Special Feature

Helping Solve Social Issues through Further Advancement of SiC Power Devices



Performance Improvements in SiC Power Devices Support the Shift to EVs

As the electrification of automobiles advances around the world, it has been pointed out that it feels like the growth in the market for electric vehicles (EV) is slowing down in some regions against a backdrop of reduced government subsidies in various countries and saturated demand in FY2023. However, we believe at ROHM that the shift to EVs will steadily advance over the medium- to long-term, and it will become an important driver for the realization of a decarbonized society. The adoption of SiC power devices with low power loss in inverters is essential for extending the travel distance while curtailing the increase in EV battery capacity. Because SiC power devices have a lower specific on resistance compared to Si devices and they demonstrate high performance even under high-temperature and high-voltage environments, their adoption especially in EVs is accelerating, and it is expected that they will come into wide use. In order to differentiate ourselves from our competitors going forward, ROHM will further raise its cost competitiveness and capture market share by increasing device performance and shifting to 8-inch SiC substrates.

EV Production Volume and SiC Market Scale Forecasts



ROHM's Position Within the SiC Market



Contributing to the reduction of GHG emissions, evolving our strengths, and competing based on speed

We perceive SiC power devices as products that will powerfully drive the transition to a decarbonized society. The application of SiC power devices in EVs is receiving the most attention and is the focus of our efforts. To further expand the market, we are advancing the development of high-voltage SiC power devices used in a broad range of applications such as solar and wind power generation, railways, and electric aircraft. As the competitive environment in the SiC market intensifies, we can list three strengths that ROHM possesses. The first strength is our unrivaled device development technology, the second is our integrated production system which enables us to develop and manufacture substrates, devices, and packages in-house, and the third is our possession of analog IC technology that drives and controls power devices such as isolated gate driver ICs as well as our ability to offer integrated proposals of power devices and analog ICs. Within the next five to ten years, Chinese companies are expected to rise to prominence, so in order to compete with them, we will further accelerate the evolution of device performance, which is our greatest strength. (→ P55 Progress of the Medium-Term Management Plan for Power Devices) While there are immediate concerns about the impact of the slowing EV growth rate, we believe that the global movement toward a decarbonized society will not change over the medium- to long-term and anticipate that it will definitely expand. To survive under such circumstances, the most important thing is overwhelming other companies with speed. Our goal is to increase development speed based on ROHM's integration of knowledge across a wide range of SiC materials, devices, and equipment as well as our accumulation of knowledge built up thus far to aim for a market share of 30% or more.

Become a leading manufacturer of 8-inch SiC wafers with our strong unity "ONE ROHM"

SiCrystal, which became part of the ROHM Group in 2009, has more than 25 years of experience in the entire process chain from SiC crystal growing to the finished substrate. We have built up a wealth of knowledge that includes not only process expertise but also machine technology, and we are highly competitive due to the crystal growth systems we have developed.

Our ability to respond quickly to changing market requirements through in-house substrate production in close cooperation with ROHM is a major advantage. ROHM, on the other hand, benefits from SiCrystal as a reliable source of substrates, which allows to cover even a large demand. Our "ONE ROHM" philosophy and this strong cohesion make us unique among substrate manufacturers.

We have been massively expanding our production capacity of 8-inch SiC substrates, and we are continuing to do so in order to meet the rapidly growing demand for high-quality 8-inch SiC substrates. At the same time, we are steadily improving the sub-processes and thus the quality of the substrates as well as the efficiency of our 8-inch production lines.

In recent years, Chinese substrate manufacturers have started to enter the market. In order to remain competitive, it is crucial for us to produce large quantities of 8-inch SiC substrates with consistently high quality at attractive prices under sustainable conditions. The 8-inch market is still at the very beginning, and we will certainly do our utmost to remain one of the leading manufacturers.

Our vision is to be a globally acting company with multiple locations around the world, being the preferred vendor for SiC substrates. With our business we want to actively contribute to a sustainable, carbon neutral future for our society, being a profitable company satisfying its shareholders.

Target for SiC Sales and the Status of the Pipeline and Design Wins

Sales target 110 billion yen or more (FY2025) and 220 billion yen or more (FY2027) *Converted at a rate of \$1 = ¥145

For the SiC power devices business, we have set a sales target of 110 billion ven or more in FY2025 and 220 billion yen or more in FY2027. We have a total pipeline (projects under discussion with customers) of approximately 700 billion yen from FY2025 to FY2027, and with respect to design wins (projects where designs have been adopted by customers), we are receiving strong demand from China, Europe, the Americas, and Japan without relying on a particular region. We have already confirmed design wins with over 130 companies and are expanding our business worldwide in a well-balanced manner.



Dr. Kazuhide Ino Member of the Board, Managing Executive Officer, in charge of Power Device Business



Dr. Robert Eckstein President and CEO SiCrystal GmbH



Business Overview by Segment

ICs

We will address market needs by further advancing miniaturization, efficiency, and functionality in our products



In April 2024, ROHM completed an absorption-style merger with LAPIS Technology Co., Ltd., a wholly owned subsidiary engaged in IC planning and development. Through this action, we strengthened the management structure of the Group as a whole to enhance competitiveness.

ROHM's IC business has developed products with a focus on analog ICs that serve as the entrance and exit points of electronic equipment systems, along with power supplies that support the systems as a whole. As the analog portion entails application-specific issues, pinpointing the needs of customers is vital. This is an area of advantage for ROHM, with its culture of deep communication with users. Through our integration with LAPIS Technology, which holds MCU-related and other digital processing technologies, we will develop high-value-added products through the fusion of analog, power, and digital technologies and will strive to provide customers with even greater ease of use.

At the same time, ROHM faces the following major challenges: environmental issues exemplified by decarbonization, boosting



Isolated gate driver ICs Controlling power devices, such as those in the drive units of electric vehicles. ROHM's unique microfabri cation technology contributes to miniaturization and higher efficiency of inverters for automobiles

the efficiency of the industry through DX to address the decline in the younger population, and ensuring the businesses resilience required to withstand geopolitical risks. Looking at our business environment, electrification and higher performance in the automotive market, which accounts for half of our sales, are major trends pushing up demand for semiconductors. Under these circumstances, we must respond to market needs through further miniaturization, efficiency improvement, and performance improvement in our products. As for consumer products, our motor control technologies contribute to greater efficiency in air conditioners and heat pumps. We plan to roll out original products that achieve both high efficiency and miniaturization through the practical application of new technologies utilizing GaN devices.

To attain the status of a major global player by FY2030, we will engage in selection and concentration and will expand our business domains by enhancing added value. I see my role as tackling new challenges to create a vibrant group led by frontline staff members.



power supply solutions

Power management/Power supply ICs (PMICs) We have a diverse lineup of application-specific system power supplies to meet various uses and specifications. In addition to consume products, we are expanding the product lineup of various PMICs for each electronic control unit (ECU) for automotive use

LAPIS Microcontrollers (MCUs) We offer high-performance MCUs that control the power and analog devices that are ROHM's strength, achieving high-efficiency motor and

ROHM's Position (2023)						
Worldwide analog IC manufacturer sales ranking (Millions of U.S. dollars)		Worldwide analog IC market				
		(Millions of U.S. dollars)	Total market	ROHM's share		
Rank	Company name	Sales	83.336 million U.S. dollars	17 th 1.1%		
1	Texas Instruments	12,785	,			
2	Analog Devices	10,837	Automotive-Analog ASSP,	Industrial & Other-Analog ASSP,		
3	Qualcomm	8,067	Automotive-Analog ASIC	Industrial & Other–Analog ASIC		
4	STMicroelectronics	5,117	Total market	Total market		
5	NXP	4,235	14,168 million U.S. dollars	4,906 million U.S. dollars		
:			BOHM's share	ROHM's share		
17	ROHM	939	12th 2.6%	16th 1.1%		
Source: Cor	npetitive Landscaping Tool CLT, Annual	2Q24				

Performance Highlights





Progress of the Medium-Term Management Plan Improving the sales ratio of the ASSP strategic TOP 10 products

To further increase sales and profits in ICs over the five-year period of the Medium-Term Management Plan, we aim to strengthen the automotive field overseas as well as in Japan, home appliances in the consumer products field, and the PC and server field. Sales of isolated gate driver ICs, LED driver ICs, and ADAS* solutions are growing steadily in the automotive market, which is expected to grow under the advancement of electrification, and adoption is expanding among both Japanese and overseas customers.



Column

Toward the Realization of a Sustainable Society

Development of small, energy-saving DC-DC converter ICs using the SOT23 package

The increase in semiconductor applications in consumer and industrial equipment in recent years has created demands for space-saving substrates, and the adoption rate of small DC-DC converter ICs is increasing. As reduction of standby power is also a key issue. DC-DC converter ICs also face demands for higher efficiency under low power use (under light load). ROHM has responded to these market demands Compact DC-DC converter IC by developing four compact DC-DC converter IC models that achieve higher efficiency in a smaller package than the existing SOP-J8 package, and began mass production in March 2024. These products are ideal for consumer and industrial equipment applications including refrigerators, washing machines, PLCs, and inverters. All four models are able to reduce component footprint by approximately 72% compared to the general SOP-J8 package, greatly contributing to the miniaturization of power supplies. The models use wireless structure packages, reducing wire impedance (the cause of resistance in wiring) and achieving high-efficiency operation. ROHM will continue to focus on the development of products that fully leverage our analog design technologies, and will contribute to miniaturization and energy saving in consumer and industrial equipment applications.

Key Products

We aim to raise the average unit price of ICs and improve the profit margin of the business overall by positioning highsales-growth and high-added-value areas as strategic TOP 10 areas and by increasing the sales composition ratios of those areas. In FY2023, performance in ICs overall struggled under sluggish demand and customer inventory adjustments but the sales ratio of the strategic TOP 10 rose to 31% from 27% in the previous fiscal year. By introducing products with high added value, we will work to continuously improve the sales ratio of the strategic TOP 10 and expand sales and profit in the medium and long terms.





Discrete Semiconductor Devices

Performance Highlights





Capital expenditures/R&D expenses



Power Devices

Making ROHM synonymous with power devices through fifth-generation SiC MOSFET development and making molded modules the de facto standard



Whereas CPUs and memory associated with semiconductors can be compared to the "brain" in applications, power devices can be compared to "muscles." Power devices contribute to enhanced efficiency in power conversion throughout daily life.

ROHM offers a diverse lineup of products. In addition to IGBTs, SJMOSs, power transistors, power diodes, and other Si-based products, ROHM is focusing on SBDs and MOSFETs made of SiC. We have also begun mass production of HEMTs made from GaN. There are also IPMs and power modules that are mounted with multiple devices including these products.

Optimal power devices for each customer differs depending on the power, frequencies, system costs, and other factors on the customer side. The reason we are able to expand our market share in power devices despite ROHM being a latecomer to the market is because we hold an application-based perspective that lets us propose the optimal combinations of devices and operating conditions matched to the customer's topology (circuit configurations). To solve

customer issues, we collaborate with the System Solutions Engineering Headquarters and FAEs in Technical Centers around the world.

The SiC power device market is continuing to grow, despite the influence of conditions in the xEV traction inverter market, which is predicted to account for about 70% of the SiC power device market. Winning in this market will require that we continue to lead in technology as well as in customer support and cost competitiveness. Our fifth-generation MOSFET will enter mass production in FY2025. Our TRCDRIVE PACK™ molded module offers value to customers through its enhancement of power density and ease of installation. Its high compatibility with mass production, in the same manner as discrete semiconductor devices, is another strength of the product, which we aim to make a de facto standard.

While we will naturally pursue sales and market share, we also aim to make the name ROHM synonymous with power devices, and intend to earn a position of trust among customers through our technology, human resources, quality, and supply.





SiC power device We offer a broad lineup of bare chips, discrete products, and modules that contribute to miniaturization and efficiency in high-power applications. (Details of strategy are described on p. 50)

ROHM's Position (2023)

Worldwide power device manufacturer sales ranking

		(Millions of U.S. dollars)		
Rank	Company name	Sales		
1	Infineon Technologies	7,399		
2	onsemi	3,166		
3	STMicroelectronics	2,798		
4	Mitsubishi Electric	1,553		
5	Fuji Electric	1,386		
:				
9	ROHM	913		
Source: Competitive Landscaping Tool CLT, Annual 2024				

Progress of the Medium-Term Management Plan

Expanding the sales of power devices and developing them into a core business

In FY2021 through FY2027, we aim to achieve a CAGR of 24.7% in the power device business, a rate that exceeds growth in the market. Sales in FY2023 increased only 6% from the previous year amid sluggish market conditions, but SiC power devices continue to grow rapidly. We have also begun cooperation on manufacturing with Toshiba Electronic Devices & Storage. The appeal of this collaboration is that both companies can benefit from economies of scale in mass production. Through focused investment by ROHM in SiC and by Toshiba Electronic Devices & Storage in Si, we aim to enhance our cost competitiveness.

An SiC business leading the industry through innovative technologies and cost competitiveness

To remain a technology leader, ROHM is engaged in simultaneous development of multiple generations of products. Our fifth-generation SiC MOSFET, slated to enter mass production in FY2025, is expected to improve specific on resistance per unit area by 30% under high temperature compared to the fourth generation, and achieve the highest performance in the world. We are also undertaking development of the sixth and later generations, with support from the Japanese government's Green Innovation Fund.

otal market 25,713 million U.S. dollars

ROHM's share 10th 2.3%

Total market 4,313 million U.S. dollars

ROHM's share 5th 7.3%

At the same time, we are making a shift to 8-inch wafers and are increasing our cost competitiveness. We will begin shipping devices made at our Chikugo Plant in FY2025, while our Miyazaki Plant No. 2, acquired in 2023, is scheduled to begin wafer production from FY2024. (→P. 50 Special Feature)

Start of mass production of GaN devices

GaN is capable of higher-frequency operation than SiC, making it suitable for applications that demand miniaturization such as AI-related server power supplies and AC adapters. As GaN devices are more difficult to drive than SiC, however, it is important to offer GaN devices as sets with analog ICs. In addition to mass production of GaN devices in 2023, we have also begun mass production of "System in Package" that combines dedicated high-frequency ICs with GaN devices into a single unit. This product is able to contribute to reduced development time for customers' power supply systems overall. We are also accelerating our collaboration with Delta Electronics, the world's top manufacturer of power supplies. This has resulted in the adoption of our EcoGaN™ GaN

device into the "C4 Duo," a 45W-output AC adapter in Delta Electronics' Innergie line. (→P. 61 Example of environmentally friendly product development: GaN devices)



Business Overview by Segment

General-Purpose Devices

Aiming to secure share in the Japanese automotive market and expand into overseas markets through miniaturization and high-productivity technologies



While the general-purpose device business is a mature one, its

market is expected to grow slowly over the medium to long term

competition characterized by low prices under national policies in

China. Accordingly, I believe that the challenges that we face in

securing a supply chain with various risks considered, expansion

of market share in overseas markets where demand is expected

to grow, the development of human resources with global per-

understanding of appropriate quality for regions and markets,

spectives regarding culture, sense of values, and business style,

and enhancement of cost competitiveness. My role is to enhance

employee engagement and psychological safety, create an orga-

nization where one is able to innovate without fear of failure, and,

to make the most of company-wide resources, strengthen coop-

hope to enhance the sense of unity within the organization overall

eration with other headquarters and promote "ONE ROHM." I

and build a foundation for working as one to achieve targets.

achieving the status of a major global player by FY2030 are

However, we cannot ignore the emergence of semiconductor

as the shift to electrification and digitalization progresses.

Tsuguru Ariyama Corporate Officer, Director of General Purpose Device **Business Unit**

ROHM's general-purpose device business has continued for over 50 years since the company's foundation, maintaining a top-level market share for many years and growing into a competitive, steady business. We believe that this has been possible because we lead the market through a comprehensive product portfolio that spans SBDs, TVSs, bipolar transistors, MOSFETs, FRDs, and RECs, miniaturization, high-productivity technologies, securement of an overwhelming share in the Japanese automotive market that demands high quality and service, and a strength in flexible production capacity increases through IDM.

In initiatives based on our Medium-Term Management Plan, we increased high-efficiency production lines and switched from old lines to secure the production capacity for achieving targets. We are also developing next-generation automated lines for mass production by utilizing technologies developed for our flexible lines. In addition, we have completed the development of manufacturing technologies that use no gold (Au) or other expensive precious metals, further strengthening our cost competitiveness.



Small-signal transistors (less than 1W) Small-signal diodes (less than 500mA) Used universally in a variety of applications.



Discrete semiconductor devices which emit light when voltage is applied. Used for lighting and status indications, etc. in all kinds of electronic devices

Laser diodes ROHM's laser diodes boast the industry's leading production volume. They are used in laser printers and multifunction printers, and in recent years in laser ranging devices and as a light source for LiDAR, etc.



Progress of the Medium-Term Management Plan

Maintaining a top-class market share as a cash cow business When it comes to semiconductors, power devices tend to attract attention, but the demand for small-signal generalpurpose devices is also increasing due to the electrification trend. For example, as more electronic components are used in automobiles, the demand for transistors and diodes is increasing as essential components. These components are small-signal general-purpose devices that handle power of 1W or less and are used in control circuits, and ROHM boasts a high market share due to our expertise in development, manufacturing, and sales accumulated over many years. The General Purpose Device Business' theme for the Medium-Term Management Plan is to contribute to ROHM's growth as a cash cow business while maintaining this high market share.

Because general-purpose devices are highly versatile products used in large quantities for all kinds of applications, we are required to provide a stable supply at low costs to customers. At ROHM, we have increased our production efficiency and capacity to achieve a stable supply, low costs and service

Column

Toward the Realization of a Sustainable Society

Development of a new 2-in-1 SiC molded module

Equipped with features including high power density and a unique arrangement of terminals, TRCDRIVE pack™ contributes to solving major issues in the miniaturization, high efficiency, and man-hour reduction required for traction inverters. The module adopts ROHM's unique structure that maximizes heat dissipation area and is equipped with the latest SiC MOSFET, achieving an industry-leading power density 1.5 times that of general products. The control signal terminals at the top of the module, equipped with press-fit pins, enable connection simply by pressing the gate driver board from the top, and greatly reduce installation man-hours. The module further maximizes the current path in the main current wiring and achieves low inductance (5.7nH) through a twolayer wiring structure, contributing to low losses during switching. Although the product is a module, we have established a mass production system like that of a discrete product. Production capacity of the module is about 30 times that of conventional, general SiC case-type modules.

Development of a 120W high-power laser diode for LiDAR

LiDAR, a technology capable of accurate distance measurement and spatial recognition, has recently been seeing increased adoption in a wide range of applications requiring the automation of operation, including AGVs, robot vacuum cleaners, and autonomous automobiles. ROHM has established proprietary patented technology that achieves narrower emission width in lasers which contributes to longer range and higher accuracy in LiDAR applications.

ROHM released a 25W laser diode in 2019 and a 75W laser diode in 2021. In response to growing market demand for even higher output, in September 2023 ROHM developed a new infrared 120W high-output laser diode, aimed at LiDAR used for distance measurement and spatial recognition in 3D ToF systems.

Utilizing proprietary device development technology, the diode reduces the temperature dependence of the laser wavelength by 66% from that of general products and contributes to narrowing the bandpass filter to extend the detection range of LiDAR. It also achieves a uniform light intensity in over 97% of its emission width to enable more precise detection, despite having the smallest width in the industry. Its high power conversion efficiency (PCE) enables high-efficiency optical output that contributes to lower power consumption in LiDAR applications.

ROHM's Position (2023)

Key Products

sales ranking

1 onsemi

4 Diodes

Rank

2

improvements by introducing high-efficiency production lines and labor-saving lines. In addition, because semiconductors for automobiles require a particularly high level of quality, we apply our strengths as an IDM to implement thorough quality control. While sales growth in FY2023 was negative, through such initiatives we will steadily meet customers' demands and contribute to the growth of medium- and long-term earnings.

Small-Signal Device Business

Maintain the top share as a cash cow business





TRCDRIVE pack™ 2-in-1 SiC molded module



RI D9007W8 high-power laser diode **Business Overview by Segment**

Modules and Others

Meeting detailed customer needs and contributing to solving social issues through "energy saving" and "miniaturization"

> **Tetsuhiro Tanabe** Corporate Officer, Director of Module Business Unit



our customers, as outlined in our Management Vision.

space industry will become increasingly strict, and the

Specifications for resistors required in fields such as the

enhancement of performance and quality will become criti-

cal. Accordingly, for general-purpose products such as

Products supplied by our business unit contribute to tackling carbon neutrality and other social issues. Resistors, ROHM's founding product, have become an essential component in automotive equipment as the shift to EVs advances. We offer a wide lineup of high-reliability products for current detection applications and the automotive and industrial equipment fields. In the printhead business, we have leveraged our proprietary semiconductor process technologies to successfully develop thermal printheads that enable high-definition printing while realizing the speediest ultra-fast printing in the industry. We are now expanding our lineup of products for barcode label printers and are providing high-value-added products to the industrial equipment market.

Miniaturization of these products and enhancement of performance in module products lead to reductions in power consumption, component count, and mounting space in end equipment. We will constantly improve performance through continuous technological development and will contribute to "energy saving" and "miniaturization" for

Key Products

Thermal printheads These use ROHM's proprietary semiconductor technology, thick-film printing and thin-film deposition technologies which achieve small-sizes energy saving, high image quality and high quality. resistors, we must anticipate and grasp the needs of customers and must act ahead of other companies to tackle product development and bring new products to markets. At the same time, for highly customizable module products, we must also build relationships with customers and attentively address their needs. We believe in the need to advance business from an outward-facing perspective so that each of our organizations is always perceptive to even slight changes in markets.

To attain the status of a major global player, we will continue contributing to society by delivering better new products to the world, drawing on the spirit of challenge that we have built up since our founding and placing priority on guality, which is stated in ROHM's Company Mission.



Sensor modules ROHM can propose total solutions by combining the world's top-level sensor variations with ROHM's core technologies.



cuit current. We have a broad lineup to support everything from mobile devices such as smartphones to automobiles, industrial equipment, and other applications which require high reliability.

ROHM's Position (2023)

0

Worldwide thermal printhead manufacturer sales share ranking

00 0

Rank	Company name	Share of sales
1	Kyocera	33.6%
2	ROHM	22.8%
3	SHEC	20.0%
4	Toshiba Hokuto Electronics	8.3%
5	AOI ELECTRONICS	5.6%
6	KAITONG	4.6%

urce: CHUNICHISHA Co., Ltd

Worldwide resistor manufacturer sales share ranking

BOHM's share 4th 9.6%

Rank	Company name	Share of sales			
1	Company A	21.0%			
2	Company B	13.0%			
3	Company C	11.9%			
4	ROHM 21.288 billion yen	9.6%			
	Other	44.5%			
jource: Researched by ROHM					

Performance Highlights





Modules: Net sales Operating profit --- Operating profit margin Others: Net sales Operating profit --- Operating profit margin



Progress of the Medium-Term Management Plan

Achieving high added value in modules and working toward qualitative transformation

We have set qualitative transformation of our module business, such as higher added value and a shift to overseas sales, as a major goal in our Medium-Term Management Plan. In FY2023, sales declined in printheads for payment terminals, but remained strong in printheads for industrial equipment and grew in sensor modules for smartphones. We will focus on expanding our support modules for autonomous driving and sensor modules for security (authentication). The practical application of low-speed, compact delivery robots has accelerated due to labor shortages in recent years, and demand for modules with laser diodes for sensor applications is also growing. Through achievements such as superior high-temperature properties, we will work to differentiate our products from those of competitors and will seek to increase our revenue.

Sales ratio of printheads for industrial equipment					
FY2023 Results	37%	-	FY2025 Forecast	43%	

Column

Toward the Realization of a Sustainable Society

Development of a thermal printhead capable of high-speed, clear printing on a single lithium-ion battery

In recent years, mobile label printers for logistics have grown in importance with the advancement of logistics, as have payment terminals with the proliferation of electronic money payments. Mobile thermal printers driven by two lithium-ion batteries have been the main type used, for reasons of printing speed and guality. However, the use of a single battery would make these printers more compact and lighter while also enabling energy saving. In December 2023, ROHM developed a thermal printhead that uses just one lithium-ion battery yet is capable of the print output of a two-battery unit.

In addition to radically revising the structure and optimizing the design of the heat storage layer, glaze, we adopted a special low-resistance heating element and changed the protective film structure on the heating element. This enables efficient transmission of generated heat to the thermal paper, transfer ribbon, or other printing media. Through improvements to the driver IC and wiring structure, we also enhanced the efficiency of the conversion of power supplied to the device to thermal energy, along with printing efficiency. Through simultaneous improvements to thermal transmission and power efficiency, we have achieved energy saving as well.





Expanding our lineup of special resistors

By application, automotive applications account for over half of our sales of resistors, which have earned the trust of numerous customers. In FY2023, sales in the industrial equipment market were sluggish, yet resistor sales grew due to increasing adoption of high-value-added, high power low ohmic shunt resistors for the automotive market, which is expected to grow rapidly. High-density mounting is expected to increase as the number of motors and ECUs mounted grows in line with the shift to higher performance in automobiles. By enhancing our lineup of shunt resistors and other special resistors adaptable to small sizes and high electrical power, we will contribute to miniaturization and higher reliability in customer applications.



Environmental Initiatives

At ROHM, we believe that corporate activities that seek to be in harmony with the natural environment, that is, a balance between economic activities and nature's regenerative and purifying capabilities, will lead to a sustainable society. This is why we are strengthening our efforts to address environmental issues through the effective use of resources, and reducing our impact on the environment through our production activities and environmentally friendly products.

Environmental Management

https://www.rohm.com/sustainability/environment



The ROHM Group Environmental Vision 2050

Human economic activities are having a negative impact on the Earth, and problems such as climate change, resource depletion, and loss of biodiversity are becoming increasingly serious. In 2021, we presented the "ROHM Group Environmental Vision 2050" to demonstrate our commitment to leave the global environment in a better state for future

generations. In this vision, we identified climate change, resource recycling, and coexistence with nature as the three important themes to address, and further formulated targets for FY2030 as an intermediate step. We will undertake activities aimed at achieving our FY2030 and FY2050 targets as we work to resolve environmental issues.



Initiatives Aimed at Achieving Our FY2030 Medium-term Environmental Targets

Climate change

To achieve our FY2050 target of net zero GHG emissions, we are working toward the reduction of GHG emissions from our business activities and toward 100% use of renewable energy. In FY2023, our Scope 1 and Scope 2 GHG emissions decreased by 16.5% from the previous fiscal year to 645,000 tons due to our expanded use of renewable energy. At the same time, we have begun reducing Scope 3 emissions (emissions from the use of procured goods and products) through initiatives under our new Carbon Neutrality Committee launched in FY2024.

Effective use of resources

Amid calls for transformation into a circular economy, ROHM is working to eliminate the waste of limited resources and

energy by procuring resources with low environmental impact and by minimizing amounts of new resource inputs and waste emissions. In FY2023, we maintained a renewable resource utilization rate of 99% or higher - net zero emissions - on a domestic consolidated basis, and a rate of 95.8% on an overseas consolidated basis. We will continue making improvements to achieve zero emissions in FY2050.

Water resource initiatives

We aim to improve our recovery and reuse of water to make more efficient use of water resources. Through the introduction of wastewater recycling facilities at manufacturing sites in Hamamatsu, the Philippines, Dalian, and other locations, our FY2023 water recovery and reuse rate increased by 2.4 percentage points from FY2019 levels to 40.0%.

Coexistence with nature

In response to the growing momentum of "nature-positive" business in recent years, in FY2023 we identified and assessed what kinds of natural capital the supply chain and our business activities depend on and what impacts our activities exert. Doing so, we identified water as a biodiversity-related priority theme that ROHM should address. In identifying themes, we first identify multiple risk items, both those specific to us and those identified as general risks by external evaluation organizations or with ENCORE*, etc. We then perform forecasting and analysis of environmental impacts at domestic and international manufacturing sites and engage in discussions with expert bodies. From FY2024 onward, we plan to hold discussions with experts, local governments where our sites are located, and other parties to study priority region

Example of Environmentally Friendly Product Development: GaN Devices

GaN is a compound semiconductor material that holds promise for next-generation power devices. The performance index, expressed as the product of on resistance (Ron) and gate charge capacitance (Qg), is lower than that of Si devices, and the material is expected to enable miniaturization and low power consumption in many applications.

ROHM's GaN devices began with the development of MOSFETs with a vertical structure on GaN substrates in 2006. We set our focus on GaN as a next-generation material for further expanding the future range of applications for power devices. We changed our course toward GAN-on-Si HEMT devices, which allow lower production costs, and began product development in areas such as energy saving and miniaturization, aimed at tackling social issues. Through our lineup of EcoGaN™ Series GaN devices that contribute to energy saving and miniaturization in applications, we are

Challenges for the Future

Pursuing the further potential of GaN devices and accelerating product development

The Power Stage Product Design Division to which I belong is the department that brings power device and IC development groups together as a new challenge at ROHM. I'm in charge of product design for low-voltage GaN power devices. To enable mass production of our in-house GaN devices, we engineer devices in step with market trends and customer needs while also playing a management role in the creation of technologies required for products, including processes, testing, and packaging. Doing so, we work to complete mass-produced products that contribute to sales.

GaN is a wide band gap compound semiconductor that initially gained worldwide prominence in optical devices such as blue light-emitting diodes, GaN, unlike the earlier-developed SiC, can exist as an impurity in Si and is difficult to work into existing Si mass production lines. We faced considerable hurdles in developing production lines in-house. However, I explained to executives the significance of performing development on an in-house line, and we were able to prepare a production line in Hamamatsu with the understanding of the company. I see this as a great step forward in ROHM's GaN development.

We intend to develop isolated gate driver ICs and controllers suitable for the operation of GaN devices, commercialize modules bundling these, and establish a new business model by which our department acts as a forerunner in the company to provide customers with higher value-added products, and make contributions to ROHM that will lead to further growth.

identification, performance indicators, and specific measures. * ENCORE: https://encorenature.org/en

Management of chemical substances in products

Amid the strengthening of laws and regulations concerning the management of chemical substances in products, we have formulated the "Control Standard of Chemical Substance in Products," a set of standards incorporating customer requirements and Japanese and international laws and regulations. We assess information on chemical substances contained in purchased parts and materials to confirm compliance with laws and regulations. We also undertake thorough management of increasingly regulated PFAS (per- and polyfluoroalkyl substances), providing environmentally friendly products that customers can use with confidence.

working to further enhance device performance. Supplementing our own device development, we will also enter into strategic partnerships to advance joint development and will help solve social issues by contributing to efficiency and miniaturization in applications.

ROHM's Nano Pulse Control[™] ultra-fast pulse control technology draws out maximum performance from GaN devices characterized by high-speed switching/high-frequency operation. Our ability to offer GaN power solution products that only

ROHM can deliver creates a competitive advantage for us.





Kentaro Chikamatsu Senior Engineer LV Power Stage Product Design Group Power Stage Product Design Division Power Management & Standard LSI Segment LSI Business Unit



Climate Change-Related Disclosure in Accordance with the **TCFD** Recommendations

ROHM endorsed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in September 2021. In order to achieve the goals of the "ROHM Group Environmental Vision 2050", ROHM will promote efforts to reduce its environmental impact and focus on more transparent information disclosure, including the resilience of its strategies based on climaterelated scenario analysis.

Disclosure Based on the TCFD Framework https://www.rohm.com/sustainability/environment/climate_change_measures

Governance

In April 2021, we established the "ROHM Group Environmental Vision 2050", which outlines the ideal state of ROHM in 2050, with the aim of realizing a sustainable society. The vision identifies climate change as an important issue affecting business sustainability, and sets a goal of reducing GHG emissions from business activities to virtually "zero" by the year 2050. In addition, the Medium-Term Management Plan "Moving Forward to 2025" announced in May 2021 also sets non-financial targets, including environmental themes, and identifies "addressing climate change" as one of the material issues that ROHM should address.

ROHM has established a system in which the President (Representative Director) has the highest responsibility and authority for climate change issues, and the EHSS General Committee*, chaired by the director in charge of sustainability appointed by the President (Representative Director), deliberates and makes decisions with regard to addressing climate change issues. Under the EHSS General Committee, eight management systems have been established, one of which is the Environmental Preservation Committee, chaired by a business unit manager and which is in charge of the Environmental

Strategy (Scenario Analysis)

Climate change is one of the most important social challenges facing global society. The Paris Agreement calls for efforts to keep the global average temperature increase well below 2°C above pre-industrial levels and to limit it to 1.5°C. At the same time, it is also an important theme for companies to achieve a balance between GHG emissions and absorption in the second half of this century to realize a decarbonized society.

Under these circumstances, ROHM is accelerating climate change countermeasures, such as improving the efficiency of semiconductor products and building an environmentally conscious business structure based on the "ROHM Group Environmental Vision 2050". In order to do this, we have analyzed the impact of climate change on business activities in all sectors, including automotive, industrial equipment, and consumer equipment by referring to scenarios published by the International Energy Agency (IEA) and the UN Intergovernmental Panel on Climate Change (IPCC), among others. Specifically, we analyzed the impact of climate change in 2050 on the Group's stakeholders (governments, financial institutions, investors, suppliers, customers, and new technologies) and the

Management System and proactively addressing climate change. The committee formulates our 2030 medium-term environmental targets and deliberates on the progress of environmental management toward achieving these targets, as well as issues related to measures to address climate change, including the introduction of renewable energy.

Directors who are members of the Audit and Supervisory Committee attend the EHSS General Committee and the monthly meetings of the Environmental Preservation Committee to continuously monitor and verify the execution status of overall environmental management, led by the President (Representative Director).

In addition, in order to further promote value sharing with our shareholders, we have adopted GHG emissions as one of the performance indicators in our performance-linked transferrestricted stock-based remuneration system for directors.

Promotional system https://www.rohm.com/sustainability/environment

* EHSS (Environment, Health and Safety, Sustainability) General Committee: A committee composed of executive officers in charge of eight subordinate management systems (environment, health and safety, labor, ethics, information, supply chain, guality, and risk management BCM) and responsible for ensuring that the PDCA cycle for each system is properly implemented

value chain (corporate, R&D, procurement, manufacturing, and sales) related to its business activities. This analysis was conducted for the 1.5°C/2°C scenario, in which society as a whole succeeds in transformation toward decarbonization and controlling the global temperature rise, and for the 4°C scenario, in which economic development takes priority and the global temperature rises and its effects continue to worsen. (→P.63 Financial Impact of Risks and Opportunities)

Reference information for our scenario analysis is provided below.

	Scenario	Reference		
Transition risks	1.5°C/2°C scenario	Sustainable Development Scenario (SDS)*1 Net Zero Emissions by 2050 Scenario (NZE)*1		
Opportunities	4°C scenario	Stated Policies Scenario (STEPS)*1		
Physical risks	1.5°C/2°C/4°C scenario	Representative Concentration Pathways (RCP)* ² Shared Socioeconomic Pathways (SSP1/5)* ²		
*1. Source: IEA "World Energy Outlook (WEO) 2021"				

*2. Source: IPCC "Fifth Assessment Report

Financial Impact of Risks and Opportunities

Financial impact on business activities

С	lassification	Event	Severity*1	Occurrence*2	Impact item	1.5/2°C impact*3	4°C impact* ³
	Policy and	Increase in costs due to introduction of carbon pricing	High	Mid- to long-term	Costs	Med	Med
	regulations	Increase in costs due to energy conservation and GHG emissions reduction initiatives	High	Short- to mid-term	Costs	Low	_
	Technologies	Increase in R&D costs to maintain and improve market competitiveness	Low	Short- to mid-term	Costs	Med	_
risks		Increase in capital investment costs due to increase in production volume and transi- tion of production facilities	Low	Short- to mid-term	Costs	Low	_
sitior		Decrease in sales due to changes in customer demand	Med	Short- to mid-term	Sales	Med	_
rans	Markata	Decrease in demand due to social changes associated with climate change	Low	Short- to mid-term	Sales	—	_
-	Markets	Increase in electricity costs due to higher electricity demand in society as a whole	Med	Short- to mid-term	Costs	Med	_
		Increase in material procurement costs due to a shortage of resources including rare metals	Med	Short- to mid-term	Costs	Med	Low
	Reputation	Loss of customer reputation due to inadequate response to climate change	Low	Short- to mid-term	Costs	—	_
sks	Acute	Damage to production facilities or production stagnation due to severe wind and flood damage	Med	Mid- to long-term	Sales	Low	Med
alri		Stagnation of raw material procurement due to supply chain damage	Med	Short- to mid-term	Sales	Med	Med
lysic		Increase in costs to strengthen measures against natural disasters	Low	Short- to mid-term	Costs	-	Med
È	Chronic	Increase in energy costs due to rising temperatures	Low	Mid- to long-term	Costs	Low	Low
	Products and services	Increase in demand for products that help customers save energy and reduce GHG emissions	High	Short- to mid-term	Sales	High	_
		Increase in revenues from entering new markets	Med	Mid- to long-term	Sales	_	_
ities	Markets	Increase in demand for products due to extreme weather and other environmental changes	Med	Mid- to long-term	Sales	-	Low
untu		Increase in revenues from gaining reputation among customers and investors	High	Short- to mid-term	Costs	—	_
Oppo	Resource efficiency	Decrease in costs by promoting energy conservation	High	Short- to mid-term	Costs	_	_
	Energy sources	Save costs by achieving GHG emission reductions and earning profits from the sale of carbon credits	Low	Mid- to long-term	Sales	_	_
	Robustness	Maintain and increase sales volume by strengthening resilience	Low	Mid- to long-term	Sales	_	Med

Future measures

С	lassification	Event	to 2025	to 2030	to 2050	
	Policy and	Increase in costs due to introduction of carbon pricing	Energy onling /bigher officience	v of plant Energy againg/b	igher officiency of plant appillant	
	regulations	Increase in costs due to energy conservation and GHG emissions reduction initiatives	ancillary facilities	facilities (pla	n to continue these initiatives)	
		Increase in R&D costs to maintain and improve market competitiveness	Install PFC* abate	ment equipment	Install PFC [*] abatement	
	Technologies	Increase in capital investment costs due to increase in production volume and tran- sition of production facilities	(completed 100% installa	(completed 100% installation in existing facilities)		
		Decrease in sales due to changes in customer demand	Promote electrificatio	n at production sites		
2	Madada	Decrease in demand due to social changes associated with climate change	Convert electricity used at (T	argets: FY2030 65%; FY2050 100%)	tes to renewable energy	
-	Markets	Increase in electricity costs due to higher electricity demand in society as a whole	Consider making annual contract countermeasure to rising prices of	s as a minerals		
		Increase in material procurement costs due to a shortage of resources including rare metals	Continue updating a	and upgrading of disclosure content t	hrough dialogues	
	Reputation	Loss of customer reputation due to inadequate response to climate change	with shareholders and responding to CD)P	
		Damage to production facilities or production stagnation due to severe wind and flood damage	Establish alternative production network for substrates (8 sites)	Consider production outsourcing for automotive products	Expand multi-location production for assembly process	
	Acute	Stagnation of raw material procurement due to supply chain damage	Create database of primary suppliers	Expand database coverage to secondary suppliers		
		Increase in costs to strengthen measures against natural disasters	Multiple purchasing o	of auxiliary materials		
	Chronic	Increase in energy costs due to rising temperatures		Make agreements with suppliers on procurement guide- lines in case of emergency		
	Products and services	Increase in demand for products that help customers save energy and reduce GHG emissions				
		Increase in revenues from entering new markets	Appeal energy	saving and miniaturization of product	s to customers	
	Markets	Increase in demand for products due to extreme weather and other environmental changes	Continue updating a	and upgrading of disclosure content t	hrough dialogues	
5		Increase in revenues from gaining reputation among customers and investors	Wit	I Shareholders and responding to GD		
222	Resource efficiency	Decrease in costs by promoting energy conservation	Secure hur	nan resources with expertise in semi	conductors	
	Energy sources	Save costs by achieving GHG emission reductions and earning profits from the sale of carbon credits	Utilize LCA and o	other scientific methods and various	calculation tools	
	Robustness	Maintain and increase sales volume by strengthening resilience				

*1 Severity: The degree of "high," "medium," or "low" is evaluated by considering the "likelihood of occurrence" and "degree of impact" of climate-related risks and opportunities

*2 Occurrence: "Short-term" is expected to occur between 2022 and 2025, "Medium-term" between 2026 and 2030, and "Long-term" between 2031 and 2050 *3 Impact: "Small" indicates a financial impact of 1 billion yen or less, "medium" indicates a financial impact of more than 1 billion yen but less than 10 billion yen, and "large" indicates a financial impact of more than 10 billion yen. The impact of risks and opportunities that are difficult to estimate are gualitatively evaluated and shown as "-

* Explained in the Glossarv

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Climate Change-Related Disclosure in Accordance with the TCFD Recommendations

ROHM will take various measures to strengthen its management in light of the identified risks and opportunities and their impacts. Specifically, in order to mitigate risks, ROHM will continue its efforts to reduce GHG emissions throughout the entire value chain, including suppliers, and will also

Risk Management

ROHM oversees and manages all significant risks related to business continuity in the Risk Management and BCM Management System under the umbrella of the EHSS General Committee, which is chaired by the director in charge of administration. In addition, the Environmental Management System identifies all risks related to the environment, including those with a long-term perspective.

Among these risks, "climate change" was identified as a significant risk, and in FY2021, we launched a project involving the entirety of ROHM Co., Ltd., and the Group to identify and analyze risks in multiple scenarios in accordance with the TCFD framework. In our risk management structure, the risk of "climate change" is broken down into physical and transition risks. Physical risks are governed by the Risk Management and BCM

strengthen its BCP measures. Additionally, in order to maximize the opportunities identified, we will strengthen R&D and sales of products that contribute to decarbonization, such as components for electric vehicles, and air-conditioning products.

Committee, which comprises cross-divisional organizations with participation of all company divisions, including business units and oversees risk management and the business continuity management system. Transition risks are governed by the Environmental Preservation Committee, which oversees the Environmental Management System. Both committees identify critical risks by considering their impact and likelihood of occurrence and based on analysis and assessment of each risk, they determine and implement response policies.

In addition, both committees oversee the risk management svstem and report to the EHSS General Committee, which is composed of those responsible for each management system. These committees also formulate BCPs to handle potential risk emergence and ensure that all Group companies are aware of the plans.



Indicators and Targets

ROHM is promoting environmental management in Japan and overseas based on the "ROHM Group Environmental Vision 2050" formulated in April 2021, aiming to achieve net zero GHG emissions and zero emissions by FY2050 to reduce its environmental impact. As one of the specific measures, we announced our Medium-Term Management Plan "Moving Forward to 2025," in May 2021 and we presented a plan which calls for 100% of electricity used in all business activities in Japan and overseas to be derived from renewable energy sources (hydroelectric, geothermal, solar power) by FY2050. Based on this Medium-Term Management Plan, we are now gradually increasing the amount of renewable energy we use, and in FY2021, we were using 100% renewable energy for our main domestic offices (Kyoto Station Building and Shin-Yokohama Station Building) and for our main SiC wafer manufacturing processes (Germany Plant and new SiC building at Chikugo Plant in Fukuoka, Japan). In addition, from FY2022. we have been using 100% renewable energy sources outside Japan, including the Thailand Plant, our main manufacturing site overseas, from FY2022. The Philippines Plant has also been powered using 100% renewable energy from FY2023.

Environmental targets for FY2030 have been established for each of the three priority issues of "Climate Change," "Resource Recycling," and "Coexistence with Nature," as

GHG Emissions



Approach to 100% Renewable Energy



stated in the "ROHM Group Environmental Vision 2050". For climate change, we have set the following targets: reducing GHG emissions from business activities (Scope 1 and 2) by at least 50.5% in FY2030 compared to FY2018, reducing GHG emissions per unit of production (Scope 1 and 2) by at least 45%, and reducing emissions from the use of products sold (Scope 3, Category 11) by at least 15% in FY2030 compared to FY2018. These targets were recognized as having a scientific basis (1.5°C level) for achieving the 2°C target of the Paris Agreement, and in February 2022, ROHM received certification from the Science Based Targets Initiative (SBTi).

In addition, ROHM's renewable energy introduction plan aims to achieve a renewable energy introduction ratio of 65% in FY2030 and 100% in FY2050 for the electricity used in its business activities. In April 2022, we joined RE100 (100% Renewable Electricity), an international corporate initiative that aims for 100% renewable energy for electricity used in business operations.

In addition to climate change, we are also working to promote resource recycling by

improving our water recovery rate and setting targets related to waste emissions per unit of production.



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Achievements and Plans for Renewable Energy Installations

FY2024 to FY2026

ROHM Apollo Co., Ltd. Hirokawa Plant LAPIS Semiconductor Co., Ltd. Miyazaki Plant

FY2026 to FY2030

Plan to gradually introduce the system at the remaining sites overseas and in Japan



Supply Chain Initiatives

High-quality, safe, and stable manufacturing demands the assured quality and stable supply of procured components and materials, as well as CSR procurement initiatives that consider labor, ethics, and the environment. Valuing our ongoing relationships of trust and cooperation with suppliers, we aim for procurement activities that allow both sides to grow sustainably.

Supply chain management

https://www.rohm.com/sustainability/supply-chain

Material issues	Sustainable Supply Chain Management	P27 FY2023 results and KPI

Promotion Structure

Our supply chain management system, positioned as a sub-organization of the Board of Directors and the EHSS General Committee, bears the role of appropriately managing and supervising supply chain risks within the Group. The EHSS General Committee evaluates and checks whether the PDCA cycle is functioning properly within the supply chain management system. It reports to and consults with the

Board of Directors as necessary to maintain and improve the precision of the management system. The Board of Directors works with the Sustainability Management Committee to discuss policies, directions, long-term targets, and other matters related to sustainability. It submits its decisions to the EHSS General Committee and, through supervision, ensures that the decisions are acted upon.

Working Together with Suppliers

A cooperative structure with suppliers is essential in aiming for sound and sustainable procurement activities. ROHM has adopted the RBA Code of Conduct* and asks suppliers to strive for compliance with the code.

* RBA (Responsible Business Alliance) Code of Conduct: A code created by a group of electronics-related manufacturers as well as automobile, toy, airplane, and IoT technology companies

Evaluation and Audit Programs

1. Comprehensive evalu- ation of activities	 a) Product quality, b) Delivery time, c) Price, d) Continuity of supply, e) Results of CSR procurement self-assessment shown below * BCP initiative evaluation, financial evaluation by an external evaluation organization
2. CSR procurement self-assessment	We conduct self-assessment of labor (including human rights), safety and health, environment, ethics, and management system in accordance with the RBA Code of Conduct, as well as in the areas of information security, BCP for procurement, logistics and quality compliance set uniquely by ROHM. For suppliers defined as high-risk suppliers, we take corrective action and provide support for improvement.
3. CSR procurement audits	Through dialogue with suppliers, we confirm the contents of self-assessments, check factories, and request improvements as nec- essary, with the aim of gaining their understanding and endorsement of ROHM's policies and approach to CSR procurement, the importance of consideration for the environment, safety, and human rights, as well as the content of our activities.
4. BCP for procurement	We assess risks associated with providing a stable supply and related impacts and check the state of responses to the identified key risks each quarter.

1. Comprehensive evaluation of activities

ROHM comprehensively evaluates the activities of suppliers by examining product quality, delivery time, price, and BCP initiatives, as well as the results of the CSR procurement self-assessments described below. We conduct comprehensive evaluations of activities at the following times:

- When selecting a supplier and when concluding contracts: Suppliers cannot conclude contracts until they meet the minimum CSR procurement self-assessment score set by ROHM.
- Regularly (once per year): ROHM performs a comprehensive assessment of activities over the year and provides feedback to suppliers. Those that do not meet the minimum score set by ROHM within the given timespan are excluded from contracts.

CSR procurement self-assessment

To confirm the level of achievement of suppliers' CSR activities, every year ROHM asks suppliers to perform self-assessments in the areas of labor (including human rights), safety and health, environment, ethics, and management systems in accordance with the RBA Code of Conduct, as well as in the areas of information security, BCP for procurement, logistics and quality compliance set uniquely by ROHM. We rank suppliers based on overall self-assessment scores and identify suppliers' ESG risks. We recognize suppliers with a rank of C or worse, or a rank of B or worse in the case of critical suppliers, as "sustainability high-risk suppliers" toward

3. CSR procurement audits

Procurement audits are conducted in the form of second party audits by CSR procurement personnel, who perform document checking on-site or online along with checks of plants and dormitories. ROHM conducts at least one audit of critical suppliers over a three-year period, and reviews target suppliers every three years. When an audit finds a need for corrections, we consult with the supplier, request the preparation and submission of an improvement plan, and track the corrective actions until completed. We view these audits not only as opportunities for assessing the state of suppliers but also as training opportunities for communicating ROHM's CSR procurement policies and approach to suppliers and for

4. BCP for procurement

As part of our BCP, we have established a system that enables rapid recovery even in the event of an emergency, and we are working to prepare alternative materials.

- a) Definition of risk in the procurement divisions: We have established the Risk Management and BCM Committee to manage risks in each division. In addition to the four existing risks of quality, delivery time, price, and compliance, the procurement divisions also evaluate risks in stable supply and their impact, and check the state of responses to the identified key risks each quarter.
- b) Selection of suppliers: In emergencies, we share information across the supply chain and select suppliers who can ensure a continuous supply. At the start of transactions, we ask that suppliers submit a consent form indicating an understanding of ROHM's basic stance.
- c) BCP initiatives: We are researching and compiling a database of information on the manufacturers and manufacturing locations of procured parts and materials so we can promptly confirm the damage, safety, and supply status of our suppliers in the event of an emergency.

which we request corrective action and provide support for improvements. Our FY2025 target is a rating of B or better for suppliers that collectively account for 90% of our annual purchasing amount. In FY2023, suppliers with this rating accounted for 80.6%.

Self-Assessment Achievement Target

FY2025 target	FY2023	FY2023	FY2024
	target	results	target
90% or higher (Monetary value basis)	80.0%	80.6%	85.0%

deepening mutual understanding of CSR activities. In FY2023, we conducted audits of 23 companies, an increase of 10 companies from FY2022.

Critical suppliers

https://www.rohm.com/sustainability/supply-chain/communication#anc03

CSR Procurement Audit Results

FY	2021	2022	2023
Number of Suppliers Visited	9	13	23

Survey of primary suppliers' production sites

We are currently conducting a survey of all materials, equipment, and parts procured from primary suppliers, roughly 70,000 items, with the goal of surveying 100% of production sites by FY2025, so that we can instantly identify the scope of impact in the event of an emergency. In addition, we quantitatively manage the results of our initiatives as the "ratio of primary supplier production sites surveyed" and monitor this indicator every year.

Prior agreement on emergency response

We are working with suppliers who supply important materials to make an agreement in advance on how to respond in the event of an emergency. We have set a goal of achieving 100% prior agreement by FY2025, and we quantitatively manage the results of our initiatives as the "ratio of suppliers with prior agreements on emergency response" and monitor this indicator every year.



Supply Chain Initiatives

Responsible Procurement of Minerals

ROHM strives to responsibly procure minerals throughout the supply chain in response to not only conflicts, but also mineral issues such as tin, tantalum, tungsten, gold, cobalt, and mica, which are related to risks and fraud involving human rights violations and environmental destruction, including OECD Annex II risks.

To ensure that customers can use ROHM products with confidence, we conduct an assessment process that follows OECD Due Diligence Guidance, with the Supply Chain Management Headquarters taking the lead. Our survey revealed a CFS* rate of 97% in FY2023, 1 percentage point lower than in the previous fiscal year. We will encourage the remaining 3% of uncertified smelters to switch to CFS. In the event that any use of conflict minerals, which are a source of funds for armed forces, is found in ROHM's

Green Procurement

ROHM views initiatives that consider and contribute to the global environment as an important management issue. To promote green procurement, we are working to enhance the precision of our investigations of chemical substances contained in the components and materials that we procure. We are constructing a mechanism that avoids the procurement of prohibited substances by screening substances contained in components and materials according to ROHM's proprietary standards and registering only those that meet the standards of our procurement system. We issue our Green Procurement

Assessments

To raise the level of suppliers' environmental management systems to a passing level under ROHM's standards, we request self-assessments by suppliers. By continuously engaging in feedback and improvement activities based on the assessment results, we aim to achieve a 100% passing rate for self-assessments of suppliers' environmental management systems in FY2025.

From FY2023, our assessments cover not only ROHM Co., Ltd. but the Group as a whole. We check the status of suppliers that fail to meet ROHM's standards or that have not responded to the assessments, work to understand those suppliers' issues, and enact initiatives aimed at improvement.

Carbon Neutral Initiatives in Collaboration with Suppliers

In response to the recent demand for decarbonization throughout the supply chain, ROHM held a "Carbon Neutral Explanatory Meeting" for key material suppliers ahead of time starting in 2023. Suppliers were asked to explain cooperation items and provide GHG emissions of materials supplied to ROHM, and collaborative reduction activities were initiated.

カーボンニュートラルに向けたお取引先様とCO2削減の取り組み • **D**-**L**(パートナー種 ●進め方・方針 お願い事項
 23年10月 10月ごろ、モデルお取引先様に説明会/調査実施 56月ごろ、すべてお取り引先様に説明会/調査実施 取組みをヒアリングさせていただき課題解決を回る

Briefing materials for suppliers (excerpts)

products, we will enact corrective measures with all due speed.

Survey Results for FY2023

Suppliers subject to surveys: 113 companies Suppliers who responded: 113 companies; response rate 100% Identified supplier smelters: 193 companies for all minerals (of which, 187 have received RMAP certification)

	Gold	Tantalum	Tin	Tungsten	Overall
Total number of smelters	89	33	42	29	193
Number of CFS* certi- fied smelters	84	33	41	29	187
CFS* certification rate	94%	100%	98%	100%	97%

* CFS stands for Conflict Free Smelter (smelter that does not use conflict minerals). ROHM defines CFS as a smelter certified by the Responsible Minerals Assurance Program (RMAP) of the Responsible Mineral Initiative (RMI).

Guidelines^{*1} and Control Standard of Chemical Substance in Products*2 to suppliers and request their confirmation of compliance with specified standards for components and materials.

- *1 Green Procurement Guidelines
- https://www.rohm.com/documents/11303/12022709/ROHM_ Green+Procurement+Guidelines_006en.pdf/ a484be56-37de-f77f-45ae-851e75884a5b?t=1722823755840
- *2 Control Standard of Chemical Substance in Products
- https://www.rohm.com/documents/11303/12022709/ROHM_Control+Standard-. of+Chemical-Substances-in-Products_003en.pdf/

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FY2023 Assessment Results

	Rate of com-	FY2023			
Evaluation category	pliance with ROHM's standards	Number of companies	Rate	Actions taken	
А	70% or higher	1,115	87.7%	_	
B∙C	Less than 70%	16	1.3%	Confirm results of suppliers' environmental management system self-assessments and understand the status and issues of suppliers, beginning with low-scoring items Send requests for improvement to suppliers	
Correction requested		9	0.7%	Provide support for improvements to raise sup- pliers' environmental management system self-assessments to 40% or higher	
No response		131	10.3%	_	
	Total	1,271	100%	_	

Enforcement of Fair Transactions

Our "ROHM Group Business Conduct Guidelines,"* our rules of ethics for the conduct of business activities, call for fair and equal transactions. To ensure fair and ethical transactions with suppliers, we have established mechanisms for the prevention

Declaration of Partnership Building

In January 2021, ROHM put forth a "Declaration of Partnership Building." This declaration is a mechanism created by the "Council for Promotion of Partnership Building to Open Up the Future," a group comprising the Chairman of the Japan Business Federation (Keidanren), the Chairman of the Japan Chamber of Commerce and Industry, the President of the Japanese Trade Union Confederation (RENGO), and relevant government Ministers. It aims to build new partnerships by promoting collaboration, co-existence,

Education on Proper Business Transactions

We must build and maintain sound relationships with suppliers to engage in fair business transactions, never forgetting that every employee of ours is part of the "face of ROHM." Engaging in transactions based on proper pricing requires that employees have an understanding of Japan's "Act against Delay in Payment of Subcontract Proceeds, etc. to

Promotion of the Fair Trade Program

To prevent the occurrence of collusion between procurement division members and specific suppliers, we rotate members among areas of responsibility every 60 months or less, and have established mechanisms to maintain fair and impartial procurement activities. Under our fair trade program, once a year we also conduct ESG-based education on topics such

Challenges for the Future

Contributing to becoming a major global player from the perspective of supply chain management

As a leader overseeing our import and export work, I am in charge of legal and regulatory management in importing and exporting, selection of appropriate logistics firms, logistics reforms aimed at reducing costs, and control of logistics BCP. The construction and management of logistics systems in the supply chain is vital to maintaining product quality, cutting costs, and responding quickly to market fluctuations. By completing the overall construction of logistics processes within the company, ROHM contributes to the enhancement of customer satisfaction and the strengthening of long-term competitiveness

As an example of logistics efficiency improvement, we worked with related divisions to reform transportation. Due to the local system, there were routes that did not allow direct delivery from our overseas manufacturing sites to sales companies in the same country, resulting in a detour of re-importing products through other countries. To solve this problem, we collaborated with local sales companies, factories, sales, manufacturing and systems divisions to thoroughly review operations, and comply with laws, regulations and commercial distribution. As a result, we were able to shorten transportation lead times and reduce logistics costs.

We will continue to go beyond existing work frameworks to propose and carry out multi-faceted logistics reforms from the perspective of supply chain management, and strengthen its supply system, helping ROHM become a major global player.

of embezzlement, bribery, and other acts of corruption, and make these known to employees through education.

ROHM Group Business Conduct Guidelines https://www.rohm.com/company/about/rohm-group-business-conduct-guidelines

and co-prosperity with business operators to create value in supply chains.



Declaration of Partnership Building (Japanese) https://www.biz-partnership.jp/declaration/937-05-20-kyoto.pdf?_fsi=b4BDSEip

Subcontractors" and "Act on the Promotion of Subcontracting Small and Medium-sized Enterprises." ROHM conducts e-learning on proper transactions to ensure that employees have a deep understanding of laws and standards and are able to comply with these when engaging in transactions

as fair and equal procurement activities, fair selection of suppliers, and CSR procurement.

Number of Participants in Fair Trade Program

FY	2021	2022	2023
Procurement division members	55	57	58



Emi Kawagoe Group Leader Global Forwarding G Logistics Planning Department SCM Planning Division Supply Chain Management Headquarters



Human Rights Initiatives

ROHM, which aims to become a major global player, recognizes discrimination or harassment on the basis of race, ethnicity, nationality, social status, gender, ideology, or beliefs, anywhere in the world, as absolutely unacceptable. Moreover, by respecting freedom of association, the right to collective bargaining, and responsible labor practices including provision of safe working environments, securing of minimum wages, and management of appropriate working hours, we also seek to be a sustainable company.

Human Rights		
https://www.rohm.com/su	stainability/foundation/human-rights	

Material issues

Sustainable Supply Chain Management

▶ P27 FY2023 results and KPIs

Our Basic Approach

Under the view that "Human rights are the fundamental right, freedom, and standard for treatment that individuals around the world possess," we have established the ROHM Group Human Rights Policy. This policy is a superordinate policy of all documentation and norms concerning initiatives for respect for human rights in the Group's business activities, and applies to all activities carried out by ROHM around the world.

As a company engaged in business globally, ROHM recognizes the importance of building a sustainable society in

Human Rights Due Diligence

In line with the international principles and norms that we support, ROHM identifies adverse human rights impacts related to our business activities and conducts human rights due diligence to prevent and mitigate these. In the event that our activities are found to have caused or encouraged adverse effects on human rights, we enact appropriate and effective remedial measures. When there is a need to prioritize initiatives, we place priority on addressing the most severe adverse effects on human rights, taking into account

Human Rights Assessments in the Supply Chain

Aiming to build a sustainable society in which human rights are respected, ROHM conducts initiatives in compliance with the RBA Code of Conduct. While respecting the human rights of suppliers, we also ask suppliers to engage in initiatives following the same norms, and promote respect for human rights throughout the supply chain.

Specifically, we request self-assessments in areas indicated by the RBA Code of Conduct: labor, safety and health,

Human Rights Training

We conduct level-specific human rights training for new employees, mid-career hires, department heads, and officers, to instill respect for the cultures, religions, customs, and legal systems of other countries and regions and promote conduct grounded in an understanding of the diversity of

values. As a part of employee education aimed at understanding ROHM's initiatives regarding customer requirements, the RBA Code of Conduct, and other international norms, we conduct "Labor and Ethics e-learning" for all employees.

ROHM Group's Social Contribution

Along with social contribution through our business, ROHM has actively engaged in social contribution activities and cultural support activities as a good corporate citizen to contribute to the advancement and soundness of society, valuing our ties to local communities and the natural environment. For the further advancement of society and progress of culture, we will continue to meet the needs of communities and broader society, as we aim to achieve a better social environment.

Social Contribution

ROHM's Value Creation Story

https://www.rohm.com/sustainability/contribute

Material issues

Mitigation of Climate Change

The Three Pillars of Social Contribution Activities

In the hope of always being a corporate citizen that is vital to society, wherever we conduct business around the world, ROHM engages in locally-rooted social contribution activities centered on education, environment, and culture and community. Under these three basic pillars, we will build relationships





Education LED Monozukuri (manufacturing) class

Endorsing the efforts of the Kyoto Municipal Board of Education and hoping to offer children opportunities to boost their interest in manufacturing while thinking about their future careers and dreams, since FY2010 we have held booth exhibits and manufacturing classes incorporating our products at the Kyoto Manabi Lifestyle Exploration Center.

Here, children listened to teachers from our company and became enchanted with LED circuits they made themselves, delighting in learning how circuits work and in seeing the LEDs' many beautiful colors.

Environment Events in our biotope area

From FY2021, we have conducted biological surveys in collaboration with outside experts to gather information on the habitats and development of organisms on the head office grounds, and to aid in their preservation and recovery. We hold guided tours of living things for our employees, where they encounter the plants and animals living on the grounds and reaffirm the importance of biodiversity as they walk with expert guides. We have also held this event for nearby elementary school students from FY2023 as a part of our natural coexistence-related cooperation measures with the Kyoto municipal government. To connect our biotope area to opportunities to gain familiarity with nature as children and to learn about the importance of environmental preservation, we regularly open the area to employees, their families, and nearby elementary schools and nursery schools.

Culture and Community the Rohm Music Foundation

We take part in a variety of music cultural support activities together with the Rohm Music Foundation, which was established by the founder Kenichiro Sato in 1991 to continuously contribute to the spread and development of music culture. We have supported 540 scholarship students through FY2023, and have been holding Scholarship Concerts in which scholarship students perform.

We also hold the Kyoto International Music Students Festival aimed at international exchange and the development of young musicians, as well as the ROHM Music Seminar aimed at the development of musicians active on the world stage, and provide subsidies and other support for music-related performances and research.

their scale, their scope, and the difficulty of corrective action.

We have also prepared a reporting hotline for use by suppliers and employees, and continue to build out effective mechanisms for responding to reports. To raise awareness of human rights, we will also carry out necessary education and skill development for officers and employees. We will strengthen these human rights initiatives through expert counsel from external stakeholders and will disclose our progress appropriately and regularly.

which human rights are respected. We emphasize respect

for human rights as one of the most fundamental requisites

following international principles and norms.

internationally recognized principles and norms.

for business activities, and support, observe, and respect the

In cases in which the laws and regulations of a country dif-

fer from international human rights norms, we follow the

maximizing respect for human rights in accordance with

higher standards and, in cases of conflict, pursue means of

environment, ethics, management systems, and BCP for procurement. Through self-assessment responses and CSR procurement audits, we request improvements in areas with low-ranking assessments, including those related to human rights. In audits and conferences, we work to raise awareness

of the necessity of CSR procurement throughout the supply chain, including the importance of respect for human rights.

▶ P27 FY2023 results and KPIs

of trust with communities through a variety of initiatives, will strive for the advancement of local communities and the resolution of social issues on a global scale, and will actively contribute to the achievement of the SDGs and the sustainable development of society.

Recognizing that we are able to engage in business only through the blessings of nature create by biodiversity, we carry out activities that lead to ervation of the global environment and







Through active involvement in community and

cultural exchange and support, both inside and





LED Monozukuri clas



Kyoto head office plant

Engaging in cultural support activities together with business advancement:



ROHM Theatre Kyoto