

Environment <E>

We contribute to preservation of the earth's environment through all of our business activities to leave a greener, richer world for the future and our children.



Hiroshi Yasuda Director, Corporate Officer, Chief of Environment Division, Chief of Production Headquarters, Chief of Safety & Health Promotion Division

We obtain many resources from the earth—water, food and clothing as well as raw materials such as rubber, resin, and metal. At the same time, we inflict damage on the earth through the emission of greenhouse gases and depletion of resources as a result of overuse in our daily lives and business activities.

Based on the TG 2050 Environmental Challenge, our long-term environmental vision, we formulate action plans every five years to promote environmental protection. These plans have been highly regarded by external organizations, including in corporate rankings by newspapers. To conduct environmental management that meets the expectations of society, we disclose related information in agreement with the recent recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Going forward, we will continue our efforts to improve corporate culture and human resource development while striving to further strengthen sustainable environmental protection activities.

Basic philosophy

The Toyoda Gosei Group formulated its 1st Environmental Action Plan in 1993 based on its environmental policy, and since that time has been actively confronting environmental issues. In February 2016, we announced our TG 2050 Environmental Challenge, which lays out our long-term goals, and formulated our 6th Environmental Action Plan, which establishes our action items and goals for the five years until 2020. These documents will guide our environmental

protection activities moving forward.

To carry out environmental management that meets the expectations of society, we have established environmental operations in the Americas, China, and Asia, and have put in place a global system for area management in these four global regions including Japan. The entire Toyoda Gosei Group will move ahead steadily with a view to 2030, the midpoint of our Environmental Challenge.

Environmental policy

1. Environmentally-friendly corporate activities

We are keenly aware that all stages of our business relate deeply to the environment, from development, production, and sales activities to end-of-life disposal. The Toyoda Gosei Group, including all internal departments, domestic and international affiliates, and suppliers, conducts all business activities with concern for the environment in cooperation and coordination with customers, government authorities, and others.

2. Good corporate citizenship

As a good corporate citizen, we participate in, support, and cooperate with environmental activities by many groups while also working on environmental activities in the community and broader society. We also provide education for all employees to support them in becoming involved in environmental activities as members of the community and society, and support social contributions and volunteerism.

3. While spreading information on these activities, we listen to the opinions of people at all levels of society and work to improve our activities wherever we can.

TG 2050 Environmental Challenge —A Greener, Richer World for Our Children

The Toyoda Gosei Group specializes in the field of high polymers—rubber and plastics. Our symbol is the benzene ring, a hexagonal hydrocarbon structure that is the starting point for polymers. Borrowing from the six sides of the benzene ring, the TG 2050 Environmental Challenge sets six challenges to strengthen our environmental efforts with a long-term view to the year 2050.

Support for TCFD recommendations

In May 2019, the Toyoda Gosei Group endorsed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and is actively disclosing relevant information together with measures to achieve a decarbonized society, as set forth in the TG 2050 Environmental Challenge (details are posted on our website). In April 2020, we announced our CO₂ emission targets for 2030 and are accelerating our efforts.





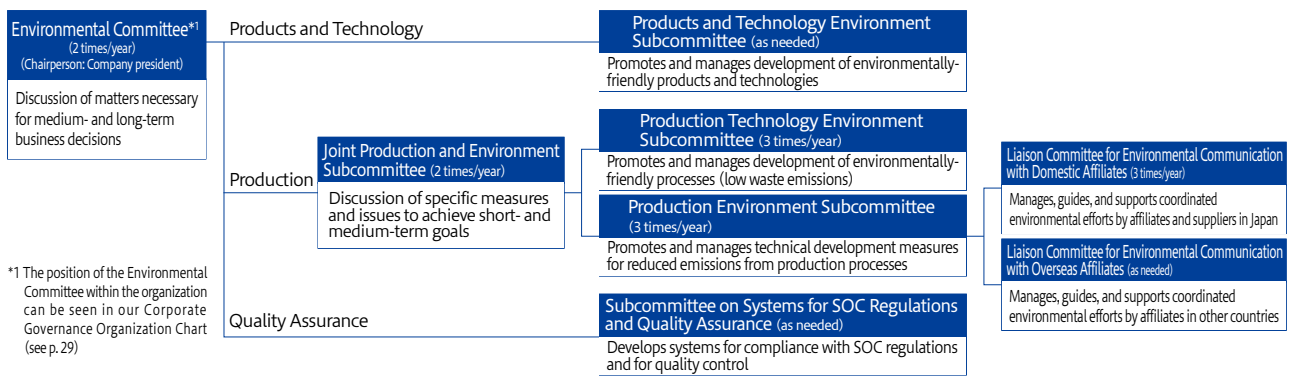
Environmental organization

Our medium- and long-term policy and key action items are discussed and decided in an Environmental Committee chaired by the company president. The Environmental Committee consists of four subcommittees in the areas of products, production, and quality. The subcommittees are further broken down into working groups that promote and manage areas such as reductions in energy use, waste products, and volatile organic compound (VOC) emissions, and preservation of the

environment. In this way, environmental preservation and management activities are conducted from an expert perspective.

Liaison committees have also been established to share information with related companies in Japan and abroad. Since 2019 we have been strengthening coordination between production technology and plant floor manufacturing (newly established Joint Production and Environment Subcommittee) to promote energy-saving activities.

Environmental organizational structure



Deployment from the Environmental Committee and subcommittees to plants and other operations is done with the establishment of expert committees in accordance with the ISO 14001 system at each plant.

Risk and opportunity associated with climate change and resource depletion

The risks and opportunities associated with climate change and resource depletion are recognized as an important management issue. We are working to strengthen our responses to the overall financial and social risks from the effects on economic and production activities of more drastic abnormal weather, changing precipitation patterns, droughts and floods, from a global perspective based on laws, regulations and trends.

	Risk	Opportunity
Climate change	Cost increases from carbon tax and soaring energy prices	Development of lighter weight, next-generation automotive parts, cost reductions from efficient energy use
Resource depletion	Effects of water shortages and floods on production activities Cost increases from difficulty in procuring materials, soaring material prices	Cost reductions from re-use and decreased use of water Cost reductions from recycling technology, use of fewer materials
Management (regulatory compliance)	Loss of trust in the company due to environmental problems, including legal violations, and insufficient efforts to protect the environment	Raise brand strength by enhancing environmental activities

Resource utilization and environmental emissions in business activities

To lessen the amount of energy, material and other resource inputs, and maximum product output, we are utilizing our skills in product development, process development and workplace

kaizen in efforts to improve through business activities.

The input resources we use include environmentally friendly materials and clean energy.

INPUT

Total material input 45,974t	Rubber (rubber sheet) 17,820t
Plastic 28,154t	Excluding purchased parts, metal and liquid
Total energy input 2,571,000Gj*2	Heavy oil 12,000Gj
Purchased electricity 1,240,000Gj	Kerosene 0Gj
Renewable energy 2.5Gj	LNG 126,000Gj
City gas 1,190,000Gj	Gasoline 1,000Gj
LPG 2,000Gj	
Water resource input 1,260,000m ³	Clean water 214,000m ³
Industrial water 696,000m ³	Underground water 350,000m ³
PRTR*3 substances usage 593t	

Business activities →

OUTPUT

Products	
Emitted into the atmosphere	
NOx*5	108t
CO ₂ 106,000t-CO ₂	Dust 0t
6 gases 200t-CO ₂	Volume of substances subject to PRTR 91t
SOx*4 0t	VOC*6 emissions 270t
Waste discharge	
General waste	7t
Landfill waste 0t	For-profit disposal by sale 5,893t
Incinerated waste 1t	Volume of substances subject to PRTR 59t
Industrial waste 7,203t	
Wastewater	
Nitrogen emissions*7	8.3t
Total wastewater 930,000m ³	Phosphorus emissions*7 0.5t
Volume of substances subject to PRTR 0.1t	COD emissions*7 4.1t

*2 Gigajoule (1,000,000,000 joules)

*3 Pollutant Release and Transfer Register

*4 Sulfur Oxide

*5 Nitrogen Oxide

*6 Volatile Organic Compounds

*7 Range of target: 4 plants of Haruhi, Inazawa, Heiwacho and Seto, Kitajima Technical Center, Miwa Technical Center and Sun-Court Inoguchi