

Environmental Protection

Environmental Protection Structure

The RIKEN TECHNOS GROUP established our environmental policy and obtains ISO 14001 certification to establish ourselves as an enterprise that contributes to the realization of a prosperous society and responds to the trust of all its stakeholders through environmentally conscious corporate activities.

At the top is the executive officer overseeing the environmental system. Under the direction of the Chief Environmental Management Representative, we appoint environmental management representatives at each site, and build and operate our environmental management system.

ISO 14001 (2015) Certification

Registration date: October 31, 2001
(certification being maintained)

Environmental Policy

For all our business activities, we take into consideration the effects on the environment. To protect the environment and realize a sustainable community, RIKEN TECHNOS CORPORATION established an environmental management system, and all members of RIKEN TECHNOS CORPORATION work to implement the following principles.

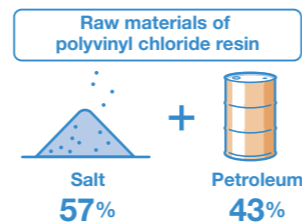
1. Through all business activities, RIKEN TECHNOS CORPORATION improves the environmental management levels and the prevention of the environmental pollution by not only observing all environmental regulations and mutual agreements but also setting our own rules and regulations voluntarily.
2. RIKEN TECHNOS CORPORATION supplies the market with various plastics those are given priority on environment such as energy-saving, resource-saving, recycling, and low-influence to the ecological system.
3. RIKEN TECHNOS CORPORATION reduces the influence against the global-environmental and the ecological system by eliminating wastefulness. We reduce the industrial waste by effective use of materials. We reduce CO₂ discharge by effort of saving energy.
4. RIKEN TECHNOS CORPORATION continues the activity approaching the protection of the environment by establishing documents including Environmental Statement and the Environmental Policy, and educating employees.
5. RIKEN TECHNOS CORPORATION sets the concrete objectives and numerical targets of which progress are self-assessed and managed properly to ensure the achievement of the Environmental Policy.
6. RIKEN TECHNOS CORPORATION expands the above-mentioned activities to the activities of the relative companies to ensure the utmost consideration to the protection of the environment and the ecological system and the safety operation at the each site.
7. RIKEN TECHNOS CORPORATION aims to obtain confidence and understanding from society through appropriate and accurate information disclosure.

Taking on the Challenge toward a Sustainable Global Environment

Environmentally Friendly Products

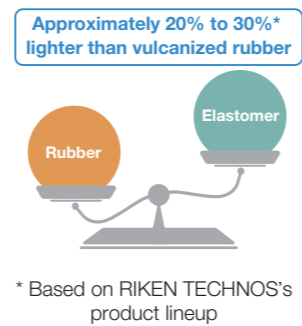
In addition to complying with various laws and regulations on the environment and chemical substances, our Group carries out environmental management at a high level—such as reducing the use of chemical substances with high environmental load and using solar power generation—and work on developing products and improving manufacturing methods aimed at reducing environmental load. We also state “Contribute to solving environmental and social issues” as one of the strategies in our three-year medium-term business plan, and strive to expand sales of the biomass plastic product RIKEBIO®, environmentally friendly materials such as rubber and paint substitutes, and polyvinyl chloride (PVC) and thermoplastic elastomer (TPE) products.


PVC can be said to be a material that has less environmental impact than other general-purpose resins made from 100% petroleum derived raw materials because salt (a natural material) accounts for about 60% of its raw material.




PVC products can be given various functions, such as long life spans, durability, and recyclability. Furthermore, using biomass plasticizers, we seek to reduce environmental load by developing compounds and films that are blended with plant- and nature-derived additives.

TPE has the same elasticity as rubber at room temperature and can be freely molded when heated. It can be molded with less energy than vulcanized rubber, which requires heat and time for function onset, and material recycling is also possible. We are developing high-functionality products by adding functions as necessary for the required application. In addition, it is lower relative density compared to vulcanized rubber, helping to make automotive components lighter and improving fuel efficiency, thereby contributing toward saving energy.







PVC window frames



Hose for construction use



Dust boot (automotive component)



Medical gasket

■ PVC products with high durability and long life spans

Compared to other resin products, PVC products have long life spans and can be used for ten years to several decades in construction applications, thereby helping to save resources. They have a wide range of applications as they can be used both indoors and outdoors.

■ Elastomers that are useful as rubber substitutes

Widely used in automotive components such as sealing materials, elastomers also contribute toward making vehicles lighter and improving fuel efficiency. In addition, as they do not require a vulcanization process, they can also be used in medical products that require a high level of hygiene.

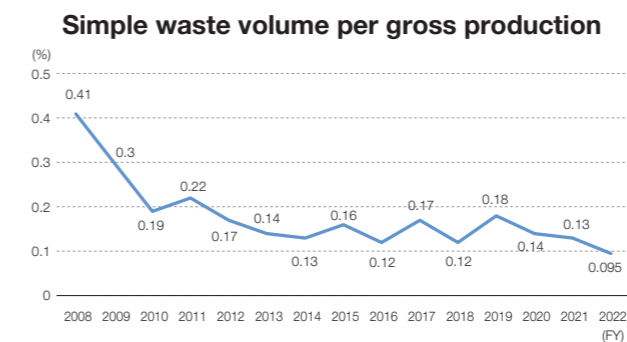
Reducing Industrial Waste

The main types of environmental burdens in our business activities come from greenhouse gas (CO₂) emissions, industrial waste output, and the discharge of chemical substances, and we strive to reduce their emissions and manage them properly.

We consider the reduction of simple (landfill and incineration) waste generated in the manufacturing stage to be one of the main goals of environmental management activities. For RIKEN TECHNOS CORPORATION, based on the scope of ISO 14001 certification, we are working toward the goals of reducing simple waste volume per gross production to 0.1% or lower and reducing total waste per gross production to 3.5% or lower. We are promoting restraint in generating waste by improving yields in our production processes, as well as strictly separating generated waste into material recycling, thermal recycling, Refuse Plastic Fuel (RPF), raw cement material, etc. for conversion to effective use.

In FY2022, the simple waste volume per gross production was 0.095% and the total waste per gross production was 3.44%, and we achieved these goals.

Going forward, we will gradually set the goals for total waste per gross production for RIKEN TECHNOS CORPORATION to be



3.3% or lower in FY2024 and 3.0% or lower in FY2030, and work toward them.

Appropriate Management of Chemical Substances

In the past, RIKEN TECHNOS CORPORATION has been managing chemical substances in accordance with laws such as the Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management Improvement (PRTR Law), the Industrial Safety and Health Act, and the Fire Services Act. Furthermore, we thoroughly understand and manage the substances used to comply with laws and regulations for diverse chemical substances (such as the Chemical Substances Control Law, Industrial Safety and Health Act, Food Sanitation Act, and the European Union's RoHS Directive and REACH regulation). We also develop a chemical substance management system that allows chemical substances regulated by laws and regulations to be inquired. During product development, we select raw materials based on our internal standards as well as laws and regulations. In addition, we have also established a system that allows us to understand the required level of chemical substance management for products by manufacturing site.

Protecting Bio diversity

We are working to eliminate the usage of Class I and II Specified Chemical Substances and Monitoring Substances under the Chemical Substances Control Law, and reduce the usage of chemical substances designated as Class I under the PRTR Law. Additionally, we comply with the Air Pollution Control Act, Water Pollution Control Act, Industrial Safety and Health Act, and other laws, and take into consideration the effects on people and ecosystems in developing, manufacturing, and marketing our products. We also work on maintaining the green areas around our factories.

Responding to Climate Change

The RIKEN TECHNOS GROUP recognizes that responding to issues surrounding sustainability is one of our key corporate challenges. By incorporating these issues into our management, we seek to help realize a sustainable society and enhance our enterprise value.

Our Group has also announced our support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and we undertake initiatives and information disclosure in line with the recommendations.



Task Force on Climate-related Financial Disclosures (TCFD)
This is an industry-led task force established in 2015 by the Financial Stability Board (FSB) in response to G20's intention. The task force recommends the evaluation of financial impact of risks and opportunities arising from climate change on management and disclosure in four thematic areas (governance, strategy, risk management, and metrics and targets) (Official website of TCFD: <https://www.fsb-tcf.org/>)

Governance

The following climate-related topics are deliberated by the Sustainability Committee.

Main topics deliberated by the Sustainability Committee

- Climate-related scenario analysis
- Identification and materiality assessment of short-, medium-, and long-term climate-related risks and opportunities
- Strategic approach policy for identified significant climate-related risks and opportunities
- Consideration of specific measures for responding to climate-related risks and opportunities
- Management of progress with adopted measures for responding to climate-related risks and opportunities

Risk Management

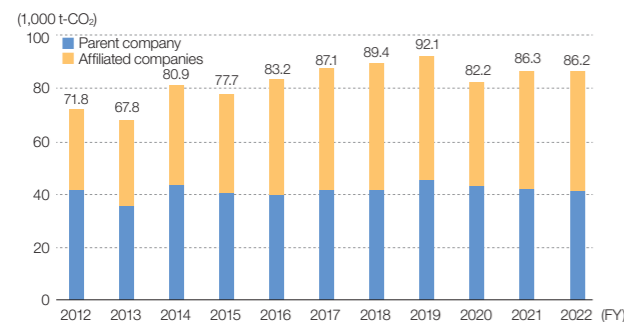
Regarding climate change and other risks related to sustainability, we undertake the formulation of policies related to risk avoidance, mitigation, and control, proposal of countermeasures, and other such matters centered on the Sustainability Committee and the Risk & Compliance Committee. On top of that, we conduct Group-wide risk management based on resolutions made at the Board of Directors. We also monitor the implementation state of countermeasures and their effects.

Metrics and Targets

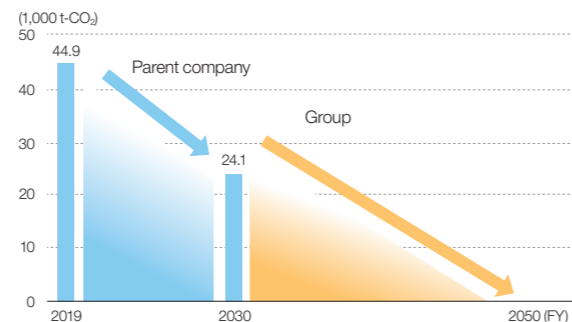
Greenhouse gas (CO₂) emissions may pose a risk for the Group's overall financial condition, but by developing products acceptable to a decarbonized society, this situation can also lead to business opportunities.

The RIKEN TECHNOS GROUP seeks to achieve carbon neutrality for the entire Group by 2050. In addition to setting medium- to long-term emissions reduction targets for the Group as a whole, we are planning specific initiatives to cut CO₂ emissions and have determined indicators to manage the progress of these initiatives.

Scope 1 and 2 emissions for the entire Group



CO₂ emissions reduction targets



Strategy

The Group has performed scenario analyses for the years 2030 and 2050 in the context of climate change based on two world views: a 2°C and a 4°C rise in global temperatures by 2100.

In the scenario with a 2°C rise in global temperatures, which is a risk that is expected to have major financial impact, the

introduction of a carbon tax will result in a shift from conventional raw materials to low-carbon raw materials, which is expected to generate or increase costs associated with the development and procurement costs of substitute raw materials.

In the scenario with a 4°C rise in global temperatures, possibilities expected include an increase in the procurement cost of raw materials caused by soaring prices of petroleum-derived raw materials, the need for facility renewal expenditures to comply with environmental regulations, and higher costs of petroleum- and coal-derived raw materials and fuel. Centered on the Sustainability

Committee, we are identifying the short-, medium-, and long-term climate-related risks and opportunities while referencing the results of scenario analyses and evaluating their criticality and financial impact. At the same time, we are studying specific measures for the identified risks and opportunities and managing the progress of our initiatives.

Risks The Group's performance may be affected by the introduction of policy measures to combat climate change, such as a carbon tax, or by delays in the development of or other action concerning environmentally friendly products.

Risk type	Risk overview	Financial impact		
		2°C	4°C	
Transition risk	Policies and regulation	Increased carbon taxes raise the cost of procuring key raw materials and energy.	Medium	Small
	Policies and regulation	The introduction of a carbon tax results in the substitution of conventional raw materials with low-carbon raw materials, which generates or increases costs associated with the development and procurement costs of substitute raw materials.	Large	-
	Technology	Delay in developing environmentally friendly products; our customers replace our products with low-carbon products from competitors, reducing demand for and sales of our products and services.	Medium	-
	Markets	Prices of petroleum-derived raw materials soar, raising the cost of procuring raw materials.	Medium	Large
	Markets	Delay in responding to our customers' reduced needs for petroleum-derived raw materials and rising needs for non-petroleum-derived raw materials, shifting demand away from our products/services and decreasing our sales.	Medium	-
Physical risk	Reputation	Delayed action on the environment causes a drop in our stock price due to a decline in investors' assessment of our environmental performance.	Medium	-
	Acute	The Company and its supply chain are struck by a disaster; until operations are restored, sales decrease due to the suspension or reduction of business activities, while costs associated with restoration and amelioration rise.	Medium	Medium
	Chronic	The cost of countermeasures for our buildings located near oceans and rivers will increase due to the increased occurrence of flooding caused by overflowing rivers and rising sea levels attributable to extreme fluctuations in rainfall and weather pattern.	Small	Medium

Opportunities The Group's performance may be affected by the development of products that contribute to energy conservation and the provision of low-carbon type products and materials with added functions.

Opportunity type	Opportunity overview	Financial impact	
		2°C	4°C
Energy sources	Development of products that contribute to energy conservation in the market and the uptake of renewable energy generation technologies and equipment increase sales of our related products.	Small	-
Products and services	Demand for and sales of our products increase due to the development and sale of materials with additional functions and products with fewer petroleum-derived components (low-carbon type products) in response to increased demand for low-carbon type products.	Medium	-
Reputation	Proactive efforts to address climate change earn the trust of stakeholders and enhance our enterprise value.	Medium	-
Resilience	The global expansion of our business sites improves our resilience by providing a stable supply of products to our customers even in an environment of increasing natural disasters, forestalling sales declines and building customer trust, leading in turn to higher sales.	Small	Small

Scenarios used in analysis: 2°C: Sustainable Development Scenario (SDS), IEA, 2020, Representative Concentration Pathways (RCP2.6), IPCC, 2014; 4°C: Stated Policy Scenario (STEPS), IEA, 2020, Representative Concentration Pathways (RCP6.0, 8.5), IPCC, 2014

Initiatives toward Carbon Neutrality by 2050

<RIKEN TECHNOS's goal>
Carbon neutrality by 2050

Parent company targets for 2030 (Scope 1 and 2)
24,139 t (46.2% decrease from FY2019) * Baseline value of 44,868 tons in FY2019

Current initiatives

- Developed RIKEBIO®.
- Supplied electricity from our own solar power generation facility adjacent to the Gunma Factory.
- Upgraded equipment to energy-efficient boilers.
- Replaced forklift trucks with EV versions and used fuel-efficient company vehicles.



Future Initiatives

- Upgrade equipment at production sites (air conditioning, production equipment, etc.); energy conservation of existing equipment
- Create an energy roadmap.
- Expand the adoption of renewable energy.
- Expand RIKEBIO® series lineup and sales.