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.





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