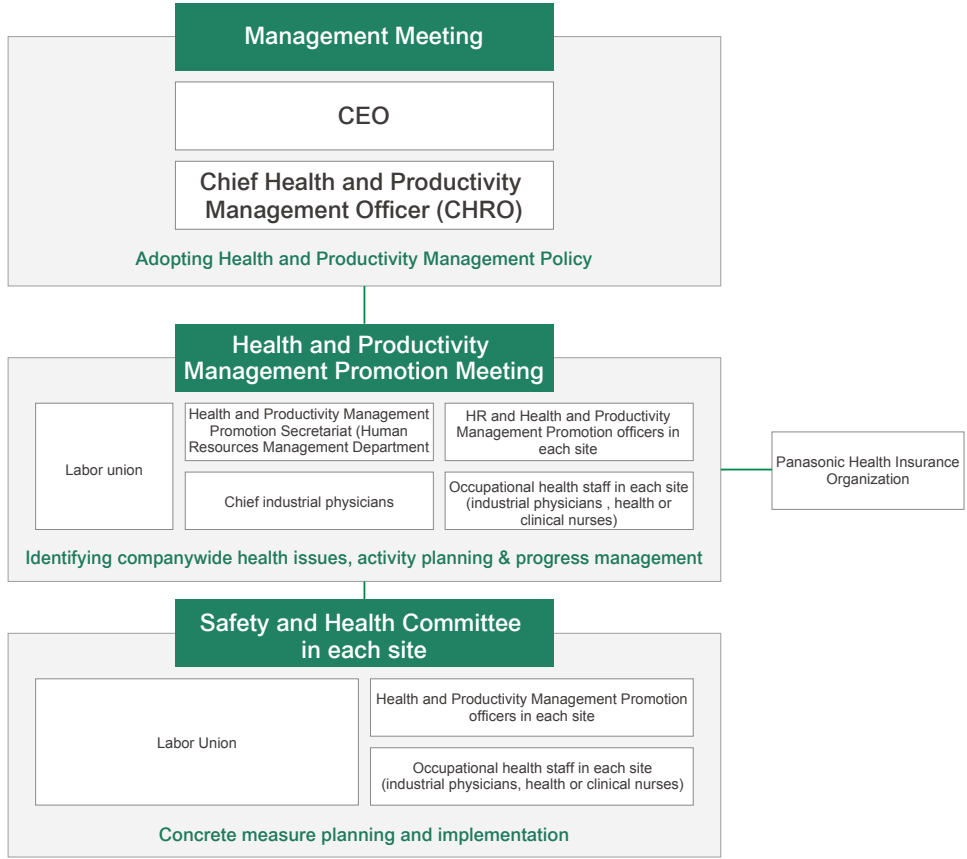
◇ Health Maintenance Betterment Standards

In the interest of appropriately and effectively undertaking measures to maintain both employee’ physical and mental health, in these Standards we have laid out procedures for health checks and follow-up measures, procedures for guidance on interviews with individuals working long hours, procedures for tests and the like to measure the level of psychological burdens, procedures for stopping those who are ill from working, and stipulates that Health Maintenance Betterment Plans and mental health promotion plans must be created. The Panasonic Group’s Health Maintenance Betterment Measures and the Panasonic Health Insurance Organization’s healthcare business to create synergy between all their initiatives. To promote specific activities, we select members from the Head Office division, the HR and General Affairs divisions at each business site, labor unions, and occupational health staff, and these activities are promoted by the Health and Productivity Management Promotion Meeting.

	FY2021	FY2022	FY2023	FY2024	Target
Employee health checkup rates	97.90%	99.80%	100%	100%	100%

◇ Promoting Organization (Japan)

Our health and productivity management is led by the CEO and the Management Meeting. The Chief Health and Productivity Management Officer (CHRO) reports and discusses groupwide progress and issues in health management at monthly Management Meetings. Taking account of decisions made in the Management Meetings and opinions from the Panasonic Health Insurance Organization, issues, activity plans, and priority matters are deliberated and determined in Health and Productivity Management Promotion Meetings, attended by members of the HR and General Affairs divisions of each site, labor union members, and occupational health staff. Decisions made in the Health and Productivity Management Promotion Meetings are then discussed in the Safety and Health Committee in each site to determine the concrete measures to be implemented within each workplace.



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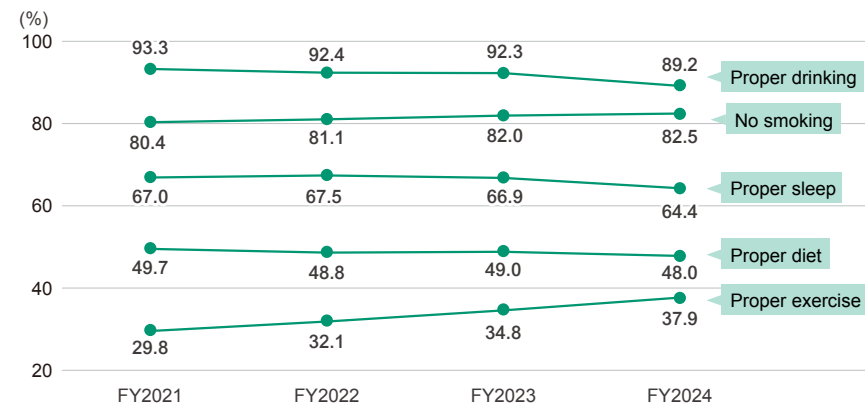
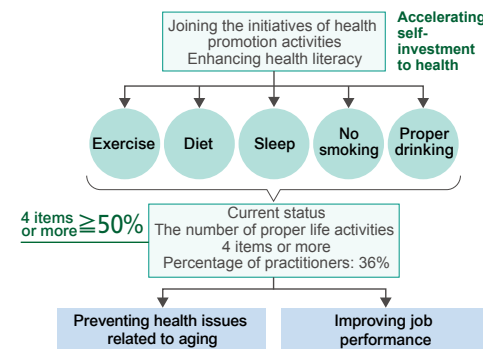
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◇Health Issues and Initiatives (Japan)

As the number of senior employees at the Panasonic Automotive Systems Group grows, the number of individuals with obesity or other health problems is increasing. With more employees using remote work in the wake of the COVID-19 pandemic, issues like a lack of exercise and communication are becoming more prevalent. We need to raise employees' health literacy and get more employees to adopt healthy practices.

There is a tendency for individuals with good lifestyle habits in all five areas (sleep, diet, exercise, moderation with alcohol, and avoiding tobacco) to be less likely to have health risks and have better job performance (based on self-evaluation). The new goals starting in fiscal 2024 is to increase the proportion of individuals who have good habits in four or more of these categories to at least 50%. That proportion was 41.5% in fiscal 2023, which is a 5% increase in the past four years. One example of an initiative meant to raise our employees' awareness about health is to have a Groupwide Health Promotion Day (October 2). Every year, we set priority themes and make efforts at all workplaces to raise awareness of healthy behavior and practices.

In addition, we offer ICT-based health promotion solutions through web services and lifestyle habit apps. These solutions provide health information, health checkup records, health challenges, health care point programs (points accumulated according to respective activities which can be exchanged for products related to health promotion), and tools for measuring health age after periodic health checkups.



◇Environmental Improvements (in Japan)

We are promoting workplace improvements so employees can work healthily at all workplaces through health promotion, disease prevention, mental health care, and other employee health initiatives. As for our measures to curb smoking, indoor smoking has been 100% banned throughout the Group. In addition, we promote healthy eating environments in cooperation with contracted food service companies. Currently, all four cafeterias have obtained external certifications (such as Healthy Eating and Dining certification system and ISO14001) either as a business site or a cafeteria management company. We also implement safety considerations for individuals as required by actively offering health guidance and industrial physician counseling, through the nine health and productivity management offices across Japan. These efforts are subject to specific health guidance and at high risk of facing health problems. For remote workers, we have developed a “Guide to Working from Home in a Healthy and Safe Manner,” which provides essential points to consider when working at home and simple exercises that can be done at home, thereby helping employees be proactive in maintaining health.

◇Stress Check (Japan)

All Group companies conduct stress checks once a year, in order to promote group analyses and workplace improvements on a company organizational unit level in addition to the conventional response for those under high stress. In conjunction with these stress checks, we also recommend that employees practice self-care in terms of sleep, diet, and exercise as a crucial part of maintaining their health. In addition to providing employees with an opportunity to identify their own stress levels, the stress check test results are given to responsible persons in each workplace, and these workplaces as a whole, to work as feedback in the form of a diagnostic analysis. This analysis is used to develop measures intended to prevent the occurrence of mental illness and to revitalize the workplace. Employees who work long hours or whose regular health screening results suggest a need for monitoring their safety receive a consultation from an industrial physician based on our own criteria. Measures are also taken to prevent damage to the employee's health, including by addressing working conditions and environment. Furthermore, from the perspective of employee health and statutory compliance, we are striving to address excessive working hours and fundamentally review work processes in a way that goes beyond short-term efforts. This is part of our approach to continuously improve how employees engage in work and downtime.

	FY2021	FY2022	FY2023	FY2024	Target
Stress check participation rate	86.40%	85.70%	86.40%	95.20%	100%

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■ Initiatives for Preventing Harassment and Ensuring Compliance

The Group aims to respect the individuality and abilities of each employee in all workplaces so that everyone can feel motivated and comfortable in their work. Therefore, to encourage us to create a company free of harassment that everyone is proud of, we are strengthening our harassment prevention efforts in accordance with the Act on Equal Opportunity and Treatment between Men and Women in Employment, the Act on Childcare Leave, Caregiver Leave, and Other Measures for the Welfare of Workers Caring for Children or Other Family Members, the Amendment to the Act on Comprehensive Promotion of Labor Policies (Power Harassment Prevention Act), and other relevant laws and regulations as follows.

- We have designated every December as “Zero Harassment Month” and have been raising awareness about harassment.
- We are revising our disciplinary rules (with stricter disciplinary measures for harassment) as a Groupwide effort to deter harassment.
- Specifically for harassment prevention, training was held in July 2024 for employees, including managers, in Group companies. About 7,000 employees underwent the course (Participation rate was approximately 99%). They learned how to avoid committing harassment and how to proceed if they receive reports of workplace harassment. This course is to be held continually.
- Along with the training above, a harassment recognition survey was conducted with its results disclosed on the intranet.

Employee Empowerment

Aiming to realize our mission and vision, we adopted the HR concept of “Explore the Unknown.”

The word “explore” brings nuances of autonomy, speed, and excitement. “The unknown” conveys a future-oriented mindset, a global reach, and something unprecedented. We encourage our employees to venture into previously uncharted territory, in this era when the automobile industry is experiencing a great transformation.

■ Development of Management Executives

For the sustained development of our Group, a diverse pool of managers that can drive business forward is absolutely essential. To that end, we are working to create a pipeline of successors over the medium to long term. As specific Group-level initiatives, for the key posi-

tions such as Executive Officers and Presidents of regional headquarters, we are promoting the development of a diverse pool of management executives irrespective of nationality, work history, gender, age, or other attributes based on a policy of “earlier discovery” and “the right person for the right job.” Also, the Panasonic Automotive Systems Group Talent Management Committee has been established to discuss and promote the search, development, assignment, and monitoring of successors for important posts from the optimal perspective of the entire Group. Currently the Committee is working on the career development of about 100 successors who are selected from short-term, mid-term, or long-term perspectives. From fiscal 2025, these initiatives will be enhanced further to develop more successors from the aspect of quality, quantity, and diversity. To that end, we will conduct inclusive programs to develop executive successors by training executive candidates (mentioned later) and establishing a framework to develop executives on a global level in line with each region, as well as performing development training for selected younger-generation employees. Moreover, each function, business division, and regional headquarter has a similar talent management committee to discuss and promote identifying, training, assigning, and monitoring successors to important posts such as business division heads for each function, business division, and region from a multifaceted perspective, helping develop managers for optimal Groupwide management.

	FY2023	FY2024
Successor readiness rate	2.9 employees/post (40 employees/14 posts)	3.4 employees/post (48 employees/14 posts)

Succession readiness	FY2023		FY2024	
Appointment possible immediately	10.0%	(4 employees out of 40)	10.4%	(5 employees out of 48)
Appointment possible within 3 years	20.0%	(4 employees out of 40)	33.3%	(16 employees out of 48)
Appointment possible within 5 years	70.0%	(28 employees out of 40)	56.3%	(27 employees out of 48)

	FY2023		FY2024	
Leadership development participation rate	35.0%	(14 employees out of 40)	43.8%	(21 employees out of 48)

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Training for Executive Candidates

We have made available the best internal and external training programs for executive candidates, and we continue to participate entire Panasonic Group programs such as Launching Executive Leaders and Creating Executive Leaders, which launched in fiscal 2020. A total of 18 people participated in the former program and 21 people in the latter. In addition, since fiscal 2021, the new director training programs and group management workshops were held, and management literacy training for younger-generation executive candidates was started in fiscal 2022. We participated in them as a member of the Panasonic Group. Moreover, in fiscal 2025 we have newly established the global group training for presidents, executive officers and regional headquarter heads, and are considering strengthening our dispatch programs to external training. Through the Executive Club to provide self-learning opportunities, we are enhancing the development of the management team even further.

◇ Group Training Program for Young Executive Candidates

We plan to offer a group training program for young executive candidates who are expected to be appointed to section manager or department manager positions within one to two years. The program is designed to help them acquire basic management literacy based on mutual learning among participants who have diverse backgrounds through discussions of business case studies. This global training program will be introduced after fiscal 2025.

◇ Executive Club

We plan to offer a group training program for young executive candidates who are expected to be appointed to section manager or department manager positions within one to two years. An executive officer leads a group of about 10 candidates selected regardless of their location or job function. The program is designed to establish bonds between executive officers and candidates and to share learning through working together under a theme selected by the group. This global training program will be introduced after fiscal 2025.

◇ Dispatch to External Training Programs

This program will be offered to executive candidates, who are expected to be appointed to the position of business unit director or affiliate company president within one to two years. We plan to organize a scheme to dispatch these candidates to renowned business schools both in Japan and overseas. We will support them by offering a study program that fulfills the areas required for each individual’s growth. We will start the scheme after fiscal 2025.

Executive Remuneration System

The remuneration system consists of a fixed base salary, performance-linked compensation (with short-term and medium-term performance-linked portions) as an incentive reflecting short-term and medium-term performance, and restricted stock compensation as a long-term incentive. The amount of performance-linked compensation reflects evaluations of financial items (consolidated performance: EBITDA, ROE, operating cash flow) and non-financial items (set separately for each individual) emphasized in the current medium-term plan. In remuneration for directors, the amount of base salary and performance-linked compensation for each individual director for fiscal 2024 was decided through review by the Nomination and Compensation Advisory Committee, checking whether the details comply with our remuneration decision-making policy with attention given to objective, external data, etc., and reporting its validation review results to the Board of Directors.

■ Recruitment

In our recruitment activities, we have selected “Open up the unknown” as our recruiting brand slogan in Japan, marking our aggressive stance to recruit a wide range of people who wish to contribute to society, for the automotive industry presently undergoing a once-in-a-century transformation.

[Recruitment website \(Japanese article only\)](#)

Recruitment Policy

In April 2024, we established a new vision and values. In our recruitment activities, we plan to review the recruitment process, recruitment criteria and job interview methods to allow us to acquire people who empathize with our vision and who will act in accordance with our values.

Recruitment with an Ensured Initial Assignment (Japan)

For all job functions, the recruitment process is conducted to ensure an initial assignment such as job functions and location (business field in case of mid-career recruitment). By applying this system, autonomous career development will be fostered with the business division or work type that a newcomer wishes to apply for, and mismatching avoided. The details of jobs and requirements for the respective functions are disclosed on the Recruit Site of Panasonic Automotive Systems Co., Ltd.

[Recruit Site \(to know job function\)](#)

[Website for mid-career recruitment \(Recruit information\)](#)

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Onboarding (Japan)

In the Panasonic Automotive Systems Group, the onboarding period for new employees ranges from one to three years, during which time they undergo Group training, as well as introductory training for those in technical jobs. Mid-career hires also undergo introductory training, and interim follow-up training in their first year of employment, to enable mid-career employees to build ties with others with similar career paths and to provide them with opportunities to look back on their activities following employment. In addition to training programs, we have set up a mentorship program for new employees to provide support as they start on their jobs (for first year of employment) and a career navigator program for mid-career hires (first three months of employment).

Referral-Based Recruitment

In August 2023, we introduced a referral-based recruitment program (recruitment based on recommendation from employees) to approach mid-career workers who appear to be willing to change jobs. At its introduction, we held briefings with employees to foster greater understanding of the program's objectives and details. We have also implemented a system that can be used easily and smoothly. Additionally, we have organized advertising and promotional campaigns after its startup and created the Open Position scheme (job offering that does not specify the job type or content, with job assignments decided through study of the candidate's aptitudes and competences after recruitment). Through these efforts, we are accelerating recognition of our activities and gaining greater employee cooperation. In comparison to recruitment activities immediately prior to program introduction, the number of job applications quadrupled, and hirings tripled, contributing to improved recruitment and retention of employees with advanced specialized skills and management skills.

■ Developing Human Resources


Basic Human Resource Development System

The human resource development system of our Group consists of many programs according to rank and type of job. The driving force behind these programs is each division/workplace. At each workplace, we stimulate mindset growth in each employee through 1 on 1 meetings with their supervisor. The basis of human resource development is to provide small but important on-the-job training on a daily basis. By effectively combining this with group training, we can supplement and strengthen the knowledge, skills, and experience necessary for growth. Rather than one-sidedly providing the company's own training, the workplace supports each individual so that they have a clear vision of what they want to be/become, and proactively take opportunities to achieve these goals.

Establishment of a Corporate University

In order to become “the strongest company in human resource development,” we established the Panasonic Automotive Systems University (PAS University) in October 2024. Founded on the concept of “engage in mutual learning and teaching with initiative,” we plan to integrate the various training programs conducted separately by divisions and build it as an effective corporate function that helps build human resources necessary for the automotive industry in the future, by supporting employees in improving their competences and skills and in building their career paths independently.

In addition to providing training, PAS University develops human resources development plans that are in step with our business and technology strategies and contribute to the creation of our own unique approach to human capital management. We also coordinate these activities with other sites on a global scale, broadening the scope of human resources development, including cross-cultural exchanges, and start up exchanges with external parties in anticipation of interaction with other corporate universities.

 **Sustainability: What is PAS University, a corporate university that engages in mutual learning and teaching with initiative?**

Global Human Resources Development

In each country and region, we plan and operate our unique selective executive development training programs in cooperation with Japan to bolster our business leadership development. For fiscal 2024 in North America, we implement the Challenge Development Program (CDP) for high-potential human resources, providing two years of offsite and online group training and workplace rotations with the aim to help them acquire business literacy and practical workplace skills. In Europe, we operate the Global Leadership Program (GLP), a human resources training program for business leader candidates. It includes workshops on new business creation, launching and promoting actual business projects, mentoring and coaching, and various other activities. Participants work with partners from different European affiliates to improve their overall business knowledge and skills. In fiscal 2025, we plan to implement hybrid group training and executive club for global executive candidates. Furthermore, we arrange rules for inter-regional transfers to provide programs for overseas employees' job transfers to Japan and inter-regional transfers.

Hierarchical/Skill Training (Japan)

We have established PAS University as an organization that specializes in organizational development and individual growth and training for employees of the Group. We are working to develop human resources for all employees in cooperation with each division and function.

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We now provide the following hierarchical/skill training activities.

- Onboarding training for new graduates and mid-career hires so that new employees can quickly become active in the Group.
- Business skills training that teaches IT, communications, languages and other skills required to facilitate employee tasks.
- Job-function-specific training so that employees can learn the specialized knowledge and skills needed to accomplish their tasks, whether they be technical, manufacturing, or sales and marketing.
- Elective management development training for employees who meet certain conditions.
- Management skill training to practically implement management philosophy of our founder Konosuke Matsushita and our Mission/Vision/Value (MVV) philosophy, and to improve management skills, and so forth.

To accelerate self-directed learning, we provide other training modules on business skills and liberal arts in Japanese, English, and Chinese on our internal website, providing a learning platform that allows employees to easily learn every day, from anywhere in the world.

Developing Middle Management

◇ Training for Middle Management

We believe that middle managers (section managers) play a critical role and have a great deal of responsibility in driving the Panasonic Automotive Systems Group toward realizing its business strategies. Managers today are expected to demonstrate transformational leadership by setting their organization's direction and fostering an organizational culture in which each individual is highly motivated in their active role. To encourage growth of our middle managers, we provide managerial employee training to help them cultivate appropriate role awareness and to implement their knowledge at their work sites, training as officers responsible for job evaluation and development, setting targets for the business site and for support in job performance evaluation and feedback and other programs. We have provided a total of 664 employees with training for middle management.

Organizational Development (Japan)

Panasonic Automotive Systems Group defines organizational development as “activities that promote achievement and self-actualization by drawing out the inherent potential of people and organizations.” To draw out potential fully, both “self-directed individuals” and “collaborative organizations” are necessary. To realize this goal, we broadly deploy initiatives within the Group to promote understanding and embracing organizational development.

Training (Japan)

The total amount of time each employee spent training was 19.6 hours in fiscal 2024. In addition to our job-rank-based training programs that we plan and provide, hours of attendance in training programs provided by the Panasonic Group's Team & Talent Development Center are included .

* Excludes hours of attendance in groupwide training programs organized by various job functions (e.g., technology, quality and manufacturing)

■ Evaluation and Rewards

Total Rewards Systems That Treat Both Our Organization and Our Ambitious Employees the Way They Deserve (Japan)

“Role/Grade System” has been implemented at Group companies in Japan. This system determines work/role grades for employees according to the size of the work or role they currently perform and constitutes the basis for employee benefits (The target of the system is employees with non-fixed-term employment). The aim of this system is to treat the wide variety of employees at the Group based on the scope of their work and responsibilities. This helps to enhance the transparency of our human resources system, and fosters understanding among employees. By setting clear goals for employees and organizations to strive for, we encourage both individuals and teams to boldly pursue their objectives without fear of failure. According to this, we review our conventional job-rank-based promotion system and process and abolished them. Through these initiatives, we aim to build an organizational culture brimming with vitality that rewards both our people and organizations for taking on challenges.

Development of Role Description Documents

As part of our activities aimed at building an environment for a broader range of growth opportunities through challenges, we have introduced a role description document. We have created two systems, for management and professionals, defined the role for each position, as well as the job requirements for the assigned person and have disclosed the information to all employees. With the essential requirements for each position identified clearly, each employee will be able to focus on improving the skills necessary to achieve their target position. Our goal is to enable each employee, organization and the Company to tackle challenges and continue to grow.

Evaluation and Compensation (Japan)

The Panasonic Automotive Systems Group has adopted a performance-linked compensation system that sets current fiscal-year bonuses based on the Company's previous fiscal-year performance. The compensation provided to higher levels of management reflects corporate performance to a higher extent. Moreover, individual bonuses are determined based on

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how individuals perform in their jobs the previous fiscal year. With corporate and individual performance impacting compensation to some degree, we inspire the desire to improve both aspects of performance.

Award Program

In fiscal 2022, we created the PAS Global Heartmotive Awards, as an employee award program covering the entire Group on a global scale. The objective of the program is to gather from the entire workforce exemplary cases of employee action and stances that reflect our MVV philosophy and our slogan "Heartmotive" that embodies the MVV, enabling mutual recognition and celebration across the Group, to boost greater employee understanding toward our MVV and motivate them to take on greater challenges.

◇ Mutual Aid, Insurance, and Savings Programs

To ensure that employees can work with peace of mind, we offer mutual aid and insurance programs for housing, death, illness, injury, and nursing care and savings plans to build future assets. (Target: Employees of our domestic Group companies in Japan; approximately 6,000 people)

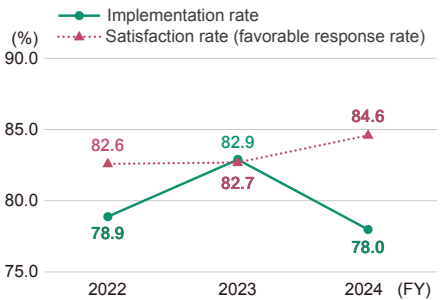
■ Transfer and Deployment - Career Development Support

As the Panasonic Automotive Systems Group sees the importance of providing each employee with opportunities to contribute to society, the following initiatives are being taken in Japan: A Better Dialogue, PASport, Career and Life Design Seminars, career consultations, etc. In addition, global mobility is being promoted as an initiative at the global level.

A Better Dialogue (Between Employees and their Managers)

One initiative is A Better Dialogue, which supports every employee's personal growth and challenges by enhancing the quality and quantity of dialogue with their respective managers. It consists of 1 on 1 meetings, which bring out the aspirations of each and every employee. In fiscal 2024, we implemented with two mechanisms: career and skill development and goal management. We are committed to promoting these diverse opportunities for dialogue. We achieved significant success in fiscal 2024, with implementation and satisfaction rates of respectively 78% and 85% in Japan. Moreover, to enable all employees to maximize their individuality and abilities and enhance job

Implementation/Satisfaction Rates of 1 on 1 Meetings



satisfaction, we are creating opportunities to enhance the value of their individual experiences, take on challenges, and actively participate in various aspects of the Group, including pre- and post-employment onboarding, career development, evaluations, promotions, transfers, and secondments. We will keep on promoting this initiative as we consider that the satisfaction rate on work fulfillment and environment can be improved by 1 on 1 meetings that bring out positive morale with dialogue involving each employee.

Internal Open Recruitment (Japan)

Internal Open Recruitment is one of the systems to support individuals' willingness to take on challenges and pursue self-directed career development. These include the following types of systems: "Challenge type", "Appeal Challenge type", and "Multiple Internal Roles." From fiscal 2024, we are aiming a system which is more familiar to our employees, and are strengthening its operation by renewal with the name Career PASport.

- Challenge type: for applications for open positions where assignment is possible if applicants successfully pass the selection process. Employees make their own decision on whether or not to apply for the position according to the requirements shown by an applicable business division.
- Appeal Challenge type: for applications to the department in which the employee hopes to work. Employees can seize the opportunity to try new work if they pass the selection process by showcasing their strengths.
- Multiple Internal Roles: for the opportunity to work in another department by applying for an open position within the Group while working in the current department. This scheme is intended to stimulate the personal growth of employees through trying out their abilities or potential.
- Internal internships: for the opportunity to work in another department by applying for an open position to experience several days within the Group while working in the current department. Through this scheme, employees are able to gain a greater understanding of other business divisions and foster exchange through hands-on work.

In fiscal 2024, 78 employees applied for Challenge and Appeal Challenge, and 40 were assigned to a new position.

Career and Life Design Seminars (Japan)

To nurture individuals who continue to take on challenges and support self-directed and diverse career development both within and outside the Group, we have held Career and Life Design Seminars (CLD Seminars) for all employees of target age (33, 38, 43, 48, and 53 years old) since fiscal 2014. The number of participants was 485 in fiscal 2024. The program has three pillars: career design, healthy living, and financial planning. It promotes an understanding of the importance of self-directed career development, encourages behavioral changes toward realizing a career vision in five years, and offers support for preparing a fulfilling life plan.

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Career Consultation (Japan)

This is designed to boost each employee’s thinking and acting for their career development in a self-directed way with full awareness of career ownership. We conduct supporting measures such as seminars and consultations. In fiscal 2024, the month of July was designated Career Month, during which various measures were implemented to enable employees to learn the latest approaches to career development, re-examine their respective career paths and get to know the various measures being provided by the Company. Specifically, we have organized keynote speeches by external experts and made available career diagnostic tools for measuring each employee’s status in career ownership, along with e-learning courses on specific themes for convenient and informal learning as well as career cafés offered as venues for employees sharing similar problems to interact and exchange information. Through these activities, we provide support to employees in achieving their goals and developing action plans to reach those goals.

Global Mobility

We arrange rules for inter-regional transfers to provide programs with which overseas employees can work in Japan or realize inter-regional transfers. In addition to executives in each region, we have established rules on transfer requirements and benefits to enable young and mid-career employees to transfer on the global level across the boundaries of regions and develop a wide range of career opportunities. As of April 2024, the number of employees who have made use of this system has reached more than 100 including two executives.

DEI (Diversity, Equity & Inclusion)

"To fully leverage individuality and abilities, Panasonic Automotive Systems aims to create a company where everyone can take on challenges" — to achieve this goal, we are actively engaged in a variety of training programs and in improving our HR systems and schemes, to create an environment in which a wide range of people can demonstrate their respective individual characteristics and abilities to the maximum and work with a sense of self-fulfillment and well-being.



■ Top Management Commitment

The “top management commitment” means management members themselves are committed to promoting DEI and do so by incorporating it into business strategies. As a business strategy, we are introducing activities designed to build PAS as a company that respects diversity in thinking and workstyles, mobilizes individuality and abilities to the maximum in creating a cor-

porate culture and climate that provides a comfortable work environment that is conducive to taking on challenges. DEI-related activities are planned with the executive officer responsible for DEI promotion as part of our regular HR strategy, and activity reports are submitted.

Endorsement of Social Movement

◇ Endorsement of EqualityActJapan

In 2021, we expressed our support for EqualityActJapan, a petition-based movement for the enactment of an LGBT Equality Act in Japan. Based on our management philosophy, in the Code of Ethics & Compliance we clearly state that we respect basic human rights, and do not permit discriminatory speech or conduct with regard to sexual orientation or gender identity, as defined by the applicable laws in the respective countries. At the same time, we are actively working to create a comfortable work environment by recognizing same-sex domestic partners as equivalent to legal spouses within our HR systems, and providing internal training to promote understanding of LGBTQ+ issues.



◇ Endorsement of Tokyo Pride 2025 Pride Parade & Festival (Former Tokyo Rainbow Pride)

Panasonic Automotive Systems Co., Ltd. supports Tokyo Pride, whose aim is to eliminate discrimination and prejudice against people of diverse identities, including LGBTQ+. We participated in its parade in fiscal 2024 and fiscal 2025. To create a society where everyone is able to live “with pride, joy and in one’s own way,” we have started up action on the Allyship Declaration as a project to support efforts to resolve the wide range of human rights issues across a broad scenario, where issues such as gender, disability, ethnicity and employment opportunities overlap each other.



◇ Endorsement of the Recommendations of the American Chamber of Commerce in Japan (ACCJ)

In 2020, we endorsed the American Chamber of Commerce in Japan’s (ACCJ) recommendations to the Japanese government on legal equality in marriage. By recognizing the right of LGBT couples to marry, the ACCJ seeks to remove obstacles faced by companies doing business in Japan in recruiting and retaining talent and treating their diverse workforces fairly. Our endorsement of the proposal is in line with our stance since 2016 of recognizing same-sex domestic partners as equivalent to legal spouses within our HR systems in Japan.



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◇ Endorsement of 30% Club Japan

In 2021, we announced its support for 30% Club Japan, a global campaign to increase the percentage of females in key decision-making positions at companies, with the goal of increasing the percentage of female executives to 30% or more by 2030. To accelerate empowerment of women, we are organizing career growth programs for women leaders (program with executive officer sponsorship), creating opportunities for women to learn about the values and work perspectives of their role models through roundtable meetings with women in executive positions and working on reinforcing advanced officer management capabilities.



◇ work with Pride Association (wwP)

We express our support for “work with Pride”, a voluntary organization that works to create comfortable workplaces regardless of sexual orientation, gender identity, and other factors.



■ Creating an Inclusive Work Environment (Japan)

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

DEI Forum

The DEI Forum is an event held with the aim of providing an opportunity for each and every one of us to increase our understanding of and identification with DEI, and to take action. We held this forum to update the value every year since fiscal 2022 with the aim of awareness that DEI is something we must all take seriously because it concerns us all.

Unconscious Bias Training

Unconscious bias refers to prejudices and stereotypes people have based on past experiences and perceptions that they are not consciously aware of having. We conduct training to learn about and become aware of the existence of these assumptions that everyone makes about others. Through changing one-sided views and perspectives and considering other possibilities, we review communication in the workplace to create a workplace culture where everyone can work comfortably and where every individual's diversity can be fully utilized. Furthermore, continuous education is provided to employees through the use of e-learning.

■ Support for Every Individual (Japan)

Support for every person means helping each and every individual, with their diverse individualities, to face their challenges. We will work to build a support system and improve Human Resources systems and mechanisms.

Promoting Diverse Work Styles

We aim to maximize results by accelerating innovation and strengthening competitiveness through improving productivity from an organizational perspective and realizing well-being from an individual one. From an organizational perspective, we improve productivity by optimizing the balance between office and remote work depending on business conditions and the fields in which employees work, rather than forcing just office or remote work. Meanwhile, expanding the options of time and place to work also leads to well-being from an individual perspective. Many employees within the Group are willing to continue to take on challenges despite their various circumstances. We will continue to expand the work time and place options to encourage these individuals to take on challenges and grow, allowing them to continue their careers with optimism.

◇ Greater Options for Work Hours and Places

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

We allow all employees to take annual paid leave in half-day or hourly increments, regardless of their work style or position. We have also made it possible for employees to take leave during regular working hours and to allocate their paid leave hourly. We are expanding these various systems, thereby supporting more diverse and flexible work styles.

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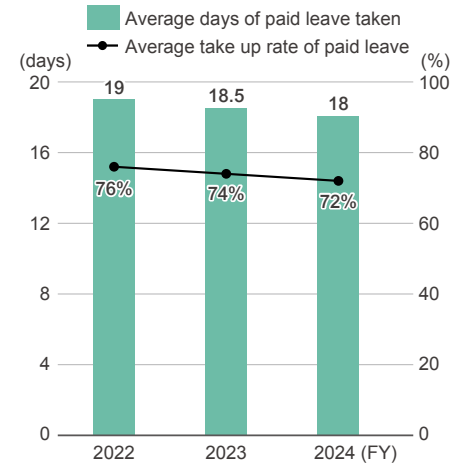
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As of March 2025		
	Number of Users	Utilization Rate
Shorter working hours	27	0.51%
Flexible work hours	3,768	72.40%
Remote work system	1,284	24.67%

	FY2024
Selective four-day workweek system*	41 employees
Remote work outside commuting distance	75 employees
Side Job	29 employees

* The number of employees who used the selective four-day workweek system at least once during the fiscal year

Days and Take Up Rate of Annual Paid Leave



◇ Support for Employees During Pregnancy and Childcare

We use the Guidebook for Supporting Work-Life Balance (Work and Pregnancy, Childbirth, and Childcare) to promote understanding of the Company's systems. This guidebook also serves as a management guide for supervisors, promoting communication tailored to each employee's circumstances, from pregnancy through to the childcare period. Moreover, we are working to develop systems and foster a workplace culture so that any employee who wishes to do so can balance childcare and career development. Specifically, we have newly established a childcare leave system by day and made a system in which a certain period of childcare leave is paid (the maximum period of childcare leave is two years). Furthermore, apart from the simple idea of a leave system, we have been promoting the establishment of a better system with flexible work styles and expanded options for work time/place according to employees' needs to handle childcare along with their work.

Childcare Leave Utilization

	FY2022	FY2023	FY2024
Male employees	63.90%	107.10%	80.00%
Average days of leave	17.3	13.0	22.3
Female employees	111.10%	64.00%	109.00%
Average days of leave	111.2	59.3	133.9

◇ Support for Employees Caring for a Family Member

We use the Guidebook for Supporting Work-Life Balance (Work and Caregiving) to promote understanding of the Company's systems. This guidebook also serves as a management guide for supervisors, promoting communication tailored to each employee's circumstances, from the stage before they start providing caregiving to after. We have working to raise awareness of the need for basic knowledge and preparation for balancing work and nursing care, as well as to promote understanding and foster a workplace culture among those in positions of responsibility through the seminars. We also provide a summary of internal and external support systems and basic information available to employees at each stage of nursing care, from the stage before they start providing caregiving to after. In addition, we have established a nursing care consultation service in partnership with a company specializing in nursing care, and have a system in place where employees can consult with them at any time about their nursing care concerns.

◇ Examples of Systems Supporting Work-Life Balance

As part of our efforts to create an environment that enables everyone to play an active role, we are implementing initiatives to support a good work-life balance for employees. On their own the efforts and adaptability by employees are not enough for childcare and nursing care to coexist with working. Therefore, expanded options for work time/place are needed by employees, as well as the understanding and support of their supervisors and workplaces. We also introduce our own programs with explanations of the systems needed for maintaining personal and business responsibilities and information on how supervisors and subordinates can work together. This is another way in which the Panasonic Automotive Systems Group helps its employees continue their careers without worry, regardless of the situations they face with childcare or nursing care.

Promoting Gender Equality

There are no gender-based inequalities in our compensation system. However, particularly in Japan, we are aware that there is a need to promote a greater number of women to senior management and decision-making positions, and the Panasonic Automotive Systems Group is striving to ensure gender diversity. Therefore, in addition to creating an inclusive work environment, we are working on revising our evaluation and promotion processes from the perspective of equity. Specifically, we are reducing the load of excess work that is the result of the unique characteristics of a woman's lifecycle and assuring greater equality of opportunity, through reviewing and abolishing the job-rank-based promotion process. We are committed to undertaking activities such as holding training programs for women leaders and providing opportunities to discover female role models' values and work ethics. Furthermore, as a flexible initiative for diverse work styles, the period of evaluation is according to the actual length of time for each employee.

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◇Women Empowerment Initiatives

In Japan, we implement measures for female employees to improve their leadership and practical management skills with a view to becoming active in management positions. We also dispatch female employees to external training program, and they improve their own skills, such as by experiencing the values and work perspectives of internal and external instructors, learning deeply about the Company’s strategic direction, and considering new challenges for themselves. To help demonstrate their active participation in creating better workplaces for female employees, the superiors of female workers also take part in such various measures.

Creating a Workplace Where LGBTQ+ Individuals Can Take an Active Part

◇Code of Ethics & Compliance

We have maintained compliance with the Panasonic Group Code of Ethics & Compliance. It clearly states that we clearly forbid all discrimination or conduct that may result in discrimination based on characteristics like sexual orientation, gender identity, or gender expression in accordance with the laws and regulations of all countries.

◇Applying to HR Systems

Since April 2016, we have treated same-sex domestic partners as equivalent to legal spouses within our HR systems—including bereavement leave, childcare and nursing care support, and temporary solo relocation allowances—except in areas where such recognition cannot be applied due to legal restrictions.

◇Establishing Consultation Services

We have set up an internal contact point where employees can receive consultation services by e-mail or phone regarding any matter, including sexual and power harassment. (Anonymous consultation is available.)

◇Groupwide Training to Promote Understanding

To promote understanding about LGBTQ+ individuals and create more LGBTQ+-friendly workplaces, we have been conducting training geared toward HR functions, managerial positions, and employees since February 2016. The training for HR functions offers not only basic knowledge about LGBTQ+ individuals but also methods for dealing with discriminatory speech or conduct and responding to the needs of those involved.

◇Sharing Information across the Group

Information on advancing understanding of LGBTQ+ individuals and invitations to participate in events that support LGBTQ+ employees are also sent out via our intranet.

Creating a Workplace Where People with Disabilities Can Take an Active Part

As of March 2025, the total proportion of Group employees in Japan who have disabilities was 2.63%, and we will continue in our efforts to promote independence and participation in each workplace on the part of people with disabilities.

- Whenever employees with hearing-related disabilities take part in Groupwide events or training programs, we make sure that they are able to access the same information through sign language interpretation and voice recognition software. We introduced an application for communication support and conversation visualization Groupwide in 2020. We prepared manuals and introductory training courses.
- We are also moving forward with improvements to workplace environments including flat floors without steps, using brighter lighting, and introducing a free desk system in which workstations are not strictly assigned.
- The Group also creates educational content in order to help provide a better understanding of life with a disability and offers opportunities for learning to all employees.
- We also have active communities of employees that have risen up to hold various information exchanges and discussions on themes surrounding disabilities.
- The Group established the Disability Work Support Hotline that makes it possible for those with disabilities or anyone else, including their supervisors, colleagues, HR, and the people responsible for DEI promotion to easily ask questions or seek advice. This makes it possible for the supervisors and coworkers of those with disabilities to find out how to accommodate individual disabilities. We promote workplaces that make it possible for anyone, including people with disabilities to work together without worry and be able to take on challenges.

◇Special Subsidiary Company

In cooperation with local administrative authorities and communities, we are managing Harima SANYO Industries Co., Ltd., as our Group’s special subsidiary and hiring people with severe disabilities. We have adjusted the workplace environment to adapt to the physical conditions of wheelchair users, through readjusting the location of parts and components and the design of worktables. Additionally, we are organizing workplace study tours for junior high and high school students to foster a work incentive and an understanding of people with disabilities, accepting technical trainees with disabilities and organizing tours of the work environment.

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Creating an Environment Where Post-Retirement Age Workers Can Take an Active Part

To achieve the goal, "To fully leverage individuality and abilities, Panasonic Automotive Systems aims to create a company where everyone can take on challenges," we also have initiatives for senior workers to take an active part in each of our Group companies.

◇Promoting Self-Directed Career Development

We are developing and promoting training seminars Groupwide on career and life design for various stages of people’s lives to help individual employees direct their own career development as early as possible (“Career and Life Design Seminars” as mentioned before). In addition, for a more appropriate design of employees’ career development, there has been a renewal of the retirement benefits system (in July 2013) to shift from the traditional defined benefit pension plans to defined contribution pension plans which have more portability. With the aid of the defined contribution pension plans, employees can build their assets through enhanced education on investment.

◇Securing Employment Opportunities for Older Employees

The Next Stage Partner Program, as a reemployment system, allows employees who wish to continue working after mandatory retirement at age 60 to do so until age 65. We have been striving to improve the working conditions under this system to encourage employees to leverage the expertise, experience, and skills they have cultivated over the years. The social significance of responding to the growing number of older workers who wish to work and the need to aid employees financially until they begin receiving public pension benefits also drive our efforts with this program. As a measure to broaden the range of options for work activities and ensure employment continuity, we are accepting applications from employees who seek job reassignment. Starting in April 2021, we have introduced a scheme that allows employment of people aged 65 and over.

◇Post-Resignation/Retirement Support

We are also offering economic support for employees who wish to leave the Group before retirement and seek new opportunities elsewhere, as well as support for those who wish to work elsewhere after reaching retirement age.

Global Initiatives

The Panasonic Automotive Systems Group is globally engaged in a wide variety of activities to promote DEI according to regional characteristics so that diverse human resources can maximize their individual strengths.

Contacts for Whistleblowing and Seeking Consultation

■Mental and Physical Stress Prevention and Response for Employees (Japan)

The Panasonic Automotive Systems Group has established the following support lines to help employees prevent or deal with mental or physical stress.

◇Health Management Office

We staff our offices full-time industrial physicians and occupational health staff to provide health support that performs functions such as preventing lifestyle-related diseases and helping individuals stop smoking, as well as consulting on mental and physical health.

◇Employee Assistance Program (EAP) Counseling Office

For this program, we have engaged an outside organization that listens to the personal concerns of employees who can rest assured that what they have discussed will not be disclosed to the Group or their health insurance organization. In the program, specialists such as clinical psychologists and psychiatric social workers take care of our employees, as well as supporting them by the “Re-work program” through which employees are able to make reappointments after an absence from work.

■Whistleblowing Discrimination and Harassment

The Panasonic Automotive Systems Group has set up a hotline where employees can anonymously report discrimination or harassment if they see or hear about it.

◇Global Hotline

For more details, please see “Business Ethics” chapter on [\(Page 22\)](#).

◇Equal Partnership Consultation Office

We have established an Equal Partnership Consultation Office with dedicated contacts in both the Company and employees’ labor union. This whistleblowing framework allows us to address any concerns from employees, including dispatched employees, who report cases of harassment, including sexual harassment (includes harassment related to LGBTQ+), harassment based on power differentials, or harassment related to pregnancy, childbirth, or childcare leaves. During consultations, we safeguard employee privacy and carefully handle their concerns while confirming their needs. We also ensure that the employee and any other parties involved in factchecking the case are protected from retaliation.

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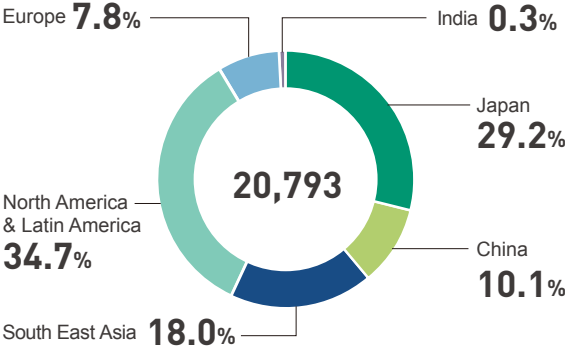
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Human Resources Data

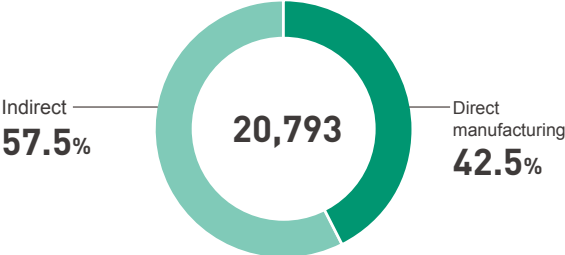
Number of Employees

On a global consolidation basis As of March 2025

<By region>



<By job junction>



Panasonic Automotive Systems Co., Ltd.
*As of April 1, 2025

<By gender>

	Number of Employees	Percentage
Male	4,511	86.7 %
Female	691	13.3 %
Total	5,202	100.0 %

<By recruitment type>

	Number of Employees	Percentage
New graduate hires	4,088	78.6 %
Mid-career hires	1,114	21.4 %
Total	5,202	100.0 %

<By employment type >

	Number of Employees	Percentage
Non-fixed-term employment	4,641	89.2 %
Fixed-term employment	561	10.8 %
Total	5,202	100.0 %

<By age>

	Number of Employees	Percentage
Under 29 years old	754	14 %
Between ages 30 and 39	774	15 %
Between ages 40 and 49	1,129	22 %
Between ages 50 and 59	2,002	38 %
Over 60	543	10 %

Recruitment Figures (FY2024)

Panasonic Automotive Systems Co., Ltd.
(Unit: number of people)

	New Graduate Hires	Mid-Career Hires	Total
Male	73	195	268
Female	15	52	67
Total	88	247	335

* 29 non-Japanese citizens and 14 people with disabilities included

Average Years of Continuous Service As of April 1, 2025

(Unit: year)

Men	Women	Average
19.4	20.0	19.5

Turnover Rate (FY2024)

	FY2022	FY2023	FY2024
For all resignation reasons	2.7 %	3.8 %	4.0 %
For resignation reasons other than mandatory retirement	1.3 %	1.8 %	2.3 %

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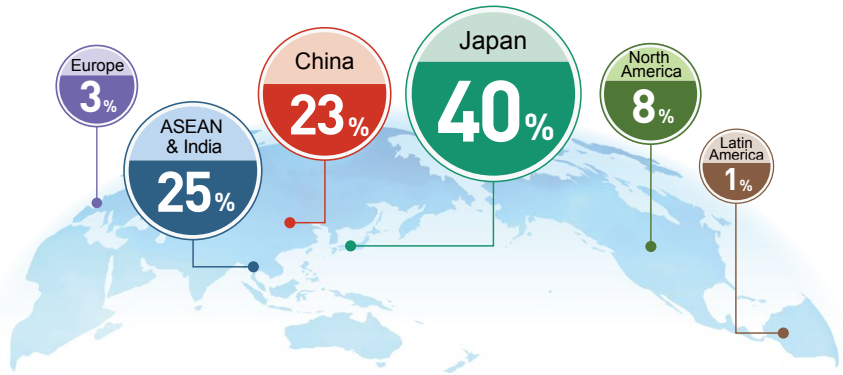
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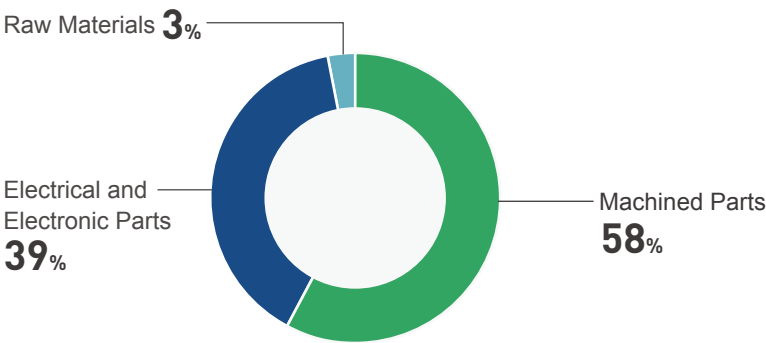
Responsible Supply Chain

Panasonic Automotive Systems Group does business with approximately 1,400 suppliers worldwide. Panasonic Automotive Systems Group strives to do business with suppliers that not only provide superior technology and quality but also fulfill their social responsibilities including human rights and environmental considerations, healthy workplace environment, and fair transactions. The parts and materials we purchase range from raw materials to electrical/electronic components and processed parts. Our suppliers are located in various regions and countries, meaning that some parts and materials come from regions and countries with many migrant workers. By region, the percentage of suppliers providing parts and materials used directly in manufacturing was 40% from Japan, 23% from China, 25% from ASEAN/India, 3% from Europe, 8% from North America, and 1% from Latin America. By industry, 58% were in machined parts, 39% in electrical and electronic parts, and 3% in raw materials.

The Number of Suppliers by Region (%)



The Number of Suppliers by Product (%)



Procurement Policy

Panasonic Automotive Systems Group has summarized its core thinking on procurement in the following 3-item set of Procurement Policy. The fundamental basis of this policy is the concept that, “based on relationships of mutual trust, and through diligent study and cooperation, our suppliers are invaluable partners in creating the value our customers demand”. We continue to promote activities as a part of the Panasonic Group.

● Implementation of Global Procurement Activities

The Company globally establishes partnerships with suppliers to respond to production activities on a global scale, and works to create the functions and values our customers demand based on relationships of mutual trust and through diligent studies and cooperation.

● Implementation of CSR Procurement

Complying with laws and regulations, social norms, and corporate ethics, the Company promotes procurement activities, together with suppliers, that fulfill their social responsibilities, such as human rights, labour, safety and health, global environmental conservation, and information security.

● Procurement Activities Working Closely with Suppliers

In order to achieve product values expected by customers, the Company serves as the contact point of suppliers with respect to information, such as the market trends of materials and goods, new technologies, new materials, and new processes, and works to ensure and maintain the quality of purchased goods, realize competitive prices, and respond to market changes. We have also issued the Panasonic Supply Chain CSR Promotion Guidelines (“CSR Guidelines”) for our suppliers to promote collaboration in responsible procurement efforts.

■ Clean Procurement

Because Panasonic Automotive Systems Group believe that “a company is a public entity of society”, we engage in fair and equitable transactions with our global suppliers. With a need for a more stringent sense of moderation and ethics and to maintain healthy relationships with suppliers, in 2004, we released our Clean Procurement Declaration and have followed this declaration in our procurement activities since. In Japan, we promote understanding and awareness of “clean procurement” among our procurement staff by providing annual e-Learning and training materials.

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Prohibition of Receiving Money and Valuables from Suppliers and Prohibition of Accepting Any Form of Hospitality, Entertainment or Meals

Panasonic Automotive Systems Group established “Rules on Gift and Hospitality for Anti-Bribery / Anti-Corruption” in its internal regulations, applied at the global level. These strict rules apply to the acceptance of gifts, meals, entertainment and travel invitations from our business partners, including suppliers. They stipulate general rules regarding the rationality and balance in light of the purpose, value and frequency of gifts, meals, entertainment and travel invitations, and local customs, and the absence of improper influence on business judgement. More detailed standards and stricter rules are also set for each region.

 [Clean Procurement Declaration](#) (Redirected to the website of Panasonic Holdings Corporation)

Responsible Executive and Framework

Panasonic Automotive Systems Group Chief Procurement Officer (CPO) serves as the officer in charge of procurement (as of August 2025). We established a Groupwide framework to foster cooperation in promoting responsible procurement among all Group operating companies and regional procurement divisions.

Supply Chain Due Diligence

Enforcement of the Panasonic Supply Chain CSR Promotion Guidelines

We, Panasonic Automotive Systems Group, adhere to international norms and principles, such as the United Nations “Guiding Principles on Business and Human Rights,” and require suppliers to affirm them. To show our approach to CSR procurement and clearly convey the requirements to suppliers, we have established the CSR Guidelines, and we share them at the start of transactions. The contract obligates suppliers to comply with the guidelines. The CSR Guidelines stipulate the following provisions, while taking into account laws, regulations, and principles of international norms:

- 1. Labor rights: Prohibition of forced labor or child labor, appropriate working hours, decent wages, humane treatment, elimination of discrimination, freedom of association
- 2. Occupational health and safety: Training to ensure workplace safety and emergency preparedness, safety measures for machinery and equipment, and occupational health and safety rules for facilities

- 3. Environment: Compliance with the “Panasonic Group’s Green Procurement Standards”
- 4. Ethics: Prohibition of corruption and bribery, and promotion of fair business and responsible mineral procurement
- 5. Information security: Prevention of information leaks and protection against computer and network threats
- 6. Product quality and safety: Creation of a product quality management system, provision of accurate product and service data, and maintenance of product safety
- 7. Contributions to society: Contributions to society and local communities
- 8. Management systems: The CSR Guidelines are prepared in Japanese, English, and Chinese and we both keep them on our website and endeavor to distribute to our suppliers and notify them of any revisions. We also ensure that we share these guidelines with our suppliers at workshops as necessary. We ask our suppliers to communicate the requirements of the guidelines to their suppliers and subsequent suppliers, and to check their compliance status. For further details, please visit the following website.

 [For Suppliers](#) (Redirected to the website of Panasonic Holdings Corporation)

Obtaining Commitment from the Suppliers

We, Panasonic Automotive Systems Group, require that suppliers affirm the Code of Ethics & Compliance and the Panasonic Automotive Systems Co., Ltd. Human Rights and Labor Policy, and at the start of transactions for materials and components for the manufacturing of Panasonic products, we make it mandatory to conclude a Master Global Purchasing Agreement that stipulates compliance with the CSR Guidelines. In addition, we stipulate in the CSR Guidelines a respect for human rights as expressed in United Nations norms and principles, an evaluation of the status of suppliers’ human rights initiatives and the implementation of prevention / mitigation / corrective measures, a request for compliance with tier 2 suppliers, and a request for cooperation with the Panasonic Group’s human rights due diligence. The template of our Master Global Purchasing Agreement obliges suppliers to comply with the CSR Guidelines. Our latest contract for new suppliers contains an article on “Compliance with Panasonic Supply Chain CSR Promotion Guidelines.” Suppliers who concluded agreements using the previous version of the contract were requested to submit separate agreements for this new article. This procedure is being carried out for all suppliers of the Panasonic Group. If more than one of our operating companies have contracts with the same supplier, the company with primary responsibility (i.e. that with the greater purchases) obtains this agreement as a representative. Of the suppliers for which PAS has primary responsibility, 94% have submitted the agreement and we are chasing up the remaining suppliers.

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■ Conducting CSR Self-Assessments and Audit

To promote human rights due diligence and other aspects of CSR throughout the supply chain, the Group requires its suppliers to conduct CSR Self-Assessments. The CSR Self-Assessments are structured based on the CSR Guidelines, and we require that all new suppliers conduct the assessments before we start transactions with them. We also require our existing suppliers to conduct them regularly. We collect these assessment results using a web-based questionnaire, reducing the burden on suppliers and our Group and improving collection efficiency and accuracy. As of March 31, 2025, we had collected the questionnaires from more than 1,140 suppliers (81%). After identifying issues, particularly those identified as priority management items in the CSR Self-Assessments, such as labor conditions for migrant workers, we will visit suppliers, check on-site conditions, hold interviews, and investigate issues if necessary and work to correct them. We will continue to collect these assessments from our suppliers on a regular basis. Since April 2022, the Group has begun work on initiatives to build a structure for human rights due diligence. While incorporating guidance from outside experts, the Group has compiled a table to assess human rights risks at our suppliers by using risk indicators and indices provided by international organizations in order to identify suppliers for which action should be taken on a priority basis. Since April 2023, all operating companies narrowed down the audit targets from among these identified suppliers based on the aforementioned risk approach and conducted supplier audits for a total of 24 suppliers (7 of which were audited by third-party organizations) using the supplier audit plans they formulated. The items identified through audits are shown in the table below. We have asked suppliers to improve these items, and we are monitoring their progress.

Category	Examples of Findings in Supplier Audits
Labour	Records of working hours, break times, and overtime hours have not been properly managed
Human rights	Breakrooms that ensure privacy for women are not provided.
Health and safety	Emergency evacuation routes are unclear.
Environment	Environment impact assessments are not properly conducted.
Ethics	Anti-bribery and other related training for all employees is not provided.
IT	Insufficient security management and employee training

Initiatives for a Harmonious Relationship with the Environment

We strive to reduce the negative impact on the environment through cooperation with our suppliers and logistics partners. Please see the “Environment” section ([page 27](#)).

Responsible Minerals Procurement

■ Our Basic Stance

Panasonic Automotive Systems Group recognizes that the procurement of certain minerals (notably tin, tantalum, tungsten, gold, cobalt, and mica) carries a risk of funding organizations in conflict-affected areas and risks related to human rights abuses, child labour at mining sites, harsh working conditions, environmental destruction, and corruption in high-risk areas. This is a matter of grave social concern, and to fulfill our corporate social responsibility, Panasonic Group is engaged in the responsible procurement of minerals in its global supply chain. Of course, there are companies and individuals in those same areas who conduct their business legally at the same time. Therefore, while we remain mindful of our obligation to avoid using minerals associated with illegal or unethical practices, we strive to ensure that this does not hinder the business activities and livelihoods of legitimate companies and individuals. To this end, it is necessary for us to work in partnership with a wide range of stakeholders including national governments, companies, and NPOs that are working toward creating sound minerals supply chains in the target areas. We will keep conducting its activities based on the “Due Diligence Guidance” of the OECD (Organization for Economic Co-operation and Development) and build management processes in line with global standards. The promotion of responsible minerals procurement requires conducting due diligence throughout the entire supply chain, from upstream mining companies to smelters, refineries, and downstream enterprises. We require that all related suppliers provide information on smelters/refineries throughout the supply chain, and we aim to procure from suppliers who don’t present any issues.

■ Responsible Minerals Procurement System

Based on our Responsible Mineral Procurement Policy, we are conducting surveys in collaboration with relevant departments.

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■ Due Diligence Efforts




Responsible mineral survey requires cooperation from all our suppliers going back to the refineries and smelters. Panasonic Automotive Systems Group uses industry-standard survey forms issued by RMI to conduct surveys, including the tin- tantalum-tungsten -gold (3TG) survey form (CMRT) and the cobalt-mica survey form (EMRT). In fiscal 2024, we collected responses from 931 of 1,025 suppliers that we asked to conduct CMRT surveys and 920 of 1,025 suppliers that we asked to conduct EMRT surveys (as of March 31, 2025). Based on the data collected from the survey forms, we conducted a risk analysis and assessment and requested further investigations from suppliers, according to the risks that we identified. In fiscal 2025, roughly 60% of the designated refiners and smelters had Conformant/Active Smelter status (refiners and smelters that have either passed RMI audit or is currently undergoing one). We use RMI’s reporting templates (CMRT and EMRT) for responsible mineral auditing, tracing back to the supply chain upstream. If we find unauthorized refiners and smelters in the reports submitted by our suppliers, we request them to remove the unauthorized entities from their sources.

Internal Training and External Awareness-Raising

Our procurement department conducts CSR procurement training for our procurement staff members, who will be able to fulfill our social responsibilities in procurement activities, by teaching them about the company’s approach to CSR, and they create opportunities to gain knowledge about procurement compliance. We have also conducted training for procurement employees overseas (in parts of Europe, the US, China, and other Asian countries). Through this training, we aim to consolidate their knowledge while confirming their understanding of the importance of essential topics and compliance in CSR procurement—including compliance with environmental, anti-corruption, and anti-bribery regulations, as well as human rights, labour, health and safety, and clean procurement in the supply chain. In addition to all this, we also build in basics on CSR procurement in our training curricula for new employees in procurement departments and those transferring from other divisions. In fiscal 2025, we conducted CSR audits (including third party audits) on 16 suppliers, including 2 suppliers in Japan and 14 overseas suppliers, and applied remedies for any problems found. One example of such remedies was for a domestic supplier who had not created their CSR policy and was instructed to create one. They have now published the policy on their website.

Systems for Whistleblowing and Seeking Consultation

Panasonic Automotive Systems Group has established its “Global Hotline EARS” that anyone, including Group employees and suppliers, can use to anonymously report any violation or suspected violation of laws and regulations, agreements with our suppliers, the Group Code of Ethics & Compliance, or other material codes in the Group’s supply chain. Whenever there is a report, the Group follows all internal rules and guidelines as well as the laws of the relevant countries with regard to the protection of the individual making the report, and from there it undertakes appropriate investigations and countermeasures. In all reporting systems, we ensure whistleblower anonymity and report confidentiality and publicize the contact information for reporting systems on our supplier web portal and our website, “For Suppliers.” We conducted audits through a third-party organization on human rights issues at suppliers that we received through the hotline, and we have witnessed suppliers take corrective actions.

-  [For Suppliers](#) (Redirected to the website of Panasonic Holdings Corporation)
-  [Global Hotline](#) (Redirected to the website of Panasonic Holdings Corporation)
-  [Grievance mechanism of Japan Center for Engagement and Remedy on Business and Human Rights \(JaCER\)](#)

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Founded on the Groupwide Quality Policy to "truly serve customers by way of providing products and services that continuously meet and satisfy the needs of customers and society," Panasonic Automotive Systems Co., Ltd. has established its quality assurance system through business process innovation activities that center on the automotive industry's process approach. We have established our quality policy system as achieving No. 1 quality in the industry by tackling challenges to achieve 'zero' quality risk" and regard this as an important part of our management foundation and business growth.

Quality Assurance System

We recognize safety, quality and compliance as the foundation of our business management, define issues by sharing related risks and policies, submit our recommendations for resolving issues and report on the results and indicators for monitoring progress status at the Management Meeting.

The Quality Assurance Center of the Operations Division holds the authority and responsibility for the quality of our products and fulfills the role of quality assurance for our customers. The Center has set out its own quality strategies and action indicators for this purpose, implementing concrete measures in line with our customers and each region. Activities for qualitative improvement are organized through interaction and coordination with other functional divisions. In addition, functional managers in the Operations Division participate in monthly quality meetings to confirm progress made in the PDCA cycle, share information on quality management conditions, implement measures to prevent problem recurrence, promote standardization and strengthen the quality assurance system.

Quality Management System

We have acquired certification under IATF 16949, the international standard for quality management systems developed by the International Automotive Task Force (IATF), for all of our global sites. The effectiveness of this quality management system is confirmed by means of internal audits and third-party audits, which are carried out to identify and rectify any inadequacies found. We are making revisions and continual improvements by reviewing the business processes at the time of a problem outbreak and taking action to prevent any

recurrence in weak areas.

We have also put quality management systems in place to adapt to new business areas such as Mobility as a Service (MaaS) and our WELL Cabin business, to spur evolution of our quality assurance activities and bring customer satisfaction and a sense of security as we work to build a "sustainable mobility society."

Quality Assurance Activities and Initiatives

■ Cyber Security Activity

In face of the emergence of the software-defined vehicles, device networking and growing communication with external devices such as smartphones and cloud services, automotive cyber security has become increasingly important, chiefly for our mainstay business, the Cockpit Integrated Solution. In order to deliver secure products to our customers, we have set out internal standards and guidelines in compliance with ISO/SAE 21434, the international standard on cyber security, to monitor vulnerabilities and respond to incidents from all stages of the product development process to product shipment and up to disposal. Additionally, we are working at continual improvements, organizing specific education and training programs to develop human resources with the required competences and abilities, conducting product assessment and implementing regular training.

■ Human-Centric Quality Management in Large-Scale Software Development

With the scale of development for Cockpit Integrated Solutions products now reaching a total of 10,000 to 20,000 person months, innovation in large-scale software development management has become an important issue in assuring development of high-quality software without delay. We developed and introduce the Connectivity Flow Board (see next figure) embedded the Seven Principles of Quality Management (QM7) which was based on the Theory of Constraints (TOC). With quality built into the product in the upstream processes of complex software development, bugs are detected at an early stage, and bug detection is reduced in the integrated system evaluation in the latter stage. It has also contributed to reducing development time and improving employee satisfaction.

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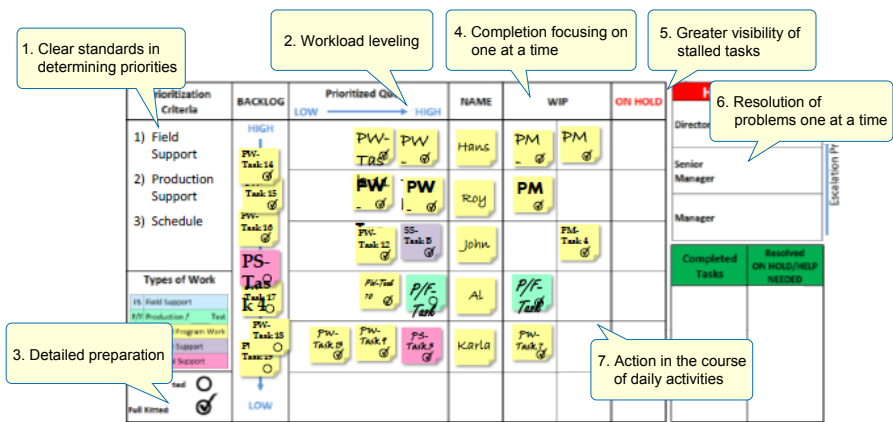
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■ Product Safety and Functional Safety

To prioritize risk reduction and safety assurance, the basic issues needed to assure safety and to prevent harm to the life, body or property of the customer as a result of a flaw in our products or services have been defined clearly by identifying where responsibilities lie and with internal regulations governing all phases of the product development process.

In response to the dissemination of driver-assistance systems, computerization and systems integration in automobiles, we have set up a development management system in step with car manufacturers, in compliance with ISO 26262, the international functional safety standard aimed at reducing and preventing dangerous events caused by functional failures of in-vehicle electronic devices and systems. For in-vehicle equipment and device software development processes, we have established a system capable of compliance with Automotive Safety Integrity Level (ASIL) requirements. We are also actively working to ensure compliance with new laws and regulations, as well as with new requirements, gathering information and applying the findings to our development processes. Additionally, our product development is being executed through assessment, audit and review.

Internal Company Rules Concerning Product Labeling

Based on the Manufacturing Industrial Standards for the Panasonic Group, we determine our own approach and guidelines to be followed with regard to the way our products are handled as well as installation and services as appropriate for each product. Specifically, warning label related to the safe use of products and information label on legally designated recycling or disposal methods (according to the laws including Recycling Acts) and other information that helps customer safely use our products and services are specified in the design methods of warning labels and instructions for use, care and installation of products in consideration of preventing customers from misusing. There have been no instances of product labeling violations subject to fines or penalties in the Group (as of August 2025).

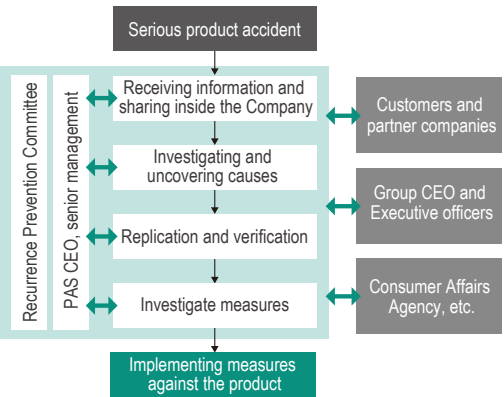
Developing Human Capital and Cultivating a Quality Climate

Under our founder Kounosuke Matsushita's philosophy of "contributing to the progress and development of society and the well-being of people worldwide through our business" and his approach to human capital development of "making people before products," we have laid the foundations for groupwide training, raising employee awareness of the significance of the work they are involved in and of the mission of the company and its organizations. To increase their sense of responsibility and autonomy, we have established the PAS University (see [Page 71](#)). This corporate university has been created for the acquisition and reinforcement of specialized skills, including international standards, functional safety, cyber security, software product assurance and incident prevention tools. For this purpose, training courses and curriculum have been developed and systematized, classified by job type and job rank and by skill level, including basic training for new employees and for job relocation.

Messages from the president are released at regular intervals to instill in our employees that quality assurance is the fundamental principle of business management. In addition to these messages, we organize exhibitions with quality case studies every November, at which we showcase the opinions of customers, progress made in company policy and activities, case studies on product flaws, information sharing on lessons learned, measures for arriving at solutions and presentation of development tools and methods. This event is being organized to strengthen in employees the significance of full participation and to provide them with the opportunity to internalize what they have learned.

Responding to Product-Related Incidents

In the event that a product-related incident occurs, we immediately confirm the facts related to the incident, and analyzes and verifies its causes. If the incident is deemed to be serious, suppliers and our management as well as PHD/PEX work together to take appropriate measures to ensure customers' safety. Specifically, our first response is to notify relevant government bodies such as the Consumer Affairs Agency and Group CEO, who then consider the response policies. In addition, based on incidents that have occurred in the past, we prepare manuals detailing responses to product failures, safety test documentation, etc. We are putting these into practice in new product development, specification changes, etc. to prevent incidents' recurrence.



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Since its foundation, Panasonic Automotive Systems Group has aimed to contribute to society through its products and services, while always putting the customer first. When providing CS, we strive for sincerity, accuracy, and speed, and our acts with humility and appreciation. This finds its basis in the CS principle of “true service” that our founder described. Our fundamental stance is thus to provide customers with trust, peace of mind, and satisfaction.

Service Philosophy (True Service)

The customer’s satisfaction is our satisfaction.

True service resides in mutual satisfaction.

Service is an integral part of any business. A business that does not provide service is no business at all. Service, therefore, is the duty and obligation of any business person. But there’s nothing more aggravating than service provided only out of a sense of duty. Customers can sense it.

Service means satisfying customers, and when we satisfy our customers, we in turn find satisfaction in a job well done. Satisfied customers and satisfied employees: This is what constitutes true service.

Konosuke Matsushita
August 1967 issue of PHP Magazine

Customer Satisfaction System for Enterprise Business

When supplying genuine automotive equipment, we have also developed schemes and systems for early detection and resolution of product flaws to respond to car manufacturers and provide a prompt, extensive and comprehensive service. Furthermore, we are coordinating action between our Group’s sales companies and our retailers to offer after-sales services for our car navigation systems and to increase customer satisfaction.

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Basic Policy

Based on the recognition that Panasonic Automotive Systems Group is a public entity of society and that society at large has entrusted us with all the resources we need to do business, we maintain dialogues with local communities as we undertake our business. The Group contributes positively to local communities and seeks to minimize any potentially negative impacts of entering or leaving a market through dialogues with local governments and residents and impact assessments on the environment and other areas. In particular, we are an active member of local communities that promotes Corporate Citizenship Activities and strives to develop the corporation and the communities.

Management System of Corporate
Citizenship Activities

In line with the Panasonic Group's initiatives, we are engaged in a variety of corporate citizenship activities based on the actual conditions in each Group company and each region, in line with the Group Policy outlined in the next paragraph. We define annual activity plans and evaluate annual results and make improvements.

Policy

We aim to become the world's leading "Joy in Motion" design company, and work to create new value by tackling social issues head-on in both our business activities and our activities as a corporate citizen.



Corporate Citizenship Activities (Redirected to the website of Panasonic Holdings Corporation)

Responsible Executive and Framework

Corporate citizenship activities are directly managed by the Chief Human Resources Officer (CHRO) (as of August 2025). The General Affairs Division is responsible for the function of strategic planning for the entire Group and executes its activities based on the actual conditions in Group companies and their sites.

Employee Participation and Supporting Systems

Enhancing employee interest in social issues and their desire to solve them is extremely important both in terms of promoting corporate citizenship activities and carrying out our core business. We encourage employees to participate by providing information on volunteer activities and lectures and offering menus relevant to social issues at corporate cafeterias. Some of the most characteristic examples of these are shown below.

Activities Supporting Employees' Social Involvement
Provision of Sustainable Seafood* at Corporate Cafeteria (Japan)

We were the one of the first company to continuously introduce sustainable seafood in its company cafeterias. We aim to use the food served in cafeterias to raise awareness of the world's fishery resources in crisis, encourage changes in consumption behavior, and expand our impact on our surroundings.



* Seafood certified for sustainable production (fishing and aquaculture) as well as management and traceability in processing, distribution, and marketing.

LIGHT UP THE FUTURE “AKARI Action Project”

We are actively participating in the initiative which was widely promoted by the Panasonic Holdings Group. The donation drive delivers solar lanterns to areas without electricity, using funds collected through cafeteria points from the employee benefits service and donations of used books, DVDs, and other secondhand items. In fiscal 2024, we collected 2,371 second-hand items, and donated 131,824 yen to contribute solar lantern donation drive.

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Panasonic ECO RELAY for Sustainable Earth

In 1998, we, as the Panasonic Group, began promoting Love the Earth Citizen’s Campaign in Japan, aiming to foster greater environmental awareness and even lifestyle changes by encouraging employees and their families to actively engage in environmental activities at home and in their local communities. Since then, we have expanded our efforts globally and changed the program’s name to “Panasonic ECO RELAY for Sustainable Earth.” As a global citizen, we aim to help create a sustainable global environment and society through our engagement in biodiversity conservation and other environmental activities. We have joined the environmental activities in our communities through cleanup and tree-planting campaigns.

Introducing Regional Volunteer Activities and Providing Opportunities

Each work site within the Panasonic Automotive Systems Group takes an active role in developing and rolling out a variety of volunteer activities that are tailored to the specific features of the regions. At the Head Office Yokohama site, for example, we participate in cleaning activities and vegetation conservation in collaboration with an NPO. At the Tsuruga site, we are involved in community contribution activities such as a cleanup of Kehi no Matsubara, a scenic spot in Tsuruga City. Our work sites and affiliate companies periodically conduct cleanup and other activities in their communities.



Disaster Volunteer Training Course

In order to raise interest in and motivation to solve social issues, the Panasonic Holdings Group hold the lecture called the “Social Good Meetup (SGM)”, where various experts on social issues give presentations, and a “Disaster Volunteer Training Course” where employees can gain knowledge and skills that will enable them to serve as a volunteer when common disasters occur. We are actively participating in those initiatives.

Participation in Out of KidZania in Tsuruga

This event was held for the first time in Tsuruga City, Fukui Prefecture, in March 2025. The objectives of the event are to foster the retention and circulation of human resources in the local community, as well as to promote recognition of businesses in the city, strengthen publicity capabilities and increase the attitude of elementary school and junior high school students toward work. Under the supervision of KidZania, a work-related edutainment facility for children, companies in Tsuruga City set up booths and attracted the participation of 950

elementary school and junior high school students. Our booth at the event attracted 25 children, who experienced how engineers worked with our products. Through the event, we hope that the children who participated gained an understanding of the importance of and excitement involved in work with our company and that the experience will lead to their future participation in our business in the future.



Examples of Major Group Companies in Japan / Flexible Work Styles for Participating in Volunteering

We have expanded the options of our diverse work styles to encourage employees to take on the challenge of volunteering. Specifically, we offer a scheduling system with reduced hours/ reduced workdays that enables employees to balance volunteering and work and a leave-of-absence system that allows for long-term volunteering for up to one year (the required period for those joining the Japan Overseas Cooperation Volunteers). Additionally, we encourage employees to volunteer using various types of leave, such as the ten days of “Challenge Leave” granted to employees who reach a milestone age. We also have a policy of allowing employees to take five consecutive days out of their 25 days of annual paid leave for volunteering.

Support for Environmental Activities Linked to Vehicle Purchase Mediation Program

We have a program in which employees mediate in vehicle purchases. In coordination with such mediation activities, we have created a scheme of providing support to environmental activities designed to protect the global environment.

Other Examples of Support for Environmental Activities

Our support for environmental activities in fiscal 2024 include support for gaining ASC certification for Japanese amberjacks in Japan, in support of the WWF Japan Marine Programme, support for the recovery of fishery after the Noto Peninsula Earthquake and support for the wider promotion of MSC-certified bonitos.



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It has often been pointed out that while new technologies can offer solutions for different kinds of issues and enrich people’s lives, the risks those same technologies bring have the potential to lead to human rights issues like violations of privacy, more intense illicit surveillance, and discrimination by algorithms that have been trained on biased data. The Panasonic Automotive Systems Group considers its approach to AI ethics as “a promise to the rest of the world to apply AI in ways that are human-centered and that respect human rights,” and we work to apply that approach to AI ethics to the ways in which we develop and operate our AI products and services, as well as our AI utilization.

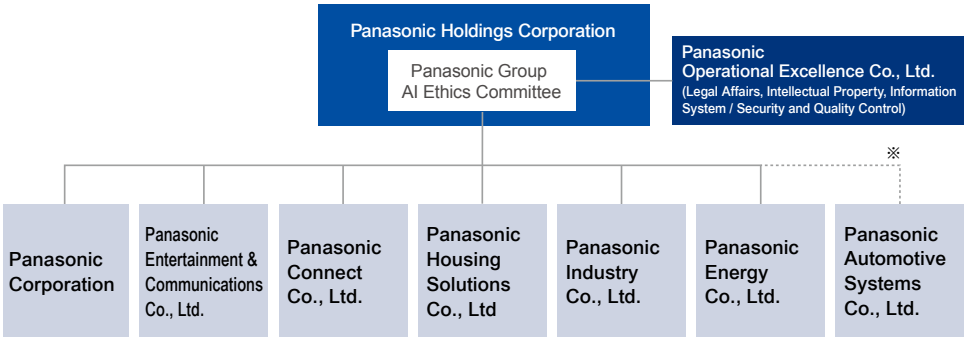
Policy

We work to protect the safety and interests of all stakeholders, including any customers involved, and minimize the impact of risks throughout the AI utilization life cycle from the planning of AI products and services up to their sale and use. By fostering trust in our AI technologies and products in this way over the long term, we will encourage further AI utilization, through which we can make a greater contribution to society. In 2022, the Panasonic Group have defined our AI Ethics Guidelines which apply to the entire Group, and established and published our AI Ethics Principles. Although we ceased to be a consolidated subsidiary of Panasonic Holdings Corporation in December 2024, we still adhere to the Panasonic Group AI Ethics Principles, and related laws, regulations, and the ethics guidelines of respective countries. To ensure an appropriate AI utilization cycle, we evaluate and manage AI ethical risks, and alleviate and avoid such risks through activities to improve AI technologies and their process.

 [Panasonic Group Responsible AI](#)
(Redirected to the website of Panasonic Holdings Corporation)

Promoting Organization

AI ethics activities are driven by the Group’s CTO, our head of operations as the Panasonic Group’s activities (as of August 2025).



* Although we are not a consolidated subsidiary of Panasonic Holdings Corporation (PHD), we share information and collaborate with PHD on AI ethics promotion.

The AI Ethics Committee has been established within the Panasonic Holdings Corporation by the Group CTO, comprising staff members in charge of AI ethics and members from other related departments like legal and information security. The Committee provides the Panasonic Automotive Systems Group with systems and measures to be implemented in relation to AI ethics activities and provides us with support for their AI ethics activities as well as understanding, reviewing, and formulating countermeasures against risks. We have a person in charge of AI ethics, and the person cooperates with the Panasonic Group’s AI Ethics Committee to carry out activities that fit our business and technologies. For extremely risky AI projects or those with manifest risks, the AI Ethics Committee will propose countermeasures, report the countermeasures to the AI Ethics Committee Chair and relevant companies, and then work with these companies to implement the countermeasures.

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Education

We are using learning materials on the basics and promotion of AI ethics provided by the AI Ethics Committee to enable our Group employees to work in line with the principles of AI ethics activities.

Since fiscal 2022, the AI Ethics Committee has been providing e-Learning courses on AI ethics for all employees in our domestic Group companies every year. We also post e-Learning materials to our Intranet site so that all employees, including those in overseas companies and temporary staff, can strengthen their understanding whenever necessary.

Risk Assessment

In 2022, a monitoring system to identify the AI ethical risks of our Group products was introduced. The AI Ethics Committee collects risk assessment results through the Group employee survey results and the groupwide risk check system and analyzes them to understand any risks within the Group. The Committee provides the analysis results for us. For matters that have been determined to pose a high level of risk, the Committee sets up review teams to conduct risk reviews or otherwise addresses them across organizational divisions.

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External Cooperation

We collaborate with external organizations through the AI Ethics Committee. For example, the AI Ethics Committee participate in committee activities at external institutions researching AI ethics, as well as in the community, academic, and public sectors. We conduct research and awareness activities through these activities. Through AI Ethics Committee, we participated in drafting the Governance Guidelines for the Implementation of AI Principles laid out by Japan’s Ministry of Economy, Trade and Industry at the Expert Group on How AI Principles Should be Implemented. We are further strengthening our links with external organizations by our participation in AI Alliance, a global alliance on AI through the AI Ethics Committee.

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Panasonic Automotive Systems Group strives to appropriately acquire, protect, and utilize technologies, know-how, designs, brands, and other achievements obtained through R&D and other business activities as intellectual property. By implementing our group’s intellectual property in various ways, such as commercialization in our group and co-creation with other companies as well as striving to respect the intellectual property of third parties in our group’s business activities, the Group aims to achieve business growth in our group and achieve solutions to social issues.

Policy

Based on the spirit of “IP (intellectual property) before business” since its founding, the Group has been promoting intellectual property activities, aimed at ensuring the advantage and safety of its business now and in the future and helping address social issues, by proposing IP-based strategies for its business; acquiring, protecting, and utilizing global intellectual property; and preventing and resolving disputes related to intellectual property. To consistently achieve these goals, the Group has established its “Basic Rules for Intellectual Property Matters” that apply to the entire Group. We are working to appropriately pursue our intellectual property activities and establish a foundation for our initiatives. In addition, we respect the intellectual property of our suppliers, business partners, and other third parties and do our best not to infringe on them. That is also a stipulation in our “Compliance Basic Policy,” and we provide regular education to ensure that all employees comply with it.

Responsible Executive and Framework

The Chief Technology Officer is the executive officer responsible for intellectual property for the Group (as of August 2025). We are advancing our intellectual property operations at the R&D Planning Center.

Major Initiatives

Intellectual Property Strategy Framework

The Group has formulated an Intellectual Property Strategy Framework (see figure below). This framework shows that our intellectual property (IP) strategies and activities, conducted from the perspectives of “customers,” “competitors,” and “society” based on our materiality, will contribute to “business advantages” and “business safety” as well as “social implementation through Co-creation with intellectual property as a starting point”, and that these will contribute to solving social issues and ultimately lead to the vision we are aiming for. These strategies and activities are embodied in the framework based on each aspect of intellectual property: “rights,” “assets,” and “information.” For example, from a “customer” perspective, strategies and activities such as planning and implementation of “co-creation and open & closed strategies” and “IP portfolio (PF) building of core technologies”, will lead to output in the form of “improvements in customer value.” From the “competitors” perspective, strategies and activities such as “dispute resolution”, “strict respect for third-party IP”, and “lean transformation of our IP portfolio (e.g., abandoning unnecessary IP)” will lead to output in the form of “improvements in cost performance.” From the “social” perspective, strategies and activities such as “Co-creation with intellectual property as a starting point” will lead to outputs such as “social implementation through co-creation” (e.g., commercialization of environmental technologies through co-creation with other companies). These outputs will lead to our goal of “enhance competitiveness” and realizing “an ideal society with affluence both in matter and mind.”

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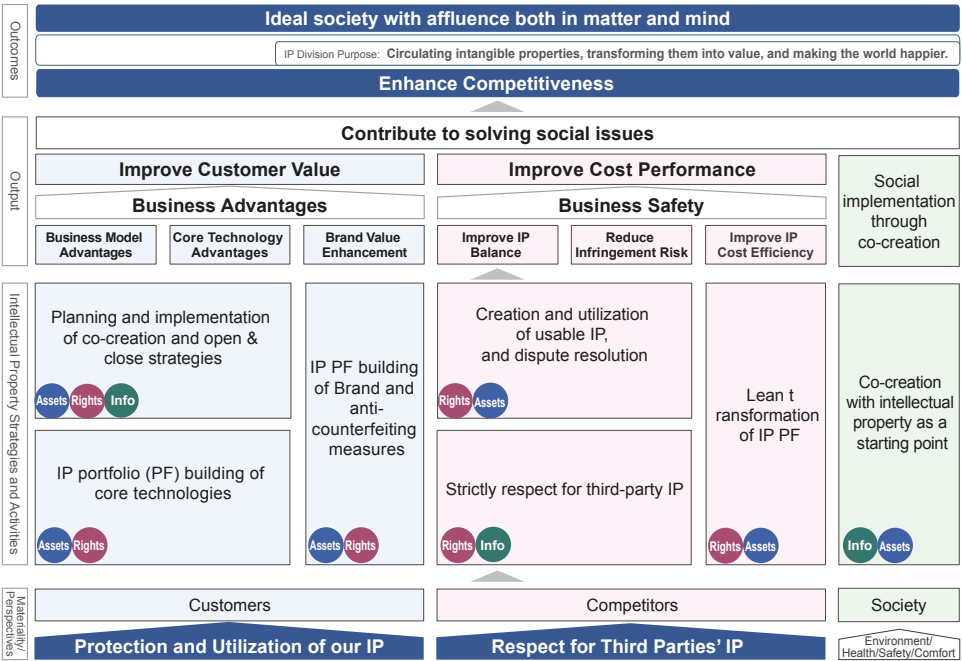
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Acquiring Intellectual Property Rights and Reward System

The Group has been building up a global portfolio of intellectual property in line with our IP strategy, which in turn is based on our business strategies and research and development strategies.

If the Group's intellectual property is not properly protected and utilized, counterfeit or infringing products involving that intellectual property may emerge, causing quality problems, generating inflows of funds to criminal organizations, and other problems that may inhibit sustainable innovation. Going forward, the Group will continue to acquire the results of research and development and business activities in the form of intellectual property, and will strive to further protect and utilize intellectual property. The Group also has a reward system for inventors designed to increase their motivation and help invigorate their inventions and creative endeavors, and we operate this system in a just and fair manner based on the laws and regulations of each country.

Respect for Intellectual Property of Third Parties

If we infringe on the intellectual property of a third party, there is a risk of causing losses to that third party and inconvenience to our direct and indirect customers due to changes in specifications or interruptions in the supply of our products or services. The Group conducts its business activities while striving to respect third parties' intellectual property. Our Group-wide internal rules stipulate how to respond when a third party contacts us with a suspicion of intellectual property rights infringement and how to estimate losses in the event of such infringement. The internal rules of each operating company also stipulate how to conduct investigations, report discovered risks, and follow other processes to prevent infringement of third-party intellectual property rights.

Contributions to Building Co-Creation Relationships

The Group aims to contribute to solving social issues in its business activities. In addition to facing social issues head-on, contributing to their resolution, and growing our business as a result, we are also promoting a new intellectual property strategy by building a system that connects and cooperates between a wide range of people, goods, and things, and building co-creation relationships based on intangible assets to solve social issues that are difficult for individual companies to address.

To realize the safety and security of automobiles, we are advancing the practical application of our expert knowledge through strategic and creative collaborations with other companies. We hope that this will help to resolve various social issues. It is impossible for our Group alone to address the variety of issues that can occur in a mobility society. Our Intellectual Property department is forming a network of stakeholders through our shared intangible property. This network will bring innovations to society, forming a path toward a world of happiness.

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■ Anti-Counterfeit Activities

Counterfeit products that use important corporate assets such as brands and other intellectual property without permission, and piggyback on the brand value built up by the rights holders not only cause quality problems (accidents and injuries) for customers, but also give rise to the following problems for society as a whole and can be an obstacle to the creation of a healthy society.

- Economic losses: decreasing tax revenues, less business incentives to develop new products and innovation.
- Security issues: potential sources of funds for criminal/ terrorist organizations, increasing threats to national security.
- Environmental problems: disposal of seized counterfeit goods

Thus, aiming to eliminate counterfeit goods should be considered a Corporate Social Responsibility.

Education and Awareness-Raising

The Group conducts various training and education programs for employees to ensure they fully implement our policy on intellectual property. Alongside the above-mentioned employee education on respecting third-party intellectual property, as the use of Open Source Software (OSS) in automotive systems is increasing in recent years, we are raising awareness and providing an educational program on the appropriate use of copyrighted software together with our Open Source Program Office (OSPO) activities. The OSPO is advising thorough compliance with OSS international standards as well as promoting further use of OSS, and has established a standard software development process and is encouraging user departments to engage with OSS-related communities.

Consultation & Whistleblowing

All Group employees, business partners, and their employees can seek consultation and report any intellectual property-related risks or problems they see or hear about through the global hotline Panasonic has set up.

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Corporate publicity and advertising make brands, products, and services more widely known within society. However, they can also adversely impact general consumers due to expressions and images that lack diversity and consideration for impressionable children. Furthermore, with the development of social media, such effects are likely to spread globally, not only in the country or region where the advertising or promotional campaign activities are carried out. Therefore, companies must maintain high normative awareness and ethics in their communications.

Policy

Providing accurate and honest information and communications to customers and society at large is the starting point for gaining trust from the same and is essential in both protecting and growing the brand's value. Based on this recognition, we comply with the Panasonic Group Code of Ethics & Compliance. It stipulates the following policies regarding our communications with society.

- We provide fair and accurate information regarding our products, services and technologies through our corporate communications, public announcement and advertising, with the aim of better informing our customers and other stakeholders and enhancing the value of our brand. We communicate openly about our Basic Business Philosophy. We continually listen to and learn from customers and society as a whole. We reflect the feedback we receive in our business activities.
- We base our corporate communications on accurate facts. Our corporate communications respect diversity, do not discriminate against any social group, defame or undermine the personal dignity of any person.

We have also created various sets of rules and guidelines, such as the PAS Brand Management Rules*, PAS Official Social Media Account Operational Guideline*, Basic Rules for Intellectual Property Matters*, and Global ISM Policy. We also follow the Panasonic Group Basic Rules for Brand Matters, Operational Rules for Digital Media, Panasonic Group Social Media Guidelines, as a part of the Panasonic Group. Our rules and guidelines require us to respect the intellectual property, identities and privacy of third parties in the execution of our corporate communications activities.

*...Japanese Edition Only

Principles Concerning Publicity and Advertising Activities


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." In addition, today we see an important social responsibility in communicating widely, not just about our products but also about the full range of our activities as a corporation. Our efforts to achieve this are informed by the same kind of thinking. The following basic guidelines are based on the philosophy of our founder and reflect our attitude and approach to the production of advertising.

- In the context of our business activities, publicity and advertising fulfill an important social mission.
- It is an activity that conveys the "heart" of our company.
- Facts must be told truthfully, in ways that are easy for our customers to understand.
- We do not cause discomfort or annoyance.
- Always use a creative and innovative approach.
- Approach our work with a high level of insight, competence and passion.

Additionally, the media used in all our publicity and advertising campaigns are selected based on their general acceptance in their respective regions, their promotion of brand familiarity, and their cost-effectiveness.

Responsible Executive and Framework

Publicity and advertising come under brand strategy and communication strategy, which is directly managed by the executive officer in charge of brand strategy. The Corporate Communication Office of Panasonic Automotive Systems Co., Ltd. is responsible for corporate advertising and product advertising for the whole Group.



The “Joy in Motion” design company

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