2022 Sustainability Report
It is my great pleasure to share Renesas’ first sustainability report, which demonstrates our commitment to realizing a sustainable society and our progress toward this goal.

With over 21,000 employees around the world, we are united under one mission—to build a safer, greener, and smarter world where technology helps make our lives easier. My core belief is that semiconductor products and solutions Renesas develops directly contribute to achieving a sustainable future. Our advanced technologies in smart factories and homes, connected cars, and EVs are great examples. We strive to enhance our quality of life, while reducing greenhouse gas emissions and preserving natural resources.

We have actively implemented various programs to reduce carbon footprint at our manufacturing sites, increase our water recycling rates, and build a resilient supply chain with our suppliers globally.

We invest in our people who are critical to our growth and achieve our sustainability goals. As a global company, we celebrate and promote Diversity, Equity and Inclusion and provide a rewarding and value-based workplace and career opportunities.

Since founding the Sustainability Promotion Office in 2020, we have made significant progress by working together with our internal and external stakeholders including the Board of Directors.

For the first time in 2022, we were included in three ESG-related Financial Times Stock Exchange (FTSE) indices and received an “AA” rating from Morgan Stanley Capital International (MSCI). We are proud of these recognitions and invite you to learn more about our efforts and accomplishments in this report.

We look forward to continuing our sustainability journey and sharing the positive impact of our offerings and capabilities each year.

Sincerely,

Hidetoshi Shibata
President and CEO
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About Renesas

Renesas Electronics Corporation (TSE: 6723) empowers a safer, smarter and more sustainable future where technology helps make our lives easier. The 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 (Internet of Things) 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
Renesas At-A-Glance

Revenue

1,502.7B Yen

BY SEGMENT

IoT 28%
Automotive 43%
Infrastructure 11%
Industrial 17%
Others 1%

BY PRODUCT

Power 5%
Analog 40%
SoC 13%
MCU 41%
Others 1%

BY GEOGRAPHY

Japan 44%
Americas 11%
Europe (EMEA) 11%
China 11%
Other Asia 23%

As of December 31, 2022

Employees

21,000 Total
Worldwide Locations

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

“Renesas Culture” was developed in 2020 to foster teamwork and shared success across the organization. The five pillars of Renesas Culture, “Transparent, Agile, Global, Innovative, and Entrepreneurial” define core values as a company and empower employees in all our activities, behavior and decision-making.

These elements will allow us to respond flexibly to changes and solve issues, and continue to make a positive impact on our company and society. We encourage each Renesas Group employee to embody this Culture by incorporating the values into their decision-making processes and operations.

Based on our Renesas Culture guidelines, we will continue to improve how we listen to the voices of our diverse stakeholders, earn their trust and meet their expectations. By doing so, we believe we can make a contribution to our society and fulfill our duties as a responsible global company.
# Sustainability Approach

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At Renesas, sustainability is at the heart of what we do. Our products and solutions reflect our long-term commitment to building a sustainable future where technology helps make our lives easier.

We are committed to:

• Developing products and solutions that contribute to building a sustainable society
• Achieving the industry’s highest standards in each of the environmental, social and governance (ESG) areas
• Supporting the UN Sustainable Development Goals (SDGs)

Our Purpose
To Make Our Lives Easier
by complementing human capabilities
Materiality Assessment & Results

We conducted our comprehensive materiality assessment in 2022 to identify and prioritize the issues that matter most to our business and stakeholders. This assessment provides a basis for managing current ESG opportunities, risks and impacts, and identifies emerging issues. The assessment deemed the following issues as material for Renesas as of 2022.

**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
Our Ongoing Commitment

To ensure that we are aligned with the ever-changing priorities of our stakeholders, Renesas is committed to conducting the materiality assessment with internal stakeholders every year and external stakeholder interviews every other year going forward. To help us identify and prioritize ESG issues of mutual importance, we have engaged an extensive range of internal and external stakeholders in this process, including CEO and senior executives, managers, 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.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>The following items are reviewed:</td>
<td>• Develop a dashboard showing relevant issues</td>
<td>• Present the results and their analyses to the company executives and experts in various departments, including Environment, Risk Management, Procurement, HR, Legal, Technology and Finance</td>
<td>• Present the results and their analyses to key external stakeholders, including shareholders, lenders and customers, and then finalize the materiality matrix</td>
</tr>
<tr>
<td>• Internal documentation</td>
<td>• Perform a quantitative evaluation of the results</td>
<td>• Incorporate their feedback into the scoring</td>
<td></td>
</tr>
<tr>
<td>• Media coverage</td>
<td>• Perform analysis and mapping applying a set of criteria that consider:</td>
<td>• Identify relevant ESG topics</td>
<td>• Analyze and prioritize topics through stakeholder engagement</td>
</tr>
<tr>
<td>• Relevant standards and frameworks</td>
<td>• the magnitude of the issue’s impact on Renesas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Assessments of ESG investors and rating agencies</td>
<td>• its importance to stakeholders</td>
<td></td>
<td>• Results are used in planning:</td>
</tr>
<tr>
<td>• Materiality assessment reports of peer companies</td>
<td>• Allocate scores to relevant issues</td>
<td></td>
<td>• Sustainability strategy</td>
</tr>
<tr>
<td>• Country risk data presented by third party</td>
<td></td>
<td></td>
<td>• Future ESG reporting focus areas</td>
</tr>
</tbody>
</table>

Results are used in planning:
- Sustainability strategy
- Future ESG reporting focus areas
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 35% water being recycled 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 20% of the board seats

INDEPENDENT DIRECTORS
• Aim for over 50% independent directors
# 2021–2022 ESG Highlights

## Environmental
- Committed to **carbon neutrality by 2050**
- **Reduced GHG emission by** 6.8%*
- **Renesas Green Devices** accounted for 93% of new product development
- **Improved water intensity by** 38%
- **Maintained** 92% waste recycling rate
- **Reduced energy consumption by** 1.2%

## Social
- **Expanded Women in Technology Employee Resource Group** across the company
- **Implemented the first human rights due diligence**
- **Achieved 97% employee participation in human rights e-learning course**
- **Achieved 90%+ supplier response to the Self-Assessment Questionnaire**
- **Obtained ISO 45001 certification for our main production bases in Japan**

## Governance
- **Received “AA” ESG rating**
- **Completed the first materiality assessment**
- **Established a Security Council** consisting of the CEO, CFO, General Counsel and the heads of IT and HR
- **Achieved Board gender diversity target of 20% in March 2022**
- **Enhanced cybersecurity**
- **Revised Renesas Global Code of Conduct**

* Figures were revised on July 1, 2023. Please refer to the Editing Policies for details.
Timeline of Recent ESG Developments

- **2020**
  - Nov: Launched Sustainability website
  - Apr: Joined the Responsible Business Alliance
  - Mar: Pledged to become carbon neutral by 2050

- **2021**
  - Jul: Identified potential human rights risks
  - Jul: Issued the first Green Bond

- **2022**
  - Nov: Included in the MSCI Japan Empowering Women Index
  - Dec: GHG emission targets validated by SBTi
  - Jun: Included in two FTSE indices (FTSE Blossom Japan and FTSE4GOOD)
  - Apr: Endorsed the TCFD recommendations
  - Mar: MSCI: Received “AA” ESG rating
  - Jul: Included in the FTSE Blossom Japan Sector Relative Index
  - Jul: PRIDE Index: Won the top-level Gold recognition
  - Jun: Revised Renesas Code of Conduct
  - Apr: Became a signatory of United Nations Global Compact Women’s Empowerment Principles
  - Mar: Completed the first materiality assessment
Innovation for a Sustainable Future

Renesas believes that we can contribute to a sustainable society by accelerating innovation in meaningful and productive ways. While we continue to pursue our four core technology areas (Artificial Intelligence, Safety & Security, Digital & Analog & Power Solution, and Cloud Native), our strategic focus on sustainability is centered around developing energy-efficient solutions and technologies that make people's lives safe and secure.

A Sustainable Focus on:

Products and Solutions that Contribute to Energy Efficiency

- RH850 automotive microcontrollers
- High-quality memory interface ICs and timing devices used in data centers
- Millimeter-wave beamforming ICs for 5G systems
- IGBTs and photocouplers for renewable energy solutions
- RZ microprocessors with a built-in high-precision AI accelerator for factory automation
- Green and Super Green Devices

Products and Solutions that Contribute to Safety & Security

- Touchless solutions and ultra-low-power ozone-sensing firmware
- Autonomous driving and advanced driver assistance system solutions for functional safety standards
- Automotive microcontrollers and SoCs (System on Chip) that comply with ISO/SAE21434
- Microprocessors and transceivers that support security features of IoT devices and AI processing
Sustainability Promotion Structure

To promote group-wide sustainability initiatives, we have established the Sustainability Promotion Office (SPO) in 2020 under the direct supervision of the CEO, who assumes responsibility for all initiatives related to sustainability at Renesas. SPO is an integral part of our strategic planning, increasing transparency and accountability, and fostering diversity and collaboration across the Renesas Group.
## ESG Ratings & Scores

We have made consistent progress over the past two years, as evidenced by our efforts surrounding improved data disclosure as well as the demonstrated effectiveness of our ESG policies and practices.

<table>
<thead>
<tr>
<th>Rating</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTSE Russell</td>
<td>3.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Sustainalytics</td>
<td>24.4 (Medium)</td>
<td>29.8</td>
</tr>
<tr>
<td>MSCI</td>
<td>AA</td>
<td>BBB</td>
</tr>
<tr>
<td>CDP (Climate)</td>
<td>B</td>
<td>B-</td>
</tr>
<tr>
<td>CDP (Water)</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>CDP (Supply Chain)</td>
<td>A</td>
<td>A-</td>
</tr>
<tr>
<td>Pride Index</td>
<td>Gold</td>
<td>Silver</td>
</tr>
</tbody>
</table>
## Index Inclusion & Participating Initiatives

To fulfill our responsibility as an industry leader, we have continued to expand our strategic partnerships and commitments to sustainability and diversity initiatives.

### Index Inclusion

<table>
<thead>
<tr>
<th>MSCI Japan Empowering Women Index</th>
<th>FTSE Blossom Japan Sector Relative Index</th>
<th>FTSE Blossom Japan Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTSE4Good Index Series</td>
<td>S&amp;P/JPX Carbon Efficient Index</td>
<td>Sompo Asset Management’s SNAM Sustainability Index</td>
</tr>
</tbody>
</table>

### Participating Initiatives

- MSCI Japan Empowering Women Index
- FTSE Blossom Japan Sector Relative Index
- FTSE Blossom Japan Index
- FTSE4Good Index Series
- S&P/JPX Carbon Efficient Index
- Sompo Asset Management’s SNAM Sustainability Index

- United Nations Global Compact
- Task Force on Climate-related Financial Disclosures (TCFD) Japan Consortium
- Responsible Minerals Initiative of the Responsible Business Alliance
- Global Semiconductor Alliance’s Women’s Leadership Initiative (WLI)
- Water Project by the Ministry of Environment in Japan

- Japan Electronics and Information Technology Industries Association’s Semiconductor Environmental Strategy Committee and Responsible Mineral Procurement Study Group
- Japan Climate Initiative
- Business for Marriage Equality
Awards & Recognitions

Renesas is honored to have received the following awards in 2021 and 2022:

**RENESAS WON 2022 “OUTSTANDING ASIA-PACIFIC SEMICONDUCTOR COMPANY AWARD” BY GSA**

Renesas received the 2022 “Outstanding Asia-Pacific Semiconductor Company Award” by the Global Semiconductor Alliance (GSA) (announced on December 12, 2022). GSA represents the semiconductor industry across the globe, with over 300 corporate members worldwide. Annual awards are given to members that have demonstrated excellence through their success, vision, strategy, and future opportunities in the industry. The award is presented to an APAC-headquartered semiconductor company, chosen by industry peers on GSA’s APAC Leadership Council.

**“TOP 100 INCLUSIVE COMPANY RANKING” BY FORBES JAPAN**

Due to high employee engagement such as global diversity and inclusion and employee stock options, Renesas was ranked in the top 100 of the “2022 Inclusive Company Ranking” by Forbes JAPAN, the Japanese edition of Forbes. Out of all 1,839 companies listed in the Prime Market of Tokyo Stock Exchange, Renesas ranked 8th in the “Stakeholder Capitalism” segment.

**2021 NEDO CONSERVATION TECHNOLOGY DEVELOPMENT AWARD**

Renesas was awarded the 2021 NEDO Conservation Technology Development Award by the New Energy and Industrial Technology Development Organization (NEDO) in Japan. The award recognizes Renesas’ contributions for developing energy efficient low-power automotive LSI technology using model-based design techniques. The award is given to companies that have developed ground-breaking R&D technology for clean energy adoption and energy conservation between 2021 and 2022.

**OVERDRIVE AWARD BY GENERAL MOTORS**

Renesas was recognized as an Overdrive Award recipient at GM’s 30th Annual Supplier of the Year Awards. The Overdrive Award is presented to suppliers that showcased outstanding achievements in sustainable automotive supply chain management, innovation, building supplier-customer relationships, total enterprise cost, product excellence and safety. The winners of the 2021 Supplier of the Year Award and Overdrive Award were selected based on performance criteria in product purchasing, global purchasing, manufacturing services, customer care, after-sales and logistics.
Environmental

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Q&A with Eizaburo Shono

Eizaburo Shono
Senior Vice President and General Manager, Production and Technology Unit

Q: Why are environmental initiatives important for Renesas and how do they contribute to a sustainable society?

A: To contribute to building a sustainable society, we must achieve business operations that are sustainable over the long term. This requires formulating appropriate responses to changes in the business environment. Over the past few years, risks and opportunities related to environmental changes, such as climate change, have increased globally. The semiconductor industry requires very large amounts of energy and water resources for manufacturing and generates a lot of chemicals and waste. For Renesas, there is also the potential risk that environmental changes could significantly affect its business operations. We believe that properly addressing the risks and opportunities associated with these environmental changes will help Renesas achieve sustainable business operations.

Q: What is your policy regarding environmental initiatives?

A: The Renesas Group is committed to reducing its environmental impact and preventing pollution by complying with environmental laws and regulations and continuously improving our global environmental management system in all of our corporate activities. In addition, our policy is to provide environment-friendly semiconductor products and solutions throughout their entire life cycle, from R&D, design, procurement, production, sales, distribution, use, and disposal. Our goal is to support a sustainable society as well as foster corporate activities that enable both environmental conservation and healthy lifestyles for people.

Q: Tell us about Renesas’ environmental initiatives in the last fiscal year.

A: Last fiscal year, we focused on the following priority measures: energy conservation (primarily the purchase of green electricity at our manufacturing sites), the introduction of solar purchase power agreements (PPA), and the improve intensity of energy consumption. Specifically, we began implementing measures such as the purchase of green electricity at our manufacturing sites in Japan and the introduction of solar PPA at our manufacturing sites in China and Malaysia. We are also working to communicate our environmental targets and implementation measures throughout the company, particularly among front-line employees, through e-learning and other forms of environmental education.

Q: Please tell us about your priorities for this fiscal year.

A: This fiscal year, we are implementing three environmental initiatives. The first is to achieve zero violations of environmental laws and regulations and zero environmental accidents, as we did in the previous fiscal year. To achieve this, we will continue to utilize our environmental management system. Second, we will continue to implement measures in areas including energy conservation, water conservation, and waste reduction and reuse promotion to achieve our environmental preservation goals. And finally, we will ensure transparency to our stakeholders. Last year, we obtained third-party verification of our environmental data to improve the reliability of our environmental data, and actively participated in external initiatives. As a result, we were included in the FTSE ESG Index. We will continue to communicate with our stakeholders on the progress of our environmental initiatives in a timely manner through this Sustainability Report, our website, and our responses to global ESG evaluation organizations.
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.

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 Management System

Renesas’ Environmental Policy and the Basic Rules of Environmental Management are defined in our Basic Management Rules.

In particular, with regard to greenhouse gas 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 2022, there were no violations of environmental laws or ordinances as in the year before last.
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).
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 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 PFC gas – a greenhouse gas that heavily impacts the environment – and meeting the domestic 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).

6.8% decrease in GHG emissions from 2021

* Figures were revised on July 1, 2023.
Please refer to the Editing Policies for details.
SBTi-Certified Renesas GHG Emissions Reduction Targets

<table>
<thead>
<tr>
<th>Categories of GHG emissions</th>
<th>Level</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1 + Scope 2</td>
<td>1.5°C</td>
<td>Renesas to reduce GHG emissions by 38% in 2030, compared to 2021 levels</td>
</tr>
<tr>
<td>Scope 3</td>
<td>WB2.0°C</td>
<td>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</td>
</tr>
</tbody>
</table>

- “Scope 1” refers to direct greenhouse gas 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.
OUR COMMITMENT TO CARBON NEUTRALITY CONTINUED

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.

2022 Renesas’ GHG Emissions by Scope (t-CO₂)

| Scope 3: Fuel and energy-related activities not included in Scope 1 and 2 | 4% (112,074) |
| C2: Capital goods | 4% (120,942) |
| C1: Purchased goods and services | 61% (1,842,705) |
| Scope 1 | 7% (196,261) |
| Scope 2 | 24% (717,422*) |
| Scope 3 | 70%* (2,093,087) |

See Appendix (Environmental Data)

*Figures were revised on July 1, 2023. Please refer to the Editing Policies for details.

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
Conserving Water

At Renesas, we regularly monitor information on water intake and usage by water source and wastewater discharge by destination at all of our manufacturing sites. In addition, we manage wastewater quality in compliance with local and governmental 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 expected, 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.

**Water Resource Conservation Policy and Targets**

- Improving 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.)

**Targets**

<table>
<thead>
<tr>
<th>TOTAL AMOUNT OF WATER USAGE PER REVENUE</th>
<th>WATER RECYCLING RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021 Base Year</td>
<td>2030 Target Year</td>
</tr>
<tr>
<td>Water usage 24.9 million m³</td>
<td>33% Reduction</td>
</tr>
<tr>
<td>100%</td>
<td>67%</td>
</tr>
<tr>
<td>33% Reduction</td>
<td>33%</td>
</tr>
<tr>
<td>Company-wide sales</td>
<td>35%</td>
</tr>
</tbody>
</table>

2021 Base Year

2030 Target Year
Ongoing Initiatives

- Improve the water utilization efficiency of the Renesas Group by 33% (basic unit improvement, 2030 target, based on the 2021 level).
- Start on-site verification to increase the recycling rate at the Naka Factory to 30%, with a goal of 35% recycling rate (2025 target).
- Set improvement targets for water use per production related revenue (based on shipment value) at manufacturing sites with high water risks and strive to conserve water resources.

Community Engagement

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 our manufacturing site in Suzhou, China, 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. Both of our two manufacturing sites in China (Beijing and Suzhou), which are designated as water risk areas, achieved their annual targets for water withdrawal per unit of sales.
Participation in Water Project by the Ministry of the Environment in Japan

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.

**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.

Online monitoring system of wastewater discharge
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.

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

Considering legal and regulatory trends related to substances of concern and customer requests, we classify chemical substances into four categories and manage them in each stage of the manufacturing process, as well as those contained in final products.

**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 MANAGEMENT CONTINUED**

**Compliance with Environmental Laws and Regulations**

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

**Renesas’ Definition of Chemical Substances**

<table>
<thead>
<tr>
<th><strong>PROHIBITED SUBSTANCES</strong></th>
<th><strong>SUBSTANCES TO BE REDUCED</strong></th>
<th><strong>SUBSTANCES TO BE MANAGED</strong></th>
<th><strong>CONSTITUENT SUBSTANCES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Substances that are prohibited from being contained in products and used in the manufacturing process</td>
<td>Substances to be reduced by setting voluntary targets for product content and usage in the manufacturing process and emissions in the environment</td>
<td>Substances for which the amount of use, inventory, emissions and movements should be controlled</td>
<td>Substances that need to be understood as consituent materials</td>
</tr>
</tbody>
</table>

**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

To maintain a waste recycling rate at least 90% globally*, the Renesas Group continuously focuses on the 3Rs ("reuse," "reduce" and "recycle") to maintain the waste recycling rate at 90% or more globally. In 2022, a waste recycling rate at our global bases of 92% met our target of 90% or more.

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

### Recycling Initiatives

<table>
<thead>
<tr>
<th>Waste Materials</th>
<th>Examples of Recycling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sludge</td>
<td>Roadbed materials, raw materials for cement, recycled sand, raw materials for metal refining</td>
</tr>
<tr>
<td>Waste Oil</td>
<td>Incinerator combustion aid, recycled oil, raw materials for cement</td>
</tr>
<tr>
<td>Waste Acid</td>
<td>Recycled sulfuric acid, wastewater treatment, fuel conversion, raw materials for cement, raw materials for metals</td>
</tr>
<tr>
<td>Waste Alkali</td>
<td>Fuel conversion, raw materials for cement, raw materials for metals</td>
</tr>
<tr>
<td>Waste Plastics*</td>
<td>Incinerator combustion aid, solid fuel, raw materials for plastics</td>
</tr>
<tr>
<td>Metal Scraps*</td>
<td>Raw materials for metals</td>
</tr>
<tr>
<td>Glass and Porcelain Scraps</td>
<td>Raw materials for glass, raw materials for cement, tiles, lightweight aggregates</td>
</tr>
<tr>
<td>Product Waste*</td>
<td>Raw materials for silicone</td>
</tr>
<tr>
<td>Precious Metals*</td>
<td>Raw materials for precious metals</td>
</tr>
<tr>
<td>Paper</td>
<td>Raw materials for recycled paper</td>
</tr>
<tr>
<td>Wood Chips</td>
<td>Raw materials for paper, fertilizers, fuel</td>
</tr>
<tr>
<td>Styrofoam</td>
<td>Paint and mortar aggregates</td>
</tr>
</tbody>
</table>

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

2022 Major Initiatives (including ongoing activities)

REDUCTION OF PLASTIC WASTE (RESPONSE TO THE NEW PLASTIC RESOURCE CIRCULATION ACT IN JAPAN)

- Reusing or recycling of plastic packaging materials (tray) and plastic cases
- Reducing plastic waste by increasing the size of BGA package
- Reducing the amount of cushioning material used in cardboard shipping boxes by promoting full cartoning.
  (Reduction of waste plastic generated by customers)
  Fractional packing for small orders.

OVERALL WASTE REDUCTION ACTIVITIES

- Valuable waste liquid 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

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

12.4 By 2020, achieve the environmentally-sound management of chemicals and all wastes throughout their lifecycle, 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

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

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, 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.
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
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

<table>
<thead>
<tr>
<th>Safety evaluation</th>
<th>Resource and energy-saving evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long life evaluation (reliability evaluation)</td>
<td>Weight reduction evaluation</td>
</tr>
<tr>
<td>Safety assessment (evaluation of controlled chemical substances, compliance with laws and regulations)</td>
<td>Energy saving evaluation</td>
</tr>
<tr>
<td>Information disclosure evaluation</td>
<td>Packaging material evaluation</td>
</tr>
<tr>
<td>Production process evaluation</td>
<td>Distribution evaluation</td>
</tr>
</tbody>
</table>

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.
ECO-PRODUCT INITIATIVES CONTINUED

Product planning

Product environmental assessment 1

Development and design

Design review

Pilot production

Product characteristics evaluation

Product environmental assessment 2

Product quality certification

Mass production

Example of Product Environmental Assessment Result Chart

Example of Energy Consumption Comparison

<table>
<thead>
<tr>
<th>(W)</th>
<th>Baseline products</th>
<th>New products</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.01</td>
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<tr>
<td>0.00</td>
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</tr>
</tbody>
</table>
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 2022, Renesas Green Devices accounted for 94% of new product development, and approximately 60% of total sales (Note 5), including affiliated products.

Note 4: Percentage of Renesas Green Devices among the number of former Renesas products developed in 2022.

Note 5: Percentage of Renesas Green Devices (former Renesas products developed and mass-produced in 2022 and their affiliated products) to sales of former Renesas products in 2022.
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.

<table>
<thead>
<tr>
<th>New development of Renesas Green Devices</th>
<th>Proportion of number of lead-free products developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>91%</td>
<td></td>
</tr>
</tbody>
</table>

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

Examples of Renesas Green Devices and Super Green Devices

Products certified as “Renesas Green Devices” and “Renesas Super Green Devices” for having superior environmental performance among hundreds of products developed annually at Renesas are registered in a database. Some of the products that can be publicly disclosed are uploaded onto the Renesas website. Going forward, Renesas will continue to promote the creation of environmentally-conscious products by recognizing green device certified products in award systems and more.

Renesas Super Green Devices

Among Renesas Green Devices, products with superior performance are certified as “Super Green Devices.”

<table>
<thead>
<tr>
<th>Evaluation criteria</th>
<th>Comparison between indexed product and new product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource-saving evaluation</td>
<td>• Product volume • Product mass 50% or more reduction</td>
</tr>
<tr>
<td>Energy-saving evaluation</td>
<td>• Power consumption during operation • Standby power consumption</td>
</tr>
<tr>
<td>Chemical substance content evaluation</td>
<td>• Percentage improvement of reduced substances (Pb) in products</td>
</tr>
</tbody>
</table>
Introduction of Renesas Green Devices and Super Green Devices (products developed in 2021 and 2022)

Excerpt from products that can be publicly disclosed

<table>
<thead>
<tr>
<th>Product name</th>
<th>Type</th>
<th>Application</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMTF31872BAGBM</td>
<td>Low power high density / Ultra high speed memory (DRAM)</td>
<td>Network devices (Router/Switch)</td>
<td>Optimized high-speed random access for low latency</td>
</tr>
<tr>
<td>RMTF30972BRGBM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAA305380GBM</td>
<td>High-performance, low-power MPU &amp; Driver</td>
<td>Smartphones</td>
<td>Image stabilization function with built-in smartphone, Gyro sensor I/F and actuator driver</td>
</tr>
<tr>
<td>RAA305370GBX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAA305390GBX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAA305391GBX</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| R9A02G011GBG                  | USB Power Delivery Controller | Industry/Consumer | A Universal Serial Bus (USB) Power Delivery Controller based on the USB Power Delivery Specification Revision 3.1 and USB Type-C™ Cable and Connector Specification Revision 2.1

Built-in CC-PHY and CC-logic, flash ROM, oscillator, power-on reset circuit, etc. that allow significant reduction of the number of external components and various applications where board space is limited.

Learn more about USB PD Controller

| R5F5671***BP                  | 32 bit high-performance and high-efficiency MCU | Industry/Consumer | Ultra-small package with high performance, industry-leading power efficiency and large-capacity memory, reducing the environmental impact. |
| R5F5671***LJ                  | RX671 Group                              |                      |                                                                         |
| R5F5671***LK                  |                                             |                      |                                                                         |

Learn more about RX671 Group
## RENESAS GREEN DEVICES CONTINUED

<table>
<thead>
<tr>
<th>Product name</th>
<th>Type</th>
<th>Application</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>R9A07G075xxxGBG (RZ/T2M)</td>
<td>High-speed Processing and Realtime Control MPU</td>
<td>Industry/Consumer Motor Control</td>
<td>RZ/T2M is an industry-leading high-performance multi-function MPU that realizes high-speed processing, high precision control, and functional safety required for industrial equipment such as AC servos and industrial motors. <a href="#">Learn more about RZ/T2</a></td>
</tr>
<tr>
<td>R9A07G084M04GBG (RZ/N2L)</td>
<td>Ethernet communication microprocessor (MPU) for Integrated TSN-Compliant 3-Port Gigabit Ethernet Switch to Implement Industrial Ethernet and TSN</td>
<td>Ethernet work controller for general industry</td>
<td>Integrated with large-capacity RAM with ECC, ΔΣ I/F, A/D converter, PWM timer, UART, CAN, etc., realizing application processing and network processing on a single chip. <a href="#">Learn more about RZ/N2L</a></td>
</tr>
<tr>
<td>R7F100GGN3CNP</td>
<td>Low power RL78/G23 (memory, by temperature range) 16Bit MCU</td>
<td>RL78 general-purpose microcontroller for home appliances, consumer equipment, and industrial equipment</td>
<td>In addition to the industry’s lowest level of low current consumption, the SNOOZE mode sequencer significantly reduces power consumption during intermittent operation. 32 MHz, wide operating voltage range from 1.6 V to 5.5 V, various packages from 30 to 128 pins, and up to 768 KB of flash memory. <a href="#">Learn more about RL78/G23</a></td>
</tr>
<tr>
<td>R7FA6M4AF2CBM (RA6M4)</td>
<td>RA Family Arm® Cortex®-M based 32Bit MCU</td>
<td>Industry/consumer High performance microcontroller with TrustZone®</td>
<td>It supports partner ecosystems such as various RTOS and middleware. Suitable for IoT applications requiring Ethernet, security and low power consumption. <a href="#">Learn more about RA family</a></td>
</tr>
</tbody>
</table>

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RENASAS GREEN DEVICES CONTINUED

Environmental Contribution of Renesas Green Devices

Renesas aims to make people’s lives easier through our products and solutions, and contribute to building a future that creates a better world. In a world where everything around us is intelligent and interconnected, advanced computing performance is a must. At the same time, the demand for energy efficiency and robust safety and security will continue to increase. By providing our customers Renesas Green Devices that meet these growing demands, we can foster a greener and more sustainable society.

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.

<table>
<thead>
<tr>
<th>Product name</th>
<th>Type</th>
<th>Application</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>R7F102GGE3CFB</td>
<td>Low power consumption</td>
<td>RL78 general-purpose microcontroller for home appliances, consumer equipment, and industrial equipment</td>
<td>In addition to the industry’s lowest level of low current consumption of 37.5 μA/MHz when CPU is running and 200 nA when CPU is stopped, it is equipped with a wealth of capacitive touch channels. Equipped with various packages from 16 to 48 pins and 32KB to 64KB flash memory. Learn more about RL78/G22</td>
</tr>
<tr>
<td>R7F102GGE2DFB</td>
<td>RL78/G22, 16-bit MCU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R7F102GGE3CFB</td>
<td>RL78/G22, 16-bit MCU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R7F102GGC3CFB</td>
<td>RL78/G22, 16-bit MCU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R7F102GGC2DFB (RL78/G22)</td>
<td>RL78/G22, 16-bit MCU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R9A06G1502GNK</td>
<td>32Bit MCU for RISC-V based voice control HMI</td>
<td>Consumer equipment, industrial equipment HMI solutions</td>
<td>Working with ecosystem partners to provide a complete solution for keyword spotting recognition systems. Integrates advanced digital/analog microphone input and playback interfaces. Learn more about R9A06G150</td>
</tr>
<tr>
<td>R9A06G1502GNE (R9A06G150)</td>
<td>32Bit MCU for RISC-V based voice control HMI</td>
<td>Consumer equipment, industrial equipment HMI solutions</td>
<td>Working with ecosystem partners to provide a complete solution for keyword spotting recognition systems. Integrates advanced digital/analog microphone input and playback interfaces. Learn more about R9A06G150</td>
</tr>
</tbody>
</table>
Renesas Green Device Solutions that Contribute to a Sustainable Society (Note 6)

Renesas Green Devices

<table>
<thead>
<tr>
<th>Mission-critical business areas (Automotive, FA, communication infrastructure, medical, healthcare, etc.)</th>
<th>Other business fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean Transportation</td>
<td>Energy Efficiency</td>
</tr>
<tr>
<td>Smart Electric Vehicles Solutions</td>
<td>Smart Data Center Solutions</td>
</tr>
<tr>
<td>Smart Autonomous Drive Solutions</td>
<td>Smart Cellular Solutions</td>
</tr>
<tr>
<td></td>
<td>Smart Society Solutions</td>
</tr>
<tr>
<td></td>
<td>Renesas Green Devices and Technology</td>
</tr>
</tbody>
</table>

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

Note 6: Solutions are classified according to the green eligibility category of the green bond framework effective in November 2021.

Note 7: Renesas Green Devices (former Renesas products and affiliated products developed and mass-produced in 2022) 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 35%.

Sales Ratio of Renesas Green Devices by Solution (Note 7)

In 2022, 75% of Renesas’ Green Device sales was for mission-critical business areas (green bond eligible solutions), of which 44% was for smart vehicle solutions and electric vehicles, and 31% for social infrastructure such as data centers and cellular.

- Renesas’s Green Devices and Technology: 2%
- Smart Electric Vehicles Solutions: 6%
- Smart Autonomous Drive Solutions: 38%
- Smart Data Center Solutions: 14%
- Smart Cellular Solutions: 1%
- Smart Society Solutions: 14%
- Other Business Solutions: 25%
- Clean Transportation: 44%
- Energy Efficiency: 31%
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.

Renesas Biodiversity Conservation Activities

The following two points summarizes our achievements in 2022 and activities planned for 2023 and onwards.

- Created “Renesas In-House Scorebook” to visualize biodiversity activities
- Set June 5 every year (environment month in June) as “The Day of Renesas Group to think about biodiversity and SDGs” (tentative) and promote it both inside and outside the company.

Renesas Biodiversity Conservation Initiatives

LAUNCH OF THE BIODIVERSITY ACTIVITY TASK FORCE

In September 2022, Renesas launched a task force to evaluate activities, disseminate information globally, and actively promote additional activities in the future. We started biodiversity activities in December 2022.
Renesas Biodiversity Activity Evaluation for 2022

2022 was the first year of the evaluation, and the average score of self-evaluation on biodiversity activities at each site was higher than that of “conservation of ocean and water quality” and “preservation of ecosystem.” We received lower scores for environmental preservation, cooperation with local governments, activities in our core business, and employee awareness-building.

In addition, when comparing sites, the Kawashiri Factory received the highest evaluation for its “no car commuting week” and the provision of recharged rice in the employee cafeteria. In addition, the Nishiki Factory, which has been cultivating endangered flower, “Tsukushiibara,” for more than 10 years, was also highly rated.

Going forward, Renesas will continue to promote visualization of biodiversity activities and information sharing on initiatives and activity know-how to contribute to biodiversity conservation as a whole.

Renesas Biodiversity Conservation Activities in 2022

Average score of 8 sites in Japan (Headquarters area, Naka, Takasaki, Saijo, Kawajiri, Yonezawa, Oita, Nishiki)
Renesas Biodiversity Activity Results

Major activities in 2022

A: Conservation of ocean and water quality

Kumamoto City is a rare "groundwater city" in Japan, where 100% of its tap water is supplied by groundwater. At the Kawashiri Factory, located in Kumamoto City, we regularly carry out beautification activities and work to conserve clean and abundant water resources.

B: Conservation of soil and natural environment

Biodiversity conservation activities continued

Purchased recharged rice from the Kumamoto Groundwater Foundation (Kawashiri Factory)

C: Ecosystem protection by mitigation global warming

The Kawashiri Factory conducts a "No Car Commuting Week." We call on our employees to participate every month, tally the number of participants and the amount of CO2 reduction, and work to continuously reduce CO2 emissions.

In 2022, a total of 121 people participated, and the amount of reduction was 583 kg-CO2.

D: Coordination with local governments, activities in the main business, employee awareness raising

The Kawashiri Factory participates in the "Water Offset" project of the Kumamoto Groundwater Foundation.

The water offset business protects Kumamoto’s abundant groundwater, while at the same time supporting agriculture, and is also an initiative of local production for local consumption that purchases and consumes local crops.

At the Kawashiri Factory, we are promoting activities to purchase recharged rice for our employees and provide part of the rice for the employee cafeteria as recharged rice with the cooperation of the cafeteria management company.

Car-free commuting week held (Kawashiri Factory)

Participation in cleaning activities from all departments led by the factory manager (Kawashiri Factory)
Biodiversity Conservation Activities Continued

B: Conservation of soil and natural environment

D: Coordination with local governments, activities in the main business, and awareness-raising of employees

Tsukushibara (Tsukushi rose) is a type of rose unique to southern Kyushu, and is the town flower of Nishiki-cho, where the Nishiki Factory is located. Originally, it grows in colonies in riverbeds, etc., but due to environmental changes, its numbers have decreased, and in 2004 it was registered as an endangered species.

At the Nishiki Factory, we grow horsetail thorns on the plant premises as a biodiversity conservation activity. Beautiful flowers bloom from May to June every year, and are appreciated by everyone in the area.

C. Ecosystem protection by mitigation global warming

At the Nishiki Factory, we install green curtains every year. We are promoting energy-saving activities by blocking heat energy from solar radiation and suppressing rises in indoor temperatures.

A: Conservation of ocean and water quality

The Nakatsu Tidal Flat, the largest tidal flat in the Seto Inland Sea, is located near the Oita Factory. The Nakatsu tidal flat boasts the greatest biodiversity in Japan, and is also home to many rare species such as horseshoe crabs and green whiting.

For many years, the Oita Factory has participated in beach cleanups sponsored by the NPO Mizube ni Asobikai, striving to conserve biodiversity.

- Conservation of endangered Tsukushibara (Nishiki Factory)
- Goya Green Curtain (Nishiki Factory)
- Resumed cleanup activities that had been suspended due to the COVID-19 pandemic (Oita Factory)
Biodiversity conservation activities continued

**A: Conservation of ocean and water quality**

The Naka Factory is located near the Naka River, one of the clearest streams in the northern Kanto region. The Naka River is a river rich in diversity, with a variety of fish species living in the middle reaches and a popular fishing spot near the mouth of the river where seawater is mixed.

Every month, the Naka Factory conducts cleaning activities around the factory. In 2022, we temporarily refrained from doing so due to the impact of COVID-19, but a total of just under 300 employees participated in the effort to protect the local environment.

![Monthly cleaning activities (Naka Factory)]

**Saijo City Clean Walk (Saijo Factory)**

At the Saijo Factory, labor and management participate in the annual Saijo City Clean Walk in cooperation with the Ehime Toyo Association. In 2022, although the scale was reduced due to the influence of the new corona, 29 people participated and carried out cleaning activities.

While deepening exchanges with local residents, we are contributing to the creation of beautiful towns suitable for the pilgrimage.

**Saijo City Clean Walk (Saijo Factory)**

**D: Coordination with local governments, activities in the main business, and employee awareness-raising**

In the headquarters area, we have started collecting semiconductor trays, magazines, and reels from our business sites that had been disposed of until now. At the same time, we are working to reduce and reuse waste plastic by starting to collect the plastic that was used as cushioning material for packaging.

![Collecting semiconductor trays, magazines and reels (headquarters area)]

**Regular awareness-raising activities (headquarters area, etc.)**

We regularly carry out employee awareness-raising activities through environmental education and in-house information dissemination at our head office and other bases.
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

12.4 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

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

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

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

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
# Social

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Q&A with Julie Pope

Julie Pope
Senior Vice President and Chief Human Resources Officer

Q: What were our key accomplishments in 2022?

We are proud of our 2022 accomplishments even in the face of war, inflation, energy scarcity, environmental impacts and the continued impacts of COVID-19. Our employees are our greatest asset and we have continued to invest in their growth and development. 2022 initiatives we launched include:

- Emergency funding and support to our employees in Ukraine.
- Additional workforce flexibility initiatives including options to work abroad.
- New talent acquisition approach to increase diversity and strengthen relationships with universities around the world.
- Successful onboarding of Reality AI and Steradian teams that joined through acquisitions.
- Launched new global employee trainings, combining self-guided and group learning formats.
- Technical training for engineers and customized training for first-time managers.
- International Women’s Day celebration (March 2022) and expanded the Women in Technology Employee Resource Group to all employees.
- Hosted employee seminars for Pride Month (June 2022) and Diversity Awareness Month (October 2022) with external DE&I experts.

Q: What progress and improvements did we make in terms of human rights?

We set the Renesas Group Human Rights Policy in 2021 and conducted the first human rights due-diligence process in 2022. We identified six key issues to be addressed during the process which included clarifications in the following areas: Safe and Healthy working Environment, Prohibition of Child and Forced labor, Working Hours, Responsible Minerals Procurement, Labor management Relations in Japan, Human Rights Education.

We strive to plan, execute, monitor, and disclose our actions and results in order to minimize these prioritized risks by country, region, company, and throughout the production process.

Q: What is your vision for “Renesas Culture” and how have you helped global employees understand and embody its values?

In 2022, we focused on further defining the behaviors we look for as part of our TAGIE (Transparent, Agile, Global, Innovative, Entrepreneurial) culture and how employees can demonstrate those behaviors in their roles. We did this through a variety of channels, including launching a newsletter—TAGIE Times—that features interviews, videos, employees’ challenges, and contributions from senior leaders. We also conducted a survey to measure progress and addressed the issues raised as part of the survey through a series of measures.

In 2023, we will continue to embed the culture by making sure TAGIE is clearly articulated throughout the employee lifecycle—including recruitment, goal setting, development and performance management. We will measure our progress again through another survey.

Q: What are your strategic priorities for this year and why?

We have 3 key areas of focus in 2023:

- Enabling business growth and expansion through leadership effectiveness and manager enablement, supporting and facilitating M&A, delivering targeted organizational design and deploying strategic workforce planning.
- Talent engagement by attracting, engaging, rewarding, and retaining our best talent.
- Operational excellence by ensuring our HR organization is positioned to serve the employees through simplification, compliance and effective use of HR technology.
Q&A with Shuhei Shinkai

Shuhei Shinkai
Senior Vice President and Chief Financial Officer

Q: Could you share 2022 highlights from the divisions you oversee (Procurement, General Affairs, Corporate Finance)?

Ensuring supply chain resilience and a safe and healthy workplace has been our top priority. Building on the progress from 2021, we continued to engage with our suppliers, although the supply shortages required us to focus on meeting the immediate demand. As the situation started to ease, we shifted our focus toward discussing and implementing long-term sustainability activities together with our suppliers. Notable highlights about Supply Chain Engagement include:

- More than 90% of our suppliers responded to the Self-Assessment Questionnaire (SAQ) and agreed to our Supplier Code of Conduct. We also conducted in-person audits with select suppliers.
- Completed the audit of our suppliers that cover 59% of our purchasing volume for direct materials and Foundry/OSAT based on the combined audit results from 2021.

In 2022, we continued to feel the impact of COVID-19 globally. Since the outbreak, we have improved our management system to ensure our employees’ Health and Safety. As a result, Renesas obtained ISO 45001 certification for our main production bases in Japan last year, and we’re continuing the effort globally.

We have also been working hard to increase Social Contribution initiatives. As one of the highlights from last year, we donated funds to The UN Refugee Agency (UNCHR) to provide support to Ukraine and provided supplies and housing to our local employees.

Also, we improved our disclosure on Climate Change. For example, we expanded our reporting framework to align with Task Force on Climate-related Financial Disclosure (TCFD), adding a scenario-based analysis and additional non-financial information about our opportunities and risks for the first time. Please visit our website for more details.

Q. What are your 2023 strategic priorities and how you plan on achieving milestones?

We will continue to increase our engagement with suppliers further this year. In addition to hosting supplier’s meetings, we plan to set up a forum that enables two-way communication and a platform that allows suppliers to exchange best practices with each other.

We established a three-year plan and KPIs in 2021 to implement supplier audits that cover 80% of our procurement value for direct materials and Foundry/OSAT by the end of 2023. We are making steady progress to achieve this objective by year-end.

Regarding conflict minerals, we plan to disclose the investigation status of Mica and Cobalt beyond 3TGs.

We will also continue to focus on the safety and health of our employees. In addition to our bases in Japan, we aim to obtain ISO 45001 certification for major production and design bases globally by the first quarter of 2024.

To expand our social contribution initiatives, we made donations earlier this year to aid people impacted by the major earthquake in Turkey and Syria. We plan to set goals and KPIs for our Corporate Social Responsibility initiatives and implement plans accordingly.
Diversity, Equity and Inclusion

As a global company, Renesas enjoys the benefits of a highly diverse team. Our employees with diverse backgrounds bring unique experiences, perspectives and values. We ensure that our commitment to equal opportunities and the culture of inclusion is reflected in our management strategies, policies and employee benefits, as well as in a number of employee-focused initiatives and partnerships. Examples are listed below.

**Renesas Board Member Diversity**
Target of 20%

**Global Semiconductor Alliance’s Women’s Leadership Initiative pledge**

**United Nations Women’s Empowerment Principles (WEPs) pledge (April 2021)**

**Launch of the Diversity Promotion Group and various employee resource groups such as Women in Technology**

**Global partnership with Inspiring Girls International (France, UK)**

**Group-wide efforts to promote employment of diverse human resources and equal pay for equal work**

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DIVERSITY, EQUITY AND INCLUSION CONTINUED

Ratio of Female Employees (2022)

**Global Workforce**
- Male: 15,692
- Female: 5,324
- Male: 25.3%
- Female: 24.7%
- Total: 21,017

**Managers**
- Male: 3,493
- Female: 321
- Male: 8.4%
- Female: 11.6%
- Total: 3,814

**Leadership Team**
- Male: 16
- Female: 4
- Male: 20%
- Female: 80%
- Total: 20

**New Graduates Hire**
- Male: 378
- Female: 68
- Male: 15.2%
- Female: 44.8%
- Total: 446

**Senior Managers**
- Male: 2,586
- Female: 242
- Male: 8.6%
- Female: 11.4%
- Total: 2,828

**Experienced Professionals Hired**
- Male: 970
- Female: 336
- Male: 25.7%
- Female: 74.3%
- Total: 1,306
Employee Resource Group

At Renesas, we prioritize individuality and professional growth for employees globally. To support this, we have established the Diversity Promotion Group (DPG) to spearhead Diversity, Equity and Inclusion initiatives. DPG is led by six leaders with diverse backgrounds and has 120+ members from offices worldwide. The leaders drive discussions on global policies and DE&I initiatives in each region. We believe that every employee has a responsibility to embrace DE&I and we value dialogue and learning from each other to accelerate our DE&I initiatives.
CONTINUOUS DE&I TRAINING

In recognition of Pride Month in June 2022, we addressed the gender inclusivity and LGBTQ+ visibility in the workplace by hosting a special seminar with a guest speaker—Yuli Kim, a workplace inclusion expert and the founder of Inclusion Sensei.

“Education is key to addressing LGBTQ+ inclusion at work. It is about psychological safety—that of your colleagues and yourself—and creating a sense of belonging, which I consider is a prerequisite for anyone to perform their best at work.”

—Yuli Kim, Founder of Inclusion Sensei

Gender Pay Gap Reporting

We are committed to bridging equality in the workplace. This includes making sure our people are compensated fairly for the work they are hired to do, regardless of their background. As the first step, we are analyzing our employee’s salary data and the difference in the average pay between men and women in the workplace.

Supporting Career Advancement for Women

Renesas is strengthening our efforts to promote the participation and advancement of female employees. We aim to increase the ratio of women in all organizations, especially in management positions. Despite low number of female students in engineering, we are actively recruiting and aim to have over 20% of new graduates in Japan be women. As of 2021, women make up around 25% of the workforce and 7.6% of managerial positions. We are committed to doing more to increase the total representation of women in the future.

Creating an LGBTQ+ Friendly Workplace

We strive to create an LGBTQ+ friendly workplace by promoting diversity and creating a safe work environment for everyone. Our Code of Conduct prohibits discrimination based on sexual orientation and identity. To demonstrate our commitment, Renesas has pledged to support Business for Marriage Equality (BME) in 2021, which is a campaign to increase marriage equality in Japan. We have also revised our HR policies in Japan to include partners of common-law marriage, regardless of their gender and sexual orientation. Renesas has plans to expand these initiatives in the future.
CONTINUOUS DE&I TRAINING
For our Diversity Awareness Month celebration in October 2022, we celebrated and educated one another on our differences to bring us together and make us stronger. We invited Bernadette Smith, Founder & CEO of Equality Institute, to discuss how to foster a truly inclusive workplace.

“What I believe is that a lot of us don’t connect with people who are different than us because we’re afraid of getting it wrong… [I use] a tool called the ARC method—Ask, Respect, Connect—to help you connect across differences.”

—Bernadette Smith, Founder & CEO, Equality Institute

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
- **5.6** 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
Investment In Human Capital

At Renesas, we continue to develop our personnel system and talent growth strategies so that each of our diverse employees, as well as new recruits, are able to reach their full potential and grow professionally. In 2020, we developed new ideas to foster this in a guideline called “Renesas Culture” to be followed by all Renesas Group employees, helping them create value for society on a global scale in a rapidly changing business climate.

Some key actions we have taken include:

**Talent Attraction**
- Internship programs developed in each region
- Renesas University Program
- Experienced professional recruiting

**Employee Engagement/Retention**
- Performance and career development reviews for all permanent employees throughout the year (excludes contractors)
- Efforts to further instill the Renesas Culture, a set of shared values, in our employees
- Annual Employee Culture and Engagement Survey
- “One Global Renesas” pay-for-performance system
- Employee stock option program (adopted in Japan)

**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

We understand that the human rights regulated under the International Bill of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work are fundamental rights, and we conduct our business respectfully and according to the UN Guiding Principles on Business and Human Rights. In addition, we support the Ten Principles of the UN Global Compact on human rights, labor, environment, and anti-corruption.

Recent developments include the following:

- Established the Renesas Electronics Group Human Rights Policy (Nov 2021)
- 97% of our global employees completed human rights e-learning (2021)
- Conducted the first human rights due diligence process and identified issues and related actions (Jan–Mar 2022)

**The Renesas Human Rights Due Diligence Process**

**ASSESSMENT/ANALYTICS**

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

**REPORT/DISCLOSURE**

- Disclose information to stakeholders through reports and websites

**PLAN/ACTION**

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

**MONITORING**

- Check compliance with human rights policies and progress in risk reduction efforts
- Comply with Board supervision
## Identifying Potential Human Rights Risks

We have identified human rights risks in our business activities and stakeholders who might be vulnerable to potential risks based on international trend surveys, NGO reports, and advice from human rights experts.

<table>
<thead>
<tr>
<th>Potential human rights risks</th>
<th>Concerned matters (examples)</th>
<th>Potentially affected stakeholders</th>
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<tbody>
<tr>
<td>Safe and healthy working environment</td>
<td>Industrial accidents/Poor working environment/Poor employee health</td>
<td>Customers</td>
</tr>
<tr>
<td>Working hours</td>
<td>Long working hours/Forced overtime/Lack of legal leave</td>
<td>Customers</td>
</tr>
<tr>
<td>Discrimination (including Diversity, Equity &amp; Inclusion)</td>
<td>Discrimination by attribute/Discrimination against the weak/Harassment</td>
<td>Customers</td>
</tr>
<tr>
<td>Freedom of association and collective bargaining</td>
<td>Prevention of labor union formation</td>
<td>Customers</td>
</tr>
<tr>
<td>Right to privacy</td>
<td>Leakage of personal information of customers and employees</td>
<td>Customers</td>
</tr>
<tr>
<td>Conflict minerals</td>
<td>Funding to armed forces/Deterioration of local security</td>
<td>Customers</td>
</tr>
</tbody>
</table>
## IDENTIFYING POTENTIAL HUMAN RIGHTS RISKS CONTINUED

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<tr>
<td></td>
<td></td>
<td>Customers</td>
</tr>
<tr>
<td>Child labor</td>
<td>Deviates from Renesas Supplier Code of Conduct</td>
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<tr>
<td>Grievance mechanism malfunction</td>
<td>Malfunction of whistleblower system/Malfunction of whistleblower system and grievance system at suppliers</td>
<td>✓</td>
</tr>
<tr>
<td>Forced labor</td>
<td>Deviates from Renesas Supplier Code of Conduct</td>
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</tbody>
</table>
Potential Risks on Human Rights

Renesas has identified the following six key human rights issues to be addressed within the Group and our supply chain. In order to meet stakeholder expectations on these critical issues, we will take 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

Participation rate in compliance education, including human rights (2022)

<table>
<thead>
<tr>
<th></th>
<th>Managers and above</th>
<th>Non-managers</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>Japan</td>
<td>95.9%</td>
<td>94.6%</td>
<td>94.8%</td>
</tr>
<tr>
<td>Global</td>
<td>90.1%</td>
<td>88.6%</td>
<td>88.9%</td>
</tr>
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Ongoing and Future Initiatives

We are working closely with the Human Resources Division to ensure human rights are protected in our global operations. We will identify and prioritize risks by country, region, company, and process and formulate plans to prevent and mitigate risks. The Board of Directors will supervise and evaluate these efforts to implement improvements.

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**

Introduced a management system based on the ISO 45001 standard to identify workplace accident risks and implement countermeasures.

**Monthly Health & Safety Education**

Providing training to direct employees at each factory site, including monthly health and safety education.

**Preparations for Emergencies**

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

**Physical & Mental Health Initiatives**

Introduced health guidance and consultation by industrial physicians and affiliated institutions, 24-hour telephone consultations and a full-scale telecommuting system during the pandemic.

**Healthy Work-Life Balance**

Properly managing the working hours to comply with the limits set by the laws and regulations of each country.
At Renesas, the health and safety management team, under the direct supervision of the CFO, plays a central role in implementing our occupational health and safety initiatives. In addition, every business site and group company has set up a Health and Safety Committee staffed with a health and safety officer to keep employees safe and healthy.

**A Structure Centered on Safety**

- **Health and Safety Management Team at HQ** (under the direct supervision of CFO)
- **Company-wide Health and Safety Conference**
  - **Subcommittee for Facility Safety Measures**
    - Secretariat: **Equipment & Productivity Engineering Department**
  - **Central Expert Committee for Health and Safety** (Labor and management collaboration)
    - Secretariat: **Health and Safety Management Department (HQ)**
- **Overseas business sites**

**Health and Safety Committee** (Established at each business site/group company)
Industrial Accidents

We track all industrial accidents that cause operational shutdowns on a global basis and strive to prevent those accidents through proactive information-sharing. The average number of disasters between 2017–2019 was 16, 11 in 2020, and 19 in 2021 and 18 in 2022.

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
Social Contributions Through Community Involvement

Renesas recognizes that the prosperity of our society, preservation of the environment and development of diverse and talented human resources have a tremendous impact on our business growth.

For example, we have established a structure with various types of vacation days for employees in Japan including “volunteer vacation days” to increase the amount of vacation days taken by employees so they can give back to the community through volunteer work. In addition, we have introduced three and four-day working weeks to allow employees to easily attend activities held in the community on a regular basis.

In California, United States, employees are encouraged to use a set number of hours within the working day to attend social service activities as part of the Volunteer Community Service.

<table>
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<tr>
<th>Actual Figures from Social Contribution Initiatives Spending in 2022 (Million in JPY)</th>
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<tbody>
<tr>
<td>Donations</td>
</tr>
<tr>
<td>Financial Contributions</td>
</tr>
<tr>
<td>Donation of Goods</td>
</tr>
<tr>
<td>Employee Volunteering Participation (hours converted to monetary value)</td>
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</tbody>
</table>
SOCIAL CONTRIBUTIONS THROUGH COMMUNITY INVOLVEMENT CONTINUED

Three Areas of Focus for Social Contribution

Environmental Initiatives

EXPANSION OF SOLAR PANEL INSTALLATION (CHINA AND MALAYSIA)
In November 2022, Renesas installed solar panels at our manufacturing site in Suzhou, China, to maintain a continuous energy supply and reduce energy usage and utility expenses. We also installed and started operating a solar power system at our manufacturing site in Malaysia for the first time. We plan to expand the solar panel installation from 2023 to 2024 with a goal to further contribute to global climate change efforts and Malaysia’s renewable energy expansion policy. Based on Renesas’ global environmental action guidelines, we will continue to promote activities that will allow our factories to be more sustainable and eco-friendly.

TREE PLANTING FOR RIVER RESTORATION (U.S.)
In October 2022, Renesas partnered with Raritan Headwaters Association, a nonprofit conservation organization, to help plant 1,000 trees along the north branch of the Raritan River in New Jersey. This was a kick-off of a four-year restoration project to plant 10,000 trees along the Raritan River to help prevent future erosion and restore water resources. The Renesas team worked alongside the volunteers from Somerset County Parks Commission, Raritan Headwaters, AmeriCorps, and the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration (NOAA).

Educational Activities

IT & ELECTRONIC DESIGN CONTESTS FOR UNIVERSITY STUDENTS (CHINA)
Renesas sponsored the National Undergraduate Electronic Design Contest and the Advanced Information Technology Invitational Contest (AITIC) for university students in China. Despite the COVID-19 lockdowns, 261 students from 52 universities across the country submitted excellent designs for AITIC based on the Renesas RZ/G2L microprocessor. In addition, the 3rd “Renesas Cup” (Information Technology Frontier Invitational Competition) was held from April to August 2022, co-sponsored by Renesas and the Chinese Education Bureau. Approximately 100 teams of students from major universities studying information technology and electronics were invited to tackle an innovative and functional application system using cutting-edge technology. Renesas provided a microprocessor-based development platform that incorporates advanced DRP technology, as well as technical support such as online training.

SCHOLARSHIPS FOR FEMALE STUDENTS IN STEM (VIETNAM)
In November 2022, Renesas awarded 40 scholarships to female students from the top nine technical universities in southern and central Vietnam. This program is organized as part of our global effort to invest in the next generation of female engineers and technology professionals in the semiconductor industry. Renesas actively offers various learning opportunities as well as financial support locally.
SOCIAL CONTRIBUTIONS THROUGH COMMUNITY INVOLVEMENT CONTINUED

Three Areas of Focus for Social Contribution

Community Support

RUNNING FOR A GOOD CAUSE (GERMANY)

In July 2022, approximately 30 Renesas employees participated in the charity event, “AKB run,” in Nabern, Germany. A regional non-profit, Aktionskreis für Menschen mit und ohne Behinderung e.V. (AKB), holds events for non-disabled people to spend time with people with disabilities and learn from them. Our involvement began with Dialog employees who are now part of Renesas. The local team also donated $500.

SAFE AND CLEAN DRINKING WATER PROJECT (INDIA)

In 2021 and 2022, Renesas collaborated with Trinity Care Foundation to provide safe drinking water to government school students by installing Reverse Osmosis (RO) water plants at the select schools in Bangalore North District, Karnataka. Out of 30 districts in Karnataka, the groundwater in 29 districts was considered unsafe for drinking. The goal of this initiative is to improve the health of students and teachers, while minimizing absence and dropouts due to illness. Renesas provided five schools with a plant with a 4-layered overhead tank that can generate 100 liters of purified water in an hour and holds 1,000 liters of water.

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
Engagement with Our Supply Chain and Partners

Our medium-term targets (through 2024) for a sustainable supply chain are to have every key supplier obtain an RBA SAQ score of “medium” or below and to procure minerals only from RMI-certified smelters. Our recent sustainable procurement initiatives include the following.

Green Procurement
We preferentially procure environmentally conscious parts and materials from companies that practice proactive environmental conservation.

Self-Assessment Questionnaire (SAQ)
In 2022, a total of 922 suppliers responded to the Self-Assessment Questionnaire (SAQ), including 40 new suppliers. No significant risks were identified.

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.

RBA Membership and the New CoC
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 1,258 of our suppliers worldwide have agreed to follow it.

Responsible Mineral Procurement
To protect human rights and the environment on a supply chain level, we are working to realize responsible mineral procurement by not procuring conflict minerals related to risks in conflict-affected and high-risk areas as presented in Annex II of the OECD Guidance.

CDP Supply Chain Program
In 2022, Renesas joined CDP (Carbon Disclosure Project) Supply Chain Program and hosted an online “CDP Supply Chain Program Information Session” for approximately 100 suppliers. In March 2023, Renesas was recognized as a CDP 2022 Supplier Engagement Leader.
RESPOnsible Minerals Procurement Policy

In order to avoid human rights violation and destruction of environment within the supply chain, Renesas is working to realize responsible mineral procurement with the aim of procuring materials that do not include conflict minerals, from 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.

In 2022, all 235 smelters of 3TG (tin, tantalum, tungsten and gold) we have—except one that is still under RMI audit—were added to the RMI’s Conformant Smelter List as confirmed.

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>235</td>
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<tr>
<td>Tin</td>
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<td>Tantalum</td>
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<tr>
<td>Tungsten</td>
<td>38</td>
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<tr>
<td>Gold</td>
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<tr>
<td>Number of Identified Smelters</td>
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<tr>
<td>Number of Conformant Smelters</td>
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</table>
Governance

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Q&A with Noboru Yamamoto

Noboru Yamamoto
Independent Director, ESG Sponsor

Q: What improvements or developments has Renesas accomplished in the area of Governance?

Since “Toshi” Shibata became the CEO in 2019, there has been significant progress in Governance. Notable improvements include the introduction of a lead independent director, more transparency in executive compensation and establishing policies to ensure board diversity. We have made it our utmost priority to implement enhancements in Governance across all three groups – Board of Directors, Nomination Committee, and Compensation Committee. To increase shareholder engagement, we have implemented various initiatives since 2022, such as hosting roundtables and virtual shareholder meetings and Q&A sessions during shareholder meetings.

As a member of the Nomination Committee, I believe increasing diversity is extremely important when selecting board members. To serve the global market and stay ahead of the competition, it is vital for us to have diverse perspectives at the board level, and discuss and execute decisions on various topics. Currently, the board consists of a small, but unique team of members with diverse skill sets, experiences, and cultural backgrounds that allow us to have dynamic discussions from a broad range of perspectives.

Additionally in 2022, we started third-party evaluations by an independent organization to assess board effectiveness. Leveraging these evaluations, we have established a good routine to identify issues, ideate, and execute improvement measures.

Q2: As an ESG Sponsor, what areas of sustainability do you think Renesas should focus on?

Semiconductor manufacturing is a business that can highly impact the environment. To reduce GHG emissions and efficiently use water resources, we established ambitious targets and action plans to complete by 2023. The immediate challenge is to execute the plan and meet the targets every year. In 2023, we may face more challenges due to macroeconomic uncertainty, however, we will continue to monitor the situation and help us achieve the plan.

Where I personally expect to see additional progress is in human capital development. While the board values diversity, I hope the company can become an organization where diverse employees can thrive globally. To succeed as one of the few truly global companies in Japan, I would like to see continued advancements of new initiatives such as global mobility, as driven by our CEO and CHRO, Julie Pope, and lay the foundation for further success this year.

Today’s semiconductor industry is facing new business risks such as cyber security, in addition to natural disasters as we encountered in the past. We cannot predict everything, but we must prepare ourselves for unexpected events and discuss with management how we can build a business continuity plan (BCP) to address these challenges. I’m confident that we will be able to deal with any unforeseen circumstances with agility and collaboration.
Our Governance Structure

To execute corporate governance and remain as 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 corporate value over the mid- to long-term for the benefit of all the stakeholders.

We recognize the importance of operating business efficiently and ensuring the soundness and transparency of management in order to continuously increase corporate value. We are working to improve our management system and implement various measures to enhance corporate governance. In addition, we regularly hold meetings of the Board of Directors, the Board of Corporate Auditors, and the Executive Committee.

As required under the Companies Act in Japan, we have established an internal control system to ensure our corporate 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

The Board of Corporate Auditors audits the performance of directors as required by the Japanese Companies Act.

An independent third party with no interest in the Company conducts the audit as an Accounting Auditor.

The Internal Audit Department, which functions independently, reports directly to the CEO while cooperating with the Board of Corporate Auditors.

Business units, support functions, subsidiaries, etc.
Board Skills & Diversity

Renesas’ management board is organized in accordance with the Companies Act in Japan, and the members of the board are collectively responsible for the management, general and financial affairs and policy and strategy of our company. As of April 2022, the Board of Directors is comprised of five members, each appointed at our General Meeting of Shareholders. Out of five directors, we have four outside Directors to bring a different and diverse set of knowledge and experience in dealing with business challenges. Board responsibilities and expectations are identified in the Renesas Board Charter that is approved by the Board of Directors.

<table>
<thead>
<tr>
<th></th>
<th>Hidetoshi Shibata</th>
<th>Jiro Iwasaki</th>
<th>Selena Loh LaCroix</th>
<th>Noboru Yamamoto</th>
<th>Takuya Hirano</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management/Strategy</td>
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<tr>
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<tr>
<td>Risk Management</td>
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<tr>
<td>Legal</td>
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<td></td>
<td>✓</td>
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<tr>
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<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td></td>
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</tbody>
</table>
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.

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 in all of 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.

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.

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.
Compliance & Business Ethics Continued

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

Anti-Bribery and Anti-Corruption

Renesas complies with the anti-bribery and anti-corruption laws of the countries where it operates. Renesas provides and will further expand its anti-corruption and anti-bribery training for executives and employees globally.

Information Security

We provide information security training to all employees of Renesas and its subsidiaries. The most recent training, the Cyber Security Awareness Training, was held in February 2021.

Compliance & Business Ethics Continued

Information Security

We provide information security training to all employees of Renesas and its subsidiaries. The most recent training, the Cyber Security Awareness Training, was held in February 2021.
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>
<thead>
<tr>
<th>Corporate Risk Manager</th>
<th>Risk Management Officer</th>
<th>Risk Management Division</th>
<th>Risks</th>
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<tbody>
<tr>
<td>CEO</td>
<td>CEO</td>
<td>Corporate Communications Office</td>
<td>Public relations risks</td>
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<tr>
<td></td>
<td></td>
<td>Quality Assurance Division</td>
<td>Product quality-related risks</td>
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<td></td>
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<td>Legal Division</td>
<td>Legal violation risks</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Intellectual property-related risks</td>
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<tr>
<td>CFO</td>
<td>Corporate Strategy &amp; Finance Division</td>
<td>M&amp;A-related risks</td>
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<tr>
<td></td>
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<td>Conflict risks</td>
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<td>Supply Chain Management Division</td>
<td>Recorded sales-related risks</td>
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<tr>
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<td>Procurement Division</td>
<td>Procurement-related risks</td>
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<tr>
<td></td>
<td>Accounting &amp; Control Division</td>
<td>Accounting and financial risks</td>
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<td>General affairs-related risks</td>
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<td>Human Resources Division</td>
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<td></td>
<td></td>
<td>Labor-related risk</td>
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<tr>
<td>CTO</td>
<td>CTO Office</td>
<td>Technical information-related risks</td>
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<tr>
<td>CSMO</td>
<td>Global Sales &amp; Management Unit</td>
<td>Sales-related risks</td>
<td></td>
</tr>
<tr>
<td>General Manager of Business Unit</td>
<td>Automotive Solution Business Unit</td>
<td>R&amp;D-related risks</td>
<td></td>
</tr>
<tr>
<td>General Manager of Production and Technology Unit</td>
<td>Production and Technology Unit</td>
<td>Production-related risks</td>
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<tr>
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<td>Environment Promotion Department</td>
<td>Disaster and accident risks</td>
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<tr>
<td>Senior Vice President in charge of Information Technology</td>
<td>Information Systems Division</td>
<td>Environment-related risks</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>IT security-related risks</td>
<td></td>
</tr>
</tbody>
</table>
Information Security Policy

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.

Information Security Governance

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 regularly perform internal audits and collaborate with external agencies to examine our tools, infrastructure, and policy to ensure we maintain optimal levels of security.

• 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 in a timely manner.

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.

Certifications

Renesas strives to comply with global security standards to demonstrate our commitment and capabilities in protecting ourselves from security breaches. Some of the security standards we are working towards include:

• 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

• Working with customers to fully comply with TISAX by 2023 and IATF 16949 standards

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 of.

**Compliance with Tax Law**

We aim to remain compliant with the law in each country we operate in. 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 our employees have a strong understanding of tax principles.

**Tax Efficiency**

In order to maximize shareholder return, we continue to make our best effort to be efficient with our tax liabilities by applying for tax benefits and tax incentives within the scope of business objectives and legislative intents. A valid business purpose and substance is of the utmost importance to us. As such, we do not enter into transactions solely for the purpose of reducing tax burdens and we do not conduct schemes for the purpose of tax avoidance or profit shifting by using offshore secrecy jurisdictions or so-called “tax havens.”
Avoidance of Double Taxation
In order to avoid double taxation on identical economic profits, we actively seek applicable tax treaty relief and mutual agreement procedures among the countries where we conduct business.

Transfer Pricing
With regard to internal transactions within Renesas and its global subsidiaries, we aim to allocate the appropriate profit based on the arm’s length 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.
Appendix

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

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<th>TCFD RECOMMENDED DISCLOSURE</th>
<th>REFERENCE LOCATION</th>
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<tbody>
<tr>
<td><strong>Governance</strong></td>
<td></td>
</tr>
<tr>
<td>Describe the board’s oversight of climate-related risks and opportunities</td>
<td>Governance</td>
</tr>
<tr>
<td>Describe management’s role in assessing and managing climate-related risks and opportunities</td>
<td>Risk Management</td>
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<tr>
<td><strong>Strategy</strong></td>
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<tr>
<td>Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term</td>
<td>Response to the TCFD Proposal</td>
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<tr>
<td>Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning</td>
<td>Climate Change Initiatives</td>
</tr>
<tr>
<td>Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2 or lower scenario</td>
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<tr>
<td><strong>Risk Management</strong></td>
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<td>Describe the organization’s processes for identifying and assessing climate-related risks</td>
<td>Response to the TCFD Proposal</td>
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<tr>
<td>Describe the organization’s processes for managing climate-related risks</td>
<td>Risk Management</td>
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## Metrics and Targets

<table>
<thead>
<tr>
<th>Description</th>
<th>Reference</th>
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</table>
| Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process | [Response to the TCFD Proposal | Metrics and Targets](#)  
  Environmental Protection Goals                                               |
| Disclose Scopes 1 and 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and related risks | [Environmental Data and Third-Party Verification](#)  
  Climate Change Initiatives                                                 |
| Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets | [Response to the TCFD Proposal | Metrics and Targets](#)  
  Environmental Protection Goals  
  Environmental Initiatives                                                  |
## Sustainability Accounting Standards Board (SASB) Index

### SEMICONDUCTOR STANDARD

<table>
<thead>
<tr>
<th>Topic</th>
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<tr>
<td><strong>Greenhouse Gas Emissions</strong></td>
<td>TC-SC-110a.1</td>
<td>(1) Gross global Scope 1 emissions (2) Amount of total emissions from perfluorinated compounds</td>
<td>(1) 196,261 t-CO2 (2) 157,510 t-CO2</td>
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<td>TC-SC-110a.2</td>
<td>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</td>
<td>See “Our Commitment to Carbon Neutrality” section of our 2022 Sustainability report, p. 25</td>
</tr>
<tr>
<td><strong>Energy Management in Manufacturing</strong></td>
<td>TC-SC-130a.1</td>
<td>(1) Total energy consumed (2) Percentage grid electricity (3) Percentage renewable</td>
<td>(1) 1,781,592 Mwh (2) 85% (3) 1%</td>
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<tr>
<td><strong>Water Management</strong></td>
<td>TC-SC-140a.1</td>
<td>(1) Total water withdrawn (2) Total water consumed, percentage of each region with High or Extremely High Baseline Water Stress</td>
<td>(1) 15,806 km3 (2) Total water consumed: 23,403 km3. 2 facilities in China located in the area with high water stress consumed about 2% of the total water consumption of Renesas. See more detail at <a href="https://www.renesas.com/us/en/about/company/sustainability/water">https://www.renesas.com/us/en/about/company/sustainability/water</a></td>
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<tr>
<td><strong>Waste Management</strong></td>
<td>TC-SC-150a.1</td>
<td>Amount of hazardous waste from manufacturing, percentage recycled</td>
<td>(1) 20,737 t (2) 91.2% See “Waste Management” section of our 2022 Sustainability report, p. 33</td>
</tr>
<tr>
<td>Topic</td>
<td>Code</td>
<td>Accounting Metric</td>
<td>Response</td>
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<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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<td>Employee Health &amp; Safety</td>
<td>TC-SC-320a.1</td>
<td>Description of efforts to assess, monitor and reduce exposure of employees to human health hazards</td>
<td>See “Employee Health &amp; Safety” section of our 2022 Sustainability report, p. 65</td>
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<tr>
<td></td>
<td>TC-SC-320a.2</td>
<td>Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations</td>
<td>In 2022, Renesas did not incur monetary losses as a result of legal proceedings associated with employee health and safety violations</td>
</tr>
<tr>
<td>Recruiting &amp; Managing a Global &amp; Skilled Workforce</td>
<td>TC-SC-330a.1</td>
<td>Percentage of employees that are (1) foreign nationals and (2) located offshore</td>
<td>Headcounts by regions as of Dec 31, 2022: Japan 44%, Americas 11%, China 11%, EMEA 11%, Other Asia 23%. Percentage of foreign nationals is not disclosed.</td>
</tr>
<tr>
<td>Product Lifecycle Management</td>
<td>TC-SC-410a.1</td>
<td>Percentage of products by revenue that contain IEC 62474 declarable substances</td>
<td>Renesas does not disclose this information. Our approach to product hazardous substances is available in “Chemical Substance Use Management” section of our 2022 Sustainability report, p. 31</td>
</tr>
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<td></td>
<td>TC-SC-410a.2</td>
<td>Processor energy efficiency at a system-level for (1) servers, (2) desktops and (3) laptops</td>
<td>Renesas does not track this information. This is not applicable to Renesas business</td>
</tr>
<tr>
<td>Materials Sourcing</td>
<td>TC-SC-440a.1</td>
<td>Description of the management of risks associated with the use of critical materials</td>
<td>See “Engagement with Our Supply Chain and Partners” section of our 2022 Sustainability report, p. 71</td>
</tr>
<tr>
<td>Anti-Competitive Behavior Litigations</td>
<td>TC-SC-520a.1</td>
<td>Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations</td>
<td>In 2022, Renesas did not incur monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations.</td>
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</table>
## Global Reporting Initiative (GRI) Index

### GRI STANDARD

<table>
<thead>
<tr>
<th>Organizational Profile</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>102-1</strong> Name of reporting organization</td>
<td>Renesas Electronics Corporation</td>
</tr>
<tr>
<td><strong>102-2</strong> Activities, brands, products and services</td>
<td>About Renesas, page 5</td>
</tr>
<tr>
<td><strong>102-3</strong> HQ Location</td>
<td>About Renesas, page 7</td>
</tr>
<tr>
<td><strong>102-4</strong> Location of operations</td>
<td>About Renesas, page 7</td>
</tr>
<tr>
<td><strong>102-5</strong> Ownership and legal form</td>
<td>Renesas is traded and listed in Tokyo Stock Exchange (TSE:6723)</td>
</tr>
<tr>
<td><strong>102-6</strong> Markets served</td>
<td>About Renesas, page 5</td>
</tr>
<tr>
<td><strong>102-7</strong> Scale of the organization</td>
<td>About Renesas, page 6</td>
</tr>
<tr>
<td><strong>102-8</strong> Information on employees and other workers</td>
<td>About Renesas, page 6, Diversity, Equity and Inclusion, page 56</td>
</tr>
<tr>
<td><strong>102-9</strong> Supply chain</td>
<td>Engagement with Our Supply Chain and Partners, page 71</td>
</tr>
<tr>
<td><strong>102-10</strong> Significant changes to the organization and its supply chain</td>
<td>Engagement with Our Supply Chain and Partners, page 71</td>
</tr>
<tr>
<td><strong>102-11</strong> Precautionary Principle or approach to environmental challenges</td>
<td>Renesas practices a precautionary approach to support environmental challenges.</td>
</tr>
<tr>
<td><strong>102-12</strong> External initiatives</td>
<td>Index Inclusion &amp; Participating Initiatives, page 19, Diversity, Equity and Inclusion, page 55, Engagement with Our Supply Chain and Partners, page 71</td>
</tr>
<tr>
<td><strong>102-13</strong> Membership of associations</td>
<td>Index Inclusion &amp; Participating Initiatives, page 19, Engagement with Our Supply Chain and Partners, page 71</td>
</tr>
</tbody>
</table>
### Strategy

| 102-14 | Statement from senior decision-maker | A Letter from Leadership, page 3 |

### Ethics and Integrity

| 102-16 | Values, principles, standards and norms of behavior | Our Sustainability Approach, page 10, Renesas Culture, page 8 |

### Governance

| 102-18 | Governance structure | Governance, Our governance structure, page 76 |
| 102-19 | Process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and their employees | Sustainability approach, Sustainability Promotion structure, page 17 |

### Stakeholder Engagement

| 102-40 | List of stakeholder groups | Our stakeholders are customers, suppliers, industry association, communities & NGOs, rating agencies and employees |
| 102-41 | Collective bargaining agreements | 53% of employees covered by the collective bargaining agreement in 2022 |
| 102-43 | Approach to stakeholder engagement | Sustainability approach, Materiality assessments & Results, page 10 |
| 102-44 | Key topics and concerns raised | Sustainability approach, Materiality assessments & Results, page 10 |
### Reporting Practice

| 102-45 | Entities included in the consolidated financial statements | About Renesas, page 7 |
| 102-47 | List of material topics | ESG Targets: Overview, page 13 |
| 102-48 | Restatements of information | Not applicable as this is Renesas’ first report |
| 102-49 | Changes in reporting | Not applicable as this is Renesas’ first report |
| 102-50 | Reporting period | Fiscal year 2022, which began on January 1, 2022 and ended on December 31, 2022. |
| 102-51 | Date of most recent report | Not applicable as this is Renesas’ first report |
| 102-52 | Reporting cycle | Annual |
| 102-53 | Contact point | Sustainability Promotion Office |
| 102-54 | Claims of reporting in accordance with GRI Standards | About This Report, page 105 |
| 102-55 | GRI Index | Page 90 |
| 102-56 | External assurance | This Report was not externally assured. |

### Our Approach to ESG

#### Product Innovation

| 103-1,2,3 | Management approach | Sustainability approach, Innovation for a Sustainable Future, page 16 |
|          |                     | Environmental, Eco-Product Initiatives, page 35 |
## ESG Governance

| 103-1,2,3 | Management approach | Sustainability approach, Sustainability Promotion structure, [page 17](#) |
| 405-1 | Diversity of governance bodies and employees | Social, Diversity, Equity and Inclusion, [page 55](#) |

## Supply Chain Engagement

| 103-1,2,3 | Management approach | Social, Engagement with Our Supply Chain and Partners, [page 71](#) |
| 308-1 | New suppliers screened using environmental criteria | Renesas does not disclose this information. |
| 308-2 | Negative environmental impacts in the supply chain and actions taken | Social, Engagement with Our Supply Chain and Partners, [page 71](#) |
| 414-1 | New suppliers screened using social criteria | Renesas does not disclose this information. |
| 414-2 | Negative social impacts in the supply chain and actions taken | Social, Engagement with Our Supply Chain and Partners, [page 71](#) |

## Environment

### Climate Change

| 103-1,2,3 | Management approach | Environmental, Environmental Initiatives, [page 23](#) |
| 302-1 | Energy consumption within the organization | 1,781,592 Mwh |
| 305-1 | Scope 1 GHG emissions | 196,261 t-CO2 |
| 305-2 | Scope 2 GHG emissions | 719,066 t-CO2 |
| 305-3 | Scope 3 GHG emissions | 2,093,087 t-CO2 |
| 305-5 | Reduction of emissions intensity | Environmental, Our Commitment to Carbon Neutrality, [page 25](#) |
### Water

<table>
<thead>
<tr>
<th></th>
<th>Management Approach</th>
<th>Environmental, Conserving Water, [page 28]</th>
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</thead>
<tbody>
<tr>
<td>103-1,2,3</td>
<td>Interactions with water as a shared resource</td>
<td>Environmental, Conserving Water, [page 28]</td>
</tr>
<tr>
<td>303-1</td>
<td>Management of water discharge-related impacts</td>
<td>Environmental, Conserving Water, [page 28]</td>
</tr>
<tr>
<td>303-2</td>
<td>Water withdrawal</td>
<td>Environmental Data, [page 97]</td>
</tr>
<tr>
<td>303-3</td>
<td>Water discharge</td>
<td>Environmental Data, [page 97]</td>
</tr>
<tr>
<td>303-4</td>
<td>Water consumed</td>
<td>Environmental Data, [page 97]</td>
</tr>
<tr>
<td>303-5</td>
<td></td>
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</table>

### Waste

<table>
<thead>
<tr>
<th></th>
<th>Management Approach</th>
<th>Environmental, Waste Management, [page 33]</th>
</tr>
</thead>
<tbody>
<tr>
<td>103-1,2,3</td>
<td>Waste generation and significant waste-related impacts</td>
<td>Environmental, Waste Management, [page 33], Environmental Data, [page 97]</td>
</tr>
<tr>
<td>306-1</td>
<td>Management of significant waste-related impacts</td>
<td>Environmental, Waste Management, [page 33]</td>
</tr>
<tr>
<td>306-2</td>
<td>Waste diverted from disposal</td>
<td>Environmental Data, [page 97]</td>
</tr>
<tr>
<td>306-4</td>
<td></td>
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© Renesas Electronics Corporation 2022 Sustainability Report
## Social

### Inclusion and Diversity

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<tr>
<td>103-1,2,3</td>
<td>Management approach</td>
<td>Our Sustainability Approach, <a href="#">page 10</a></td>
</tr>
<tr>
<td>405-1</td>
<td>Diversity of governance bodies and employees</td>
<td>Diversity, Equity and Inclusion, <a href="#">page 53</a></td>
</tr>
<tr>
<td>405-2</td>
<td>Ratio of basic salary and remuneration of women to men</td>
<td>Diversity, Equity and Inclusion, <a href="#">page 58</a></td>
</tr>
</tbody>
</table>

Also refer to our webpage:

### Employee Attraction, Development, Engagement & Retention

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<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Reference</th>
</tr>
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<tbody>
<tr>
<td>103-1,2,3</td>
<td>Management approach</td>
<td>Social, Investment in Human Capital, <a href="#">page 60</a></td>
</tr>
<tr>
<td>401-1</td>
<td>New employee hires and employee turnover</td>
<td><a href="#">https://www.renesas.com/us/en/about/company/sustainability/human-resources-data</a></td>
</tr>
<tr>
<td>404-1</td>
<td>Average hours of training per year per employee</td>
<td>15.1 hours of training per employees.</td>
</tr>
<tr>
<td>404-2</td>
<td>Programs for upgrading employee skills and transition assistance programs</td>
<td>Social, Investment in Human Capital, <a href="#">page 60</a></td>
</tr>
<tr>
<td>404-3</td>
<td>Percentage of employees receiving regular performance and career development reviews</td>
<td>Social, Investment in Human Capital, <a href="#">page 60</a></td>
</tr>
</tbody>
</table>

### Employee Wellness, Health & Safety

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>103-1,2,3</td>
<td>Management approach</td>
<td>Social, Employee Health &amp; Safety, <a href="#">page 65</a></td>
</tr>
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### Human Rights

<table>
<thead>
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<th>Description</th>
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</thead>
<tbody>
<tr>
<td>103-1,2,3</td>
<td>Management approach</td>
<td></td>
</tr>
<tr>
<td>412-2</td>
<td>Employee training on human rights policies or procedures</td>
<td></td>
</tr>
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</table>

Social, Commitment to Protecting Human Rights, page 61

### Community Engagement

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>103-1,2,3</td>
<td>Management approach</td>
<td></td>
</tr>
<tr>
<td>201-1</td>
<td>Direct economic value generated and distributed</td>
<td></td>
</tr>
</tbody>
</table>

Social Contribution Through Community Involvement, page 68

### Governance

#### Ethics & Compliance

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>103-1,2,3</td>
<td>Management approach</td>
<td></td>
</tr>
</tbody>
</table>

Governance, Compliance & Business Ethics, page 78

#### Data Security & Privacy

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>103-1,2,3</td>
<td>Management approach</td>
<td></td>
</tr>
</tbody>
</table>

Governance, Information Security Policy, page 82
## Environmental Data

### GHG EMISSIONS (2022 DATA)

(Source: Environmental Data and Third-Party Verification)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Range and Calculation Method</th>
<th>Emission amount (t-CO2)</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct emission of greenhouse gases</td>
<td>Greenhouse gases emitted by Renesas</td>
<td>196,261</td>
<td>6.52%</td>
</tr>
<tr>
<td>Emission of PFC gases (Amount included in the total)</td>
<td></td>
<td>157,510</td>
<td>—</td>
</tr>
<tr>
<td><strong>Scope 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect emission from the use of electricity, heat and steam</td>
<td>Indirect emission following the use of electricity and gases provided by other companies</td>
<td>719,066</td>
<td>23.90%</td>
</tr>
<tr>
<td><strong>Scope 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[C1] Purchased goods and services</td>
<td>Emission following procurement of materials and production outsourcing</td>
<td>1,842,705</td>
<td>61.25%</td>
</tr>
<tr>
<td>[C2] Capital goods</td>
<td>Emission following the increase of production equipment</td>
<td>120,942</td>
<td>4.02%</td>
</tr>
<tr>
<td>[C3] Fuel- and energy-related activities not included in Scope 1 and 2</td>
<td>Emissions from upstream processes of procured electricity and fuel</td>
<td>112,074</td>
<td>3.73%</td>
</tr>
<tr>
<td>[C4] Upstream transportation and delivery</td>
<td>Emissions from production logistics within Japan</td>
<td>428</td>
<td>0.01%</td>
</tr>
<tr>
<td>[C5] Waste generated by operation</td>
<td>Emissions from transportation and disposal of waste conducted by another party</td>
<td>6,843</td>
<td>0.23%</td>
</tr>
<tr>
<td>[C6] Business travel</td>
<td>Emissions from employee business trips</td>
<td>6,823</td>
<td>0.23%</td>
</tr>
<tr>
<td>[C7] Employee commuting</td>
<td>Emissions from employee commutes in Japan</td>
<td>3,272</td>
<td>0.11%</td>
</tr>
<tr>
<td>[C8] Upstream leased assets</td>
<td>Not applicable (included in Category 1)</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>[C9] Downstream transportation and delivery</td>
<td>Not applicable</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

*(Source: Environmental Data and Third-Party Verification)*
## 2022 Classification Range and Calculation Method

<table>
<thead>
<tr>
<th>2022</th>
<th>Classification</th>
<th>Range and Calculation Method</th>
<th>Emission amount (t-CO2)</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope 3</strong></td>
<td>[C10] Processing of sold products</td>
<td>Not applicable</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>[C11] Use of products sold</td>
<td>Not applicable</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>[C12] Disposal of sold products</td>
<td>Not applicable</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>[C13] Downstream leased assets</td>
<td>Not applicable</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>[C14] Franchises</td>
<td>Not applicable</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>[C15] Investments</td>
<td>Not applicable</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>3,008,414</td>
<td>100%</td>
</tr>
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</table>
### ENERGY CONSUMPTION (2022 DATA)

<table>
<thead>
<tr>
<th>Category 1</th>
<th>Category 2</th>
<th>Unit</th>
<th>Japan</th>
<th>Outside Japan</th>
<th>Worldwide</th>
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</thead>
<tbody>
<tr>
<td><strong>Total Energy</strong></td>
<td></td>
<td>MWh</td>
<td>1,493,746</td>
<td>287,846</td>
<td>1,781,592</td>
</tr>
<tr>
<td>Electricity</td>
<td></td>
<td>MWh</td>
<td>1,240,642</td>
<td>269,270</td>
<td>1,509,912</td>
</tr>
<tr>
<td>(Include) Renewable Energy</td>
<td></td>
<td>MWh</td>
<td>13,584</td>
<td>1,305</td>
<td>14,890</td>
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<tr>
<td>Steam</td>
<td></td>
<td>MWh</td>
<td>68,561</td>
<td>16,887</td>
<td>85,449</td>
</tr>
<tr>
<td>Gas</td>
<td></td>
<td>MWh</td>
<td>129,425</td>
<td>1,678</td>
<td>131,102</td>
</tr>
<tr>
<td>Other Fuels</td>
<td></td>
<td>MWh</td>
<td>55,118</td>
<td>11</td>
<td>55,129</td>
</tr>
<tr>
<td><strong>Factory</strong></td>
<td></td>
<td>MWh</td>
<td>1,492,987</td>
<td>287,846</td>
<td>1,780,833</td>
</tr>
<tr>
<td>Electricity</td>
<td></td>
<td>MWh</td>
<td>1,239,883</td>
<td>269,270</td>
<td>1,509,153</td>
</tr>
<tr>
<td>(Include) Renewable Energy</td>
<td></td>
<td>MWh</td>
<td>13,134</td>
<td>1,305</td>
<td>14,439</td>
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<tr>
<td>Steam</td>
<td></td>
<td>MWh</td>
<td>68,561</td>
<td>16,887</td>
<td>85,448</td>
</tr>
<tr>
<td>Gas</td>
<td></td>
<td>MWh</td>
<td>129,425</td>
<td>1,678</td>
<td>131,103</td>
</tr>
<tr>
<td>Other fuels</td>
<td></td>
<td>MWh</td>
<td>55,118</td>
<td>11</td>
<td>55,129</td>
</tr>
<tr>
<td>Category 1</td>
<td>Category 2</td>
<td>Unit</td>
<td>Japan</td>
<td>Outside Japan</td>
<td>Worldwide</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------</td>
<td>------</td>
<td>-------</td>
<td>---------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Office</td>
<td></td>
<td>MWh</td>
<td>760</td>
<td>—</td>
<td>760</td>
</tr>
<tr>
<td>Electricity</td>
<td></td>
<td>MWh</td>
<td>760</td>
<td>—</td>
<td>760</td>
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<tr>
<td>(Include) Renewable Energy</td>
<td></td>
<td>MWh</td>
<td>451</td>
<td>—</td>
<td>451</td>
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<tr>
<td>Steam</td>
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<td>MWh</td>
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<tr>
<td>Gas</td>
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<tr>
<td>Other fuels</td>
<td></td>
<td>MWh</td>
<td>0</td>
<td>—</td>
<td>0</td>
</tr>
<tr>
<td>Energy Consumption per Revenue</td>
<td>Consolidated Revenue</td>
<td>Oku yen</td>
<td>—</td>
<td>—</td>
<td>15,027</td>
</tr>
<tr>
<td>per Revenue</td>
<td></td>
<td>MWh/Oku yen</td>
<td>—</td>
<td>—</td>
<td>119</td>
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</tbody>
</table>
## WATER (2022 DATA)

<table>
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<th>Unit</th>
<th>Japan</th>
<th>Outside Japan</th>
<th>Worldwide</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Amount Used (Water Intake + Recycled Water)</strong></td>
<td></td>
<td>Km3</td>
<td>21,406</td>
<td>1,997</td>
<td>23,403</td>
</tr>
<tr>
<td><strong>Total Water Withdrawal by Source</strong></td>
<td></td>
<td>Km3</td>
<td>13,870</td>
<td>1,936</td>
<td>15,806</td>
</tr>
<tr>
<td>Surface Water (Rivers, Lakes, Ponds)</td>
<td></td>
<td>Km3</td>
<td>8,865</td>
<td>477</td>
<td>9,342</td>
</tr>
<tr>
<td>Ground Water (Wells, Boreholes)</td>
<td></td>
<td>Km3</td>
<td>4,656</td>
<td>0</td>
<td>4,656</td>
</tr>
<tr>
<td>Municipal Water (Tap Water)</td>
<td></td>
<td>Km3</td>
<td>349</td>
<td>1,459</td>
<td>1,808</td>
</tr>
<tr>
<td>Ocean Water</td>
<td></td>
<td>Km3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Others (Rain Water, Quarries, External Effluents)</td>
<td></td>
<td>Km3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Recycled Water</strong></td>
<td></td>
<td>Km3</td>
<td>7,536</td>
<td>61</td>
<td>7,597</td>
</tr>
<tr>
<td><strong>Water Recycled and Reused</strong></td>
<td></td>
<td>%</td>
<td>35</td>
<td>3</td>
<td>32</td>
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## ENVIRONMENTAL DATA CONTINUED

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<th>Outside Japan</th>
<th>Worldwide</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Water Discharge</strong></td>
<td></td>
<td>Km3</td>
<td>11,513</td>
<td>1,176</td>
<td>12,689</td>
</tr>
<tr>
<td><em>There is no discharge made to the ground surface</em></td>
<td>Public Water (Ocean)</td>
<td>Km3</td>
<td>10,952</td>
<td>374</td>
<td>11,326</td>
</tr>
<tr>
<td></td>
<td>Sewerage (Off-Site Water Treatment)</td>
<td>Km3</td>
<td>561</td>
<td>462</td>
<td>1,022</td>
</tr>
<tr>
<td></td>
<td>Others (Underground, Wells)</td>
<td>Km3</td>
<td>0</td>
<td>341</td>
<td>341</td>
</tr>
<tr>
<td><strong>Water Use per Revenue</strong></td>
<td>Consolidated Revenue</td>
<td>Oku yen</td>
<td>—</td>
<td>—</td>
<td>15,027</td>
</tr>
<tr>
<td></td>
<td>per Revenue</td>
<td>Km3/Oku yen</td>
<td>—</td>
<td>—</td>
<td>1.6</td>
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## CHEMICAL SUBSTANCES (2022 DATA)

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<th>Unit</th>
<th>Japan</th>
<th>Outside Japan</th>
<th>Worldwide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Substances (subject to PRTR Law)</td>
<td>Transaction Volume</td>
<td>t</td>
<td>1,353</td>
<td>18</td>
<td>1,371</td>
</tr>
<tr>
<td>VOC</td>
<td>Emissions (Atmosphere)</td>
<td>t</td>
<td>367</td>
<td>—</td>
<td>367</td>
</tr>
</tbody>
</table>

## WASTE (2022 DATA)

<table>
<thead>
<tr>
<th>Category 1</th>
<th>Category 2</th>
<th>Unit</th>
<th>Japan</th>
<th>Outside Japan</th>
<th>Worldwide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Waste</td>
<td></td>
<td>t</td>
<td>16,787</td>
<td>3,950</td>
<td>20,737</td>
</tr>
<tr>
<td>Total Hazardous Waste</td>
<td></td>
<td>t</td>
<td>2,085</td>
<td>1,561</td>
<td>3,646</td>
</tr>
<tr>
<td>Recycling</td>
<td></td>
<td>t</td>
<td>1,830</td>
<td>687</td>
<td>2,517</td>
</tr>
<tr>
<td>Landfill</td>
<td></td>
<td>t</td>
<td>3</td>
<td>779</td>
<td>782</td>
</tr>
<tr>
<td>Others (Intermediate processes, etc.)</td>
<td></td>
<td>t</td>
<td>252</td>
<td>95</td>
<td>347</td>
</tr>
<tr>
<td>Total Non Hazardous Waste</td>
<td></td>
<td>t</td>
<td>14,702</td>
<td>2,389</td>
<td>17,091</td>
</tr>
<tr>
<td>Recycling</td>
<td></td>
<td>t</td>
<td>14,228</td>
<td>1,467</td>
<td>15,695</td>
</tr>
<tr>
<td>Landfill</td>
<td></td>
<td>t</td>
<td>10</td>
<td>922</td>
<td>932</td>
</tr>
<tr>
<td>Others (Intermediate processes, etc.)</td>
<td></td>
<td>t</td>
<td>464</td>
<td>0</td>
<td>464</td>
</tr>
</tbody>
</table>

(Source: Environmental Data and Third-Party Verification)
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 of the “2022 Sustainability Report” (Scope 1, 2, 3) and the “2022 Calculation report for energy consumption” (Scope 1, 2). Calculation report for energy consumption is calculated using the formula "Energy consumption = Energy output (GWh) / Energy rate (GWh)." The calculation was performed for the fiscal year ending December 31, 2022. The verification was conducted in a workable manner for the accuracy of the data collected and the calculation methods used. The conclusion of the verification is based on the verification procedures, and the results are presented in this report. The reports presented were reviewed by the Company’s own facilities.

2. Procedure Performed

JQA conducted verification in accordance with “ISO 14067” for GHG emissions from Scope 1, 2 & 3, and with “ISAE3000” for the verification of Scope 2. The verification was conducted in a workable manner for the accuracy of the data collected and the calculation methods used. The conclusion of the verification is based on the verification procedures, and the results are presented in this report. The reports presented were reviewed by the Company’s own facilities.

3. Conclusion

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

4. Considerations

The Company is responsible for preparing the Reports, and JQA is responsible for conducting verification of GHG emissions, energy consumption, and water usage in the Reports only. In any event, it is understood that the Company and JQA have worked together to prepare the Reports.

*Please refer to the Appendix for the next page.

(Source: Environmental Data and Third-Party Verification)
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 2022, from January 1, 2022 until December 31, 2022. 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 2023.

This report has been prepared in accordance with Global Reporting Initiative (GRI) Standards: Core option, 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 85–104) 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 2022 ending on December 31, 2022 has been reviewed and verified by a third party (see page 104). 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.

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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, particularly the rate between the yen and the U.S. dollar. 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.