

2023

Business & Sustainability

REPORT

The bottom half of the page features a close-up photograph of a vibrant green leaf. The leaf's surface is covered with numerous clear, glistening water droplets of various sizes. The lighting highlights the texture of the leaf and the individual droplets, creating a fresh and natural aesthetic.

Table of Contents








	About Renesas 3			Environmental 30			Governance 96
	About Renesas 4			Leadership Perspective 31			Our Governance Structure 97
	At-A-Glance 5			Environmental Initiatives 33			Board Skills & Diversity 99
	Renesas Culture 6			Climate Change Initiatives 36			Compliance & Business Ethics 100
	2023 Highlights 7			Conserving Water 42			Risk Management 104
	CEO Message 8			Chemical Substance Use 48			Information Security Governance & Testing 109
	2023 Business Performance 10			Waste Management 51			Tax Policy 110
	2023 Spotlight: Products & Development Tools 12			Eco-Product Initiatives 54			Appendix 112
	Shaping the Innovation Landscape 13			Renesas Green Devices 57			Task Force on Climate-Related Financial Disclosures (TCFD) Content Index 113
	2023 Financial Highlights 14			Biodiversity Conservation Activities 64			Sustainability Accounting Standards Board (SASB) Index 115
	CFO Interview 15			Social 72			Global Reporting Initiative (GRI) Index 118
	Stakeholder Management 18			Leadership Perspective 73			Environmental Data 123
	Sustainability Approach 19			Diversity, Equity & Inclusion 75			Third-Party Verification: Environmental Data 130
	Our Sustainability Approach 20			Human Capital Development 79			Third-Party Verification: HR Data 131
	Materiality Assessment & Results 21			Commitment to Protecting Human Rights 82			About This Report 132
	ESG Targets: Overview 22			Employee Health & Safety 85			Forward-Looking Statements 133
	2023 ESG Highlights 23			Community Involvement & Social Contributions 89			
	Innovation for a Sustainable Future 24			Engagement with Our Supply Chain & Partners 93			
	ESG Ratings & Index Inclusion 25						
	Participating Initiatives 27						
	Awards & Recognitions 28						



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



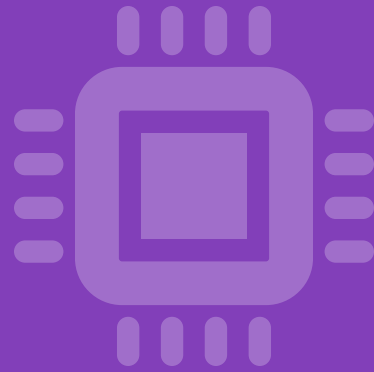
Social



Governance



Appendix



About Renesas

About Renesas	4
At-A-Glance	5
Renesas Culture	6



About Renesas

Renesas Electronics Corporation (TSE: 6723) empowers a safer, smarter and more sustainable future where technology helps make our lives easier. A leading global provider of microcontrollers, Renesas combines our expertise in embedded processing, analog, power and connectivity to deliver complete semiconductor solutions. These Winning Combinations accelerate time to market for automotive, industrial, infrastructure and IoT applications, enabling billions of connected, intelligent devices that enhance the way people work and live.

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

At-A-Glance

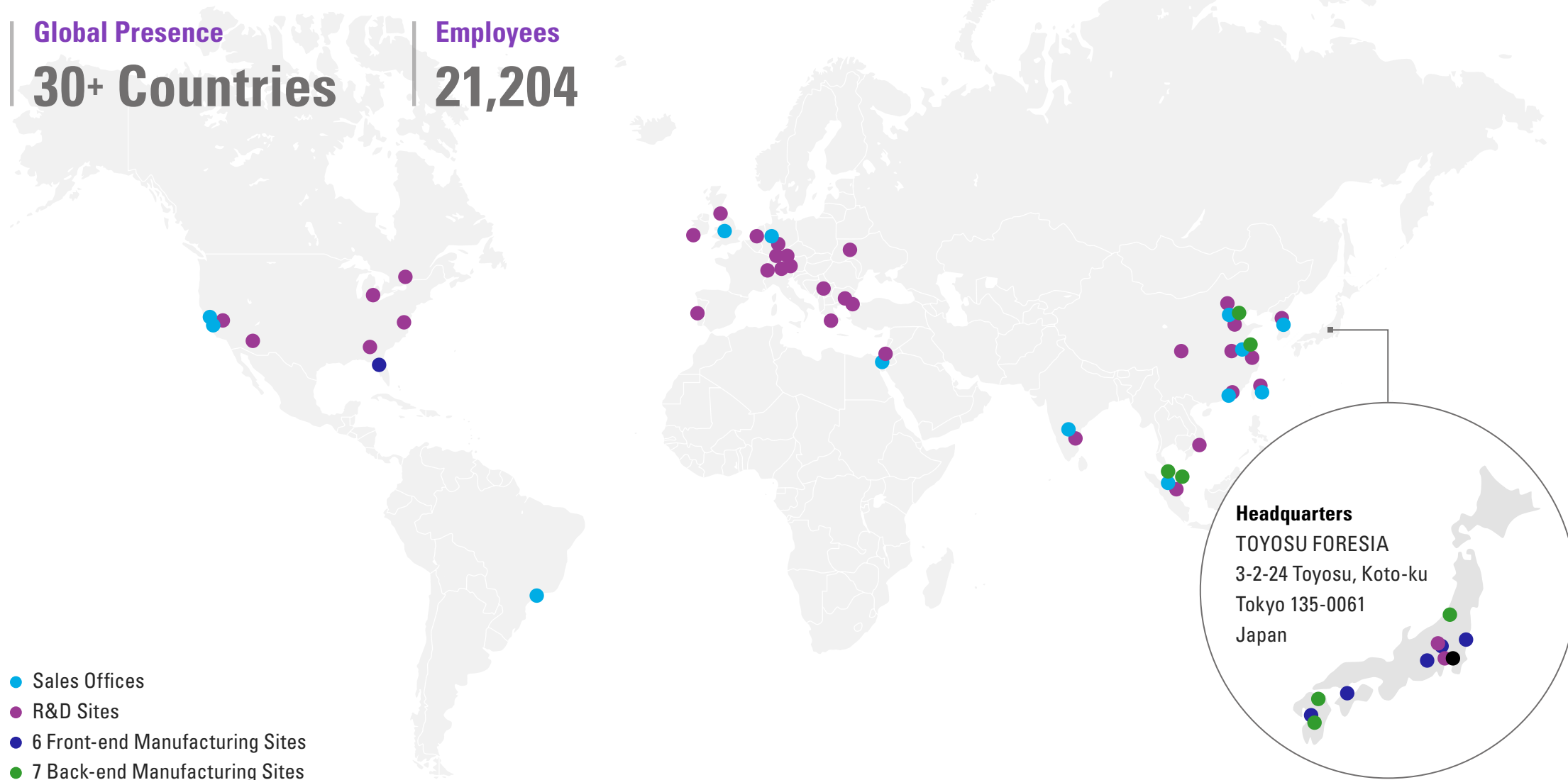
Renesas currently operates from headquarters located in Tokyo, Japan as well as through sales offices and manufacturing, design and development sites located around the world. Each office is organized and operated in accordance with the laws and regulations of the respective countries.

Global Presence

30+ Countries

Employees

21,204



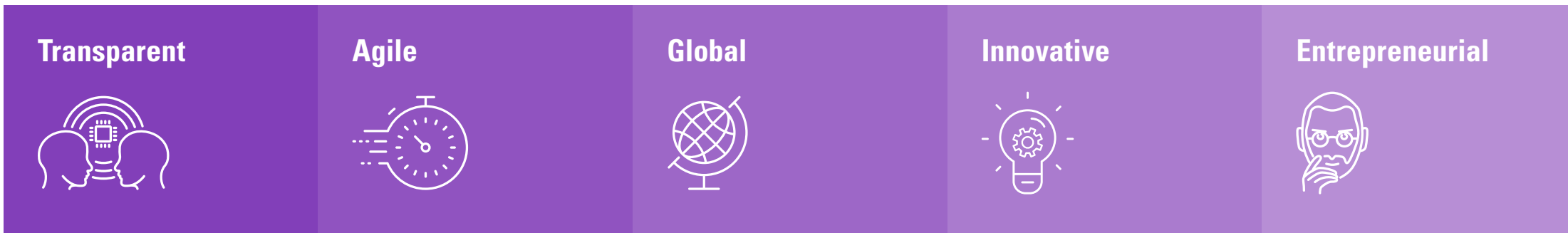
Headquarters
 TOYOSU FORESIA
 3-2-24 Toyosu, Koto-ku
 Tokyo 135-0061
 Japan

- Sales Offices
- R&D Sites
- 6 Front-end Manufacturing Sites
- 7 Back-end Manufacturing Sites

- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix

Renesas Culture

We are on a journey of transformation to change the way people live and fulfill our purpose: To Make Our Lives Easier. To stay focused with the speed of change and innovation we rely heavily on our culture. We call it "TAGIE." It's a set of guiding principles for how we work together. We encourage our people to embody TAGIE culture by adapting to changes flexibly, offering creative solutions to our customers and making a positive impact on our company and society.



2023 Renesas Culture Survey Results

As a responsible global business, we always seek feedback from our diverse stakeholders to ensure alignment and meet their expectations.

We conduct an annual survey with a goal to measure our progress on embedding culture values across the organization. Including our management team, we proactively listen to and act on our global employees' candid feedback and suggestions for improvement.

Response Rate

92%

Progress

69%

of employees felt TAGIE has improved in the last 12 months.

Comments

4,448

Focus Area

Collaboration



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



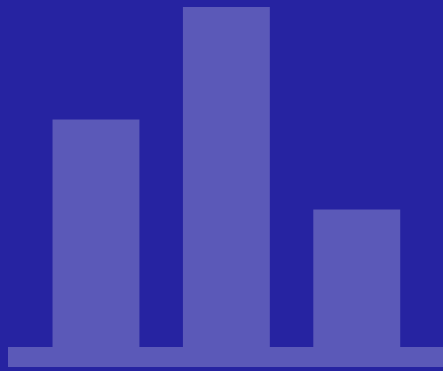
Social



Governance



Appendix



2023 Highlights

CEO Message	8
2023 Business Performance.....	10
2023 Spotlight: Products & Development Tools	12
Shaping the Innovation Landscape	13
2023 Financial Highlights	14
CFO Interview	15
Stakeholder Management.....	18

CEO Message

During the fiscal year ended December 31, 2023, the global economy continued to stagnate as in the previous year reflecting the protracted situation in Ukraine, the deteriorating conditions in the Middle East, the global inflation, and the elevated interest rates. In line with these trends, the semiconductor market also remained sluggish. To address these situations, we have proactively implemented various measures to respond swiftly to changes and to ensure steady results even in the face of headwinds. As a result, we secured a certain level of profit in 2023 and managed to sustain our revenue to a slight decline compared to the previous year.

In 2023, to accelerate future business growth, we welcomed Pantronics, a company with expertise in near-field communication or NFC technology, into the group. We also signed a long-term supply agreement with Wolfspeed for silicon carbide (“SiC”) wafers, to ensure a stable supply of SiC wafers for power semiconductors. Furthermore, we have launched a wide array of new products and services, including: the “RA8 Series,” the industry’s first microcontrollers (“MCUs”) equipped with the high-performance Arm® Cortex®-M85 core; the “R-Car Generation 5 Product Family,” with a roadmap consisting of future offerings of R-Car system-on-chips or SoCs with advanced in-package chiplet integration technology and next-generation automotive MCUs; and “Quick-Connect Studio,” a cloud-based design platform that supports customer product development. These



To materialize the ‘2030 Aspiration’ and our purpose of ‘To Make Our Lives Easier,’ we will continue to provide products and solutions that make people’s lives easier. As a member of the global community, we will remain steadfast in our commitment to further enhance our corporate value by addressing environmental issues and contributing to a sustainable society.”

initiatives have resulted in securing a number of design-ins which will be a source of future revenue.

The year 2023 was a period in which our presence in the stock market continued to grow, following on from the previous year. Our stock was selected as a constituent of the “Nikkei 225,” the index which makes up the Nikkei Stock Average, and our market capitalization has nearly doubled in the year since the beginning of 2023. In addition, with respect to ESG, we were selected for the first time as a constituent of the “MSCI Japan ESG Select Leaders Index” by the internationally renowned MSCI Inc., recognized as a CDP Supplier Engagement Leader for our efforts in the previous year, and received the



Hidetoshi Shibata
President & CEO

- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix

CEO MESSAGE CONTINUED

Gold rating on the Pride Index for two consecutive years. Furthermore, INCJ Corporation, which contributed to building the foundation of our growth, sold all of its shares in our company in light of our growth.

In terms of shareholder return, we acquired a total of approximately 50 billion yen of our own shares in April 2023. Considering our strengthened financial base, we have decided to resume the dividend payments and proposed, at this Shareholders Meeting, a year-end dividend of 28 yen per share. We aim to continue to return profits to shareholders on a continuous and stable basis as far as possible. We intend to do this by taking into account changes in the business environment and the balance with retained earnings for long-term growth investment.

2030 ASPIRATION

TOP 3

Embedded Semiconductor Solution Suppliers

\$20⁺B

Revenue

6x

Market Cap vs 2022

Initiatives for the future

We will continue to make various efforts to realize our “2030 Aspiration” (“Become a Top 3 embedded semiconductor solution supplier,” “Achieve revenues of more than \$20 billion,” and “Bring up the equity value by up to six times the market capitalization compared to January 2022” by 2030).

In January 2024, we implemented organizational changes to further accelerate our growth. The new organizational structure has reorganized an application-oriented organization to a technology-based business structure. This structure strengthens our capability to provide a broader range of solutions tailored to our customers’ needs. In addition, to maximize our scale merit, we have established new groups of foundations. These organizations will serve as centralized foundations across all lines of business.

Furthermore, we are pursuing a digitalization strategy that makes it easier for customers to build solutions by providing a cloud-based platform. To achieve this, we have established a new organization dedicated to software and digitalization. In February 2024, as a significant step in accelerating our digitalization strategy, we agreed to acquire Altium, a leading printed circuit board or PCB design software company.

We also agreed to acquire Transphorm, which has strengths in gallium nitride or GaN technology, in January 2024. This enables us to build on our SiC capability and enhance our portfolio of power semiconductors, which is one of the key pillars of our growth.

To strengthen our corporate governance, we have proposed at this Shareholders Meeting the transition of our company’s governance structure to a Company with a Nomination Committee, etc. We also set a new 30% board diversity target.

To materialize the “2030 Aspiration” and our purpose of “To Make Our Lives Easier,” we will continue to provide products and solutions that make people’s lives easier. At the same time, as a member of the global community, we will remain steadfast in our commitment to further enhance our corporate value by addressing environmental issues and contributing to a sustainable society. I am confident in our ability to deliver lasting value to our shareholders.

Sincerely,

Hidetoshi Shibata


President & CEO









2023 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; IoT, which includes semiconductors for PC, mobile phone, and other consumer products, such as home appliances and wearable devices; and Infrastructure, which includes semiconductors for data center and base transceiver stations.

SEGMENTS	REVENUE	GROSS MARGIN	OPERATING MARGIN	MAJOR UPDATES
<p>Automotive</p> 	<p>695.0 billion yen</p>	<p>52.3%</p>	<p>34.3%</p>	<ul style="list-style-type: none"> • The overall sales of the Automotive segment increased by 7.8% year on year in 2023 compared to 2022. This result was due to positive effects of yen depreciation, vehicle price increase, growth in car production and semiconductor contents per vehicle offsetting the negative effects of inventory adjustment by our customers. • Both Automotive control and Automotive information had high single digit increases year on year, and especially xEV and ADAS showed strong 20% and 30% growth respectively year on year, compared to 2022. • The gross margin of Automotive segment for this fiscal year was 52.3%, which was 2.0% points higher than the last fiscal year, mainly due to the improvement of product mix. • The operating margin of Automotive segment for this fiscal year was 34.3%, which was 0.2% point higher than the last fiscal year. Despite the cost increase due to R&D enhancement, the improvement of the product mix contributed to the margin increase.

- 
 Table of Contents
- 
 About Renesas
- 
 2023 Highlights
- 
 Sustainability Approach
- 
 Environmental
- 
 Social
- 
 Governance
- 
 Appendix

2023 BUSINESS PERFORMANCE CONTINUED

SEGMENTS	REVENUE	GROSS MARGIN	OPERATING MARGIN	MAJOR UPDATES
IIoT Industrial  Infrastructure  IoT 	764.7 billion yen	61.6%	33.9%	<ul style="list-style-type: none"> The overall sales of IIoT segment decreased by 9.6% year on year in 2023 compared to 2022. Although there were positive effects of yen depreciation, price increase, and sales growth of some products for data center, the impact of inventory adjustment by our customers was significant in IoT and Industrial segments, resulting in a decrease in sales for the whole segment. The industrial segment sales had a low single digit increase year on year, as the growth in factory automation products was offset by the decline in standard products and mass market products for the industrial end market. The IoT segment sales had a high-teen percent decrease, due to the inventory adjustment of customers for PC, mobile and other consumer products. The Infrastructure segment sale was almost flat year on year, despite the remarkable growth of memory interface products for DDR5 in Data center, as it was also affected by the inventory adjustment of customers. The gross margin of IIoT segment for this fiscal year was 61.6%, which was 1.7% 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 33.9%, which was 5.3% points lower than the last fiscal year. Both the margin decline due to the sales decrease and the R&D increase for future growth contributed to this result.
Company Total	1,469.7 billion yen	57.0%	34.1%	

2023 Spotlight: Products & Development Tools



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance

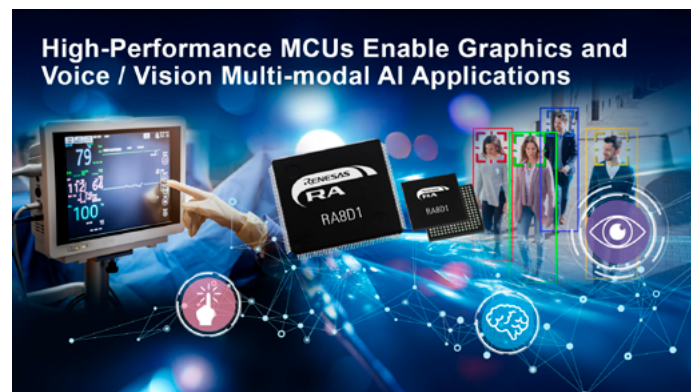


Appendix



QUICK-CONNECT STUDIO ACCELERATES THE DESIGN CYCLE FOR RAPID PROTOTYPES AND DEVELOPMENT ONLINE

Renesas' Quick-Connect Studio launch in March 2023 is a groundbreaking online, cloud-based IoT system design platform that enables users to graphically build hardware and software to quickly validate prototypes and accelerate product development. Helping overcome the challenges with today's development cycle, this platform streamlines the typical prototype development cycle, saving a significant amount of time. With Quick-Connect Studio, engineers can now perform hardware and software development simultaneously. This is a radical shift in the industry, enabling designers to build software immediately with the ability to quickly reconfigure and test product ideas. This yields dramatic time savings and reduces risk as engineers can validate designs before committing to hardware layout. ([Read More](#))



RENESAS' NEW ULTRA-HIGH PERFORMANCE MCUS ARE INDUSTRY'S FIRST BASED ON ARM CORTEX®-M85 PROCESSOR

In October 2023, we introduced the world's most powerful microcontrollers (MCUs), delivering breakthrough performance of over 3000 CoreMark points, and fully deterministic, low latency, real-time operation that satisfies customers' most demanding application needs. The new RA8 Series MCUs are the industry's first to implement the Arm® Cortex®-M85 processor, enabling the new devices to deliver industry-leading 6.39 CoreMark/MHz performance. This level of performance will allow system designers to use the RA MCUs in applications that previously required microprocessors (MPUs). The new series is part of Renesas' popular RA Family of MCUs based on Arm Cortex processors. Existing designs built for other RA devices can easily be ported to the new RA8 MCUs. ([Read More](#))

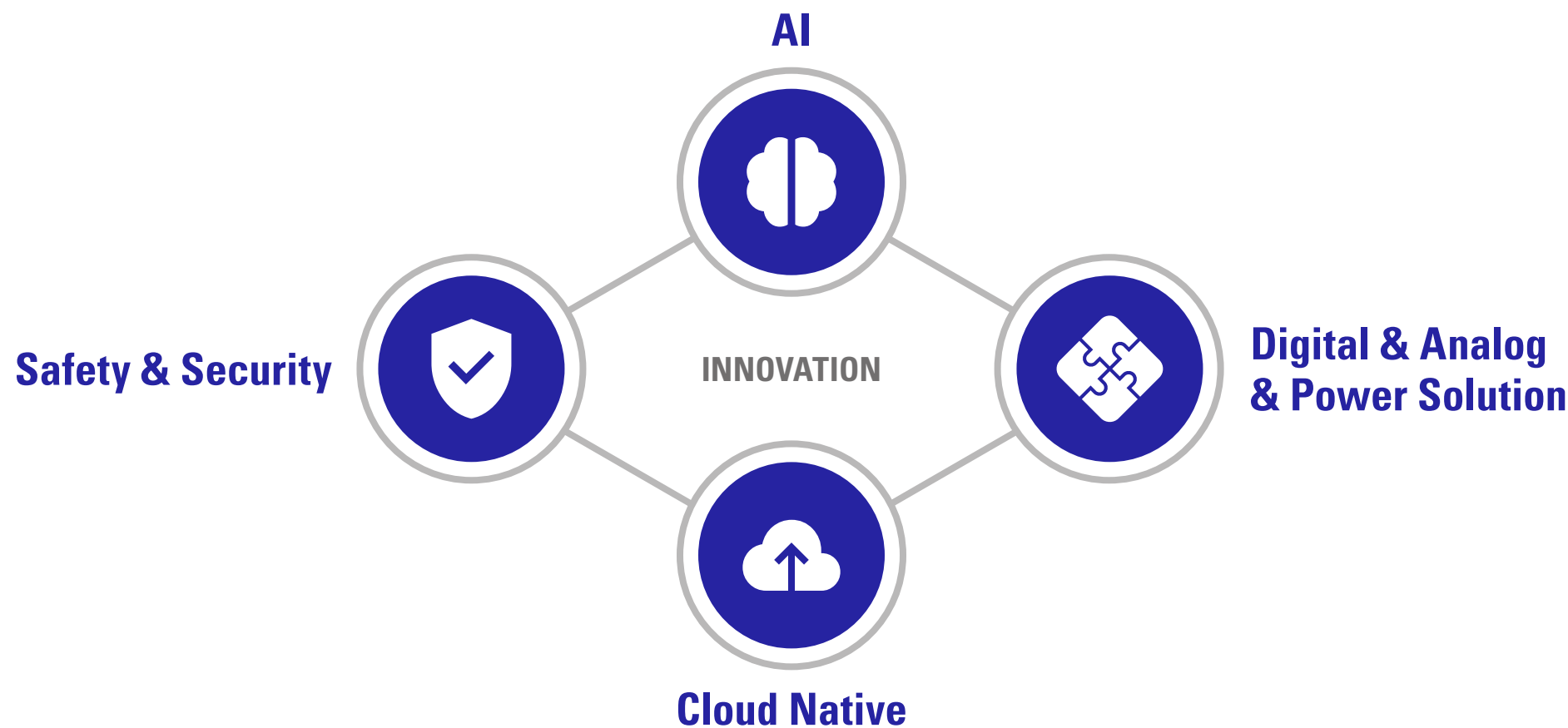


NEW AI WORKBENCH OFFERS CLOUD-BASED AUTOMOTIVE DESIGN CAPABILITIES

In December 2023, Renesas announced the development of their AI Workbench, an integrated virtual development environment that empowers automotive AI engineers to design, simulate and fine-tune their automotive software - all within the cloud. Instead of installing tools on a PC or obtaining an evaluation board, they can perform tasks such as performance evaluation, debugging and verification using simulation tools online. A collaboration with Microsoft, this approach aligns with the "Shift-Left" approach, which enables software creation and testing earlier in the design cycle, even before the actual hardware becomes available. This environment will serve as a unified development platform for designing and testing Renesas' scalable automotive SoCs and microcontrollers (MCUs), regardless of product type or application. ([Read More](#))

Shaping the Innovation Landscape

Renesas has a robust patent portfolio of around **20,000 active patents** covering a wide range of technologies and businesses including the designated four key technology areas as well as other common essential technologies and implementations. We also focus on the selected fields of technologies from a sustainability perspective that are growing in our portfolios. Our portfolio is strengthening through strategic emphasis on circuitry or systems related inventions as well as through mergers and acquisitions of companies having valuable and competitive technologies.



2023 Financial Highlights

Revenue

1,469.7 billion yen

Gross Margin

57.0%

Operating Margin

34.1%

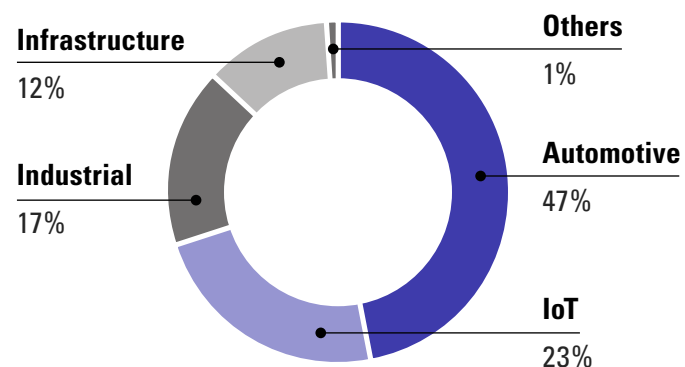
Profit Attributed to Owners of Parent

432.9 billion yen

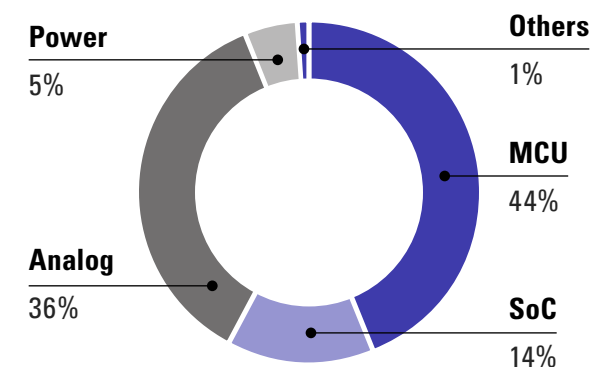
EBITDA

581.9 billion yen

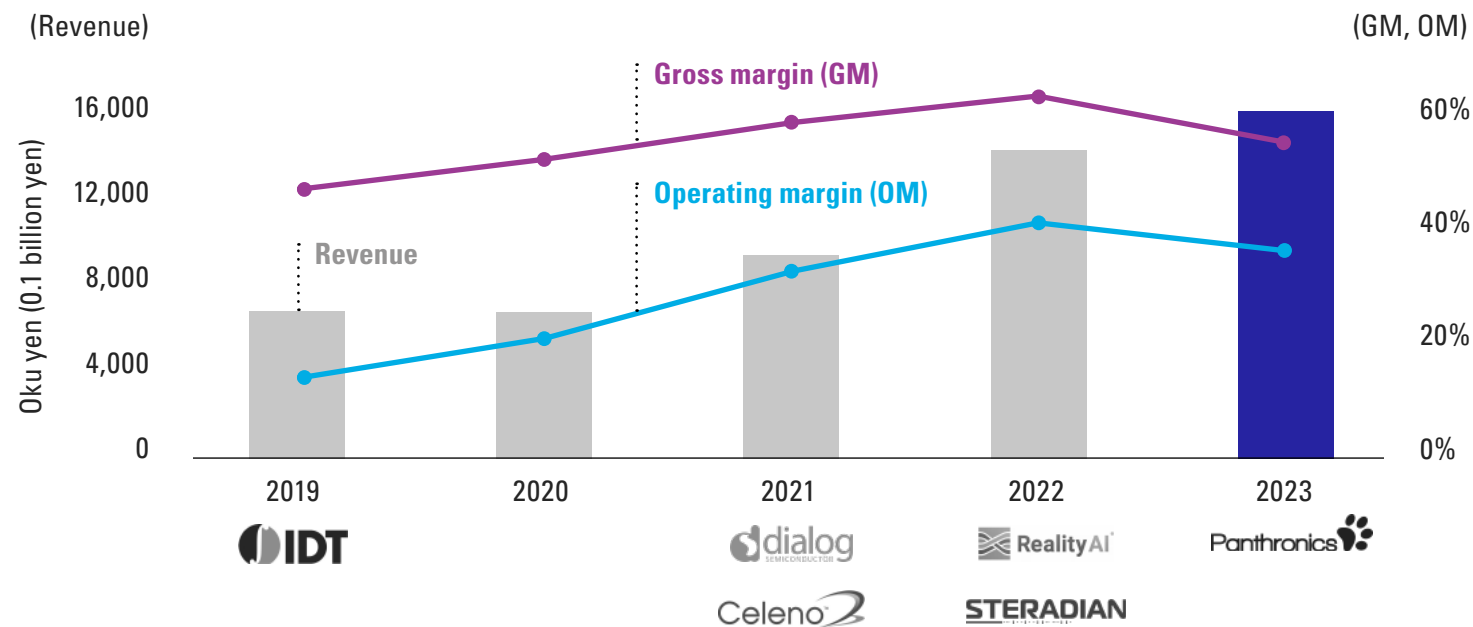
Revenue by Segment



Revenue by Product



Growth Trajectory



CFO Interview



Shuhei Shinkai
Senior Vice President
and CFO

In 2023, the semiconductor industry experienced the down cycles due to inventory corrections in several end markets, starting from the PC and mobile segment followed by automotive, industrial, and mass market. In such a market environment, we have prioritized controlling the inventory and expenses as tightly as possible to maintain the profit margin even during the down cycle periods. Specifically, we proactively engaged with our customers to reduce/prevent excess inventories at customers, and carefully monitored the inventory levels on hand and the channel.

Also, we adjusted the production promptly after we found the signal of increasing the inventory. As a result of this adjustment, the fab utilization was decreased in 2023, but I am pleased that we secured a certain level of gross margin despite the decrease in factory utilization rates, which was the result of our focus and efforts on reducing the volatility of financial performance over the last five years. One example of this is increasing the outsource ratio of production. By promoting the Fab-lite strategy, our outsource ratio is more than 60% of our front end productions. Diversification of products and applications has also contributed to increasing our operational resilience. Also, we have not had a significant excess inventory or a sharp decrease in sales because of our successful inventory and production management so far.



We look forward to building upon our strong financial foundation while we continue to find ways to better serve our customers and contribute to the well-being of our employees, partners, and shareholders.”

In addition to inventory and production, under down cycles, we also worked to save SG&A (Selling, General and Administrative) expenses diligently, while leveraging R&D (Research and Development) to accelerate future growth opportunities.

Some of the key financial highlights from 2023 include:

- 1,469.7 billion yen in revenue, 57.0% gross margin, 34.1% operating margin (Non-GAAP), Free cash flow of 379.2 billion yen.
- We continued implementation of a 50-billion-yen buyback as a shareholder return, begun in 2022. Dividends were decided to resume at 28 yen per share based on full-year performance in 2023.

CFO INTERVIEW CONTINUED

- To reduce the risk of the yen appreciating in the environment where the foreign exchange market was volatile and yen depreciation was progressing, we continued to implement currency hedging for the U.S. dollar. As for the exchange rate fluctuation risk, with Multicurrency Notional Pooling changing the way we hold intercompany cash pooling, we worked to minimize fluctuations in performance due to exchange rate risks outside of our core business.

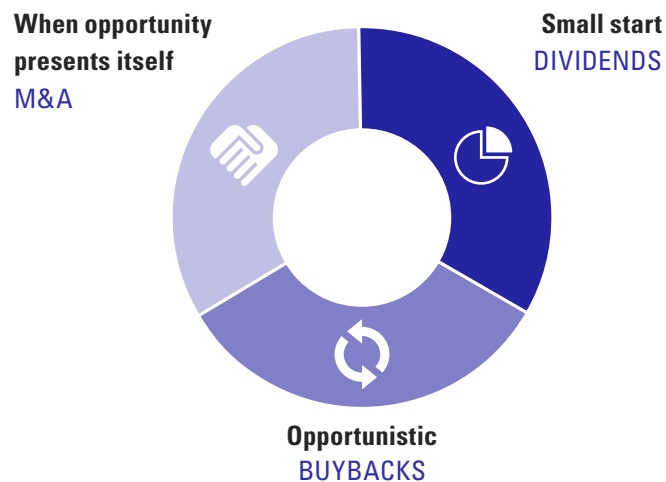
The Resumption of Dividends in 2023

Building on a strong financial structure achieved through structural reforms, growth investments, and M&A, Renesas resumed paying dividends for the first time since FY2004. We decided to start small, taking various factors into account, including our competitors’ dividend yield. We will strive to provide continuous and stable dividends to the extent possible.

Our major capital allocation policy remains unchanged. We plan to pay dividends continuously. We will also continue to carry out mergers and acquisitions that are necessary for our future growth. If we have surplus free cash flow, we will also consider the buyback as a flexible and agile alternative.

Regarding the treasury stock, we plan to keep the amount necessary for stock based compensation to our employees and cancel the rest. We are aiming for a level that does not exceed 5% of the total number of outstanding shares.

Capital Allocation



Looking Forward

As we work toward our “2030 Aspiration” of being a top three embedded semiconductor solutions provider with revenues of over \$20 billion and 6x market cap compared to 2022, we are implementing strategies to bring those goals to fruition. We have policies and systems in place to facilitate constructive dialogs with investors and enhance mid to long-term corporate values. For example, our dedicated team of investor relations professionals regularly engage with investors and Renesas’ senior management, including our CEO and myself, proactively present and participate in major investor conferences throughout the year to share our financial performance, growth strategies, and new developments with global investors and analysts directly.

There are various measures to achieve our “2030 Aspiration,” and one example is the downcycle management. In 2024, we will continue our focus on the channel and in-house inventory management and expenses. We will also make appropriate additions to the Die Bank in anticipation of the upcoming uptick.

Since 2021, we have been actively engaged in tuck-in and minority investments that complement our technology and products to ensure our future business growth. In 2024, to continue to demonstrate synergies with the companies we have acquired to date, we will further strengthen our Post Merger Integration (PMI). I believe that this will allow us to continue building the foundation for future growth. We recently announced the acquisitions of Transphorm (January 2024) and Altium (February 2024) and will be sure to meet regulatory requirements and complete the acquisition procedures.

Additionally, we plan to carefully integrate the use of Artificial Intelligence (AI), as well as other technologies, to develop and execute financial strategies more efficiently and effectively. This will enable us to improve efficiency, leveraging technology to scale operations.

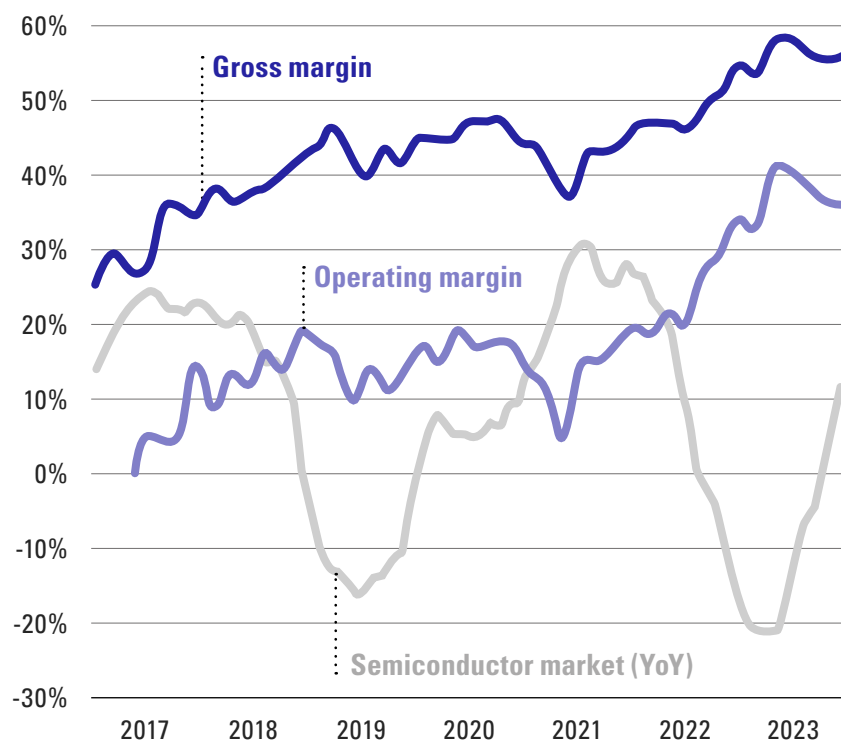
We look forward to building upon our strong financial foundation while we continue to find ways to better serve our customers and contribute to the well-being of our employees, partners, and shareholders.

CFO INTERVIEW CONTINUED

Operational Resilience

MARGIN TRAJECTORY

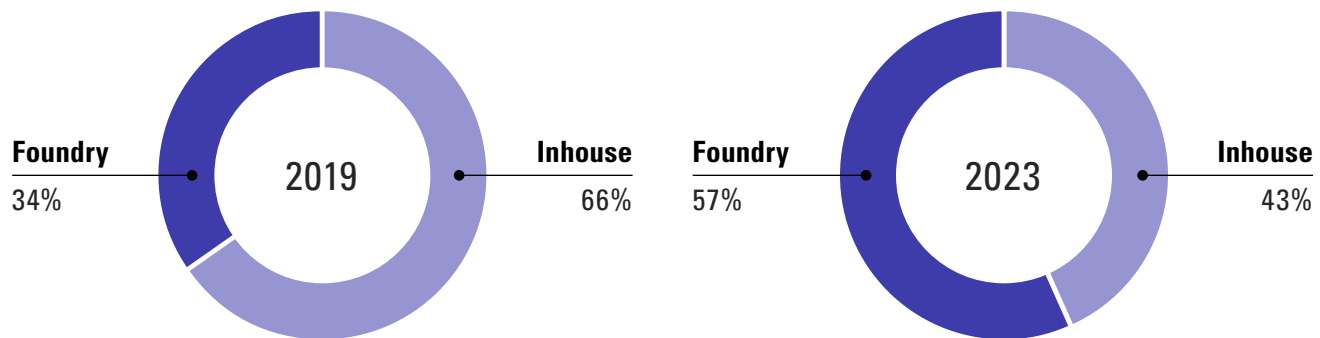
Margin¹ / Semiconductor Market²



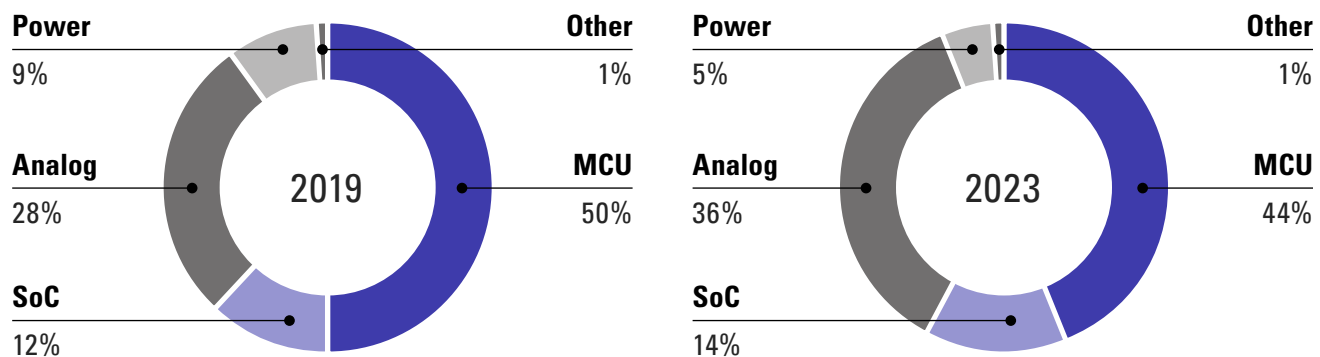
1 Company data, Non-GAAP. Quarterly basis.

2 Global Semiconductor Sales by Semiconductor Industry Association (SIA)

FRONT END PRODUCTION

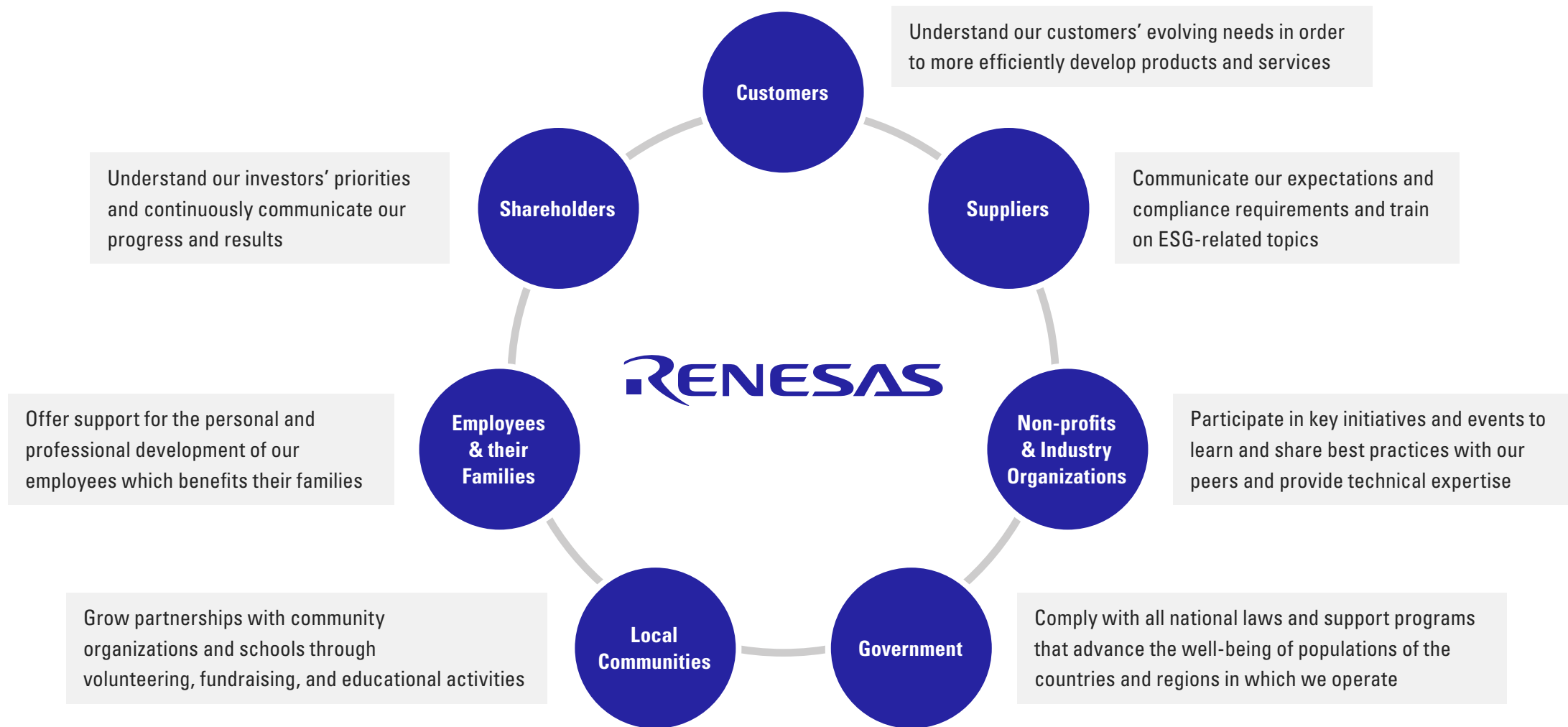


PRODUCT MIX



Stakeholder Management

We recognize the impact of our business operations and sustainability efforts on our key stakeholders and the communities around the globe. That is why we ensure alignment between our ESG strategy and priorities and key concerns of our various stakeholders. We strive to:



- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix



Sustainability Approach

Our Sustainability Approach	20
Materiality Assessment & Results	21
ESG Targets: Overview	22
2023 ESG Highlights	23
Innovation for a Sustainable Future	24
ESG Ratings & Index Inclusion	25
Participating Initiatives	27
Awards & Recognitions	28



Our Sustainability Approach



Our team of over 21,000 professionals around the globe is united under one Purpose:

To Make Our Lives Easier

Our products and solutions reflect our long-term commitment to building a more sustainable future for our customers, employees, partners and investors.

Leveraging advanced technologies and combined expertise, we strive to meet our own Environmental, Social and Governance (ESG) objectives and support 13 UN Sustainable Development Goals (SDGs).

In 2023, we increased our efforts in the following key areas. Please read on for more details in each section.

- Global data disclosure
- Greenhouse gas emission reduction
- Supplier engagement
- Diversity, equity & inclusion
- Employee well-being
- New board structure



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix

Materiality Assessment & Results

To ensure that we are aligned with the ever-changing priorities of our stakeholders, we have conducted a comprehensive materiality assessment annually. Based on the input from our internal and external stakeholders, we formulate immediate and multi-year action plans to address material issues and minimize ESG risks.

To help us identify and prioritize ESG issues of mutual importance, we have engaged with a diverse group of Renesas leaders and teams in this process, including CEO and senior management team members, and functional and ESG discipline experts (HR, Environment, Heads of Business Units, Risk, Procurement, etc.). The Sustainability Promotion Office collaborates with key departments to achieve KPIs they establish each year, reports progress to the management, and shares externally.

People

- Health, safety and well-being
- Talent attraction, engagement and retention
- Diversity, equity and inclusion



Environment

- Climate change, energy and emissions
- Water management
- Waste, chemicals and product lifecycle management



Society

- Value creation and distribution
- Strategic sourcing



Business Sustainability

- Innovation management
- Value chain resilience
- Customer engagement and quality standards
- Financial resilience



- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix

ESG Targets: Overview

Environmental



GHG EMISSIONS

- Reduce by 38% by 2030
- Achieve carbon neutral status by 2050

WATER CONSERVATION

- Reduce water intensity by 33% by 2030
- Realize a 35% water recycling rate by 2030

WASTE MANAGEMENT

- Achieve 90% or more of waste recycling

Social



SUPPLIER RISK EVALUATION

- Ensure all key suppliers obtain an RBA SAQ score of “medium” or below

ON-SITE SUPPLIER AUDIT

- Audit all key suppliers within three years

CONFLICT MINERALS

- Achieve 100% conflict-free 3TGs (Tungsten, Tantalum, Tin and Gold)

OCCUPATIONAL HEALTH & SAFETY

- Achieve ISO 45001 for all major manufacturing sites

Governance



BOARD GENDER DIVERSITY

- Advance gender equality with women holding at least 30% of the board seats

INDEPENDENT DIRECTORS

- Aim for over 50% independent directors

- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix

2023 ESG Highlights

Environmental

17.9%

GHG emission reduction achieved
(2023 and 2022 total vs. 2021 result)

~80%

of new products released were
sustainability-focused

- **70%** of our global revenue was derived from sustainability-focused product sales
- Reduced **energy consumption** by **2.6%**
- Improved **water intensity** by **36%**
- Achieved **33% water recycling** rate
- Achieved **90% waste recycling** rate

Social

100%

of our major manufacturing sites have
ISO45001 certification

96%

of our global suppliers confirmed consent and support of **Renesas Supplier Code of Conduct**

- Received **CDP Supplier Engagement Leader** recognition and the top “Gold” rating from **Pride Index Japan** for the second year in a row
- 400 applications received for a new **Remote Working Abroad program** that enables employees to work in another country for up to 30 days
- Launched the **Pride and Renesas International Support and Empowerment (RISE) ERGs**
- Expanded our engagement with **Inspiring Girls International, High-Tech High Heels, and UK Electronics Skills Foundation**
- Donated **38 million yen** for social contribution initiatives and **3 million yen** worth of employee volunteering time

Governance

30%

Board diversity target set
(Achieved in Q1 2024)

98.8%

of employees think positively about our
culture of compliance

- Achieved over **80% Independent Director** ratio (50% target)
- Achieved **91% completion** on the annual Code of Conduct employee training
- Released several new standalone global policies, including the **Anti-Bribery and Anti-Corruption Policy, Whistleblower Policy, and Compliance Investigations Policy**
- Obtained **TISAX certification**, an automotive security standard which works alongside IATF 16949 and ISO9001
- Increased security capabilities, such as to **24/7 security operations center**, to identify and prevent potential attacks on our business

- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach**
- Environmental
- Social
- Governance
- Appendix

Innovation for a Sustainable Future

In 2023, Renesas continued to accelerate innovation in its four core technology areas (Artificial Intelligence, Safety & Security, Digital & Analog & Power Solution, and Cloud Native). Our efforts are centered around our ability and dedication to developing eco-friendly and safety-focused products that empower our customers and make a positive impact on peoples’ lives.

Products and solutions released in 2023 include:

Energy Efficiency

- Solutions for EV charging stations/vehicle cluster control
- IC for DDR5 memory module
- Beamforming IC
- IGBT
- RZ/T2L

Safety & Security

- Air quality measurement
- Roadmap for next-generation automotive SoCs and microcontrollers
- ISO/SAE 21434 solution
- Highly secure RA8 series microcontroller

Renesas technologies featured at ISSCC 2023

Renesas’ technical papers featuring our innovative technologies in the automotive and IoT markets were presented at the ISSCC (International Solid-State Circuits Conference) 2023, the foremost global forum for presentation of advances in solid-state circuits and system-on-chips.



AUTOMOTIVE

“A 33kDMIPS 6.4W Vehicle Communication Gateway Processor Achieving 10Gbps/W Network Routing, 40ms CAN Bus Start Up and 1.4mW Standby Power”

IOT

“Single Chip, Qi Compliant, 40W Wireless Power Transmission Controller using RMS Coil Current Sensing and Adaptive ZVS for 4dB EMI and up to 1.7% Efficiency Improvements”

ESG Ratings & Index Inclusion

We are proud of global and regional evaluations of our ESG policies and practices, as well as improving data disclosure. Our efforts continue to further demonstrate our ESG commitment to our customers, business partners and investors.

	INDEX/RATING NAME	2023 RATING/SCORE	SCALE
	FTSE ESG	4.5	1–5
	FTSE4Good Index	Index Member	—
	FTSE Blossom Japan Index	Index Member	—
	FTSE Blossom Japan Sector Relative Index	Index Member	—
	MSCI ESG Ratings	AA	CCC–AAA
	MSCI Japan Empowering Women Index	Index Member	
	Corporate Sustainability Assessment	65	1–100
	Company ESG Risk Ratings	19.4 (Low Risk)	50-1 (High Risk–Low Risk)
	Climate	B	D–A
	Water	B	D–A
	Supply Chain	A	D–A
	Gender Diversity Tilt Index	Index Member	—

- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach**
- Environmental
- Social
- Governance
- Appendix

ESG RATINGS & INDEX INCLUSION CONTINUED




	INDEX/RATING NAME	2023 RATING/SCORE	SCALE
	Carbon Efficient Index	Index Member	—
	Pride Index	Gold	Bronze, Silver, Gold
	Sustainability Index	Index Member	—

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

Participating Initiatives

As a global industry leader, we have formed strategic partnerships engaged in a wide variety of sustainability and diversity-focused initiatives.



- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix

Awards & Recognitions

Renesas is honored to have received the following awards in 2023:



“AA” MSCI ESG RATING

For the first time, Renesas received an “AA” ESG rating from Morgan Stanley Capital International (MSCI). AA is the second highest rating given by MSCI ESG Research, a global provider of in-depth research, ratings and analysis of the environmental, social and governance (ESG) related business practices ([announced on January 27, 2023](#)).



CDP 2023 SUPPLIER ENGAGEMENT LEADER

In March 2024, Renesas was awarded the highest rating in the CDP 2023 Supplier Engagement Rating (SER) for two years in a row. SER evaluates how effectively companies are working with their suppliers on climate change issues. This recognition was given to the top 8% of companies with the highest scores in four categories (Governance, Targets, Scope 3 Emissions and Value Chain Engagement) in CDP’s climate change survey.



RECEIVED HIGHEST “GOLD” RATING FOR PRIDE INDEX 2023 FOR 2ND CONSECUTIVE YEAR

Renesas received the highest “Gold” rating by the Pride Index 2023 for two consecutive years. The index, established by work with Pride in Japan, evaluates workplace initiatives for LGBTQ+ and other sexual minorities within companies and organizations ([announced on November 21, 2023](#)).

AWARDS & RECOGNITIONS CONTINUED



SELECTED AS MEMBER OF SNAM SUSTAINABILITY INDEX IN 2023

Since 2019, Renesas has been a member of the SNAM Sustainability Index, established by Sompo Japan Nipponkoa Asset Management Co., Ltd. (SNAM). The SNAM Sustainability Index is managed with a long-term perspective for pension funds and institutional investors who invest broadly in companies with strong ESG ratings. Every year, approximately 300 stocks achieve an excellent ESG rating.



“EXCELLENT AWARD” AT SEMICONDUCTOR OF THE YEAR 2023 AWARDS

Renesas’ next-generation Si-IGBTs for xEV inverters received the “Excellence Award” in the semiconductor device category of the Semiconductor of the Year 2023 awards hosted by the Electronic Device Industry News of Sangyo Times Co., Ltd. The award was given in recognition of the performance of the IGBTs as well as Renesas’ accomplishments in securing a stable supply system and providing inverter solutions.



ELECTRONICS INDUSTRY AWARD

Renesas received two prestigious awards from The Electronics Industry Awards. Our RAA270205 high-definition radar transceiver has been named Automotive Product of the Year, while our RZ/T2M motor control MPUs won Semiconductor Product of the Year.



EE AWARDS ASIA

Renesas won two awards for its advanced products and solutions including the RA8 processor used with the Arm Cortex®-M85 core, which was selected as the best MCU/Driver IC product of the year. Also receiving an award was Renesas’ Reality AI technology which won the best AI product of the year. The EE Awards Asia is a grand gathering for top manufacturers and professionals in the semiconductor and electronics industries to jointly commend outstanding companies, products in the field, and people who have made outstanding contributions to the industry.

- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix



Environmental

Leadership Perspective	31
Environmental Initiatives	33
Climate Change Initiatives.....	36
Conserving Water	42
Chemical Substance Use	48
Waste Management.....	51
Eco-Product Initiatives.....	54
Renesas Green Devices.....	57
Biodiversity Conservation Activities.....	64



Leadership Perspective

A Focus on Integrated Operations

As a result of our efforts over the past several years, Renesas is now positioned for the first time to effectively integrate our internal, foundry and external operations together to support progress toward our sustainability goals. This includes working in close partnership with our procurement and all of our suppliers as a unified team.

This teamwork offers a great opportunity to continue to positively impact the environment in the communities where we live and work and beyond, while also improving operational efficiencies throughout our organization.

Renesas is committed to continuously working toward achieving three environmental protection goals:

- Greenhouse gas (GHG) emissions reduction
- Water management
- Waste recycling

Working with our Supply Chain Partners

These commitments extend beyond our own immediate organization and are inclusive of our supply chain partners. Partnering with our Environmental Promotion Department, our production team is striving to meet our global targets throughout the production process. But we also realize that working closely with our supply chain members is critical to achieving our goals.



This teamwork offers a great opportunity to continue to positively impact the environment in the communities where we live and work and beyond, while also improving operational efficiencies.”

We have reduced our own emissions (Scope 1 and 2) by saving energy, utilizing green energy sources, and investing in technologies such as perfluoro compound (PFC) gas abatement equipment.

With about two-thirds of our emissions coming from Scope 3 (supplier) sources, close collaboration with the members of our supply chain has the potential to significantly impact our progress in this area.

A key component of this collaboration includes annual supplier audits. This year we will strive to achieve 80% participation in these surveys and put a strong focus on human rights. We are also planning to host a supplier forum in mid-2024 to share Renesas’ environmental goals, initiatives, and plans. The forum will be structured to encourage increased collaboration and learning opportunities including industry best practices.



Sailesh Chittipeddi, Ph.D.
Executive Vice President
and Head of Operations



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix

LEADERSHIP PERSPECTIVE CONTINUED

We are keen on increasing training throughout our supply chain to support our partners in their own efforts to improve their environmental and operational performance. The holistic impact will be beneficial for all participants up and down the Renesas supply chain.

Greater Efficiencies through Artificial Intelligence

With the incorporation of Artificial Intelligence (AI) in so many facets of business and life, Renesas is realizing the opportunity to positively influence our environmental impact and efficiency throughout our operations. By using more AI functions, we will have better product development, minimizing the risk and cost at our factories around the world. AI in both design and testing will offer us the opportunity for greater accuracy in monitoring our equipment, resulting in increased productivity. An example would be the detection of minute gas leaks in equipment, notifying us of maintenance that can be employed to extend the life of equipment as well as protect the health and safety of our team.

Incorporating AI directly into Renesas products helps improve the lives of consumers as well. “Edge” or endpoint AI functionality in our products is a core part of our business, allowing us to better serve our customers with more “intelligent” technology to integrate into their own products, providing greater power efficiencies and enhanced user experience.

Through our integrated operations, use of intelligent technology, and stronger partnerships with our suppliers around the world, we are confident that we can achieve more this year and beyond.

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 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 Environmental Promotion 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 top management.



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

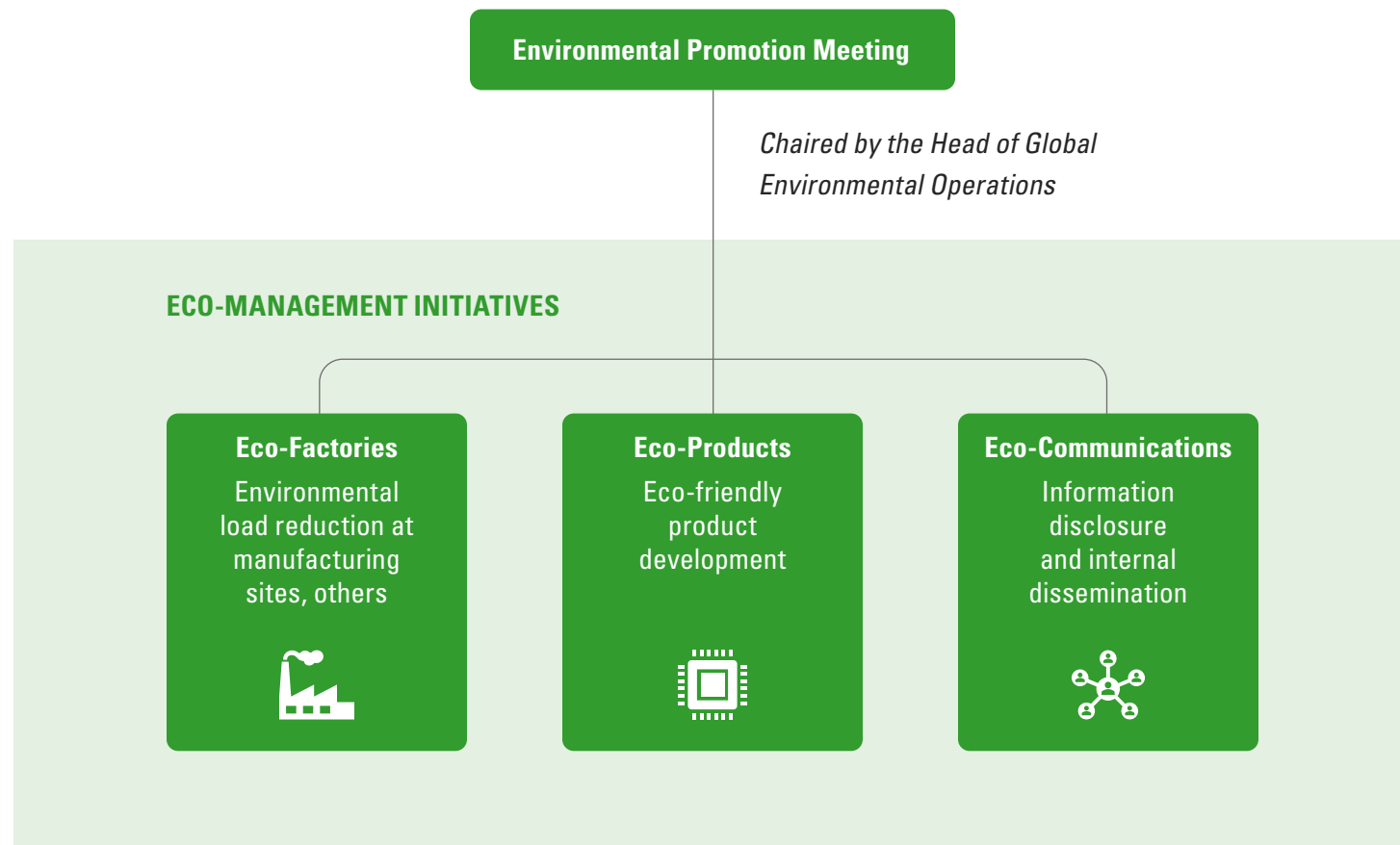
In particular, with regard to GHG reduction and water resource conservation, we regularly monitor our progress toward our targets to ensure that we are up-to-date on the latest status. In addition, in 2023, there were no violations of environmental laws or ordinances, environmental accidents or complaints as in the year before last.

- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental**
- Social
- Governance
- Appendix

ENVIRONMENTAL INITIATIVES CONTINUED

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.



ENVIRONMENTAL INITIATIVES CONTINUED

2023 Environmental Activity Results

CATEGORIES		ACTIVITIES IN 2023	RESULTS OF 2023
Eco-Management Activities		Promotion of environmental performance improvement measures and maintenance of ISO14001 certification	Direct audit by ISO certification body, certification renewal completed
	Eco-Factory Initiatives	Reduce 5 years average energy consumption per basic unit by 1% or more (effort target of the Energy Conservation Law)	<ul style="list-style-type: none"> 5-year average basic unit results: Renesas Electronics (Japan): 1% reduction, Renesas Semiconductor Manufacturing: 1.2% reduction Expected to obtain an S rank in the evaluation of business classification by the Energy Conservation Law
		Maintain perfluoro compound (PFC) emissions to below emission levels of 2015 (per wafer area)	Reduced PFC emission by 0.021 points compared to emission levels of 2015 (per wafer area)
	Eco-Product Initiatives	Appropriately respond to various regulations in Japan and overseas as well as customer demands	No domestic or foreign environmental laws and ordinances violated
		Maintain 90% or more Green Devices ratio of newly mass produced products	Green Devices ratio in 2023: 96%
	Eco-Communication Initiatives	Improve environmental information disclosure to stakeholders	Third-party verification of environmental data
		Renewed training materials for rank-based training and environmental e-learning / conducted training	<ul style="list-style-type: none"> Implementation of e-learning for new employee education, new manager education, etc. Regular environment-related information sharing within the company
		Active promotion of biodiversity conservation activities	<ul style="list-style-type: none"> Implemented 120 biodiversity activities at manufacturing sites and offices globally. Introduced activity self-assessment indicators to global sites.

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

Climate Change Initiatives

Our Commitment to Carbon Neutrality

Renesas aims to become carbon neutral by 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 pre-industrial 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 [Science-Based Target initiative \(SBTi\)](#) certified our mid-term 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

“Scope 1” refers to direct GHG emissions from the activities of a company.

“Scope 2” refers to indirect emissions from electricity, heat, and steam purchased and used by a company.

“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.

“Scope 3 Category 1” refers to the products and services purchased by a company.

“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.



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](#)).

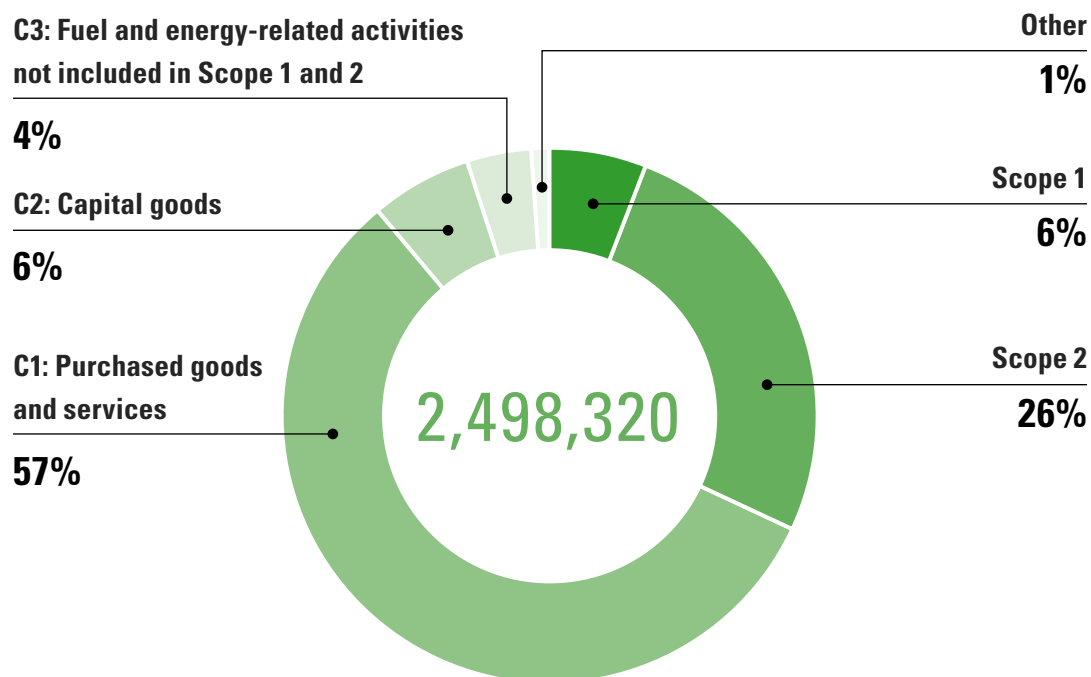


Environmental Impact of the Entire Value Chain

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.

2023 RENESAS' GHG EMISSIONS BY SCOPE

(t-CO2)



See Appendix ([Environmental Data](#))

- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix

CLIMATE CHANGE INITIATIVES CONTINUED

Greenhouse Gas (GHG) Emission Reduction

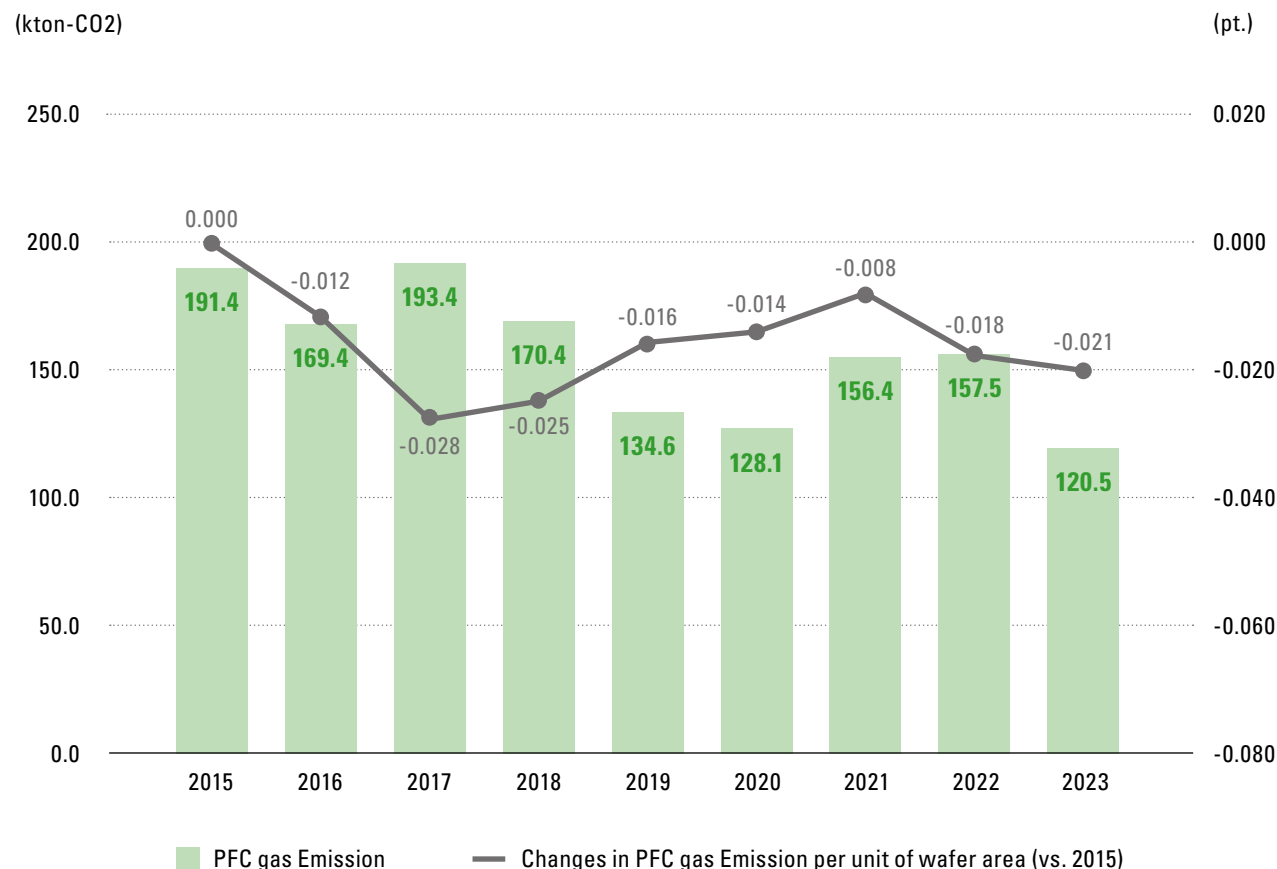
Renesas mainly uses perfluoro compound (PFC) (Note 1) gas, one of the GHGs, as a process gas for plasma etching and wafer cleaning, and as a cleaning gas for reaction chambers in the semiconductor manufacturing process. These gases are not easily decomposed, and their global warming potential (Note 2) 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 2023, compared to 2015, we achieved a 0.021 percentage point reduction in wafer area per unit of production and approximately 37% reduction in total emissions. Efforts will continue to be made to further reduce emissions beyond 2024.

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 (CO₂=1)

CHANGES IN PFC GAS EMISSIONS & PFC GAS EMISSION PER UNIT OF WAFER AREA



CLIMATE CHANGE INITIATIVES CONTINUED

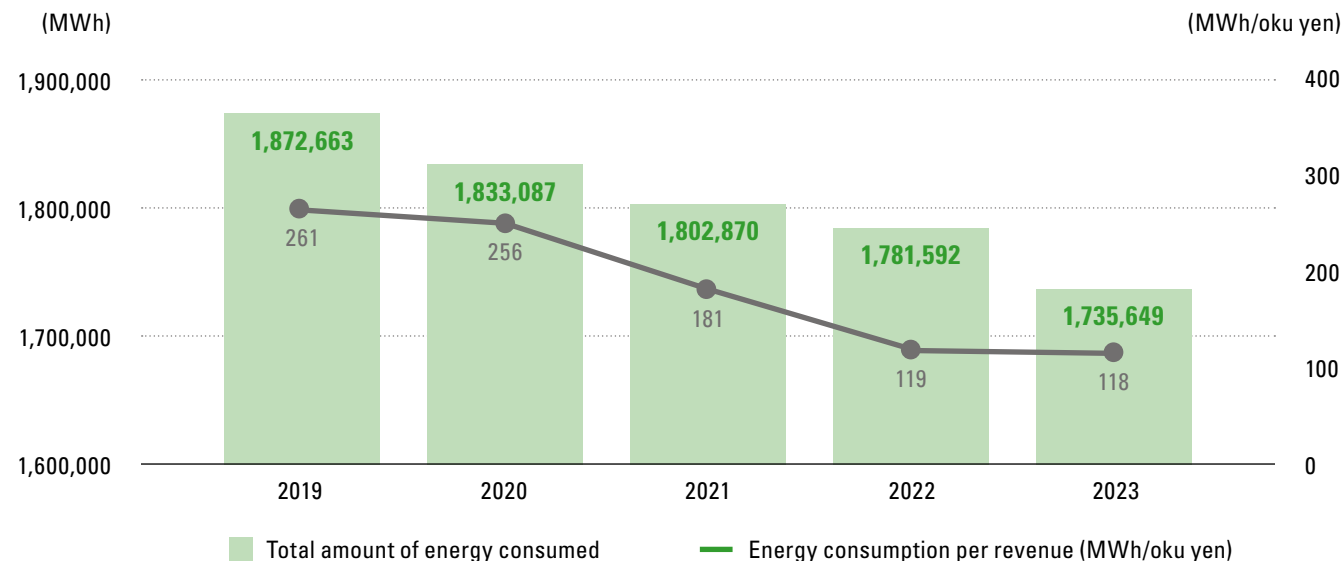
Energy Reduction

In 2023, we reduced energy consumption by 2.6% compared to the previous year of 2022. Energy intensity against revenue was same level of the previous year of 2022 due to the energy-saving measures implemented at each factory and the result of diligent energy management despite a decline in demand due to a weakening semiconductor market.

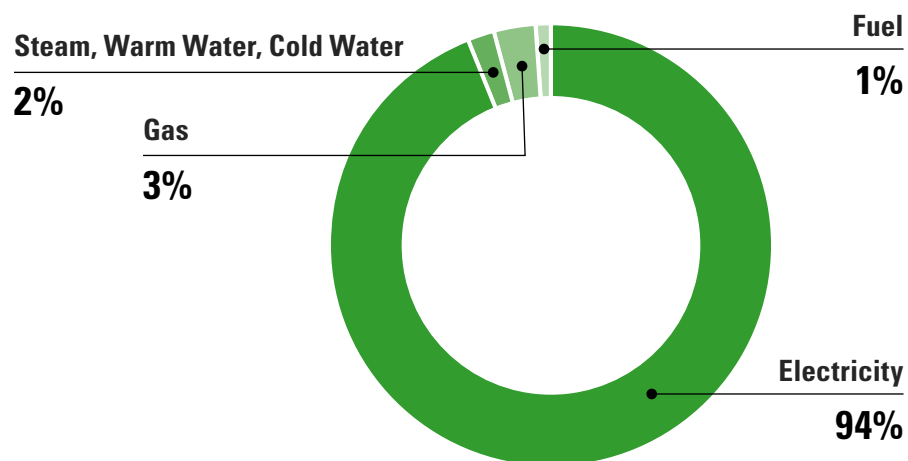
In 2024, we will continue to promote energy-saving measures and strive for efficient use of energy corresponding to the Group's business activities in order to reduce energy consumption and prevent global warming.

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 "Low Carbon Society Action Plan," an initiative undertaken by the Japanese electrical and electronics industry since 2013. This plan aims for the development of innovative technology which will contribute to the prevention of global warming, promoting international contributions through 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 2023



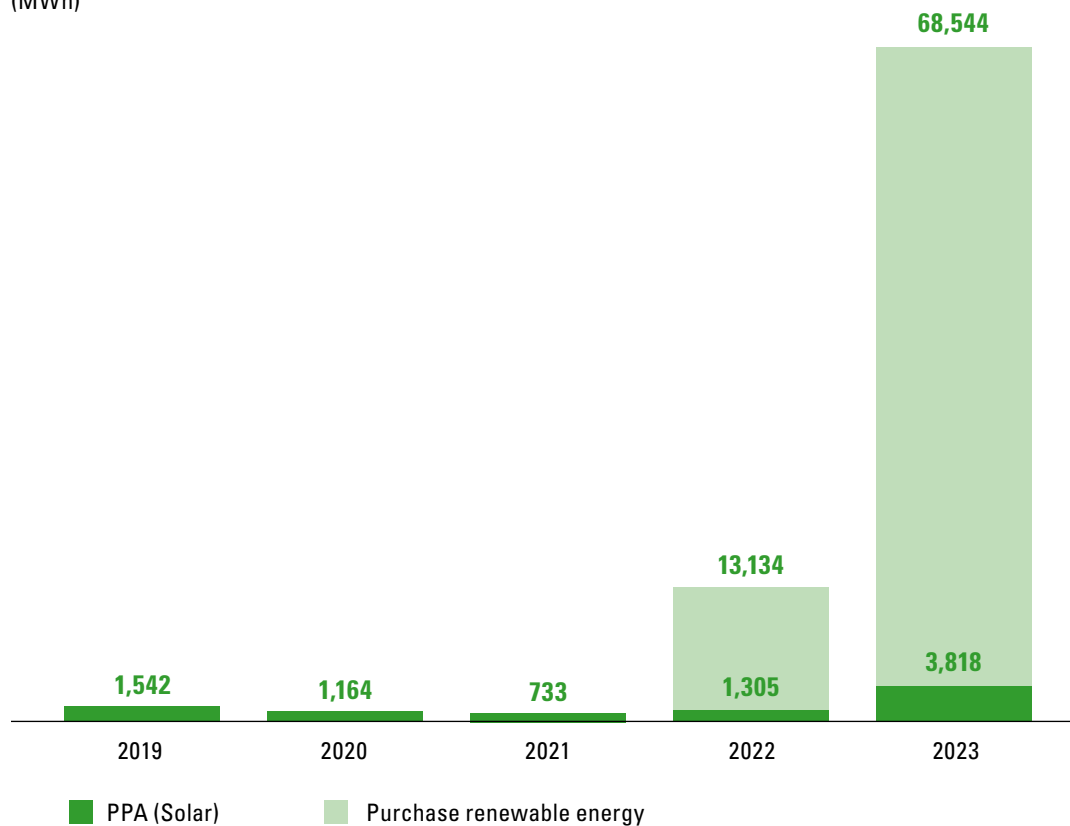
CLIMATE CHANGE INITIATIVES CONTINUED

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 have 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 second half of 2022.

TREND OF RENEWABLE ENERGY

(MWh)



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

CLIMATE CHANGE INITIATIVES CONTINUED

OVERVIEW OF SOLAR PANEL (PPA) INSTALLATION BASES



Production base
 Renesas Semiconductor KL Sdn. Bhd.

Country
 Malaysia

System
 Solar power PPA

Power generation amount
 137kwh/h

Operation start
 December 2022

OUR COMMITMENT

Renesas' efforts in Climate Change Initiatives contribute to these Sustainable Development Goals targets:



7.2
 By 2030, increase substantially the share of renewable energy in the global energy mix



9.4
 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally-sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities



13.3
 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

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.)



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix

CONSERVING WATER CONTINUED

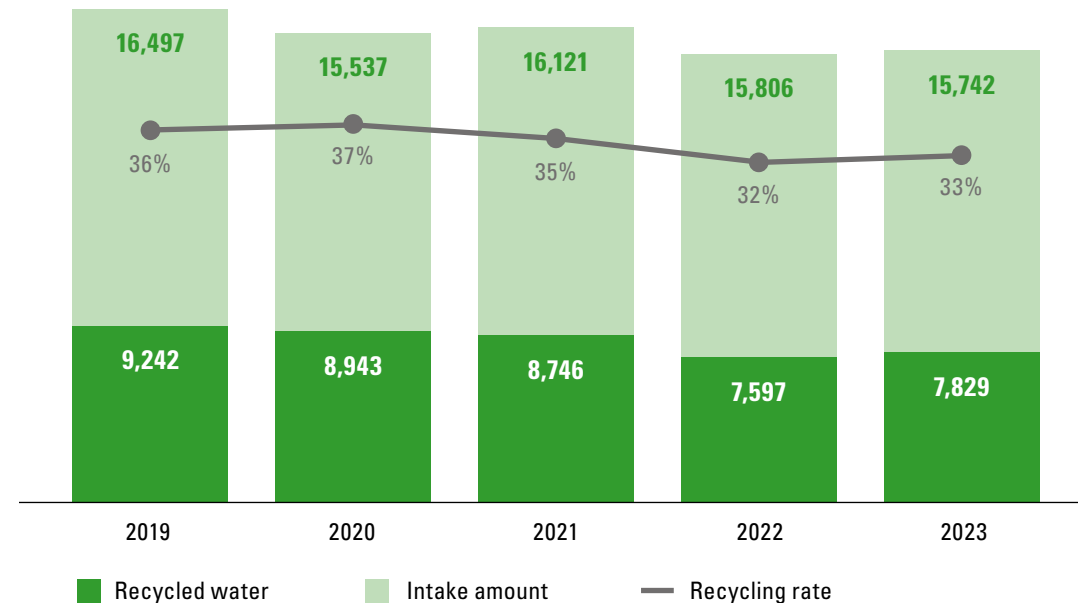
Efficient Use of Water

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 2023, we reduced the amount of water intake to 15,742 Km³, a decrease of approximately 0.4% from the previous year, due to improvement activities aimed at efficient water usage. The recycling rate has increased by approximately 1%. The total amount of water used was 23,571 Km³, a decrease of approximately 0.7% from the previous year. In addition, total amount of water used per revenue improved by 36% in 2023 compared to the base year of 2021.

CHANGES IN TOTAL CONSUMPTION

(Total Consumption = Water Intake + Recycled Water)
(1,000 m³/year)



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, such as for 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 2023 was 362,108 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 2023 improved by 33% compared to 2021. In 2024, we aim for 20% 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 30% compared to 2021. In 2024, we aim for 30.5% 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 TARGET	2023 ACTUAL RESULT	2024 TARGET
Renesas Semiconductor (Beijing) Co., Ltd.	10%	33%	20%
Renesas Semiconductor (Suzhou) Co., Ltd.	22%	30%	30.5%

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

- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental**
- Social
- Governance
- Appendix

CONSERVING WATER CONTINUED

MEASURES TO IMPROVE WATER USE PER PRODUCTION RELATED REVENUE WATER

	RENEASAS SEMICONDUCTOR (BEIJING) CO., LTD.	RENEASAS SEMICONDUCTOR (SUZHOU) CO., LTD.
Water Use Reduction Measures	<ul style="list-style-type: none"> Improvement in unit water usage (total amount of water used/ sales) due to mass production effect Continuation of water-saving activities for domestic use and water for greening 	<ul style="list-style-type: none"> Improvement in unit water usage (total amount of water used/ sales) due to mass production effect Reducing water consumption by appropriately adjusting the water pressure of domestic water Reducing the amount of cooling water used by replacing cooling water pipes (lower pressure at cooling water terminals) Reducing of water consumption by changing the tester equipment cooling method Continuation of water-saving activities for domestic use and water for greening
Efficiency Measures	<ul style="list-style-type: none"> Recover BG wastewater and reuse it as make-up water for cooling towers Recover the remaining water from the water heater and reuse it for 5S activities Recover moisture permeable membrane cleaning water from humidifiers and reuse it as make-up water for cooling towers 	<ul style="list-style-type: none"> Reduce water usage by recycling BG polishing wastewater, dicing cooling water, and vacuum pump cooling water Increased water efficiency for cooling tower (introduced one cooling water treatment machine) Reduce water usage by utilizing reverse osmosis of pure water

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

CONSERVING WATER CONTINUED

Collaboration with Global Suppliers

Renesas joined the [Responsible Business Alliance \(RBA\)](#) in 2021 and revised the [Renesas Supplier Code of Conduct](#). 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 (64 companies) 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.



污水实时数据			
实时数据	累计流量(吨)	瞬时流量(L/s)	监测时间
	67382	4.08	2021-11-17 11:14:59
污染物实时数据			
因子名称	实测值	数据单位	设备状态
化学需氧量	32.700000	mg/l	待机
PH	6.43		正常
水温	25.0	°C	正常
氨氮	0.024000	mg/l	正常
			2021-11-17 10:00:00

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

CONSERVING WATER CONTINUED

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 2023.

OUR COMMITMENT

Renesas’ efforts in Conserving Water contribute to these Sustainable Development Goals targets:



6.3

By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally



6.4

By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity



6.6

By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes



6.B

Support and strengthen the participation of local communities in improving water and sanitation management

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.

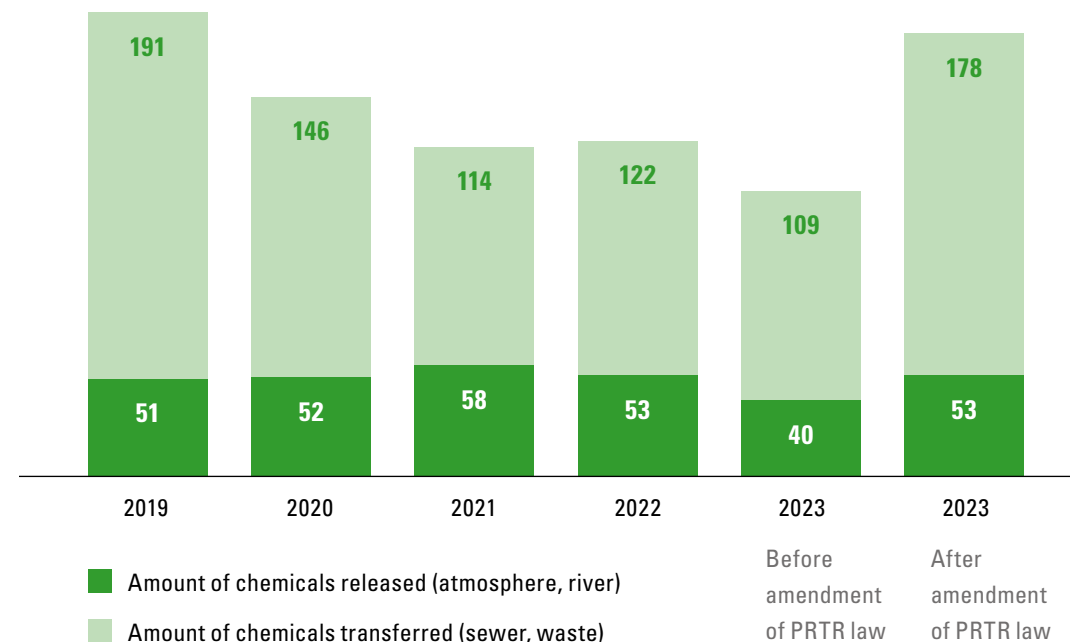
Note 1: Pollutant Release and Transfer Register: a law concerning the monitoring of emissions of specified chemical substances into the environment and their management.

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)



- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental**
- Social
- Governance
- Appendix

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	1. 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.

*Including containers, packing materials, and accessories

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.

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*, 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.

* POPs Convention: Stockholm Convention on Persistent Organic Pollutants.

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.

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.

Status of our compliance with laws and regulations:

- [EU RoHS](#)
- [China RoHS](#)
- [REACH \(SVHC\)](#)
- [Lead-free related:](#)
 - [Parts made lead-free](#)
 - [Terminal specifications by package](#)
 - [Discrimination via packaging label](#)
- [Halogen-free](#)
- [RoHS compliance of tool](#)
- [Other environmental regulations and information concerning chemical substances](#)

OUR COMMITMENT

Renesas’ efforts in Chemical Substance Use Reduction contribute to these Sustainable Development Goals targets:



12.4
By 2020, achieve the environmentally-sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment



12.5
By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

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 generated derived from our business activities as resources as a mid-term goal.

* Recycling rate (%) = $100 - (\text{Final disposal amount} \div \text{Total amount of waste \& valuable emissions}) \times 100$. 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

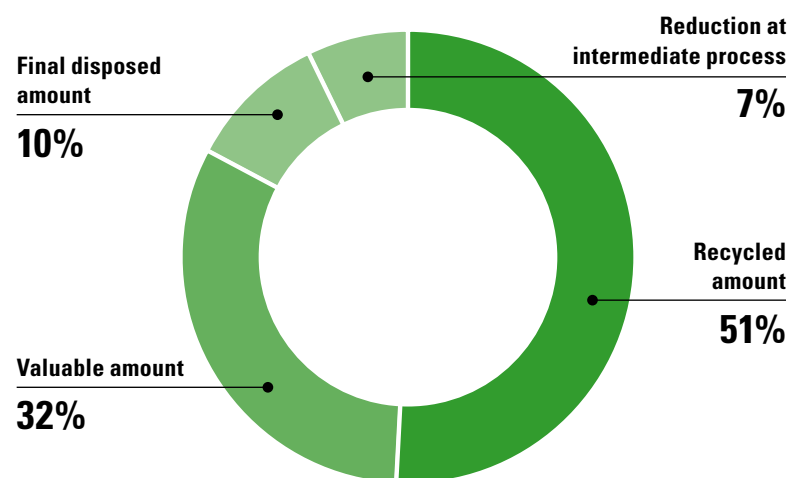
WASTE MATERIALS	EXAMPLES OF RECYCLING
Sludge**	Roadbed materials, raw materials for cement, recycled sand, raw materials for metal refining
Waste Oil**	Incinerator combustion aid, recycled oil, raw materials for cement
Waste Acid**	Recycled sulfuric acid, wastewater treatment, fuel conversion, raw materials 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 Porcelain Scraps**	Raw materials for glass, raw materials for cement, tiles, 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**	Paint and mortar aggregates

** Including scrap wafers generated during the production process and products that are considered defective.

WASTE MANAGEMENT CONTINUED

The 3R Performance

- In the fiscal year 2023, the amount of waste disposal decreased by 17% 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 and the elimination of temporary increases in waste disposal resulting from the closure of production bases in Japan the previous year.
- More than 99% of domestic waste in 2023, which accounts for about 78% of all waste, is reused, recycled, or properly intermediately treated. The final landfill disposal rate (final disposal amount) was 0.15%. The proportion of landfill disposal (final disposal volume) of waste outside of Japan was 44%.
- The waste recycling rate at our global bases was 90% due to a decrease in the waste ratio in Japan, which has a high recycling rate, and we are maintaining our benchmark of 90%.

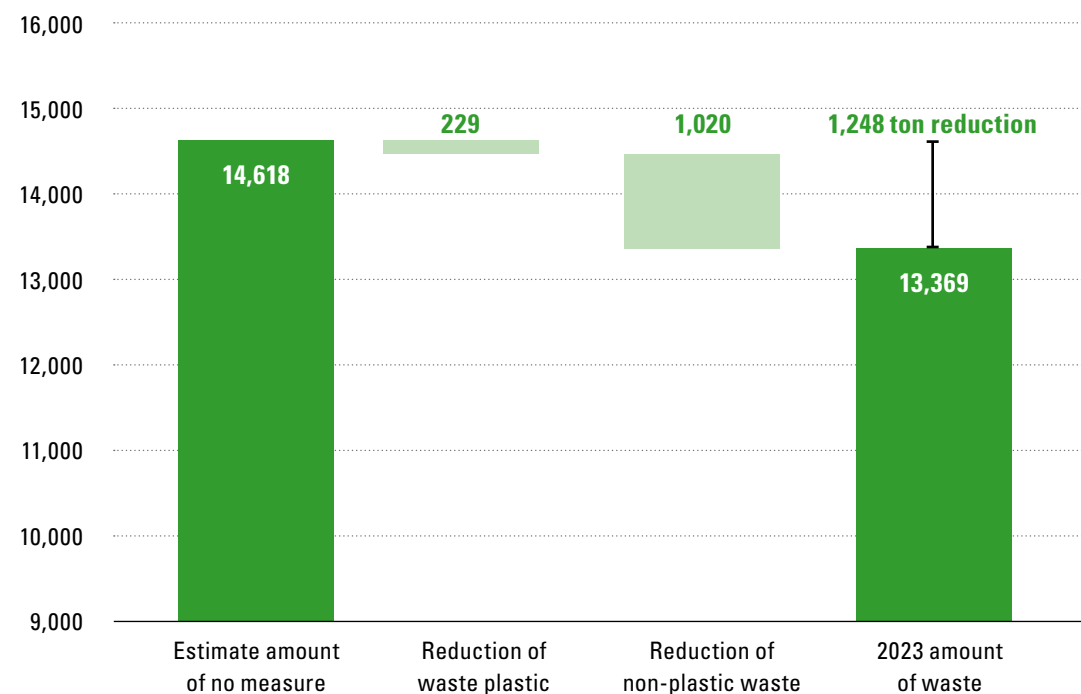


Waste Reduction Initiatives

In 2023, Renesas Group achieved a waste reduction of 1,248 tons (including 229 tons of waste plastic reduction) in Japan.

WASTE REDUCTION CHART BASED ON THE 3R EFFORTS (JAPAN)

(ton)

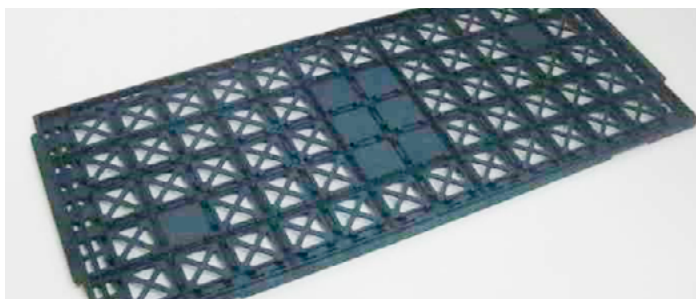


WASTE MANAGEMENT CONTINUED

2023 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
- 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

OUR COMMITMENT

Renesas' efforts in Waste Reduction contribute to these Sustainable Development Goals targets:



3.9
By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination



12.5
By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse



11.6
By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management



15.3
By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world



12.4
By 2020, achieve the environmentally-sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment



15.4
By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development

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 (Note 1) 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.

Note 1: Currently, the product environmental assessment is conducted only for former Renesas products, but we are considering expanding the scope in the future.



- 
 Table of Contents
- 
 About Renesas
- 
 2023 Highlights
- 
 Sustainability Approach
- 
 Environmental
- 
 Social
- 
 Governance
- 
 Appendix

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



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 2) based on eight criteria, including weight reduction, product safety, and whether they are energy saving.

Eight Criteria for Product Environmental Assessment

SAFETY EVALUATION	RESOURCE AND ENERGY SAVING EVALUATION
Long life evaluation (reliability evaluation)	Weight reduction evaluation
Safety assessment (evaluation of controlled chemical substances, compliance with laws and regulations)	Energy saving evaluation
Information disclosure evaluation	Packaging material evaluation
Production process evaluation	Distribution evaluation

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

- If a prohibited material is used in the product or in the manufacturing process
- If a new material used in the product or in the manufacturing process is not SDS (Note 3) registered
- If the preliminary examination of any new materials used in the manufacturing process has not been conducted

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 2: 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.

Note 3: Safety Data Sheet (SDS) refers to the information document provided by supplies on the properties of chemical substances and the handling of materials that contain hazardous substances that may be dangerous or harmful.

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 is basically as follows: Firstly, 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 2023, Renesas Green Devices accounted for 96% (Note 1) of new product development, and approximately 60% of total sales (Note 2), including affiliated products.

EVALUATION CRITERIA	COMPARISON BETWEEN INDEXED PRODUCT AND NEW PRODUCT		RENESAS GREEN DEVICES
Resource-saving evaluation	<ul style="list-style-type: none"> Product volume Product mass 	10% or more reduction	96% of Renesas Green Devices in new product development (Note 1)
Chemical substance content evaluation	<ul style="list-style-type: none"> Power consumption during operation Standby power consumption 		
	<ul style="list-style-type: none"> Percentage improvement of reduced substances (lead) in products 		

Note 1: Percentage of Renesas Green Devices among the number of former Renesas products developed in 2023.

Note 2: Percentage of Renesas Green Devices (former Renesas products developed and mass-produced in 2023 and their affiliated products) to sales of former Renesas products in 2023.

- 
Table of Contents
- 
About Renesas
- 
2023 Highlights
- 
Sustainability Approach
- 
Environmental
- 
Social
- 
Governance
- 
Appendix

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	90%


[Click here](#) to learn about our compliance with environmental laws and regulations.


[Click here](#) to learn about our lead-free initiatives.


- 
 Table of Contents


- 
 About Renesas


- 
 2023 Highlights

- 
 Sustainability Approach

- 
 Environmental

- 
 Social

- 
 Governance

- 
 Appendix

RENESAS GREEN DEVICES CONTINUED

Renesas Green Devices and Super Green Devices (products developed in 2023)

Excerpt from products that can be publicly disclosed

PRODUCT NAME	TYPE	APPLICATION	FEATURE
R7F102G4E3CNP R7F102G4C3CNP R7F102G4E2DNP R7F102G4C2DNP	MCU with low current consumption and capacitive touch channel	RL78 general-purpose microcontroller for home appliances, consumer equipment, and industrial equipment	In addition to the industry's lowest level of current consumption, it is equipped with a wide variety of capacitive touch channels. The new generation of RL78 general-purpose microcontroller lineup comes with 16-48 pin packages and 32KB to 64KB flash memory.
R7F123FMG5AFB-C R7F123FLG5AFB-C R7F123FGG5AFB-C R7F123FBG4ANP-C	16-bit MCU for actuator/sensor control	Automotive	Realizes next-generation smart actuators & sensors and low-end body ECUs that require high reliability.
R7F124FBJ4ANP-C	16-bit MCU for actuator/sensor control	Automotive	Realizes next-generation smart actuators & sensors and low-end body ECUs that require high reliability.
R7FA8M1A*ECFB R7FA8T1A*ECFB R7FA8M1A*ECFC R7FA8D1**ECFC R7FA8T1A*ECFC R7FA8M1A*ECFP R7FA8T1A*ECFP	RA Family Arm® Cortex®-M based 32Bit MCU	General industry/consumer use	Reduces overall system power consumption with multiple low-power modes, power domain separation, low-voltage operation, fast wake-up, low operating and standby current combinations, and more.

RENESAS GREEN DEVICES CONTINUED

PRODUCT NAME	TYPE	APPLICATION	FEATURE
R7FA6E2BB2CBB R7FA6E2BB2CBC R7FA6E2B92CBB R7FA6E2B92CBC	RA Family Arm® Cortex®-M based 32Bit MCU	General-purpose microcontroller with TrustZone® for general industry and consumer use	Based on a 200 MHz Arm® Cortex®-M33 core with TrustZone, it pursues a balance between cost and functionality, achieving best-in-class performance as an entry-line microcontroller.
R7F101G6G4CSP R7F101G6E4CSP R7F101G6G3CSP R7F101G6E3CSP R7F101G6G2DSP R7F101G6E2DSP	Low power 8/16 bit MCU	For home appliances, consumer equipment, and industrial equipment	A microcontroller with the highest level of processing performance among the RL78 family MCUs, equipped with a CPU operation with a maximum operating frequency of 48MHz and a flexible application accelerator (FAA). Additionally, it has enhanced analog functionality and a rich set of timers, making it suitable for motor control, power supply, and lighting applications. FAA is a coprocessor dedicated to calculations and can operate independently of the CPU, achieving higher processing power.
R9A09G057H48GBG	MCU equipped with Renesas' proprietary AI accelerator (DRP-AI3), quad Arm® Cortex®-A55 (1.8GHz) Linux processor, and dual Cortex®-R8 (800MHz) real-time processors	Industrial (autonomous robots, factory automation, etc.)	In addition to the AI accelerator, it is equipped with another dynamic reconfiguration processor (DRP), which can accelerate image processing such as OpenCV and dynamics calculations required for robot applications.

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

RENESAS GREEN DEVICES CONTINUED

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.

RENESAS GREEN DEVICES

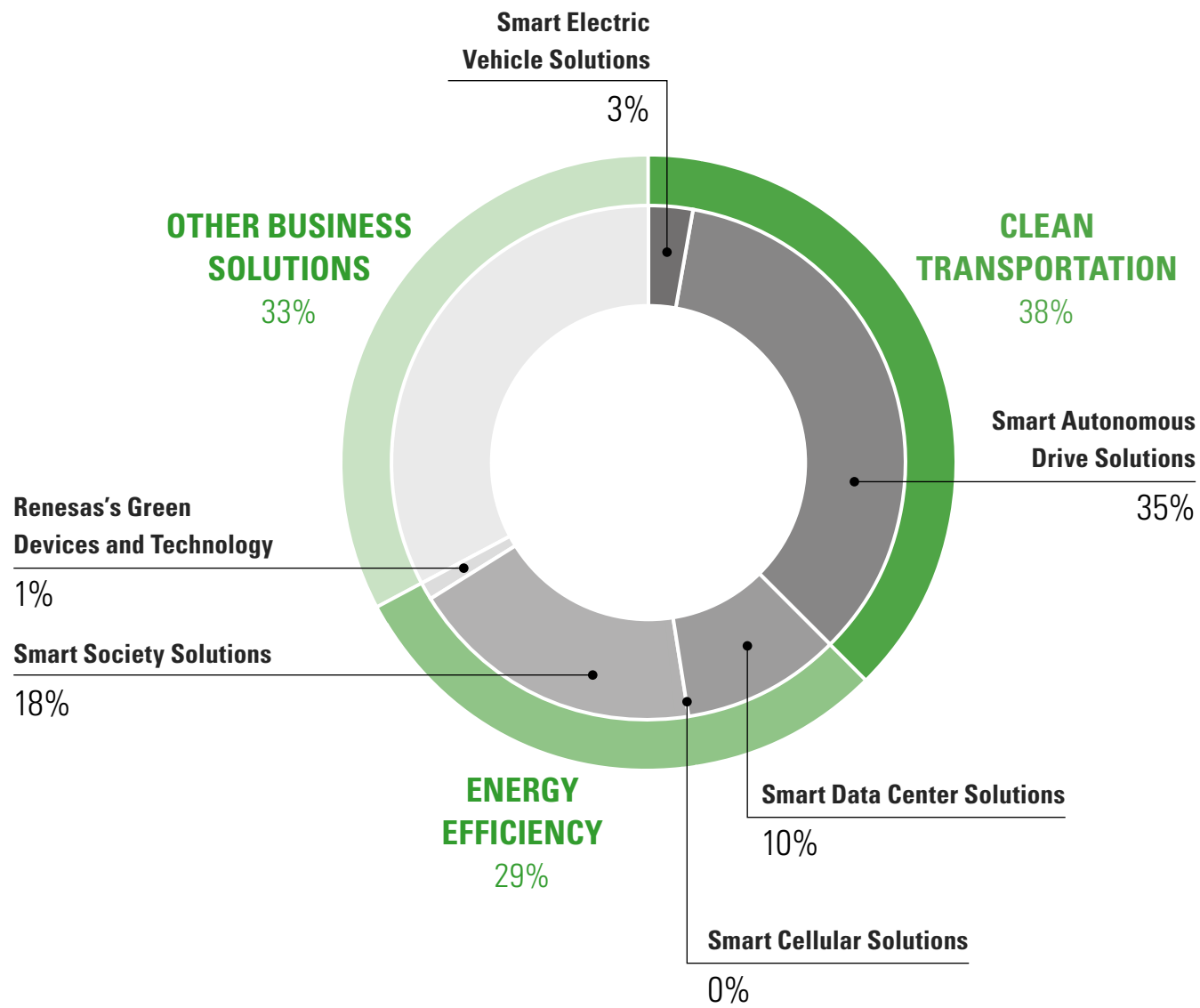
MISSION-CRITICAL BUSINESS AREAS (AUTOMOTIVE, FA, COMMUNICATION INFRASTRUCTURE, MEDICAL, HEALTHCARE, ETC.)		OTHER BUSINESS FIELDS
CLEAN TRANSPORTATION	ENERGY EFFICIENCY	
Smart Electric Vehicles Solutions	Smart Data Center Solutions	Other business solutions
Smart Autonomous Drive Solutions	Smart Cellular 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

Sales Ratio of Renesas Green Devices by Solution

In 2023, 67% of Renesas' green device sales was for mission-critical business areas (green bond eligible solutions), of which 38% was for smart vehicle solutions and electric vehicles, and 29% for social infrastructure such as data centers and cellular. (Note 3)



Note 3: Renesas Green Devices (former Renesas products and affiliated products developed and mass-produced in FY2023) that can be classified as green-bond eligible solutions are extracted, and the sales of the classifiable products are used as the denominator for each solution. The proportion of products excluded from classification is 20%.

RENESAS GREEN DEVICES CONTINUED

Product Environmental Quality in Supply Chain

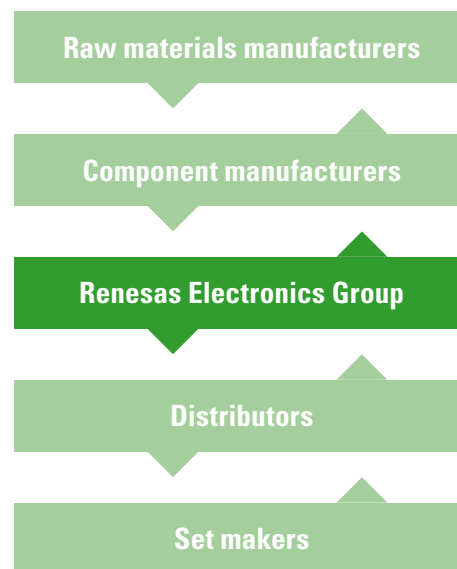
We believe that it is necessary for the entire supply chain to manage chemical substances contained in products throughout the process, from the selection of materials during development and design, to the prevention of pollution in the manufacturing process. For this reason, we ask suppliers to submit 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.

[Click here](#) to learn about our environmentally-conscious supply chain initiatives.

[Click here](#) to learn about our green procurement.

[Click here](#) to learn about our environmental compliance.



OUR COMMITMENT

Renesas' efforts in Eco-Product Initiatives contribute to these Sustainable Development Goals targets:



12.4

By 2020, achieve the environmentally-sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

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 its biodiversity conservation activities based on average self-assessment scores at each site. In the fiscal year 2023, marking the second year of evaluation, Renesas assessed a total of 15 sites globally, including manufacturing bases outside Japan. Biodiversity conservation efforts at overseas manufacturing bases, in addition to those in Japan, were actively pursued, resulting in improved scores across all indicators compared to the previous year.

OUTSTANDING FACILITIES

- Two sites in Malaysia stood out, implementing a wide range of activities from on-the-ground conservation of soil and natural environments to coordination with local authorities and raising employee awareness.
- The Penang FIZ3 Site received the highest rating for its work around coastal protection and endangered species conversation activities in addition to a wide range of efforts they have made, including cooperation with the local governments and raising employee awareness.
- The Beijing Factory and Kinu Plant, which engage in region-specific activities such as water conservation campaigns and protection of endangered species, also received high ratings.
- The Yonezawa Factory, which introduced energy-saving facilities and initiated off-site cleaning activities, saw significant improvements in ratings from the previous year.

Renesas will continue to promote information sharing to sustain biodiversity conservation activities and enhance the quality of these efforts. We remain committed to contributing to biodiversity conservation across our entire operations.

BIODIVERSITY CONSERVATION ACTIVITIES CONTINUED

Biodiversity Conservation Activity

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

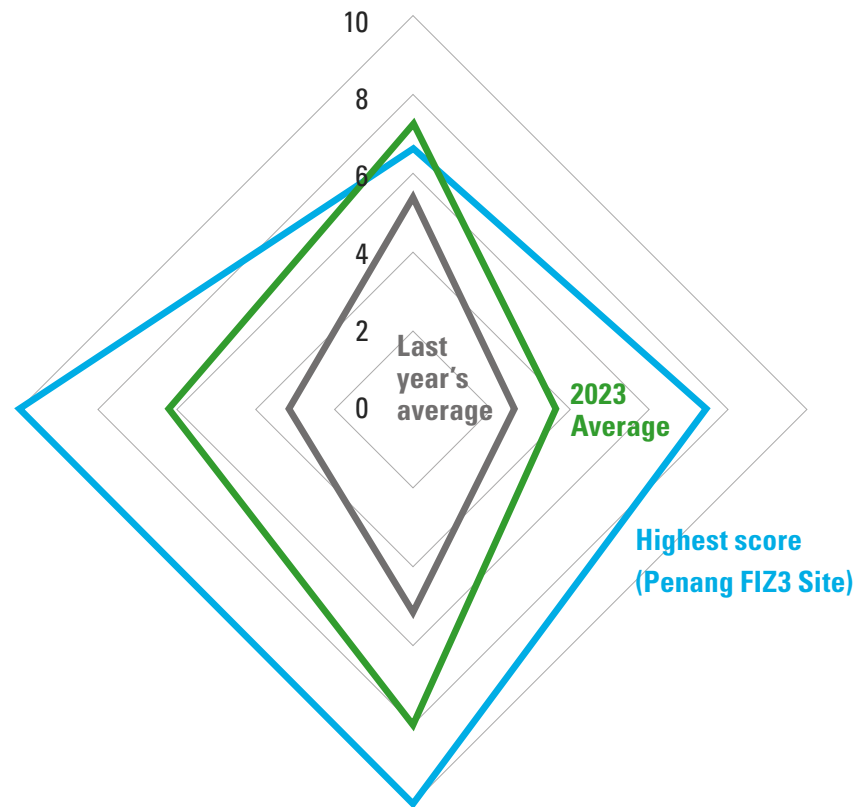
Governance

Appendix

A. Conservation of ocean and water quality

B. Conservation of soil and natural environment

D. Coordination with local governments, activities in the core business, employee awareness-raising



C. Ecosystem protection by mitigation global warming

(1) Average score for 1 office and 7 factories in Japan (Headquarters, Naka, Takasaki, Saijo, Kawashiri, Yonezawa, Oita, Nishiki)

(2) Average score of above plus the following 7 factories outside Japan (Beijing, Suzhou, Kuala Langat, Penang FIZ2, Penang FIZ3 Site, Palm Bay, Dresden Site)

BIODIVERSITY CONSERVATION ACTIVITIES CONTINUED

2023 Activities and Results

In 2023, Renesas implemented 120 biodiversity conservation activities, mainly at manufacturing sites.

Renesas 14 manufacturing sites, one office	A. Ocean and water quality conservation	B. Conservation of soil and natural environment	C. Global warming control and Ecosystem protection through resource conservation activities	D. Cooperation with local governments, activities in the main business, employee awareness raising, improving the work environment
Production sites	29	22	23	39
Offices	2	1	2	2
Total	31	23	25	41

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

BIODIVERSITY CONSERVATION ACTIVITIES CONTINUED

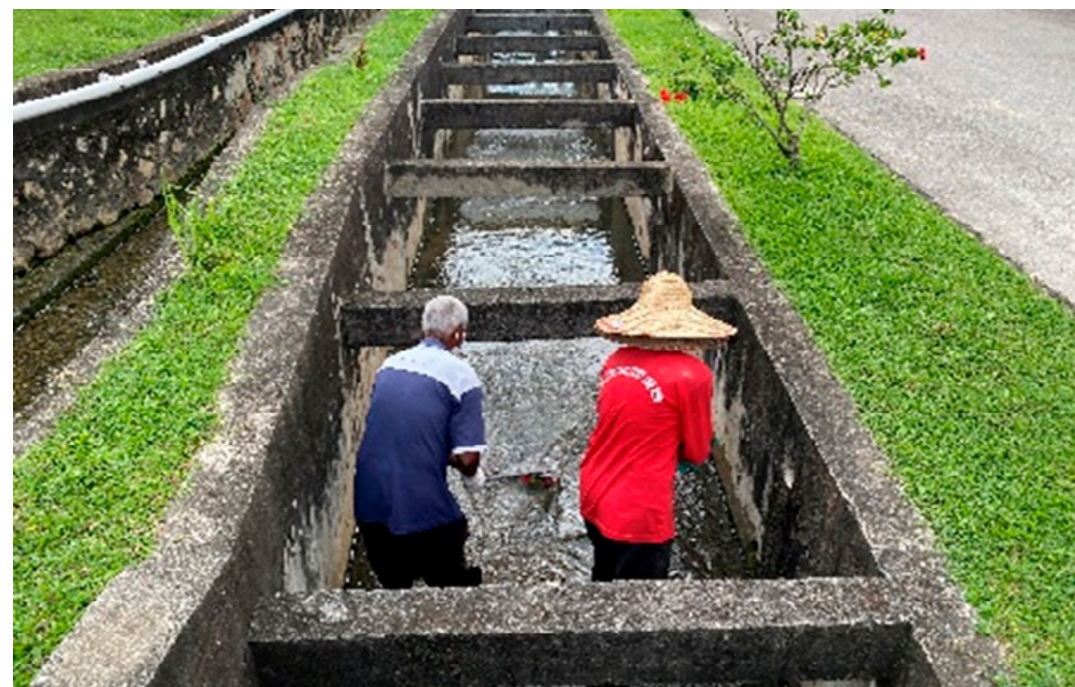
Conservation of Ocean and Water Quality

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 cleanup volunteers.



Cleaning of Nakatsu tidal flat (Oita Factory, Japan)

At factories near the coastline, we conducted beach cleanup activities together with local residents.



Regular drain cleaning (Penang FIZ2 Factory, Malaysia)

At the Nishiki Factory and two factories in Malaysia, which are close to irrigation canals, we carried out regular drainage cleaning activities.

BIODIVERSITY CONSERVATION ACTIVITIES CONTINUED

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.



Sea turtle conservation activities (Penang FIZ2 Factory)

The population of sea turtles has declined due to habitat loss and marine debris, and they are now registered as an endangered species.



The Tsukushiibara flower in bloom

The Tsukushiibara, the town flower of Nishiki-cho, Kumamoto Prefecture in Japan, was once listed as endangered, but thanks to successful conservation efforts by our colleagues at Nishiki Factory, its population has recovered to the point where it has been relisted as a near-threatened species.







- 


Table of Contents
- 


About Renesas
- 

2023 Highlights
- 

Sustainability Approach
- 

Environmental
- 

Social
- 

Governance
- 

Appendix

BIODIVERSITY CONSERVATION ACTIVITIES CONTINUED

Global Warming Control and Ecosystem Protection Through Resource Conservation Activities

Renesas recognizes that efforts to curb global warming and conserve resources are urgent issues to protect the ecosystem. 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.



LNG-fueled boiler (Saijo Factory, Japan)

By switching boiler fuel from kerosene to LNG, we were able to reduce CO₂ emissions by 714t-CO₂ per year.



Reporting water saving measures to the Chinese Ministry of Water Resources (Beijing Factory, China)

We actively engage in discussions and exchanges of opinions regarding energy and resource conservation not only within the company but also with local governments and related companies.

BIODIVERSITY CONSERVATION ACTIVITIES CONTINUED

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

We proactively cooperate with local governments where our manufacturing bases are located, supporting their efforts to address environmental issues.



Reused water filtration equipment (Palm Bay Factory, U.S.)

Palm Bay Factory partners with the city to supply the city with 30m³ of recycled water per day.



Providing organic food in partnership with local companies (Dresden Site, Germany)

Renesas also emphasizes environmental initiatives in its employee cafeteria. Some locations have begun offering environmentally friendly meals.

[Click here](#) for more updates regarding our biodiversity conservation efforts.

- 

Table of Contents
- 

About Renesas
- 

2023 Highlights
- 

Sustainability Approach
- 

Environmental
- 

Social
- 

Governance
- 

Appendix

BIODIVERSITY CONSERVATION ACTIVITIES CONTINUED

OUR COMMITMENT

Renesas' efforts in Biodiversity Conservation Activities contribute to these Sustainable Development Goals targets:



11.6
By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management



12.5
By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse



15.3
By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world



12.4
By 2020, achieve the environmentally-sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment



13.3
Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning



15.4
By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development



14.1
By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine litter and animal nutrition

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix



Social

Leadership Perspective	73
Diversity, Equity & Inclusion	75
Human Capital Development	79
Commitment to Protecting Human Rights.....	82
Employee Health & Safety.....	85
Community Involvement & Social Contributions	89
Engagement with Our Supply Chain & Partners.....	93



Leadership Perspective

Diversity at the Core of an Inclusive Workplace

At Renesas, we are committed to recruiting and maintaining a vibrant workforce, which begins with a focus on putting people first. With multiple acquisitions over the past few years, this presents us with a unique opportunity to benefit from the skills and perspectives of employees from different companies.

I am particularly proud of the progress we have made toward building a more inclusive workplace. A key focus continues to be the development of our female talent. In collaboration with our Women in Technology Employee Resource Group, we have run workshops aimed at helping women take ownership of their careers. Our partnership with the Women’s Leadership Initiative has allowed women to participate in niche technical mentoring programs and to attend technical conferences such as Women in Semiconductor Hardware (WISH). In 2023, we focused on targeted hiring of diverse talent. For two such initiatives, we surpassed our 15% hiring goal for early engineering roles in Japan and 30% of our new hires in India were female.

We have continued to raise awareness of unconscious biases among our employees during events hosted for International Women’s Day, International Women in Engineering Day, Pride and Diversity Awareness



Success at Renesas begins with attracting and rewarding people who bring their unique and individual perspectives and talents to the organization, ultimately benefiting our customers, shareholders, and the entire company.”

Month. Our Diversity Promotion Group and Employee Resource Groups (Women in Technology, Pride, Renesas International Support and Empowerment) have played a pivotal role in building communities around the globe allowing diverse groups of employees to network and share their knowledge. They have also led educational activities in which all employees are invited to participate.

We have increased our efforts to promote STEM education and career paths among young students, working with mission-driven organizations such as Inspiring Girls International, High-Tech High Heels, and UK Electronics Skills Foundation. As a global company, we have a role in helping the next generation of engineers develop by providing career opportunities.



Julie Pope
Senior Vice President
and CHRO

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix

LEADERSHIP PERSPECTIVE CONTINUED

Recruitment and Retention with a Purpose

A focus on recruiting top talent begins with careful planning. An important part of this planning process is establishing relationships with professors at universities. In 2023, we began to expand our circle of targeted universities to provide opportunities to more individuals who offer a variety and backgrounds. We offer internships that are directly tied to potential full-time positions, which result in more qualified and trained individuals.

Ensuring the well-being of our employees and offering flexibility have been our top priorities. This past year, Renesas added a new Head of Global Mobility and expanded our Remote Work Abroad program that allows Renesas employees to work remotely in a different country for up to 30 days. More flexible work from home policies, which we kept even after other companies have discontinued them, also offer a way to provide employees greater autonomy and work-life balance.

Nurturing a Culture of Success

It is invaluable to understand how our employees view Renesas' culture and performance. We conduct an annual Culture Survey to take the pulse of team members throughout the company. We actively listen to and act on our global employees' candid feedback and suggestions for improvement. In 2023, we received a 92% response rate with a key finding that nearly 70% of respondents indicated they felt that our company culture had improved over the past 12 months.

A key part of our Renesas culture revolves around employees having the desire to make a difference. When people are excited about the projects they are involved in at work, they naturally view their roles as having more meaning and impact.

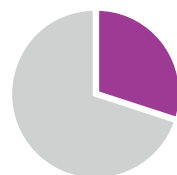
Fortunately, the markets we serve, combined with Renesas' industry-leading semiconductor advancements, offer the opportunity to be a part of cutting-edge technology that is positively impacting society.

While we are proud of our accomplishments and continuing commitments in 2023, we realize there is more to be done in 2024 and beyond. We embrace the opportunity to improve as individuals and collectively as an organization.

Diversity, Equity & Inclusion

Diversity, Equity & Inclusion (DE&I) lies at the heart of our company's culture. Our employees' diverse backgrounds and unique perspectives drive innovation, which is essential to our growth.

Our management strategies, policies and employee benefits, as well as employee-focused initiatives and partnerships reflect our strong commitment to equal opportunities and building a truly inclusive workplace for all. Examples are listed below.



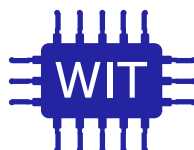
New target set for **board diversity (30%)** and **female senior leadership hiring**



2024 Ally Sponsor for Global Semiconductor Alliance's **Women's Leadership Initiative**



United Nations **Women's Empowerment Principles (WEPs)** pledge



Diversity Promotion Group and Employee Resource Groups to promote DE&I and support our employees globally



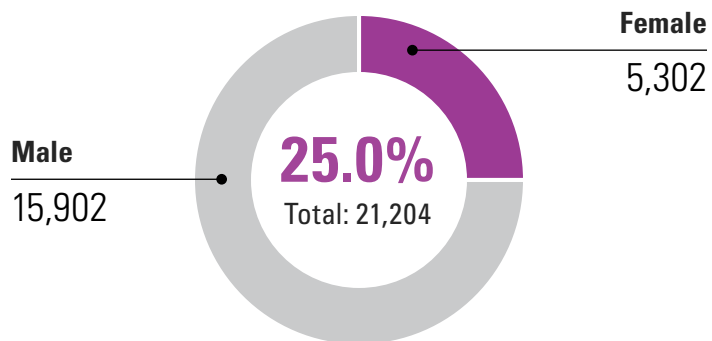
Strategic partnerships with **Inspiring Girls International** and **High-Tech High Heels** to mentor and inspire next generation of female engineers

- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix

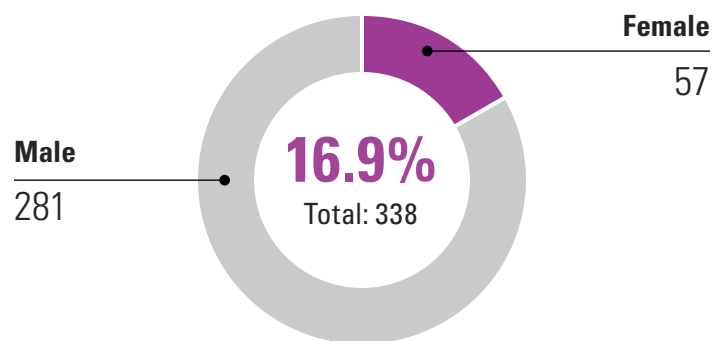
DIVERSITY, EQUITY & INCLUSION CONTINUED

Ratio of Female Employees (2023)

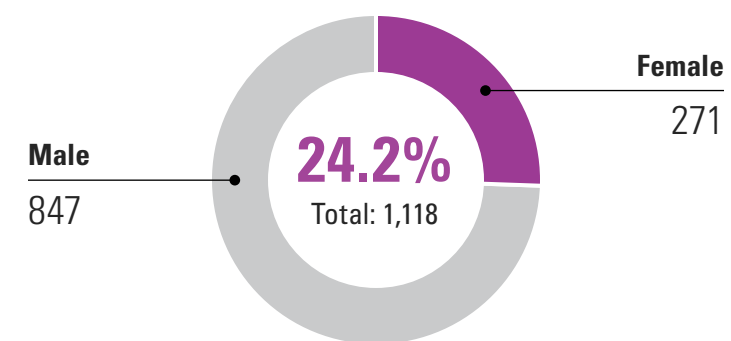
GLOBAL WORKFORCE



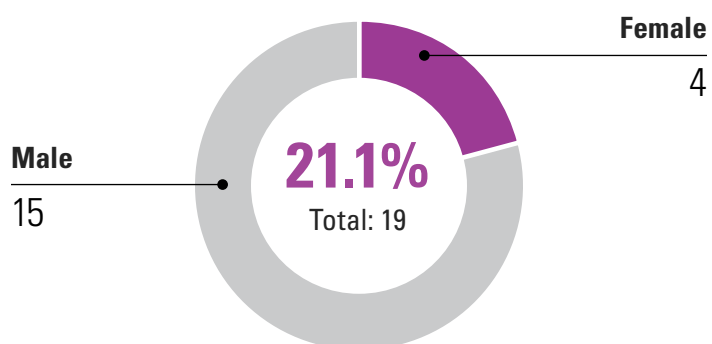
NEW GRADUATES



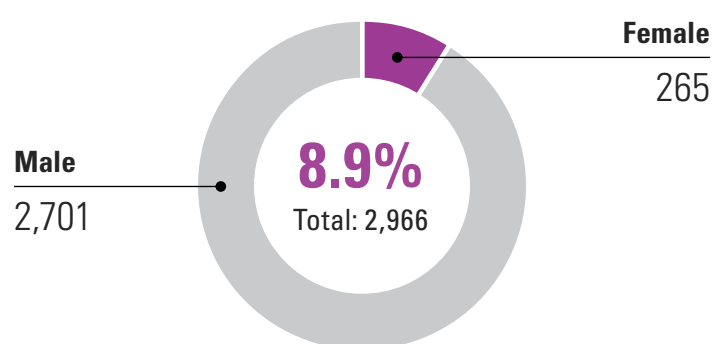
EXPERIENCED PROFESSIONALS



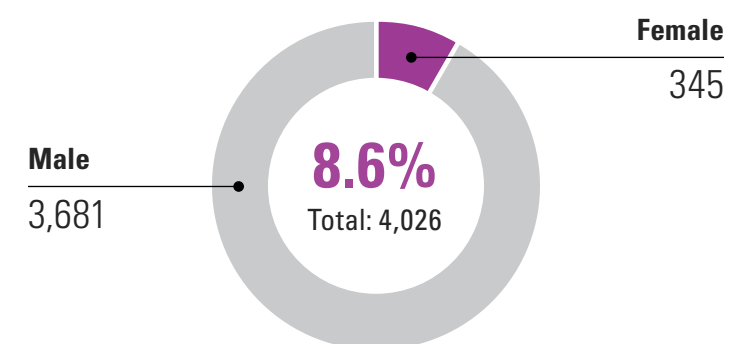
LEADERSHIP TEAM*



SENIOR MANAGERS



MANAGERS



* Board of Directors, Auditors, and Executive Members

- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix

DIVERSITY, EQUITY & INCLUSION CONTINUED

DE&I Communities within Renesas

There are a number of regional and global support groups within Renesas formed by and for our employees, including Diversity Promotion Groups (DPG) and Employee Resource Groups (ERGs). With over 200 members worldwide, our Women in Technology ERG hosts networking and educational activities on an ongoing basis and celebrate important events such as International Women in Engineering Day. Newly launched in 2023, the Pride ERG and Renesas International Support and Empowerment (RISE) are increasing membership and planning future initiatives.

International Women's Day

Based on the 2023 theme of #EmbraceEquity, we organized a special panel discussion, hosted by our Women In Technology ERG. Julie Pope, CHRO, shared her perspectives on gender equity for career advancement and embracing diversity. Our colleagues shared their experiences on mentorship and what has helped them and their teams succeed.



Pride Month

In recognition of Pride Month, Renesas held a virtual panel discussion focusing on the benefits and importance of an inclusive workplace. The panelists, representing various regions and teams, discussed unconscious biases and how we can overcome them to further foster an inclusive environment.

Diversity Awareness Month

In October every year, we celebrate Diversity Awareness Month with our employees around the world. We engaged with our employees across three events hosted in 2023. Topics covered included unconscious bias, gender stereotypes in the workplace and physical and mental well-being.



Inspiring Girls International and High-Tech High Heels

In 2023, Renesas joined forces with Inspiring Girls International and High-Tech High Heels. Working together, we supported their mission to inspire young girls around the world through career roadshows, providing experiment kits and tutorial videos.

UK Electronics Skills Foundation (UKESF)

For over 10 years, Renesas has partnered with UKESF. Renesas has awarded female undergraduate students with a paid internship and ongoing support while they pursue electronics-related degrees. In 2023, we welcomed 11 interns and plan to increase engagement in the coming years.



DIVERSITY, EQUITY & INCLUSION CONTINUED

Gender Pay Gap Reporting

At Renesas, we are committed to equality in the workplace. This includes making sure our employees are compensated fairly for the work they do, regardless of their background. We conduct reviews of employee salary data and the difference in average pay between men and women in the workplace to ensure all employees are fairly compensated.

OUR COMMITMENT

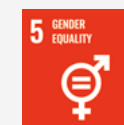
Renesas' efforts in Diversity, Equity and Inclusion contribute to these Sustainable Development Goals targets:



5.1: End all forms of discrimination against all women and girls everywhere



5.5: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life



5.c: Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels



10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

Human Capital Development

As the hiring and retention of high-performance professionals remain fiercely competitive in the semi-conductor industry, we continue to make employee development one of our highest priorities. One way Renesas invests in our people and their professional development throughout their career stages is by offering digital learning programs that are accessible whenever and wherever they live and work. Our competitive benefits and initiatives implemented in 2023 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

We work to help students and experienced professionals launch and advance their careers across our business and regions.

- Hired nearly 600 university graduates and over 1,800 experienced professionals globally.
- Made progress on unifying our policies, referral program and processes, and the bonus structure with a goal to manage everything and report on hiring metrics centrally and more effectively.
- Rolled out a new global Applicant Tracking System (Smart Recruiters) as well as a new career site in Q1 2024 for improved candidate, hiring manager, and recruiter experience.
- Established new recruitment outsourcing partnership with Randstad in Japan.
- Built a concept and a plan for our Employer Value Proposition activation and recruitment marketing in 2024.

Employee Engagement and Retention

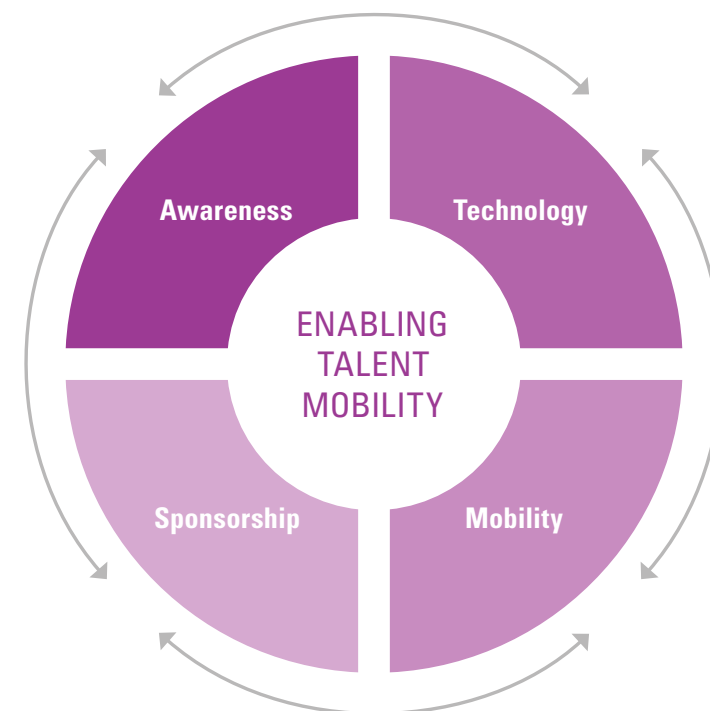
From health benefits to job changes, we empower our employees with the optimal support and opportunities to grow.

- Over 200 applications received through the Internal Mobility program, resulting in approximately 30% job transfers.
- Launched Remote Working Abroad program that enables employees to work from another country for up to 30 days per calendar year; over 400 applications were received in 2023.
- Increased resources to review and update our Global Mobility programs to support more international working opportunities.

ENABLING TALENT MOBILITY

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 see the opportunities at Renesas.
- Global mobility to allow for movement among our locations around the world.



HUMAN CAPITAL DEVELOPMENT CONTINUED

Benefits and Compensation

Renesas is committed to providing competitive compensation and benefits packages for our employees worldwide, and continually monitor our programs to ensure we remain competitive and attractive to global talent. Some of the initiatives this past year included:

- Continued to harmonize benefits programs for employee groups in a country, to provide fair and consistent access, and strengthen our ability to attract, reward and retain talent to the Company.
- Revised our performance management system to support managers in giving more constructive feedback and introduced a guide for them to enable more effective year-end performance and compensation discussions with their team members.
- Based on our global pay-for-performance philosophy, we implemented new global Short-Term Incentive targets aligned by job level (later phasing for Japan and some manufacturing sites) and abolished “Yakutei” (position retirement/demotion based on age) in Japan.
- Hosted 2nd annual “Renesas Day,” a company-sponsored day off for all employees and implemented meeting-free “Focus Fridays” to increase productivity and work-life balance during the month of August.
- Offered an e-learning course on stress management globally and conducted an annual stress check in Japan, as required by the local law.
- Hosted virtual well-being panel sessions for all employees in each region, with our leaders and colleagues sharing how they balance their own professional and personal lives.

Diversity Awareness Month 2023
Diversity, Equity & Inclusion

Wellbeing Panels

Our leaders shared their experiences on integrating their professional and personal lives, as well as supporting their teams' well-being in today's fast-paced world.

RENEASAS

HUMAN CAPITAL DEVELOPMENT CONTINUED

Learning and Development

We realize that skills and talents need to be continuously nurtured and developed. This is an ongoing effort and critical to staying competitive in today's marketplace. Some of these efforts in 2023 included:

- Introduced a centralized Talent Development website page featuring a Skills Library.
- Rolled out a new management program, "Launch into Leadership," globally; Approximately 100 employees completed the program by year-end and over 220 employees are continuing.
- Over 200 employees enrolled in Leadership Development programs for all different employee levels.
- Provided TAGIE Foundation (Transparent, Agile, Global, Innovative, Entrepreneurial) e-learning course in English and Japanese.
- Renesas employees used 91% 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 81% of active users, greatly exceeding the goal to have 70% active users.
- The use of our ExecOnline leadership development tool surpassed our goal of a +9 point in competence confidence growth with an actual increase of over 40 points.

OUR COMMITMENT

Renesas' efforts in Employee Growth and Engagement contribute to this Sustainable Development Goals target:



4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

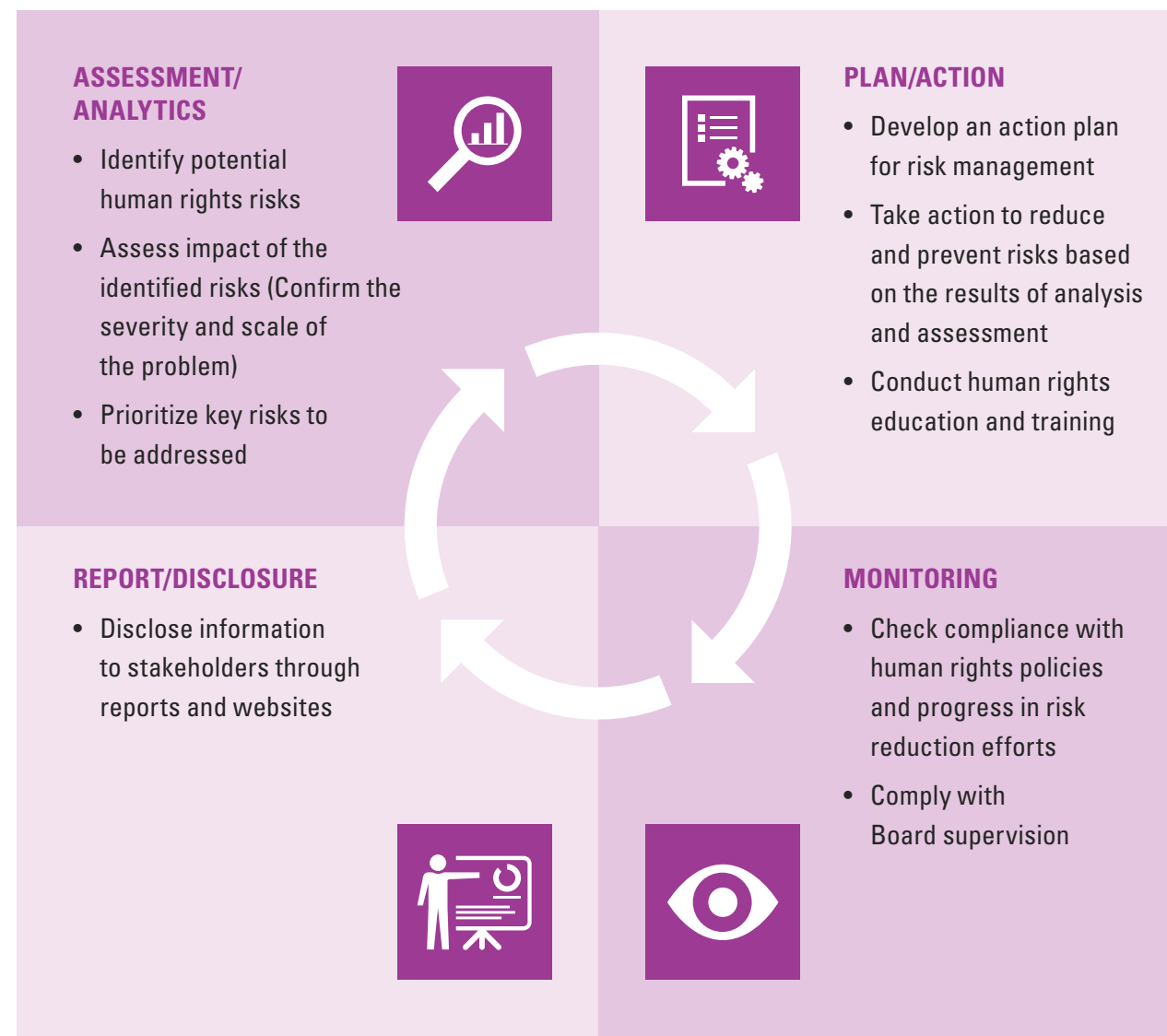
Commitment to Protecting Human Rights

At Renesas, we strive to conduct our business respectfully and according to the UN Guiding Principles on Business and Human Rights. We regard the human rights regulated under the International Bill of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work as fundamental rights. In that spirit, we support the Ten Principles of the UN Global Compact on human rights, labor, environment, and anticorruption.

Recent developments include:

- Made improvements on human rights issues identified during 2022 due diligence process.
- Completed an all-employee compliance training on an online platform hosted by Navex Global, Inc.

Human Rights Due Diligence Process



- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix

COMMITMENT TO PROTECTING HUMAN RIGHTS CONTINUED

Identifying Potential Human Rights Risks

We have categorized human rights risks in our business activities, identified why they are important to address, and have established a series of appropriate actions to help mitigate those risks.

RISK CATEGORY	ISSUES	ACTIONS TAKEN
Non-Discrimination and Equal Opportunity, DE&I	Not meeting the legal employment rate of people with disabilities	Improved the employment rate of people with disabilities
	Not fully equipped reasonable accommodations for employees with disabilities	Reviewed the need of reasonable accommodations for employees with disabilities
	Conduct non-mandatory health check that might lead to discriminatory outcomes	Removed non-mandatory health check items that might lead to discriminatory outcomes
	No clear communication regarding job descriptions and promotion criteria with all employees	Clearly communicated job descriptions and promotion criteria with all employees
Forced Labor	No translations of the contracts in the employee's native language for nonnative employees	Provided translations of the contracts in English for nonnative Japanese new hires
Privacy and Information Security	Personal data collection without clear policy and employees' consent	Reviewed terms of information/ personal data collected and data protection policy
	No system or process to monitor privacy and information security regulation	Established a system or process to monitor privacy and information security regulation

COMMITMENT TO PROTECTING HUMAN RIGHTS CONTINUED

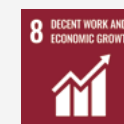
Potential Risks Related to Human Rights

Renesas has identified the following six key human rights issues to be addressed within the company and our supply chain. In order to 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:

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

OUR COMMITMENT

Renesas' efforts in respecting Human Rights contribute to these Sustainable Development Goals targets:



8.7: Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms



10.3: Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard



16.b: Promote and enforce non-discriminatory laws and policies for sustainable development

Employee Health & Safety

With the goal of achieving zero lost-time incidents globally, Renesas is committed to creating a safe and healthy workplace for our employees and contractors. Our recent efforts include the following:



Health & Safety Management System

In 2023, all of our major manufacturing sites have achieved ISO45001 certification, ensuring we are in compliance with international standards for occupational health and safety (OH&S) management systems. We also obtained certification for five additional sites in Q1 2024. This includes two fabrication facilities (in China and Malaysia) and three non-manufacturing sites (Japan, Vietnam, U.S.).

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.

- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix

EMPLOYEE HEALTH & SAFETY CONTINUED

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix



Monthly Health & Safety Education

As part of our monthly Health & Safety Education, training was conducted in Japan. This consisted of e-learning programs on mental health that were conducted in fall of 2023 as well as health and safety training for upcoming spring 2024 graduates.



Preparations for Emergencies

Established procedures for responding to emergencies, set up an emergency team, and periodically conduct evacuation drills.



Physical & Mental Health Initiatives

In Japan, the internal obligation of wearing masks for COVID-19 prevention was eased gradually at factory and non-factory locations and reporting on COVID-positive employees had been discontinued in February 2023 in all regions except for Japan, which continued until May 2023.



Healthy Work-Life Balance

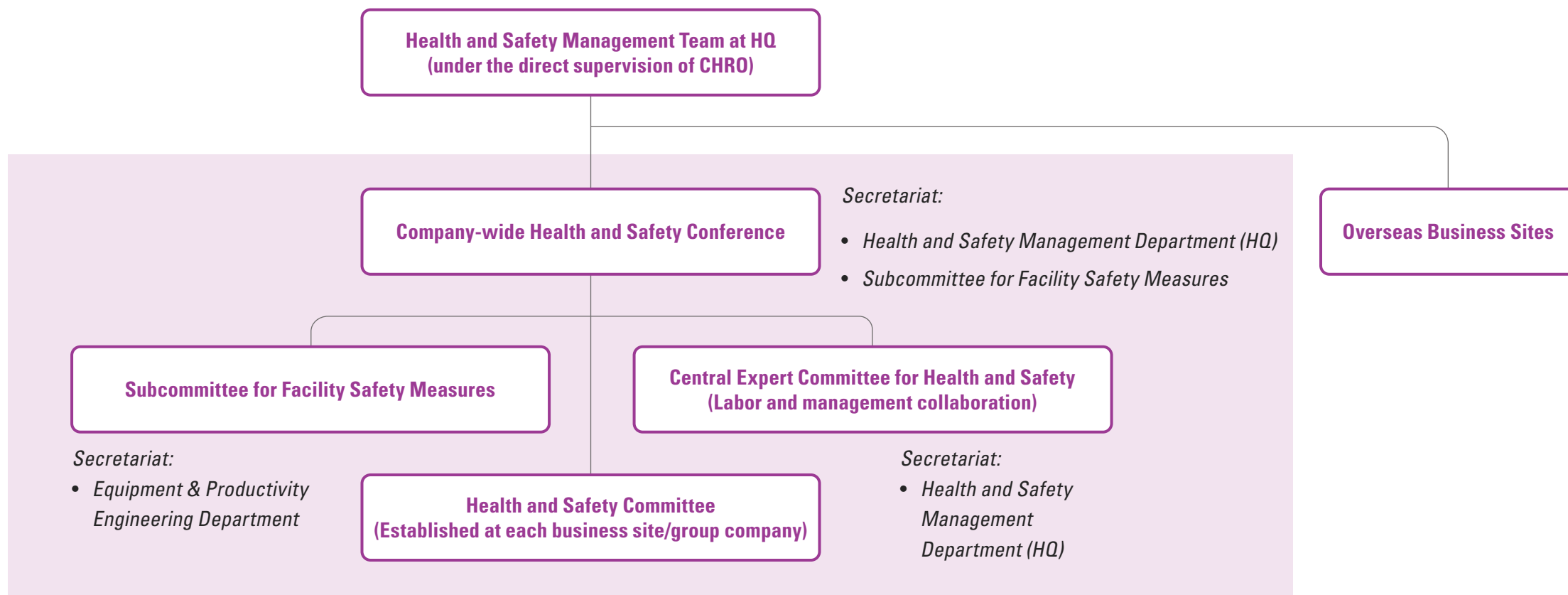
Properly managing the working hours to comply with the limits set by the laws and regulations of each country is imperative. The average prescribed working hours at Renesas (Japan) were seven hours and 45 minutes per day, with 130 days off in 2023. As a result, in 2023, the average monthly overtime hours for a labor union member were 21.4 hours, and the annual paid leave days taken were 18.4 days (in Japan).

EMPLOYEE HEALTH & SAFETY CONTINUED

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



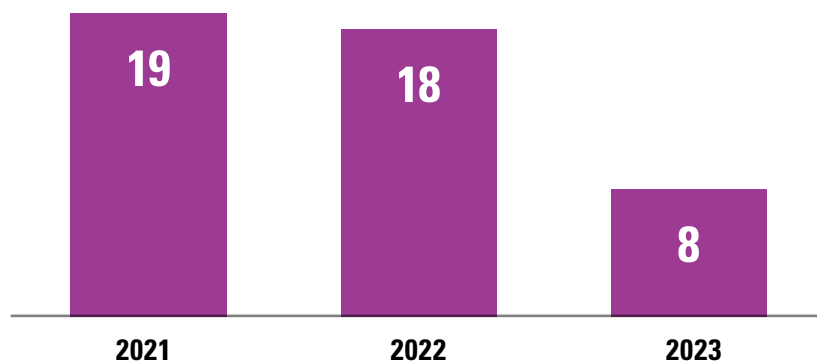
- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix

EMPLOYEE HEALTH & SAFETY CONTINUED

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 2023, eight cases were reported, which is 10 cases fewer than 2022. The reporting rule for occupational accidents has been recently introduced in overseas factories and non-factories.

Number of Industrial Incidents (per year)



OUR COMMITMENT

Renesas' efforts in Safe and Healthy Working Environment contribute to these Sustainable Development Goals targets:



8.8: Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment



Community Involvement & Social Contributions

At Renesas, we realize that doing good for others and the communities in which we live and work is good business.

In Japan, we have incorporated various types of leaves (e.g., volunteer leave) into the annual paid vacation leaves and increased the number of vacation days so our employees can leverage some of those days for social contribution activities. In addition, we have introduced a 3- and 4-day work weeks to make it easier for our employees to participate in activities in their local communities on a regular basis.

In the United States, all regular full-time employees can take up to a maximum of 16 hours of normal paid work time in a calendar year to participate in an approved community service activity.

ACTUAL FIGURES FROM SOCIAL CONTRIBUTION INITIATIVES SPENDING IN 2023 (MILLIONS OF YEN)

Donations	38.14
Financial Contributions	3.71
Donation of Goods	0.53
Employee Volunteering Participation (hours converted to monetary value)	3.09



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix

COMMUNITY INVOLVEMENT & SOCIAL CONTRIBUTIONS CONTINUED

Three Areas of Focus for Social Contribution

Community Support



BIONIC ARM FOR A SOLDIER (UKRAINE)

In July 2023, Renesas' Lviv office donated 300,000 UAH (approx. 7,500 Euros) to Unbroken, a charity providing physical, psychological, and psychosocial rehabilitation to people injured in the war. Our contribution helped gift a bionic arm to a young soldier who lost his right arm after his tank was hit by an enemy mine. The local team had an opportunity to meet him at the Unbroken office.



CHARITY RACE FOR CANCER RESEARCH (UK)

The effort to find the cure for cancer continues, rain or shine—and even through the mud. In May 2023, our Swindon, UK team joined hundreds of runners and went through challenging obstacle courses in the muddy fields to raise money for cancer research. They raised over £2,000.



FUNDRAISING AND FOOD BOXES TO END HUNGER (UNITED STATES)

In October 2023, Renesas U.S. team participated in Second Harvest, Silicon Valley's virtual race to end hunger. We contributed over \$20,000, which provided 100,000 meals to people in need in our local community. In November, we partnered with Second Harvest once again to sort and package 24,000 lbs. of food during the three-hour period.

COMMUNITY INVOLVEMENT & SOCIAL CONTRIBUTIONS CONTINUED

Educational Activities



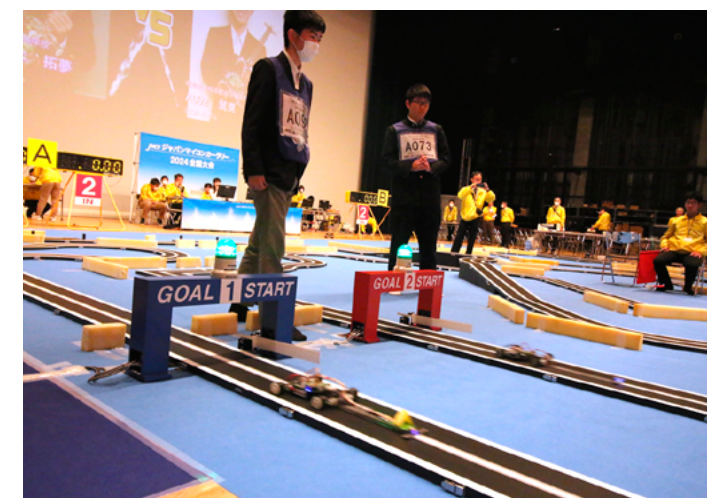
WORK EXPERIENCE FOR JUNIOR HIGH STUDENTS (JAPAN)

In August 2023, our Naka Factory welcomed two second-year junior high school students from Hitachinaka City Minohama Gakuen, an integrated elementary and junior high school in the neighborhood, to provide the experience of working at a Renesas factory. After a tour and a lecture on what a semiconductor is, they had opportunities to gain hands-on work experience and learn about the fun and challenges of working in the real world.



RENESAS BOARD KITS DONATION (VIETNAM)

We donated 100 CK-RA6M5 Cloud Kit + Sparkfun WIFI shield (Arduino) with DA16200 to Ho Chi Minh University of Technology and Da Nang University of Science and Technology in February 2023. Through these efforts, we were able to enhance our ongoing relationships with those universities and increase awareness and interest in Renesas among engineering students.



COLLABORATION WITH JAPAN MCU CAR RALLY (JAPAN)

In 2023, Renesas collaborated with the Japan MCU Car Rally, which was attended by 1,254 students representing 191 technical high schools in Japan. Renesas provided MCUs for controlling cars along with training sessions that enhanced engineering skills among students and teachers. On December 27–28, 2023, 191 students competed in the national competition's final races to set their sights on the first spot. With Renesas' RA Family MCUs poised for use in the next-generation MCU cars, Renesas stays committed to empowering students in their future endeavors.

COMMUNITY INVOLVEMENT & SOCIAL CONTRIBUTIONS CONTINUED

Environmental Initiatives



MOUNTAIN CLEAN-UP (CHINA)

In May 2023, over 40 employees in Beijing, China volunteered for community service. Three groups climbed the Baiwang Mountain through different paths, picking up garbage and cleaning traffic signs and trashcans along the way. During the three-hour charity event, they embodied Renesas’ Purpose—To Make Our Lives Easier—by contributing to a clean environment for all through conservation.



MANGROVE FOREST CONSERVATION (MALAYSIA)

In December 2023, Renesas joined forces with Penang Inshore Fisherman Welfare Association on a biodiversity project for the second year in a row. More than 20 employees volunteered to plant Mangroves trees, which provide shoreline protection, habitat for diverse marine life, and carbon sequestration. Together, we planted approximately 200 trees and took a significant step towards preserving and restoring our coastal ecosystems.

OUR COMMITMENT

Renesas’ efforts in Social Contribution Initiatives contribute to these Sustainable Development Goals targets:



4.3: By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university



4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship



5.b: Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women



6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

- 

Table of Contents
- 

About Renesas
- 

2023 Highlights
- 

Sustainability Approach
- 

Environmental
- 

Social
- 

Governance
- 

Appendix

Engagement with Our Supply Chain & Partners

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, we doubled the CDP survey responses from our suppliers and made the **CDP Engagement Leaderboard** in 2023. 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 (2021–2024) include 1) obtaining a risk evaluation score* below Medium at all key suppliers and 2) procuring minerals only from RMI-certified smelters that follow the RMI certification process.

*Risk evaluation by RBA-SAQ



Green Procurement

We prioritize the sourcing of environmentally conscious parts and materials from companies that practice proactive environmental conservation.



RBA Membership and the New Code of Conduct

Upon joining the Responsible Business Alliance (RBA) in 2021, we re-evaluated our Supply-Chain CSR Deployment Guidebook. The revised version is called the Renesas Supplier Code of Conduct (CoC), and 96% of our suppliers worldwide have agreed to follow it.



Self-Assessment Questionnaire (SAQ)

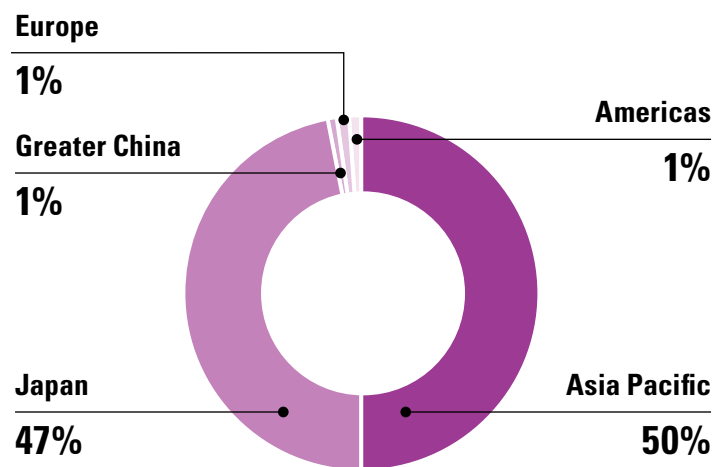
In 2023, 82% of suppliers responded to the Self-Assessment Questionnaire (SAQ). No significant risks were identified.

- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix

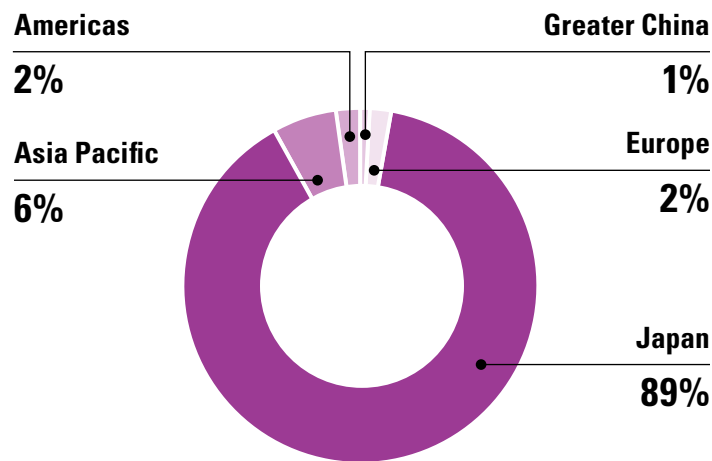
ENGAGEMENT WITH OUR SUPPLY CHAIN & PARTNERS CONTINUED

Supply Chain Data by Region

RATIO OF PURCHASE AMOUNT BY REGION (2023)



RATIO OF SUPPLIERS BY REGION (2023)



CDP Supply Chain Program

On April 13, 2023, more than 100 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. We provided guidance on responding to the questionnaire, and a special Q&A session on initiatives to reduce GHG emissions. Responses from our suppliers to the 2023 CDP survey have doubled from 40 to 81 companies.



ENGAGEMENT WITH OUR SUPPLY CHAIN & PARTNERS CONTINUED

Responsible Minerals Procurement Policy

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 relations to risks listed on the Annex II of OECD's guidelines.



Renesas targets 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](#).

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



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.



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix



Governance

Our Governance Structure	97
Board Skills & Diversity	99
Compliance & Business Ethics	100
Risk Management	104
Information Security Governance & Testing	109
Tax Policy	110



Our Governance Structure

To execute effective corporate governance and remain a sustainable and responsible partner for our stakeholders, we are committed to maintaining a transparent corporate governance structure that enables fair, fast, and resolute decision-making and robust accountability. Our ultimate objective is to achieve sustainable enhancement of Renesas' corporate value over the mid- to long-term for the benefit of all the stakeholders. In addition, we continue to improve our management system and implement various measures to increase operational efficiency.

The 22nd Annual General Meeting of Shareholders in March 2024 resolved a new corporate governance structure to ensure more efficient and effective management with increased transparency and objectivity under clear separation of supervisory and executive functions. By adopting this structure, we aim to further evolve as a global company in the rapidly changing and highly-competitive semiconductor industry.

Also, as required under the Companies Act in Japan, we have established an internal control system to ensure our officers and employees comply with applicable laws and regulations and with our articles of incorporation.



OUR COMMITMENT

Renesas' efforts in Governance contribute to these Sustainable Development Goals targets:

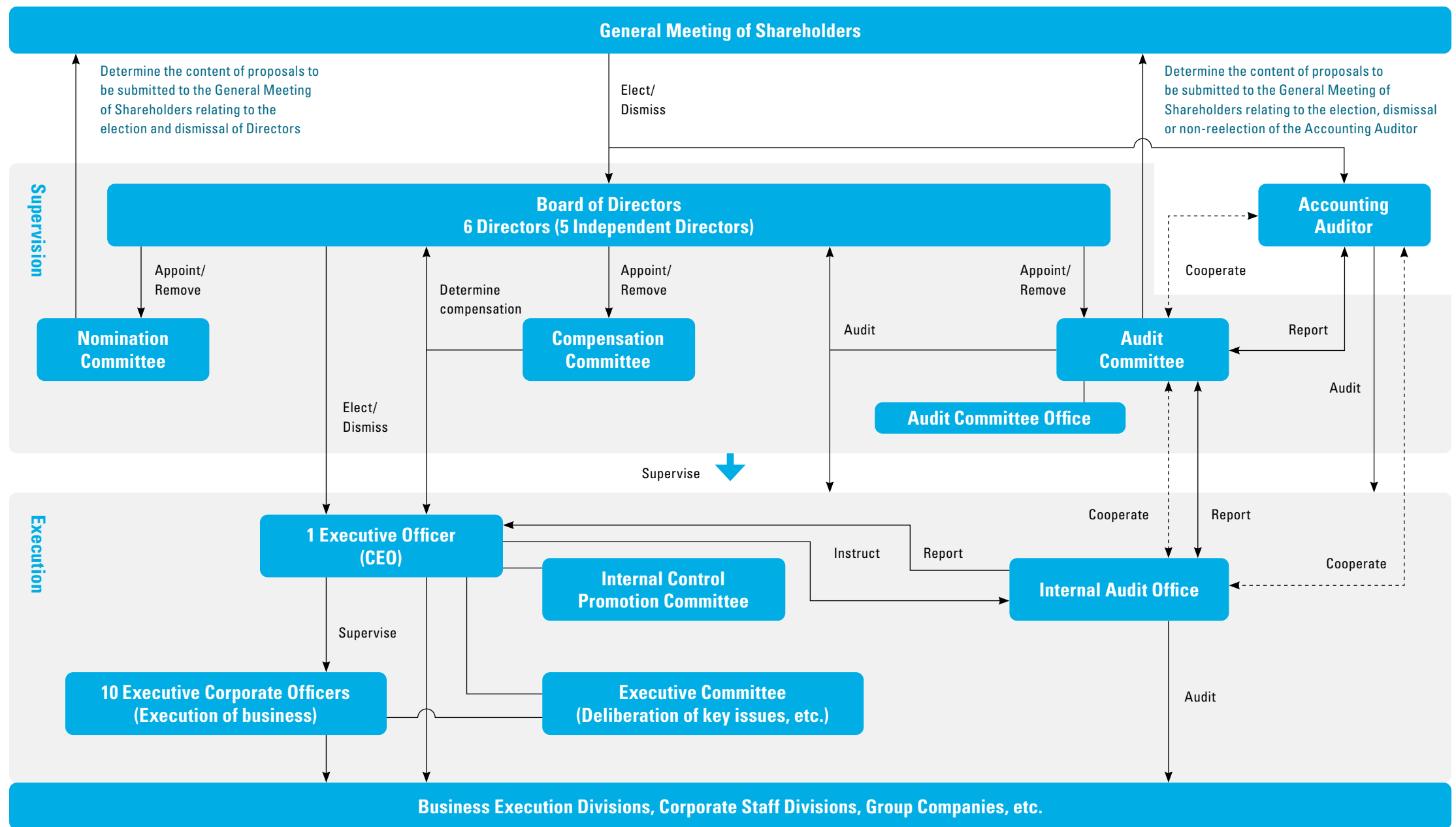


16.5: Substantially reduce corruption and bribery in all their forms








16.7: Ensure responsive, inclusive, participatory and representative decision-making at all levels

OUR GOVERNANCE STRUCTURE CONTINUED



Board Skills & Diversity

Renesas' management board is organized in accordance with the Companies Act in Japan. As of April 2024, the Board of Directors is comprised of six members, including a new female Director, each appointed at our General Meeting of Shareholders. 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
Management Strategy	✓	✓			✓	✓
Leadership Experience	✓	✓		✓	✓	✓
Risk Management		✓		✓		✓
Legal Affairs			✓			
Finance	✓	✓		✓		
Sustainability			✓	✓		
International Business	✓	✓	✓	✓	✓	✓
Semiconductor Technology/DX	✓		✓		✓	

Female Directors
33%

Independent Directors
83%

Compliance & Business Ethics

As one of the world’s leading semiconductor companies, Renesas’ strong commitment to the highest standards of ethics and integrity helps us earn the continued trust of our stakeholders, including our investors, customers, vendors, and communities. Our Code of Conduct and compliance policies are foundational to how we do business and how we put our values into practice every day.

As part of our efforts to ensure practical implementation of the principles espoused in our Code of Conduct and to promote consistent compliance best practices throughout our group, Renesas released several new standalone global policies in 2023, including the Anti-Bribery and Anti-Corruption Policy, Whistleblower Policy, and Compliance Investigations Policy.



Code of Conduct

Our Code of Conduct 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 on issues addressed in the Code of Conduct to help them understand their ethical and legal responsibilities to each other and the company.

2023 CODE OF CONDUCT TRAINING COMPLETION RATE

2023	91% (increase of 7%)
2022	84%



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix

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.

Throughout the year, we regularly issue global newsletters to our employees by email to reinforce our compliance policies. In 2023, these included:

- Anti-Bribery and Anti-Corruption (April 6, 2023, and October 23, 2023)
- Whistleblower Policy (September 27, 2023)
- Preventing Fraud and Deception (July 31, 2023)
- Conflicts of Interest (June 22, 2023)
- Preventing Harassment and Discrimination (March 3, 2023)
- Employee Privacy Policy (January 26, 2023)

We also issue a regular newsletter monthly to all employees who are based in Japan. This newsletter covers locally-specific topics as well as Japanese laws and regulations.

2023 COMPLIANCE SURVEY

98.8%

of employees who completed the survey responded positively about their perception of the culture of compliance in their workplace.

6.2%

of employees perceived actual or potential unreported compliance issues in their workplace (93.8% of respondents did not have concerns about compliance in their workplace).

COMPLIANCE & BUSINESS ETHICS CONTINUED



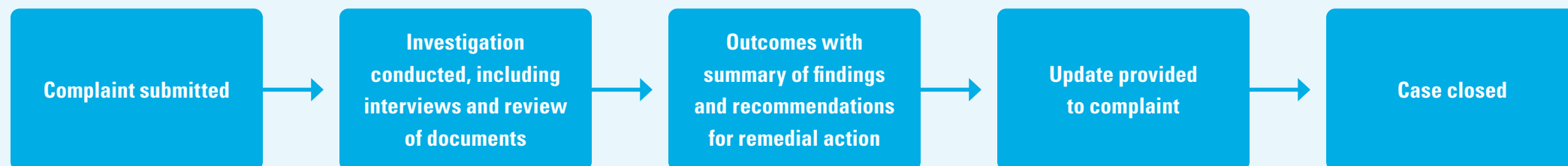
Ethics and Whistleblower Hotline

Renesas provides a hotline service for its employees, customers, suppliers, and the public to speak up about workplace concerns. 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 2023, 49 reports were made to the hotline with actions including investigation, remediation (where needed), and disciplinary action (where warranted). Of these 49 reports, 27 related to claims of harassment, discrimination, or labor compliance. No serious compliance violations were detected. Renesas remains committed to promoting awareness of the hotline.

In September 2023, we implemented a Renesas-wide standalone Whistleblower Policy as a global rule. We also instituted a Global Compliance Investigations Policy, which provides a group-wide framework for the investigation of compliance concerns.

In accordance with our Whistleblower Policy and Compliance Investigations Policy, investigations into compliance concerns will be promptly initiated, with a goal of commencing within five to 10 business days following receipt of the report. The policies outline our commitment to thoroughly investigating and efficiently resolving issues.

COMPLIANCE ISSUES INVESTIGATION PROCESS



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, most recently in November 2023. While there were no instances of disciplinary action or termination in 2023 due to non-compliance with our anti-corruption 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 next section for more details ([Risk Management](#)).

OUR COMMITMENT

Renesas’ efforts in Governance contribute to these Sustainable Development Goals targets:



16.5: Substantially reduce corruption and bribery in all their forms



16.7: Ensure responsive, inclusive, participatory and representative decision-making at all levels

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

Risk Management







At Renesas, we are continually working on strengthening our risk management by recognizing the significance of early identification and analysis of group-wide risks and prompt resolution.



Risk Management System

We have established a group-wide risk management system based on the “Renesas Electronics Group Risk and Crisis Management Regulations.” We have a risk management system in place that we regularly maintain to address potential risks with each type of risk assigned to a department responsible for crisis management and day-to-day risk management.

We also identify and group risks in advance that are represented in our Risk List, while at the same time formulating contingency measures to prevent those risks and response policies. Furthermore, in the event of an emergency, we establish an Emergency Task Force (ETF), led by our CEO, which brings information together, proposes countermeasures, and takes action to minimize losses.

- 
 Table of Contents
- 
 About Renesas
- 
 2023 Highlights
- 
 Sustainability Approach
- 
 Environmental
- 
 Social
- 
 Governance
- 
 Appendix

RISK MANAGEMENT CONTINUED

RISK MANAGEMENT MANAGER	RISK MANAGEMENT OFFICER	RISK MANAGEMENT DIVISION		RISKS	
CEO	CEO	CEO Direct		Politics	
		Corporate Communications Office		Public relations	
		Sustainability Promotion Office		Sustainable Development Goals	
		Environment Promotion Department		Natural disasters	
		Legal		Employee misconduct	
				Reporting system	
				Violation of laws and regulations	
				IP	
				Information leakage	
		Executive Vice President	Operations	Production	Violation of laws and regulations
					Environment
					Procurement
					Technological innovation
					Infections
	Accident				
	Natural disasters				
	Politics				
	Cybersecurity				

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

RISK MANAGEMENT CONTINUED

RISK MANAGEMENT MANAGER	RISK MANAGEMENT OFFICER	RISK MANAGEMENT DIVISION		RISKS
CEO	Executive Vice President	Operations	Supply Chain Management	Asset management
				Employee misconduct
				Natural disasters
				Politics
		Procurement	Human rights	
			Violation of laws and regulations	
			Procurement	
			Infections	
	CFO	Corporate Strategy	Financial Planning & Analysis	Natural disasters
				Politics
				M&A
				Asset management
				Revenue
Accounting & Tax	Trade & Compliance	Accounting & Tax	Capital expenditures	
			Tax	
			Credit	
			Employee misconduct	
Trade & Compliance	Trade & Compliance	Trade & Compliance	Violation of laws and regulations	
			Fund procurement	
			Asset management	

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

RISK MANAGEMENT CONTINUED

RISK MANAGEMENT MANAGER	RISK MANAGEMENT OFFICER	RISK MANAGEMENT DIVISION	RISKS
CEO	CHRO	Human Resources & General Affairs	Human rights
			Labor policy
			Sustainable Development Goals
			Personnel strategy
			Infections
			Natural disasters
	Senior Vice President	Quality Assurance	Quality
			Engineering
	Senior Vice President of each Product Group	Analog & Connectivity Embedded Processing High Performance Computing Power	System
			Procurement
			Violation of laws and regulations
			Technological innovation
	Senior Vice President	Sales & Marketing	Business expansion
			Information leakage
Employee misconduct			
Vice President	Information Systems	Sales	
		Natural disasters	
		System	
		Natural disasters	
		Cybersecurity	

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix

RISK MANAGEMENT CONTINUED

Cybersecurity and Data Privacy

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. Moreover, all employees working at all our global sites, including sales, marketing, design, engineering and manufacturing locations, must comply with our guidelines for cybersecurity and data privacy.

2023 achievements include:

- By increasing security capabilities and visibility of our systems, we have been able to identify and prevent hundreds of thousands of potential attacks on our business.
- We are now processing more than a billion pieces of security data each day through our 24/7 security operations center.
- We are actively working with our customers and partners to ensure our cybersecurity strategy not only reflects our threats and issues but builds in their specific security needs and concerns. We also work with a third-party to ensure we appropriately target our investment in cybersecurity.



Information Security Governance & Testing

Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix

We have a formal structure in place to monitor, evaluate, report and respond to any unauthorized attempts to access our networks, data or computers.

- Our team of trained IT security experts monitors potential threats and risks 24/7 and takes tactical and strategic measures to detect and respond to all security issues, under the supervision of the Vice President of IT.
- If an incident is identified, the IT team will immediately report to the Security Council (CEO, CFO, General Counsel, heads of HR and IT) and respond with emergency plans. Additionally, the IT team will coordinate with HR, Legal, Quality Assurance, Procurement and Accounting teams, as needed.
- We review our security posture and benchmark this using a third party to ensure we appropriately target our investment.
- The IT team reports quarterly to the Security Council, executive management and Board of Directors to keep them up to date on cybersecurity risks and initiatives.
- We also run regular incident response exercises to ensure our procedures are followed correctly and in a timely manner. In May 2023, we conducted an annual external infrastructure and web application penetration testing.

Training

At Renesas, we provide all global employees and contractors mandatory training on cybersecurity and phishing at least once a year. As part of the training program, IT periodically sends mock phishing emails to test employees' understanding of cybersecurity protocols. Additional training, videos and resources are also available on demand through the IT Intranet page.

In 2023, we conducted regularly scheduled employee cybersecurity training sessions and completed our annual cycle of security training. This is a continual process that not only focuses on phishing but also ensures our colleagues are up to date with key threats facing us as a global organization. Every new employee undertakes detailed security and compliance training with annual refresher training. This past year, more than 80% of our staff completed their training on schedule.

We will continue to focus on the threats that our users face, from malware, phishing and impersonation. We will continue to work in lockstep with our colleagues in Compliance, Legal and HR to ensure that we have regular, effective and timely updates and training to meet the modern threats we face.

We strongly believe that good information security represents a business enabler and can deliver positive business growth by being a trusted supplier, customer and partner.

Certifications

Renesas strives to comply with global security standards to demonstrate our commitment and capabilities in protecting ourselves from security breaches. Our plan is to continue to improve our security posture to enable wider certification (ISO/SOC), to actively ensure that current and future acquisitions are bought in line with our global standards, thus ensuring that all of our users have the same homogenous experience.

Our most recent result and priorities include:

- Completed TISAX certification in 2023, an automotive security standard which works alongside IATF 16949 and ISO9001.
- The CIS20 Framework as a basis to identify vulnerabilities with comprehensive external assessments and implement continuous improvement.
- Target to achieve the SOC2 certification by 2024.

Data Privacy

Renesas is committed to vigorously protecting the privacy and security of our colleagues, customers, partners and other stakeholders, and the steps we take to do so are described in our information security policy. We strictly comply with all laws, national guidelines and regulations related to data privacy including GDPR, APPI, CCPA and BDSG.

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 will 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."





Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix

TAX POLICY CONTINUED

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 principal 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 case of disagreement, we will work in collaboration with the tax authority to seek a resolution.

Corporate Tax Paid by Region (2022)

(Millions of yen)

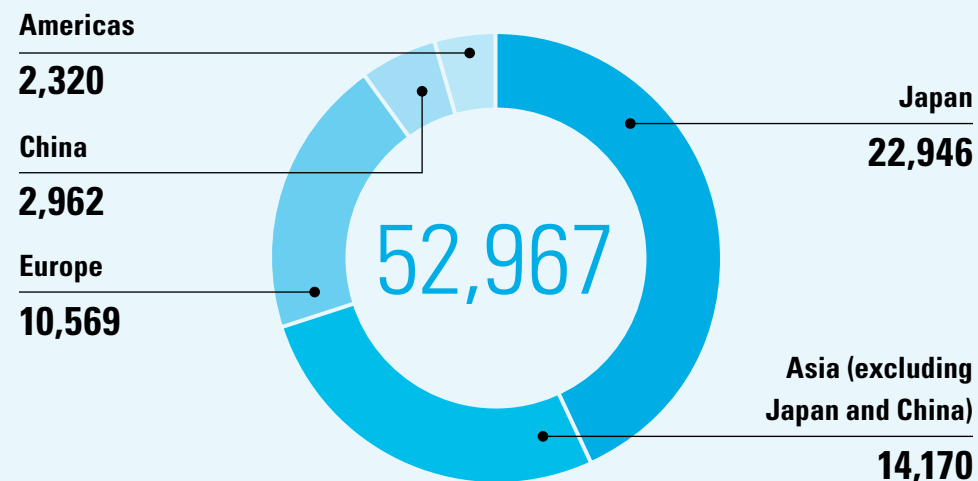




Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix



Appendix

Task Force on Climate-Related Financial Disclosures (TCFD) Content Index	113
Sustainability Accounting Standards Board (SASB) Index.....	115
Global Reporting Initiative (GRI) Index.....	118
Environmental Data	123
Third-Party Verification: Environmental Data	130
Third-Party Verification: HR Data.....	131
About This Report	132
Forward-Looking Statements	133



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
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	Innovation
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 Risk Management
Describe the organization’s processes for managing climate-related risks	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	

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) CONTENT INDEX CONTINUED

METRICS AND TARGETS

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



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix

Sustainability Accounting Standards Board (SASB) Index

SEMICONDUCTOR STANDARD

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) 156,403 t-CO2 (2) 120,537 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) 1,735,649 MWh (2) 85% (3) 4%
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) 15,742 km ³ (2) Total water consumed: 23,751 km ³ . 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) 17,246 t (2) 90% See Waste Management

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

SUSTAINABILITY ACCOUNTING STANDARDS BOARD (SASB) INDEX CONTINUED

TOPIC	CODE	ACCOUNTING METRIC	RESPONSE
Employee Health & Safety	TC-SC-320a.1	Description of efforts to assess, monitor and reduce exposure of employees 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 2023, 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 are (1) foreign nationals and (2) located offshore	<p>Headcounts by regions as of December 31, 2023:</p> <p>Japan: 9,265 (44%) Americas: 2,218 (10%) China: 2,192 (10%) EMEA: 2,535 (12%) Other Asia: 4,994 (24%) Total: 21,204</p> <p>Percentage of foreign nationals is not disclosed.</p>
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 Chemical Substance Use 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.

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

SUSTAINABILITY ACCOUNTING STANDARDS BOARD (SASB) INDEX CONTINUED

TOPIC	CODE	ACCOUNTING METRIC	RESPONSE
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
Anti-Competitive Behavior Litigations	TC-SC-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	In 2023, Renesas did not incur monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations.



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix

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 Human Resources Data and Third-Party Verification
	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 Interview Environmental, Leadership Perspective Social, Leadership Perspective Governance

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

GLOBAL REPORTING INITIATIVE (GRI) INDEX CONTINUED

GRI STANDARD		DISCLOSURE	LOCATION
	2-14	Role of the highest governance body in sustainability reporting	Our Governance Structure Governance
	2-15	Conflicts of interest	
	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	52% of employees covered by the collective bargaining agreement in 2023.	

GLOBAL REPORTING INITIATIVE (GRI) INDEX CONTINUED

GRI STANDARD		DISCLOSURE	LOCATION
GRI 3: Material Topics 2021	3-1	Process to determine material topics	Materiality Assessment & Results
	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 2016	205-1	Operations assessed for risks related to corruption	Compliance & Business Ethics
	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 2023.
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	

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

GLOBAL REPORTING INITIATIVE (GRI) INDEX CONTINUED

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	2023 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 Development

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

GLOBAL REPORTING INITIATIVE (GRI) INDEX CONTINUED

GRI STANDARD		DISCLOSURE	LOCATION
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
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.

Table of Contents

About Renesas

2023 Highlights

Sustainability Approach

Environmental

Social

Governance

Appendix

Environmental Data

GHG EMISSIONS (2023 DATA)

2023	CLASSIFICATION	RANGE AND CALCULATION METHOD	EMISSION AMOUNT (T-CO2)	RATIO
Scope 1	Direct emission of greenhouse gases	Greenhouse gases emitted by Renesas	156,403	6.26%
	Emission of PFC gases (Amount included in the total)		120,537	—
Scope 2	Indirect emission from the use of electricity, heat and steam	Indirect emission following the use of electricity and gases provided by other companies	647,660	25.92%
Scope 3	[C1] Purchased goods and services	Emission following procurement of materials and production outsourcing	1,428,994	57.20%
	[C2] Capital goods	Emission following the increase of production equipment	138,738	5.55%
	[C3] Fuel- and energy-related activities not included in Scope 1 and 2	Emissions from upstream processes of procured electricity and fuel	105,895	4.24%
	[C4] Upstream transportation and delivery	Emissions from production logistics within Japan	404	0.02%
	[C5] Waste generated by operation	Emissions from transportation and disposal of waste conducted by another party	5,205	0.21%
	[C6] Business travel	Emissions from employee business trips	11,899	0.48%
	[C7] Employee commuting	Emissions from employee commutes in Japan	3,123	0.12%
	[C8] Upstream leased assets	Not applicable (included in Category 1)	0	0.00%
	[C9] Downstream transportation and delivery	Not applicable	—	—

Source: [Environmental Data and Third-Party Verification](#)

ENVIRONMENTAL DATA CONTINUED

2023	CLASSIFICATION	RANGE AND CALCULATION METHOD	EMISSION AMOUNT (T-CO2)	RATIO
Scope 3	[C10] Processing of sold products	Not applicable	—	—
	[C11] Use of products sold	Not applicable	—	—
	[C12] Disposal of sold products	Not applicable	—	—
	[C13] Downstream leased assets	Not applicable	0	0.00%
	[C14] Franchises	Not applicable	0	0.00%
	[C15] Investments	Not applicable	0	0.00%
Total			2,498,320	100%









Source: [Environmental Data and Third-Party Verification](#)

ENVIRONMENTAL DATA CONTINUED

ENERGY CONSUMPTION (2023 DATA)

CATEGORY 1	CATEGORY 2	UNIT	JAPAN	OUTSIDE JAPAN	WORLDWIDE
Total Energy		MWh	1,460,039	275,611	1,735,649
	Electricity	MWh	1,225,663	255,942	1,481,605
	(Include) Renewable Energy	MWh	68,544	3,818	72,362
	Steam	MWh	62,530	18,004	80,534
	Gas	MWh	133,329	1,654	134,982
	Other Fuels	MWh	38,517	11	38,528
Factory	Electricity	MWh	1,459,367	275,611	1,734,978
	(Include) Renewable Energy	MWh	67,957	3,818	71,775
	Steam	MWh	62,530	18,004	80,534
	Gas	MWh	133,322	1,654	134,976
	Other fuels	MWh	38,517	11	38,528

Source: [Environmental Data and Third-Party Verification](#)

- 
Table of Contents
- 
About Renesas
- 
2023 Highlights
- 
Sustainability Approach
- 
Environmental
- 
Social
- 
Governance
- 
Appendix

ENVIRONMENTAL DATA CONTINUED

CATEGORY 1	CATEGORY 2	UNIT	JAPAN	OUTSIDE JAPAN	WORLDWIDE
	Office	MWh	672	—	672
	Electricity	MWh	665	—	665
	(Include) Renewable Energy	MWh	587	—	587
	Steam	MWh	0	—	0
	Gas	MWh	0	—	0
	Other fuels	MWh	0	—	0
Energy Consumption per Revenue	Consolidated Revenue	Oku yen	—	—	14,697
	per Revenue	MWh/Oku yen	—	—	118

Source: [Environmental Data and Third-Party Verification](#)

ENVIRONMENTAL DATA CONTINUED

WATER (2023 DATA)

CATEGORY 1	CATEGORY 2	UNIT	JAPAN	OUTSIDE JAPAN	WORLDWIDE
Total Amount Used (Water Intake + Recycled Water)		Km3	21,630	1,941	23,571
Total Water Withdrawal by Source		Km3	13,862	1,880	15,742
	Surface Water (Rivers, Lakes, Ponds)	Km3	8,678	385	9,063
	Ground Water (Wells, Boreholes)	Km3	4,644	0	4,644
	Municipal Water (Tap Water)	Km3	540	1,495	2,035
	Ocean Water	Km3	0	0	0
	Others (Rain Water, Quarries, External Effluents)	Km3	0	0	0
Recycled Water		Km3	7,769	60	7,829
Water Recycled and Reused		%	36	3	33

Source: [Environmental Data and Third-Party Verification](#)

ENVIRONMENTAL DATA CONTINUED

CATEGORY 1	CATEGORY 2	UNIT	JAPAN	OUTSIDE JAPAN	WORLDWIDE
Total Water Discharge		Km3	10,786	1,213	11,999
<i>* There is no discharge made to the ground surface</i>	Public Water (Ocean)	Km3	10,191	365	10,556
	Sewerage (Off-Site Water Treatment)	Km3	595	494	1,088
	Others (Underground, Wells)	Km3	0	354	354
Water Use per Revenue	Consolidated Revenue	Oku yen	—	—	14,697
	per Revenue	Km3/Oku yen	—	—	1.6

Source: [Environmental Data and Third-Party Verification](#)

ENVIRONMENTAL DATA CONTINUED

CHEMICAL SUBSTANCES (2023 DATA)

CATEGORY 1	CATEGORY 2	UNIT	JAPAN	OUTSIDE JAPAN	WORLDWIDE
Chemical Substances (subject to PRTR Law)	Transaction Volume	t	1,112	17	1,129
VOC	Emissions (Atmosphere)	t	311	—	311

WASTE (2023 DATA)

CATEGORY 1	CATEGORY 2	UNIT	JAPAN	OUTSIDE JAPAN	WORLDWIDE
Total Waste		t	13,369	3,877	17,246
	Total Hazardous Waste	t	1,307	1,296	2,603
	Recycling	t	1,307	642	1,949
	Landfill	t	0	543	543
	Others (Intermediate processes, etc.)	t	0	111	111
	Total Non Hazardous Waste	t	12,062	2,581	14,643
	Recycling	t	10,957	1,414	12,371
	Landfill	t	19	1,167	1,186
	Others (Intermediate processes, etc.)	t	1,086	0	1,086

Source: [Environmental Data and Third-Party Verification](#)

Third-Party Verification: Environmental Data

2023 JQA Independent Verification Report

[View the Report](#)

JQA No.1811004786
Independent Verification Report

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 "FY2023 Calculation reporting for Scope1,2 emission", "FY2023 Calculation reporting for energy consumption", "FY2023 Calculation reporting for Scope3 emission" and "FY2023 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(kansai(GM)-0030-09)", "Calculation manual for Scope1(except PFC), Scope2 emission and energy consumption(kansai(GM)-0036-09)", "Calculation manual for PFC emission (kansai(GM)-0037-04)", "Calculation manual for Scope3 emission(kansai(GM)-0035-10)" and "Calculation manual for water usage etc. (kansai(GM)-0038-03)" (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 2023 of the Company ended on December 31, 2023.

2. Procedures Performed
 JQA conducted verification in accordance with "ISO 14064-3" for GHG emissions from Scope 1, 2& 3, and with "ISAE3000" for energy consumption and water usage, respectively. The scope of this verification assignment covers Scope 1& 2(energy-derived CO₂ 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 nineteen sites: eleven domestic sites and eight overseas sites. The organizational boundaries of the verification for Scope3 are as indicated in Appendix I.
 Our verification procedures included:
 • Performing validation of integrated functions to check the Rules prior to the on-site assessment except for Scope 3.
 • Holding on-site verification except for Scope 3, at the Company's three domestic sites: Musashi site, Naka Factory and Yonezawa 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, performing validation of integrated functions to check the Rules, and checking 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 FY2023 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, Kashiwashicho, Chiyoda-ku, Tokyo, Japan
 April 08, 2024
 *Please refer to the appendix I in the next page.

Page 1 of 2

JQA No.1811004786
Appendix I

<Boundaries of Scope 3 GHG emissions by category>

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 activities (not included in scope 1 or scope 2)		Same boundary as Scope 1& 2
Category 4 Upstream transportation & distribution	Procurement materials and logistics	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, Sajo Factory, Kawasaki Factory
Category 5 Waste generated in operations		Same boundary as Scope 1& 2
Category 6 Business travel		REL, RSMC, REA, REF, RESG, REML, REIN, REHK, RECH, RESH, RETW, REKR, RSM, RST, RSK, RSC, RSB, RSKL
Category 7 Employee commuting		All domestic Renesas Group facilities

<List of abbreviations>
 REL:Renesas Electronics Corporation
 REA:Renesas Electronics America Inc.
 REF: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.

*Please refer to the previous page.

Page 2 of 2

Source: [Environmental Data and Third-Party Verification](#)

Third-Party Verification: HR Data

2022 SGS Independent Verification Report

(FY2023 HR data to be verified in 2024)

[View the Report](#)

25 September 2023
Opinion No : SGS23/069

Mr. Hidetoshi Shibata
Representative Director, President and CEO
Renesas Electronics Corporation
TOYOSU FORESIA, 3-2-24 Toyosu, Koto-ku, Tokyo, Japan

Objective
SGS Japan Inc. (hereinafter referred to as "SGS") was commissioned by Renesas Electronics Corporation (hereinafter referred to as "the Organization") to conduct independent verification based on Criteria of Verification (the SGS verification protocol) regarding the social data posted on the Organization's website (hereinafter referred to as "the Statement"). The objective of this verification is to confirm that the Statement in the Organization's applicable scope has been correctly calculated and reported in the Statement in conformance with the criteria, and to express our views as a third party. The Organization is responsible for the preparation and fair presentation of the Statement.

Scope
The scope of verification is the 11 social data specified by the Organization, which posted on the Organization's website.
The period subject to report is from January 1, 2022 to December 31, 2022.
Refer to the attached sheet for the detailed scope of verification and the period subject to report.

Procedure of Verification
The Statement was verified in accordance with Criteria of Verification, and the following processes were implemented at a limited level of assurance:

- Verification of the calculation system: Interviews on the tabulation, calculation and reporting methods employed by the Organization as well as review of related documents and records
- Verification of the Statement: Review of vouchers, related documents and records at the head office

The criteria for this review are based on the protocol specified by the Organization.

Conclusion
Within the scope of the verification activities employing the methodologies mentioned above, nothing has come to our attention that caused us to believe that the Organization's Statement was not calculated and reported in conformance with the criteria.
SGS Japan Inc. affirms our independence from the Organization, being free from bias and conflicts of interest with the Organization.

For and on behalf of SGS Japan Inc.
Yokohama Business Park North Square 1
134, Godeicho, Hodogaya-ku, Yokohama
Knowledge
Management Committee Member
Head of Certification/Accreditation

Yuji Takeuchi

1 / 2

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings as the time of its intervention only and within the limits of Client's instruction, if any. The Company's sole responsibility is to Client and this document does not constitute parties to transaction from oversteering all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attached file
25 September 2023
Opinion No : SGS23/069

The details of the scope of verification

The scope	The boundary	The statement
1 Rate of employees in important positions outside of Japan	Overseas Group 47 companies (As of December 31, 2022)	Rate: 74.5% Managed by local head: 35 companies
2 Rate of female employees in managerial positions	Global (As of December 31, 2022)	8.4%
3 Rate of female employees in managerial positions equivalent to senior manager positions	Global (As of December 31, 2022)	8.6%
4 Employee turnover rate	Global Japan	Global: 11.4% Japan: 5.8%
5 Rate of occurrence of occupational accidents with days away from work	Global	Rate: 0.05% Number of occurrences: 17
6 Rate of employees with disabilities	Japan (As of June 1, 2022)	2.34%
7 Number of employees using childcare leave	Japan	54 people
8 Number of employees using spousal maternity leave	Japan	18 people
9 Number of employees using short working hours for childcare	Japan	89 people
10 Number of employees using nursing care leave	Japan	4 people
11 Average annual salary at management level and rate of female to male	Japan	Male average: 11.8 million yen Female average: 11.7 million yen Rate: 99.5%

※ "Global" refers to the Organization and domestic and overseas group companies, and "Japan" refers to the Organization and domestic group companies in the boundary.
 ※ The scope No. 6 to 11 excludes the three former Dialog companies in the boundary.
 ※ The scope No. 11 excludes employees transferred outside the group and employees transferred within the group who were posted overseas.

2 / 2

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings as the time of its intervention only and within the limits of Client's instruction, if any. The Company's sole responsibility is to Client and this document does not constitute parties to transaction from oversteering all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Source: [Human Resources Data and Third-Party Verification](#)

- Table of Contents
- About Renesas
- 2023 Highlights
- Sustainability Approach
- Environmental
- Social
- Governance
- Appendix

About This Report

Our Approach

This annual sustainability report represents environmental, social and governance (ESG) strategies, initiatives, and results of Renesas Electronics Corporation (Renesas) during the fiscal year 2023, from January 1, 2023 until December 31, 2023. Data and activities noted in this report cover all of Renesas and its subsidiaries, as well as those of Dialog Semiconductor Ltd. (acquired in 2021). This report also includes some data from previous fiscal years and relevant updates, including the new board structure approved during the general shareholder meeting in March 2024.

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 (see pages [112–133](#)) for disclosure details.

This report also demonstrates our commitment to the UN Global Compact, to which we have been a signatory since 2021. Renesas has supported and taken actions against 13 out of 17 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 2023 ending on December 31, 2023 has been reviewed and verified by a third party (see [page 130](#)). Our human resources data for the fiscal year 2022 ending on December 31, 2022 was reviewed and verified by a third party (see [page 131](#); 2023 data to be verified in 2024). The remaining data and information in this report have been reviewed by Renesas leadership team and internal subject matter experts.

Contact Us

Please contact Renesas' [Sustainability Promotion Office](#) with any questions or feedback you may have on this report or our ESG initiatives. We look forward to hearing from you.

Copyright © 2024 Renesas Electronics Corporation

This report was designed and produced by [OBATA Design, Inc.](#)



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix

Forward-Looking Statements

The statements in this report with respect to the plans, strategies and forecasts of Renesas Electronics 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, North America, Asia and Europe; demand for, and competitive pricing pressure on, our products and services in the marketplace; our ability to continue to win acceptance of its 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 the projected results forecast.

This report is based on the economic, regulatory, market and other conditions as in effect on the date hereof. It should be understood that 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.



Table of Contents



About Renesas



2023 Highlights



Sustainability Approach



Environmental



Social



Governance



Appendix

The Renesas logo is displayed in a dark blue, stylized font. The background of the slide is split: the top right features a blue grid of dots forming a tunnel-like perspective, while the bottom half shows a close-up of green leaves with water droplets.

RENESAS

[renesas.com](https://www.renesas.com)

