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### **About This Report**

#### **Our Approach**

This annual sustainability report represents environmental, social and governance (ESG) strategies, initiatives, and results of Renesas Electronics Corporation (Renesas).

This report has been prepared in accordance with Global Reporting Initiative (GRI) Standards, the Sustainability Accounting Standards Board (SASB) Semiconductor Industry Standard, and the Task Force on Climate-related Financial Disclosures (TCFD) recommendations. Please refer to the Appendix section for disclosure details.

This report demonstrates our commitment to the UN Global Compact, to which we have been a signatory since 2021, as well as the United Nations' Sustainable Development Goals (SDGs).

#### **Accuracy and Verification**

We hereby confirm Renesas' responsibility for report preparation and the accuracy of information in the report. Our environment data for the fiscal year 2024 ending on December 31, 2024 has been reviewed and verified by a third party (see page 129). Our human resources data for the fiscal year 2023 ending on December 31, 2023 was reviewed and verified by a third party (see page 133; 2024 data to be verified in 2025). The remaining data and information in this report have been reviewed by the Renesas Sustainability Department and leadership team.

#### **Report Overview**

Period  This report principally covers the fiscal year 2024 (January 1, 2024 to December 31, 2024)  Note: Some information regarding activities in January 2025 and after is also included.					
Companies	Renesas Electronics Corporation and its consolidated subsidiaries				
Subject Notation	Renesas Group: Refers to the Renesas Electronics Group, including Renesas Electronics Corporation				
Reporting Boundary	The information and data in this Report covers global Renesas locations, except where indicated in the relevant section. For more information on Renesas operational sites, visit our Global Operations webpage.  The scope of environmental data includes Renesas headquarters, Musashi site, and Renesas-operated manufacturing sites. These sites consume and emit over 90% of the energy of Renesas Group.				
Reporting Cycle Published every year as an annual, integrated report					
Publication Date	June 2025 (Previous report: May 2024)				

#### **Contact Us**

Please contact Renesas' <u>Sustainability Department</u> with any questions or feedback you may have on this report or our ESG initiatives. We look forward to hearing from you.

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## **CEO Message**

#### **Reflecting on Fiscal Year 2024**

Fiscal year 2024 (January 1–December 31) was marked by global inflation, rising geopolitical risks, and increasing concerns over protectionist policies, fueled by the strengthening of isolationism and the rise of far-right forces. These factors heightened uncertainty in the global economy. In the semiconductor market, inventory adjustments and weak consumer demand persisted, except for products targeting Al-driven data centers. Industrial product inventory corrections continued for an extended period, while demand growth for automotive semiconductors, driven by automation and electrification, was offset by inventory adjustments.

Amid these challenging business conditions, we demonstrated agility and resilience, securing steady results. In pursuit of our "2030 Aspiration"—to become a top-three embedded semiconductor solution supplier, achieve revenue exceeding \$20 billion, and increase the equity value sixfold from January 2022 levels—we strategically executed cost reductions and efficiency improvements, while making bold yet prudent investments for future growth. As a result, although revenue, gross profit, and operating income declined year-over-year, we managed to maintain a decent profit level even amid prolonged market stagnation.

# **Key Initiatives and Progress** in Fiscal Year 2024

At the beginning of the fiscal year, we reorganized the company's structure, transitioning from an application-oriented organization to a technology-based one to effectively address the converging needs of customers. Additionally, we established a team dedicated to software and digitalization, and restructured the Operations, Engineering, and other key functions to serve as centralized foundations across all lines of business. In September 2024, we launched the UX organization to build on our strong customer relationship and further enhance customer experience by providing a unified interface with customers. In January 2025, leadership team changes were implemented to reinforce our organizational structure.

To accelerate our Digitalization strategy, we acquired Altium, a PCB design software leader, in August 2024. Integration has progressed smoothly, and in January 2025, Altium's team was fully integrated into our Software & Digitalization Group.

Recognizing India's rapid growth potential, we designated it as our focus market and expanded our operations accordingly. We are on track to double our workforce in India to 1,000 employees by the end of 2025. In March 2024, we signed a joint venture agreement with CG Power and Industrial Solutions and Stars Microelectronics to build and operate an outsourced semiconductor assembly and test facility in Gujarat, India.

On the product front, we launched the first device in the 5th-generation R-Car series. The R-Car X5H is a high-performance automotive SoC featuring advanced 3nm process technology that delivers the highest level of integration for power efficiency. Additionally, we introduced the RZ/V2H, an MPU with an integrated AI accelerator for next-generation robotics with both vision AI and real-time control capabilities. We also launched the RRH62000, an ultra-compact sensor module for smart air quality monitoring. These innovations, along with numerous other product releases, contributed to securing a strong pipeline of future business opportunities.

For shareholder returns, we proposed at this Annual General Shareholders' Meeting a yearend dividend of 28 yen per share, reaffirming our commitment to stable and continuous shareholder value enhancement.

In terms of corporate governance, we transitioned to a Company with Nomination Committee, etc. structure from 2024 to further enhance monitoring-based governance.

# **Hidetoshi Shibata**

President & CEO



On sustainability and ESG initiatives, significant achievements were made. These include our first "Business & Sustainability Report" which combines both financial and non-financial information. We continued to perform strongly in major ESG indices and rating agencies, including MSCI and FTSE Russell. Additionally, the Naka factory, our advanced front-end wafer fabrication site, achieved Platinum status from the Responsible Business Alliance ("RBA") for our social responsibility audit. The RBA, comprising approximately 200 companies including electronic device manufacturers worldwide, aims to improve labor conditions, safety and health standards, the environmental practices, and ethics across the global supply chain.

#### **Future Initiatives**

To navigate an evolving business environment, achieve long-term growth, and ultimately realize our "2030 Aspiration," we are actively driving our "Back to Basics" strategy with a focus on three key priorities:

#### Productivity Increase

We will maximize the scale advantages of our global workforce, comprising approximately 22,000 employees across 30+ countries, while streamlining operations to improve efficiency.

#### **■** Purposeful Investment

We will strategically allocate resources to our core embedded semiconductor solutions and their value-enhancing elements—UX & Digitalization. Our previous approach balanced short-term revenue growth with

long-term strategic investments and achieved significant success. Considering the impact on our overall organization and changes in the business environment, we have decided to go "Back to Basics." We are now prioritizing long-term growth by refining our business priorities and directing maximum resources to strategic initiatives.

#### ■ UX & Digitalization Strategy

In January 2025, we expanded the UX Group by integrating digital marketing functions and the system solutions team to reinforce our UX initiatives.

For Digitalization, we are working with Altium as one team to establish an integrated and open "electronics system design and lifecycle management platform," to make electronics design accessible to a broader market to allow more innovation. As part of this initiative, Altium acquired Part Analytics in January 2025, marking another step toward realizing our Digitalization vision.

Under the new structure, UX & Digitalization is positioned as our top strategic priority, and we will continue to accelerate our efforts. Our vision is to establish a comprehensive digital platform that streamlines the end-to-end process of electronics system development from discovery, system design, production, to lifecycle management—to make our customers' lives easier.

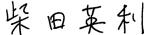
As part of our ESG commitment, we established a company-wide ESG organization and repositioned the Audit Committee as the Audit and Sustainability Committee in January 2025. This ensures the highest level of oversight and governance integration to enhance ESG implementation and execution. Under this refined framework, initiatives are actively advancing, including accelerating our carbon neutrality target to 2040.

Regarding geopolitical risks, short-term concerns include supply chain disruptions caused by tariffs. Medium-term trends suggest that U.S. regulatory easing and China's focused technology investments—particularly in Al—will drive innovation. We will closely monitor these developments and continue our Digitalization efforts to strengthen long-term competitiveness.

To advance toward our "2030 Aspiration" and our Purpose, "To Make Our Lives Easier," we remain committed to delivering products and solutions that are vital to our daily lives. We appreciate your continued trust and support as Renesas evolves and drives technological progress.







#### Hidetoshi Shibata

Director, Representative Executive Officer. President and CEO



In pursuit of our "2030 Aspiration" to become a top-three embedded semiconductor solution supplier, achieve revenue exceeding \$20 billion, and increase the equity value sixfold from January 2022 levels—we strategically executed cost reductions and efficiency improvements, while making bold yet prudent investments for future growth.

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2024 Business Updates



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# Appendix

### **About Renesas**

Renesas is an embedded semiconductor solution provider driven by its Purpose 'To Make Our Lives Easier.' As the industry's leading expert in embedded processing with unmatched quality and system-level know-how, we have evolved to provide scalable and comprehensive semiconductor solutions for automotive, industrial, infrastructure, and IoT industries based on the broadest product portfolio, including High Performance Computing, Embedded Processing, Analog & Connectivity, and Power. With a diverse team of over 22,000 professionals in more than 30 countries, we continue to expand our boundaries to offer enhanced user experiences through digitalization and usher in a new era of innovation. We design and develop sustainable, power-efficient solutions today that help people and communities thrive tomorrow, 'To Make Our Lives Easier.'

#### **Automotive**



Highly reliable vehicle control, safe and secure autonomous driving, eco-friendly electric vehicles

#### **Industrial**



Lean, flexible, and smart industry

#### Infrastructure



Robust infrastructure, enabling safety and efficiency

#### IoT



Comfortable, safe, and healthy lifestyles through IoT devices







About Renesas





**Sustainability Approach** 





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Business Responsibility



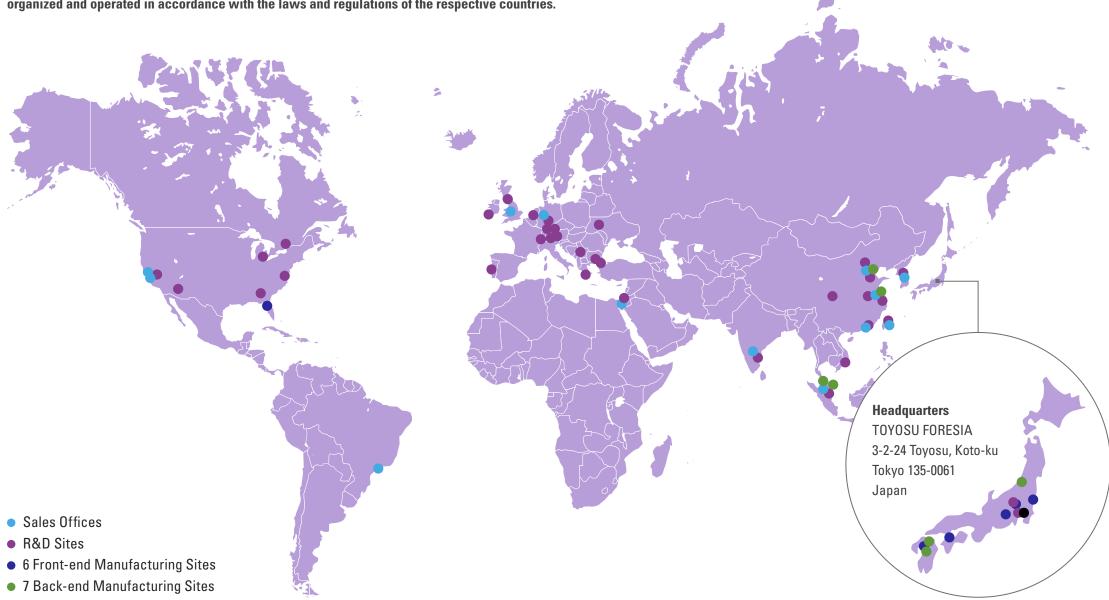
### **At-A-Glance**

Renesas currently operates from headquarters located in Tokyo, Japan as well as through sales offices and manufacturing, design, and development sites located around the world. Each office is organized and operated in accordance with the laws and regulations of the respective countries.

**30+ Countries** 

**Employees 22,711** 

(as of 31 Dec. 2024)







**About Renesas** 















## **Our Value Creation Story**

#### **Financial**

Strong financial stability

■ Total assets: 3.167.0B JPY

INPUT

■ Total equity: 2,005.6B JPY

**High Profitability** 

- Revenue: **1.469.7B** JPY
- Gross margin: 57%

#### Industrial

Global Manufacturing network

■ 5 manufacturing sites in Japan and 8 in Asia

#### Intellectual

R&D for innovative technology development

■ R&D Investment: 250B JPY

Established applications and solutions across diverse areas

Active patents and pending applications covering a wide range of technologies and businesses: ~20,000

Diverse and inclusive workforce

■ Number of Employees: 22,711 Agile/Responsive corporate culture that is reflected in talent attraction and

retention initiatives

#### Social & Relationships

Active contribution to society and communities

- Social contribution initiatives: 38M JPY
- Value of employee volunteering time:
- Financial contributions: 3.71M JPY

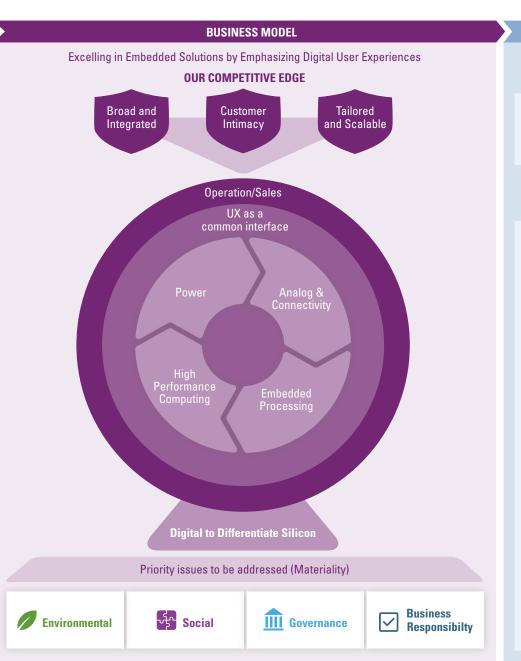
Customer & Supplier base

■ Number of customers: 5.000+

#### Nature

Green business operations

- Energy consumption: **1,621,052** (MWh)
- Water withdrawal: **15.586** (1.000 m³)



#### **Financial Achievements**

OUTPUT

- Automotive: **702.8B** JPY
- Industrial, Infrastructure. IoT: 636.8B JPY

#### **Non-Financial Achievements**

#### **Environmental**

- GHG Emissions: -26%
- Energy Consumption: -10.1%
- Water Recycling Rate:
- Waste Recycling: 92% Social
- Major Manufacturing Sites with ISO 45001 Certification: 100%
- Global Suppliers Consenting to Supplier Code of Conduct: 92%

#### Governance

- Board Gender Diversity (Female ratio): 33%
- Independent Outside Directors on BoD: 83%

#### **Business Responsibility**

Value of Volunteer Time Contributed by Renesas Employees: **5.07M** JPY

### **2030 Aspiration**

**OUTCOMES** 

revenue of more than \$20 billion

2022 valuation

Achieve

**PURPOSE** 

*To* 

Make

Our Lives

Easie

Increase market capitalization to 6 times the

**Sustainability** Commitment

Become

a **Top 3** 

semi-

embedded

conductor

solution

supplier

Achieve a waste recycling rate of 90%

or more

Advance aender equality with women holding at least 30% of

the board

seats

Reduce water

Reduce GHG

emissions by

38% by 2030

intensity by 33%/Achieve a water recycling rate of 35% by 2030

Achieve 100% conflict-free 3TGs

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### **2024 Business Performance**

At Renesas, we disclose our financial performance by two segments: Automotive and IIoT.

Automotive consists of two sub-segments: Automotive control, which includes semiconductors for vehicle functions, such as driving, turning, and stopping, and semiconductors for xEV-related products; and Automotive information, which includes semiconductors for IVI and AD/ADAS functions.

IIoT consists of three sub-segments: Industrial, which includes semiconductors for end markets, such as factory and building automation; Infrastructure, which includes semiconductors for data center and base transceiver stations; and IoT, which includes semiconductors for PC, mobile phone, and other consumer products, such as home appliances and wearable devices.

**ESG Activities**: At Renesas, our business strategy integrates sustainability as its core, actively contributing to the United Nations Sustainable Development Goals (SDGs) and aligning with global ESG standards. By embedding ethical business practices across our semiconductor solutions and supply chain, we enable customers to advance their decarbonization efforts and comply with evolving global sustainability requirements. Our transparent governance framework and proactive sustainability disclosure strengthen stakeholder trust and reinforces our position as strategic partner in advancing sustainable innovation. This continuous progress in ESG performance reflects our long-term commitment to creating value for investors, customers, and society. (ESG Ratings & Index Inclusion)

Segments	Revenue	Gross Margin	Operating Margin	Major Updates
Automotive	702.8 billion yen	52.3%	31.7%	■ The overall sales of the Automotive segment increased by 6.4% year on year in 2024 compared to 2023. This result was due to positive effects of yen depreciation and channel inventory expansion.
				Both Automotive Control and Automotive Information had mid-high single digit increases year on year. Notably, ADAS achieved strong growth of over 20%, driven by R-Car Gen 3, compared to 2023.
				The gross margin of Automotive segment for this fiscal year was 52.3%, which was 0.4% points lower than the last fiscal year, mainly due to the lower fab utilization.
				■ The operating margin of Automotive segment for this fiscal year was 31.7%, which was 3.1% points lower than the last fiscal year. Despite the revenue increase, this decrease was mainly due to the increase in research and development costs.





















Segments	Revenue	Gross Margin	Operating Margin	Major Updates
Industrial Infrastructure IoT	636.8 billion yen	60.6%	27.2%	<ul> <li>The overall sales of IIoT segment decreased by 20.3% year on year in 2024 compared to 2023. Although there were positive effects of yen depreciation and sales growth of some products for data centers, the softening of demand mainly in Industrial and IoT markets was significant, resulting in a decrease in sales for the whole segment.</li> <li>The industrial segment sales decreased approximately around 40% decrease year on year, due to the softening of demand mainly in factory automation and inventory adjustment by our customers. The IoT segment sales decreased by high-teens percent decrease, due to the demand decrease in mobile and other consumer products. The Infrastructure segment sale was almost flat year on year, despite the remarkable growth of digital power products for Al and General server, as it was also offset by the demand decrease in other infrastructure products.</li> <li>The gross margin of IIoT segment for this fiscal year was 60.6%, which was</li> </ul>
West Control.				O.2% points lower than the last fiscal year. The margin decline due to the sales decrease and lower fab utilization led to this result.  The operating margin of IIoT segment for this fiscal year was 27.2%, which
Company Total (including others)	1348.5 billion yen	56.1%	29.5%	was 6.3% points lower than the last fiscal year. The margin decline was mainly due to the sales decrease.







About Renesas















## **2024 Spotlight: Products & Development Tools**



# Future-Proof Multi-Domain Compute Solutions for Centralized E/E Architecture with Chiplet Extensions

Built using the latest 3-nanometer automotive process technology, Renesas' R-Car X5H SoC offers the highest level of integration and performance in the industry, allowing OEMs and Tier 1s to shift to centralized Electronic Control Units for streamlined development and future-proof system solutions. It is among the first in the industry to offer highly-integrated, secure processing solutions on a single chip for multiple automotive domains, thanks to its unique hardware-based isolation technology. Additional benefits include an option to expand AI and graphics processing performance using chiplet technology and scale it by three to four times or more. As the highest performance device within the 5th generation R-Car Family, the R-Car X5H directly addresses the growing complexity of Software-Defined Vehicle development and helps overcome technical challenges while ensuring vehicle safety. (Read More)



# Powerful Single-Chip RZ/V2H MPU for Next-Gen Robotics with Vision Al and Real-Time Control

Offering the highest levels of performance within the RZ family, the RZ/V2H enables both vision AI and real-time control capabilities. The device comes with a new generation of Renesas proprietary AI accelerator, DRP (Dynamically Reconfigurable Processor)-AI3, delivering 10 TOPS/W power efficiency, an impressive 10-fold improvement over previous models. This performance boost allows engineers to process vision AI applications directly at edge AI devices without relying on cloud computing platforms. By integrating these cores into a single chip, the device can effectively manage both vision AI and real-time control tasks, making it ideal for demanding robotics applications of the future. Since the RZ/ V2H consumes less power, it eliminates the need for cooling fans and other heat-dissipating components. This means engineers can design systems that are smaller in size, less expensive, and more reliable. (Read More)



### Highest Industrial MPU RZ/T2H for Industrial Robots, PLCs, and Motion Controllers with High-Performance Application Processing and Fast Real-Time Control

With the growing demand for unmanned and labor-saving manufacturing, industrial robots and controller equipment are being deployed to accelerate automated production. The RZ/T2H is capable of high-speed, high-precision control of industrial robot motors for up to nine axes and supports a variety of network communications including Industrial Ethernet on a single chip. The MPU targets industrial controller equipment such as programmable logic controllers, motion controllers, distributed control systems, and computerized numerical controls. While industrial systems traditionally required multiple MPUs or a combination of field programmable gate arrays to control these applications, the RZ/T2H MPU can now meet all the requirements on a single chip. This reduces the number of components and saves time and costs of FPGA program development. (Read More)























### **Latest R-Car Open Access Platform for Software-Defined Vehicle Development** with Market-Ready Software

The R-Car Open Access (RoX) is a development platform for software-defined vehicles (SDVs) that integrates all essential hardware, operating systems, software, and tools needed for automotive developers to rapidly develop next-generation vehicles with secure and continuous software updates. Designed for the Renesas R-Car family of system-on-chips and microcontrollers, the SDV platform includes comprehensive tools for the seamless deployment of AI applications. By pre-integrating all fundamental layers required to develop SDVs, RoX drastically reduces the complexities for car OEMs and Tier 1 suppliers, saving time and money. Renesas' customizable solution solves vehicle function and safety challenges by offering a cloud-native development environment and a simulation platform, supporting the software-first approach and parallel hardware and software development. (Read More)



#### **Altium Discover to Connect Ecosystem of Electronics Supply Chain & Distribution for Accelerated Innovation**

During the Electronica 2024 conference in Munich, Germany, Altium—a Renesas company known for its industry-leading electronics design systems—unveiled Altium Discover, a trustbased, collaborative ecosystem that brings semiconductor manufacturers, distributors, and product developers together on a unified platform. It leverages the proven cloud capabilities of Altium 365 to provide real-time, transparent collaboration, ensuring that all stakeholders in the electronics supply chain can work together with confidence, from discovery through production. The platform not only streamlines workflows but also builds trust—a crucial value proposition in today's fragmented industry—by ensuring transparency, secure engagement, and accountability throughout the product lifecycle. (Read More)



#### **Altium 365 BOM Portal for Engineering and Procurement Team Collaboration**

The Bill of Materials (BOM) Portal within the Altium 365 platform was launched to dramatically enhance collaboration between engineering and procurement teams, offering a unified approach to managing BOMs in electronics design. Both procurement and engineering teams benefit from a comprehensive dashboard that monitors all BOMs in production and provides immediate insights into any parts supply issues. It also fosters efficient collaboration and informed decision-making across the product lifecycle. By integrating with top data sources like Octopart, SiliconExpert, and S&P Global, it provides companies with real-time, accurate component data. This is crucial for making smart, data-driven decisions. (Read More)







About Renesas





Sustainability Approach



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### **CFO Message**

2024 was a year of continued uncertainty in the global economy, with demand fluctuations having a significant impact on the semiconductor market. We worked to strengthen our growth platform while maintaining profitability by striking a balance between prudent inventory management, cost containment, and strategic investment.

Revenue for the full year amounted to ¥1,348.5 billion, a decrease which was the result of adapting to the changing market environment (-8.2% year-on-year). Meanwhile, the gross profit margin stood at 56.1%, a slight decrease from the previous year (57.0%), but remained stable as a result of thorough cost control. The operating profit margin stood at 29.5%, continuing to generate steady profits despite the difficult market environment.

The semiconductor business for the automotive sector, our core business, recorded sales of JPY 702.8 billion (+6.4% year-on-year), reflecting the market adjustment, but long-term demand remains strong due to growth in products for EVs and ADAS-related products. On the other hand, the business for industry, infrastructure, and IoT amounted to JPY 636.8 billion (-20.3% year-on-year), reflecting the adjustment in the industrial market.

### **Cash flow and capital allocation**

With regard to cash flow in 2024, we generated operating cash flow of JPY 340.5 billion and investment cash flow of JPY 1,284.1 billion. This was primarily attributed to the acquisitions of Altium and Transphorm. These have significantly increased our competitiveness in the areas of design software and power semiconductors respectively.

In terms of capital distribution, we paid out a dividend of over JPY 50 billion, continuing the dividend policy we initiated in 2023. Going forward, we will continue to maximize shareholder value in an appropriately balanced manner with the aim of providing a sustainable return of profits.

### **M&A** and integration strategies (PMI)

The year 2024 marks an important turning point in our M&A strategy. In particular, the acquisitions of Altium and Transphorm are pivotal to our growth strategy: the integration of Altium's PCB design software and cloud platform strengthens our design ecosystem for customers and enables us to deliver added value through the convergence of hardware and software. In addition, the use of Transphorm's GaN technology will further enhance the company's competitiveness in the field of next-generation power semiconductors.

In Post Merger Integration (PMI), the two companies will promote sales growth and the creation of cost synergies while maximizing the strengths of both companies. In this way, the aim is to strengthen the earnings base over the medium to long term and achieve more sustainable growth.

#### **Looking Forward**

Towards 2025, we will accelerate our efforts to achieve 2030 Aspiration. In particular, we will maximize synergies through further integration with Altium and Transphorm to add value to our products and services, and expand our customer ecosystem through the enhancement of our cloud-based development environment and software strategy. In addition, while building on the 2024 results, we will maintain profitability and financial soundness by continuing to efficiently manage costs and optimize profitability. Furthermore, from the perspective of sustainable management, we will promote the use of energy-saving technologies

and initiatives towards carbon neutrality, while aiming to establish a sustainable business model from a long-term perspective.

Through these initiatives, we will ensure the implementation of its growth strategy beyond 2025 and aim to create sustainable corporate value. We will continue to work with our shareholders and stakeholders to meet

new challenges.



Senior Vice President and CFO



















### **2024 Financial Highlights**

#### Revenue

1,348.5 billion yen

### **Gross Margin**

56.1%

### **Operating Margin**

29.5%

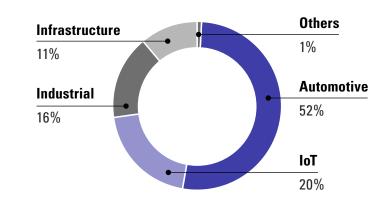
### **Profit Attributed to Owners of Parent**

360.4 billion yen

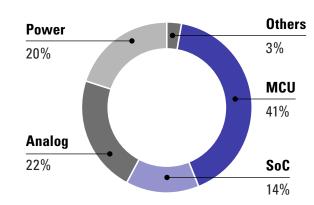
#### **EBITDA**

486.2 billion yen

### **Revenue by Segment**



#### **Revenue by Product**



#### **Growth Trajectory**

























### **Awards & Recognitions**

Renesas is honored to have received the following awards in 2024:





For three consecutive years, Renesas has been included in three indices, "FTSE4Good Index Series," "FTSE Blossom Japan Index," and "FTSE Blossom Japan Sector Relative Index" for our outstanding Environmental, Social, and Governance (ESG) practices.

The three indices are provided by FTSE Russell, a subsidiary of the London Stock Exchange Group, and used by a wide variety of market participants to create and assess responsible investment funds and other products. The FTSE Blossom Japan Index and FTSE Blossom Japan Sector Relative Index are adopted as benchmarks of ESG passive funds by the Government Pension Investment Fund, one of the world's largest pension funds.



#### **2024 Pride Index: Gold Rating**

Renesas is proud to have received the highest "Gold" rating by the <u>Pride Index 2024</u> for three consecutive years. The index, established by work with Pride in Japan, evaluates workplace initiatives for LGBTQ+ and other sexual minorities within companies and organizations.

We continue to expand our <u>LGBTQ+ initiatives</u> through a variety of programs and events. This past year, we reinforced a non-discriminatory benefits policy and provided educational programs and harassment prevention for all employees globally. Most recently, we celebrated the Diversity Awareness Month in October and hosted multiple events that focused on unconscious biases and gender stereotypes in the workplace as well as physical and mental well-being. Renesas also founded the "Renesas Pride" employee resources group that offers support and networking opportunities for LGBTQ+ individuals and allies.



#### **2024 World Electronics Achievement Award**

At the International Integrated Circuit Exhibition and Conference (IIC Shenzhen 2024) in China in November 2024, Renesas team participated in the Global CEO Summit and 2024 World Global Electronics Achievement Awards ceremony event. We received the most prestigious "Electronic Company of the Year" award for our strong technical strengths and outstanding market performance. As we continue to expand our business globally and diversify our capabilities to make our customers' lives easier, our complete, easy-to-use development platform from hardware to software, remains in high demand in China.





















#### **Electronics Industry Awards 2024**

Two Renesas products were named as a Product of the Year at The Electronics Industry Awards 2024. Our RA8 Series MCUs were named the Embedded Solution Product of the year and our DA14592 SoC won the Internet of Things Product of the Year. In addition, our Al Workbench was recognized as Highly Commended in the Engineering Development Design Tool category.

These recognitions highlight our innovation excellence and our commitment to our Purpose and developing products 'To Make Our Lives Easier.'



#### **TrustRadius 2025 Buyer's Choice Award**

Altium 365 was recognized as a TrustRadius 2025 Buyer's Choice Award winner. Requirements for qualifying for the 2025 Buyer's Choice Award included 10+ new reviews between January 1, 2024 and September 26, 2024, for evaluation purposes. Within those reviews, at least 75% of reviewers selected the product as having the best capabilities, value for price, and customer relationships.



#### **G2 Best CAD & PLM Products 2024**

Altium Designer and Altium 365 were G2 Best CAD & PLM products in 2024. Industries across various disciplines such as manufacturing, engineering and design, simulation and more use CAD and PLM software to create, analyze and/or modify 2D or 3D models in a digital environment. To qualify for the best CAD and PLM software list, products must be listed under one or more of the CAD & PLM categories.







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Vice President

© Renesas Electronics Corporation

Senior Vice President

Appendix

# SUSTAINABILITY AT RENESAS

To Make Our Lives Easier



Senior Vice President

Chair of the Audit and

Sustainability Committee

ESG Sponsor, Member of the Audit

and Sustainability Committee 20







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# Leadership Perspective: Advancing Sustainability at Renesas

A Conversation with Ariunzaya Bayarsaikhan, Head of Sustainability

Q: As the new leader of Renesas' Sustainability Department (SU), what unique challenges and opportunities do you see for the semiconductor industry?

The semiconductor industry faces critical sustainability challenges. It's energy-intensive, consumes significant water resources, and relies on materials with high greenhouse gas emissions. These challenges are compounded by increasing climate disruptions, evolving regulatory requirements, and complex global supply chain and human rights issues.

However, these challenges present strategic opportunities for Renesas to demonstrate leadership and drive meaningful change. For example, by strengthening our climate resilience through supplier diversification, improving energy efficiency and accelerating the usage of data technology solutions, Renesas can effectively mitigate supply chain vulnerabilities caused by climate-related events.

Successfully navigating such sustainability challenges enables Renesas to differentiate itself from competitors, reduce business risks, and strengthen customer relationships, driving long-term growth and value creation.

By accelerating our carbon neutrality target to 2040—ten years ahead of schedule—we're sending a clear message about our priorities."

#### Q: How does Renesas' sustainability strategy align with overall business objectives?

We have built a strong foundation over the past three years—developing sustainability capabilities across our organization. Now, we're moving into our next phase with Sustainability Strategy 2.0. Our focus on aligning business and sustainability objectives has led us to develop a comprehensive materiality map that clearly identifies our strategic priorities, ensuring perfect alignment with our broader business strategy. With priorities clarified, we have established a mid- to long-term strategy to manage these topics effectively. Learn more about our "Materiality Analysis".

To execute this strategy, we've secured strong backing from our Board, CEO, and leadership team, centralizing our sustainability function early this year to accelerate progress. Our dedicated Sustainability Department coordinates company-wide initiatives while our CEO maintains direct oversight, ensuring strategic alignment. Regular reporting to the Audit & Sustainability Committee and Board maintains accountability.

As we advance, our next steps focus on leveraging the insights from our materiality assessment to drive meaningful action across the organization. By integrating these findings into key business functions—such as product development, supply chain management, and corporate finance—we ensure that sustainability is not just an initiative but a core driver of innovation and long-term value creation.

Ariunzaya Bayarsaikhan

Head of Sustainability (SU)

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### **Leadership Perspective**

Q: What specific business value does Renesas create through its sustainability initiatives, and how do these efforts translate into competitive advantages?

At Renesas, sustainability directly supports our purpose "To Make Our Lives Easier" by developing energy-efficient solutions that reduce power consumption in customer applications, making technology more accessible while minimizing environmental impact.

I believe sustainability initiatives create business value by balancing risk mitigation with strategic competitive positioning. Recognizing the urgency of climate action and evolving customer priorities, we recently accelerated our carbon neutrality target to 2040. We conducted high level financial sensitivity analysis and it confirms this commitment not only enhances long-term operational resilience but also strengthens partnerships with key clients, where sustainability now is considered similar to traditional factors, such as cost and quality in decision-making. This strategic decision positions us to capture future opportunities and drive competitive advantage.

Additionally, we also clarified our 2030 sustainability commitments, strengthening investor confidence and improving ESG ratings.

I think there are even more intangible values and impacts being created by our sustainability initiatives. For example, we see significant benefits in human capital, helping us attract top talent. These initiatives also deepen our relationships with employees and communities, building a more resilient organization positioned for long-term success.

#### Q: What are Renesas' key priorities for 2025 and beyond?

After a comprehensive analysis of customer, investor, and societal expectations, we developed Sustainability Strategy 2.0, which focuses on several priorities:

- Targeted actions: Each department will address the most pressing sustainability issues relevant to its operations.
- Strengthening collaboration: We're expanding the Sustainability Operating Team (SOT) and Audit and Sustainability Committee to improve accountability and coordination.
- **Leadership in compliance**: Preparing for regulatory compliance such as the Corporate Sustainability Reporting Directive (CSRD) and Australian Sustainability Reporting Standard (ASRS).
- Updated carbon targets: Start execution and plan investments based on the updated 2040 action plan.

This strategy blends immediate actions with ambitious longterm goals. Our immediate focus includes improving data tracking, increasing board engagement in sustainability, and revising targets. These efforts are already driving measurable impact while advancing our broader sustainability goals.

#### Q: Looking at your journey so far, what successes will you build on, and what challenges do you anticipate?

Our progress toward carbon neutrality and global recognition—such as being named a CDP Supplier Engagement Leader in 2022 and 2023 and being recognized on the prestigious CDP's Climate Change A List—are major milestones. We've improved ESG ratings on indices like FTSE and MSCI, reflecting our sustainability efforts.

As we implement **Sustainability Strategy 2.0**, we'll continue strengthening targets in areas like conflict minerals tracking, gender pay gap reporting, and board diversity.

However, we face challenges such as adapting to regional compliance standards and managing risks tied to natural disasters or emerging technologies like Al. Staying ahead of regulatory changes, especially as a global company, requires proactive planning and robust governance.

Despite these challenges, I'm excited to accelerate our ESG efforts and demonstrate how we're creating value for all stakeholders.







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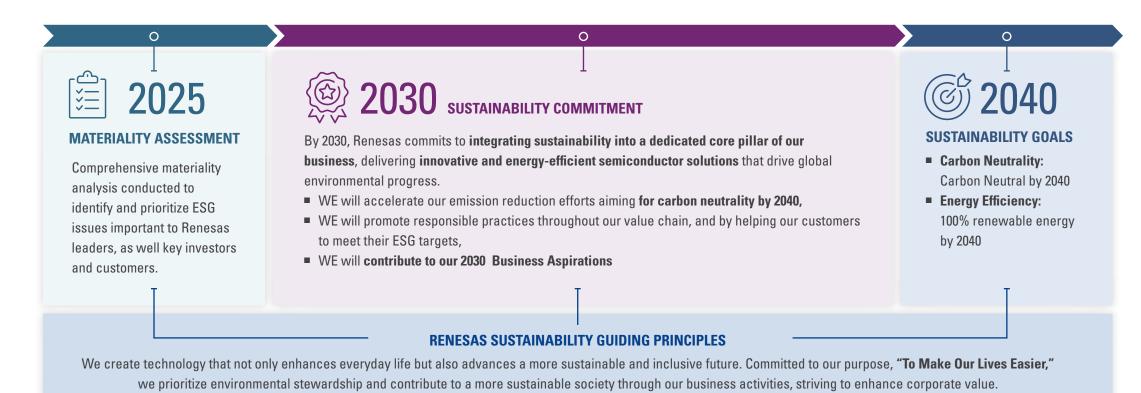


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### **Our Sustainability Strategy and Commitments**

#### **Renesas Sustainability Roadmap**

Renesas' Sustainability Strategy 2.0 is a long-term strategy guided by our company purpose and the Renesas Electronics Group Sustainability Guiding Principles. It establishes a clear path toward our carbon neutrality goal by 2040, with interim 2030 sustainability commitments that directly align with our business aspirations.



Launched in April 2025, our Sustainability Strategy 2.0 builds on the foundation established by our Strategy 1.0 in 2022. Strategy 2.0 takes us to the next phase by fully integrating environmental, social, and governance priorities into our business. By aligning our business goals with global sustainability challenges, we're positioned to deliver both financial performance and positive societal impact, creating lasting value for customers, employees, investors, and communities.











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#### OUR SUSTAINABILITY STRATEGY AND COMMITMENTS CONTINUED

#### **Renesas Sustainability Framework**



As part of our renewed strategy development, we conducted a comprehensive gap analysis and materiality analysis improving upon our 2022 evaluation. The gap analysis provided a snapshot of our current sustainability performance compared to peers, investor requirements, and customer expectations. Meanwhile, the materiality analysis focused on identifying mid-to-long term stakeholder priorities and their business implications. This thorough process incorporated feedback from investors, customers, and management to reflect changes in the business environment. The final materiality map is divided into three layers: priority topics, strategic topics, and monitoring topics, which guide strategic resource allocation and target monitoring.

Key elements of Renesas' Sustainability Strategy 2.0 based on our materiality analysis results, include climate action, energy management, supply chain transparency, data privacy, cybersecurity, risk management, and diversity and inclusion. Each priority area connects directly to our business strategy, with specific targets and KPIs to track progress.

We've also accelerated our carbon neutrality target from 2050 to 2040, responding to industry standards and stakeholder expectations. Our path to carbon neutrality focuses on three main areas: reducing PFC gases, expanding renewable energy use, and improving energy efficiency. We've developed a detailed roadmap for these initiatives and remain on track to achieve our SBTi-certified target of 38% emissions reduction (Scopes 1+2) by 2030 compared to 2021 levels.

#### **Embedding Sustainability Culture within Our Organization**

As part of our plan to accelerate sustainability and engage our stakeholders, we've launched internal sustainability webcasts and incorporated sustainability topics into our board of directors and new employee training. These initiatives help communicate emerging trends and challenges while keeping employees updated on our programs and performance. We're now developing a comprehensive training program for all internal stakeholders to further strengthen sustainability awareness and implementation across the organization.

To strengthen governance and accelerate sustainability, we've established a robust structure where the Sustainability Department reports directly to our CEO and to the Board of Directors. This includes the cross-functional Sustainability Operating Team that drives day-to-day initiatives, and the Audit and Sustainability Committee for executive oversight. The Sustainability Department regularly reports progress to the ASC to ensure effective implementation.























#### **Materiality Analysis**

To ensure that we are aligned with the ever-changing priorities of our stakeholders, we renewed our materiality analysis in 2025. This comprehensive materiality analysis serves as the foundation of Sustainability Strategy 2.0.

OUR SUSTAINABILITY STRATEGY AND COMMITMENTS CONTINUED

To help us identify and prioritize ESG issues of mutual importance, we have engaged with a diverse group of Renesas leaders, including our CEO, CFO, CHRO, and Head of Operations. These stakeholders were selected after consideration of their responsibility and proximity to sustainability issues. In addition to our management team, surveys with ELT members and interviews were also conducted with a selection of Renesas' key investors and customers. Based on the input from our internal and external stakeholders, we formulated mid and long-term strategies to address our key material issues and minimize ESG risks.

This materiality analysis was conducted with the following aims:

- Strengthen accountability and improve transparency for all stakeholders, including customers, suppliers, and employees
- Align with Renesas' business strategy and clarify our mid and long-term ESG goals and targets
- Ensure consistency with global sustainability standards and best practices

Our 2025 materiality map defines material topics in three layers: Priority Topics (high business and stakeholder impact), Strategic Topics (core to operations and reputation), and Monitoring Topics (monitor for future impact).









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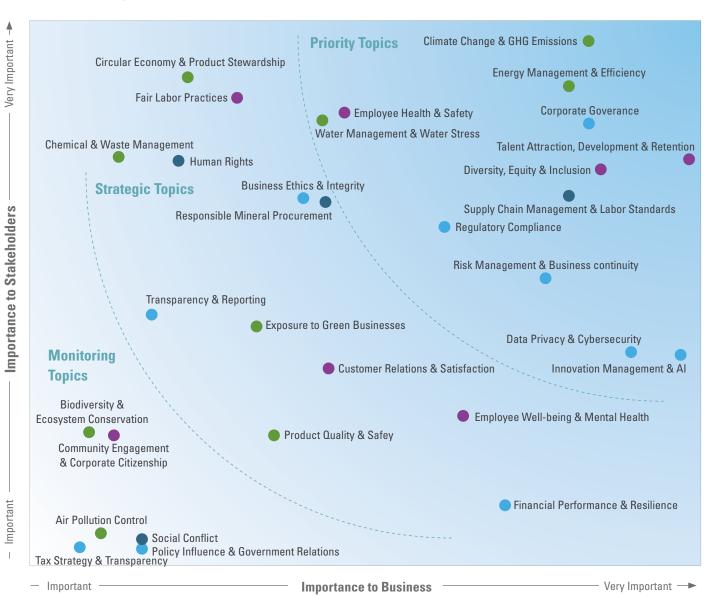






#### OUR SUSTAINABILITY STRATEGY AND COMMITMENTS CONTINUED

#### **Materiality Map**



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Priority Topics	High focus and importance to both stakeholders and business. These topics have a direct and immediate impact on business success and stakeholder trust, including customers and investors.
Strategic Topics	Core importance to business operations and reputation. Failure to manage these effectively (e.g., data privacy, product quality) could lead to significant business or reputational damage. These topics also have the potential to become high-priority issues in the near future.
Monitoring Topics	Lower current relevance but important to track for potential long-term impact. These topics may rise in priority based on external factors or business changes.

<u>Visit our website</u> to learn more about our 2025 materiality results.

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# **ESG Targets**

#### **Environment**

2025 Material Topic	Renesas Sustaina	Renesas Sustainability Goals		FY2024 Progress	Contribution to SDGs
Climate Change & GHG Emissions Energy Management & Efficiency	Envrionmental Initiatives Climate Change Initiatives	Achieve carbon emissions reduction throughout global operations and value chain.  Targets: 2030: Reduce GHG emissions by 38% (from FY2021 base year) 2026: Reduce Scope 3 Emissions by 17.5% (from FY2023 base year) 2040: Achieve carbon neutrality (Scope 1+2) 2040: Utilize 100% renewable energy	On-Track	21.6% emissions reduction at applicable manufacturing sites and offices (Scope 1 +2) (from FY2021 base year)  Read more	
Water Management	Conserving	Reduce water consumption by improving manufacturing efficiency and conserving water.  Targets: 2030: Improve the total amount of water used per revenue by 33% (from 2021 base year) 2030: Increase the water recycling rate at global production bases to 35%	On-Track	32% improvement in total water usage by revenue (from FY2021) 32% water recycling rate	3 GOOD HEATTH G GLEAN WATER BY AND WHILE HEAD TO AND ADMINISTRAN BY AND SWISTINGTURE OF AND SWISTINGTURE OF AND SWISTINGTURE
& Water Stress	Water	Promote water resource conservation in areas with high water risks.  Targets:  2025: 21% improvement in water use per production-related revenue at Renesas Semiconductor (Beijing) Co., Ltd.  2025: 31% improvement in water use per production-related revenue at Renesas Semiconductor (Suzhou) Co., Ltd.	Exceeding Target	27% improvement in water use per production- related revenue at Renesas Semiconductor (Beijing) Co., Ltd. 32% improvement in water use per production- related revenue at Renesas Semiconductor (Suzhou) Co., Ltd.	11 SIGNAMARI CITIES  12 REPRISORE  AND PRODUCTION  AND PRODUCTION  TO SIGNAMARI  TO SI
Chemical & Waste Management	Chemical Substances Use Management	Reduce environmental risks by reducing, substituting, and properly disposing of chemical substances that pose health, safety, and environmental concerns, and by appropriately responding to global regulations and customer demands.  Targets:  Maintain VOC emissions at FY2010 levels or lower Zero violations of major environmental laws and regulations	Exceeding Target	Achieved about 70% reduction in VOC emissions compared to 2010.  No environmental laws and regulations	





















### ESG TARGETS CONTINUED

#### **Environment Continued**

2025 Material Topic	Renesas Sustainability Goals		Status	FY2024 Progress	Contribution to SDGs
Chemical &	Waste	Strive to reduce, reuse or recycle as much waste as possible.  Target:  2030: Consistently maintain a waste recycle rate of 90% or more	On-Track	92% of waste recycled in FY2024	3 GOOD MEALTH GO GLAN WHEE AND SAME SAME SAME SAME SAME SAME SAME SAME
Waste Management Management	Reduce the generation and disposal of hazardous waste across all operations.	On-Track	3.8% reduction hazardous waste generated at applicable manufacturing sites and offices (compared to FY2023)	7 CLAN HORSENEY 9 NOVEM PROGRAMMENT 11 SETEMBARE OFFEE 11 SETEMBARE OFFEE 12 SECTIONAL OFFEE 13 SECTIONAL OFFEE 14 SECTIONAL OFFEE 14 SECTIONAL OFFEE 15 SECTIONAL OFFEE 16 SECTIONAL OFFEE 17 SECTIONAL OFFEE 17 SECTIONAL OFFEE 18 SECTIONAL OF	
Circular Economy & Product Stewardship	Circular Economy	Promote the research, development, and design of Renesas Green Devices which support the creation of environmentally-conscious end products.  Target: 2025: 90% of newly developed products are designated as Renesas Green Devices	Making Progress	89% Renesas Green Devices in new product development across all product groups	13 admit 15 lift laboration 15 l

#### Social

Diversity, Equity & Inclusion	Diversity, Equity, & Inclusion	Attract more women to Renesas through inclusive recruitment efforts and engaging our diverse colleagues through development to achieve their potential.	On-Track	15% of management positions held by women 28% of women in total workforce	
Talent Attraction, Development & Retention	Human Capital Management	Enhance the overall candidate experience and gather feedback to continuously improve the recruitment process.  Targets: 2025: 70% of candidates to report a neutral/positive experience. 2030: 90% of candidates to report a neutral/ positive experience.  Replace physical TA materials with digital ones  Targets: 2025: 70% of materials provided digitally 2030: 95% of materials provided digitally	On-Track	Read more	4 COLUMN SOCIED SERVICE SERVIC
Employee Health & Safety	Employee Health & Safety	Protect the health and safety of employees and create a safe and pleasant workplace environment.  Target: 2025: Zero occupational accidents with days away from work	Making Progress	6 occupational accidents with days away from work	







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### ESG TARGETS CONTINUED

#### Governance

2025 Material Topic	Renesas Sustainability Goals		Status	FY2024 Progress	Contribution to SDGs
Corporate Governance	Governance Structure	Maintain a corporate governance structure that is transparent, enabling fair, fast, and resolute decision-making and robust accountability.	On-Track	[LInk to "Governance Structure" section of the B&S Report]	
Regulatory Compliance	Compliance & Business Ethics	Comply with relevant laws, regulations, and codes of practice and strive to meet higher global standards.  Target: 2025: 100% Employee Code of Conduct completion rate	On-Track 92% of employees successfully completed Code of Conduct training		16 Pures puries  And Strong  Antimities
Risk Management & Business Continuity	Risk Management	Continuously strengthen risk management system by proactively identifying, analyzing, and responding to Group-wide risks and promptly resolving them.	On-Track	Read more	<u>Y</u>
Innovation Management and AI	Information Security Management	Implement responsible data privacy and cybersecurity practices to protect employees, customers, and other key stakeholders.  Targets: 2025: Obtain ISO/IEC 27001 certification 2025: 100% of employees complete cybersecurity training	On-Track	83% of employees successfully completed cybersecurity training	

#### **Business Responsibility**

Human Rights	Commitment to Protecting Human Rights	Strengthen our human rights approach in line with industry best practices, including enhanced due diligence and policy improvements.	On-Track	Read more	
Supply Chain Management & Labor Standards	Supplier Engagement	Promote supplier best practices and strengthen our supply chain sustainability performance.  Targets: 2027: 100% Agreement to Renesas Supplier Code of Conduct from key suppliers 2027: 100% RBA SAQ response rate obtained from key suppliers	On-Track	FY2024: 92% of key suppliers agreed to the Renesas Supplier Code of Conduct FY2024: 100% RBA SAQ response rate obtained from key suppliers	8 DECENT HIDRE AND CONCOUNT CONVEY!  16 PANCE, AUSTROCK DISTRIBUTION D
Responsible Mineral Procurment	Responsible Minerals Sourcing	Realize responsible mineral procurement with the aim of procuring materials that do not include conflict minerals from OECD conflict-affected and highrisk areas.  Target: 2027: 100% completion of conflict minerals (3TG) survey in accordance with RMI procedures	On-Track	FY 2024: 100% completion of conflict minerals survey in accordance with RMI procedures	







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# **Stakeholder Management**

At Renesas, we acknowledge the significant impact our business operations and sustainability initiatives have on our key stakeholders and global communities. We maintain regular engagement and open communication with all key stakeholders regarding our progress on critical issues. This approach ensures our sustainability strategy and priorities are closely aligned with the concerns of our diverse stakeholders.

Stakeholders	How Renesas Engages					
Customers	<ul> <li>Trade shows</li> <li>Regular meetings and information exchange</li> <li>Audits</li> </ul>					
Suppliers and business partners	<ul> <li>ESG SAQs and self-improvement requests</li> <li>Trainings on ESG topics</li> <li>Adherence to the Renesas Supplier Code of Conduct</li> <li>Third party audits</li> </ul>					
Local communities and partners (NGOs, etc.)	<ul> <li>Charitable donations</li> <li>Global volunteer activities</li> <li>Key partnerships collaborative initiatives</li> </ul>					
Educational establishments	<ul> <li>Internship partnerships at graduate/post-graduate levels</li> <li>Joint research</li> <li>Graduate recruitment</li> </ul>					
Industry associations	Participation in various industry consortiums and associations					
Regulators and government agencies	<ul> <li>Annual reporting towards regulatory compliance</li> <li>Visits and consultation meetings</li> </ul>					
Employees	<ul> <li>Annual Culture Survey</li> <li>Career development trainings</li> <li>Global intranet portal</li> </ul>					
Shareholders	<ul> <li>Renesas Capital Markets Day</li> <li>Financial disclosures and Business &amp; Sustainability Report</li> <li>Ad-hoc questionnaires and surveys</li> </ul>					
Media	<ul> <li>Press release issuance</li> <li>Social media</li> <li>Participation in conferences</li> </ul>					







About Renesas















### **2024 ESG Highlights**

If you'd like to learn more, click on any tile to be directed to the relevant section.

**Environmental** 

21.6%
GHG emission
reduction achieved
in 2024 compared
to fiscal 2021

RBA VAP
Platinum
certification obtained
at our Naka factory

Revised our Renesas Supplier Code
of Conduct in line with RBA, with
92% Agreement
reached with key suppliers as of
February 2025

Governance

30%
Board
Diversity
(female representation)

**Business Responsibility** 

Updated our

Human
Rights
Policy to align with
global best practices

Expanded scope of
Renesas
"Green Devices"
from REN-CORE products to all product groups

Working
Abroad
program to cover
all employees

**Social** 



Renesas employees
dedicated
5.07
Million
yen worth of their time
to volunteer activities

32% improvement in total water usage by revenue (from FY2021) and 32% water recycling rate

Conscious Inclusion
training for all employees and
Inclusive Leadership
training for managers pilot in October 2024

Established
global guidelines
for employee
use of generative

Al Tools

Enhanced ESG Governance

via the formation of the Audit & Sustainability Committee and Sustainability Operating Team in January 2025

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## **2024 Ratings, Scores, and Indices**

We take pride in the global and regional evaluations of our ESG policies and practices, as well as our enhanced data disclosure. Our ongoing efforts further underscore our commitment to ESG principles for our customers, business partners, and investors. In 2024, we have successfully increased or maintained our score or inclusion status across all ESG ratings firms and indices we track.

Index/Rating Name		Rat	ing/Score		Scale
		2023	2024		
	FTSE ESG	4.5	4.7	•	1 to 5
FTSE	FTSE4Good Indes	Index Member	Index Member		_
Russell	FTSE Blossom Japan Index	Index Member	Index Member		_
	FTSE Blossom Japan Sector Relative Index	Index Member	Index Member		_
MCCL	MSCI ESG Ratings	AA	AA	<b>*</b>	CCC to AAA
MSCI 🏶	MSCI Japan Empowering Women Index	Index Member	Index Member		-
S&P Global	CSA (Corporate Sustainability Assessment)	65	65	•	1 to 100
SUSTAINALYTICS	Company ESG Risk Ratings	19.2 (Low risk)	19.0 (Low risk)	<b>1</b>	50 to 1 (high to low risk)
	Climate Change	В	A-	•	D to A
CDP	Water Security	В	В	•	D to A
	Supply Chain	А	TBA		D to A
ecovadis	EcoVadis	62	69	•	0 to 100

# Renesas is proud to be included in the following ESG indices:

- FTSE4Good Index
- FTSE Blossom Japan Index
- FTSE Blossom Japan Sector Relative Index
- MSCI Japan Empowering Women Index
- Gender Diversity Tilt Index
- Carbon Efficient Index
- Sustainability Index

- ♠ Rating improved from previous year
- → Same rating as previous year





















### **Sustainable Technology and Innovation**

#### Innovation for a Sustainable Future

As the world's leading semiconductor company, Renesas aims to build a future in which sustainable products and solutions using cutting-edge technologies make people's lives easier and create a better world.

With the spread and expansion of high-speed, high-capacity communication, everything around us is becoming intelligent and interconnected, requiring high computational performance for each device. In such a technologically advancing world, achieving an environmentally friendly and sustainable society necessitates that our products and solutions, as well as the systems in which they are integrated, are energy-efficient and safe. Renesas will continue to provide low-power, safe and secure products and solutions to achieve those goals. For more information on Renesas' low-power products and solutions, visit our Innovation webpage.

#### **Focus Areas for Sustainability and Related Products**

		Smart Electric Vehicles Solutions MCU, IPS, IGBT, PMIC			
	Renasas's Green devices and technology  Green Devices, SOTB, Future technologies	Smart Autonomous Drive Solutions SoC, Radar, PMIC, UWB, WPC			
Projects related to alleviating		Smart Data Center Solutions MID, Infra core power			
environmental impacts through our		Smart Cellular Solutions RF, Infra core power			
business activities		Smart Society Solutions			
Green electricity, Water recycling		MCU	Renewable energy		
,, a.c., 100, cg		MPU Sensor	Building automation		
		IGBT	Factory automation		
			IoT, Home appliance		
			Future applications		

UMB: Ultra Wide Band

WPC: Wireless Power Charging

MID: Memory Interface Device

SOTB: Silicon on Thin Buried Oxide

IPS: Inductive Position Sensor

IGBT: Insulated Gate Bipolar Transistor

PMIC: Power Management IC







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#### SUSTAINABLE TECHNOLOGY AND INNOVATION CONTINUED

### Renesas technologies featured at ISSCC 2024



As part of Renesas' innovative technologies in the field of embedded processing, the following papers were accepted at the International Solid-State Circuits Conference (ISSCC) 2024, the foremost global forum for

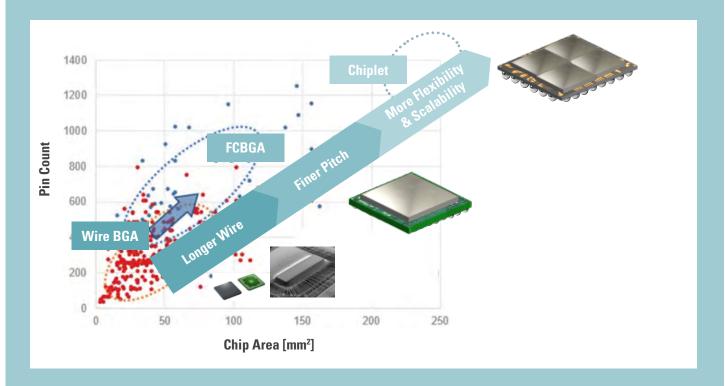
presentations of advances in solid-state circuits and systemon-chips. We hope that these results presented at ISSCC will contribute to global greening through power efficiency and intelligence.

- Memory Technology: "A 22nm 10.8Mb Embedded STT-MRAM Macro Achieving over 200MHz Random Read Access and 10.4MB/s Write Throughput with In-field Programmable 0.3Mb MTJ-0TP for High-end MCUs" (Tomoya Ogawa, Ken Matsubara, Yasuhiko Taito, Tomoya Saito, Masayuki Izuna, Koichi Takeda, Yoshinobu Kaneda, Takahiro Shimoi, Hidenori Mitani, Takashi Ito, Takashi Kono, Renesas Electronics, Tokyo, Japan)
- Al Technology: "A 23.9 TOPS/W @ 0.8V, 130 TOPS AI accelerator with 16x performance accelerable pruning in 14nm heterogeneous embedded MPU for real-time robot applications" (Koichi Nose, Taro Fujii, Katsumi Togawa, Shunsuke Okumura, Kentaro Mikami, Daichi Hayashi, Teruhito Tanaka, Takao Toi, Renesas Electronics, Tokyo, Japan)

#### **Spotlight: Chiplet design**

Renesas' Co-CTO Shinichi Yoshioka was invited to speak at the International Semiconductor Executive Summit Japan (ISES JAPAN) on March 6, 2024. This international conference brings together major semiconductor manufacturers, equipment and material suppliers, and research institutions to discuss innovative technologies.

During the event, Yoshioka emphasized the importance of promoting the co-design of hardware and software, a principle Renesas has long advocated. He also explained the key aspects of chiplet development as a platform for implementing and building this approach. As innovative technologies facilitate our customers' system development, Renesas is committed to challenging digitalization/virtualization. Moving forward, this will remain a major guiding principle for our company.













































# Leadership Perspective: Environmental Stewardship and Sustainable Growth

A Conversation with Takeshi Kataoka, Head of operations, and Charles Kawashima, Chief of Staff to president and CEO, Vice President

#### Q: Milestones achieved in the recent fiscal year

Kataoka: "We are steadily building achievements toward a sustainable future."

In FY2024, we reduced greenhouse gas emissions by 21.6% compared to 2021 levels. This reduction was achieved through energy conservation measures, including the implementation of energy-efficient equipment, alongside decreased production due to softening end demand. Specifically, we implemented measures such as upgrading freezers with optimal control systems, updating compressors with quantity control, renovating boilers, and upgrading dry pumps. Additionally, we implemented initiatives to reuse natural energy, utilize vaporization energy, winter free cooling, waste heat recovery and reuse, and water spray humidification.

Regarding global water resource conservation, we have set specific targets for efficient water usage at our factories in Beijing and Suzhou, China. In FY2024, both factories achieved their efficiency targets set at the beginning of the year. Including these activities, our company-wide water usage per unit of sales reached 1.7, achieving our FY2030 target of 99%. Furthermore, we maintain our waste recycling rate was 92% in 2024, it was above the target of 90%.

#### Q: Renesas' biggest environmental risks, challenges, and solutions

Kataoka: "We are further developing concrete measures to address climate change challenges."

Our most significant environmental risk is climate change, and the solution lies in reducing greenhouse gas emissions in line with globally recognized reduction targets. Specifically, for PFC gases, which account for about 80% of Scope 1 emissions, we are setting emission reduction targets while optimizing processes to reduce PFC gas usage, considering installation of abatement equipment, and working with suppliers to investigate switching to gases with lower GWP. For Scope 2, we are implementing energy-saving measures and introducing renewable energy (purchasing FIT non-fossil certificates) for electricity, our largest GHG emission source. We are also implementing solar power generation (PPA) at our production sites in China and Malavsia.

We are steadily building achievements toward a sustainable future."



Head of Operations, Senior Vice President















Soci







### **Leadership Perspective**

## Q: Balancing financial growth acceleration with environmental impact minimization

**Kawashima:** "Understanding stakeholder expectations is crucial for sustainable growth balance"

Balancing financial growth acceleration with environmental impact minimization is crucial for sustainable corporate management. To achieve both financial growth and environmental/social considerations, we need to implement renewable energy use, efficient resource utilization, environmentally conscious product design, social responsibility fulfillment, and transparency in reporting - all aligned with stakeholder expectations. Given my responsibility for the environmental initiatives, I realize the importance of identifying key issues in environmental impacts, identifying risks and opportunities, while also considering the business impact, and ensuring that measures are prioritized and implemented. We also recognize that this balance requires engagement across the entire supply chain, not just within our company. We believe cooperation with suppliers and establishing environmental standards are necessary to reduce environmental impact.

## Q: New initiatives and programs planned for 2025 and their objectives

**Kawashima:** "Accelerating the achievement of carbon neutrality"

This fiscal year, we moved forward our carbon neutrality target from 2050 to 2040. This acceleration came after studying stakeholder expectations last year and identifying gaps with our activities. Recognizing a global gap in our previously set climate change targets, we immediately set more aggressive goals aligned with stakeholder expectations. As a specific initiative, we set a new renewable energy target of 100% implementation by 2040. We will clarify the renewable energy implementation plan and specify cost calculations and decision points for PFC measures. Progress toward these targets will be regularly reported to the newly established Sustainability Audit Committee to ensure achievement.

#### Q: Initiatives to meet stakeholder expectations

Kawashima: "Continuously improving activities to meet stakeholder expectations"

We understand that stakeholders expect us to maintain financial growth while addressing climate change, contributing to a circular economy, developing sustainable products, and providing transparent environmental data disclosure. We evaluate our environmental performance through peer comparison and industry benchmarking to assess our position and identify areas for improvement.

Specifically, for climate change response and circular economy contribution, we are implementing measures to achieve globally recognized environmental targets. For sustainable product development, we conduct product environmental assessments to manage chemical substances and reduce material environmental impact. We enhance data reliability through third-party verification reports and maintain transparency through annual Business & Sustainability Reports and regular website updates. Additionally, we actively promote environmental education for employees through bi-annual e-learning programs, which form the foundation of our

**Charles Kawashima** 

sustainability activities.

Chief of Staff to President and CEO, Vice President















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### **Environmental Initiatives**

Renesas is committed to reducing the environmental impact of its production activities and developing eco-friendly products that help improve the environmental performance of its customers, in accordance with our Environmental Policy and Action Guidelines established with the approval of the CEO.

#### **Environmental Action Guidelines**

At Renesas, we will strive to foster a sustainable society that can last decades, by providing environmentally-friendly semiconductor products and solutions throughout their entire life cycle, from research and development, design, procurement, production, sales, distribution, use, to disposal.

We are committed to reducing our environmental impact and preventing environmental pollution in all areas of our business. At the same time, we will comply with environmental laws and regulations and continue to improve our global environmental management system.

- Response to Climate Change: We will strive to reduce energy consumption throughout
  the value chain, use energy efficiently, and minimize greenhouse gas (GHG) emissions to
  support the goal of becoming carbon neutral.
- Effective Use of Resources: We will make efficient use of all resources required for our businesses. In particular, we will strive to use water resources appropriately, minimize waste, and promote recycling.
- Biodiversity Conservation: We will contribute to biodiversity conservation through our business activities and promote the concept of biodiversity that is critical in supporting a rich and healthy society.

We help build a better society by proactively disclosing environmental information with our stakeholders to establish mutual understanding and by actively communicating with them.























#### **ENVIRONMENTAL INITIATIVES CONTINUED**

#### **Environmental Management System**

Renesas' Environmental Policy and the Basic Rules of Environmental Management are defined in our Basic Management Rules. We have established an environmental management system across all offices and sites including partner companies to promote environmental activities. The Sustainability Operations Department oversees all of Renesas' environmental activities, reports, and makes suggestions on results of various environmental activities, challenges, and issues to the Head of Global Environmental Operations appointed by Executive.



**Environmental management systems established and PDCA cycle** implemented at each site, including affiliated companies.

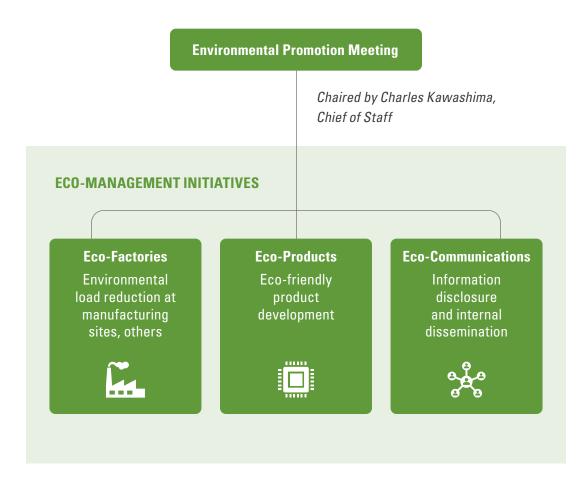


All of our domestic and overseas manufacturing sites have ISO14001 certification, an international standard for environmental management systems

In particular, with regard to GHG reduction and water resource conservation, we regularly monitor our progress toward our targets to ensure that we are up-to-date on the latest status. In addition, in 2024, there were no violations of environmental laws or ordinances, environmental accidents or complaints as in the year before last.

#### **Three Focus Areas**

We promote global environmental management based on the "Eco-Management Initiative" system to address important issues including (1) Legal and regulatory compliance, (2) Reduction of environmental impact, (3) Eco-friendly product development, and (4) Stakeholder relationship management.



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#### ENVIRONMENTAL INITIATIVES CONTINUED

### **2024 Environmental Activity Results**

Categories		Activities In 2024	Results Of 2024
Eco-Management Activities		Promotion of environmental performance improvement measures and maintenance of ISO14001 certification	Underwent a renewal audit by an ISO certification body and completed certification renewal
Eco-Factory Initiatives		Reduce 5 years average energy consumption per basic unit by 1% or more (effort target of the Energy Conservation Law)	<ul> <li>Energy consumption per unit of production (5-year average)</li> <li>Renesas (domestic bases): Expected to increase by 4.7%</li> <li>Renesas Semiconductor Manufacturing: 1.6% increase</li> </ul>
		Maintain PFC emission to below emission levels of 2015 (per wafer area	PFC emissions reduced by 0.012 percentage points compared to 2015 (wafer area intensity)
	Eco-Product Initiatives	Appropriately respond to various regulations in Japan and overseas as well as customer demands	No violation of environmental laws or ordinances
		Maitain 80% or more Green Devices ratio of newly mass produced products	FY2024 Green device ratio: 88.5%
	Eco-Communication Initiatives	Improve environmental information disclosure to stakeholders	<ul> <li>Acquisition of third-party verification of environmental data</li> <li>Issuance of Sustainability Report</li> </ul>
		Renewed training materials for rank-based training and environmental e-learning / conducted training	<ul> <li>Implementation of e-learning for new employee training, new managerial training, etc.</li> <li>Periodic in-house dissemination of environment-related information</li> </ul>
		Active promotion of biodiversity conservation activities	<ul> <li>Implemented 130 biodiversity activities at global manufacturing sites and sites</li> <li>Global Deployment of Voluntary Activity Indicators</li> </ul>





















### **Climate Change Initiatives**

#### **Our Commitment to Carbon Neutrality**

Renesas aims to achieve carbon neutrality by 2040, advancing the target by ten years from 2050 to minimize the impact of climate change. As an interim target, we have set a goal for 2030 to reduce greenhouse gas (GHG) emissions from business activities (Scope 1 and 2) by 38% compared to 2021 levels. This is in line with the 1.5°C target (an effort to limit the increase in global average temperature to 1.5°C compared to preindustrial revolution levels). We are committed to having 70% of our suppliers (by emissions covering Category 1) set science-based targets by 2026 (Scope 3).

We plan to achieve our goal by reducing the emission of perfluoro compound (PFC)—a GHG that heavily impacts the environment—and meeting Japanese electrical and electronics industry targets in Japan and the energy intensity reduction target in accordance with the Energy Conservation Law. These initiatives also include expanding the use of reusable energy at our manufacturing sites. In August 2022, the <a href="Science-Based Target initiative">Science-Based Target initiative</a> (SBTi) certified our midterm targets (announced on August 25, 2022).

#### **SBTi-Certified Renesas GHG Emissions Reduction Targets**

Categories Of GHG Emissions	Level	Target
Scope 1 + Scope 2	1.5°C	Renesas to reduce GHG emissions by 38% in 2030, compared to 2021 levels
Scope 3	WB2.0°C	Suppliers (including outsourcing partners) that account for 70% of GHG emissions in Category 1 of Scope 3 to set Science Based Targets for GHG reductions by 2026

<sup>&</sup>quot;Scope 1" refers to direct GHG emissions from the activities of a company.

<sup>&</sup>quot;WB 2.0°C (well-below 2.0°C)" refers to the GHG reduction targets to keep a global temperature rise well-below 2.0°C compared to pre-industrial revolution levels.





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<sup>&</sup>quot;Scope 2" refers to indirect emissions from electricity, heat, and steam purchased and used by a company.

<sup>&</sup>quot;Scope 3" refers to all indirect emissions not covered by Scope 1 or Scope 2, produced by third parties for the purpose of a company's activities.

<sup>&</sup>quot;Scope 3 Category 1" refers to the products and services purchased by a company.





















#### CLIMATE CHANGE INITIATIVES CONTINUED

#### **Our Response to the TCFD Proposal**

In April 2021, Renesas declared its support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and also joined the TCFD Consortium of Japan. Based on the TCFD framework, we also make every effort to disclose information about the risks and opportunities to our business posed by climate change including "Governance," "Strategy," "Risk Management" and "Indicators and Targets." We have also developed a business strategy that further takes climate change into consideration and made strategic decisions to reduce risks and maximize opportunities brought by climate change (Learn more).



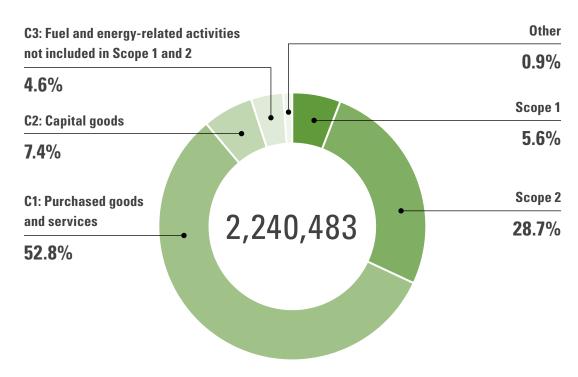


#### **Environmental Impact of the Entire Value Chain**

In order to understand the environmental impact of our business activities including the value chain, we have calculated the amount of greenhouse gas (GHG) emission from scope 1 through 3 based on the GHG protocol.

#### **2024 Renesas' GHG Emissions by Scope**

(t-C02)



See Appendix ("Independent Verification Reports – 2024 Environmental Data")





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About Renesas









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#### CLIMATE CHANGE INITIATIVES CONTINUED

#### **Greenhouse Gas (GHG) Emission Reduction**

Renesas mainly uses perfluoro compound (PFC) (Note 1) gas, one of the GHGs, as a process gas for plasma etching and wafer cleaning, and as a cleaning gas for reaction chambers in the semiconductor manufacturing process. These gases are not easily decomposed, and their global warming potential (Note 2) is high, ranging from about 7,000 to more than 20,000. Therefore, the reduction of these emissions is important, and we are actively working to prevent global warming by setting targets for reducing PFC gas emissions. Methods to reduce GHG emissions from PFC gas include 1) changing to smaller GWP gases, 2) reducing PFC gas usage by optimizing processes, and 3) installing detoxification equipment to decompose PFC gases. By combining these three methods, our group has been developing technologies to reduce its emissions target to 90% of the 1995 emission level or lower by 2010. Since 2010 we have continued our reduction efforts, despite structural reforms, and made a large reduction in 2015 where emissions were approximately 20% lower than the 1995 emission levels.

Now that the structural reforms have been completed and we have entered into a growth phase, in 2024, compared to 2015, we achieved a 0.012 percentage point reduction in wafer area per unit of production and approximately 51% reduction in total emissions. Efforts will continue to be made to further reduce emissions beyond 2025.

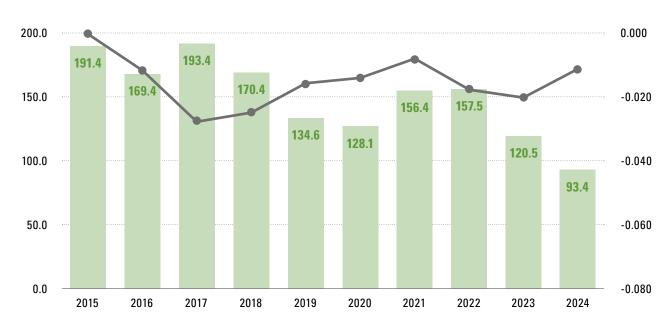
Note 1: PFC; The semiconductor industry has declared emission reductions for CHF3, CF4, C2F6, C3F8, C4F8, SF6 and NF3

Note 2: GWP; a coefficient indicating how much a given mass of GHG is estimated to contribute to global warming ( $C0^2=1$ )

#### Changes in PFC gas emissions & PFC gas emission per unit of wafer area



























#### CLIMATE CHANGE INITIATIVES CONTINUED

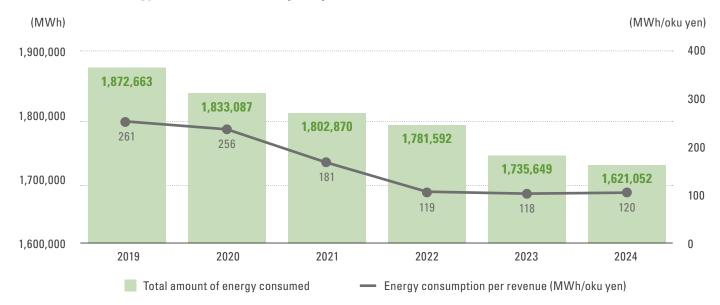
#### **Energy Reduction**

In 2024, we reduced energy consumption by 6.6% compared to the previous year of 2023. Although the energy-saving measures were implemented at each factory, the decrease in demand was due to a softening semiconductor market. This resulted in a slight increase in Energy intensity against revenue from the previous year of 2023.

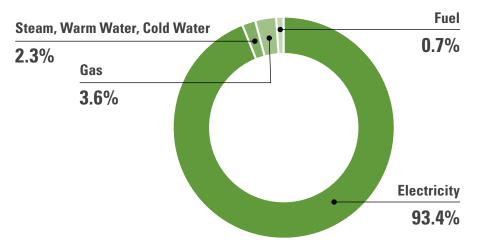
In 2025, we will continue to promote energy-saving measures and strive for efficient use of energy corresponding to the Group's business activities in order to reduce energy consumption and prevent global warming.

In addition, every year, Renesas aims to reduce energy consumption in Japan, which accounts for approximately 80% of the energy consumption of Renesas as a whole, by 1% or more per unit (5-year average). This is in line with the Energy Conservation Law's effort targets. As part of our energy reduction activities to achieve the goal, we have participated in the "Carbon Neutrality Action Plan," an initiative undertaken by the Japanese electrical and electronics industry since 2021. This plan aims for the development of innovative technology which will contribute to the prevention of global warming, promoting international contributions though the transfer of technology, strengthening the cooperation among supply chains.

#### **Total Amount of Energy Consumed vs Consumption per Revenue**



#### Composition ratio of energy use for 2024

















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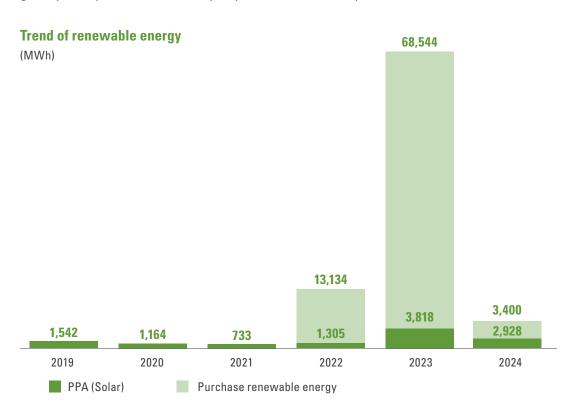
#### CLIMATE CHANGE INITIATIVES CONTINUED

#### **Renewable Energy**

Renesas is expanding the installation of renewable energy, mainly at its production sites, to achieve its greenhouse gas (GHG) reduction targets.

In Japan, we started purchasing green electricity in 2022. We are also installing solar panels (PPA) outside of Japan and began the operation at a production base in China and Malaysia during the second half of 2022.

In fiscal 2024, due to a softening in demand for our semiconductors, we were able to fully achieve our annual greenhouse gas reduction target through a reduction in the operation of our production bases and energy-saving measures, so we temporarily adjusted the amount of green power purchased from the perspective of business operations.



#### Overview of solar panel (PPA) installation bases



#### **Production base**

Renesas Semiconductor (Beijing) Co., Ltd.

**Country** China

System

Solar power PPA

Power generation

amount 283kwh/h

**Operation start** October 2013



#### **Production base**

Renesas Semiconductor (Suzhou) Co., Ltd.

**Country** China

System

Solar power PPA

Power generation

**amount** 178kwh/h

**Operation start** October 2022



#### **Production base**

Renesas Semiconductor KL Sdn. Bhd.

**Country** Malaysia

System

Solar power PPA

Power generation

**amount** 137kwh/h

**Operation start** 

December 2022

















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Business Responsibility



### **Conserving Water**

We recognize that water resource conservation is not only a global environmental issue but is essential for stable operations within the semiconductor industry. The manufacturing process requires a large amount of water, and the depletion of water resources could lead to stagnant production as well as impact the procurement of raw materials. To help mitigate this operational risk, we use ultrapure water refined from industrial water and other sources, particularly at manufacturing sites, for a variety of applications including cleaning semiconductor wafers and cooling of equipment.

We regularly monitor information on water intake and usage by water source and wastewater volumes by discharge destination at all of our manufacturing sites, and manage the quality of wastewater in compliance with local and administrative laws and regulations. In addition, we are striving to improve the recycling rate and efficient use of water, and the entire group is working to improve the total amount of water used per revenue. At manufacturing sites located in areas where water risks are anticipated, we continue to make efforts to minimize the impact on the ecosystem of the region by setting and implementing improvement targets for water use per production related revenue. In addition, to support forest protection activity that nurtures water resources and conserves biodiversity, we plant trees and contribute to the creation of forests that protect these water resources.

#### **Water Resource Conservation Policy**

- Improve water utilization efficiency as a means to protect water resources globally
- Expand the recycling rate for efficient use of water
- Promote water resource conservation in areas with high water risks (areas where sufficient water supply is at risk in the neighborhood)

#### **Efficient Use of Water**

We aim to reduce consumption by improving manufacturing efficiency and conserving water. At the same time, we actively recycle and utilize recycled water to improve the entire Group's total amount of water used per revenue.

In 2024, we reduced the amount of water intake to 15,586 Km³, a decrease of approximately 1.04% from the previous year, due to improvement activities aimed at efficient water usage. The recycling rate has decreased by approximately 1%. The total amount of water used was 22,907 Km³, a decrease of approximately 2.8% from the previous year. In addition, total amount of water used per revenue improved by 32% in 2024 compared to the base year of 2021.

#### **Changes in Total Consumption**

(Total Consumption = Water Intake + Recycled Water) (1,000 m<sup>3</sup>/year)

















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#### CONSERVING WATER CONTINUED

#### **Risk Management for Water Resources**

Water risk assessment at Renesas Group manufacturing sites uses the world map and information tool "WRI AQUEDUCT" provided by the World Resources Institute (WRI), and identifies high-risk areas, including drought, at each site.

As a result of the evaluation, two of our manufacturing sites (Beijing and Suzhou) in China were identified as areas with high water risk, and we will continue to consider the need for countermeasures in the future. The total water usage of those two factories in China (Beijing and Suzhou) in areas with high water stress (tight water supply and demand situation) in 2024 was 361,875 m³, which was about 2% of the total usage by the Group.

We have set improvement targets for water use per production related revenue (basic unit with the shipment value as the denominator) and strive to conserve water resources by making continuous improvements.

- Renesas Semiconductor (Beijing) Co., Ltd.'s cumulative water use per production related revenue in 2024 improved by 27% compared to 2021. In 2025, we aim for 21% improvement with 2021 as the base year.
- Renesas Semiconductor (Suzhou) Co., Ltd.'s cumulative water use per production related revenue during the same period improved by 32% compared to 2021. In 2025, we aim for 31% improvement with 2021 as the base year.

#### **Changes in Water Intake and Displacement of Sites in China**

Basic Unit (Water Usage/Shipment Value) Improvement Rate	2023 Actual	2024 Actual	2025 Target
Renesas Semiconductor (Beijing) Co., Ltd.	33%	27%	21%
Renesas Semiconductor (Suzhou) Co., Ltd.	30%	32.1%	31%

Results and target improvement rates are calculated and set based on the basic unit for fiscal 2021.





















#### CLIMATE CHANGE INITIATIVES CONTINUED

#### Measures to Improve Water Use Per Production Related Revenue Water

	Renesas Semiconductor (Beijing) Co., Ltd.	Renesas Semiconductor (Suzhou) Co., Ltd.
Water Use Reduction Measures	<ul> <li>Improvement of water consumption efficiency (total water consumption/sales) by increasing production</li> <li>Continue to carry out water-saving activities for domestic use and greening water</li> <li>Reducing the amount of water used in employee dormitories through efficient use</li> </ul>	<ul> <li>Improvement of water consumption efficiency (total water consumption/sales) by increasing production</li> <li>Reducing the amount of water used by efficiently using water for daily use</li> <li>Replacement of cooling tower piping (water leak repair, etc.)</li> <li>Reduction of water consumption by changing the cooling method of tester equipment (wind cooling ▶ water cooling)</li> <li>Continue to carry out water-saving activities for domestic use and greening water</li> </ul>
Efficiency Measures	<ul> <li>Harvests wastewater from BG and dicing processes and reuses it as make-up water for cooling towers</li> <li>Installed a residual water collection device for water heaters in the cafeteria, and reused the collected water for flushing toilets</li> </ul>	<ul> <li>Reuse of BG abrasive wastewater, dicing cooling water, vacuum pump cooling water</li> <li>Improved water use efficiency for cooling towers (introduction of one cooling water treatment machine)</li> <li>Reduction of raw water consumption compared to the use of pure water RO</li> </ul>















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#### CONSERVING WATER CONTINUED

#### **Collaboration with Global Suppliers**

Renesas joined the <u>Responsible Business Alliance (RBA)</u> in 2021 and revised the <u>Renesas Supplier Code of Conduct</u>. Among the items specified in this Code of Conduct, the following are required for water management and we ask our suppliers to support them.

We have received the consent and approval of business partners for this Code of Conduct, as well as numerous suppliers.

- Document, characterize, and monitor water sources, water use and discharge, discover water-saving opportunities, and implement water management programs to control pollution routes
- Characterize, monitor, and control all wastewater and implement necessary treatments before discharge or disposal
- Regularly monitor wastewater treatment systems and water tanks to ensure optimal operation and compliance with regulations

#### **Collaboration with Communities**

With a goal to conserve water resources, Renesas is working to resolve water-related issues through collaboration with stakeholders in the watersheds of our manufacturing sites. Especially at Renesas Semiconductor (Suzhou) Co., Ltd., we are jointly managing and reporting information such as flow rate and pH related to wastewater discharge to the Environmental Protection Bureau every hour on an online monitoring system. This is done as a safety measure to conserve water resources and safely drain wastewater.







#### **Collaboration with the Government**

Renesas joined the "Water Project" in February 2022 as part of its ongoing efforts to conserve water resources. The "Water Project" was launched by the Ministry of the Environment of Japan as a public-private partnership initiative to increase commitment to

maintain or restore a healthy water cycle based on the Water Cycle Basic Law that took effect in 2014.



Through this initiative, Renesas will introduce our efforts to conserve water resources and share information about the importance of water resources and our contributions.

#### **Waste Water Management**

Renesas considers the quality of drainage to minimize the impact on the surrounding environment during the process. All of Renesas Group's manufacturing sites comply with the laws and regulations of each country and region and set and manage voluntary wastewater standards above the regulatory level. There were no violations of wastewater-related laws, environmental accidents, or complaints in 2024.

Online monitoring system of wastewater discharge.; (net data transmission to the Environmental Protection Agency, once an hour).





















### **Chemical Substance Use**

#### **Chemical Substance Use Management and System Development**

Renesas Group is committed to reducing environmental risks associated with semiconductor manufacturing. Since we utilize substances and materials that can pose health, safety, and environmental risks during the manufacturing process, we focus on reducing, substituting, and properly disposing of waste, while complying with laws and regulations as well as customer requirements. To achieve this, Renesas conducts assessments leveraging our green procurement activities and chemical substance database that includes relevant legal and regulatory information. While we work to accurately understand the total volume of chemical substances used, we are working to reduce the use of these substances and minimize the hazards they pose. To further these efforts, we are continuing to conduct research and development that leads to green products and eco-factories.

With regard to the PRTR (Note 1) Act and VOCs (Note 2), we conduct accurate balance control of the handling volume of small quantities. The balance results are not only reported to the government, but are analyzed and fed back to activities aimed at substituting chemical substance and emission reductions.

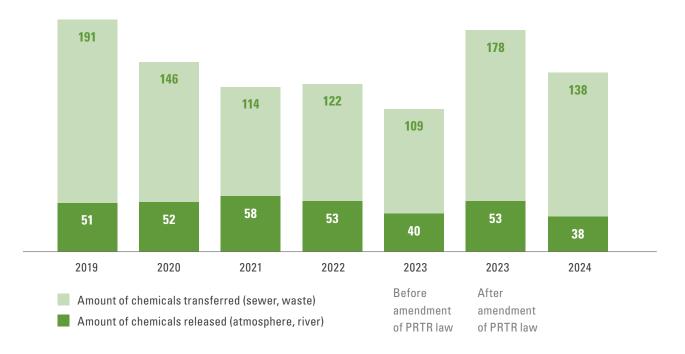
In line with the partial revision of the PRTR Law that came into effect in April 2023, Renesas has identified the substances subject to the revision, and has been working with component suppliers to prepare SDS (Note 3). At the end of March 2023, we established a management system that complies with the revised PRTR Law and started management of these activities.

Note 1: Pollutant Release and Transfer Register: a law concerning the monitoring of emissions of specified chemical substances into the environment and their management.

Note 2: Volatile Organic Compounds.

Note 3: Safety Data Sheet: A document that describes the properties and handling of targeted chemical substances when transferring or providing products containing chemical substances that may be dangerous or harmful to other businesses.

#### Changes in the amount of transfer and release of chemicals (PRTR Law) (ton)























**Business Responsibility** 



#### CHEMICAL SUBSTANCE USE CONTINUED

#### Understanding the Use and Emission Volume and the Introduction of Management Categories

Renesas conducts various assessments through our green procurement activities as well as the chemical substance database based on legal and regulatory information. By tracking the total volume of chemical substances used, we are better able to control and reduce the use of these substances and emissions in an effort to minimize hazardous waste.

In addition, in consideration of the laws and regulations relating to substances of concern globally and the requirements from our customers, we classify chemical substances into four categories:

Definition Of Chemical Substances		Management Category
Renesas Management of Chemical Substances	Substances that are prohibited from being contained in products or used in the manufacturing process	Prohibited Substances
	2. Substances promoted to be reduced by setting voluntary targets for product content and usage in the manufacturing process and emissions to the environment	Substances to be Reduced
	3. Substances for which the amount of use, inventory, emissions, and movement should be controlled	Substances to be Managed
	4. Substances that need to be understood as constituent materials	Constituent Substances

#### Selection/Purchase Stage of Components/Materials\*

"Chemical Substance Management System" used in conjunction with company-wide purchasing information to accurately manage income and expenditures, even for small portions handled. Also used to promptly respond to customer inquiries regarding the environmental impact of products.

#### **Manufacturing Process**

Guidelines established to comply with environmental laws related to chemical substances, company regulations, and environmental accident prevention, and to strengthen chemical substance management across our sites and offices.

<sup>\*</sup>Including containers, packing materials, and accessories.















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#### CHEMICAL SUBSTANCE USE CONTINUED

#### Major Environmental Laws and Regulations Outside Japan and Our Responses

Renesas obtains legal and regulatory information of major countries to ensure compliance with environmental laws and regulations related to our products, reflect them in our products, and provide our customers with information on chemical substances in a timely manner.

Substances listed in the appendix to POPs Convention (Note 4), which are required to comply internationally, are reflected in laws such as the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture (Chemical Substance Control Law) in Japan, and the POPs Convention is guaranteed. When substances designated in Annex A (Elimination) in the POPs Convention are reflected as Class 1 Specified Chemical Substances under the Chemical Substances Control Law, we classify these chemical substances in the "Prohibited Substances" category under Renesas Management of Chemical Substances. We share them globally and monitor them diligently to ensure compliance.

The European RoHS Directive (Note 5) and End-of-Life Vehicles (ELV) Directive (Note 6) specify threshold values for banned substances. For this reason, we receive analytical data and reports on the non-inclusion of banned substances from our suppliers for components that make up our semiconductor products. We also confirmed that they are below the thresholds by analyzing our products internally.

#### Status of our compliance with laws and regulations:

- EU RoHS
- China RoHS
- REACH (SVHC)
- Lead-free related:
  - · Parts made lead-free
  - Terminal specifications by packageDiscrimination via packaging label
- RoHS compliance of toolOther environmental

Halogen-free

regulations and information
concerning chemical substances

Note 4: POPs Convention: Stockholm Convention on Persistent Organic Pollutants.

Note 5: An European directive limiting the content of specific hazardous substances (such as lead, mercury, cadmium, hexavalent chromium, brominated flame retardants including PBB and PBDE, and phthalates including DEHP, BBP, DBP and DIBP) in electronic and electric devices.

Note 6: A European directive limiting content of lead, mercury, cadmium and hexavalent chromium in automobiles.

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### **Waste Management**

#### The 3R Activity Overview

Renesas Group is focusing on the 3Rs ("Reuse," "Reduce," and "Recycle") to maintain the waste recycling rate at \*90% or more globally. We diligently implement these "3Rs" during manufacturing and intend to reuse all the waste derived from our business activities as resources as a mid-term goal.

\* Recycling rate (%) = 100 - (Final disposal amount  $\div$  Total amount of waste & valuable emissions) x 100. Proper processing, such as thermal recycling and neutralization treatment, is also included.

#### Reuse

Renesas uses plastic packaging materials (trays and magazines) for product shipments. We have a reusable infrastructure (collection cleaning-inspection system) in place at our global production sites to ensure those materials are efficiently reused. Carrier tape, cardboard, and wafer cases are also being reused for other applications.

#### **Reduce and Recycle**

During manufacturing and factory design processes, we are making efforts to minimize waste generation as much as possible and promote waste recycling by working together with companies in other sectors.

For example, cement manufacturers are using sludge we generate from the effluent treatment as roadbed and cement materials. Metals are also reused for material steel manufacturing, and paper as raw materials are converted to recycled paper. We are also recycling scrap wafers generated during the production process and final products that are considered defective.

#### **Recycling Initiatives**

Waste Materials	Examples Of Recycling
Sludge	Roadbed materials, raw materials for cement, recycled sand, raw materials for metal refining
Waste Oil	Incinerator combustion aid, recycled oil, raw materials for cement
Waste Acid	Recycled sulfuric acid, wastewater treatment, fuel conversion, raw materials for cement, raw materials for metals
Waste Alkali	Fuel conversion, raw materials for cement, raw materials for metals
Waste Plastics**	Incinerator combustion aid, solid fuel, raw materials for plastics
Metal Scraps**	Raw materials for metals
Glass and Raw materials for glass, raw materials for cement, tiles, Porcelain Scraps lightweight aggregates	
Product Waste**	Raw materials for silicone
Precious Metals**	Raw materials for precious metals
Paper	Raw materials for recycled paper
Wood Chips	Raw materials for paper, fertilizers, fuel
Styrofoam	Cushioning material, styrofoam tray

<sup>\*\*</sup> Including scrap wafers generated during the production process and products that are considered defective.











**Sustainability Approach** 





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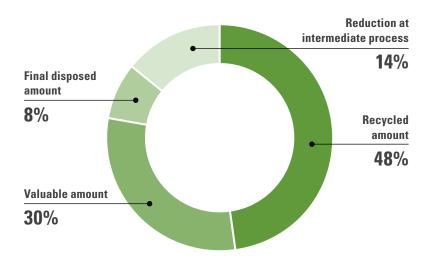




#### WASTE MANAGEMENT CONTINUED

#### The 3R Performance

- In the fiscal year 2024, the amount of waste disposal decreased by 5% compared to the previous year. This reduction was attributed to the planned implementation of activities aimed at reducing industrial waste and waste plastics, the softening of the semiconductor market.
- More than 99% of domestic waste in 2024, which accounts for about 78% of all waste, is reused, recycled, or properly intermediately treated. The final landfill disposal rate (final disposal amount) was 0.2%. The proportion of landfill disposal (final disposal volume) of waste outside of Japan was 35.5%.
- The waste recycling rate at our global bases was 92.1%, which has a high recycling rate, and we are maintaining our benchmark of 90%.

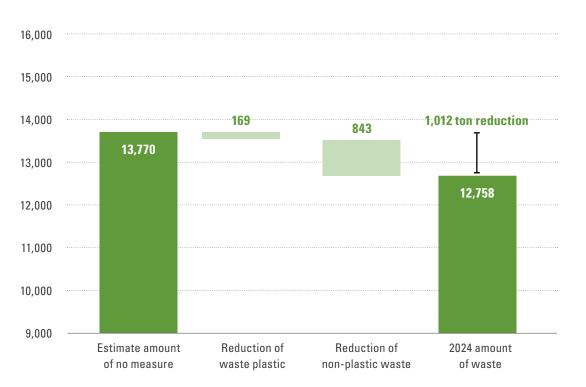


#### **Waste Reduction Initiatives**

In 2024, Renesas Group achieved a waste reduction of 1,012 tons (including 169 tons of waste plastic reduction) in Japan.

#### Waste Reduction Chart Based on The 3R Efforts (Japan)

(ton)























#### WASTE MANAGEMENT CONTINUED

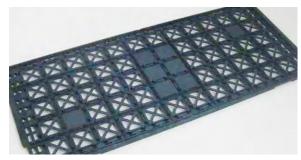
#### **2024 Major Initiatives**

#### **Reduction of Plastic Waste** (Response to the New Plastic Resource Circulation Act in Japan)

- Reusing or recycling of plastic packaging materials (tray), plastic cases, and Styrofoam
- Reuse of plastic trays, magazines, wafer cases, etc. (Return to the front-end processing site of the shipping source for reuse and reduce the amount of plastic waste)
- Reducing plastic waste by increasing the size of BGA package
- Clean and recycle resin containers after using CMP slurry or use them as recycled materials
- Instead of purchasing garbage bags needed for cleaning activities around the factory, reusing the bags produced during the manufacturing process

#### **Overall Waste Reduction Activities**

- Valuable waste liquid and oil, and activities to reduce the amount of wastewater treatment sludge
- Promotion of waste reduction activities among teams participating from all Japanese sites



Utilization of plastic packaging materials (tray)

Wafer Cases





Cushion

Inner Cover



















# Appendix

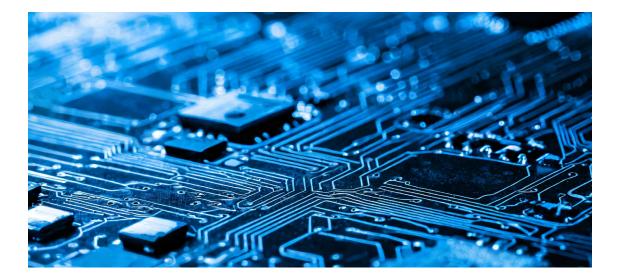
### **Eco-Product Initiatives**

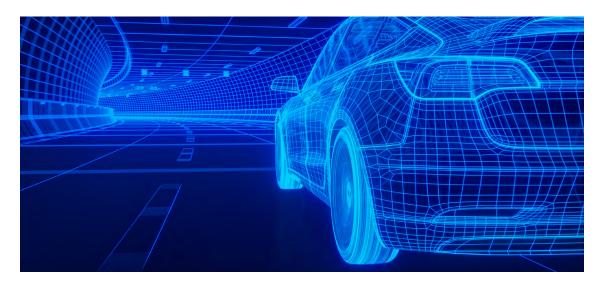
Renesas is committed to eco-product initiatives and creating environmentally-conscious products and solutions that contribute to energy conservation and efficiency.

#### **Creating Environmentally-Conscious Products**

In order to create environmentally-conscious products, it is important to reduce the environmental impact at all stages of the product lifecycle, from development, procurement, manufacturing, to use and disposal. Our eco-products are the results of product environmental assessments which evaluate the total environmental impact reduction measures (Product Stewardship). During these product environment assessments, our products are tested and evaluated at two stages: at the development stage and before mass production.

In addition, we have made product environmental assessments as part of the requirements in new product development, and we are working to raise internal awareness of the importance of product stewardship through training for project leaders and future leaders involved in new product development.























#### ECO-PRODUCT INITIATIVES CONTINUED

#### **Eco-Product Initiatives at Each Stage**

#### **DEVELOPMENT**

- Product environmental assessment
- Environmentally friendly design that considers LCA



#### **PROCUREMENT**

Promote green procurement by not procuring materials or subsidiary materials that have high environmental loads



#### **PRODUCTION**

- Conserve energy by shortening production processes
- Properly manage chemical substances in production sites



#### USE

- Design energy-saving semiconductor products (e.g., low power consumption during standby)
- Design devices that are integrated into customers' equipment to save energy



#### **DISPOSAL**

- Eliminate specified chemical substances
- Reduce waste by making products smaller and lighter



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#### ECO-PRODUCT INITIATIVES CONTINUED

#### **Environmental Assessments of Products**

We create environmentally-conscious products by incorporating product environmental assessments into the product development and design flow, to evaluate the degree of improvement in environmental load. In this assessment, we make comparisons between our target products with indexed previous generations of the products (Note 1) based on six criteria, including weight reduction, regulatory compliance, and whether they are energy saving.

#### Criteria for Product Environmental Assessment

- Regulatory Compliance
- Evaluation of Controlled Chemical Substances
- Weight reduction evaluation
- Energy saving evaluation
- Packaging material evaluation
- Distribution evaluation

The outcome of the assessment is determined by the design department developing the product as well as the Sustainability Operations Department at the headquarter office of Renesas as a third-party assessor. If the outcome determines that any of the two categories below applies, the sale of the product is prohibited in principle.

- If the components that make up the product contain chemical substances prohibited by Renesas
- If chemical analysis reveals chemical substances prohibited by Renesas

In addition, if the environmental performance of a product has not improved in comparison to the indexed product, the design department must consider making improvements to the product or decide whether the development should continue.

The steady promotion of the environmental assessment increases the safety and trust of Renesas' semiconductor products, as well as to further improve the environmental performance of the products themselves. This will ultimately lead to reducing the environmental impact for the final customers using our finished products.

Note 1: Previous generation refers to indexed products that are one generation prior but have almost the same purpose, function and performance as the new product. However, if there are no previous generations of a product, the new product itself is considered as the index product.











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### **Renesas Green Devices**

In order to promote research and development (R&D) and design of products that support the creation of environmentally-conscious products based on the Environmental Action Guidelines in all stages of the product life cycle, products that greatly contribute to the reduction of environmental impact are certified as "Renesas Green Devices."

Green Devices are certified products that have completed the development stage but have not yet been mass produced. The certification process requires the following three items to be met:

- Does not contain chemical substances prohibited by Renesas
- Compliant with European RoHS
- Halogen-free

In addition, based on the results of the product environmental assessments, we confirm whether the environmental performance of the target product is more superior to the indexed product in the three categories of resources (mass), energy (energy consumption), and chemical substances (quantity of substances used by Renesas that are subject to reduced usage). Secondly, if the target product is determined to be superior to the indexed product and the improvement rate is over 10%, the product is certified as "Renesas Green Devices." In fiscal year 2024, Renesas Green Devices accounted for 89% (Note 1) of total new product development projects.

Evaluation Criteria	Comparison Between Indexed Product And New Product		Renesas Green Devices
Resource-saving evaluation	<ul><li>Product volume</li><li>Product mass</li></ul>	10% or more reduction	89%: Ratio of Renesas Green Device Development Projects to New Product Development Projects
Energy-saving evaluation	<ul><li>Power consumption during operation</li><li>Standby power consumption</li></ul>		
Chemical substance content evaluation	<ul> <li>Percentage improvement of reduced substances in products</li> </ul>		

Note 1: Percentage of Renesas Green Devices among the number of former Renesas products developed in 2024.





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#### RENESAS GREEN DEVICES CONTINUED

#### **Lead-Free Products within Renesas Green Devices**

Renesas' semiconductor products are used in many products that are marketed around the world. To comply with environmental laws and regulations related to our products, we research the laws and regulations of major countries, apply the information in our group products, and communicate with our customers on the chemical substance content in a timely manner. In addition, Renesas is actively working to reduce the use of lead-free products, as the demand for semiconductor products and electronic devices continues to grow.

	Proportion Of Number Of Lead-Free Products Developed	
New development of Renesas Green Devices	80%	

<u>Click here</u> to learn about our compliance with environmental laws and regulations. Click here to learn about our lead-free initiatives.

#### **Environmental Contribution of Renesas Green Devices**

Renesas Green Devices not only reduce the use of resources, energy, and prohibited chemical substances in the product itself, but also contribute to improving the energy efficiency of customers' systems by incorporating our solutions into their products. We also play a role in increasing energy efficiency of society, as our customers' products are used across many applications.

Renesas' core business is to foster a sustainable society by providing products and solutions in mission-critical business fields that form the basis of our society, such as automobiles, factory automation (FA), communication infrastructure, and medical and healthcare. Specifically, we will focus on developing low-power products with minimum environmental impact and products and solutions that make people's lives safer and more secure, and advancing research and development for innovation that supports them.

Mission-Critical Business Areas (Automotiv	Other Business Fields	
Clean Transportation	Energy Efficiency	Other Business Solutions
Smart Electric Vehicles Solutions	Smart Data Center Solutions	Other business solutions
Smart Autonomous Drive Solutions	Smart Cellular Solutions	
	Smart Society Solutions	
	Renesas Green Devices and Technology	

Read more about Renesas' products and solutions that contribute to a sustainable society through customers' systems here.

















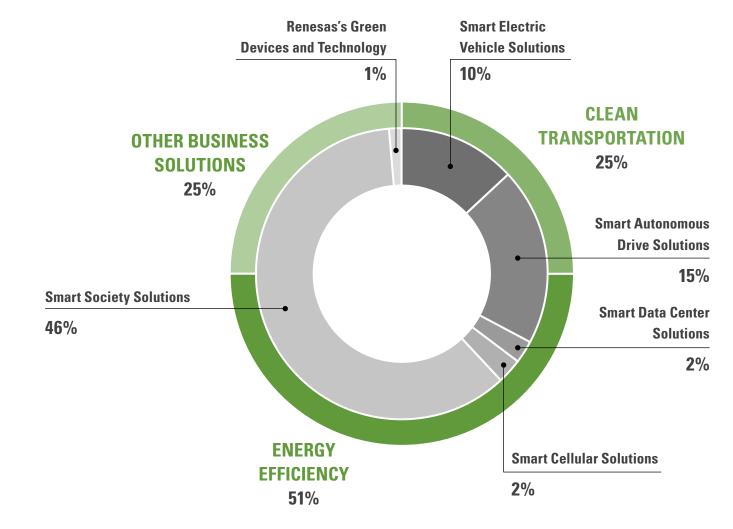




#### RENESAS GREEN DEVICES CONTINUED

#### Ratio of development projects by solution for Renesas Green Devices

In 2024, 75% of Renesas' green device development projects were for mission-critical business areas (green bond eligible solutions), of which 25% were for smart vehicle solutions and electric vehicles, and 50% for social infrastructure such as data centers and cellular. (Note 2)



Note 2: Renesas Green Devices (former Renesas products and affiliated products developed and mass-produced in FY2024) that can be classified as green-bond eligible solutions are extracted, and the projects of the classifiable products are used as the denominator for each solution. The proportion of products excluded from classification is 25%.

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#### RENESAS GREEN DEVICES CONTINUED

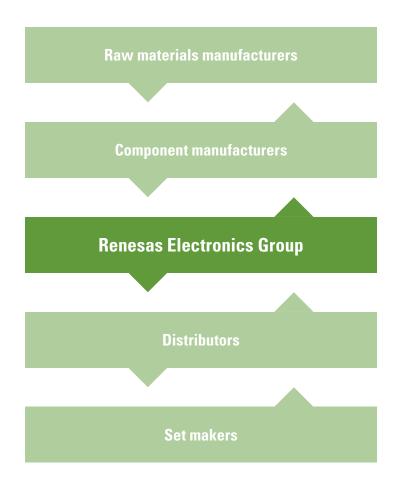
#### **Product Environmental Quality in Supply Chain**

We believe that it is necessary for the entire supply chain to manage chemical substances contained in products throughout the process, from the selection of materials during development and design, to the prevention of pollution in the manufacturing process. For this reason, we ask suppliers to submit certificates and analysis data to confirm that prohibited substances are not used, and they adhere to such practices in supplier audits. Distributors are requested to manage the chemical substances contained in the packaging materials they use. On the other hand, we also provide our customers with information on chemical substances contained in products and analysis data on prohibited substances according to the RoHS Directive to ensure that our products can be used safely. In addition, we share with customers our systems for managing chemical substances and the progress of our environmental activities.

<u>Click here</u> to learn about our environmentally-conscious supply chain initiatives.

Click here to learn about our green procurement.

<u>Click here</u> to learn about our environmental compliance.

















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### **Biodiversity Conservation Activities**

#### **Biodiversity Conservation Policy**

Renesas' business sector, semiconductors, requires a large amount of water, resources, and energy for manufacturing, and relies heavily on various ecosystem services provided by biodiversity.

We are committed to protecting biodiversity, based on the fundamental environmental philosophy to conduct corporate activities that promote a balance between global environment preservation and the healthy lifestyle of people to realize a sustainable society. This is considered to be one of the most important items in our Environmental Action Guidelines.

Renesas' policy is to actively promote business activities that contribute to biodiversity conservation, such as the efficient resource use at manufacturing and business sites, and the provision of sustainable products and solutions. We would like to give the benefits from ecosystem services back to our local communities, while meeting our customers' needs.

#### **Biodiversity Conservation Activity Evaluation**

Renesas evaluates biodiversity conservation activities at each site based on an average score that reflects both self-assessments conducted by the sites and reviews by the corporate environmental department. In FY2024, the third year of this evaluation framework, one additional overseas site was included, bringing the total to 16 sites assessed globally.

Biodiversity initiatives continued to be actively promoted at both domestic and overseas locations. Notably, several sites enhanced their efforts to raise employee awareness, which led to improved evaluation scores. In addition to traditional training such as online and in-person education, these sites strengthened their communication of environmental information internally.

#### **Outstanding Facilities**

In the site-by-site comparison, the Kuala Langat Factory received the highest rating due to the launch of various new initiatives, including the protection of endangered species and participation in food loss reduction campaigns. The Beijing Factory also earned high marks for beginning a vegetation survey aimed at quantitatively understanding local biodiversity. Similarly, Penang FIZ2 Factory and Penang FIZ3 Site were recognized for their active participation in community-led environmental activities, including mangrove planting. Among domestic sites, the Oita Factory significantly improved its score through enhanced waste reduction and awareness-raising efforts, while the Naka Factory was commended for initiating the recycling of protective packaging materials.

Three years into the implementation of our biodiversity scorecard system, Renesas has successfully visualized the progress of biodiversity activities at each site. This has enabled continuous review and reflection, fostering opportunities to enhance the quality and strategic direction of our initiatives.

Moving forward, we will continue to promote these activities while encouraging cross-site information sharing to further improve our contributions to biodiversity conservation across the Renesas Group.













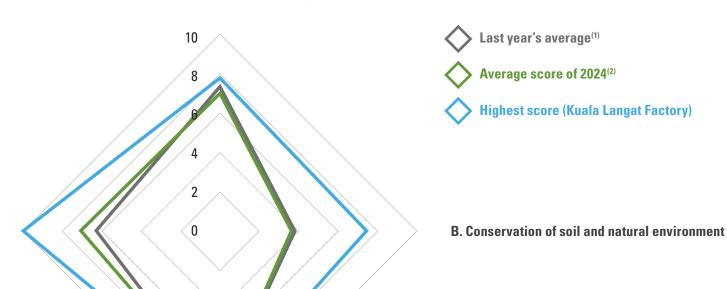






#### **Biodiversity Conservation Activity**

#### A. Conservation of ocean and water quality







- (1) Average score for 1 office and 14 factories (Headquarters, Naka, Takasaki, Saijo, Kawashiri, Yonezawa, Oita, Nishiki, Beijing, Suzhou, Kuala Langat, Penang FIZ2, Penang FIZ2, Palm Bay, Dresden)
- (2) Average score of (1) plus Bingen site





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### BIODIVERSITY CONSERVATION ACTIVITIES CONTINUED

#### **2024 Activities and Results**

In 2024, Renesas implemented 130 biodiversity conservation activities, mainly at manufacturing sites.

Renesas 15 manufacturing sites, one office	A. Conservation of ocean and water quality	B. Conservation of soil and natural environment	C. Ecosystem protection through global warming control and resource conservation activities	D. Coordination with local governments, activities in the main business, employee awareness raising, improving the work environment
Production sites	29	22	25	47
Offices	2	1	2	2
Total	31	23	27	49





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#### BIODIVERSITY CONSERVATION ACTIVITIES CONTINUED

#### **Conservation of Ocean and Water Quality**

Conservation of the ocean and water quality is essential for the semiconductor manufacturing industry, which requires large amounts of water resources. Renesas strives to preserve ocean and water quality through regular cleaning of industrial drainage channels and participation in community clean-ups.



Cleaning of the Teluk Bahang River, a key local waterway (Penang FIZ2 Factory)



Drainage cleaning near the plant by employees (Penang FIZ3 Site)





















#### B. Conservation of soil and natural environment

In order to build a healthy living environment and sustainable future, the preservation of rich soil, trees, and the diverse organisms nurtured therein is essential. Renesas' facilities scattered throughout various regions engage in activities closely tied to each local community.



Planting mangroves to prevent erosion, purify water, and protect marine life (Penang FIZ2 Factory)



On-site vegetation survey as first step toward biodiversity (40 species, 2,200 trees) (Beijing Factory)









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#### C. Ecosystem protection through global warming control and resource conservation activities

Renesas recognizes that efforts to curb global warming and conserve resources are urgent issues to protect the ecosystem. This includes working to solve environmental issues from a variety of perspectives, from updating equipment to more energy-saving equipment, introducing highly efficient lines, purchasing green electricity, and saving electricity in the workplace.



Boiler switched from kerosene to LNG fuel (Saijo Factory)

## **Zertifikat**

#### **Erneuerbare Energie**

Hiermit bestätigen wir unserem Kunden

Renesas Design	Bingen GmbH	
Firmenname		
Im Bubenstück	1	
Adresse		
55411	Bingen	
PLZ	Ort	

mit dem **Produkt "Öko basic"**, dass im Umfang seines Stromverbrauchs im Zeitraum vom 01.03.2023 bis zum 31.12.2024 Strom in Erneuerbaren-Energien-Anlagen erzeugt und in das öffentliche Stromnetz eingespeist wird.

#### Ihr Beitrag zum Klimaschutz

Sie tragen damit zu einer Einsparung von jährlich ca.  $223.403\,kg\,CO2$  gegenüber dem deutschen Strommix bei.



100% renewable electricity at Bingen Site through procurement and rooftop solar (Bingen Site)





















D. Coordination with local governments, activities in the main business, employee awareness raising, improving the work environment.

Actively cooperate with local governments where our manufacturing bases are located in their efforts to address local environmental issues.



Partners with the city to supply 30 m³/day of recycled water (Palm Bay Factory)



Recycling valuable materials by dismantling defective ICs accumulated over time (Bingen Site)























**Leadership Perspective: Advancing Workforce Excellence and Sustainability** 

**Our Culture** 

**Diversity, Equity & Inclusion** 

**Human Capital Management** 

**Employee Health & Safety** 























### Leadership Perspective: Advancing Workforce Excellence and Sustainability

A Conversation with Utae Nakanishi, Senior Vice President and CHRO

Q: What were the top three HR accomplishments for Renesas in 2024, particularly in supporting the company's sustainability and innovation goals?

The Renesas HR Leadership Team is actively advancing a long-term strategy that extends to 2030. While the overarching priorities remain consistent, they are refined annually to address emerging challenges and opportunities. In 2024, the top three HR accomplishments on our Roadmap to 2030, with a particular focus on initiatives that drive sustainability and foster innovation, were:

#### **Simplification**

In 2024, Renesas advanced a sustainable and innovative HR model across APAC, harmonizing terms, benefits, and processes, while further aligning practices in Japan with global standards. We optimized regional HR team structures to support sustainable growth and prioritised team development through succession planning and career path creation, ensuring a future-ready workforce.

#### Leadership

In 2024, Renesas formalised management and leadership assessment and development activities, fostering a culture of continuous growth and innovation. By equipping leaders with the skills to drive sustainable practices and inspire their teams, we are building a resilient leadership pipeline that supports long-term organisational success and aligns with our sustainability goals.

#### **Employee Experience**

In 2024, Renesas advanced its commitment to sustainability and innovation through a number of key employee experience initiatives, including the launch of Phase 2 of the Remote Working Abroad program, promoting greater flexibility and inclusivity for a globally connected workforce. Additionally, in June 2024, we proudly celebrated the 11th annual International Women in Engineering Day to honor the achievements of women in the engineering field and their contributions and inspiration for our future generations. We engaged our employees through a series of discussion forums led by female employees and a virtual fireside chat, featuring Chandana Pairla, VP Connectivity Solutions Division and Elif Balkas, Chief Technology Officer at Wolfspeed.

In relation to our sustainability agenda more specifically we have:

 Refreshed Human Rights Policy to ensure that we are aligned with current best practices, and regulatory requirements.

 Forced and Child Labor remediation plans to be able to identify any of our current practices which pose a higher degree of risk to enable us to implement mitigation and detailed remediation actions with responsible owners.

Updated our Global Employee Code of Conduct in respect of Responsible Recruitment principles to ensure we are aligned with best practices, and subsequent changes to our tender process because of this to ensure any RPO can comply in our Supplier Code of Conduct.

Created an Integrated Action Plan, to identify and then build HR's objectives into the wider Renesas ESG plan enabling collaboration and galvanizing teams behind common goals.

These achievements underscore our commitment to building a resilient, future-ready workforce while aligning with our broader strategic objectives.

**Utae Nakanishi** 

Senior Vice President and CHRO







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### **Leadership Perspective**

Q: How has Renesas' talent acquisition and retention strategy evolved to meet industry demands, such as digital transformation and sustainability? Could you highlight any unique programs or initiatives introduced this year?

In 2024, Renesas achieved significant milestones in Talent Acquisition, driven by innovation and a focus on improving our processes.

#### **Applicant Tracking System (ATS), Smart Recruiters**

In February 2024, we successfully launched a new ATS, Smart Recruiters, transforming the recruitment process with an intuitive and user-friendly platform. This system serves as a single source of truth, accessible by recruiters, HR, and managers, streamlining operations such as candidate submission and interview feedback collection.

Seamless integration with SuccessFactors allows requisitions to flow directly from SuccessFactors to Smart Recruiters, with offer acceptance triggering onboarding activities, ensuring a smooth end-to-end process. Additionally, simplified, in-system approval processes have replaced lengthy offline workflows, increasing efficiency.

#### **Global Employee Referral Policy**

We also introduced a Global Employee Referral Policy, consolidating 15 regional policies into one consistent framework. This standardizes rewards for all employees and simplifies the submission process in the employee portal in Smart Recruiters, making participation easier and driving referrals globally. By leveraging employees' networks, we can tap into diverse talent pools, bringing fresh perspectives and ideas that foster creativity and innovation at Renesas.

#### **Hybrid TA Team in India**

To support sustainable growth, we established a hybrid talent acquisition team in India, combining internal expertise and RPO capabilities. Processes for hiring, training, and onboarding were implemented in collaboration with other teams, and partnerships with universities were formed to build a strong talent pipeline. A targeted brand awareness campaign in India further reinforced our position as an employer of choice in this critical growth market.

Q: Could you share examples of employee engagement initiatives from 2024 and the impact they've had on fostering a collaborative and innovative culture?

2024 Renesas Day - a day designed to celebrate Renesas' culture, foster engagement, it provides

a platform for us to engage with our employees and promote a sense of community.

Continued the company-wide survey in 2024 to measure the degree to which the "Renesas Culture" has been adopted by employees, and to gauge awareness of any problems and ideas for improvement.

Cultivating Global Leadership - identifying and developing future leaders who will drive the business growth of the Group as a whole, providing opportunities to rotate jobs across departments and geography to build a professional network.

Global Mobility – our initiative to support employees who live and work in a range of locations, covering all permanent cross-country transfers, temporary assignments, short-term assignments, etc., providing career development opportunities.

2024 all-hands events and small group roundtable sessions (direct conversations). Continuing online information sharing and question-and-answer sessions for all employees, conducted in both Japanese and English. These events are followed up by surveys to provide feedback, suggestions, and comments from employees to the management team.







About Renesas















## **Leadership Perspective**

Q: What are the strategic HR priorities for Renesas in 2025, and how do these align with the company's long-term ambitions, particularly in sustainability and global talent development?

Key HR priorities for 2025 supporting sustainability include: Leadership Development, Employee Engagement and Experience, HR Metrics and Data Analytics, and Optimization of HR Processes and Resource Alignment. These priorities are aligned with our long-term sustainability goals and our commitment to global talent development. In 2025 we plan to address these areas specifically as follows:

### **Leadership Development**

Effective leaders drive clarity and alignment around the Company goals and elevate employee capabilities and performance. They also understand the importance of balancing economic, social, and environmental responsibilities. Through our development program, a goal is to enable leaders to become more adept at identifying and mitigating risks associated with unsustainable practices, ensuring long-term viability and growth.

In addition, we will be focused on developing current and future leaders globally through a rotation program and high potential and accelerated leadership development programs.

### **Employee Engagement and Experience**

Driving a high performance and empowering culture remains critical to our collective success. Actions planned in 2025 such as enhancing our onboarding and employee development programs will advance our current approach to enabling high performance across the organization.

In addition, Global initiatives like Pay Transparency and Living Wage reflect our commitment to fair compensation. Simultaneously, implementing a Learning Management System (LMS) enhances skill-building and knowledge transfer, enabling growth within our workforce.

## HR Metrics and Data Analytics - Driving change through data driven decision making

HR metrics are a cornerstone of our sustainability efforts, providing critical insights to drive change. These metrics will form a key part of our human rights due diligence and support key initiatives like addressing the gender pay gap, advancing pay transparency, and preparing for CSRD compliance.

#### Optimization of HR processes and resource alignment

We are streamlining global HR resources with initiatives including a unified policy library, ensuring compliance, transparency, and ethical decision-making across all jurisdictions. This ensures operational efficiency, supports sustainability, and aligns HR practices with our ESG goals.



















## **Our Culture**

Renesas Culture unites every employee around the world, drives innovation, and motivates us to fulfill our purpose, 'To Make Our Lives Easier.' We strive to embody TAGIE culture each day by embracing change with an entrepreneurial mindset, sharing best practices, and trying new ways to meet and exceed our customers' evolving needs.











Since 2020, we have conducted an annual survey to engage employees at all levels around the world and measure progress toward our goals. Based on our employees' feedback and suggestions, we continue to identify areas for improvement and address them through actionable plans.

## **2024 Renesas Culture Survey Results**

Response Rate	<b>90%</b> (20,364 responses)	
Comments	3,230	
Progress	<b>68%</b> of employees felt TAGIE has improved in the last 12 months.	
Focus Areas	Enhancing Collaboration Supporting Well-being Empowering Managers	



I believe that Renesas needs to be an organization with a "Transparent, Agile, Global, Innovative and Entrepreneurial" culture. These five elements are a guide for "how" to achieve the "what" which is expressed through Renesas' mission and strategies.

## **Hidetoshi Shibata**

2024 Business & Sustainability Report

President and CEO







About Renesas













# Appendix

### **OUR CULTURE CONTINUED**

## **Global Collaboration Project**

With the global expansion of our team, the need for cross-regional and departmental **collaboration** is greater than ever before. Integrating teams across geographies and enhancing collaboration, especially among engineers, requires a long-term commitment from leadership to ensure success.

In response to the employee feedback received through the 2023 Culture Survey, Renesas launched the **Global Collaboration Project** (GC) under the leadership of our Co-CTOs, Shinichi Yoshioka and Balaji Kanigicherla, with a goal to improve the sharing of ideas and best practices while fostering cross-functional cooperation among engineers.

2023-2024 global collaboration achievements and progress include:

#### 1. Identifying and Addressing Global Challenges:

We conducted an extensive survey to understand challenges faced by employees working globally, identifying over 150 key issues. To address these, we established 10 task force teams, whose solutions have been consolidated into a webbased resource site for company-wide sharing. Notable examples include:

- IP search system to enhance design asset reusability.
- Specialized training materials sharing site accumulated by legacy companies.
- Best-practices sharing site for employees.

#### 2. Enhancing Connections Among Experts:

To strengthen connections among engineers globally, we have lowered the barriers to internal information sharing and began company-wide adoption of a corporate social networking tool in 2023. Over 70 technical categories have been launched through this project, facilitating community management tailored to engineers' needs. A couple examples of popular communities are our Artificial Intelligence and PCB Design communities:

#### 3. Empowering Internal Influencers:

Recognizing the challenge of translating information into practical applications, we identified over 600 employees as "internal influencers," who act as key hubs for knowledge sharing. To support their roles, we gave them priority during our Microsoft Copilot license rollout of Microsoft Copilot, leveraging AI to simplify searches for people and internal resources.

## 4. Hosting Knowledge Exchange Platforms:

We organize regular technical symposiums, providing a platform for internal knowledge sharing. Additionally, we invited external technological experts to share global collaboration insights necessary to drive innovation, with the aim to enhance the impact of our efforts.













Sustainability Approach











## **Diversity, Equity & Inclusion**

Diversity, Equity & Inclusion (DE&I) is a core priority at Renesas, as we embrace the diverse backgrounds, skills, and experiences of our employees to foster an inclusive culture that drives innovation and empowers new ideas. We strive to ensure our strategies and practices are fair and equitable and provide the platform for all our employees to thrive. We continue our work to improve diverse representation across all levels of the company and value our relationships with our external partners which support those efforts. Please refer to the examples below.



## Global Semiconductor Alliance's Women's Leadership Initiative

As the 2024 Ally Sponsor, we promote the achievements and development of females in the semiconductor industry.



## **Inspiring Girls International**

Facilitating workshops, mentoring, and inspiring female students with a view to them studying STEM subjects and pursuing a career in engineering.



#### **High-Tech High Heels**

Organizing learning activities and distributing technical experimental kits and tutorial videos to local schools to perk interest and raise awareness in engineering.



#### **UK Electronics Sills Foundation**

Providing paid internships to undergraduates studying electronics related subjects.







## **Employee Resource Groups and Diversity Promotion Groups**

Global employee led communities promoting culture and workforce diversity, raising awareness, and contributing to maintaining an inclusive environment for all employees.















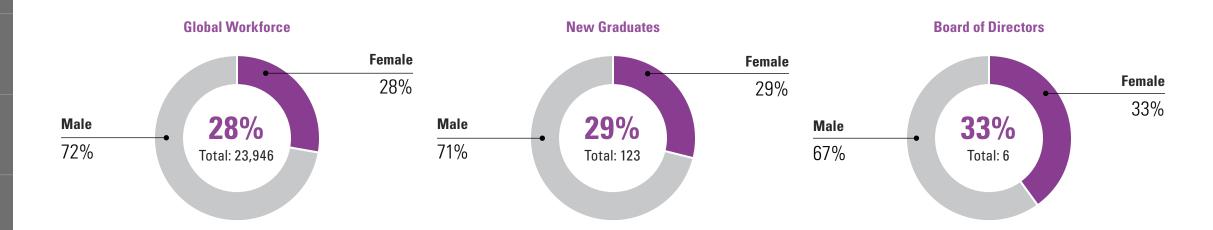


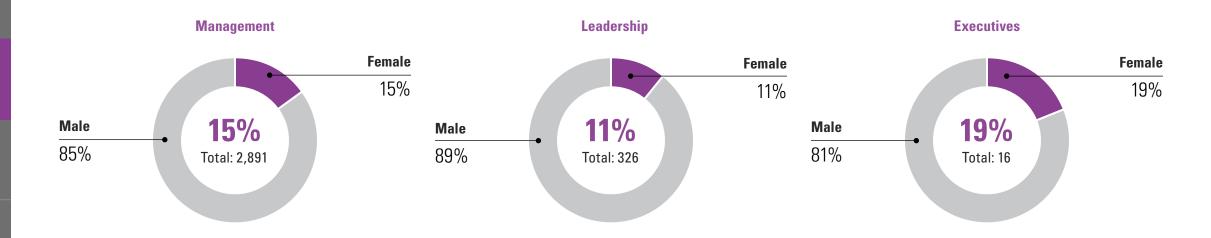






## **Ratio of Female Employees (2024)**











About Renesas















### **2024 Initiatives**

## **Employee-Led Communities**

Renesas' Employee Resource Groups (ERGs) and local Diversity Promotion Groups (DPGs) play an integral role in building communities, promoting cultural activities and events and championing the DE&I initiatives that are linked to creating an environment that is diverse, equitable, and inclusive.

Our ERGs and DPGs host educational, networking, and social events to recognise and celebrate commemorative dates. In addition, across the company, employee led groups supporting local worthwhile causes demonstrate their commitment to corporate social responsibility within their own communities.



## International Women in Engineering Day

In June, we proudly celebrated the 11th annual International Women in Engineering Day to honor the achievements of women in the engineering field and their contributions and inspiration for our future generations. We engaged our employees through a series of discussion forums led by female employees and a virtual fireside chat, featuring Chandana Pairla, VP Connectivity Solutions Division at Renesas and Elif Balkas, CTO at Wolfspeed.



## **International Women's Day**

In March, we hosted a variety of global and local activities connecting and celebrating women at Renesas and allies. In addition, several of our senior leaders participated in panel discussions and shared their experiences and insights on how to continue building and fostering an inclusive working environment.

## **High-Tech High Heels**

Our Women in Technology (WIT) ERG has led our joint efforts, involving female engineers to create tutorial videos in different languages and provide experimental kits to introduce and inspire students to study electronics. One additional member of WIT ERG was appointed as a board member of High-Tech High Heels in 2024.



### **Diversity Awareness Month**

Throughout the month of October, we hosted several events to celebrate Diversity Awareness Month with our colleagues around the world. We promoted the 2024 theme, "Knowing Your Role as an Ally," through moderated panel discussions on allyship in the workplace, all-employee discussions led by our Women in Technology ERG, unconscious bias training for all employees, and an inclusive leadership training for managers. Employees from different regions contributed video messages sharing their views and suggestions on diversity and allyship.







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2024 Business Updates



Sustainability Approach





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Business Responsibility

#### 2024 Initiatives

## **Inspiring Girls International**

In collaboration with Inspiring Girls International, a global non-profit organization with a mission to connect girls with female role models in STEM, we facilitated workshops, conducted in-school visits, and held working groups in the UK, Italy, and Germany, introducing young girls to the engineering industry and possible career pathways.

## Empowering Future Tech Leaders at IEEE WINTECHON 2024

Renesas India sponsored 25 aspiring women engineers at IEEE WINTECHON, a 2-day tech event dedicated to advancing women in technology. These remarkable students from PES, RVCE, IISc, IIIT Bangalore, and GSSS-Mysore joined to gain industry insights, network with leaders, and deepen their technological awareness.

Buvna Ayyagari, VP and Head of UX at Renesas, captivated the audience with her keynote on "AI in the Era of More Than Moore"—covering AI, ML, Gen AI, and Digital Twins' role in the semiconductor industry. Her talk was practical, inspiring, and left everyone eager to learn more.

Our sponsored students had hands-on experiences, attended demos, and engaged in insightful discussions. Following the event, they had a powerful interaction with Malini Narayanamoorthi, India Country Head & Sr. Dir Engineering, who shared her career journey and encouraged them to be bold, ask questions, and embrace challenges.



#### **Pride Month**

In celebration of Pride Month in June, we organized fireside chats with an external expert and coach to raise awareness on why inclusion matters at Renesas. We also held virtual networking events for our LGBTQ+ communities and allies across the globe.

## **DE&I Training**

In 2024, we designed and delivered a series of "Unconscious Bias" training which was available to all employees, with a goal to increase awareness and challenge ourselves to adopt more inclusive practices. We partnered with the People Decoders to create and deliver "Inclusive Leadership" training for managers, equipping them with important insights on useful ways to create a more inclusive environment and manage more high-performing teams.

#### **UK Electronics Skills Foundation (UKESF)**

In partnership with UKESF, we welcomed 11 female university students pursuing Engineering degrees on paid internships, the highest numbers to date. Through our Renesas Award for Female Students, where we sponsor female students in their final year of school who are beginning an undergraduate degree in Electronics, we were delighted to offer positions to six of those students to return in 2025 and further expand their work experience with us.









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#### **2024 Initiatives**

### **Women's Leadership Initiative (WLI)**

As the 2024 Ally sponsor, we engaged in several WLI initiatives to support their commitment to empowering women in the semiconductor industry. Examples of our efforts include:

- Joint social media visibility campaign, featuring four of our women leaders and colleagues from the U.S., Japan, and India.
- Four articles published in WLI quarterly newsletters.
- Two U.S. team members completed Women in Hardware Mentorship Program.
- Speaking engagement and participation in "Lunch & Learns" in the U.S., Germany, and Taiwan.
- Participation in a panel discussion at "Design the Solution: Navigate Your Way to a Career in Semiconductors" event hosted at the University of Texas, Austin.
- Attendance at the annual Women in Semiconductor Hardware Conference in Silicon Valley.







## **Partnership with HerKey**

Renesas India partnered with HerKey—a leading recruitment platform in India exclusively for women to advance returnship efforts. This partnership enables us to reach out to women applicants across different career and life stages to apply to various open roles at Renesas India.

### **Gender Pay Gap Reporting**

We are committed to ensuring all our employees are compensated fairly for the work they do. Globally, we have reviewed factors which may influence differences in pay and bonus between genders, and any observed differences are primarily due to the female representation at the various levels throughout the business. Like other companies with engineering populations, specifically in the semiconductor industry, Renesas is impacted by the wider, systemic issue with female underrepresentation in electronic engineering.

We are continuing our focus on attracting more women to Renesas through inclusive recruitment efforts and engaging our diverse colleagues through development to achieve their potential. Through this, we aim to improve female representation in the company and reduce the pay gap between men and women.





















## **Human Capital Management**

At Renesas, we continue to invest in the greatest asset we have - our people. In this highly competitive industry, we challenge ourselves to identify the best talent globally and improve our support programs and work environment to retain the top talent. Wherever our employees are on their career journeys and wherever they are located, we ensure that they have access to professional development opportunities and a rewarding work environment. Our competitive benefits and initiatives implemented in 2024 reflect our full commitment to providing our employees with the support they need to reach their potential and maintain a healthy work-life balance.

### **Talent Attraction**

From recruiting events to strategic partnerships, we leverage various channels to meet with university students and experienced professionals around the world. As they launch and advance their careers across our business, we come together as one global team to shape the future of the semiconductor industry. In 2024, we:

- Hired nearly 400 interns, 500 university graduates, and over 1700 experienced professionals globally.
- Rolled out a new global Applicant Tracking System (Smart Recruiters) as well as a new career site for improved experience for candidates, hiring managers, and recruiters.
- Engaged a new Recruitment Process Outsourcing (RPO) partner for a rollout in 2025.
- Developed workstreams to maximize the ROI of our recruitment marketing efforts, focusing on early careers and university outreach in target countries.









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### HUMAN CAPITAL MANAGEMENT CONTINUED

## SPOTLIGHT: Recruiting and Developing the Next Generation of Engineers in India

For business expansion and talent pipeline development, India remained our top priority market for Renesas. We significantly increased our efforts to attract new talent and female engineers through recruiting marketing and strategic partnerships in 2024.

Altium, now part of Renesas, aims to empower the next generation of electronics engineers and provide equal access to electronic design tools to build and nurture a community of innovators. In India, they successfully reached more university students and faculty members through unique programs by Altium Education and Altium Training.

#### **RENESAS:**

- Launched a dedicated landing page for India recruiting and social media campaigns featuring our employee testimonial videos, boosting our brand awareness and applications in Indi.
- Signed a three-year memorandum of understanding with the <u>Indian Institute of</u>
   <u>Technology Hyderabad</u> in June 2024 for research and collaboration in the field of VLSI and embedded semiconductor systems (Learn more).
  - The first joint course module was completed in November 2024, involving engineering students designing products using Renesas boards.
- Established a partnership with HerKey, a leading recruitment platform in India only for women to advance returnship efforts, to reach and encourage women in different career and life stages to apply for various open roles at Renesas.
- Sponsored 25 aspiring female engineering students at IEEE WINTECHON, a 2-day tech event dedicated to advancing women in technology. They gained hands-on experiences, attended demos, and engaged in insightful discussions. Buvna Ayyagari, VP and Head of UX at Renesas, delivered her keynote on "Al in the Era of More Than Moore," covering AI, ML, Gen AI, and Digital Twins' role in the semiconductor industry.
- Piloted an intercultural awareness session for the local team to foster global collaboration.

#### **ALTIUM EDUCATION AND TRAINING:**

- Has engaged 100 universities and colleges and 10,000 students across India to date.
- Established Altium Centers of Excellence in collaboration with five schools, including Chandigarh University and GSSS Institute of Engineering for Women, in addition to providing training for faculties and integrating Altium Designer and 365 into their curriculums.
- Joined forces with major players to maximize the reach and promotion in India.
  - AWS Skills to Tech Alliance, India
    - Made joint marketing efforts and incorporated AWS Cloud Essentials content
  - Mouser Electronics (Read more)
    - Combined their educational resources with Altium's design software to empower educators and students
  - Chips to Startup
    - Ministry of Electronics program providing institutions access to EDA Tools
    - Engaged 200 universities and colleges























## HUMAN CAPITAL MANAGEMENT CONTINUED

## **Employee Engagement and Retention**

To make sure all our employees have everything they need to succeed, we continue to improve benefits and programs and optimize opportunities for them to grow professionally.

- 140 employees transferred to new roles and/or job locations through the Internal Mobility program.
- Launched a new platform to streamline the request submission process for our Remote Working Abroad program, which offer employees the flexibility to work from another country for up to 30 days; over 560 applications were received in 2024.

At Renesas, we offer employees the opportunity for professional advancement by working with managers at all levels to support their teams in a variety of ways. Some of these include:

- Increased internal mobility opportunities.
- Career pathing to offer help employees identify opportunities at Renesas.
- Global mobility to allow for movement among our locations around the world.



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## HUMAN CAPITAL MANAGEMENT CONTINUED

## **Benefits and Compensation**

We provide competitive compensation and benefits packages for our employees worldwide and regularly evaluate our offerings to ensure they are attractive for future candidates. Examples of our 2024 initiatives:

- Continued to harmonize compensation and benefits programs including pension plans in Germany, policies in Austria, target STI in Malaysia, and post-M&A planning for Transphorm and Altium to provide fair and consistent access for local employees.
- Improved transparency on employee performance rating and support for managers to enable more comprehensive and effective year-end performance and compensation discussions.
- Standardized our annual grant guidelines for the Long-Term Incentive.
- Hosted the third annual "Renesas Day," a company-sponsored day off for all employees and implemented meeting-free "Focus Fridays" during the month of August; received 650 entries from our global employees for the photo and video competition.
- Conducted annual stress checks in Japan, as required by the local law.
- Began to prepare for various pay transparency requirements in Europe and the United States.

## **Learning and Development**

To help our employees succeed at any career stages, we are continuing our commitment to make learning accessible for all. Some of these efforts in 2024 included:

- Offered learning pathways and recommended content through a centralized Talent Development website.
- Conducted a 360 assessment for leaders (VP level and above) to identify development needs.
- Provided a TAGIE Foundation (Transparent, Agile, Global, Innovative, Entrepreneurial)
   e-learning course in English and Japanese.

- Renesas employees used 93% of the LinkedIn Learning licenses this year (the goal was for 80% participation in the program).
- MindTools, an on-demand platform designed to provide actionable insights into personal and professional development, was used by 98% of active users, greatly exceeding the goal to have 80% active users.
- Identified a new Learning Management System; targeting deployment in 2025.























## **Employee Health & Safety**

Renesas is committed to creating a safe and healthy workplace for all our employees and contractors. To achieve our annual goal of zero lost-time incidents globally, we have continued to enhance our internal systems and processes, preventative measures, and education for employees.

## **Health & Safety Management System**

Compliance with international standards for Occupational Health and Safety (OH&S) management systems is essential to our business and employee safety. In 2024, we obtained the ISO45001 certification at five additional sites including two fabrication facilities (in China and Malaysia) and three non-manufacturing sites (Japan, Vietnam, U.S.). In addition, we have maintained the ISO45001 certification and passed the surveillance tests at all our major manufacturing sites last year.



Over the past 2.5 years, we've taken actions to certify our Renesas production sites in Japan, China, Vietnam, U.S., and Malaysia for the ISO 45001, which has improved the employee awareness of health and safety, reduced the number of occupational accidents, and promoted employee health. My team members around the world are working together to prevent occupational and industrial accidents by proactively sharing case details and countermeasures, standardizing rules, and implementing unified risk assessment systems at manufacturing sites."

## **Johannes Baubin**

Vice President, General Affairs

#### **ISO45001 CERTIFIED SITES**

Location	Certified Sites
Japan	8
Malaysia	5
China	2
United States	1
Vietnam	1

Click here for a full list of certified sites.

At our Naka Factory in Japan, we obtained the highest "Platinum" certification from the Responsible Business Alliance Validated Assessment Program (VAP). The VAP covers several key areas, including labor, health & safety, environmental, ethics, and management systems.





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## EMPLOYEE HEALTH AND SAFETY CONTINUED

In 2024, we also focused on replacing and repairing old facilities and equipment. To strengthen safety measures, we took some proactive actions at Renesas sites around the world. A few examples are included below:



## **SAN JOSE, US**

We installed three guard rails on the roof hatch openings of our three buildings to reduce the potential of an individual falling 12 feet or more from the roof top opening to lower-level entry point. This helped protect those needing access to the roof, including Renesas' Facilities team, contractors, and vendors.



## **BEIJING, CHINA**

To reduce the risk of falls on outdoor staircases at night, we installed high-visibility fluorescent signs on each step, ensuring that employees have greater visibility of each step and can walk safely, even in low light conditions. We also maintain them regularly to keep them in top condition.



### **ALL SITES IN JAPAN**

(except the headquarters):

The number one cause of workplace accidents in Japan has been falling down the stairs. To minimize the risk, we have placed numbered stickers (3>2>1>0) on stairs and signs on handrails to alert employees.



















## **Employee Health Programs and Safety Education**

We host various health and safety-focused events and programs for our teams around the world.



### TAKASAKI AND MUSASHI, JAPAN

We set up massage facilities to help our employees manage their health better, recover from fatigue, and prevent illness. The health keepers we have hired are nationally licensed massage and shiatsu therapists. They provide physical therapy treatments, self-care guidance, and health advice to relieve fatigue and other symptoms that our employees may experience while working - all of which help improve work efficiency and promote the health of employees.



#### **BEIJING, CHINA**

Our local team organized the "Walk for Health" challenge to promote employees' active participation in health management. During the month-long campaign, 55% of employees completed more than 10,000 steps in 30 consecutive days. These employees not only demonstrated their perseverance and determination in meeting the challenge, but also improved their own health through practical actions.



### PENANG, MALAYSIA

The team here organized various types of health events, including mental health programs and health screenings. For example, the Stress Management Campaign was designed to help employees manage their stress levels and monitor their health status. Other activities included Group Music and Imagery Workshop, a Mental Health Gym (teaching relaxation techniques), and a mental health talk on Managing Workplace Stress. They conducted safety programs, including a Safe Motorcycle Riding Course, Safety Training for contractors, and an Emergency Drill Exercise, to raise awareness of safety at work and reduce the risk for workplace injuries.



















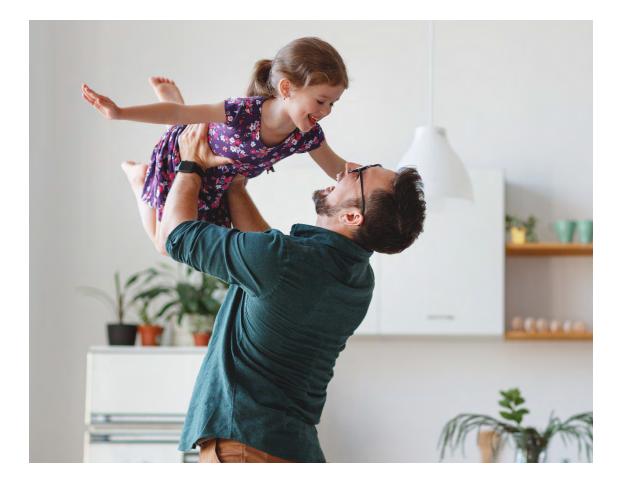


## **Preparations for Emergencies**

To ensure we are prepared for emergencies, we have team response procedures in place and conduct evacuation drills as well as regular Business Continuity Plan tabletop trainings.

## **Healthy Work-Life Balance**

Properly managing the working hours to comply with the limits set by the laws and regulations of each country is imperative. The average prescribed working hours at Renesas (Japan) were 7 hours and 45 minutes per day, with 132 days off in 2024. As a result, in 2024, the average monthly overtime hours for a labor union member were 20 hours and 4 minutes, and the annual paid leave days taken were 18.5 days (in Japan).



















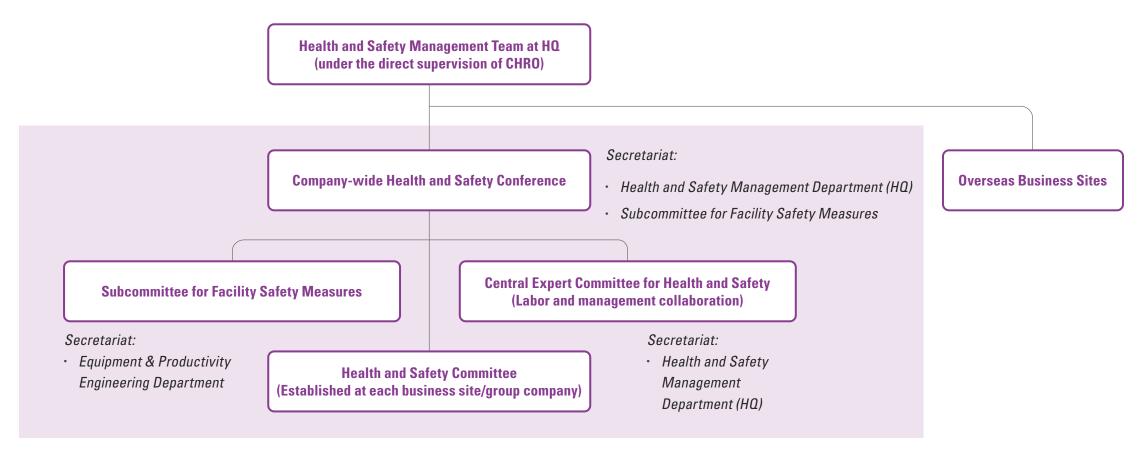




## **Safety Continues as a Top Priority**

The health and safety of our employees is our top priority. The health and safety management team based in Japan operates within the global Human Resources & General Affairs division and under the direct supervision of the Chief Human Resources Officer. Its primary responsibility is to oversee the implementation of our occupational health and safety initiatives. All business sites and group companies in Japan have set up a Health and Safety Committee staffed with a health and safety officer.

#### **HEALTH AND SAFETY MANAGEMENT STRUCTURE IN JAPAN**



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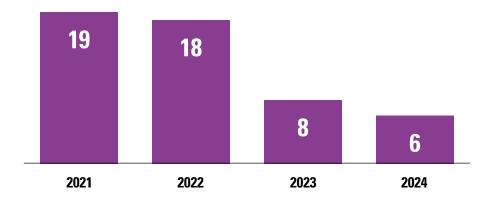




## **Industrial Accidents**

Renesas tracks all industrial accidents that cause operational shutdowns on a global basis and strives to prevent those accidents through proactive information-sharing. In 2024, six cases were reported, which is two cases fewer than 2023. We are striving to prevent workplace accidents by standardizing risk assessment rules at our global manufacturing bases.

## **NUMBER OF INDUSTRIAL INCIDENTS (PER YEAR)**









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## **Leadership Perspective: Strengthening Sustainability Governance at Renesas**

## **A Conversation with Board Leadership**

## **Q:** What are the latest developments or progress made in 2024 from a governance perspective?

Yamamoto: 2024 marked a significant year for accelerating sustainability efforts at Renesas. One of the most notable achievements was the decision on the establishment of the Sustainability Department (SU) in January 2025, which centralized sustainability initiatives across the organization. For example, we consolidated our environment team, previously operating under the operations team, into the SU. This integration has enabled more efficient management of environmental initiatives as part of our broader sustainability strategy. This structural change enhances efficiency, accountability, and alignment with long-term sustainability goals.

SU drives progress toward our 2030 sustainability commitments and 2040 goals, ensuring regulatory compliance and stakeholder engagement. With board-level oversight and cross-functional collaboration, this governance model reinforces Renesas' commitment to sustainability leadership.

Mizuno: In 2024, ESG governance at Renesas underwent a significant transformation as we decided to integrate sustainability into our risk and opportunity management structure through the Audit and Sustainability Committee framework. A key component of this strengthened governance is the Sustainability Operating Team (SOT), which is led by the SU and responsible for coordinating sustainability initiatives across the organization. Under this structure, departments report directly to SOT on their progress toward sustainability

targets, ensuring transparency and alignment with companywide goals. For example, the Environment team leads efforts on energy reduction initiatives, while the Procurement team drives supplier ESG assessments.

To reinforce accountability, we introduced an "Implement or Explain" approach. When departments fall short of their sustainability targets, they must provide comprehensive explanations and present concrete action plans for improvement to the SOT.

With SU leading the SOT, this ensures that sustainability initiatives are driven by those directly responsible for execution, while the Audit and Sustainability Committee provides governance oversight to ensure alignment with long-term business strategy and regulatory expectations.

Q: As board members responsible for sustainability, how do you envision Renesas strengthening its sustainability commitments, particularly in areas where industry expectations and regulations are evolving rapidly?

**Yamamoto:** At Renesas, we are committed to continuously improving our sustainability strategy to adapt to rapidly evolving regulations and industry expectations. The Sustainability Department plays a central role in aligning

the company's overall vision with divisional goals. This centralized model enables us to respond quickly to new regulations, such as the EU's Corporate Sustainability

Reporting Directive (CSRD), and contributes to long-term value creation. Furthermore, close collaboration between the SU, SOT, and the board ensures that our sustainability goals are both ambitious and achievable, enhancing execution across the company.

Mizuno: From a governance perspective, embedding sustainability into the risk management framework is critical. This ensures not only compliance with global ESG regulations but also leverages them as sources of competitive advantage. The Audit and Sustainability Committee assesses how regulatory changes impact our operations and provides guidelines to ensure the sustainability of our business. These measures establish a strong foundation for Renesas to maintain its position as an industry leader.

**Noboru Yamamoto** 

Independent Outside Director,
ESG Sponsor, Member of the Audit and Sustainability Committee

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## **Leadership Perspective**

Q: What role do you see the board playing in driving Renesas' 2030 sustainability commitment and 2040 goals, and how are you ensuring these goals remain aligned with broader business objectives and shareholder interests?

**Yamamoto:** Achieving the 2030 sustainability commitment and 2040 goals requires integrating sustainability objectives into the core of our business strategy. The centralized model, led by the Sustainability Department, enables decision-making that incorporates ESG factors across all areas, from product development to supply chain management. These goals are tracked against defined KPIs to ensure transparency and alignment with shareholder interests.

**Mizuno:** The role of the Audit and Sustainability Committee is to ensure that these goals are both achievable and measurable. We monitor regular reports from the SOT and provide guidance when challenges arise. Additionally, we evaluate these goals from the perspective of risks and opportunities to ensure they align with short-term business objectives and shareholder interests.

Q: What are the top sustainability challenges or risks you believe Renesas faces in the coming years, and how is the board preparing to address these to secure long-term growth and resilience?

**Yamamoto:** The primary challenges include strengthening our response to carbon neutrality targets, ensuring ESG compliance across the supply chain, and adapting to the rapid evolution of international regulations. To address these, we are fostering cross-divisional collaboration through SOT and formulating unified strategies. We have also developed concrete action plans for 2030 and 2040 to advance sustainability-centered growth initiatives.

Mizuno: One major risk is balancing sustainability investments with short-term profit goals. To address this, the Audit and Sustainability Committee evaluates the long-term impact of ESG initiatives. Additionally, we are strengthening mechanisms to respond swiftly to regulatory advancements, positioning Renesas not only to ensure compliance but also to lead the industry in setting sustainability standards.

Q: How is Renesas preparing to meet emerging global sustainability regulations, and what strategies are in place to ensure compliance and competitiveness?

Yamamoto: To enhance regulatory compliance, we conduct regular gap analyses and refine our ESG strategy to align with global standards. In 2024, we developed a short-term integrated action plan to ensure compliance with sustainability regulations and prepare for future consolidated reporting. These efforts serve as a foundation to enhance our competitiveness and gain stakeholder trust.

Mizuno: From a governance perspective, integrating ESG compliance into the organizational structure is essential. By leveraging the collaboration between the Sustainability Department and SOT, we have established mechanisms to identify and mitigate compliance risks early. Regular reviews by the Audit and Sustainability Committee ensure transparency and efficiency in regulatory responses. This approach enables Renesas to adapt to regulatory changes while fostering innovation and maintaining industry leadership.

At Renesas, we are committed to continuously improving our sustainability strategy to adapt to rapidly evolving regulations and industry expectations.



Independent Outside Director, Chair of the Audit and Sustainability Committee



















## **Our Governance Structure**

At Renesas, we are committed to maintaining a transparent corporate governance structure that enables fair, fast, and effective decisionmaking and accountability. To enhance Renesas' mid to long-term corporate value for all our stakeholders, we continue to improve our management system and implement various measures to increase operational efficiency.

In 2024, we focused on upgrading and strengthening the Board and corporate governance. For example, we:

- Transitioned to the three-committee Board structure.
- Hosted Virtual-Only Shareholders' Meeting, allowing shareholders to ask questions verbally in addition to text in both English and Japanese.
- Strengthened governance and compliance of use of Al tools by updating internal guidelines for generative AI tools, consultation, and approval processes (See additional details in the Risk Management section).

In 2025, we significantly strengthened our governance on sustainability. By integrating sustainability into the Audit and Sustainability Committee, we have strengthened our oversight of ESG-related risks and opportunities. Policies, key issues, opportunities, and risks related to climate change are regularly discussed and reviewed by the CEO, executive corporate officers appointed by the CEO and the Sustainability Department and are reported to the Board of Directors on a regular basis.

Our internal control system meets the requirements of the Companies Act in Japan and ensures that our officers and employees comply with applicable laws and regulations and with our articles of incorporation.







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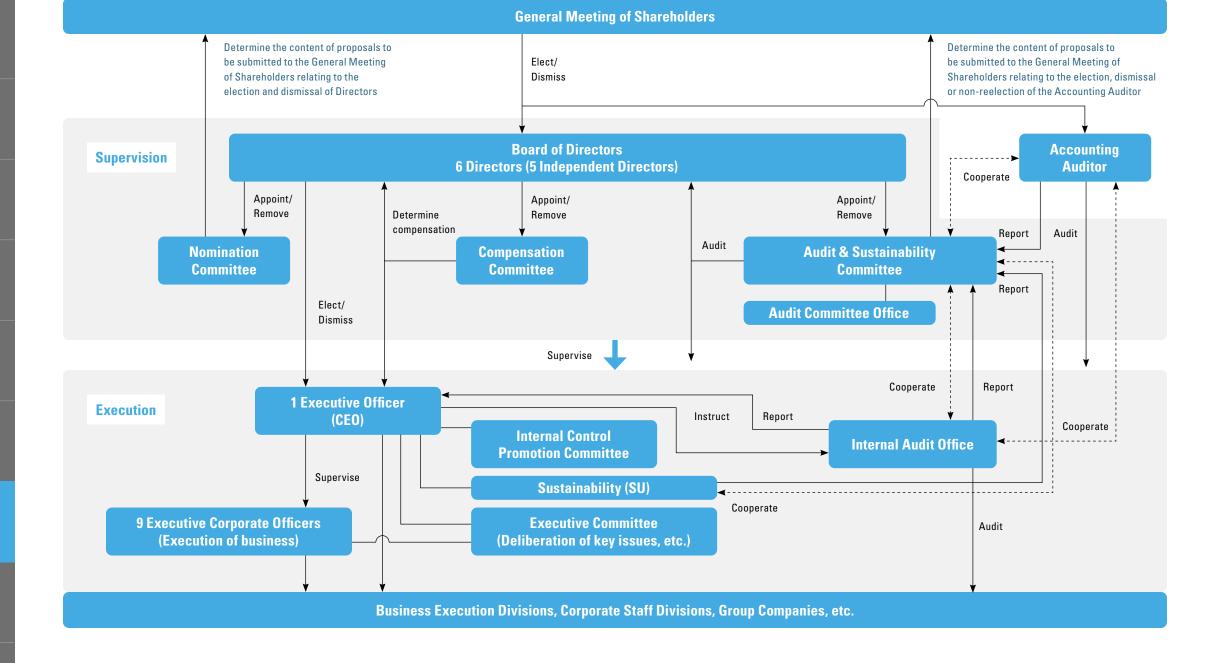
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## **Board Skills & Diversity**

Renesas' management board is organized in accordance with the Companies Act in Japan. As of April 2025, the Board of Directors is comprised of six members. Five out of six Directors are Outside Directors who will bring a diverse set of knowledge and experiences to elevate Renesas' Board effectiveness. Board responsibilities and expectations are identified in the Renesas Board Charter that is approved by the Board of Directors.

	Hidetoshi Shibata	Jiro Iwasaki	Selena Loh LaCroix	Noboru Yamamoto	Takuya Hirano	Tomoko Mizuno
Executive Leadership						
International Business						
Semiconductor/Technology Industry						
Software/Digital						
Sustainability/ESG						
Finance						
Risk Management/Legal Affairs						
Public Board Experience						





















## **Composition Ratio of Board of Directors and Each Committee**

**Board of Directors Nomination Committee** 

> 83% **Independent Outside Director Ratio** (5 out of 6)

100% **Independent Outside Director Ratio** (3 out of 3)

33% **Female Director Ratio** (1 out of 3)

**75**% **Independent Outside Director Ratio** (3 out of 4)

**Compensation Committee** 

50% **Female Director Ratio** (2 out of 4)

100%

**Audit & Sustainability Committee** 

**Independent Outside Director Ratio** (3 out of 3)

33% **Female Director Ratio** (1 out of 3)

33%

**Female Director Ratio** 

(2 out of 6)





















## **Compliance & Business Ethics**

As a responsible business, we strive to hold ourselves to the highest standards of ethics and integrity and earn the continued trust of our key stakeholders including investors, customers, vendors, and communities. Renesas Global Code of Conduct (CoC) and compliance policies reflect our full commitment. Our focus and results from 2024 include:

- Updating global policies to align with global trends and changes in internal policies, including but not limited to CoC and other policies related to ethics and compliance.
- Integration of the entity management system and streamlined operations including PMI of those related to the companies we acquired.
- Development and implementation of generative Al tool for automatic response to internal inquiries.



### CoC

CoC is reviewed and approved by the Board of Directors and expresses our commitment to ethical standards and responsibilities that guide our decision-making process across our business operations and corporate activities. We provide training to our employees annually on issues addressed in CoC to help them understand their ethical and legal responsibilities to each other and the company.

2024 CoC TRAINING COMPLETION RATE			
2024	93% (increase of 2%)		
2023	91%		





















## COMPLIANCE & BUSINESS ETHICS CONTINUED

## **Compliance Promotion**

Renesas' Internal Control Promotion Committee, chaired by the CEO, deliberates and makes decisions on compliance matters, and reports key issues to the Executive Committee and the Board of Directors. Any compliance violation is promptly investigated, remediated, and reported to the head of the division or office in charge of compliance and to the head of the Legal Division.

We implemented multiple global employee trainings in 2024 including:

- Diversity and harassment prevention training
- Anti-trust training
- Conflicts of Interest (COI) training
- Center of Influence training
- Training on Ringi, an internal pre-approval procedure for decision-making, to enhance transparency and accountability

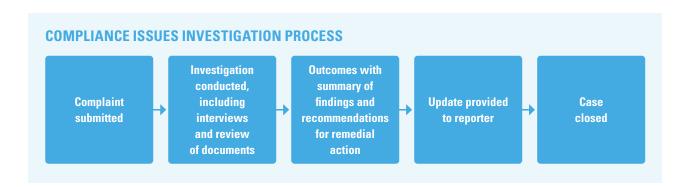
Throughout the year, we regularly issue CoC newsletters to our employees by email to reinforce our compliance policies. In 2024, these included:

- Fostering a Respectful Workplace: Understanding and Preventing Harassment (October, 2024)
- Antitrust Awareness: Safeguarding Competition (March, 2024)
- Advancing Diversity, Equity, and Inclusion in the Workplace (February, 2024)
- Announcement of Global COI Policy (December, 2024)

We also issue a regular newsletter periodically to all employees who are based in Japan. This newsletter may cover country-specific topics as well as Japanese laws and regulations.

#### **Ethics and Whistleblower Hotline**

Renesas provides a hotline service for its employees, customers, suppliers, and the public to speak up about compliance concerns including workplace matters. Complaints may be made anonymously and can be registered online or via telephone. Renesas will not retaliate, and will not tolerate retaliation, against any individual for reporting a concern in good faith. In 2024, 34 reports were made to the hotline with actions including investigation, remediation (where needed), and disciplinary action (where warranted). Of these 34 reports, 15 related to claims of harassment, discrimination, or labor compliance. No serious compliance violations were detected. Renesas remains committed to promoting awareness of the hotline.



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## COMPLIANCE & BUSINESS ETHICS CONTINUED

## **Anti-Bribery and Anti-Corruption**

Renesas complies with the anti-bribery and anti-corruption laws of the countries where it operates. We regularly conduct anti-corruption and anti-bribery training for all employees. While there were no instances of disciplinary action or termination in 2024 due to non-compliance with our anticorruption policy, Renesas remains committed to its policies and will further expand its anti-corruption and anti-bribery training for executives and employees globally.

Our global Anti-Bribery & Anti-Corruption Policy, introduced in 2023, strengthens the anti-corruption principles highlighted in our Global Code of Conduct. By clearly defining what constitutes bribery and corruption, and who qualifies as a government official, we aim to make it easier for employees to understand and comply with the policy. Renesas' Board of Directors oversees both the standalone Anti-Bribery & Anti-Corruption Policy, as well as the anti-corruption policies included in the Global Code of Conduct.

Renesas' prohibition against offering, promising, or paying bribes also applies to third parties (including but not limited to new business partners and suppliers) who provide services or act on Renesas' behalf, such as suppliers, agents, contractors, consultants, and distributors. This principle applies to Renesas transactions everywhere in the world, even where the practice may be widely considered "a way of doing business." A copy of the Renesas standalone Anti-Bribery & Anti-Corruption Policy can be accessed here.

## **Information Security Policy**

At Renesas, we have the foundation for privacy protection, but plan to build on the policies and procedures we have already established. Because more regions and countries are likely to introduce regulations similar to the GDPR, we will need to ensure compliance with these evolving data privacy laws. To address these changes, we provide information security training to all employees of Renesas and its subsidiaries. Please refer to the Risk Management section for more details.







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## **Risk Management**

Risk management is critical to our business continuity and building trust with our customers, suppliers, and the communities where we operate. By regularly analyzing Renesas' group-wide risks, we strive to identify and mitigate all types of risks.

## **Risk Management System**

We have established a comprehensive group-wide risk management system based on the Global Rule for Risk and Crisis Management within the Renesas Group. We continuously address potential risks, with each type of risk assigned to the relevant department responsible for both day-to-day risk management and crisis management.

We proactively identify and categorize risks on our global risk list, develop contingency measures to prevent those risks, and update our response policies. Furthermore, in the event of an emergency, we establish an Emergency Task Force led by our CEO which promptly gathers information, proposes countermeasures, and takes action to minimize losses.

Risk Management Manager	Risk Management Officer	Risk Management Division	Risks				
Hidetoshi Shibata	CEO	CEO Direct	Politics				
(Director, Representative Executive		Corporate Communications	Public relations				
Officer, President and CEO)		Sustainability	Sustainable Development Goals				
			Natural disasters				
		Legal	Employee misconduct				
			Reporting system				
			Violation of laws and regulations				
			IP				
			Information leakage (Secret information including personal information)				
					Engineering	Engineering	System
							Procurement





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Risk Management Manager	Risk Management Officer	Risk Management Division		Risks	
Hidetoshi Shibata	Senior Vice President	Operations	Production	Violation of laws and regulations	
(Director, Representative Executive				Environment	
Officer, President and CEO)				Procurement	
				Technological innovation	
				Infections	
				Accident	
				Natural disasters	
				Politics	
				Cybersecurity	
			Supply Chain	Asset management	
			Management	Employee misconduct	
				Natural disasters	
				Politics	
			Procurement	Human rights	
				Violation of laws and regulations	
				Procurement	
				Infections	
				Natural disasters	
				Politics	
			Quality Assurance	Quality	
	CF0	Business Development		M&A	
		Financial Planning & Analysis		Asset management	
				Revenue	
				Capital expenditures	





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Risk Management Manager	Risk Management Officer	Risk Management Division	Risks	
lidetoshi Shibata	CF0	Accounting & Tax	Tax	
(Director, Representative Executive			Credit	
fficer, President and CEO)			Employee misconduct	
			Violation of laws and regulations	
		Treasury, Control & Cost	Fund procurement	
			Asset management	
	CHRO	Human Resources & General Affairs	Human rights	
			Labor policy	
			Personnel strategy	
			Infections	
			Natural disasters	
	Senior Vice President of each Product Group	Analog & Connectivity Embedded Processing High Performance Computing Power	Violation of laws and regulations	
			Technological innovation	
			Business expansion	
			Information leakage	
	CS0	Sales	Employee misconduct	
			Sales	
			Natural disasters	
	Vice President	resident Information Systems	System	
			Natural disasters	
			Cybersecurity	





















## **Information Security Management**

As a global company, Renesas takes cybersecurity seriously and strives to identify vulnerabilities and respond immediately to any potential threats.

To ensure business continuity, we constantly work to prevent cyberattacks through corporate governance policies and processes, including monitoring and reporting potential threats, employee training, and staying current with the latest cybersecurity standards and certifications. In 2024, we enhanced our information security core competencies via the following key initiatives:

- Enhanced supply chain security to ensure better protection against potential vulnerabilities and enhance operational resilience.
- Strengthened engagement with key stakeholders, including our industry peers, suppliers, governments, and customers, lending a robust security posture and improved intelligence
- Stayed informed about industry cybersecurity challenges and solutions through active participation in the Semiconductor Manufacturer Cybersecurity Consortium (SMCC) Governance and Testing

We have established a comprehensive security management framework designed to continuously monitor, assess, report, and address any unauthorized attempts to access our networks, data, or computer systems. This structured approach ensures that we can promptly identify and respond to potential security threats, thereby safeguarding our digital assets and maintaining the integrity of our operations.

Renesas aligns with ISO 27001 standards and conducts regular maturity benchmarking against a peer group of comparable manufacturers to ensure continuous improvement in information security practices. We have a formal structure in place to monitor, evaluate, and respond to unauthorized attempts to access our networks, data, or systems. Our expert IT security team monitors potential threats around the clock, employing both tactical and strategic measures to proactively detect and resolve security issues, all under the guidance of the Vice President of IT.

In the event of an incident, the IT team promptly reports to the Security Council (CEO, CFO, General Counsel, and heads of HR and IT) and activates emergency response plans, collaborating with HR, Legal, Quality Assurance, Procurement, and Accounting as necessary. Quarterly reports are provided to the Security Council, executive management, and the Board of Directors to keep them informed of cybersecurity risks and initiatives.

We conduct regular incident response exercises to ensure swift and effective action, reinforced by recent security policy updates that strengthen threat response, enhance coordination, and align with industry-leading standards. In addition, we also conduct annual penetration tests to identify internal vulnerabilities and provide actionable insights to mitigate risk.

## **Training at Renesas**

At Renesas, we prioritize cybersecurity awareness by providing mandatory annual training on phishing and security protocols to all global employees and contractors. Our program includes periodic mock phishing exercises and access to additional on-demand training materials via the IT Intranet page.

In 2024, we conducted regularly scheduled employee cybersecurity training sessions and completed our annual cycle of security training, with 83% of employees successfully completing the training. This is a continual process that not only focuses on phishing, but also ensures our colleagues are up to date with the latest knowledge on cybersecurity threats. Furthermore, every new employee undertakes detailed security and compliance training with annual refresher training.

Our cybersecurity team works closely with our colleagues in Compliance, Legal, and HR to ensure we have the necessary tools and processes to address modern security threats. We firmly believe that robust information security acts as a business enabler, fostering growth by establishing us as a trusted supplier, customer, and partner.





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#### **Certifications**

Renesas is dedicated to adhering to global security standards, showcasing our commitment and ability to protect against security breaches. In 2024, we aimed to broaden our certifications to ensure that both current and future acquisitions align with our global standards, providing a consistent experience for all users. Our current certifications include the following:

- ISO 27001 (Initiated a global ISO 27001 certification process and successfully completed the first phase, which involved testing the effectiveness of our design controls).
- TISAX, an automotive security standard which works alongside IATF 16949 and ISO9001 (Completed in 2023).
- SOC2 Type 2 certificatione is in place for the Altium 365 platform involving an evaluation of the effectiveness of security controls over a specified period and ability to operate consistently over time.

#### Al Governance

As generative AI has become an imperative part of our operation at Renesas, we place great importance in AI governance to ensure safe and responsible adoption and use. We formed the AI Tools Task Force which is a cross-functional working group of AI, Security, Compliance and Legal, and released Guidelines for Generative AI Tools to foster secure and compliant environment to use generative AI tools across the organization globally. We also provided online training for employees in 2024 to boost their understanding of use, risks, and limitation of AI Chatbots in the workplace.

## **Data Privacy**

Renesas is dedicated to safeguarding the privacy and security of our team, clients, partners, and stakeholders. Our information security policy outlines the rigorous measures we take, with the objective of ensuring full compliance with data privacy laws and regulations, including GDPR, APPI, CCPA, and BDSG. These changes have been implemented organization-wide to strengthen our security posture and ensure alignment with industry best practices. Additionally, Renesas partners with TrustArc, a third-party vendor specializing in privacy compliance, to conduct an annual comprehensive assessment of its privacy practices. This assessment thoroughly evaluates Renesas's privacy practices, policies, and procedures, ensuring that any potential gaps are identified and addressed to enhance and strengthen our privacy program.

Our **Data Privacy Framework** outlines the principles, controls, and governance mechanisms we have implemented to protect personal data throughout its lifecycle. In 2025, we continued to advance our data privacy capabilities through the following key initiatives:

### 1) Enhanced Data Privacy Governance

We have established a Legal Department Data Privacy Team. We collaborate with internal stakeholders to identify and mitigate data privacy risks.

## 2) Strengthened Privacy Frameworks and Regulatory Compliance

Renesas is implementing structured frameworks to support compliance with global data protection laws.

These frameworks are designed to provide a consistent foundation for privacy operations and promote accountability, transparency, and risk mitigation across the organization.

#### 3) Privacy by Design and Default

Renesas intends to apply Privacy by Design principles to ensure that privacy considerations are embedded from the outset of product development and business initiatives, and by default, only the minimum necessary personal data is collected, retained, and processed, reducing exposure and supporting responsible data use.

### 4) Cross-Functional Engagement and Risk Analysis

We engage cross functionally to assess privacy risks. Through internal reviews and privacy impact assessments (PIAs), we strengthen organizational awareness and alignment around data protection goals.

#### 5) Centralized Privacy Resources

Renesas has launched a centralized Data Privacy intranet page that provides streamlined access to privacy policies, guidance, training materials, and templates.

## 6) Ongoing Monitoring and Continuous Improvement

We stay informed about legislative changes to update our president and templates.

### 7) Transparent Communication

Renesas is committed to transparency. We clearly communicate how we collect, use, and protect personal data, and we uphold the rights of individuals to access and control their information in accordance with applicable laws through our Privacy Policy.

Through these efforts, Renesas ensures the responsible handling of personal data and fosters a culture of privacy that supports innovation, trust, and global compliance.





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## **Tax Policy**

In compliance with the Renesas Code of Conduct, Renesas and its Group companies ensure transparency and comply with tax laws and regulations of the countries in which we operate. Renesas' tax policy, which is approved by the Board of Directors, serves as the guiding principle for the long-term sustainability of our business.

Through our tax policy, we ensure the following:

## **Transparency**

Our goal is to maintain transparency with our tax requirements by informing our internal team, shareholders, and other relevant individuals about our tax positions, risks, and strategies. We also ensure that all decisions are made with sufficient analysis and evidence.

## **Compliance with Tax Law**

We aim to remain compliant with the law in each country where we operate. We stay up to date with any changes in tax law and seek confirmation when policies are unclear. In addition, we provide internal training for employees in order to ensure they have a strong understanding of tax principles.

## **Tax Efficiency**

In order to maximize shareholder return, we continue to make our best effort to be efficient with our tax liabilities by applying for tax benefits and tax incentives within the scope of business objectives and legislative intents. A valid business purpose and substance is of the utmost importance to us. As such, we do not enter into transactions solely for the purpose of reducing tax burdens and we do not conduct schemes for the purpose of tax avoidance or profit shifting by using offshore secrecy jurisdictions or so called "tax havens."

### **Avoidance of Double Taxation**

In order to avoid double taxation on identical economic profits, we actively seek applicable tax treaty relief and mutual agreement procedures among the countries where we conduct business.

## **Transfer Pricing**

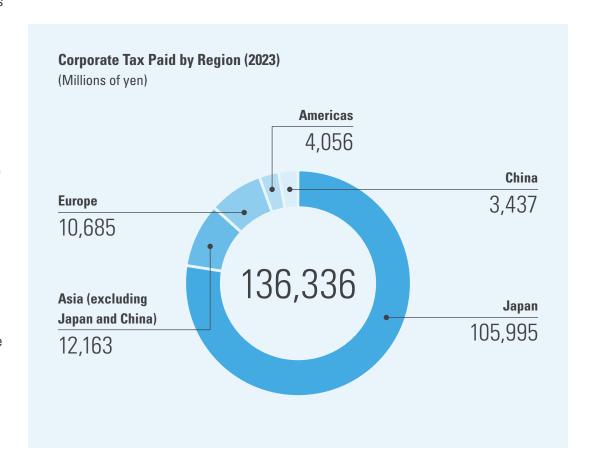
With regard to internal transactions within Renesas and its global subsidiaries, we aim to allocate the appropriate profit based on the arm's length principle in accordance with the OECD transfer pricing guidelines. In addition, we utilize Advance Pricing Agreement (APA) with the tax authorities in order to minimize tax exposures related to transfer pricing.

## **Uncertain Tax Positions**

Our goal is to interpret and apply the law as intended, instead of taking as it is written. We stay current with both official and unofficial interpretations of tax laws. We are committed to doing our due diligence and ensuring we are well-supported and disclosing when uncertain.

## **Relationship with Tax Authorities**

Our goal is to maintain a trustworthy relationship with tax authorities through honest and thorough communication. In the case of disagreement, we will work in collaboration with the tax authority to seek a resolution.



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**Business Responsibility** 























## **Commitment to Protecting Human Rights**

At Renesas, we are committed to upholding the highest standards of human rights and ethical business practices. Our approach is guided by internationally recognized frameworks, ensuring we operate responsibly and with integrity. Specifically, we align our business with:

- The United Nations Guiding Principles on Business and Human Rights and the International Bill of Human Rights, providing a robust foundation for respecting and promoting fundamental rights across all our operations.
- The Ten Principles of the UN Global Compact, which we have proudly supported as a signatory since 2021, driving our efforts in human rights, labor, environment, and anticorruption.
- The International Labour Organization's The Ten Principles | UN Global Compact, reinforcing our dedication to fair labor practices, including freedom of association and the elimination of forced labor and discrimination.

These commitments reflect our role in advancing global human rights standards throughout our business and supply chains.

## **Governance and Oversight of Human Rights**

Renesas is committed to upholding human rights by implementing effective management mechanisms and ensuring robust decision-making processes.

We maintain a clear governance structure with a defined hierarchy for reporting and escalating concerns related to human rights issues. Both the Board of Directors and the newly established Audit and Sustainability Committee take human

rights risks into account when reviewing comprehensive reports (Learn more: Our Governance Structure).

In 2022, we established a human rights promotion system to drive global initiatives aligned with our commitment to respecting human rights. This effort has been led by our Senior Vice President and Chief Human Resources Officer.





















**Business Responsibility** 

## COMMITMENT TO PROTECTING HUMAN RIGHTS CONTINUED

## **Human Rights Due Diligence & Risk Assessment**

Following a self-assessment questionnaire, done in partnership with the Business for Social Responsibility and with support from PwC, we identified the following six key human rights risks within our major entities, both within the company and our supply chain:

- Safe and Healthy Working Environment
- Prohibition of Child and Forced Labor
- Working Hours
- Responsible Minerals Procurement
- Labor-Management Relations (Japan)
- **Human Rights Education**

To ensure we uphold our own high standards of integrity as well as meet stakeholder expectations on these critical issues, we are taking additional steps to identify, prevent, and mitigate risks in accordance with the United Nations Guiding Principles on Business and Human Rights. This includes our commitment to continuing to enhance our current human rights due diligence process, designed to prioritize the most significant risks. This process includes comprehensive reviews at defined intervals, complemented by more localized actions during the intervening years.

### **HUMAN RIGHTS DUE DILIGENCE PROCESS**

## **ASSESSMENT/ ANALYTICS**

- Identify potential human rights risks
- Assess impact of the identified risks (Confirm the severity and scale of the problem)
- Prioritize key risks to be addressed

PLAN/ACTION

- · Develop an action plan for risk management
- Take action to reduce and prevent risks based on the results of analysis and assessment
  - · Conduct human rights education and training

## **REPORT/ DISCLOSURE**

· Disclose information to stakeholders through reports and websites

## **MONITORING**

- Check compliance with human rights policies and progress in risk reduction efforts
- Comply with Board supervision



















## COMMITMENT TO PROTECTING HUMAN RIGHTS CONTINUED

## **Advancing Human Rights: Addressing Gaps and Building for the Future**

In 2024, our primary focus on human rights was to address outstanding actions identified during the risk assessment process. With the insights provided, we have prioritized closing critical gaps in respect to labor management relations in Japan and prohibition of forced and child labor to strengthen our compliance and operational integrity. This effort reflects our commitment to proactively identifying and mitigating human rights risks across our organization and supply chains.

Our most recent achievements and progress include:

- Advancing Labor Rights: Established new policies, including responsible recruitment practices, to ensure fair treatment and protect workers from exploitation, such as forced or bonded labor. Our responsible recruitment processes are based on the Institute for Human Rights and Business guidelines.
- Aligning with Global Standards: Updated the Renesas Electronics Group Human Rights Policy to reflect the latest best practices, reinforcing our commitment to respecting international human rights frameworks.
- **Promoting Worker Representation:** Strengthened partnerships with unions, working councils, and employee groups to uphold the right to collective bargaining and foster constructive relationships.

- **Enhancing Workforce Well-being:** Empowered employees through flexible work arrangements like our "Remote Working Abroad" program and hybrid models, promoting work-life balance and safeguarding their rights to a healthy workplace. (Learn more)
- Fostering Inclusion: Strengthened our diversity and inclusion initiatives annually by introducing Employee Resource Groups, ensuring equity and the right to a discrimination-free environment for all employees. (Learn more)

In parallel, we are actively developing a comprehensive, longer-term strategy to ensure sustained progress in this area and alignment between our human rights practices with global best standards and our organizational objectives.





















## **Supplier Engagement & Responsible Minerals Sourcing**

Close collaboration with our suppliers and partners is essential to ensuring responsible sourcing and product development. We have established and continued to provide interactive seminars to strengthen our supplier engagement around the world. As a result, in 2024 we made the CDP Engagement Leaderboard for the second year in a row. We are honored to have been recognized as one of the Supplier Engagement Leaders representing the top 8% of companies rated for supplier engagement on climate change.

### **Mid-Term Targets**

In order to realize a sustainable supply chain, we establish a mid-term target as well as a yearly KPI for undertaking initiatives. Our Mid-term goals (2025–2028) include the following:

- 1) 100% Agreement to Renesas Supplier Code of Conduct
- 2) 100% Responsible Business Alliance (RBA) SAQ response rate obtained from key suppliers

### **Green Procurement Commitment**

Renesas is committed to promoting environmentally-conscious procurement activities to contribute to a sustainable society. To comply with global regulations and advance environmental protection, we have issued the Renesas Electronics Green Procurement Standards and request our suppliers to adhere to them. We prioritize the sourcing of environmentally conscious parts and materials from companies which practice proactive environmental conservation in line with these standards. Additionally, Renesas is strengthening the disclosure of this environmental information to stakeholders and actively fostering communication to deepen mutual understanding.

### **RBA Membership and the New Code of Conduct**

Upon joining the RBA in 2021, we re-evaluated our Supply-Chain CSR Deployment Guidebook. The revised version is called the Renesas Supplier Code of Conduct (SCoC). In 2024, we revised the SCoC to reflect updates made to the RBA Code of Conduct and have worked to obtain agreement from our key suppliers. As of Feb 2025, 92% of our key suppliers worldwide have agreed to our revised Supplier Code of Conduct.

### **Participation in the RBA VAP Audit**

We conducted RBA VAP (Validated Assessment Program) audits at our Penang and Naka factories to demonstrate our compliance with the RBA Code of Conduct. In 2024, our Naka factory received Platinum certification, the highest level of certification which can be obtained. This was followed by our Penang factory, which achieved Platinum certification in April 2025.

### **Self-Assessment Questionnaire (SAQ)**

We regularly conduct ESG surveys among our direct material suppliers to check and evaluate the status of their ESG activities. Topics covered include labor, health and safety, environmental, ethics, and management systems. We disclose the assessment results to suppliers and use them as a tool for internal improvement. In 2024, more than 150 suppliers responded to the SAQ.

In addition, we regularly check the geopolitical and sectoral risks of all material suppliers using a risk assessment platform provided by the RBA. As a result of these activities, if a supplier is classified as potentially high-risk, we promptly ask them to conduct self-tests and self-improvements using a self-diagnosis survey, similar to key suppliers.

















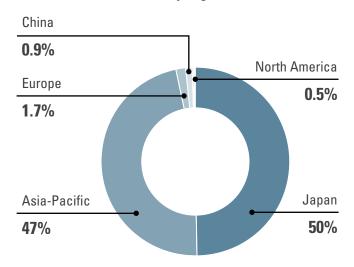




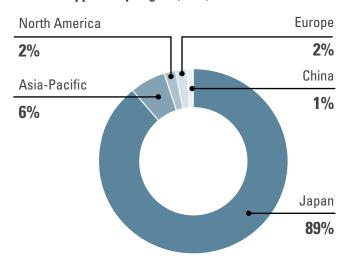
## SUPPLIER ENGAGEMENT & RESPONSIBLE MINERALS SOURCING CONTINUED

## **Supply Chain Data by Region**

## Ratio of Purchase Amount by Region (2024)



## Ratio of Suppliers by Region (2024)







## **CDP Supply Chain Program**

We utilize the CDP Supply Chain platform to efficiently carry out and evaluate our suppliers' ESG efforts and streamline supplier responses. On June 14, 2024, more than 50 suppliers participated in the "CDP Supply Chain Program briefing" session" we hosted online. On the day of the briefing, Renesas shared its ESG initiatives, and CDP provided an overview of its supply chain program. During this session, we provided guidance on responding to the questionnaire, as well as a special Q&A session on initiatives to reduce GHG emissions. For the 2024 CDP survey, we received responses from 77 companies.











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## SUPPLIER ENGAGEMENT & RESPONSIBLE MINERALS SOURCING CONTINUED

### **Responsible Minerals Procurement**

To prevent human rights violation and the destruction of the environment within the supply chain, Renesas is working to realize responsible mineral procurement that does not include conflict minerals. This includes OECD conflict-affected and high-risk areas, including DRC and adjoining countries, in relation to risks listed on the Annex II of OECD's guidelines.

In 2025, we will continue to work to identify 100% of conflict minerals (3TG) contained in our Group's products and to confirm that they are refined at Conflict-free smelters certified by a third-party organization, Responsible Materials Initiative, defined below as "conformant smelters."

### **3TG RESULTS**

	2022	2023				
	TOTAL	TOTAL	TIN	TANTALUM	TUNGSTEN	GOLD
Number of Identified Smelters	230	210	61	32	31	86
Number of Conformant Smelters	230	210	61	32	31	86

Excluding Celeno products

<u>Click here</u> to view Renesas' Responsible Minerals Procurement Policy.

JEITA Study Group Membership: As a member of the Japan Electronics and Information Technology Industries Association (JEITA), Renesas joined the association's Responsible Mineral Procurement Study Group in April 2022. As a member of this Group, Renesas supports Online Conflict Mineral seminars to share knowledge of how to address these issues.



















## **Community Involvement and Social Contributions**

At Renesas, we believe that contributing positively to our communities is not just a moral duty but also good business practice.

In Japan, we have integrated various types of leave, such as volunteer leave, into our annual paid vacation days and increased the total number of vacation days. This allows our employees to dedicate some of their time to social contribution activities. Additionally, we have introduced 3- and 4-day work weeks, making it easier for our employees to regularly engage in local community activities.

In the United States, all regular full-time employees are entitled to up to 16 hours of paid work time per calendar year to participate in approved community service activities.

## **Actual Figures From Social Contribution Initiatives Spending In 2024 (Millions Of Yen)**

Donations	9.75
Financial Contributions	7.16
Donation of Goods	1.08
Employee Volunteering Participation (hours converted to monetary value)	5.07





















## COMMUNITY INVOLVEMENT AND SOCIAL CONTRIBUTIONS CONTINUED

## **Environmental Initiatives**





In June 24, 2024, the Suzhou factory launched its 2024 environmental activities, focusing on tree planting and greening to restore the factory's greenery, which had been damaged by years of subway construction. With the general manager and deputy general manager leading the initiative, over 70 employees volunteered to plant new shrubs and flowers, aiming to raise environmental awareness, improve the company environment, strengthen teamwork, and enhance employees' sense of belonging. Despite the scorching heat, all participants worked diligently to beautify the Suzhou plant, hoping to bring new vitality to the factory with their efforts.



Earth Hour Program (Penang, Malaysia): On March 23, 2024, from 8:30 pm to 9:30 pm, around 35 employees participated in the "PZ3 Earth Hour Program" by turning off non-essential lights to show their commitment to sustainability. They creatively formed the Renesas Earth Hour wording using candles and switched off lights in various areas, including the cafeteria, walkway, corridor, multipurpose court, car park, and compound streetlights. This event underscored the importance of environmental stewardship and inspired others to take action, highlighting that every small effort contributes to a more sustainable world. Renesas is determined to build on this momentum and continue making impactful changes for the benefit of our planet.



**Beach Cleaning (Turkey and Japan):** Renesas employees worldwide are committed to environmental conservation through coastal and beach clean-up initiatives. In Turkey, the Renesas team partnered with the "Turmepa" foundation for many years until COVID, organizing clean-up activities to combat pollution caused by surging summer populations. This year, the team resumed efforts by cleaning the coast of Kınalıada, followed by a well-earned lunch on Burgazada. Meanwhile, in Japan, employees from the Hokuriku and Matsumoto branches participated in the "Clean Beach Ishikawa" event on May 25, 2024, continuing a 15-year tradition of preserving Tokumitsu Beach. These initiatives exemplify Renesas' ongoing commitment to social responsibility and protecting our planet for future generations. A heartfelt thank you to all the dedicated volunteers!

















COMMUNITY INVOLVEMENT AND SOCIAL CONTRIBUTIONS CONTINUED

## **Education of Engineers**







After-School Children's Program, Japan: In EP2D and EPIC, young employees lead the "EII (EP Initiatives By Innovators)" activity to tackle Renesas' challenges. They organized programming classes for elementary school students as part of Tokyo Metropolitan Government's After-School Children's Program, visiting five schools between July and September 2024. The classes involved creating an Electronic Music Box using the RL78/G23 FPB microcontroller board. The students showed great enthusiasm, and 97% of the 84 participants enjoyed the experience. This initiative aims to spark interest in programming and electronics among children while raising Renesas' visibility.



School Visit in Milan, Italy: Teaming up with Inspiring Girls Italia, Renesas' Field Application Engineer, Federica Maula, met with 25 grade school students in Milan as a role model. She shared what she loves about her role, how she uncovered the path to a thriving engineering career, breaking stereotypes within the STEM industry, and the diverse job and travel opportunities an engineering career path provides. At the end of her talk, the students asked thoughtful questions and engaged in positive discussions.



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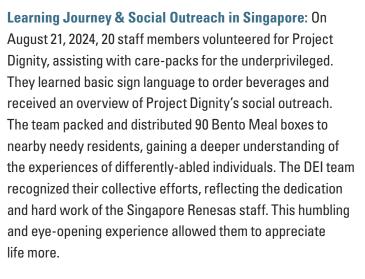




## COMMUNITY INVOLVEMENT AND SOCIAL CONTRIBUTIONS CONTINUED

## **Local Community Support**







"Don't Stop!" Half-Marathon in Lviv, Ukraine: On May 12, 2024, the Lviv Renesas Running Team participated in the "Don't Stop!" half-marathon, symbolizing national solidarity and a commitment to a brighter future for Ukraine. This event was particularly significant, highlighting the relentless determination of Ukrainians. Our team of 12 dedicated employees embraced the challenge with enthusiasm, and 100% of participation fees were donated to the "Unbroken" center, which provides vital rehabilitation services for those affected by hostilities. The marathon was a powerful reminder of community strength and resilience, and we are proud to support those in need.



**Used Book Recycling in Hong Kong:** Renesas Hong Kong participated in the "Book for Love 2024" book recycling initiative, which combines environmental protection and charitable elements. The goal was to promote the inheritance of reading culture by collecting and selling donated secondhand books, with all proceeds going to the "Treasure Trove" project of the Boys' and Girls' Clubs Association of Hong Kong and the Agency for Volunteer Service. This initiative supports grassroots families and promotes local volunteer work. We are grateful for the widespread support and enthusiasm from our colleagues, who actively contributed to this community effort. Together, we share knowledge and kindness, helping those in need.



























## **Participating Initiatives**

As a global industry leader, we proactively support and participate in various sustainability-focused initiatives. Through advocacy and joint activities, we aim to demonstrate our commitment and move the needle on critical sustainability issues that impact our earth, people, and communities around the world.



























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## **Task Force on Climate-Related Financial Disclosures (TCFD) Content Index**

TCFD Recommended Disclosure	Reference Location		
Governance			
Describe the board's oversight of climate-related risks and opportunities	Governance Bisk Management		
Describe management's role in assessing and managing climate-related risks and opportunities	Risk Management Response to the TCFD Proposal   Governance		
Strategy			
Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term	Response to the TCFD Proposal   Strategy Climate Change Initiatives		
Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	<u>Innovation</u>		
Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2 or lower scenario			
Risk Management			
Describe the organization's processes for identifying and assessing climate-related risks	Response to the TCFD Proposal   Risk Management		
Describe the organization's processes for managing climate-related risks	Risk Management Environmental Initiatives   Eco-Management: Environmental Management Activities		
Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management			







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TCFD Recommended Disclosure	Reference Location
Indicators and Targets	
Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process	Response to the TCFD Proposal   Indicators and Targets Environmental Protection Goals
Disclose Scopes 1 and 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and related risks	Environmental Data and Third-Party Verification Climate Change Initiatives
Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	Response to the TCFD Proposal   Indicators and Targets Environmental Protection Goals Environmental Initiatives





















## **Sustainability Accounting Standards Board (SASB) Index**

Topic	Code	Accounting Metric	Response
Greenhouse Gas Emissions	TC-SC-110a.1	(1) Gross global Scope 1 emissions (2) Amount of total emissions from perfluorinated compounds	(1) 125,385 t-CO2 (2) 93,356 t-CO2
	TC-SC-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets and an analysis of performance against those targets	See Our Commitment to Carbon Neutrality
Energy Management in Manufacturing	TC-SC-130a.1	(1) Total energy consumed (2) Percentage grid electricity (3) Percentage renewable	(1) 1,621,052 MWh (2) 84% (3) 0%
Water Management	TC-SC-140a.1	(1) Total water withdrawn (2) Total water consumed, percentage of each region with High or Extremely High Baseline Water Stress	(1) 15,586 km3 (2) Total water consumed: 22,907 km3. Two facilities in China located in the area with high water stress consumed about 2% of the total water consumption of Renesas. See Conserving Water
Waste Management	TC-SC-150a.1	Amount of hazardous waste from manufacturing, percentage recycled	(1) 2,503 t (2) 75% See Waste Management
Workforce Health & Safety	TC-SC-320a.1	Description of efforts to assess, monitor, and reduce exposure of workforce to human health hazards	See Employee Health & Safety
	TC-SC-320a.2	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations	In 2024, Renesas did not incur monetary losses as a result of legal proceedings associated with employee health and safety violations.
Recruiting & Managing a Global & Skilled Workforce	TC-SC-330a.1	Percentage of employees that require a work visa	Percentage of foreign nationals is not disclosed.







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Product Lifecycle Management	TC-SC-410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	Renesas does not disclose this information. See <u>Chemical Substance</u> <u>Use</u> for our approach to product hazardous substances.
	TC-SC-410a.2	Processor energy efficiency at a system-level for (1) servers, (2) desktops, and (3) laptops	Renesas does not track this information. This is not applicable to Renesas business.
Materials Sourcing	TC-SC-440a.1	Description of the management of risks associated with the use of critical materials	See Engagement with Our Supply Chain & Partners
Intellectual Property Protection & Competitive Behavior	TC-SC-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	In 2024, Renesas did not incur monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations.

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## **Global Reporting Initiative (GRI) Index**

GRI Standard		Disclosure	Location
GRI 2: General Disclosures 2021	2-1	Organizational details	Renesas Electronics Corporation About Renesas
	2-2	Entities included in the organization's sustainability reporting	About This Report
	2-3	Reporting period, frequency, and contact point	About This Report
2-4		Restatements of information	About This Report
	2-5	External assurance	About This Report
	2-6	Activities, value chain, and other business relationships	About Renesas
	2-7	Employees	At-A-Glance Diversity, Equity & Inclusion
	2-9	Governance structure and composition	Our Governance Structure Board Skills & Diversity
	2-10	Nomination and selection of the highest governance body	Our Governance Structure Board Skills & Diversity
	2-11	Chair of the highest governance body	Hidetoshi Shibata, President and CEO
	2-12	Role of the highest governance body in overseeing the management of impacts	Our Governance Structure Board Skills & Diversity
	2-13	Delegation of responsibility for managing impacts	CFO Message Environmental Stewardship and Sustainable Growth Advancing Workforce Excellence and Sustainability Governance











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GRI Standard		Disclosure	Location
	2-14	Role of the highest governance body in sustainability reporting	Our Governance Structure
	2-15	Conflicts of interest	Governance
	2-16	Communication of critical concerns	
	2-17	Collective knowledge of the highest governance body	
	2-18	Evaluation of the performance of the highest governance body	Corporate Governance Report
	2-19	Remuneration policies	Executive Compensation
	2-20	Process to determine remuneration	
	2-22	Statement on sustainable development strategy	CEO Message
	2-23	Policy commitments	Commitment to Protecting Human Rights Human Rights
	2-24	Embedding policy commitments	Our Governance Structure Governance
	2-25	Processes to remediate negative impacts	Compliance Hotline/Anonymous Whistle-Blowing System
	2-26	Mechanisms for seeking advice and raising concerns	
	2-27	Compliance with laws and regulations	Compliance & Business Ethics
	2-28	Membership associations	Participating Initiatives
	2-29	Approach to stakeholder engagement	Stakeholder Management
	2-30	Collective bargaining agreements	Renesas recognizes that in some locations of business, employees have the right to join and form trade unions and the right to bargain collectively. Renesas does not discriminate against employees with union affiliation or for their participation in union activities and to ensure employees' right to privacy, Renesas does not monitor or track employee membership of such organizations.





















GRI Standard		Disclosure	Location
GRI 3: Material Topics 2021	3-1	Process to determine material topics	Materiality Assessment & Disclosure
	3-2	List of material topics	
	3-3	Management of material topics	
GRI 201: Economic Performance 2016	201-2	Financial implications and other risks and opportunities due to climate change	Our Response to the TCFD Proposal
GRI 205: Anti-corruption	205-1	Operations assessed for risks related to corruption	Compliance & Business Ethics
2016	205-2	Communication and training about anti-corruption policies and procedures	Compliance & Business Ethics
	205-3	Confirmed incidents of corruption and actions taken	Renesas experienced no confirmed incidents of corruption in 2024.
GRI 206: Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Renesas was not subject to legal actions for anti-competitive behavior, anti-trust, and monopoly practices.
GRI 207: Tax 2019	207-1	Approach to tax	Tax Policy
GRI 302: Energy 2016	302-1	Energy consumption within the organization	Environmental Data
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	Conserving Water
	303-2	Management of water discharge-related impacts	
	303-3	Water withdrawal	Environmental Data
	303-4	Water discharge	
	303-5	Water consumption	





















GRI Standard		Disclosure	Location
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	Environmental Data
	305-2	Energy indirect (Scope 2) GHG emissions	
	305-3	Other indirect (Scope 3) GHG emissions	
	305-5	Reduction of GHG emissions	2024 ESG Highlights
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	Waste Management
	306-2	Management of significant waste-related impacts	
	306-3	Waste generated	Environmental Data
	306-5	Waste directed to disposal	Environmental Data
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Human Resources Data and Third-Party Verification
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	Employee Health & Safety Safe and Healthy Working Environment
	403-6	Promotion of worker health	Employee Health & Safety Safe and Healthy Working Environment
	403-9	Work-related injuries	Human Resources Data and Third-Party Verification Safe and Healthy Working Environment
GRI 404: Training and Education 2016	404-2	Programs for upgrading employee skills and transition assistance programs	Human Capital Management
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	Board Skills & Diversity Human Resources Data and Third-Party Verification
	405-2	Ratio of basic salary and remuneration of women to men	Diversity, Equity & Inclusion  Human Resources Data and Third-Party Verification















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GRI Standard		Disclosure	Location
GRI 406: Non- discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	Commitment to Protecting Human Rights Human Rights
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	Commitment to Protecting Human Rights Human Rights
GRI 408: Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	Commitment to Protecting Human Rights Human Rights
GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Commitment to Protecting Human Rights Human Rights
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	Community Involvement & Social Contributions
	414-2	Negative social impacts in the supply chain and actions taken	Engagement with Our Supply Chain & Partners
GRI 415: Public Policy 2016	415-1	Political contributions	Renesas does not make any political contributions.











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## **Environmental Data 2024**

In order to calculate CO2 emission level calculation in relation to electricity, we have used the factor provided by the "List of Calculation Methods/ Emission Factors in the Calculation, Report and Publication System" of the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan, adjusted conversion factors for individual power businesses based on the Act on Promotion of Global Warming Countermeasures. For figures that represent outside of Japan, the latest values for the each fiscal year supplied by power supply companies. When the CO2 emission levels are uncertain, we use the conversion factors of previous year. For the CO2 emission factor for gas and fuel at the time of calculation, we used the factor provided by the "List of Calculation Methods/ Emission Factors in the Calculation, Report and Publication System" of the Ministry of the Environment and the Ministry of Economy, Trade and Industry of Japan.

<b>GHG</b> Emissions			
Category1	Category2	Unit	2024
C02	Total Emissions (S1+S2)	t-C02	767,935
Emissions	Scope1 Total Direct Emissions	t-C02	125,385
	Fuel, etc.	t-C02	32,029
	PFC Emissions(IPCC2006 Tier2a)	t-C02	93,356
	Scope2 Indirect Emissions	t-C02	642,550
	Purchased Electricity (Market Standards)	t-C02	622,688
	(ref.) Purchased Electricity (Location Standards)	t-C02	638,962
	Other than Electricity	t-C02	19,862
	Scope3 Emissions within the Supply Chain Excluding S1 and S2	t-C02	1,472,548
	C1 Purchased Goods and Services	t-C02	1,181,824
	C2 Capital Goods	t-C02	165,936
	C3 Fuel- and Energy-Related Activities (Not Included in Scope 1 or Scope 2)	t-C02	102,486
	C4 Upstream Transportation and Distribution	t-C02	376
	C5 Waste Generated by Operations	t-C02	4,914
	C6 Business Travel	t-C02	13,828
	C7 Employee Commuting	t-C02	3,184
	C8 Leased Upstream Assets	t-C02	0
	C9 Downstream Transportation and Distribution	t-C02	-
	C10 Processing of Sold Products	t-C02	-
	C11 Use of Sold Products	t-C02	-
	C12 End-of-Life Treatment of Sold Products	t-C02	-
	C13 Leased Downstream Assets	t-C02	0
	C14 Franchises	t-C02	0
	C15 Investments	t-C02	0





















Energy Consumption			
Category1	Category2	Unit	2024
Total Energy		MWh	1,621,052
	Electricity	MWh	1,365,669
	(Include) Renewable Energy	MWh	6,328
	Steam	MWh	87,636
	Gas	MWh	140,334
	Other Fuels	MWh	27,413
Factory		MWh	1,620,379
	Electricity	MWh	1,365,001
	(Include) Renewable Energy	MWh	5,741
	Steam	MWh	87,636
	Gas	MWh	140,329
	Other Fuels	MWh	27,413
Office		MWh	673
	Electricity	MWh	668
	(Include) Renewable Energy	MWh	587
	Steam	MWh	0
	Gas	MWhh	5
	Other Fuels	MWh	0
inergy Consumption per Revenue	Consolidated Revenue	Oku yen	13,485
	per Revenue	MWh/Oku yen	120







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Water			
Category1	Category2	Unit	2024
Total Amount Used (Water Intake + Recycled Water)		Km3	22,907
Total Water Withdrawal by Sou	ırce	Km3	15,586
	Surface Water (Rivers, Lakes, Ponds)	Km3	8,822
	Ground Water (Wells, Boreholes)	Km3	4,858
	Municipal Water (Tap Water)	Km3	1,814
	Ocean Water	Km3	0
	Others (Rain Water, Quarries, External Effluents)	Km3	92
Recycled Water		Km3	7,321
Water Recycled and Reused		%	32%
Total Water Discharge * There	is no discharge made to the ground surface	Km3	11,993
	Public Water (Ocean)	Km3	10,595
	Sewerage (Off-Site Water Treatment)	Km3	1,031
	Others (Underground, Wells)	Km3	367
Water Use per Revenue	Consolidated Revenue	Oku yen	13,485
	per Revenue	Km3/0ku yen	1.7

Water data: Data from all Renesas Group manufacturing sites (excluding domestic and overseas sales offices)







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Chemical Substances			
Category1	Category2	Unit	2024
Chemical Substances (subject to PRTR Law)	Transaction Volume	t	979
VOC	Emissions (Atmosphere)	t	253

Waste			
Category1	Category2	Unit	2024
Total Waste		t	16,340
Total Hazardous Waste		t	2,503
	Recycling	t	1,882
	Landfill	t	476
	Others (Intermediate processes, etc.)	t	145
Total Non Hazardous Waste		t	13,837
	Recycling	t	11,588
	Landfill	t	819
	Others (Intermediate processes, etc.)	t	1,430

Regulatory Violations and Complaints			
Category1	Category2	Unit	2024
Regulatory Violations		-	0
	(Include) Water discharge Related	-	0
Complaints		-	0
	(Include) Water discharge Related	-	0







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## **Third-Party Verification: Environmental Data**

**2024 JQA Independent Verification Report** 



### **Independent Verification Report**

No.181100499

### To: Renesas Electronics Corporation

#### 1. Objective and Scope

Japan Quality Assurance Organization (hereafter "JQA") was engaged by Renesas Electronics Corporation (hereafter "the Company") to provide an independent verification on "FY2024 Calculation reporting for Scope 1, 2 emission", "FY2024 Calculation reporting for energy consumption", "FY2024 Calculation reporting for Scope 3 emission" and "FY2024 Calculation reporting for water usage etc." (hereafter "the Reports"). The content of our verification was to express our conclusion, based on our verification procedures, on whether the statement of information regarding GHG emissions, energy consumption and water usage in the Reports was correctly measured and calculated, in accordance with the "Annual environmental data management manual (kansui(GM)-0030-10)", "Calculation manual for Scope 1 (except PFC), Scope 2 emission and energy consumption (kansui(GM)-0036-09)", "Calculation manual for PFC emission (kansui(GM)-0037-04)", "Calculation manual for Scope 3 emission (kansui(GM)-0035-13)" and "Calculation manual for water usage etc. (kansui(GM)-0038-04)" (hereafter" the Rules"). The purpose of the verification is to evaluate the Reports objectively and to enhance the credibility of the Reports.

\*The fiscal year 2024 of the Company ended on December 31, 2024.

#### 2. Procedures Performed

JQA conducted verification in accordance with "ISO 14064-3" for GHG emissions from Scope 1, 2 & 3, and with "ISAE 3000" for energy consumption and water usage, respectively. The scope of this verification assignment covers Scope 1 & 2 (energy-derived  $CO_2$  emissions and PFC\* emissions), Scope 3 (Category 1, 2, 3, 4, 5, 6 and 7), energy consumption and water usage. The verification was conducted to a limited level of assurance and quantitative materiality was set at 5 percent each of the total emissions, total energy consumption and total amount of water usage in the Reports. The organizational boundaries of this verification for Scope 1 & 2, energy consumption and water usage include the head office of Renesas Electronics Corporation and its group companies in total 20 sites: 11 domestic sites and 9 overseas sites. The organizational boundaries of the verification for Scope 3 are as indicated in Appendix 1. Our verification procedures included:

- · Confirmation of the integrated functions and the Rules prior to the on-site assessment.
- Holding on-site verification except for Scope 3, at the Company's 3 domestic sites: Kawashiri Factory, Nishiki Factory and Saijyo Factory. The number and location of sampling sites for on-site assessment were selected by the Company.
- On-site assessment to check the reports scope and boundaries; monitoring points of energy consumption and water usage; monitoring and calculation system; and activity data.
- For Scope 3, confirmation of calculation scenario and allocation method; monitoring and calculation system; and emissions data against evidence.

\*PFC here includes HFC (CHF3), PFC (CF4, C2F6, C3F8, C4F8), SF6 and NF3.

#### 3. Conclusion

Based on the procedures described above, nothing has come to our attention that has caused us to believe that the statement of the information regarding the Company's FY2024 GHG emissions, energy consumption and water usage in the Reports is not materially correct, or has not been prepared in accordance with the Rules.

#### 4. Considerations

The Company was responsible for preparing the Reports, and JQA's responsibility was to conduct verification of GHG emissions, energy consumption and water usage in the Reports only. There is no conflict of interest between the Company and JQA.



Sumio Asada, Board Director

For and on behalf of Japan Quality Assurance Organization 1-25, Kandasudacho, Chiyoda-ku, Tokyo, Japan April 4, 2025

\*Please refer to the appendix I in the next page.

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<Boundaries of Scope 3 GHG emissions by category>

No.1811004991

#### Appendix

Scope 3 category		Boundary	
Category 1 Purchased goods & services		All Renesas Group facilities	
Category 2 Capital goods		All Renesas Group facilities	
Category 3 Fuel- and energy related activor scope 2)	vities (not included in scope 1	Same boundary as Scope 1 & 2	
Category 4 Upstream transportation & distribution	Procurement materials and logistics (Chemical substances only)	Same boundary as Scope 1 & 2	
	Transportation and distribution between a company's own facilities	REL/Yonezawa Factory, Oita Factory, Nishiki Factory, RSMC/Naka Factory, Takasaki Factory, Saijo Factory, Kawashiri Factory	
Category 5 Waste generated in operations		Same boundary as Scope 1& 2	
Category 6 Business travel		REL, RSMC, REA, REE, RESG, REML, REIN, REHK, RECH, RESH, RETW, REKR, RSM, RST, RSK, RSC, RSB, RSKL, DLG	
Category 7 Employee commuting		All domestic Renesas Group facilities	

<List of abbreviations>

REL: Renesas Electronics Corporation

REA: Renesas Electronics America Inc.

 $REE \colon\! Renesas \; Electronics \; Europe \; GmbH$ 

RESG: Renesas Electronics Singapore Pte. Ltd.

REML: Renesas Electronics Malaysia Sdn. Bhd.

REIN: Renesas Electronics India Pvt. Ltd.
REHK: Renesas Electronics Hong Kong Limited

RECH: Renesas Electronics (China) Co., Ltd.

RESH: Renesas Electronics (Shanghai) Co., Ltd.

RETW: Renesas Electronics Taiwan Co., Ltd. REKR: Renesas Electronics Korea Co., Ltd.

RSMC: Renesas Semiconductor Manufacturing Co., Ltd.

RSM: Renesas Semiconductor (Malaysia) Sdn. Bhd.

RST: Renesas Semiconductor Technology (M) Sdn. Bhd.

RSK: Renesas Semiconductor (Kedah) Sdn. Bhd.

RSC: Renesas Semiconductor (Suzhou) Co., Ltd.

RSB: Renesas Semiconductor (Beijing) Co., Ltd. RSKL: Renesas Semiconductor KL Sdn. Bhd.

DLG: Renesas Design Bingen GmbH

\*Please refer to the previous page.

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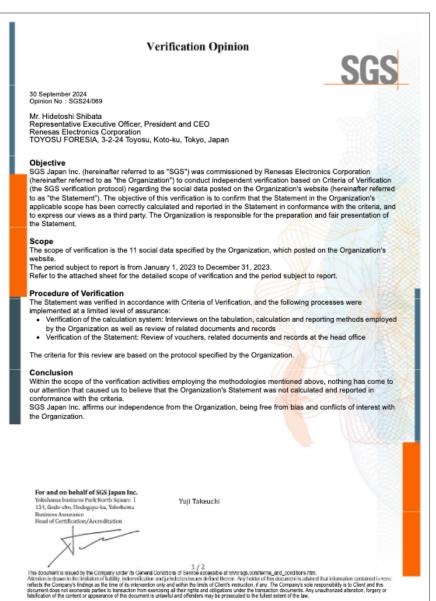


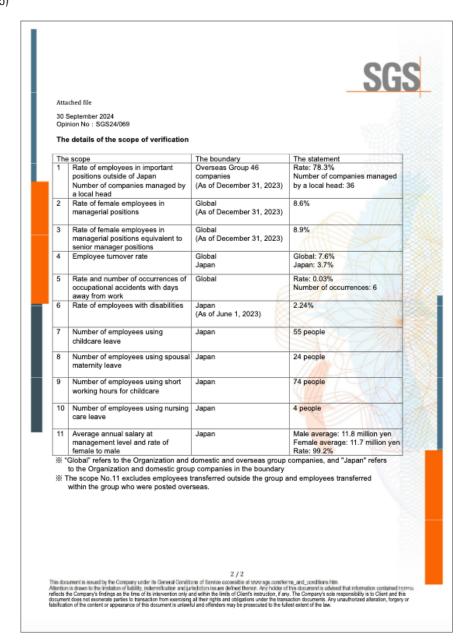
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## **Third-Party Verification: HR Data**

2023 SGS Independent Verification Report (FY2024 HR data to be verified in 2025)





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## **Forward-Looking Statements**

The statements in this report with respect to the plans, strategies, and forecasts of Renesas Electronics Corporation and its consolidated subsidiaries (collectively "we") are forward-looking statements involving risks and uncertainties. Such forward-looking statements do not represent any guarantee by management of future performance. In many cases, but not all, we use such words as "aim," "anticipate," "believe," "continue," "endeavor," "estimate," "expect," "initiative," "intend," "may," "plan," "potential," "probability," "project," "risk," "seek," "should," "strive," "target," "will" and similar expressions to identify forward looking statements. You can also identify forward-looking statements by discussions of strategy, plans or intentions. These statements discuss future expectations, identify strategies, contain projections of our results of operations or financial condition, or state other forward-looking information based on our current expectations, assumptions, estimates and projections about our business and industry, our future business strategies, and the environment in which we will operate in the future.

Known and unknown risks, uncertainties and other factors could cause our actual results, performance or achievements to differ materially from those contained or implied in any forward-looking statement, including, but not limited to: general economic conditions in our markets, which are primarily Japan and Asia, North America, and Europe; demand for, and competitive pricing pressure on, our products and services in the marketplace; our ability to continue to win acceptance of our products and services in these highly competitive markets; and movements in currency exchange rates. Among other factors, a worsening of the world economy, a worsening of financial conditions in the world markets, and a deterioration in the domestic and overseas stock markets, would cause actual results to differ from those predicted.

This report is based on the economic, regulatory, market, and other conditions in effect on the date hereof. Subsequent developments may affect the information contained in this presentation, which neither we nor our advisors or representatives are under an obligation to update, revise, or affirm.

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