Environment

Environmental Management

Our Policies and Approach

For Suntory Group、the global environment is an essential foundation for our business. As a company dedicated to delivering the gifts of water and nature to our customers, we recognize our significant responsibility to protect ecosystems, including beautiful and clean water, and to pass on a sustainable society to future generations.
To realize a rich and sustainable society, Suntory Group committed to preserving and regenerating the natural environment and to reducing environmental impact across the entire Group. To guide these efforts, we established the Suntory Group's Environmental Principles. We work collaboratively towards the realization of a sustainable society by promoting this Policy not only among our employees but also throughout the value chain, including our business partners and other stakeholders.

Suntory Group's Environmental Principles

Our Environmental Principles clearly indicates our priority initiatives, such as “achieving water security,” “conserving and regenerating biodiverse ecosystems,” “promoting a circular economy,” and “transitioning to a net-zero society.” We formulate specific environmental targets and action plans based on this policy, which was established in 1997 and revised in 2022. We also emphasize communication with society and stakeholders to champion the transformation to a sustainable society.

Basic Principles of Suntory's Environmental Policy

At Suntory Group, environmental management is at the core of our business strategy. In our commitment to cultivating a sustainable and vibrant society now and in the future, these environmental principles inform the actions we take each day across our entire value chain.

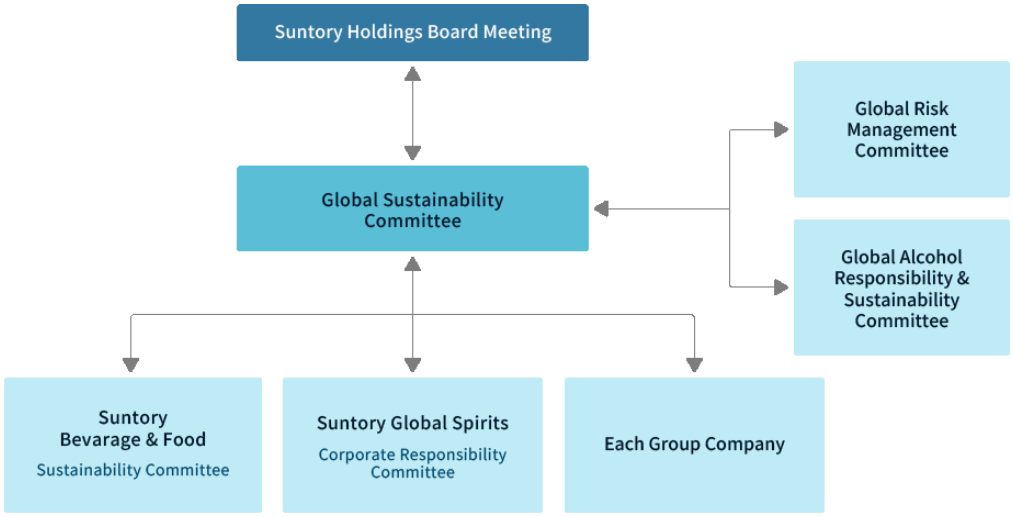
1. **Achieving water security**
   Water is the most vital resource for our business. At Suntory, we aim to become net water positive by using water carefully and localizing water stewardship to contribute to nature’s healthy water cycle.
2. **Conserving and regenerating biodiverse ecosystems**
   Thriving water and agricultural systems are crucial to our business. We strive to protect and regenerate biodiversity through local water source conservation and sustainable agricultural practices.
3. **Promoting a circular economy**
   To effectively reduce waste and efficiently utilize limited resources, we imbed sustainable principles throughout the lifecycle of our products, promote the 3Rs (reduce, reuse, recycle) for all raw materials, use renewable resources when available, and collaborate with stakeholders to build a fundamentally circular system.
4. **Transitioning to a net-zero society**
   In the face of climate change, we are doing our part to achieve a net-zero society by reducing greenhouse gas emissions across our value chain.
5. **Engaging with society**
   To achieve a vibrant global environment, we are championing the transformation to a sustainable society by collaborating with our stakeholders, deepening dialogues with local communities, and transparently disclosing our progress.

Promoting Structure

Global Sustainability Committee

The Global Sustainability Committee (GSC) is the core of our sustainability management promotion system. The Committee is chaired by the Chief Sustainability Officer, with Executive Officers from each business serving as vice chairs. Committee members include the Directors in charge of each functional division, the heads of Group companies from around the world, and the heads of functional divisions.
The GSC discusses the Group's sustainability strategies and confirms progress on priority themes (water, climate action, raw ingredients, containers and packaging, health and human rights). Progress on environmental and social activities as well as business risks and opportunities are reported to the Board of Directors on a quarterly basis. In addition, the Board of Directors are provided with the opportunities to hear advice from third party experts on sustainability management. Additionally, the targets used to determine executive compensation include a sustainability component.

Suntory Group's Environmental Management Promoting Structure



Environmental Policy Implementation Structure

To implement our Environmental Principles, each Group company appoints an environmental management officer, while designated personnel at each business site manage daily compliance and environmental performance. This includes strict internal standards for wastewater and air emissions. In the event of a serious environmental accident or regulatory violation, there is a system in place for immediate reporting to management. As of 2024, we have had no major environmental incidents.

Environmental Management System (ISO14001)

We have also introduced ISO14001–based environmental management systems at our major production sites in Japan and overseas, checking its effectiveness through periodic internal audits and third-party certification. Suntory Group companies in Japan[*1] have ISO integrated certification. Our small-scale sites have been exempt from certification since 2017 but instead have strengthened compliance management and transitioned to more efficient operations. Each business division works together under this structure to promote environmental considerations throughout the entire value chain.

*1 Group companies complying to the Japanese SOX Act

Suntory Group ISO14001 Certification List

Targets and Progress

Suntory Group has established Environmental Targets toward 2030 in addition to our long-term Environmental Vision toward 2050, covering water and climate action, which are expected to have a particularly large impact on our business operations among sustainability issues. We have also set goals for containers and packaging toward 2030 and are currently taking action accordingly.

Mid- to Long-term Goals

Environmental Vision toward 2050

Water Sustainability

- Reduce the water intensity of production at our owned plants*1 by **50%***2 globally.
- Replenish more than 100% of water used at all of our owned plants globally through conservation of the surrounding ecosystem.
- Achieve sustainable water use for all key ingredients.
- Share the Sustainable Water Philosophy to the communities where our business operates.

Climate Change Measures

- Aim for net **zero** greenhouse gas emissions across the whole value chain by 2050

  Continue to promote energy conservation, proactively implement renewable energy solutions, utilize next-generation infrastructure options and work together with stakeholders across the value chain in order to contribute to realizing a decarbonized society

Targets toward 2030

Reduction of water used in direct operation

Reduce the water intensity of production at our owned plants*1 by **35%***2 globally. In addition, explore reduction of absolute amount of water withdrawn in highly water stressed areas.

Water replenishment

Replenish more than **100%** of water used in at least 50% of our owned plants*1 globally, including all those in highly water stressed areas, through local water source conservation efforts.

Sustainable water use in raw ingredients

Collaborate with suppliers to improve water-use efficiency in the production of waterintensive key ingredients*3 in highly water stressed areas.

Water education and access to safe water

Expand water education programs and initiatives to provide safe water access for more than **5 million people**.

Greenhouse gas (GHG)

- Reduce GHG emissions from our direct operations by **50%***4
- Reduce GHG emissions across our entire value chain by **30%***4

Percentage of sustainable materials in PET bottles.*5

- Percentage of sustainable materials used in our PET bottles globally **100%**

*1 Suntory Group plants that manufactures finished products

*2 Reduction per unit production based on the business fields in 2015

*3 Coffee, barley, grapes

*4 Based on emissions in 2019

*5 Percentage of sustainable materials (e.g., recycled or bio-based materials) in terms of PET bottle weight.

Progress

Materiality		2030 targets	2024 results
Water	Reduction of water used in direct operation 	Reduce the water intensity of production at our owned plants[*1] by 35%[*2] globally. In addition, explore reduction of absolute amount of water withdrawn in highly water stressed areas	● Reduced the water intensity of production by 30% compared to 2015.
	Water replenishment 	Replenish more than 100% of water used in at least 50% of our owned plants[*1] globally, including all those in highly water stressed areas, through local water source conservation efforts. Especially in regions with high water stress, the above initiatives are implemented at all plants.	● Water replenishment activities implemented in 36% of all owned plants globally. ● For the plants located in highly water stressed areas, activities are implemented in 31% of those areas.
	Sustainable water use in raw ingredients 	Collaborate with suppliers to improve water-use efficiency in the production of water-intensive key ingredients[*3] in highly water stressed areas.	● As an initiative on barley production through regenerative agriculture, we continue working with our malt suppliers to verify the improvement of water use efficiency by improving soil water retention. ● Implemented a pilot program to assess and support water use through regenerative agriculture for coffee farmers in the Cerrado region of Brazil.
	Water education and access to safe water 	Expand water education programs and initiatives to provide safe water access for more than 5 million people.	● Total 1,750,000 people <Breakdown> ● Water education program: 1,330,000 people ● Provision of safe water: 420,000 People
Climate action	Scope 1,2 	Reduce GHG emissions from our direct operations by 50%[*4]	● 32% reduction against base year
	Scope 1,2,3 	Reduce GHG emissions across our entire value chain by 30%[*4]	● GHG emissions across our entire value chain 13% reduction compared to base year
Containers and packaging	Use of Sustainable Materials in PET Bottles 	100% of PET bottles made with sustainable materials (globally)	● Percentage of sustainable materials used in PET bottles (globally) 35% ● Percentage of sustainable materials used in PET bottles (non-alcoholic beverage business in Japan): 58%

*1 Suntory Group plants that manufactures finished products

*2 Reduction of water intensity of production based on 2015 baseline year

*3 Coffee beans, barley, grapes

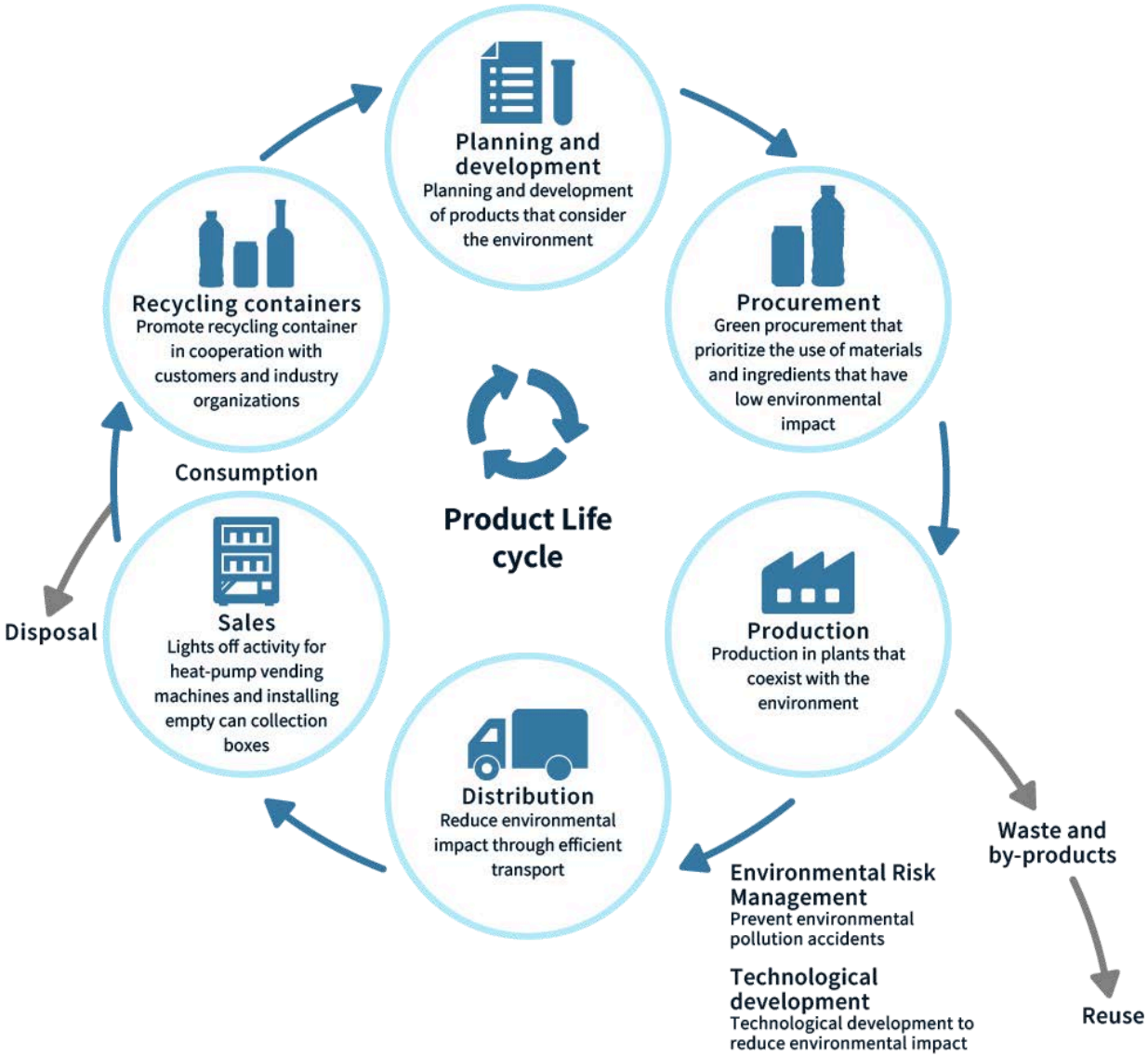
*4 Based on emissions in 2019.

*5 Percentage of sustainable materials (e.g., recycled or bio-based materials) in terms of PET bottle weight.

Our Initiatives

Reducing Environmental Impact Across the Product Life Cycle

Suntory Group generates various by-products and waste from a wide range of business activities. We are committed to reducing environmental impact by quantitatively understanding our impact on the environment throughout a product's life cycle - from planning and development to disposal and recycling.
In addition, following the global expansion of our business, we assess the environmental impact of production sites around the world to determine the environmental impact on a global scale. To reduce environmental impact across the supply chain, we encourage our business partners, including suppliers who do business with the Suntory Group, to disclose environmental information and take action to reduce their environmental impact.
This comprehensive approach has helped us achieve ongoing reductions in GHG emissions and water usage intensity for each of our products.



Compliance with Environmental Regulations and Voluntary Standards

In addition to complying with environmental laws and regulations (such as the Act on Promotion of Global Warming Countermeasures and the Energy Conservation Act in Japan), each Suntory Group plant is committed to environmental management by setting voluntary standards for wastewater treatment, boiler facilities and other environmental facilities that are equal to or more stringent than those set by laws and regulations.
In 2024, no serious accidents or violations affecting environmental pollution occurred.
Should a problem be found, we thoroughly investigate the cause and take measures to prevent a recurrence, sharing our findings with the entire Group.

Approach for Internal Awareness-Raising

To deepen employees' environmental awareness and understanding of sustainability, and to cultivate talent capable of taking proactive steps towards a sustainable society, we are engaging in systematic awareness-raising activities. Suntory Group conducts an annual sustainability-themed e-learning program for all employees, providing an opportunity to learn about the societal challenges facing our business and the initiatives we are undertaking.
In fiscal 2024, we conducted educational training (such as e-learning) on sustainable management for Group employees in Japan, with a total of 21,237 employees participating. We are also expanding our online training programs and e-learning courses to Group employees worldwide. In addition, we regularly hold specialized training sessions tailored to specific roles and job level, such as seminars on environmental regulations for factory personnel and LCA workshops for product development teams to help employees acquire the skills necessary for each area of work.

Seminar on managing Wastes Disposal and Public Cleansing Act

For more information on environmental training attendance, see Performance Data.

First Hand Experience with Forestry at Suntory Natural Water Sanctuary

We are advancing employee forestry volunteer activity at our Suntory Natural Water Sanctuaries. Up until 2013, many employees and their families joined these activities as volunteers.
Since 2014, the program has evolved into a forest maintenance experience aimed at helping each employee personally understand and embody Suntory Group’s corporate philosophy. More than 12,000 employees in alcoholic and non-alcoholic businesses have participated so far. This training is currently included in the onboarding program for new employee.

Forestry maintenance training for employees

Green Bonds

Suntory Group is actively engaging in sustainable finance to realize a decarbonized society and water usage preservation. Based on our 2022 Sustainable Finance Framework, Suntory Holdings Limited issued a green bond, a type of SDG bond, with proceeds to be used for projects that contribute to solving environmental issues.

For details, please see Green Bonds.

Suntory Group ISO 14001 Certification List (as of the end of 2024)

Japan

1. The research & development operations and academic research of food, alcoholic beverages, health care science business and new business at Suntory Holdings Limited (Suntory Beverage & Food Limited and Suntory Spirits Limited, Suntory Wellness Limited, Suntory Global Innovation Center Limited, Suntory Foundation for Life Sciences)

2. The manufacturing activities of soft drinks, liquors and wines in the following sites

2-1. Non-alcoholic Beverages and Food

2-1-1. Suntory Products Limited

- Suntory Products Ltd. Haruna Plant
- Suntory Products Ltd. Hanyu Plant
- Suntory Products Ltd. Kanagawa Ayase Plant
- Suntory Products Ltd. Tamagawa Plant
- Suntory Products Ltd. Kisogawa Plant (Including Kisogawa Well)
- Suntory Products Ltd. Suntory Tennensui Minami Alps Hakushu Plant
- Suntory Products Ltd. Suntory Tennensui Kita Alps Shinano-no-Mori Water Plant
- Suntory Products Ltd. Takasago Plant
- Suntory Products Ltd. Ujigawa Plant
- Suntory Products Ltd. Suntory Okudaisen Bunanomori Water Plant

2-1-2. Suntory Coffee Roastery LTD.

- Suntory Coffee Roastery LTD. Ebina Plant
- Suntory Coffee Roastery LTD. Oyama Atsugi Plant

2-2. Alcohol Beverages

2-2-1. Suntory Spirits Limited

- Suntory Spirits Ltd. Hakushu Distillery (Including Omi Aging Cellar)
- Suntory Spirits Ltd. Yamazaki Distillery
- Suntory Spirits Ltd. Ohmi Aging Cellar
- Suntory Spirits Ltd. Tochigi Azusanomori Plant (Including 3rd Parking Lot and 4th Parking Lot)
- Suntory Spirits Ltd. Osaka Plant
- Suntory Spirits Ltd. Gunma Brewery
- Suntory Spirits Ltd. Tokyo Musashino Brewery
- Suntory Spirits Ltd. Kyoto Brewery
- Suntory Spirits Ltd. Kyushu Kumamoto Plant
- Suntory Spirits Ltd. Tominooka Winery
- Suntory Spirits Ltd. Shiojiri Winery

2-2-2. SUNTORY CHITA DISTILLERY LIMITED

2-2-3. OSUMISYUZO LIMITED

2-2-4. Iwanohara Vineyard Co., Ltd.

2-2-5. Suntory Malting LTD.

3. The sales and management of beverages in automatic vending machine in Suntory Beverage Solution Limited, KAGAWA PEPSI COLA SALES LIMITED, Harata Vending Service Limited

4. The vending machine maintenance work at Union Trust Limited

5. The operation and management of empty beverage container recycling plant at Japan Beverage Ecology Limited

6. Food Service

- DYNAC CORPORATION
- PRONTO CORPORATION

Overseas

1. Non-alcoholic Beverages and Food

1-1. Suntory Beverage & Food Europe

- Suntory Beverage & Food France Meyzieu (France)
- Suntory Beverage & Food France La courneuve (France)
- Suntory Beverage & Food France Gadagne (France)
- Suntory Beverage & Food France Donnery (France)
- Suntory Beverage & Food Spain Toledo (Spain)
- Suntory Beverage & Food Spain Carcagente (Spain)
- Suntory Beverage & Food Great Britain and Ireland Coleford (U.K)

1-2. Suntory Beverage & Food Asia Pacific

- Suntory Beverage & Food Thailand Pin Thong (Thailand)
- Suntory Beverage & Food LCB Thailand (Thailand)
- Suntory Beverage & Food Taiwan Taichung (Taiwan)
- International Refreshment Singapore (Singapore)
- Suntory PepsiCo Vietnam Beverage Bac Ninh (Vietnam)
- Suntory PepsiCo Vietnam Beverage Quang Nam (Vietnam)
- Suntory PepsiCo Vietnam Beverage Dong Nai (Vietnam)
- Suntory PepsiCo Vietnam Beverage Hoc Mon (Vietnam)
- Suntory PepsiCo Vietnam Beverage Can Tho (Vietnam)
- Suntory PepsiCo Beverage Thailand Rayong (Thailand)
- Suntory PepsiCo Beverage Thailand Saraburi (Thailand)
- Suntory Beverage & Food New Zealand Wiri（New Zealand）

2. Alcohol Beverages

2-1. Suntory Global Spirits Inc.

- Frankfort (USA)
- Clermont (USA)
- FBN(Fred B. Noe Distillery) (USA)
- Booker Noe (USA)
- Maker's Mark (USA)
- Calgary (Canada)
- Sauza (Mexico)
- Behror (India)
- Cooley (Ireland)
- Palazuelos (Spain)
- Valverde (Spain)
- Ardmore (U.K.)

- Auchentoshan (U.K.)
- Bowmore (U.K.)
- Glen Garioch (U.K.)
- Laphroaig (U.K.)
- Springburn (U.K.)
- Cruzan (Virgin Islands,U.S.)

2-2. Chateau Lagrange (France)

3. Health Care Science

3-1. Suntory Wellness Limited

- PRONOVA LABORATORIES Supplement (Thailand)
- PRONOVA LABORATORIES Personal care (Thailand)

back to previous page

Green Bonds

Green Bonds

Suntory Group's Sustainable Finance Initiatives

Suntory's history began in 1899 when Torii Shinjiro opened Torii Shoten in Osaka City. He held an untiring "Yatte Minahare" spirit, with a belief in "Giving Back to Society" as a Company. These two management philosophies have been continuously handed down from generation to generation within Suntory Group since its foundation more than 120 years ago.
In the 2000s, with increased recognition of global climate change and other common issues around the world, the Company launched several key initiatives. In 2003, the Natural Water Sanctuary Project was launched, and in 2004, the next-generation environmental education program, "Mizuiku", aiming at coexistence with water and natural environments cultivating water resources.
Since then, to its customers and society, Suntory Group has been engaged in environmental activities with a long-term perspective. In 2019, we formulated the Suntory Group Sustainability Vision to promote group-wide activities to solve common global sustainability issues.
Under Suntory's Environmental Vision toward 2050, we aim to reduce water usage at our plants worldwide by 50%[*1] and achieve net-zero greenhouse gas (GHG) emissions across the entire value chain. Suntory's Environmental Targets toward 2030 will assist in achieving the 2050 vision through SBT certification, reduced water use intensity at our owned plants[*2] by 35%[*1] globally, reduced GHG emissions at our sites by 50%,[*3] and reduced GHG emissions across the entire value chain by 30%.[*3]
Against this backdrop, Suntory Group has formulated the Sustainable Finance Framework as a sustainability finance initiative aiming to achieve a decarbonized society and reduce water consumption. This is the first framework in Japan that incorporates targets for reducing water consumption, and we will further promote our sustainability initiatives in the future.

*1 Reduction per unit production based on the business fields in 2015

*2 Suntory Group plants that manufacture finished products

*3 2019 emissions as base line

Sustainable Finance Framework

Suntory Holdings Limited has developed its Sustainable Finance Framework as described below based on the following relevant principles, etc.* for funding through Sustainable Finance.
The Company plans to raise funds through sustainable finance under the Framework after the establishment of the Framework.
The financing methods available under the Framework include Green bonds, Green loans, Sustainability-linked bonds and Sustainability-linked loans.

Suntory Sustainable Finance Framework (Overview)

Suntory Sustainable Finance Framework

* Principles/Guidelines

- Green Bond Principles (GBP) 2021 (International Capital Market Association (ICMA))
- Green Loan Principles 2023 (Loan Market Association (LMA), etc.)
- Green Bond Guidelines 2022 (The Ministry of the Environment of Japan)
- Green Loan Guidelines 2022 (The Ministry of the Environment of Japan)
- Sustainability-Linked Bond Principles 2023 (ICMA)
- Sustainability-Linked Loan Principles 2023 (LMA, etc.)
- Sustainability-Linked Bond Guidelines 2022 (The Ministry of the Environment of Japan)
- Sustainability-Linked Loan Guidelines 2022 (The Ministry of the Environment of Japan)

Second Party Opinion

Suntory Holdings Limited received a Second Party Opinion from Moody's to ensure transparency and alignment with relevant principles and to attract more investors.

Moody's Second Party Opinion

Green Bonds Overview

Green Bonds (Unsecured Corporate Bonds No.13)

Name of the Bond	Suntory Holdings Limited 13th Publicly-offered Corporate Bonds (Green bond with specific inter-bond pari passu clause)
Issue Amount	20 Billion Yen
Term	5-years
Coupon	0.628%
Transfer Date / Maturity Date	November 24, 2023 / November 24, 2028
Interest Payment Date	May 24 and November 24 each year
Ratings	AA (Japan Credit Rating Agency, Ltd.)
Use of Proceeds	● Energy efficiency - Capital investment contributing to energy-saving at the plants we own ● Renewable energy - Costs for procurement of green hydrogen

	- Capital investment for the construction of biogas refining facilities, biomass heat supply facilities or biomass power generation facilities through wastewater treatment - Costs for procurement of electricity generated from renewable energy (purchase of renewable energy certificates)
Lead Managers	Mizuho Securities Co., Ltd., Mitsubishi UFJ Morgan Stanley Securities Co.,Ltd., BofA Securities Japan Co., Ltd.
Structuring Agent*	Mizuho Securities Co., Ltd.

* A securities company that supports the implementation of sustainable finance, including the issuance of green bonds, through the development of a sustainable finance framework and advice on obtaining second-party opinions.

Green Bonds (Unsecured Corporate Bonds No.13)　Report (As of December 31, 2024)

Suntory Holdings Limited allocated 8.44 Billion Yen to projects which fulfill eligibility criteria from 20 Billion Yen Suntory Holdings Limited 13th Publicly-offered Corporate Bonds (Green Bonds with specific inter-bond pari passu clause) issued on November 24, 2023.
9.60 Billion Yen of unallocated funds will be allocated by December 31, 2025.

Eligibility Criteria	Allocated Amount	Impact Reporting
Capital investment contributing to energy-saving at the plants we own - Adoption of best available technologies as of the installation of facilities 	JPY9,600MM (Refinance: JPY9,200MM)	Reduction in GHG emissions: 3,298t-CO_2e[*1]
Costs for procurement of green hydrogen 	JPY0MM To be allocated in 2025	-
Capital investment for the construction of biogas refining facilities, biomass heat supply facilities or biomass power generation facilities through wastewater treatment	JPY590MM (Refinance: JPY590MM)	Reduction in GHG emissions: 2,202t-CO_2e[*2]
Costs for procurement of electricity generated from renewable energy (purchase of renewable energy certificates)	JPY210MM (Refinance: JPY000MM)	Reduction in GHG emissions: 151,461t-CO_2e[*3]
Total	JPY10,400MM (Refinance: JPY9,790MM)	Impact represents the entire environmental improvement effects for the entire projects

(*1) Latest GHG emissions (or their estimate) × Improvement in energy consumption rate

(*2) Power generation using biogas × GHG emission factor of electricity, Reduction in use of city gas × GHG emission factor of city gas, or GHG emissions with conventional design (gas boilers or coal boilers) − GHG emissions with new design (only methane gas boilers after abolishing coal boilers), etc.

(*3) Power consumption × GHG emission factor of electricity

Integrated Disclosures based on the Recommendations of the TNFD and TCFD

Our Journey as a Company that Creates Harmony with People and Nature

As a multifaceted beverages company, Suntory Group delivers the blessings of water and nature to customers through our products. Beautiful, clean water, plants and forests that grow in rich soil, rivers, oceans, and the air, and ecosystem services created by living creatures are the very foundation of Suntory Group's business. We recognize that safeguarding, carefully using, and circulating these gifts of nature is not only a crucial responsibility, but also a lifeline for business continuity.

More than 50 years ago, in 1973, Suntory Group began its bird conservation activities with the slogan "Today Birds, Tomorrow Humans" (the happiness that comes to birds today may bring happiness to humans tomorrow). These activities seek to raise awareness of the environment through wild birds, which are said to be a barometer of the environment, and to pass on to future generations an environment in which birds, people, and all other living things can live in abundance.

First “Save the Birds! Campaign” newspaper ad (1973)

In 2003, the Suntory Natural Water Sanctuaries were launched in Kumamoto, Kyushu, with the aim of improving water replenishment functions and restoring biodiversity. They have since been expanded to cover an area of more than 12,000 hectares in 26 locations across 16 prefectures*, and are now conserving and restoring more than twice the amount of groundwater withdrawn by our plants in Japan. Currently, efforts to coexist with nature, such as water conservation activities, are expanding in various parts of the world where we do business.
*As of July 31, 2025

In recent years, initiatives for nature-positive practices have been accelerating, marked by the adoption of the Kunming-Montreal Global Biodiversity Framework at the 15th Conference of Parties to the UN Convention on Biological Diversity (COP15) in 2022.
In 2023, Suntory Group was the only Japanese company to participate in the world's first pilot of corporate guidance for nature conservation by the Science Based Targets Network (SBTN), and in September of the same year, we used the analysis results from the pilot to make a pilot disclosure to the Taskforce on Nature-related Financial Disclosures (TNFD).
In line with the recommendations of the TNFD and the Task Force on Climate-related Financial Disclosures (TCFD), we have disclosed Suntory Group's integrated environmental management initiatives.

To contribute more effectively to addressing the deeply interrelated challenges of climate change, biodiversity, water security and resource circulation, comprehensive measures are essential. Nature-related activities such as our Natural Water Sanctuaries represent initiatives that involve collaboration with many stakeholders with the aim of resolving complex environmental issues.
Suntory Group will continue to contribute to the realization of "Nature Positive" and "Net Zero" consistent with globally shared standards based on science.

History of Suntory Group's nature Initiatives		Spread and impact of activities to date
1973	• **Launch of Suntory bird conservation activities**	• Track record: over **50 years**
2003	• **Launch of Suntory Natural Water Sanctuary activities**	• Track record: over **20 years** • Replenishes more than twice the amount of groundwater withdrawn by plants in Japan (2019 onwards) • Water source replenishment and conservation activity bases expanded to **33 locations in 8 countries** around the world* *26 locations in Japan, 7 locations overseas (as of July 31, 2025) • Birds confirmed at Suntory Natural Water Sanctuaries: **137 species** (Species are on the Japan Red List): **14 species** (as of June 2022) • Rare plants found in Suntory Natural Water Sanctuaries:**136 species*** (as of June 2022) *Total of Ministry of the Environment Red List and prefectural Red List • Total number of employees participating in forestry development: Approx. **12,000** (by May 31, 2025)
2004	• **Launch of Suntory Mizuiku - education program for nature and water**	• Track record: over **20 years** • Implemented in **8 countries*** around the world, with a cumulative total of **1.33 million** participants in water awareness programs such as Mizuiku (as of December 31, 2024) *Japan, Vietnam, Thailand, France, China, Spain, UK and New Zealand
2022	• **Launch of regenerative agriculture pilot**	• The number of sustainable agriculture initiatives, including regenerative agriculture, has increased to **10**
2023	• **Suntory was the only Japanese company to participate in the world's first corporate guidance pilot by SBTN for nature conservation** • **TNFD pilot disclosure**	• Integrated disclosure based on the recommendations of the TNFD and TCFD (2025)

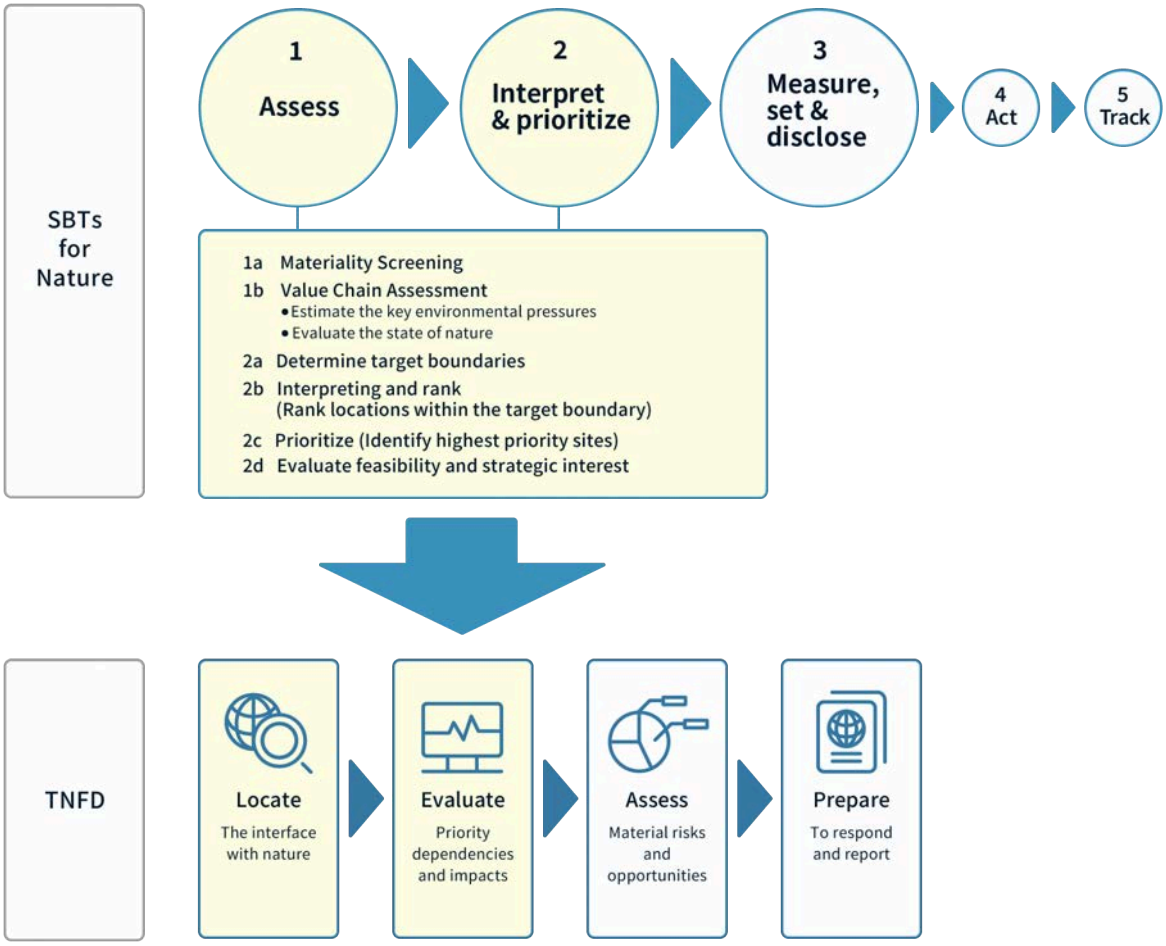
- Suntory Bird Conservation Activities
- Suntory Natural Water Sanctuary
- Suntory Mizuiku - Education Program for Nature and Water

Context and Scope of this Disclosure

Context of this Disclosure

- The material issues identified through our materiality analysis – namely water, climate action, containers and packaging, and raw ingredients - are all interrelated and mutually influential. Accordingly, we disclose information on these topics in an integrated manner in accordance with individual disclosure frameworks such as the TNFD and TCFD recommendations.
- Suntory Group was the only Japanese company to participate in the corporate guidance pilot announced in 2023 by SBTN. Of the steps in the LEAP (Locate, Evaluate, Assess, Prepare) approach, which is part of the TNFD framework, for steps L and E, we utilize the results of the analysis of direct operations and upstream value chains in SBTN's Steps 1 and 2. Please see the diagram below for the correlation between the TNFD and SBTN approaches.

Linkage between TNFD and SBTN



Scope of Disclosure

- Suntory Group's main businesses are covered: (1) beverages and food-related businesses, (2) alcoholic beverage business, and (3) other businesses
- Specifically, Suntory Group's entire value chain for the following businesses is covered in the scope:

  (1) Beverage and food business: Suntory Beverage & Food Ltd.

  (2) Alcoholic beverage business: Suntory Spirits Ltd. and Suntory Global Spirits Inc.

  (3) Other businesses: Suntory Wellness Ltd., etc.

Areas with Material Nature and/or Climate Related Issues

- With regard to nature, the assessment covers 79 directly operated production sites (27 in Japan and 52 outside of Japan), and the countries from which the 8 main raw ingredients are procured upstream in the value chain.
- Regarding climate change, the assessment covers our own sites and areas related to the upstream and downstream of our value chain.

Governance

Suntory Group adopts a holding-company system. The Board of Directors for Suntory Holdings, the holding company, consists of 9 directors, including 1 outside director (as of April 1, 2025). The Board of Directors is responsible for discussing, deliberating and makes decisions regarding management issues affecting the entire Group while supervising the execution of operations by all Group companies. The introduction of an executive officer system has separated the business decision-making process from the execution of business operations, enabling swift and agile decision-making.

In response to the expansion of global business of the Group, Suntory Holdings established the Global Risk Management Committee (GRMC) for enterprise risk management (ERM), covering sustainability-related risks, in order to strengthen the risk management promotion framework for the entire Group including international Group companies. We also established the Global Sustainability Committee to discuss sustainability strategies and manage progress toward our goals.

The Global Risk Management Committee is chaired by the executive officer in charge of risk management, with the heads of risk management for key business areas serving as vice chairs. Executive officers responsible for major functional areas also participate as members. Under this Global Risk Management Committee, we have established risk management committees and risk management teams at major operating subsidiaries to collaborate on identifying and managing significant risks across Suntory Group. The Global Risk Management Committee meets quarterly to advance activities such as identifying risks across Suntory Group, monitoring countermeasures, and establishing crisis management frameworks. Nature-related risks and climate change-related risks are identified as some of the most important risks, and the Committee actively discusses and monitors the measures to address these risks.

The Global Sustainability Committee is chaired by the executive officer in charge of sustainability and vice-chaired by executive officers from key business areas. Members of the committee include executive officers in charge of major functional departments, heads of domestic and international operating companies, and functional department heads. The Global Sustainability Committee discusses mid- to long-term business strategies of Suntory Group companies and businesses, focusing on the 7 sustainability themes outlined in Suntory Group's Sustainability Vision, including initiatives related to nature and climate change.

The Global Risk Management Committee and the Global Sustainability Committee maintain continuous collaboration. Important decision-making matters are further discussed, deliberated, and resolved by the Board of Directors. The Global Risk Management Committee and the Global Sustainability Committee each handle as agenda items and review the progress of sustainability strategies, identification of risks and opportunities, and exploring risk mitigation, avoidance, transfer and acceptance methods. They report regularly to the Board of Directors, which discusses and oversees sustainability strategy policies and plans. In particular, with regard to sustainability-related risks that have been assessed as the Group's most significant risks through the Global Risk Management Committee's enterprise risk management (ERM), the Global Sustainability Committee discusses countermeasures and reports the status of countermeasures to the Global Risk Management Committee. In addition, the Global Sustainability Committee deliberates the analysis results of the materiality based on the risks identified through enterprise risk management (ERM), and receives approval from the Board of Directors.

<Main Sustainability Matters Reported and Resolved by the Board of Directors (2024)>

- Revisions to the Suntory Group Human Rights Policy
- Revisions to water targets in Environmental Targets toward 2030
- Progress Report for Environmental Targets toward 2030

The Board of Directors are provided with opportunities to receive advice on sustainable management through events such as periodic seminars with external expert guests. Additionally, the criteria used to determine executive compensation include specific sustainability items.

Of the materiality, with regard to "climate action," "containers and packaging," and "human rights," we hold the GHG Scope 3 Reduction Promotion General Meeting, the Containers and Packaging Task Force, and the Human Rights Working Team Meeting, as forums for discussing more specific strategies and initiatives, primarily with working level staff from key businesses and functional departments.

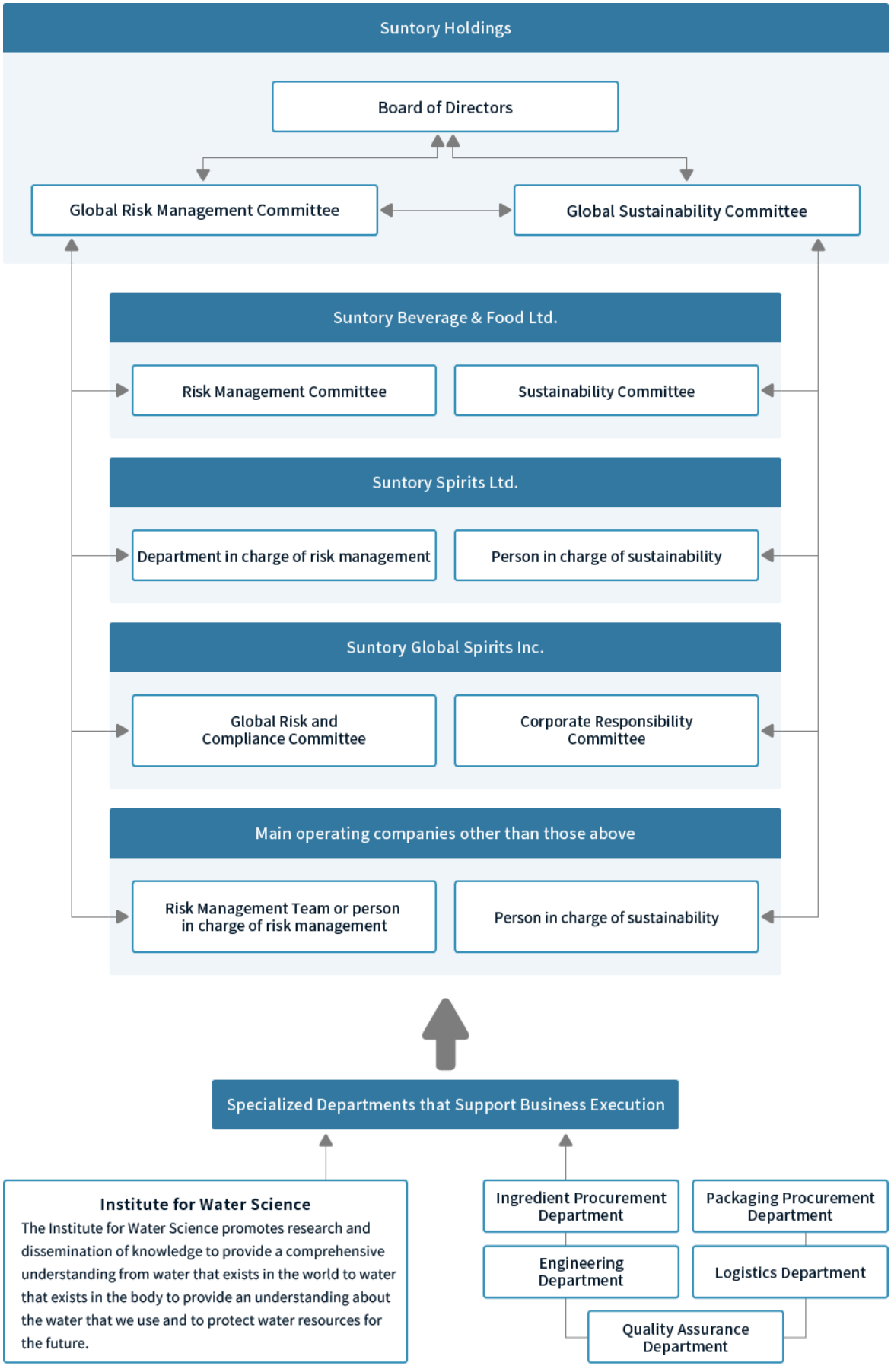
The GHG Scope 3 Reduction Promotion General Meeting, under the relevant functional departments and the corporate planning departments of key businesses, drives the reduction of Scope 3 emissions toward the achievement of Suntory's Environmental Targets toward 2030. Specifically, it has formulated a roadmap for reducing Scope 3 emissions and discusses the challenges and strategies to ensure the effective implementation of key measures for Scope 3 emissions reduction.

The Containers and Packaging Task Force consists of the executive officer in charge of sustainability, the executive officer in charge of public relations, and the heads of relevant functional departments (such as sustainability, innovation, corporate planning, finance, legal, intelligence, and manufacturing). It meets for the purpose of formulating plans and managing progress toward achieving the 2030 targets for containers and packaging. Specifically, in addition to discussing the direction of efforts to address issues concerning plastics, the task force discusses the formulation of a roadmap for achieving the 2030 target for sustainable PET bottles, as well as the progress of agreements on "bottle to bottle" horizontal recycling that have been concluded with local governments and companies in Japan.

In the area of human rights, we have the Human Rights Working Team that consists of personnel from functional departments such as sustainability, supply chain, human resources, legal, and compliance, as well as sustainability personnel from major operating companies. The team holds monthly discussions across divisions to promote human rights due diligence, including sharing domestic and international

information on human rights, identifying and responding to risks of human rights abuse throughout the value chain, and conducting activities to raise awareness.

Organizational Chart



		Roles and authorities	Members	Meetings per year	Main Deliberations in 2024
Board of Directors		• Supervision of sustainability related business execution of Suntory Group • Resolutions on medium- to long-term strategies and plan for each fiscal year	• Directors: 9 (Including 1 Outside Director)	At least 12 times/year	• Revisions to the Suntory Group Human Rights Policy • Revisions to water targets cited in Environmental Targets toward 2030 • Progress report on Environmental Targets toward 2030
Global Risk Management Committee		• Understanding and discussing important management risks related to sustainability issues, etc. • Monitoring countermeasures to important risks	• Chair: Executive officer in charge of risk management • Vice chairs: Heads of risk management departments of Suntory Holdings, Suntory Global Spirits and Suntory Beverage & Food • Members: Executive officers in charge of functional departments	4 times/year	• Identification, assessment, and discussion of the Group's top risks in 2025, including sustainability-related risks • Identification and discussion of important risks of major operating companies, including sustainability-related risks
Global Sustainability Committee		• Discussion and progress management of basic policy on sustainability, materiality, strategies and targets	• Chair: Executive officer in charge of sustainability • Vice chair: Executive officers in charge of sustainability departments of Suntory Global Spirits and Suntory Beverage & Food • Members: heads of functional departments of major operating companies in Japan and overseas, etc.	Around 6 times/year	• Development of sustainable management strategy • Revision of targets and confirmation of progress
Promotion bodies for materiality	**GHG Scope 3 Reduction Promotion General Meeting**	• Progress management of Suntory Group's Scope 3 GHG emissions reduction efforts	• Chair: Deputy Division COO of Sustainability Management Division • Business departments: Senior General Managers of Corporate Planning Departments of Suntory Beverage & Food and Suntory Global Spirits • Functional departments: sustainability and supply chain	3 times/year	• Confirmation of progress in reducing Scope 3 GHG emissions • Planning and implementation of collaborative initiatives with business partners to reduce GHG emissions

	Containers and Packaging Task Force	• Planning and progress management for achieving 2030 container and packaging targets	• Members: Executive officer in charge of sustainability, executive officer in charge of public relations, and the senior general managers of relevant functional departments (such as sustainability, innovation, corporate planning, finance, legal affairs, intelligence, and manufacturing)	Every other month	• Confirmation of progress of activities aimed at making containers and packaging such as PET bottles, glass bottles, and cans more sustainable
	Human Rights Working Team	• Implementation of human rights themed activities in the area of sustainability and progress management	• Chair: Executive officer in charge of sustainability • Members: Senior General Managers and personnel from functional departments, such as sustainability, supply chain, human resources, legal, and compliance, as well as senior general managers and personnel in charge of sustainability from key business subsidiaries companies	Monthly	• Revisions to the Suntory Group Human Rights Policy • Formulation and implementation of plan for human rights due diligence • Raising awareness of human rights internally

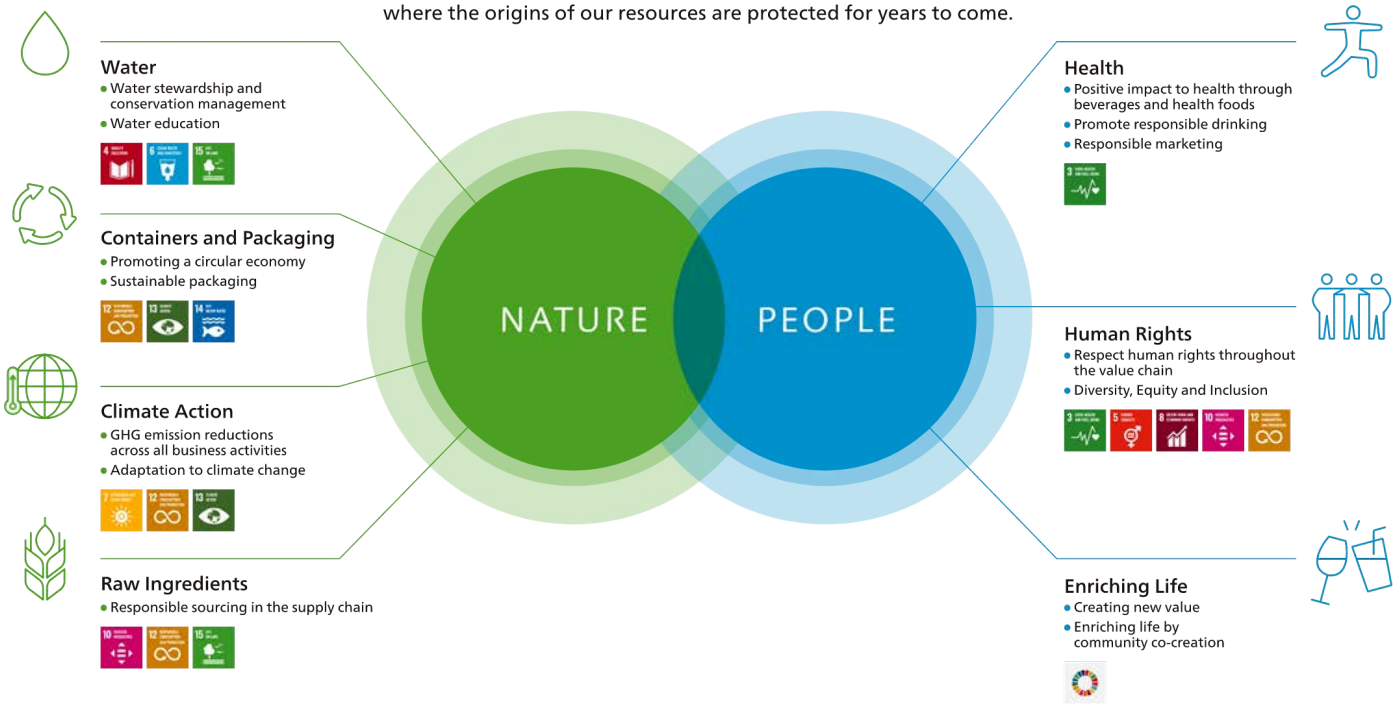
Strategy

To promote sustainable management that takes into account the changes which can be anticipated in the macro environment over the mid to long term, Suntory Group has identified its materiality relevant to the Group and integrated them into our sustainability strategy.
In 2023, using the concept of double materiality, we sought to identify and evaluate the impact on Suntory Group's finances and our external impacts on the environment and society.
Based on the results of the materiality analysis, the Suntory Group Sustainability Vision was also revised in the same year.
The 7 key themes in the Suntory Group Sustainability Vision consist of "Nature" (water, containers and packaging, climate action, and raw ingredients) and "People" (health, human rights, and lifestyle). Suntory Group is mindful of the interdependent relationship between "Nature" and "People," and is working with stakeholders to create a society in which both "Nature" and "People" resonate harmoniously.

Suntory Group Sustainability Vision

To Create Harmony with People and Nature

As a multifaceted beverage company whose products rely on the blessings of nature,
the Suntory Group is committed to working with our stakeholders to protect and nurture the natural environment.
We recognize the importance of coming together to create a society in which all life can flourish and
where the origins of our resources are protected for years to come.



Click here for details on the process of identifying Suntory's materiality.

Suntory's Sustainable Management Suntory Group's Sustainability Suntory

Policy on the Environment

As a company that embraces "Sustained by Nature and Water" as our corporate message, Suntory Group recognizes the Earth's environment itself as a vital foundation of our business operations.
Suntory Group's Environmental Principles, our highest-level environmental policy, defines our policy for the 5 key issues of achieving water sustainability, conserving and regenerating biodiverse ecosystems, promoting a circular economy, transitioning to a net zero-carbon society, and engaging with society.
With regard to "water sustainability," we share our Sustainable Water Philosophy throughout the Group in order to promote initiatives tailored to the water resource conditions in various regions around the world where we operate.
Additionally, plastic containers and packaging, which plays a significant role in Suntory Group's efforts to transition to a circular and net-zero society, is addressed under the Suntory Group Plastic Policy. Suntory Group collaborates with diverse stakeholders to tackle related challenges actively.
Furthermore, Suntory Group recognizes that environmental issues are deeply related to human rights issues. For this reason, we have established a of human rights due diligence framework based on the Suntory Group Human Rights Policy to identify, prevent and mitigate any potential adverse human rights impacts we may have on society. In regard to the rights of local community including indigenous peoples, which is one of the important themes in respecting human rights, we commit to respecting the rights of indigenous peoples and legitimate ownership rights regarding the ownership and use of land and natural resources, avoiding negative impacts on access to water, land, and natural resources, and implementing "Free, Prior, and Informed Consent (FPIC)" when acquiring water, land, and natural resources.
Our commitment to the above policies is shared with our suppliers through the Suntory Group Basic Policy on Sustainable Procurement and the Suntory Group Partner Guidelines, and measures are implemented collaboratively.

Policy and Guidelines

Suntory Group's Environmental Principles (Established in 1997 and revised in 2022)
Suntory Group Sustainable Water Philosophy (Established in 2017)
Suntory Group Plastic Policy (Established in 2019)
Suntory Group Human Rights Policy (Established in 2019 and revised in 2024)

- Suntory Group's Basic Policy on Sustainable Procurement (Established in 2011)
- Suntory Group Green Procurement Standard (Established in 2011)
- Suntory Group Partner Guidelines (Established in June 2017 and revised in May 2023)

Identification Process for Nature-Related Dependencies, Impacts, Risks and Opportunities

To further improve the accuracy of the assessment of the impacts and dependencies between our business and nature, Suntory Group has used tools and databases recommended by SBTN to clarify the pressure that Suntory Group exerts on nature and the ecosystem services on which its business depends.
For direct operations, we classified and defined Suntory Group's key business activities to be assessed by selecting the economic activity classification of the International Standard Industrial Classification (ISIC) to which our business activities belong, and also used the Materiality Screening Tool (MST) developed by SBTN to gain an overview of the impact of our business activities on nature.

In the upstream value chain, we conducted an MST assessment of our main raw ingredients, and also used the HICL (High Impact Commodity List), which lists raw ingredients that are considered to have a large impact on nature by SBTN, to identify our raw ingredients that have a particularly large impact on nature. We also assessed the environmental and human rights impacts and nature conditions in major sourcing countries. (For more information, see the relevant section in Identification of Priority Sites Related to Nature below)
With regard to dependencies on nature, we used the online tool ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure), jointly developed by international financial industry organizations in the field of natural capital, the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCSC), and others, to gain an overview of dependencies.

Impacts on Nature

High impact

Business	Value chain		Land/Water/Sea use change			Resource Use		Climate Change	Pollution				Invasives and Other	
			Terrestrial use	Freshwater use	Marine use	Water use	Other use	GHG emissions	non ghg airpollutants*	Water pollutants	Soil pollutants	Solid waste*	disturbances*	Biological alterations*
Non-alcoholic beverage	Upstream	Cradle	■	■	■	■		■	■	■	■	■	■	■
		Processing				■		■	■	■	■	■		
	Direct operations	Manufacturing				■		■				■		
Alcoholic beverage	Upstream	Cradle	■	■	■	■		■	■	■	■	■	■	■
		Processing				■		■	■	■	■	■		
	Direct operations	Manufacturing				■		■		■		■		
Others	Upstream	Cradle	■	■	■	■		■	■	■	■	■	■	■
		Processing				■		■	■	■	■	■		
	Direct operations	Manufacturing				■		■	■	■		■	■	■

* As these items are outside the scope of the SBTN, they were not included in the assessment of local conditions, the identification of priority locations and the risk/opportunity assessment.

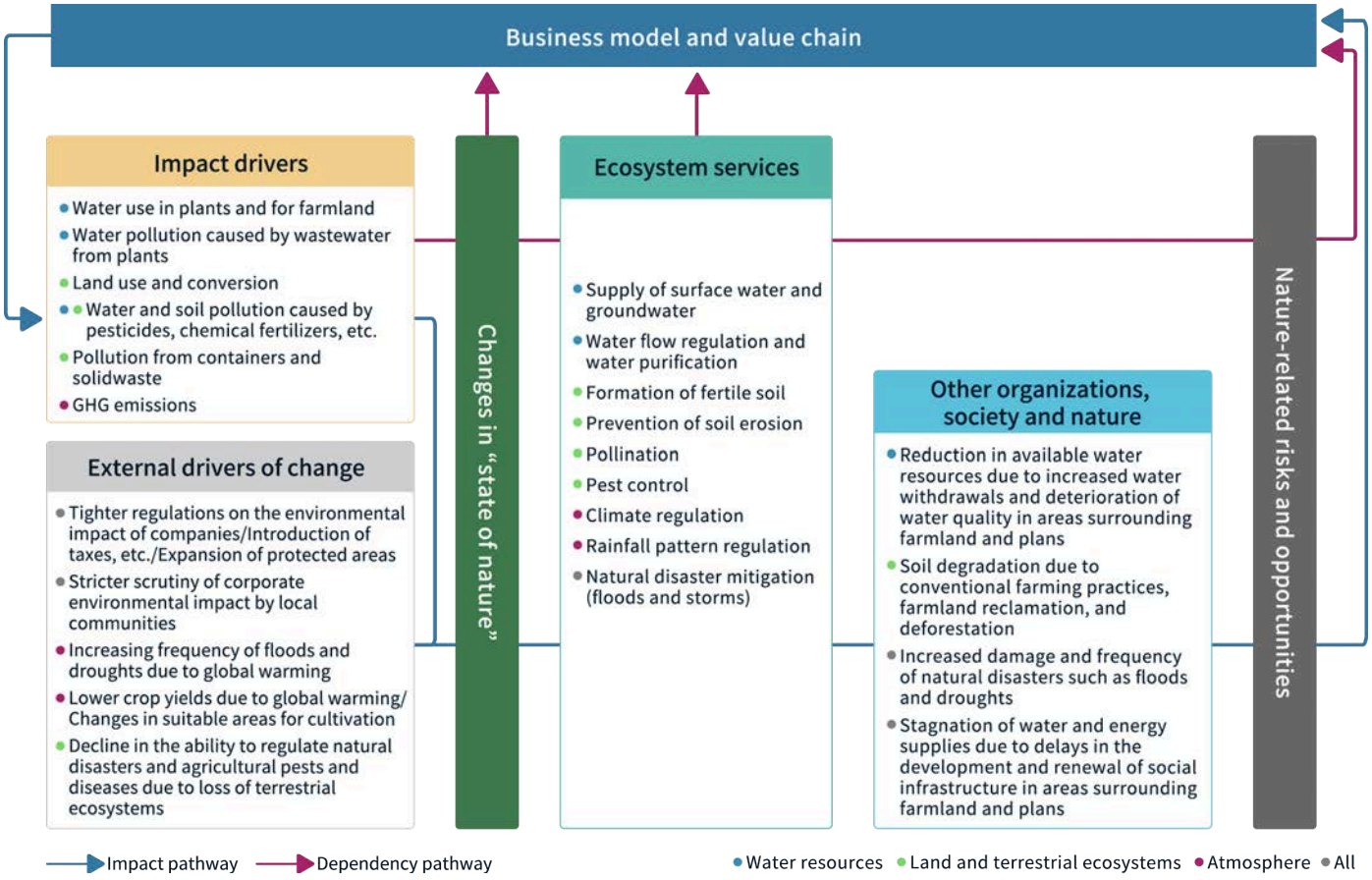
Dependencies on Nature

High dependency

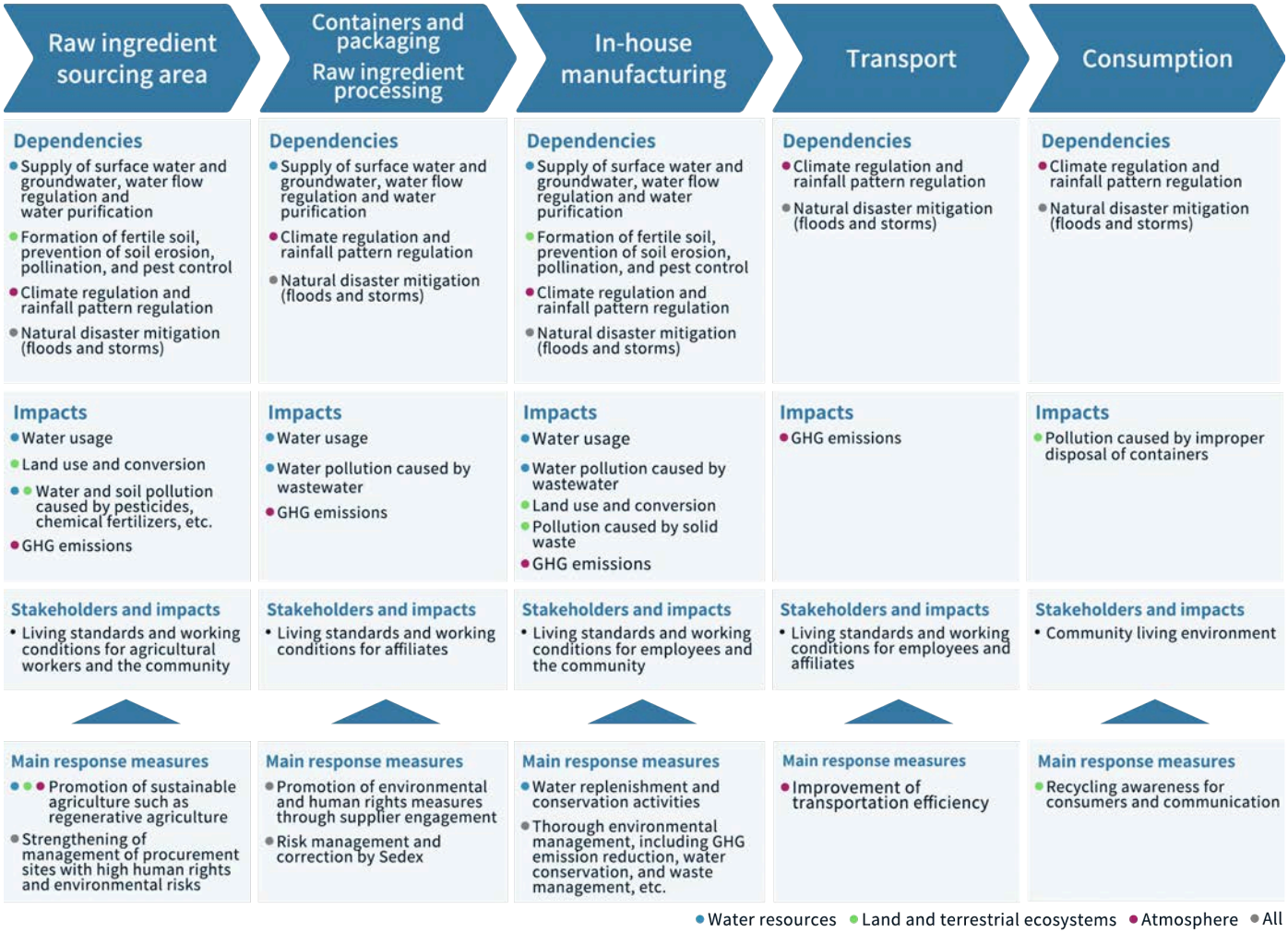
Business	Value chain		Direct Physical Input					Enables Production Process						Mitigates Direct Impacts				Protection from Disruption					
			1 Animal-based energy	2 Fibres and other materials	3 Genetic materials	4 Ground water	5 Surface water	6 Maintain nursery habitats	7 Pollination	8 Soil quality	9 Ventilation	10 Water flow maintenance	11 Water quality	12 Bio-remediation	13 Dilution by atmosphere and ecosystems	14 Filtration	15 Mediation of sensory impacts	16 Buffering and attenuation of mass flows	17 Climate regulation	18 Disease control	19 Flood and storm protection	20 Mass stabilisation and erosion control	21 Pest control
Non-alcoholic beverage	Upstream	Cradle		■		■	■		■	■		■	■					■	■	■	■	■	■
		Processing				■	■																
	Direct operations	Manufacturing				■	■																
Alcoholic beverage	Upstream	Cradle		■		■	■		■	■		■	■					■	■	■	■	■	■
		Processing				■	■																
	Direct operations	Manufacturing				■	■																
Others	Upstream	Cradle		■		■	■		■	■		■	■					■	■	■	■	■	■
		Processing				■	■																
	Direct operations	Manufacturing																	■				

The diagram below summarizes the pathway relationships based on the above-mentioned impacts and dependencies on nature.

Connections between nature-related dependencies and impacts and risks and opportunities – Impact and dependency pathways



Dependencies and Impacts on Nature in the Value Chain and Corresponding Measures



Identification of Priority Locations Related to Nature

Direct Operations

In identifying priority locations for our direct operations, we narrowed down the list from the perspectives of water usage and water quality based on findings gained from the pilot of guidance for companies provided by the Science Based Targets Network (SBTN), which we joined in 2023.

First, we analyzed the quantity and quality of available water resources in the watershed to assess the nature conditions on which the production site depends. The assessment used several indicators from Aqueduct 4.0 and the Water Risk Filter developed by the World Wide Fund for Nature (WWF).

For the volume of available water resources, we used the 3 indicators of Baseline Water Stress, Water Depletion, and Blue Water Scarcity, with the highest score taken as the risk score. Areas with high scores on these indicators indicate a high probability of water resources being strained relative to demand.

We assessed water quality using the 3 indicators of Coastal Eutrophication Potential, Nitrate-Nitrite Concentration, and Periphyton Growth Potential, with the highest score used as the risk score. Higher scores for each indicator show greater exposure to eutrophication.

Furthermore, to assess the impact of our operations at production sites on watersheds, we normalized water usage and water pollutants contained in wastewater (weight equivalents of nitrogen and phosphorus) and compiled a list for each site. However, the assessment of water pollutants was limited to facilities that discharge wastewater directly into rivers, and excluded facilities that discharge wastewater via sewer systems. Next, to identify sites at high risk in terms of both dependencies and impacts on natural conditions, we multiplied the volume of available water resources by the normalized score for water usage and multiplied the score for water quality by the normalized score for water pollutants, and selected sites that were ranked in the top 10 watersheds as priority sites. Of the identified sites, based on an assessment using the Integrated Biodiversity Assessment Tool (IBAT) and multiple biodiversity indicators, we identified sites that are close to protected areas and

key biodiversity areas within a 20 km radius and are expected to have relatively high levels of biodiversity vulnerability and difficulty in restoring them.

Number of High Priority Locations

Number of High Priority Sites	Non-alcoholic beverage	Alcoholic beverage	Others
Number of locations with high water-resource dependency and impact risk	9	4	-
Of these, locations with a large effect on biodiversity	3	3	-
Number of locations with high water-quality dependency and impact risk	-	15	3
Of these, locations with a large effect on biodiversity	-	-	-

From the perspective of water management (water withdrawal and water-saving) and water replenishment and conservation through coexistence with the communities, we assessed the level of actions taken by identified priority sites to reduce risks and confirmed the progress. Since the condition of the water resource is different in each watershed where our sites are located, we conduct measures to reduce risks that correspond with local conditions.

For more information on water risk assessment, see below.

Water Risk Assessment Suntory Group's Sustainability Suntory

Upstream Value Chain (Procurement of Raw Ingredients)

We assessed the environmental and human rights impacts for 8 key raw ingredients (barley, coffee beans, corn, raw milk, green tea leaves, hops, oak wood, and sugar cane) and their main sourcing countries (covering 45 combinations of raw ingredients and sourcing countries). The environmental and human rights impact assessments are based on secondary data and do not represent the impact of Suntory Group's business activities. The purpose is to verify the validity of our activities to date and to utilize the results as basic data for determining priorities for future initiatives.

<Scope and Method of Assessment>

Scope of assessment		Data used
Dependency level on raw ingredients/ sourcing country)	Concentration of Sourcing Countries	The market concentration index, the Herfindahl-Hirschman Index, was applied to the purchasing volume ratio of each raw ingredient to estimate the market concentration
Environmental Impact	Climate change	Emission factors for each supplier and raw ingredient used in the calculation of Scope 3 emissions by Suntory Group
	Water usage	Water footprint by raw ingredient in various countries around the world (Report of UNESCO-IHE Institute for Water Education)
	Pollution	Fertilizer usage by raw ingredient in countries around the world (IFASTAT)

	Land use	Cultivated area per unit yield of raw ingredients by country (FAO)
Human rights Impact	(1) Child labor, (2) forced labor, (3) working hours, (4) fair wages and welfare, (5) discrimination, abuse, and harassment, (6) freedom of association and right to collective bargaining, (7) access to remedy, (8) health and safety	Commodity risk assessment provided by Verisk Maplecroft

Heatmap of the Environmental and Human Rights Impacts of Main Raw Ingredients

	Low risk				High risk
5-level assessment	1	2	3	4	5

Main raw ingredients	Dependencies on raw ingredient procurement partners	Impacts on environment				Impact on human rights							
		Climate change	Water usage	Pollution	Land use	Child labor	Forced labor	Working hours	Appropriate wages and benefits	Discrimination, abuse and harassment	Freedom of association and collective bargaining	Access to remedies	Health and safety
Barley	2	2	2	4	3	1	1	1	1	2	1	1	1
Coffee beans	2	5	5	4	5	5	5	5	5	4	4	3	5
Corn	3	1	2	5	2	3	2	2	2	3	4	2	4
Raw milk	4	4	N/A	N/A	N/A	1	1	4	1	4	1	1	1
Green tea leaves	5	5	5	5	2	1	1	2	1	4	1	1	1
Hop	3	5	4	3	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oak	4	2	N/A	N/A	N/A	2	2	2	2	1	4	1	4
Sugarcane	1	1	1	5	1	3	2	2	3	1	3	3	4

* N/A indicates that the item could not be assessed this time due to a lack of data

The results of this survey showed that coffee beans pose the highest risk in terms of both environmental and human rights impacts, and that, among the countries from which Suntory Group sources coffee beans, Brazil poses the highest risk. Suntory Group procures some of our produce from the “Fazenda Bau” farm in Brazil, which has received international sustainability certification, and is also promoting a program to support the farmers we source our produce from in collaboration with trading companies and local partners. As a result, we have confirmed the appropriateness of the direction of the current procurement strategy.
Additionally, the results showed that green tea leaves have a relatively high impact on the environment in terms of GHG emissions and water usage. Suntory Group is working with the Kuma Regional Agricultural Cooperative in Kumamoto Prefecture, a producer of green tea leaves, to introduce environmentally conscious processes in the tea leaf manufacturing process, thereby reducing GHG emissions by more than 30% compared to typical manufacturing processes. We will continue to consider further activities in the future.
Based on the amount of fertilizer used, 6 raw ingredients (barley, coffee beans, corn, green tea leaves, hops, and sugar cane) were identified as having a high impact of "soil contamination." For 4 of these materials (barley, coffee beans, corn, and sugar cane), Suntory Group is actively promoting sustainable agricultural practices, such as regenerative agriculture, and plans to continue expanding our activities in the future.
Through this survey, we were able to identify combinations of raw ingredients and supply source (country) that are generally high risk. Going forward, we will use these results to consider strategies that take into account field investigations and other pertinent information.

Financial Risks and Opportunities related to Climate Change and Nature

In examining future risks and opportunities, we assumed 2 scenarios for climate change and 1 scenario for nature, and assessed the financial impacts of each.

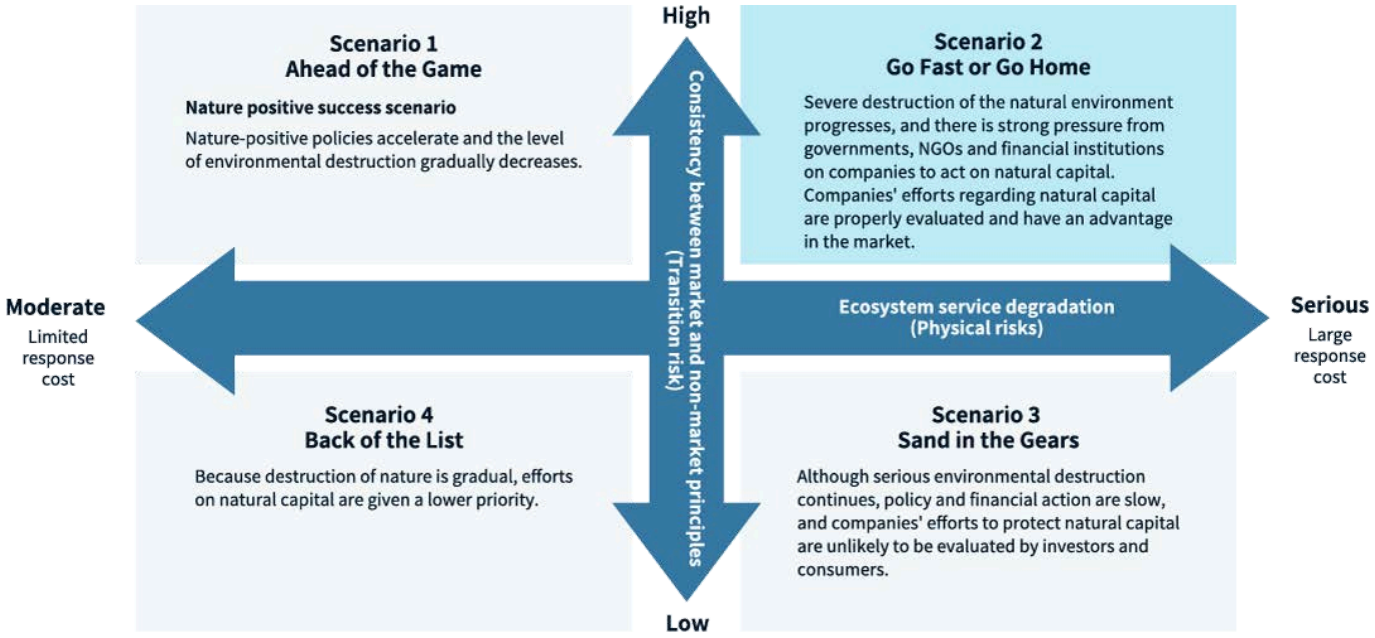
Climate Change Scenarios

Scenario	1.5℃ Transition scenario (RCP 2.6/SSP 1-1.9)	3.0℃/4.0℃ Physical scenario (RCP 8.5/SSP 2-4.5)
Scenario context	• The increase in global average temperature by 2100 is limited to 1.5°C. • Net zero is achieved by 2050 through fundamental changes in private business operations and shifts in consumer behavior, influenced by global and national policies. • Products and services that contribute to climate change measures are supported by society and consumers, and are also economically viable.	• The global average temperature rise by 2100 is around 3.0°C to 4.0°C, making it impossible to achieve net zero by 2050. • The frequency and intensity of extreme weather events such as heat waves and heavy rains increase. This raises concerns about a decline in agricultural productivity and changes to ecosystems. • Public awareness of climate change remains low, both in society and among consumers, and products and services that support climate change mitigation have not become widespread.

Nature Scenarios

As there are no normative scenarios for nature, Suntory Group has interpreted the 4 scenarios presented by TNFD and examined scenarios that we believe are appropriate for considering future risks and opportunities.
While Suntory Group aims to achieve Scenario 1 (Ahead of the Game) in which Nature Positive is successful, we also aim to test the resilience of our strategies by evaluating Scenario 2 (Go Fast or Go Home), in which physical and transition risks are deemed to be most severe, and we identified risks and opportunities and assessed their financial impacts.

Nature Scenarios



* Some interpretation and modification from the TNFD Final Recommendation v1.0

List of Risks and Opportunities

Based on the scenarios set out above, we identified the key risks and opportunities related to climate change and natural capital and organized countermeasures. As a result, for physical risks, we were able to confirm that countermeasures are largely in place or under consideration. Additionally, in terms of responding to transition risks, we reaffirmed the need to closely monitor legislative trends and consumer preferences in countries around the world and flexibly develop response strategies.
With regard to opportunities, we will expand opportunities for business continuity through risk reduction and other measures, as well as opportunities for business growth by offering innovative products and services that capture consumer preferences.

Definition of Period in Which Risks and Opportunities Emerge

The periods in which risks and opportunities emerge are categorized as follows.
The mid-term period is based on our Environmental Targets toward 2030, while the long-term period is based on our Environmental Vision toward 2050.

- Short-term: Within 1 year from the assessment
- Mid-term: Period until 2030
- Long-term: Period until 2050

Financial Impact Assessment Criteria

The criteria for evaluating financial impact are unified with the enterprise risk management (ERM) criteria, and items with a medium to large financial impact are listed.

Category	Subcategory	Main risks and opportunities	Correlation with natural capital and climate change	Value chain	Financial impacts	Risk emergence timeline	Countermeasures
Physical	Acute/Chronic	Shutdown of operations due to extreme weather (floods, tidal surge, storms, etc.)	Climate change	Direct operations	Medium to large	Short to medium	• The Global Risk Management Committee conducts risk assessments of all our production sites • BCP (business continuity plan) response
Physical	Chronic	Shutdowns due to water shortages caused by excessive water withdrawal in surrounding areas and increased droughts	Natural capital Climate change	Direct operations	Medium to large	Mid to long	• Thorough management based on water risk assessment • Implementation of initiatives with the goal of replenishing 100% or more of the water used through water replenishment activities **Water Risk Assessment Suntory Group's Sustainability Suntory**
Physical	Chronic	Increased costs for quality control and wastewater regulations due to deterioration of water quality in surrounding areas	Natural capital	Direct operations	Medium to large	Mid to long	• Water quality monitoring and management of wastewater **Water Risk Assessment Suntory Group's Sustainability Suntory**

Physical	Acute/Chronic	Decreasing crop yields and relocation of suitable cultivation areas leading to unstable procurement and higher procurement costs	Natural capital Climate change	Upstream	Medium to large	Mid to long	• Promotion of sustainable agricultural practices, including regenerative agriculture • Research and development of breeding resilient to climate change **Sustainable Procurement Suntory Group's Sustainability Suntory**
Transition	Policy	Higher cost due to introduction of carbon taxes	Climate change	Upstream/Direct operations	Medium to large	Mid to long	• Implementation of measures to achieve Environmental Vision toward 2050 and Environmental Targets toward 2030 **Climate Action Suntory Group's Sustainability Suntory**
Transition	Policy	Increased costs from compliance with regulations regarding raw ingredients, containers, and packaging	Natural capital Climate change	Value chain Overall	Medium to large	Mid to long	• Initiatives for sustainable procurement and recycling of containers and packaging **Climate Action Suntory Group's Sustainability Suntory**
Transition	Markets	Revenue decline due to delayed response to shifting consumer preferences toward sustainable products	Natural capital Climate change	Direct operations	Medium to large	Mid to long	• Promotion of nature and climate transition plans based on scientific data • Continuous implementation of consumer surveys **Climate Action Suntory Group's Sustainability Suntory**
Transition	Reputation	Revenue decline resulting from criticism by NGOs and media regarding environmental and social issues	Natural capital Climate change	Direct operations	Large	Mid to long	• Promote science-based nature and climate transition plans, engage with communities and other stakeholders, and continue to disclose information.

Opportunity	Enhancement of brand value through increased public recognition of the company's commitment to responsible water stewardship	Natural capital Climate change	Downstream	Large	Short to long	• Continue and strengthen water replenishment activities based on scientific data, water conservation and water quality management initiatives at plants, and the Mizuiku education program and other water-related awareness programs, while also disseminating information to the public **Water Sustainability Suntory Group's Sustainability Suntory**
Opportunity	Revenue growth driven by the capture of new market and income opportunities.	Natural capital Climate change	Downstream	Large	Mid to long	• Promotion of fundamental research and development • Operation of internal venture system

Of the identified risks and opportunities, we estimated the financial impact from a climate change perspective for 3 points: "Shutdowns due to water shortages caused by excessive water withdrawal in surrounding areas and increased droughts," "Higher cost due to introduction of carbon taxes," and "Decreasing crop yields and relocation of suitable cultivation areas leading to unstable procurement and higher procurement costs."

Risk	Financial impact amount	Approach and method of calculation
Shutdowns due to water shortages caused by excessive water withdrawal in surrounding areas and increased droughts	Lost opportunity cost: 26.0 billion yen (2030 and 2050/3℃ and 4℃ scenarios)	Estimated the cost impact assuming a 1 month water withdrawal restriction at all of our plants located in areas with high water stress (Exchange rate assumption: 1 US dollar = 146 Japanese yen)
Higher cost due to introduction of carbon taxes	2030: production costs set to increase by 19.0 billion yen 2050: production costs set to increase by 35.0 billion yen (1.5℃ scenario)	Calculated based on our 2019 emissions (Scope 1 and 2) using the IEA NZE carbon tax price forecast • 2030: Japan, Europe, Americas: $140/t, APAC: $90/t • 2050: Japan, Europe, Americas: $250/t, APAC: $200/t (Exchange rate assumption: 1 US dollar = 146 Japanese yen)
Decreasing crop yields and relocation of suitable cultivation	2030: procurement costs set to increase by 5.9 billion yen	Using a scientific data-based climate change impact calculation tool, we

areas leading to unstable procurement and higher procurement costs	2050: procurement costs set to increase by 8.0 billion yen (*) (3℃ and 4℃ scenarios)	grasped the impact on agricultural yields and calculated the cost impact based on the assumption of increased raw ingredient prices and usage amounts (Exchange rate assumption: 1 US dollar = 146 Japanese yen)

(*) Yield Impact on Key Raw Ingredients and Their Production Areas Under a 4℃ Scenario by 2050

-/+ Impact **Below 10%** ↓/↑
More than 10% ～ below50% ↓↓/↑↑
More than 50% ↓↓↓/↑↑↑

Business Sector	Raw material	North America	Latin America	Asia	Europe/Africa	Oceania
Alcoholic and non-alcoholic beverage	**Barley***	Canada Yield：↓↓			UK Yield：↓↓ France Yield：↓↓	
Alcoholic and non-alcoholic beverage	**Corn***	USA Yield：↓	Brazil Yield：↓	China Yield：↓↓		
Alcoholic and non-alcoholic beverage	**Sugarcane***		Brazil Yield：↑↑↑	Thailand Yield：↑↑		Australia Yield：↑↑
Alcoholic beverage	**Oak**	USA Wood quantity： ↑↑		Japan Suitable land： ↓↓↓	Spain Suitable land： ↓↓↓	
Alcoholic beverage	**Hop**	USA Yield：↓			Germany Yield：↓ Czech Yield：↓	
Non-alcoholic beverage	**Coffee beans**		Brazil Yield：↓↓ Colombia Yield：↓↓ Guatemala Yield：↓↓↓			

* Include origin of processed ingredient

As shown in figure below, based on the analysis at the end of July 2025, the total business impact of the 4°C scenario as of 2050 is projected to be a positive 8.0 billion yen. Prices of coffee beans, oolong tea leaves, corn, and barley are projected to rise due to falling output, raising procurement costs. At the same time, sugarcane and sugar beet prices are projected to decrease on higher output, resulting in a positive business impact.

Impact on Procurement Costs of Key Raw Ingredients in the 2050 4°C Scenario

Key Raw Ingredients	Business Impact
Coffee	8.0 billion yen
Oolong Tea	0.5 billion yen
Corn	2.5 billion yen
Barley	2.0 billion yen
Sugarcane	-4.5 billion yen
Sugar Beet	-0.5 billion yen

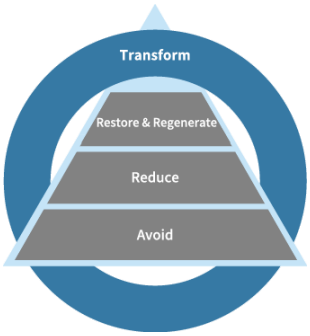
Total: 8.0 billion yen

* Scope of company: Suntory Global Spirits Inc., Suntory Beverage & Food Limited, Suntory Spirits Ltd.
* Currency exchange rate 1USD=146 JPY
* For corn, calculations included alcoholic beverage and food use, including processed raw ingredients
* For barley, calculations were made for alcoholic beverage use only

Suntory Group's Initiatives for Nature and Climate

Since nature and climate are interrelated and affect each other, taking an integrated approach to address both issues is more effective. We also consider the impact of each initiative on local communities, business partners, customers, and others, believing it is important to maximize the effectiveness of initiatives by collaborating with other private sector companies and government agencies, not to mention through appropriate engagement with stakeholders.
We have recently organized the nature and climate-related initiatives being undertaken by Suntory Group and linked the impact on nature to the AR3T Framework presented by SBTN, as well as the elements of the Engagement Strategy in the framework on climate transition planning published by the Transition Plan Taskforce (TPT) and the discussion paper on nature transition planning published by the TNFD.
As a result, we were able to confirm that our materiality is being addressed while taking into consideration important stakeholders. As we move forward with further nature and climate transition plans, we recognize the need to take into account a "just transition," and will consider steps for this transition, such as engaging with stakeholders in raw ingredient producing regions.
Going forward, we will consider additional initiatives that Suntory Group should undertake in line with the frameworks of various transition plans.

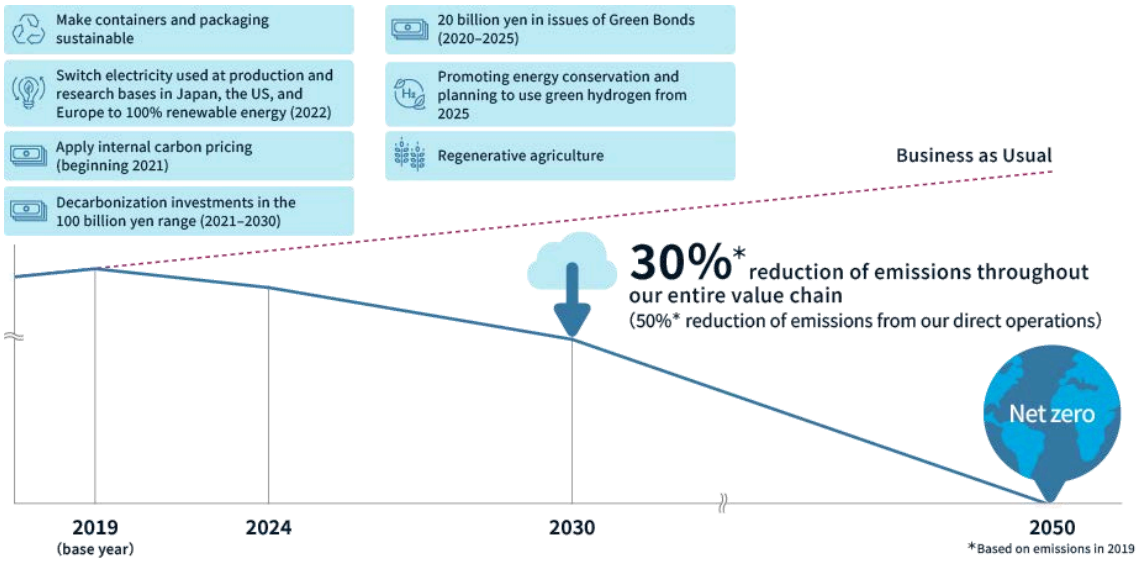
AR3T Framework



Main Initiatives in the Transition Plan

Materiality	Key Initiatives in Transition Plan	Action to Climate Change		Action to Nature (AR3T framework)				Engagement Strategy			
		Mitigation	Adaptation	Avoid	Reduce	Restore and regenerate	Transform	Community	Value Chain	Industry	Policy
Water sustainability	Water replenishment and conservation		●			●	●	●		●	●
	Water conservation at own plants		●		●						
	Mizuiku - Education Program for Nature and Water		●		●		●	●	●		●
Raw ingredients	Sustainable agriculture, including regenerative agriculture	●	●		●	●	●	●	●		
Containers and packaging	Promote “bottle to bottle” horizontal recycling for PET bottles	●			●		●	●		●	●
	Raise awareness of PET bottle recycling	●			●		●	●			●
	Develop PET Bottles using bio-derived material	●			●		●		●		
	Effective use of other resources	●			●						
Climate action	Energy: Promote introduction of renewable energy such as green hydrogen, etc.	●			●		●	●	●		●
	Energy: Conserve energy by improving logistics efficiency, etc.	●			●					●	
	BCP: Increase resilience to disasters including floods		●	●	●						

Road Map to Net Zero



For details on our activities regarding each materiality, see below.

Key issues	Relevant page
Water	Water Sustainability Suntory Group's Sustainability Suntory Water Risk Assessment Suntory Group's Sustainability Suntory
Raw ingredients	Sustainable Procurement Suntory Group's Sustainability Suntory
Climate action	Climate Action Suntory Group's Sustainability Suntory
Containers and packaging	Packaging & Resource Efficiency Suntory Group's Sustainability Suntory

Key Initiatives in Transition Plan (1)

Water Replenishment Activities and Awareness Raising involving Local Communities and Other Stakeholders

Stakeholder Engagement : Community | Value Chain | Government Policy

Forest Management and Water Resource Replenishment based on Scientific Knowledge

Water is Suntory Group's most important raw ingredient and a precious shared resource with local communities. Suntory Group has been conducting the Suntory Natural Water Sanctuary initiative since 2003 to replenish high-quality groundwater in the water source areas of our plants in Japan and to conserve and revitalize forests and biodiversity. Since 2019, the Group has achieved water positivity, replenishing more than twice the amount of groundwater withdrawn by our plants in Japan.

Suntory Group regards this initiative as a part of our core business, rather than a volunteer activity, and is carrying out forestry development with the following goals in mind:

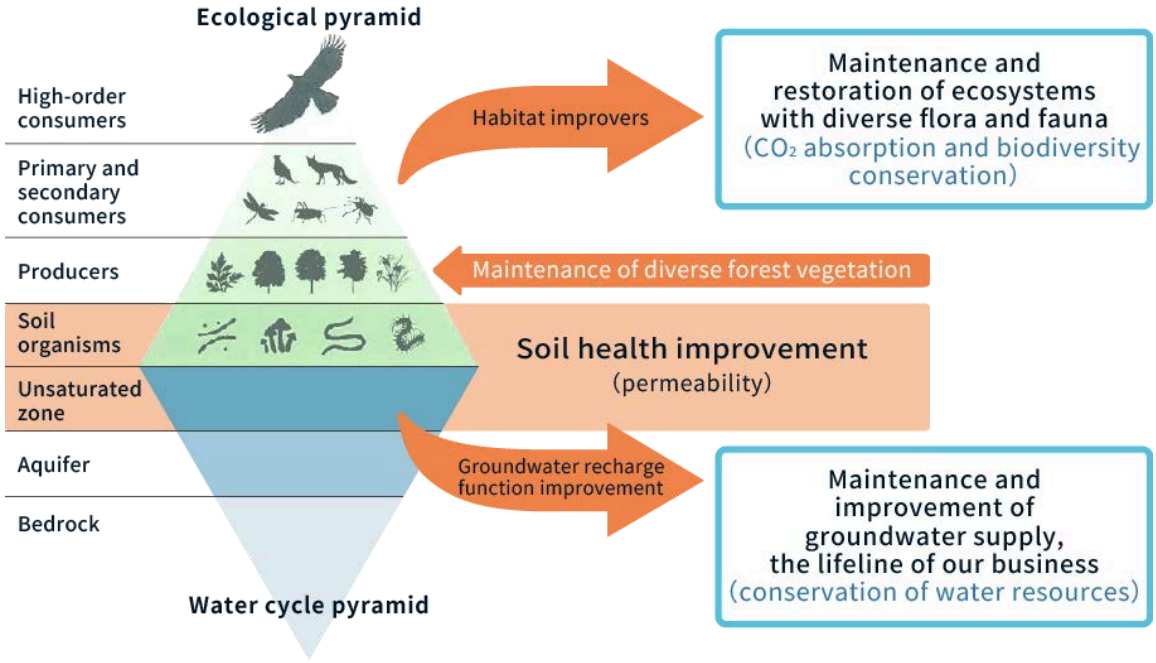
- Forests with a great capacity for conserving and restoring water resources
- Forests rich in biodiversity
- Forests able to withstand flooding and landslides
- Forests with great CO_2 absorption capabilities
- Beautiful forests where visitors can encounter nature in all its abundance

Protecting the Forests That Nurture Abundant Water: Suntory Natural Water Sanctuary Initiative

Forests that nurture pristine groundwater are also rich in biodiversity. When the inherent forest functions are restored, the flora and fauna also begin to thrive in new ways. Suntory Natural Water Sanctuaries are managed systematically through continuous monitoring of the ecosystem, which includes plants, birds, and other wildlife.
Specifically, considering how wild birds are a barometer of environmental health, we have experts conduct a wild bird survey every year to furnish a broader understanding of the changes taking place in the entire supporting ecosystem. At all Suntory Natural Water Sanctuaries in Japan (26 locations), we are carrying out an Eagles/Hawks Rearing Support Project to support the nesting and breeding of birds of prey, including eagles and hawks, which are at the top of the ecological pyramid. The aim is to continue maintaining forests rich in biodiversity by monitoring the sanctuaries from a bird's perspective.

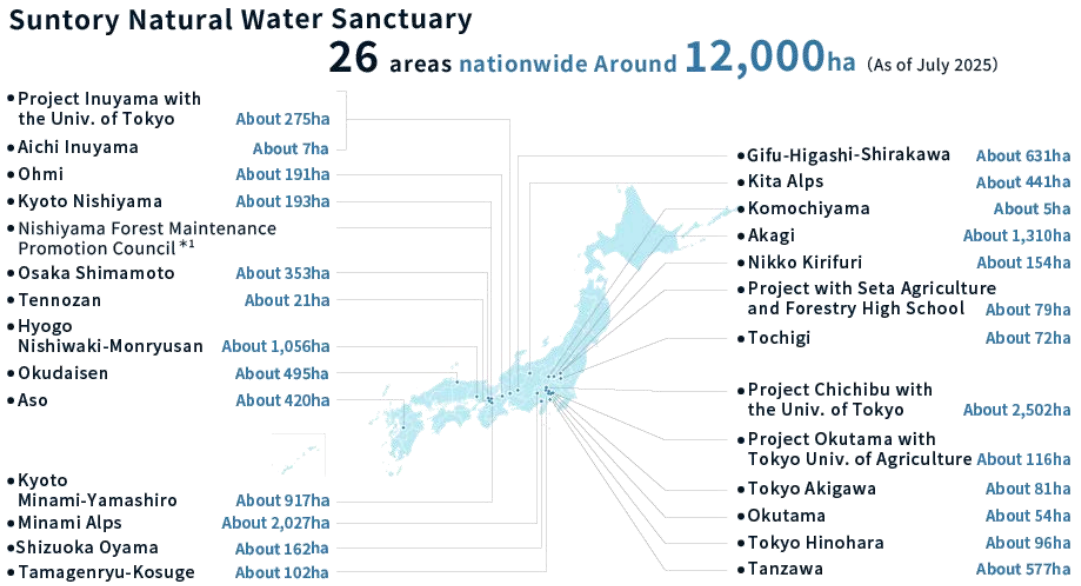
In addition, when planting trees in Suntory Natural Water Sanctuaries, we collect seeds from the surrounding forests to grow locally-sourced seedlings with careful attention to their DNA in order to avoid any negative impact on biodiversity.

In promoting these activities, we conduct research based on the latest hydrological knowledge by the Institute for Water Science, a specialized water research institute within Suntory Group. We also work with researchers and experts in water, forests, biology, development, soil, and other fields, as well as local residents, to carry out ongoing activities based on scientific evidence with an eye toward the next 100 years.



Additionally, 6* Suntory Natural Water Sanctuaries (covering a total of 2,776 hectares) have been certified as Sites Coexisting with Nature promoted by the Ministry of the Environment as part of an initiative aimed at achieving 30by30 goals (which seeks to conserve and protect at least 30% of land and ocean areas by 2030). (As of July 2025)

* Hyogo Nishiwaki-Monryusan, Tokyo Akigawa, Shizuoka Oyama, Nikko Kirifuri, Ohmi, and Akagi



*1 In Nagaokakyo, Kyoto, we are a member of the Nishiyama Forestry Development Promotion Committee and we are cooperating in local forest preservation activities with people in the community. The area of the forests subject to this activity is not counted as part of our total Natural Water Sanctuary area.

Suntory Natural Water Sanctuary

Suntory Mizuiku - Education Program for Nature and Water

Suntory Group has been implementing Mizuiku - education program for nature and water since 2004. The program is unique to Suntory Group and designed for the next generation to realize the beauty of nature and the importance of water and the forests that nurture groundwater. It also inspires students to think about what each of them can do for water sustainability. Mizuiku is currently deployed in 8 countries, with cumulative number of participants exceeding 1,190,000 (as of December 31, 2024). Because water issues vary from region to region, Mizuiku programs are customized with the cooperation of NGOs and local governments in each country.

Bequeathing Water to Future Generations and Conveying Its Importance through Mizuiku, Suntory's Education Program for Nature and Water

Evaluations on Sustainable Water Use from Certification Bodies

Suntory Group's efforts to address water issues throughout the entire watershed in collaboration with stakeholders such as local governments, NGOs, educational institutions, and local residents have been recognized with the Alliance for Water Stewardship (AWS) certification*, with Suntory's Kyushu Kumamoto Plant, Okudaisen Bunanomori Water Plant, and Suntory Minami Alps Hakushu Water Plant receiving the highest Platinum certification. Suntory Group is the only Japanese company to have received Platinum certification.

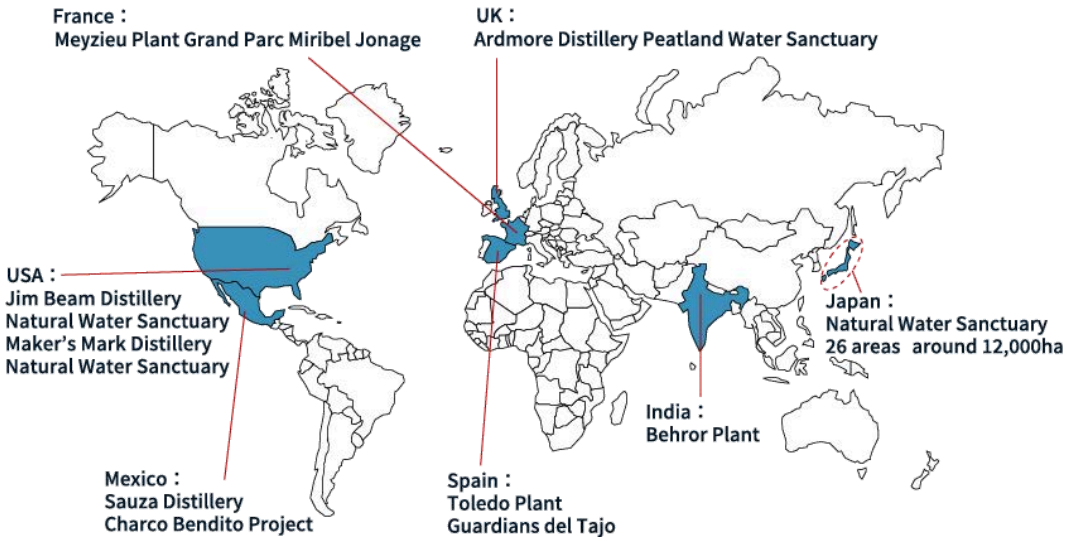
* The Alliance for Water Stewardship (AWS) is an organization globally promoting water sustainability established by NGOs, such as the World Wide Fund For Nature (WWF), The Nature Conservancy (TNC), and companies. The AWS Certification is an international certificate for sustainable water use targeting plants globally and aims to promote water stewardship.

Water Resource Replenishment and Conservation Activities Around the World

Currently, Suntory Group is promoting water resource replenishment and conservation activities at 33 locations* in 8 countries around the world, including Japan. In Scotland, we are promoting the Peatland Water Sanctuary project to ensure the sustainability of peat, essential for whisky production, while also conserving and restoring peatlands, which are also important water resources. We plan to invest more than 4 million U.S. dollars in the restoration of 1,300 hectares of peatlands by 2030 and to restore peatland that can create twice the amount of peat that Suntory Group uses by 2040.
In this way, our efforts to protect water, the lifeline of business, and the nature that nurtures it, are spreading throughout the world.

* 26 locations in Japan and 7 overseas

The Peatland Water Sanctuary™ Initiative: For Peat, an Important Ingredient in Whisky, and for the Future of the Planet



Case Studies of the Landscape Approach

Suntory Group practices a landscape approach* to effectively address environmental issues by involving relevant stakeholders.

* The landscape approach is a method for finding solutions to problems by comprehensively dealing with diverse human activities and the natural environment in a certain region or space, based on land and spatial planning.

Japan: Groundwater Conservation Activities in Kumamoto City

Kumamoto City, the location of the Kyushu Kumamoto Plant, is a fertile region known for its abundant groundwater and greenery. All of the city's tap water is sourced from groundwater. However, in recent years, concerns have been raised about reduced groundwater replenishment and increased risk of flooding due to the conversion of farmland and other forms of land associated with large-scale urban development and the construction of plants. For this reason, it has become even more important to promote the conservation of the water cycle (water positive) and the regeneration and conservation of the natural environment that supports it (nature positive) throughout the region.
Since 2003, Suntory Group has been working on water replenishment through forest management at Suntory Natural Water Sanctuary Aso. We have also been conducting groundwater replenishment activities called "winter water paddies" that integrate

the region's mountains, rivers and rice paddies. This represents a new attempt at water replenishment, which involves increasing the flow of rivers in the winter by improving the upstream forests and rivers, and then allowing that water to penetrate underground through the water paddies on the alluvial fan. To convert the water paddies to organic farming, we are also working with local farmers to develop technologies that revive the diverse organisms living in the fields that also help to reduce damage from pests and diseases. Additionally, we are working on community-based initiatives, such as conducting surveys of the wildlife in water paddies together with local elementary school students.
In March 2025, 6 organizations, including Suntory Holdings, launched Kumamoto Water Positive Action as a collaborative initiative involving industry, academia, and finance that aims to preserve Kumamoto's water cycle. Using green infrastructure such as rain gardens and winter water paddies, the initiative promotes groundwater replenishment, mitigation of inland and external flooding, measures against the heat island effect, and improvement of landscapes and biodiversity.

- **Winter Water Paddies/Activities Policy and Systems/Suntory Natural Water Sanctuary**
- **Water Cycle Conservation Event held in Kumamoto through collaboration between Industry, Academia and Finance: Launching of Kumamoto Water Positive Action with the Spread of Green Infrastructure February 27, 2025 News Release Suntory**

Mexico: Charco Bendito Project

In the country-level water stress assessments where the Suntory Group's plants are located, Mexico was one of the countries with high water stress. Casa Sauza, Suntory Group's tequila producer, is working on water replenishment activities as a partner company of the Charco Bendito project in Mexico. This watershed initiative is a collaboration with the Beverage Industry Environmental Roundtable (BIER) and 13 other manufacturing companies working to restore ecology and forests in the Lerma-Santiago River watershed through reforestation, soil conservation, and aquifer recharge activities.
This project works with local communities to provide drinking water to local residents without access to water. It also supports local sustainable agriculture and forestry employment through beekeeping and honey production, and protects important community heritage areas.

Key Initiatives in Transition Plan (2)

Promotion of Sustainable Agriculture, including Regenerative Agriculture

Stakeholder Engagement : Community | Value Chain

According to the Food and Agriculture Organization of the United Nations (FAO), around 30% of the world's total GHG emissions originate from the food system, with agricultural production accounting for more than 40% of that. Reducing GHG emissions from agricultural crops, a bounty of nature essential to Suntory Group's products, is important in reducing GHG emissions throughout Suntory Group's entire value chain. Climate change is also expected to have a significant impact on the production activities of our agricultural raw ingredients, including fluctuations in yields and shifts in suitable cultivation areas. Therefore, promoting research and development for sustainable agriculture and breeding that is resilient to climate change is essential for the business continuity of Suntory Group.
From this perspective, Suntory Group is working with trading companies, farmers, local experts and others to promote sustainable agriculture, including regenerative agriculture*. In particular, regenerative agriculture, which has been introduced in the cultivation of corn, barley, sugar cane, and other crops, is expected to reduce GHG emissions through farming methods such as the use of cover crops and no-till farming. At the same time, it will regenerate soil biodiversity, make the soil more fertile, reduce the use of chemical fertilizers and pesticides, and enable the more efficient use of water.
Additionally, for the cultivation of key raw ingredients (i.e., coffee beans, barley, and grapes) that require large amounts of water in water-stressed regions, we are working with suppliers to improve water-use efficiency.
Coffee beans are considered to have a high environmental impact and human rights risk. As a result, we procure some of our coffee beans from Fazenda Bau Farm in Brazil, which has received international sustainability certification. We also work with trading companies and local partners to promote programs to support the coffee farmers we do business with,

- **Saving the Planet with Agriculture: Collaborating with Farmers to Pioneer Regenerative Agriculture**

- **Protecting UK Blackcurrants and Their Growers: Sustainable Agriculture Support Program**

identify and correct any issues, and take other measures, while also taking into consideration the human rights of people working in the value chain.

* Regenerative agriculture: An outcome-based approach to agriculture that protects and improves soil health and biodiversity while also contributing to improving the livelihoods of farmers.

Raw Ingredients and Production Areas of Sustainable Farming

Legend: ★ Regenerative agriculture

Business	Ingredient	Producing country
Non-alcoholic beverage	Coffee beans ★	Brazil, Guatemala, and Uganda
Alcoholic and non-alcoholic beverage	Corn ★	USA
Alcoholic and non-alcoholic beverage	Barley ★	UK
Alcoholic and non-alcoholic beverage	Sugarcane ★	Thailand
Alcoholic Beverages	Agave ★	Mexico
Non-alcoholic beverage	Blackcurrant ★	UK
Non-alcoholic beverage	Grape	Japan

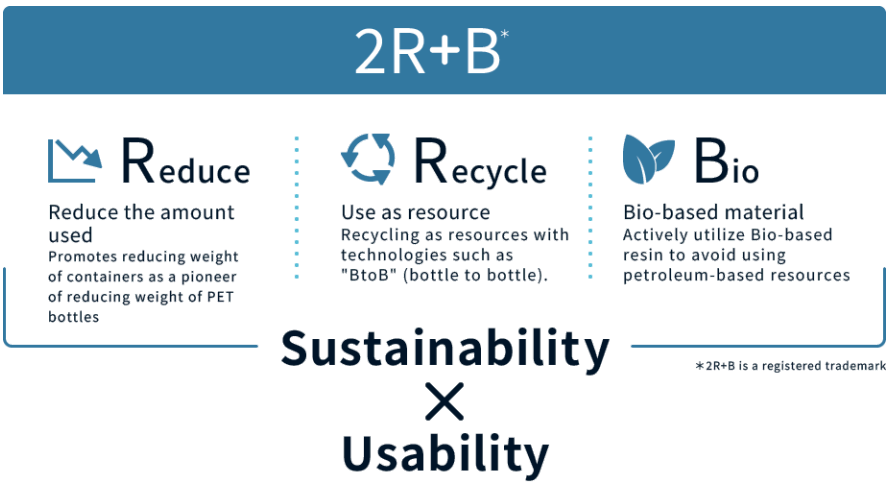
Sustainable Procurement Suntory Group's Sustainability Suntory

Key Initiatives in Transition Plan (3)

Initiatives to Achieve PET Bottles Made from 100% Recycled or Plant-based Materials

Stakeholder Engagement : Community | Value Chain | Industry | Government Policy

Plastics have enriched our lives through their usefulness. On the other hand, the environmental impact caused by improper handling of used plastics has become a problem.
To powerfully lead the transition to a circular and net-zero society, Suntory Group is advancing activities to switch all of the PET bottles we use worldwide to be made of 100% recycled or bio-based materials by 2030, completely eliminating the use of virgin petroleum-based materials.
Based on Suntory Group's own 2R+B (Reduce, Recycle + Bio) strategy, we are working to thoroughly make effective use of resources by reducing resin use and using recycled or bio-based materials, while replacing petroleum-based materials with renewable ones.



Promotion of “Bottle to Bottle” Horizontal Recycling

“Bottle to bottle” horizontal recycling recycles PET bottles many times, using them as a resource, which can help reduce the use of virgin petroleum-based materials and CO_2 emissions. “Bottle to bottle” horizontal recycling using a mechanical recycling[*1] technique is the recycling method with lower environmental impact (lower CO_2 emissions throughout the process, from raw materials procurement to PET preform production) compared to chemical recycling[*2]. Therefore, we prioritize "bottle-to-bottle" horizontal recycling, aiming to realize a sustainable society by repeatedly reusing PET bottles as resources.
In order to promote the resource recycling of PET bottles in Japan, we have concluded agreements on “bottle to bottle” horizontal recycling with local governments, distribution companies and others, under which we are collecting used PET bottles and recycling them into new ones. Because horizontal recycling requires the understanding and cooperation of consumers, we hold events to raise awareness among consumers and provide educational outreach classes on PET bottle recycling at elementary and junior high schools in partner municipalities.

Initiatives for Recycling Used Plastic

In 2020, Suntory Group established R Plus Japan Ltd., a joint venture together with 12 companies (including Suntory) in the supply chain to engage in the recycling of used plastics. As of March 2025, the number of participating companies has expanded to 48, and together with Anellotech, a bio-chemical venture firm in the United States, we are developing technologies to recycle used plastics.

Packaging & Resource Efficiency Suntory Group’s Sustainability Suntory

*1 Mechanical recycling system: A method in which recycled resin obtained through material recycling (where used PET bottles are crushed, washed and otherwise processed into materials to make more PET bottles) is further processed under high temperature and reduced pressure for a certain period of time to remove impurities in the recycled material and make PET resin of suitable quality for beverage containers.

*2 Chemical recycling: A method of chemically breaking down plastics into their original raw materials and monomers, and then reusing them.

Key Initiatives in Transition Plan (4)

Realizing Plants with Effectively Zero GHG Emissions by Using Green Hydrogen

Stakeholder Engagement : Community | Value Chain | Government Policy

In our Environmental Targets toward 2030, Suntory Group has set a goal of reducing GHG emissions from our owned business sites by 50% compared to 2019. Currently, we use 100% renewable energy for electric power purchased at all alcohol beverage, non-alcohol beverage and food manufacturing sites and R&D facilities in Japan, the Americas, and Europe.
Furthermore, we plan to install a 16-megawatt power to gas (P2G) system, the largest in Japan, at the Suntory Minami Alps Hakushu Water Plant and Suntory Hakushu Distillery by 2025. The system will utilize electricity derived from solar power and other renewable energy sources, making it capable of producing “green hydrogen” without emitting CO_2 during the hydrogen production process.
With the introduction of this system, we plan to work with Yamanashi Prefecture to explore the conversion of fuel for thermal energy used in plants, such as the steam used in the sterilization process at the Suntory Minami Alps Hakushu Water Plant, to green hydrogen, as well as the use of green hydrogen in the surrounding communities.

* Green hydrogen: Hydrogen produced without emitting CO_2 by using electricity generated using renewable energy such as solar power when electrolyzing water in the production process.

For details, see the news release Suntory Announces Suntory Green Hydrogen Vision.

Financial Strategy

Investment Plan for Decarbonization

Suntory Group plans to invest 100 billion yen from 2021 to 2030 to promote decarbonization. These investments are expected to reduce GHG emissions by approximately 1 million tons in 2030.

Internal Carbon Pricing

Suntory Group has been using internal carbon pricing since 2021. Internal carbon pricing is widely used in making management decisions, mainly capital investment decisions contributing to climate change countermeasures.

<ICP Summary of Suntory Group>

Price	8,000 yen per ton
Approach	Shadow price
Scope	Internal Suntory Group
Prerequisites for price calculation	Calculated based on forecasts by the International Energy Agency (IEA) and other international organizations, benchmarks used by other companies in the industry and those promoting advanced environmental initiatives, as well as evaluation of past internal decision-making.

Financing

Suntory Group raised 20 billion yen using green bonds in 2023. Going forward, these funds will be utilized for the following purposes up to 2025.

- Energy efficiency
  - Capital investment contributing to energy-saving at the plants we own
- Renewable energy
  - Costs for procurement of green hydrogen
  - Capital investment for the construction of biogas refining facilities, biomass heat supply facilities or biomass power generation facilities through wastewater treatment
  - Costs for procurement of electricity generated from renewable energy (purchase of renewable energy certificates)

Green Bonds Suntory Group's Sustainability Suntory

Managing Risks and Impacts

Risk Management System

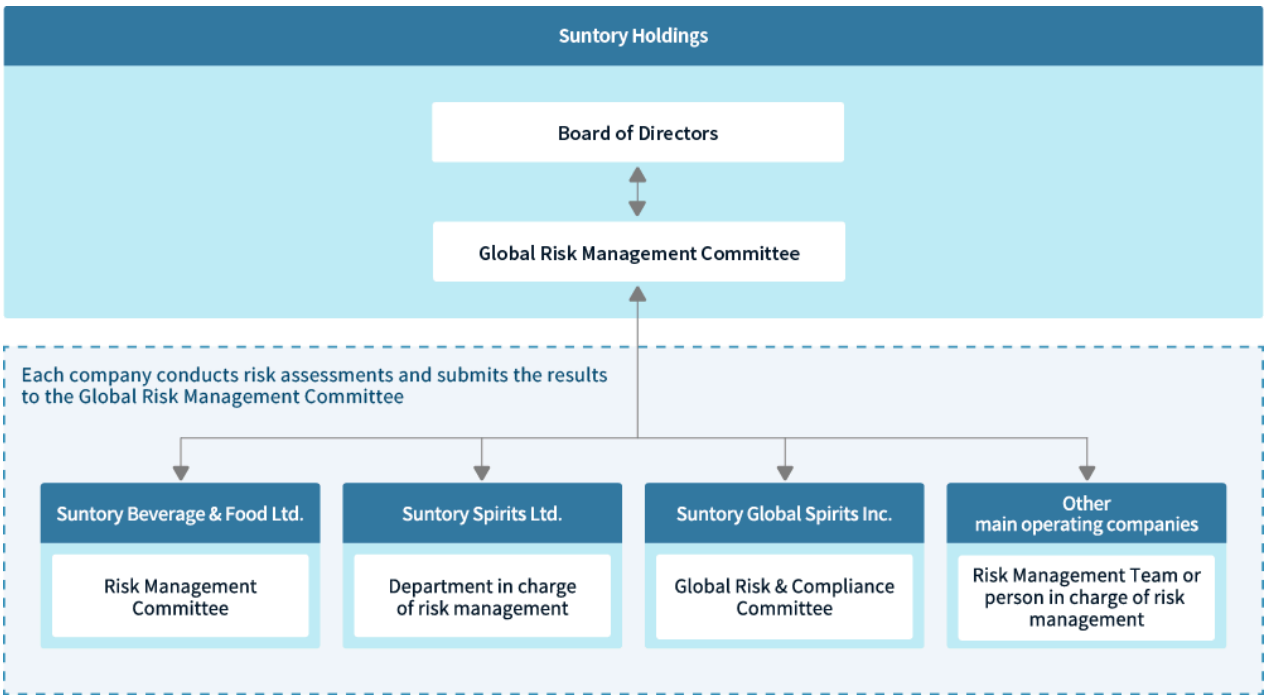
At Suntory Group, the Global Sustainability Committee identifies, assesses, and manages risks and opportunities related to sustainability. The Global Risk Management Committee regularly identifies and assesses risks within Suntory Group, identifies risks that should be addressed as a priority for Suntory Group, and promotes risk mitigation activities Group-wide. Sustainability-related risks are also included in the scope of the Committee's activities. The results of these activities are reported to the Board of Directors on regular basis. Nature capital-related risks and climate change-related risks are considered to be among the most important risks and the status of responses are monitored within this process.
The process of identifying and assessing risks and opportunities incorporates the collection of external information, such as that on the external environment and in risk reports, as well as interviews with executives. The identified risks and opportunities are then assessed according to "risk exposure (likelihood of occurrence x impact)" and "management preparedness (degree of preparation for countermeasures)," to identify those risks and opportunities to be prioritized.
To identify and manage risks in operations, we use the Sedex* platform to assess environmental and human rights risks at our suppliers and our own plants. In turn, we encourage corrective action when issues are identified. As a relief system, we have established an internal reporting system for employees. We also have in place the Suntory Group Business Partner Compliance Hotline and Customer Center as reporting channels that can be accessed by suppliers and other stakeholders (community members).

* Sedex: An NPO that works to improve ethical business practices in global supply chains by providing a platform where member companies can share their own ethical and value chain information.

For more information on human rights risk assessments and response status, see below.

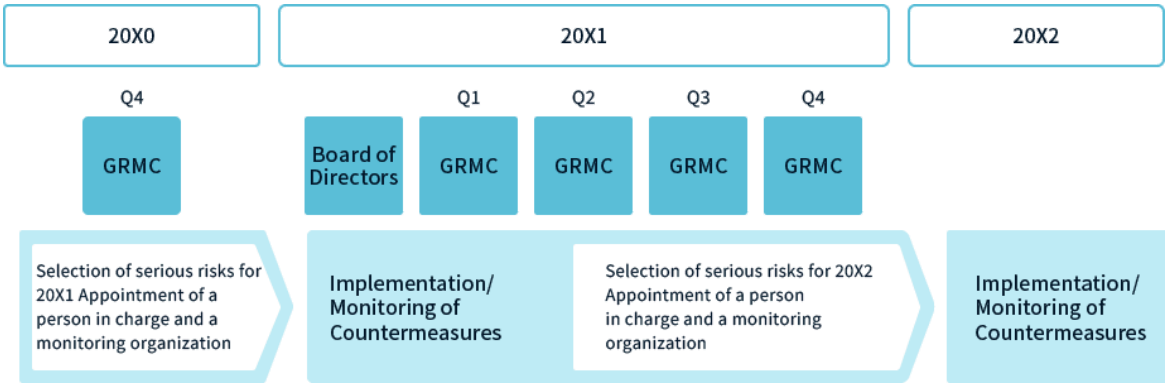
Respect for Human Rights Suntory Group's Sustainability Suntory

Organizational Chart



Method of Managing Identified Risks

For risks identified to require priority response, we appoint a person in charge and a monitoring organization and then implement measures to address the risks. The status of responses is reported and discussed at the Global Risk Management Committee (GRMC). Key risks for the next fiscal year are selected based on the results of the responses, followed by the PDCA cycle of identification, evaluation, countermeasures, and monitoring.



Indicators and Targets

Suntory Group has established Environmental Targets toward 2030 in addition to our long-term Environmental Vision toward 2050, covering water and climate action, which are expected to have a particularly large impact on our business operations among sustainability issues. We have also set goals for containers and packaging toward 2030 and are currently taking action accordingly.

Materiality		2030 targets	2024 results
Water	Reduction of water used in direct operation	Reduce the water intensity of production at our owned plants[*1] by 35%[*2] globally. In addition, explore reduction of absolute amount of water withdrawn in highly water stressed areas	● Reduced the water intensity of production by 30% compared to 2015.
	Water replenishment	Replenish more than 100% of water used in at least 50% of our owned plants[*1] globally, including all those in highly water stressed areas, through local water source conservation efforts. Especially in regions with high water stress, the above initiatives are implemented at all plants.	● Water replenishment activities implemented in 36% of all owned plants globally. ● For the plants located in highly water stressed areas, activities are implemented in 31% of those areas.
	Sustainable water use in raw ingredients	Collaborate with suppliers to improve water-use efficiency in the production of water-intensive key ingredients[*3] in highly water stressed areas.	● As an initiative on barley production through regenerative agriculture, we continue working with our malt suppliers to verify the improvement of water use efficiency by improving soil water retention. ● Implemented a pilot program to assess and support water use through regenerative agriculture for coffee farmers in the Cerrado region of Brazil.
	Water education and access to safe water	Expand water education programs and initiatives to provide safe water access for more than 5 million people.	● Total 1,750,000 people <Breakdown> ● Water education program: 1,330,000 people ● Provision of safe water: 420,000 People
Climate action	Scope 1,2	Reduce GHG emissions from our direct operations by 50%[*4]	● 32% reduction against base year
	Scope 1,2,3	Reduce GHG emissions across our entire value chain by 30%[*4]	● GHG emissions across our entire value chain 13% reduction compared to base year
Containers and packaging	Use of Sustainable Materials in PET Bottles	100% of PET bottles made with sustainable materials (globally)	● Percentage of sustainable materials used in PET bottles (globally) 35% ● Percentage of sustainable materials used in PET bottles (non-alcoholic beverage business in Japan): 58%

*1 Suntory Group plants that manufactures finished products

*2 Reduction of water intensity of production based on 2015 baseline year

*3 Coffee beans, barley, grapes

*4 Based on emissions in 2019.

*5 Percentage of sustainable materials (e.g., recycled or bio-based materials) in terms of PET bottle weight.

Contributing to Achievement of Targets set out in the Kunming-Montreal Global Biodiversity Framework

Suntory Group will contribute primarily to achieving the following 9 of the 23 global targets for 2030 set out in the Kunming-Montreal Global Biodiversity Framework, containing global targets for biodiversity adopted at the 15th Conference of Parties to the UN Convention on Biological Diversity (COP15).

1. Reduce threat to biodiversity		**Suntory Group's main contributions**
Target 2	**Restore ecosystems**	● Promotion of water resource replenishment and conservation activities (Currently implementing activities at 33 locations* in 8 countries around the world) * 26 locations in Japan and 7 overseas
Target 3	**30by30, protected areas and OECM (other effective area-based conservation measures)**	● The 6* Suntory Natural Water Sanctuaries (total of 2,776 ha) have been certified as "Sites Coexisting with Nature" by the Ministry of the Environment (as of July 31, 2025) * Hyogo Nishiwaki-Monryusan, Tokyo Akigawa, Shizuoka Oyama, Nikko Kirifuri, Ohmi, and Akagi
Target 7	**Prevent pollution as well as halve loss of nutritive salts and risks of pesticides**	● Switching all the PET bottles used globally for Suntory Group products to be made of recycled or bio-based material by 2030, achieving zero use of virgin petroleum-based materials ● Thorough water quality monitoring and waste management at our own plants ● Promotion of regenerative agriculture
Target 8	**Climate change countermeasures**	● Promotion of decarbonization measures to achieve net zero by 2050
Target 9	**Social, economic and environmental benefits to people, especially those in vulnerable situations and those most dependent on biodiversity**	● Initiatives to respect human rights through human rights due diligence ● Promotion of water resource replenishment and conservation activities
2. Satisfy people's needs		
Target 10	**Sustainable management of agriculture, forestry and fisheries**	● Promotion of water resource replenishment and conservation activities (Suntory Natural Water Sanctuaries forestry development activities) ● Promotion of regenerative agriculture
Target 11	**Restore, maintain and enhance nature's contributions to people through an approach using solutions or ecosystems using nature**	● Promotion of water resource replenishment and conservation activities ● Promotion of regenerative agriculture

3. Tools and solutions for implementation and mainstreaming		
Target 15	**Businesses assess and disclose impacts**	• Participation in SBTN's pilot guidance for businesses on natural environment conservation • Continued analysis and disclosure of our impact on natural capital in line with the TNFD recommendations
Target 16	**Sustainable consumption**	• Implementation of Mizuiku - education program for nature and water in 8 countries around the world • Promotion of "bottle to bottle" horizontal recycling of PET bottles and activities that raise awareness among and communication with consumers on recycling

TNFD Core Disclosure Metrics Response Chart

No.	Impact drivers	Metrics	Details of metrics
-		GHG emissions	**Performance Data Suntory Group's Sustainability Suntory**
C1.0	Land/freshwater/ocean-use change	Total spatial footprint	• Prior assessment of land use when establishing a new manufacturing base • 6 of Suntory Group's Natural Water Sanctuaries certified as Sites Coexisting with Nature: 2,776.36 t (Hyogo Nishiwaki-Monryusan, Tokyo Akigawa, Shizuoka Oyama, Nikko Kirifuri, Ohmi, and Akagi)
C1.1	Land/freshwater/ocean-use change	Land/freshwater/ocean-use change	• Replenishing more than twice the amount of groundwater withdrawn by plants in Japan through water replenishment in the Suntory Natural Water Sanctuaries" (over 12,000 hectares at 26 locations in 16 prefectures)
C2.0	Pollution/pollution removal	Pollutants released to soil split by type	• Implementing countermeasures after appropriate investigation in accordance with law when changing the characteristics of land
C2.1	Pollution/pollution removal	Wastewater volume and water quality	• BOD load: 533 t (2024 results) *Production sites in Japan only • Volume of water discharged: 22,789,000 m^3 *Production sites overseas only
C2.2	Pollution/pollution removal	Waste volume	• Group's total waste volume: 726,000 t *All Suntory Group production sites are covered • Total recycling volume: 251,000 t *Production sites in Japan only

			• Recycling rate: 97.8% *Production sites in Japan only
C2.3	Pollution/pollution removal	Waste plastic amount	Waste plastics • Generation: 5,838 t *Production sites in Japan only • Recycling rate: 100% *Production sites in Japan only • Percentage of sustainable material used in PET bottles (globally): 35% • Percentage of sustainable material used in PET bottles (non-alcoholic beverage business in Japan): 58%
C2.4	Pollution/pollution removal	Non-GHG air pollutants	• NOx:91.4t • SOx:2.3t *Production sites in Japan only
C7.2	Risks	Description and value of significant fines/penalties received/litigation action in the year due to negative nature-related impacts	• No environmental fines or penalties were received and no lawsuits were filed in fiscal 2024
C7.3	Opportunities	Amount of capital expenditure, financing or investment deployed toward nature-related opportunities (by type)	• Plan to invest 100 billion yen to promote decarbonization by 2030 (conversion to renewable energy, utilization of heat pumps, etc.) • Suntory Global Spirits launched a project in 2021 to protect peat, an important ingredient in whiskey Plan to invest 4 million US dollars by 2030 to conserve 1,300 hectares of peatland and water resource • Raised 20 billion yen through green bonds (scheduled to be used by 2025)
C7.4	Opportunities	Increase and proportion of revenue from products and services producing demonstrable positive impacts on nature	• Suntory's Natural Water Sanctuaries have achieved "water positivity," replenishing more than twice the amount of groundwater withdrawn by its plants in Japan • Communicate under the "Suntory Tennensui (Mineral Water)" brand and contribute to improving the corporate brand and product brand

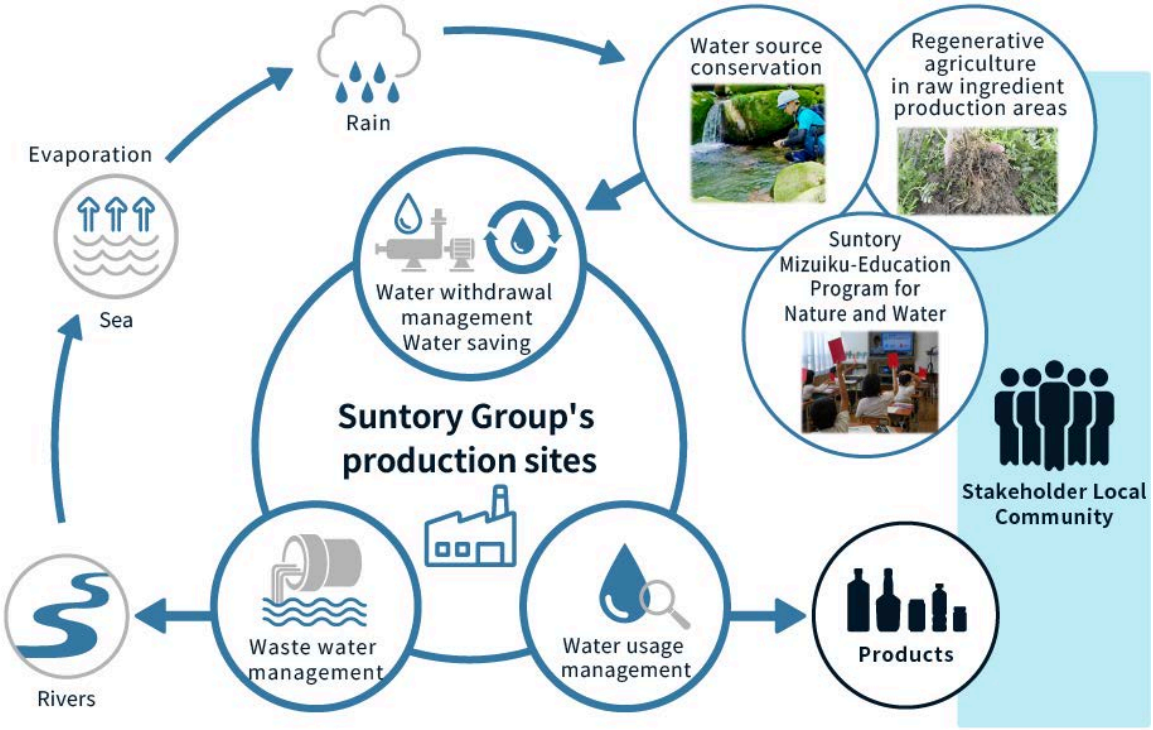
* For 2024, data covers 79 plants in the Group, including 27 production sites in Japan and 52 production sites overseas

Water Sustainability

Our Policies and Approach

Water is a vital resource that supports human life and livelihoods, and the foundation of Suntory Group's business activities. While water is a renewable resource that will never disappear from Earth, only about 0.01% of the planet's water is freshwater accessible to humans.
On the other hand, global issues concerning water resources have arisen due to factors such as population growth, economic development in developing countries, and climate change. It is predicted that by 2050, approximately 5 billion people worldwide will face severe water shortages.* This worldwide water scarcity is intertwined with numerous issues, as water is used not only for drinking and domestic purposes but also extensively in food production.
At the top of Suntory Group's Environmental Principles is "achieving water security." We are advancing various initiatives to contribution to the healthy circulation of water in nature, with a view that encompasses the entire value chain.

* World Meteorological Organization (WMO) "The State of Climate Services 2021"



For more information on Suntory Group's Environmental Principles, Environmental Vision toward 2050, and Environmental Targets toward 2030, see Environmental Management.

Suntory Group Sustainable Water Philosophy

As a globally-operating company that depends on and benefits from the water and as a company that operates globally, Suntory Group must earnestly address worldwide challenges and contribute to building a sustainable society.
Based on Suntory Group's Environmental Principles , we have established the Suntory Group "Sustainable Water Philosophy" to guide our efforts in addressing water challenges in various regions around the world. Based on this philosophy, we develop and promote initiatives that are tailored to the water resources conditions in each area where we do operate.

Suntory Group's "Sustainable Water Philosophy" (Established in January, 2017)

Water is the most important ingredient of our products, as well as a precious shared resource. In pursuit of "achieving water security," which is at the top of Suntory Group's Environmental Principles, we share the following philosophy across the Group to meet stakeholder expectations.

1. Understanding the natural cycle of water
   We investigate watersheds around our sites to understand the local hydrological cycle, using a scientific approach when needed.
2. Promoting environmentally conscious water use
   We reduce the environmental impacts of water use on the natural water cycle by implementing 3R activities and returning water to nature after adequate treatment.
3. Conserving watersheds
   We conserve our watersheds and endeavor to improve local water quality and quantity in cooperation with stakeholders for a sustainable future.
4. Engaging with the local community
   We endeavor to support our community by fostering collective actions to solve water issues and enrich society.

Promoting Structure

Global Sustainability Committee

At Suntory Group, we have established a system to promote environmental management centered around the Global Sustainability Committee (GSC). Under the supervision of the Chief Sustainability Officer, GSC formulates strategies related to the 7 key themes of sustainability, which include water, climate action, raw ingredients, containers and packaging, health, human rights, and lifestyle culture. GSC also oversees the progress of these strategies and analyzes the business risks and growth opportunities, reporting to the Board of Directors on a quarterly basis.

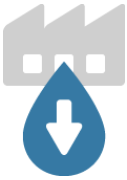
For more information on the Global Sustainability Committee, see Environmental Management.

Targets and Progress

Environmental Vision toward 2050

Water Sustainability

- Reduce the water intensity of production at our owned plants[*1] by **50%**[*2] globally.
- Replenish more than 100% of water used at all of our owned plants globally through conservation of the surrounding ecosystem.
- Achieve sustainable water use for all key ingredients.
- Share the Sustainable Water Philosophy to the communities where our business operates.

Theme	Environmental Targets toward 2030	2024 Results
Reduction of water used in direct operation 	Reduce the water intensity of production at our owned plants by **35%**[*1] globally. In addition, explore reduction of absolute amount of water withdrawn in highly water stressed areas	● Reduced the water intensity of production by **30%** compared to 2015. **Initiatives to Reduce the Amount of Water Used in Direct Operation**
Water replenishment 	Replenish **more than 100%** of water used in at least 50% of our owned plants[*2] globally, including all those in highly water stressed areas, through local water source conservation efforts.	● Water resource cultivation activities implemented in **36%** of all owned plants globally. ● For the plants located in highly water stressed areas, activities have been implemented in **31%**. **Initiatives at the Water Source**
Sustainable water use in raw ingredients 	**Collaborate with suppliers to improve water-use efficiency** in the production of water-intensive key ingredients[*3] in highly water stressed areas.	● As part of our efforts in barley production through regenerative agriculture, we are continuously working with our suppliers to verify the improvement of water use efficiency by enhancing soil water retention. ● Implemented a pilot program to assess and support water use through regenerative agriculture for coffee farmers in the Cerrado region of Brazil. **Raw Ingredient Production-related Initiatives**
Water education and access to safe water 	Expand water education programs and initiatives to provide safe water access for more than **5 million people**.	● Total **1,750,000** people Water education program: 1,330,000 people Provision of safe water: 420,000 people **Initiatives for Water Education**

*1 Reduction of water intensity of production based on 2015 baseline year

*2 Suntory Group plants that manufacture finished products: 24 plants in Japan, 45 plants overseas

*3 Coffee, barley, grapes

For more information on water-related achievements, see the List of achievements data.

Our Initiatives

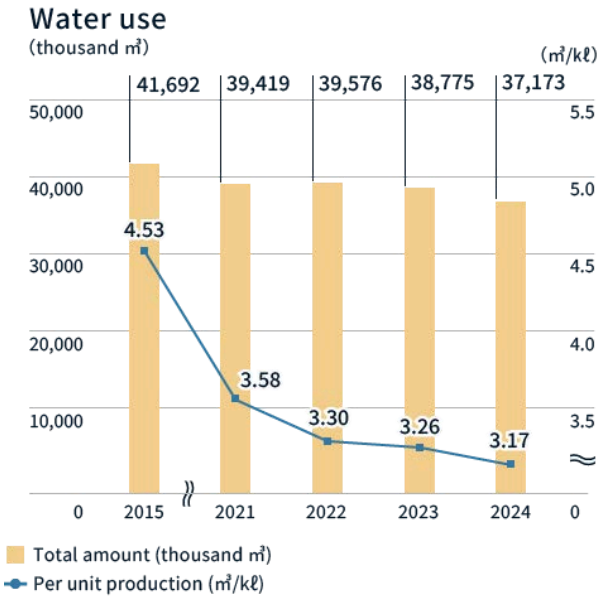
Water Risk Assessment

Prioritizing the achievement of water sustainability within the "Suntory Group Basic Environmental Policy," Suntory Group established the Suntory Institute for Water Science in 2003, and continuously conducts various assessments related to water. With a focus on sustainable business activities, we conducted risk assessment of water sustainability at our direct operation sites. We also consider water risk assessment when developing new businesses.

For more information, see Water Risk Assessment.

Initiatives to Reduce the Amount of Water Used in Direct Operation

Trends in Water Withdrawal and Water Intensity of Production (Whole Group)



* Per unit production is the amount of usage per kiloliter produced

Efficient Use of Water Resources

In Suntory Group's plants, water is used not only as an ingredient but also for cleaning and cooling manufacturing equipment. To conserve limited water resources, we implement the "3Rs of Water": reducing consumption (Reduce), using water repeatedly (Reuse), and treating it for repeated usage (Recycle). These efforts support our goal to “reduce water consumption at our owned plants worldwide by 35%”*

At the Suntory Minami Alps Hakushu Water Plant, we conduct a variety of initiatives under the 3R framework. Notably, through advanced cascade (multi-stage) water recycling, we have achieved industry-leading levels in water use efficiency per production unit. In February 2025, the Plant received the highest "Platinum" certification from the Alliance for Water Stewardship (AWS).

* Reduction water intensity based on the business fields in 2015

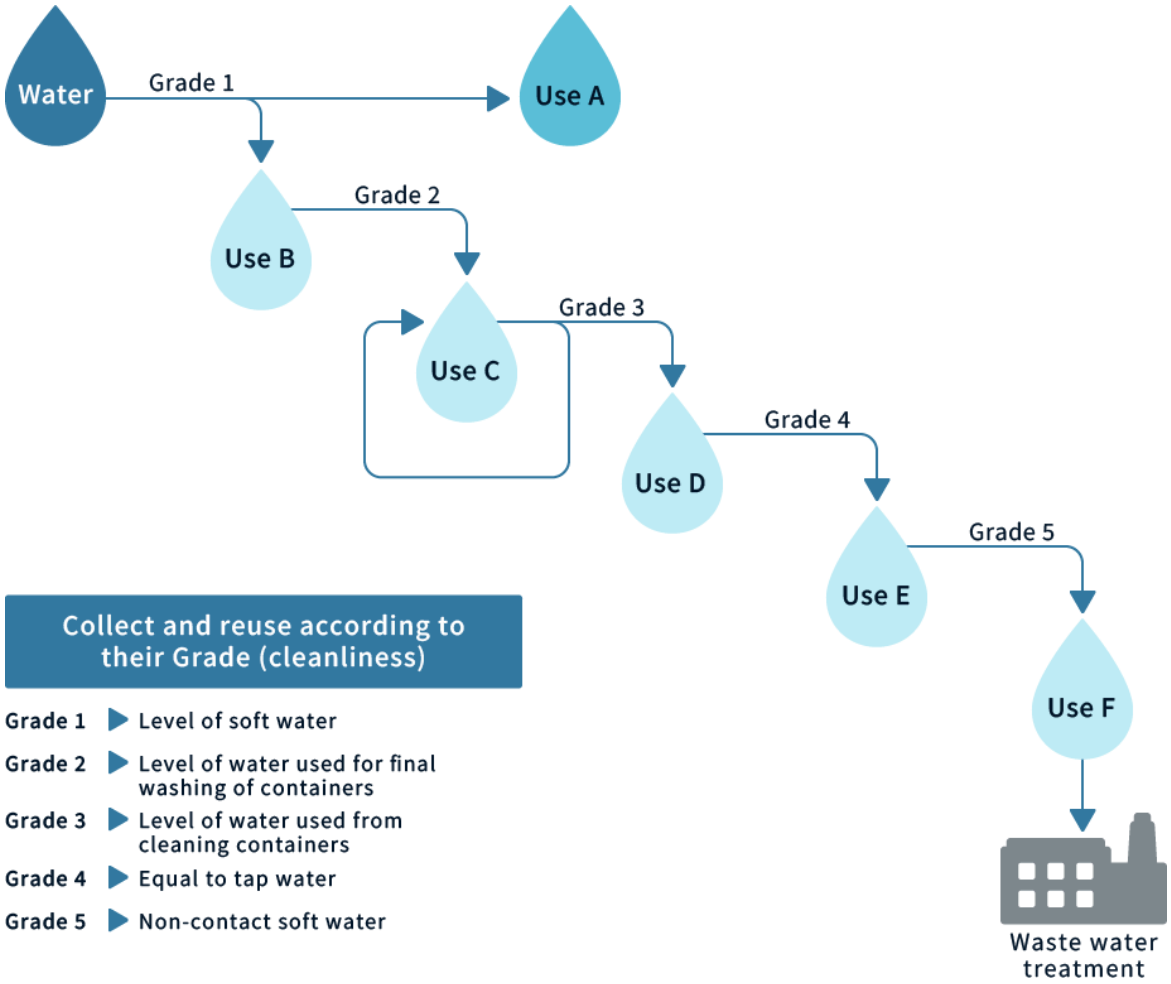
The Suntory Minami Alps Hakushu Water Plant

Reuse of water recycled at each stage of cleaning stored in 200-ton tanks

For more information, see Achieving the AWS Certification for Water Stewardship.

Water Cascade Recycling Process

This technology involves classifying the water used in the manufacturing process (groundwater, river and lake water, rainwater, tap water, and externally supplied water (recycled water)) into five grades based on cleanliness such as cooling and cleaning. The water is then progressively reused from applications requiring higher grades to those that can be satisfied with lower grades.



Strict Wastewater Management

Suntory Group established voluntary standards for wastewater that are equal to or stricter than the legal requirements to ensure that wastewater is returned to nature in a state as close to natural as possible. Wastewater from our plants is first purified using anaerobic wastewater treatment facilities* and other equipment before it is released into sewage systems or rivers. To maintain these standards, we conduct continuous monitoring with measuring devices and daily water quality inspections by personnel.

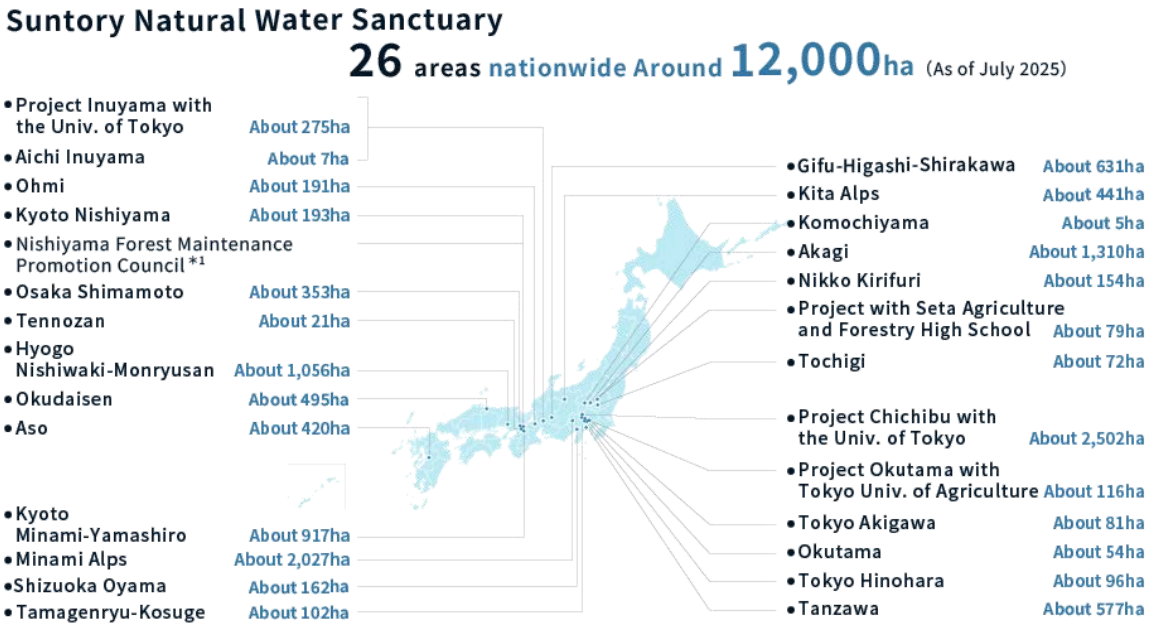
* A treatment method that decomposes pollutants using microbes (anaerobic bacteria)

24-hour wastewater management system

Initiatives at the Water Source

Suntory Natural Water Sanctuary (Water Resource Cultivation/ Restoring Biodiversity)

In 2003, Suntory Group launched the Natural Water Sanctuary Initiative aimed at enhancing water source recharge capabilities and preserving biodiversity. The initiative has now expanded to over 12,000 hectares in 26 locations in 16 prefectures across Japan, and is replenishing twice the volume of groundwater extracted by our owned plants in Japan. As we advance these efforts, we collaborate with leading researchers from various fields to ensure that our activities are scientifically grounded and sustainable for the next 100 years and beyond.



*1 In Nagaokakyo, Kyoto, we are a member of the Nishiyama forestry development promotion committee and we are cooperating in local forest preservation activities with people in the community. The area of the forests subject to this activity is not counted as part of our total Natural Water Sanctuary area.

For more information, see Suntory Natural Water Sanctuary.

Water Initiatives Worldwide

Suntory Group practices coexistence with nature in all regions where we conduct business worldwide. We will continue to engage in various initiatives as we strive to be a global leader in water sustainability.

United States of America

To protect the precious natural resource of "water," we have been actively involved in conserving water sources around our bourbon distilleries and enhancing the biodiversity of forests. The Maker's Mark Water Sanctuary Project that began in 2016 planted American white oak trees on 33 acres of Maker's Mark distillery land (approx. 13 hectares) as a water resource cultivation effort. In 2018, we set up a Natural Water Sanctuary within the 15,625-acre (approx. 6,300 hectares) Bernheim Arboretum and Research Forest, the water source for the Jim Beam Distillery, and initiated additional environmental conservation efforts.

Mexico

In collaboration with major tequila brand manufacturers, we launched a watershed stewardship project in 2010 aimed at promoting conservation activities to protect water source environments. This initiative focuses on restoring the ecological connections between the wetlands and forests in the Santiago River basin, located in the Cerro Viejo Reserve, which have been disrupted by a highway constructed in the surrounding area.

Scotland

In Scotland, we initiated the "Peatland Water Sanctuary" peatland and water source conservation activities in 2021. We plan to invest more than $4 million in the restoration and conservation of 1,300 hectares of peatlands by 2030. Furthermore, we aim to restore peatland areas capable of producing twice the amount of peat used by Suntory Group by 2040. Through this initiative, we aim to contribute to water quality improvement, enhanced water retention, and biodiversity conservation. Additionally, because peatlands have the capability to store carbon, they also help in reducing GHG emissions.

France

In France, we established a 20-year partnership for the conservation of water resources in 2017 with Grand Parc Miribel Jonage, a nature park located next to the Meyzieu Plant. Together with the local community, we are actively involved in preserving the park's expansive forests, supporting children's educational programs, and undertaking initiatives to protect and nurture the water and natural environment in the area surrounding the Plant.

Spain

In collaboration with local communities, we have been engaged in ecosystem protection efforts aimed at restoring the Júcar River and its surrounding ecosystems near our plant in Carcaixent. Additionally, we are conducting hydrological studies with local universities and specialist institutions focusing on water conservation activities in the Tagus River watershed, centered around the Guajaraz Reservoir, which serves as the water source for the Toledo Plant.
In addition, Suntory Beverage & Food Spain, a subsidiary of Suntory Beverage & Food Limited, concluded an agreement on water source conservation activities with the city of Layos, Toledo, Spain. Beginning in January 2024, with help from local residents as well as experts and researchers in various fields, we initiated “Guardians del Tajo” (Guardians of the Tagus River) activities around the Guajaraz reservoir and the upper reaches of the reservoir, with the aim of improving water quality and biodiversity.

Vietnam

Since 2015, we have been supporting the renovation and installation of restrooms and washrooms in the main schools where Suntory Mizuiku is conducted, contributing to the improvement of sanitary conditions.

Thailand

Since 2019, we have been engaged in water resource preservation activities in the northern province of Chiang Mai and the southern province of Nakhon Nayok. Such activities include slowing stream currents to prevent sediment-based erosion, installing small weirs to support permeation of underground water, and planting trees to prevent soil from flowing into streams.

India

In the Gurugram region of northern India, widespread flooding due to heavy rainfall occurs while rapid urbanization and industrial development have led to infrastructure shortages and depletion of natural water sources, causing many residents to face water shortages. Suntory Group implemented a pond restoration project in 2024 to supply agricultural and household water in the Gurugram area. This project restored the degraded pond to improve water supply, enhance water quality, treat wastewater, capture rainwater, and restore biodiversity, significantly increasing groundwater recharge levels. Additionally, a public park was established for residents to enjoy exercise and play, improving the living standards of local farmers and residents and strengthening the community's economic resilience.

For more information on community engagement , please see Identifying and Resolving Watershed Issues, and Community Engagement.

Raw Ingredient Production-related Initiatives

Regenerative agriculture is attracting attention for its potential to mitigate and adapt to climate change by reducing GHG emissions through reduced use of chemical fertilizers and pesticides, as well as restoration of soil biodiversity which boosts soil fertility and effective water use. Suntory Group is working to improve the efficiency of water use in production areas through regenerative agriculture, focusing on key raw ingredients (coffee beans, barley, and grapes) that are produced in areas with high water footprints and significant water stress and are important to profitability.

For more information, see Sustainable Procurement.

Initiatives for Water Education

Suntory Mizuiku - Education Program for Nature and Water

Suntory “Mizuiku”* — education program for nature and water started in 2004 in Japan. The program is unique to Suntory Group and designed to help children appreciate the wonders of nature, recognize the importance of water and forests that nurture it, and think about each of them can do to pass on water to future generations. Mizuiku is currently offered in 9 countries worldwide, with cumulative participants exceeding 1,190,000 as of 2024.

* Mizuiku is a registered trademark of Suntory Holdings Limited.

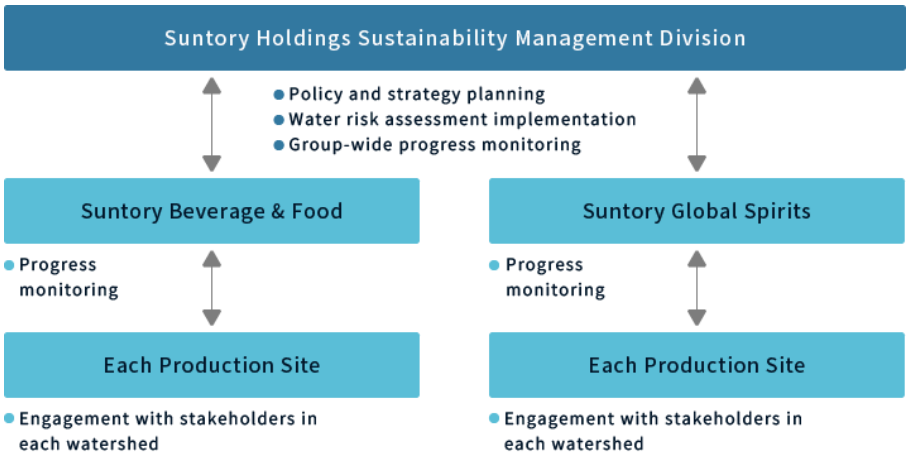
* Sponsor: Ministry of the Environment, Ministry of Education, Culture, Sports, Science and Technology, etc.

For more information, see Suntory Mizuiku — Education Program for Nature and Water.

Community Engagement

At Suntory Group, we recognize our role as a member of watershed communities and aim to contribute to their development by working alongside diverse stakeholders to conserve local water resources. To formulate policies and strategies for Suntory Group as a whole and conduct water risk assessments, the Sustainability Management Division of Suntory Holdings implements annual assessments at each production site, and based on the results, creates regular opportunities with each operating company to monitor progress for the Group overall. At each production site, we work with stakeholders including local government, NGOs, educational institutions, and the local community to address water-related issues in the local watershed.

Community Engagement Promotion Structure



For more information on community engagement, please see Identifying and Resolving Watershed Issues, and Community Engagement.

Participation in Initiatives

International Water Certification by the Alliance for Water Stewardship (AWS)

In 2018, Suntory Group's Suntory Okudaisen Bunanomori Water Plant (Tottori Prefecture) became the first in Japan to receive AWS International Certification, followed by the Suntory Kyushu Kumamoto Plant (Kumamoto Prefecture) in 2019 and the Suntory Minami Alps Hakushu Water Plant (Yamanashi Prefecture) in 2021. The Suntory Kyushu Kumamoto Plant obtained the highest "Platinum" certification in 2023, followed by the Suntory Okudaisen Bunanomori Water Plant and Suntory Minami Alps Hakushu Water Plant in 2025. In addition, as Japan's first corporate member of AWS, Suntory Group has signed onto a partnership with the same organization in February 2021 to raise awareness of water stewardship in Japan, build networks, encourage stakeholder participation, and develop sharable tools. Additionally, in March 2025, 5 Japanese member companies*, including Suntory, launched a working group called "Japan Water Stewardship Leadership Group (JWS)" to advance efforts to raise Japan's water conservation efforts to global standards.

* MS&AD Insurance Group Holdings, Inc., Kurita Water Industries Ltd., Coca-Cola (Japan) Company, Limited, and Yachiyo Engineering Co., Ltd.

About AWS

AWS is an organization founded by corporations and NGOs, including the World Wide Fund for Nature (WWF) and The Nature Conservancy (TNC), to promote water sustainability on a global scale. AWS has developed certification in sustainable water use for factories around the world, and promotes water conservation and stewardship.

For more information, see Achieving the AWS Certification for Water Stewardship.

The CEO Water Mandate

Suntory Group endorsed the CEO Water Mandate global platform, which is a United Nations Global Compact initiative to support the prevalence, practice and informational disclosure of water sustainability at companies.

30by30 Alliance for Biodiversity

Suntory Group has participated in the 30by30 Alliance for Biodiversity, which aims to halt and reverse biodiversity loss to realize a sustainable society, since April 2022.

Taskforce on Nature-related Financial Disclosures (TNFD) Forum

Suntory Group joined the Taskforce on Nature-related Financial Disclosures (TNFD)[*1] Forum in April 2022 to accelerate initiatives that contribute to nature-positive outcomes. We also registered as a TNFD Adopter[*2] in December 2023.

*1 Abbreviation for Taskforce on Nature-related Financial Disclosures

*2 TNFD Adopters are companies that have registered on the TNFD website their intention to make disclosures based on TNFD recommendations. Registered companies are required to make disclosures based on fiscal year information for 2024 or 2025.

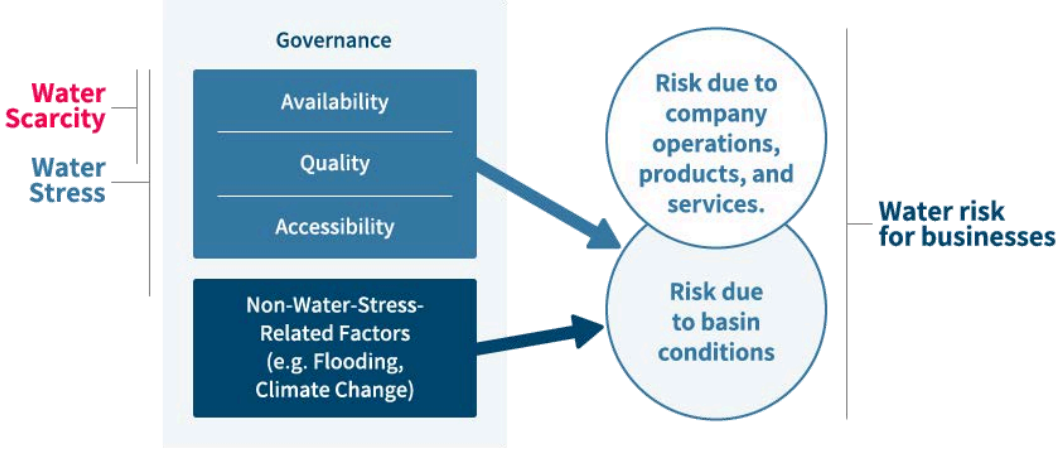
For more information, see Disclosures Based on TNFD & TCFD Recommendations.

Water Risk Assessment

Suntory Group has made achieving water security a materiarity in the Suntory Group's Environmental Principles and continues to conduct various water-related assessments at Institute for Water Science, which was established in 2003. We conduct water risk assessments to ensure sustainable business operations and leverage the insights to advance environmental management. We also consider water risk assessment when developing new businesses.

Water Risks in Suntory Group Business Operations

Water is Suntory Group's most important raw ingredient and a precious shared resource with local communities and ecosystems. Consequently, conducting water risk assessment to understand the impact of our business on local communities and ecosystems is essential for achieving sustainable business growth. Suntory Group has identified our impacts on nature and dependencies on ecosystem services for direct operations in our beverage business, alcoholic beverage business, as well as for other operations, and our upstream value chain, summarizing the pathways. Risks have been listed based on the identified dependency pathway and impact pathway, while the financial impact was evaluated by calculating the expected value of the potential loss and the probability of occurrence. The assessment found that the significant financial impacts from water resources in direct operations are operational shutdowns due to extreme weather such as floods and storm surges, increased costs for quality control and wastewater regulations in cases of water quality deterioration in surrounding areas, and operational shutdowns caused by water shortages due to excessive water withdrawal and increased droughts in surrounding areas (for more information, see Disclosures based on the TNFD and TCFD Recommendations). Operational shutdowns due to flooding or storm surges pose an acute physical risk, with losses expected to result from flood damage to assets at production sites, the associated response costs, and sales losses. On the other hand, increased costs from water quality deterioration and operational shutdowns due to water shortages are expected to arise from the complex interaction of 2 elements: physical chronic risks and transitional risks. Physical chronic risks include increased droughts due to climate change, unstable water supplies resulting from excessive water withdrawal, and deterioration in water quality caused by changes in flow conditions and wastewater eutrophication. Transition risks may also arise from the complex interplay of factors such as infrastructure development, taxation, and other policies and regulations, as well as population growth and technological influences—all of which could impact wastewater regulations and water procurement costs. These risks are particularly likely to occur in areas of high-water stress and could have a significant impact on business operations. Water stress is defined as the inability to secure sufficient freshwater resources to meet the demands of a community or an ecosystem. This is not only due to an insufficient quantity of freshwater resources, but also from water pollution and limited access to water. When combined with factors other than water stress (for example, floods), the likelihood of exposure to risks from watersheds increases. For these reasons, the Suntory Group has prioritized addressing complex water risks, such as flooding, water shortages, and water pollution, in areas of high water stress where the financial impacts are expected to be substantial.



Water scarcity : The volumetric abundance, or lack thereof, of freshwater resources.
Water stress : The ability, or lack thereof, to meet human and ecological demand for freshwater. Compared to scarcity, water stress is a more inclusive and broader concept.
Water risk : The possibility of an entity experiencing a water-related challenge (e.g., water scarcity, water stress, flooding, infrastructure decay, drought).

Source: September 2014 discussion paper by The CEO Water Mandate: Driving Harmonization of Water-Related Terminology

Water Risk Assessment for Direct Operations

From a financial impact perspective, we have prioritized Suntory Group production sites* for direct operations, identifying priority sites with high water risk.

* Directly operated Suntory Group production sites: 27 factories in Japan, 52 factories outside Japan

1. Water Stress Conditions in Countries with Production Sites

We assess the water stress conditions in countries where our production sites are located using Baseline Water Stress, a globally recognized tool developed by the World Resources Institute, to evaluate water stress across countries.

Baseline Water Stress	
Extremely high	India
High	Mexico, Spain, Thailand
Medium-high	USA, Australia, Germany, Vietnam
Low-medium	Japan, Canada, UK, France, Taiwan
Low	Ireland, New Zealand

* Based on country scores for Baseline Water Stress as used in Aqueduct 4.0 Current and Future Country Rankings by World Resources Institute.

2. Water Risk Assessment for Watersheds of Production Sites

In addition to national-level water stress assessments, we also carry out water risk assessments for the watersheds in which our production sites are located, identifying priority sites for water risk management. The following outlines the assessment process and the progress in risk

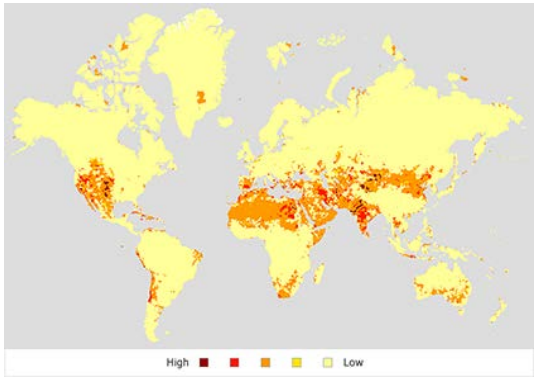
management.

Identification of Priority Sites

The first round of the assessment narrowed down priority sites based on findings gained from corporate guidance in the Science Based Targets Network (SBTN) validation pilot,* which Suntory Holdings joined in 2023. First, we analyzed the quantity and quality of available water resources in the watershed to assess the state of nature on which the production site depends. The assessment used several indicators from Aqueduct 4.0 and the Water Risk Filter developed by the World Wide Fund for Nature (WWF). For the assessment of water scarcity risk, we used the 3 indicators: Baseline Water Stress, Water Depletion, and Blue Water Scarcity, assessing the highest score as the risk score. In areas where these indicators show high scores, there is likely to be insufficient water resources to meet demand. We assessed water quality using the 3 indicators: Coastal Eutrophication Potential, Nitrate-Nitrite Concentration, and Periphyton Growth Potential, assessing the highest score as the risk score. Higher scores for each index indicate greater exposure to eutrophication. Furthermore, to assess the impact of our operations at production sites on watersheds, we normalized the values of water withdrawal and water pollutants contained in wastewater (weight equivalents of nitrogen and phosphorus) and compiled a list for each site. However, assessment of water pollutants was limited to facilities that discharge wastewater directly into rivers and, excluded facilities that discharge wastewater via sewer systems. Next, to identify sites at high risk in terms of both dependencies and impacts on state of nature, we multiplied the normalized water scarcity risk score by the normalized water withdrawal score and multiplied the normalized score for water quality by the normalized score for water pollutants, then identified priority sites that were located within the top 10 watersheds ranked by their score, taking into account their business importance. Of the identified sites, based on an assessment using the Integrated Biodiversity Assessment Tool (IBAT) and multiple biodiversity indicators, we identified sites located within a 20km radius of a protected area or key biodiversity area and are expected to have a relatively high level of biodiversity vulnerability or restoration difficulty.

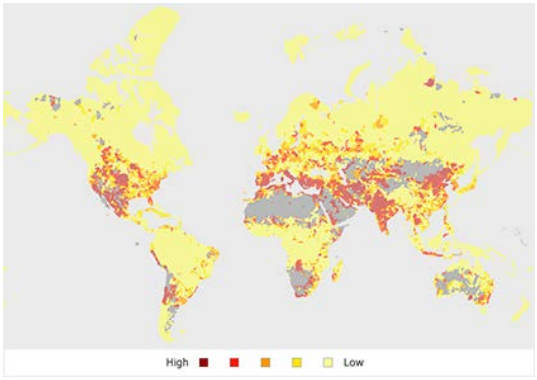
* Corporate guidance pilot study to verify methodology for setting SBTs for the Science Based Targets Network

Water Depletion of Water Risk Filter (5 Levels)



Source: WWF

2050 Water Stress BAU* Scenario Risk Assessment by Aqueduct (5 Levels)



Source: Based on the World Resources Institute's Water Risk Filter
*BAU: Business As Usual

Number of High Priority Sites

Number of High Priority Sites	Beverage business	Alcoholic beverage	business Other
Number of locations with high water-resource dependency and impact risk	9	4	-
Of these, locations with a large effect on biodiversity	3	3	-
Number of locations with high water-quality dependency and impact risk	-	15	3
Of these, locations with a large effect on biodiversity	-	-	-

Assessing Water Shortage Risks using Water Security Compass, an Online Platform for Global Water Risk Assessment

Suntory Holdings, in collaboration with the Graduate School of Engineering at the UTokyo and Nippon Koei Co., Ltd., a subsidiary of ID&E Holdings Co., Ltd., has established 'the Research Initiative for Global Hydrologic Cycles project' at the UTokyo. Through this initiative, the partners have jointly developed an online platform called 'Water Security Compass,' which enables long-term, use-specific assessment of water scarcity risks based on water supply and demand. The platform has been made publicly available free of charge since the summer of 2024. (See https://water-sc.diasjp.net/)

The Research Initiative for Global Hydrologic Cycles project was established in 2022 to combine the knowledge of companies and universities, promoting research and development, social implementation of developed technologies, and human resource development. This is an industry-academia collaboration framework involving the UTokyo, Suntory Holdings, and Nippon Koei.

Developed through this project, the Water Security Compass utilizes H08, developed by UTokyo and others, which consolidates recent breakthroughs in the fields of hydrology and geophysics, and simulate the global water cycle. By incorporating the impact of seasonal changes and the effects of dams and other infrastructure on water quantity into simulations, the Water Security Compass is an online platform which provides a picture in a rarely high resolution of how much water is needed and supplied for various locations around the world, and can visualize the extent to which water resources will be in short supply for different uses, both in the present and for the future.

One of Water Security Compass' indicators, Cumulative Deficit to Demand (CDTD), was used to assess water scarcity risk for locations with high water-resource dependency and impact risk. CDTD is an indicator that assesses the percentage of a watershed's water resources that are in short supply relative to water demand. The indicator showed that 3 priority sites in the beverage business and 1 priority site in the alcoholic beverage business have the potential for a 20–40% shortfall in water resources relative to water demand during certain seasons of the year. In these areas, it is highly likely that there will be water withdrawal and water supply restrictions for the plant's water resources.

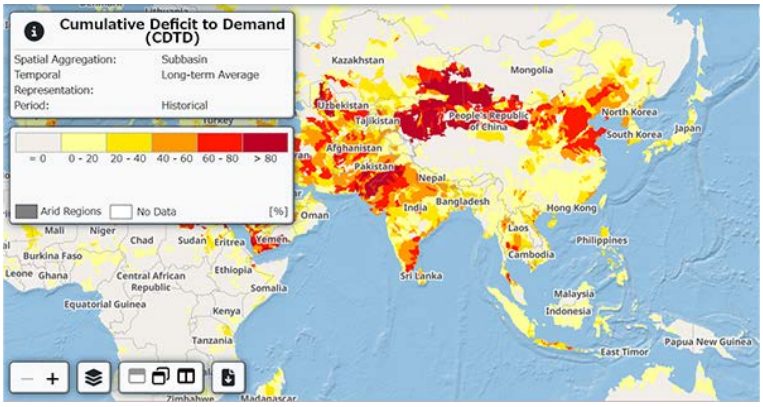


Figure: Screenshot from a Water Security Compass simulation

The Cumulative Deficit to Demand (CDTD) indicator makes it possible to identify areas where water shortages are likely to occur.

● Organizations Participating in the Global Water Cycle Social Cooperation Program

- The University of Tokyo, Graduate School of Engineering, Department of Civil Engineering
- Suntory Holdings Limited
- Suntory Global Innovation Center Limited's Institute for Water Science
- Nippon Koei Co., Ltd., Central Research Center, Center for Advanced Research

3. Risk Reduction Efforts at Priority Sites

As part of our efforts to reduce risk at identified priority sites, we regularly evaluate the level of actions taken and confirm progress for water management (water withdrawal and water-saving) at our production sites and water replenishment and conservation efforts in coexistence with communities. Since the condition of the water resources in each watershed is different, we have measures in place to reduce the risks associated with local conditions.

a. Water Management (Water withdrawal and water-saving management)

As water is a precious resource shared with the community and the ecosystem, our plants must manage water responsibly and appropriately. Water sources for our plants are broadly divided into 2 categories: city water and natural water (surface water or groundwater). Generally, city water is shared among various users in the local area, so the water source area is wide, and the entity responsible for managing water withdrawal from water sources is the local water authority. Water conservation management needs to be implemented appropriately in accordance with the water supply management policies and plans of the local water authority, including climate change adaptability plans. On the other hand, when a plant uses natural water (surface water or groundwater), we are the responsible entity for managing intake via the plant's intake gate and need to proactively promote water intake and water conservation management efforts to adapt to environmental changes such as climate change.
Based on the above points, we have assessed the level of actions to manage water withdrawal and water-saving at each site. The following 2 items were evaluated:

(1) Water Withdrawal Management

Demonstrating appropriate water withdrawal management (ensuring water is not excessively withdrawn)

* Plants that use municipal water are not covered as the water authorities manage the water withdrawal

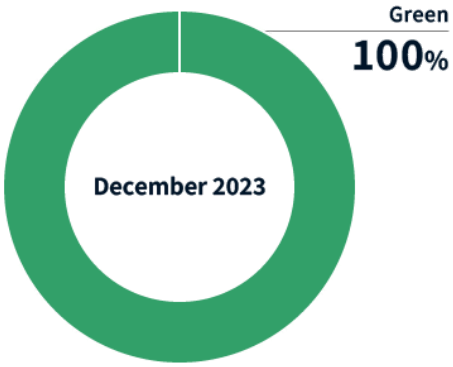
<Assessment Criteria>

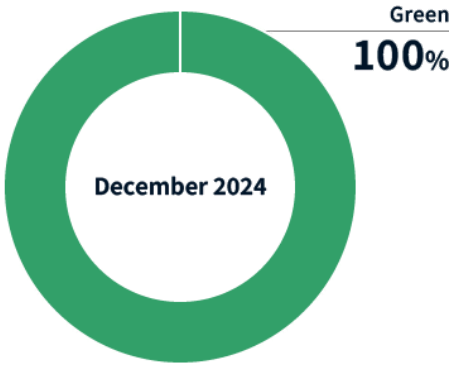
- The ability to collect the required water withdrawal data to demonstrate that water withdrawals are not significantly impacting local river and groundwater levels.
- Required water withdrawal data is being collected.

Required water withdrawal data is not collected	→	Red
Part of the required water withdrawal data is not collected	→	Yellow
All required water withdrawal data is collected, and water withdrawal is appropriately managed	→	Green

<Assessment Results>

The following shows the water withdrawal management level of each plant represented as a pie chart. The percentage of Green-rated plants for water intake management remained at 100% in December 2024, the same as for December 2023.





(2) Water Conservation Management

Demontrating effective water conservation management (avoiding wasteful use of water)

<Assessment Criteria>

- Target was established to promote efficient use of water.
- Conducting activities to achieve the target yearly.
- Target is achieved yearly.

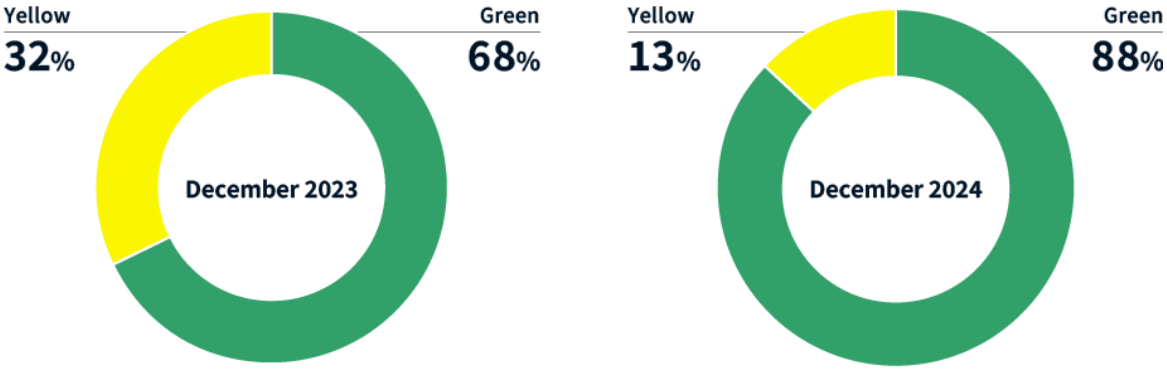
No med-term target for water intensity → Red

No yearly target for water intensity or not achieved → Yellow

The yearly target for water intensity has achieved → Green

<Assessment Results>

The following shows the water-conservation management level of each plant. As a result of setting a medium-term target and conducting water-conservation measures to achieve the yearly target, the percentage of plants that have the water-conservation management level of Green increased from 68% (December 2023) to 88% (December 2024).



We will continue to conduct measures to reduce risks using this process.

b. Water Resource Replenishment and Conservation in Coexistence with the Local Community

Suntory Holdings recognizes that we are a member of the watershed society since we share the use of water resources with the community. We therefore seek to contribute to its development by replenishing and conserving water resources in the watershed by working hand-in-hand with the various stakeholders.
Specifically, following the roadmap for water source replenishment efforts in the Environmental Targets toward 2030, in cooperation with local stakeholders, we are identifying water-related issues in the watersheds where our plants are located. With the agreement of major stakeholders, we are gradually implementing water resource conservation initiatives that will help resolve these issues.
Based on the above points, we have assessed the progress of measures to co-exist with the community at each site.

<Assessment Criteria>

- Identifying water issues in the watershed to ensure water sustainability.
- Working with local stakeholders to implement measures that contribute to resolving water issues.

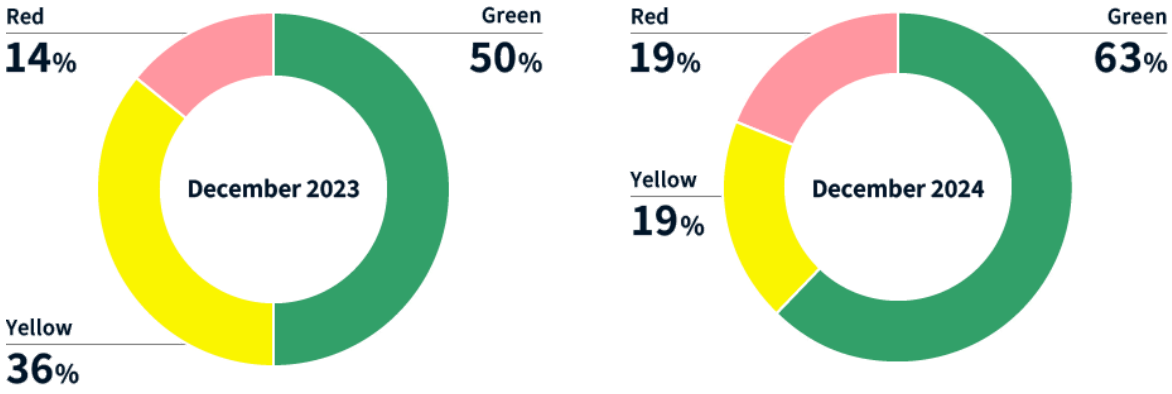
Water-related issues in the watershed are not identified → Red

Water-related issues in the watershed are identified → Yellow

Working with the community to resolve water-related issues in the watershed → Green

<Assessment Results>

The following shows the progress in water resource conservation efforts for each site through collaborative activities in the watershed. As a result of steady efforts at each plant, the proportion of plants reaching the level of Green was 63% in December 2024.



In each area, we identify water-related issues and progress water source conservation efforts with experts such as university professors.
In Mexico, tequila maker Casa Sauza is a partner in the Charco Bendito project for water replenishment activities. This watershed initiative is a collaboration with the Beverage Industry Environmental Roundtable (BIER) and 13 other manufacturing companies working together to restore ecology and forests in the Lerma-Santiago River watershed through reforestation, soil conservation, and aquifer recharge activities. This connectivity was fragmented by a highway built in the area. This project collaborates with local communities to provide drinking water to local residents who lack access to water. It also supports local sustainable agriculture and forestry employment through beekeeping and honey production, and protects important community heritage areas.
In the Gurugram region of northern India, widespread flooding due to heavy rainfall occurs while rapid urbanization and industrial development have led to infrastructure shortages and depletion of natural water sources, causing many residents to face water shortages. Suntory Group implemented a pond restoration project in 2024 to supply agricultural and household water in the Gurugram area. This project restored the degraded pond to improve water supply, enhance water quality, treat wastewater, capture rainwater, and restore biodiversity, significantly increasing groundwater recharge levels. Additionally, a public park was established for residents to enjoy exercise and play, improving the living standards of local farmers and residents and strengthening the community's economic resilience.
Since 2021, the Toledo Plant in Spain has also been carrying out a project called the Guardians del Tajo to enhance water quantity and quality and increase biodiversity in the Guajaraz Reservoir in the Tajo River watershed. Working with a local NGO for ecological and hydrological surveys, we signed an agreement with the city council of Layos (Toledo Province) in November 2023 to reforest approximately 2 hectares of municipal forest. Activities under the agreement include reforestation and greening of land adjacent to the right bank of the Layos River from 2023 to 2025, with the aim of increasing biodiversity in the area, as well as fixing and fertilizing the soil to prevent erosion processes, reducing pollution diffusion, enhancing water infiltration capacity, and capturing atmospheric CO_2. Furthermore, to assess the future impacts of climate change on the Guajaraz Reservoir, which serves as the plant's water source, we are developing a simulation model and conducting an analysis in collaboration with a hydrological research team from the University of Alcala. In this research, we assessed the impacts of climate change on the Guajaraz Reservoir using a hydrological model called SWAT+. Of the climate change scenarios based on future projections of greenhouse gas concentrations by the Intergovernmental Panel on Climate Change (IPCC), we made future projections using RCP 8.5, which has the highest greenhouse gas emissions. We are now estimating how much the amount of water flowing into the reservoir from rivers upstream will decrease by the end of the 21st century.
In Thailand, we are conducting joint research with Chiang Mai University. We are conducting research on the water balance of the entire watershed, including Pasak Jolasid Dam, which is the water source for our Saraburi Plant, and how to encourage local engagement. Additionally, we are analyzing how groundwater flows and identifying which areas would most benefit from activities to enhance groundwater recharge. Based on the knowledge gained, we plan to decide on what initiatives to implement in which areas at Pasak Jolasid Dam and the entire Pasak watershed. We will continue to follow the roadmap toward 2030 to protect and develop water resources and steadily conduct water resource conservation activities.
In addition, we have extended our Mizuiku - education program for nature and water to 1.19 million people in 8 countries, conveying the importance of protecting water resources mainly to local children so they can take that knowledge into the future.

Other initiatives to protect water resources

- Suntory Natural Water Sanctuary
- Suntory Mizuiku - Education Program for Nature and Water for the Next Generation
- AWS Certification

Back to previous page

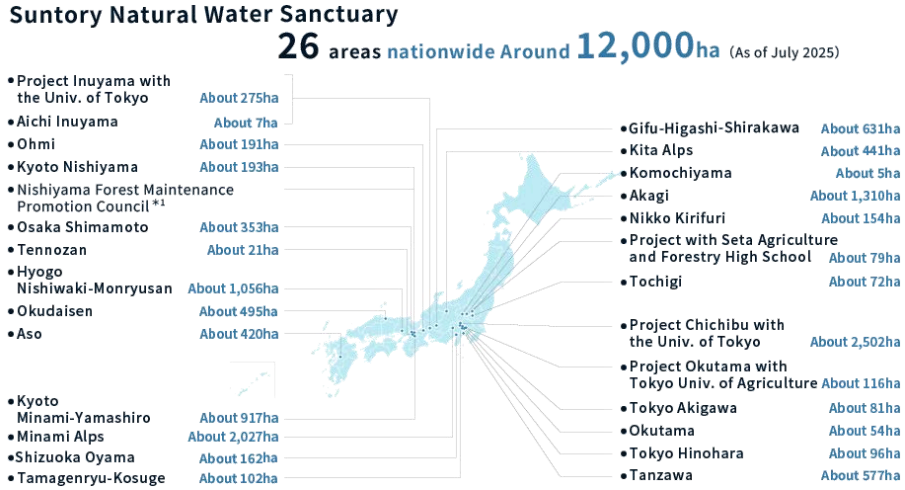
Natural Water Sanctuary (Water Resource Cultivation/ Preserving Biodiversity)

Natural Water Sanctuary Initiative -- For the Future of Water and Life

Suntory is a "water" company.
Without high quality water, we are unable to produce any beer, soft drinks, or whisky.
This is because water, especially groundwater, serves as Suntory Group's lifeline.
This precious groundwater is nurtured in the forest.
To ensure the safety, security and sustainability of groundwater, we are cultivating water resources that are more than twice the amount of water withdrawn by our plants. This is achieved by fostering water resource recharge in the forest areas surrounding our plants. We identify these water source recharge areas through our Institute for Water Science, and establish mid-to-long-term agreements with local governments and forest owners for forest management, designating these areas as Suntory Natural Water Sanctuaries.
In addition to the first sanctuary location established in Aso City, Kumamoto Prefecture in 2003, there are now 26 Suntory Natural Water Sanctuaries in 16 prefectures, covering a total area of more than 12,000ha.

<Natural Water Sanctuary> Development Targets

(1) Forests with a great capacity for cultivating water resources
(2) Forests rich in biodiversity
(3) Forests able to withstand flooding and landslides
(4) Forests with great CO_2 absorption capabilities
(5) Beautiful forests where visitors can encounter nature in all its abundance
(used for education programs, etc.)



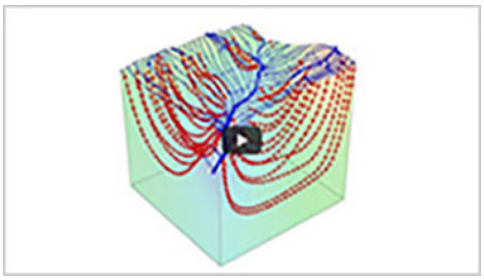
*1 In Nagaokakyo, Kyoto, we are a member of the Nishiyama Forestry Development Promotion Committee and we are cooperating in local forest preservation activities with people in the community. The area of the forests subject to this activity is not counted as part of our total Natural Water Sanctuary area.

For more information, see Suntory Natural Water Sanctuary.

Looking at Groundwater -- Comparing simulation models with results from field surveys

One of the main purposes of our Natural Water Sanctuary Initiative is to improve the function of forests for recharging water resources.
As a way to evaluate the results, Suntory Group has been attempting to quantitatively evaluate the amount of groundwater recharge using a groundwater flow simulation model since 2006, and we are gradually approaching a level of accuracy which would allow the model to be used.
Through the simulation of groundwater flow, we attempt to simulate where groundwater passes and how long it takes to reach our plants, and combine it with field survey information to deepen understanding of the underground which we normally cannot see. We would like to incorporate these results into the maintenance plan which will lead to more effective cultivation of water source recharge areas.

In addition to simulation results, it is also important to combine these results with results based on information gathered in the field during hydrologic surveys, etc. for verification.



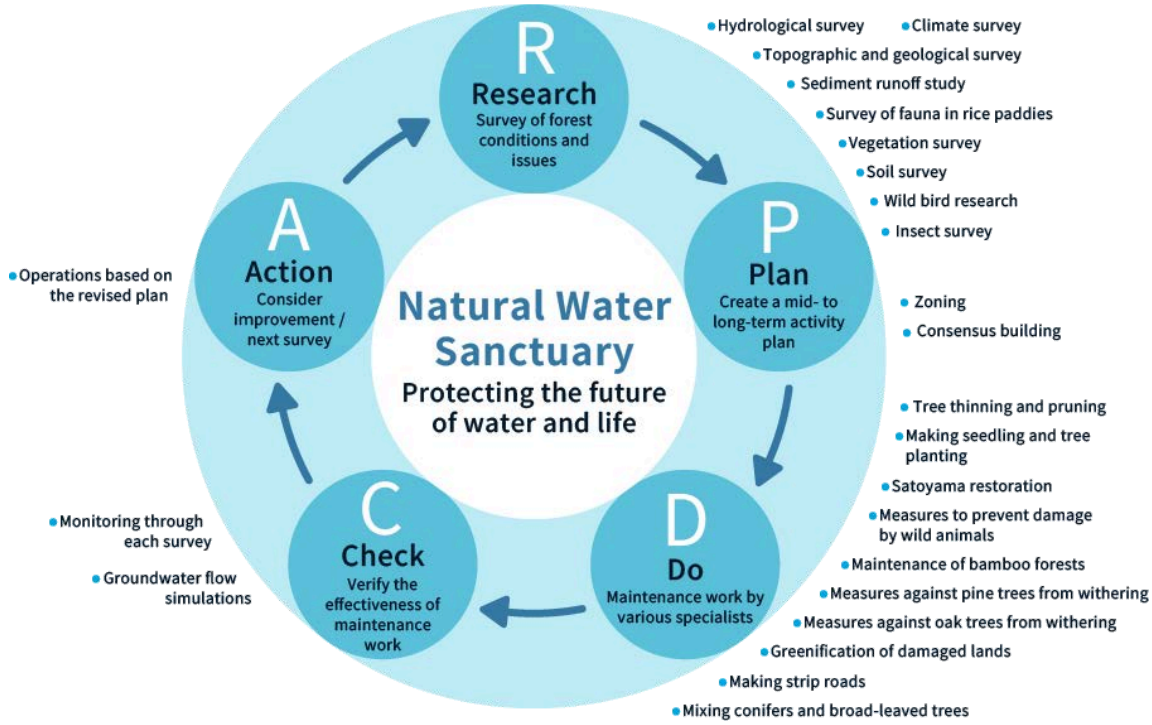
GETFLOWS for groundwater circulation simulations

Video: Groundwater circulation simulation model with GETFLOWS

Forest Cultivation Which Looks 50 years and 100 Years Into the Future

All forests are different. Understanding the unique characteristics and challenges of each Natural Water Sanctuary is crucial.
We engage in activities that follow the R-PDCA cycle which includes scientifically-based survey and research (Research), which serves as the foundation, creation of a vision (development plan) suited to each forest (Plan), maintenance work conducted by professionals (Do), verification of results (Check), and consideration of measures for improvement/conducting re-examination (Action).
The areas and fields of investigation and research targeted by the Natural Water Sanctuary Initiative are diverse and linked organically. For instance, in recent years, deer grazing pressure has become a significant issue, leading to soil erosion in some areas as surface plants are exhausted, impacting ecosystems and water recharge functions. Public-private partnerships are essential for addressing such widespread issues, so we are working alongside local communities and relevant organizations.
In doing so, cooperation based on the knowledge and skills of experts in various fields and of people in local communities are indispensable.
The Sanctuaries also serve as a field for next-generation environmental education through Suntory Mizuiku - Education Program for Nature and Water, which emphasizes the importance of forests that nurture groundwater, and for Suntory employees to experience forest maintenance firsthand.
Suntory continues the implementation of Natural Water Sanctuary Initiative in order to provide the invaluable gifts of nature to our children, grandchildren, and future generations by humbly listening to various related issues and working together with local communities.

For more information, see Activities Policy and Systems (in Japanese)



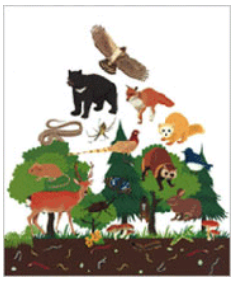
A Healthy Forest is One Full of Life – Protecting Biodiversity

If there are many different types of plants in a forest, there will be an increase in the types of small animals that eat them, resulting in attracting animals that eat those small animals. In a healthy environment like this, a pyramid formed by various organisms is completed.
In Natural Water Sanctuaries, we conduct planned management through continuous ecosystem monitoring of birds, plants, insects, and other creatures. In January 2011, we also became a Pledge Partner for Japan Business Federation's Biodiversity Declaration. In 2024, we participated in Sites Coexisting with Nature, led by the Ministry of the Environment, taking the lead for actions that will help create a society rich in biodiversity.

Suntory Natural Water Sanctuary Biodiversity Restoration Report

In 2022, we published the Suntory Natural Water Sanctuary Biodiversity Restoration Report. This report consists of 2 sections, a "Facts & Data" section that summarizes various issues facing Japanese forests and an “Actions” section which provides simple explanations and examples of activities to address these issues in "Suntory Natural Water Sanctuary."

Suntory Natural Water Sanctuary Biodiversity Restoration Report



Ecological Pyramid of a Forest: Protecting the soil and vegetation leads to the protection of the entire ecosystem

Suntory Natural Water Sanctuary Biodiversity Restoration Report

Biodiversity in the Natural Water Sanctuary from a Bird's Perspective

The plant and animal life living in the forest will change if the typical functions of the forest can be revitalized. Focusing on wild birds, which are said to serve as a barometer of a given environment, we conduct wild bird surveys by specialists in the Natural Water Sanctuaries every year based on the idea that it is possible to comprehensively grasp the changes in the entire ecosystem that supports them.
In addition, we have been promoting the project of nest building and rearing of chicks by eagles and hawks at all the Natural Water Sanctuaries in Japan with the purpose of advancing the development of a forest rich with biodiversity by taking the perspective of natural wild birds in the Natural Water Sanctuaries.

Eagles/Hawks Rearing Support Project

For more information, see Suntory Bird Conservation Activities
Video: Eagles/Hawks Rearing Support Project (in Japanese)

Becoming More Familiar with Natural Water Sanctuaries

It is sometimes necessary to cut down trees in order to keep a forest healthy. Suntory Group calls wood material made from Natural Water Sanctuary Initiative to nurture sustainable water and forests "Ikurinzai" - timber from cultivated forests, carefully using all the conifer and broad-leaved trees removed during tree cutting, road creation, and other activities.

For more information, see Ikurinzai – Timber from Cultivated Forests (in Japanese)

Case Examples of Timber Utilization Inside and Outside of the Company

Research Location: Timber used to create the entrance (flooring, etc.) of Suntory World Research Center

All table tops at PRONTO mbs Tamachi shop.

Town Hall Chair in Mashiki Town, Kumamoto Prefecture

Video: Ikurinzai – Timber from Cultivated Forests Project (in Japanese)

Natural Water Sanctuary Forum

Based on the goal of "Creating Forests Which Nurture Water and Life," specialists in a variety of fields who provide coaching and collaborate in Natural Water Sanctuary Initiative are invited the form which serves as an opportunity to share the newest expertise and policies for future activities. The forum was held 9 times in total from 2011 to 2019.

A poster session where guests can ask lecturers questions and exchange opinions

Training Program for Employees

We are advancing employee forestry volunteer activity at our Suntory Natural Water Sanctuaries. Up until 2013, many employees and their families joined these activities as volunteers.
Since 2014, the program has evolved into a forest maintenance experience aimed at helping each employee personally understand and

embody Suntory Group's corporate philosophy. More than 12,000 employees in alcoholic and non-alcoholic businesses have participated so far. This training is currently included in the onboarding program for new employee.

Employees planting trees

Employees pruning trees at a Natural Water Sanctuary

Participation in "30by30 Alliance for Biodiversity" in Japan

In April 2022, the Suntory Group joined the 30by30 Alliance for Biodiversity, which aims to halt and reverse biodiversity loss to realize a sustainable society. Through this Alliance, we are helping to achieve international goals by obtaining certification for Suntory Natural Water Sanctuaries as OECMs.*
As of April 2025, 6 Suntory Natural Water Sanctuaries are certified as "Sites Coexisting with Nature" promoted by the Ministry of the Environment to achieve the "30by30" goal.

* Other Effective Area-based Conservation Measures. Areas where the private sector and others undertake conservation efforts or where management not aimed at conservation also results in contribution to the protection of the natural environment.

About the 30by30 Alliance for Biodiversity

The alliance is formed as a voluntary coalition of local governments, companies, and NPOs to conserve or protect at least 30% of Japan's land and sea areas by 2030 to halt loss and restore biodiversity.

- 1. Hyogo Nishiwaki-Monryusan (Nishiwaki City, Hyogo)
- 2. Tokyo Akigawa (Akiruno City, Tokyo)
- 3. Shizuoka Oyama (Oyama Town, Shizuoka)
- 4. Nikko Kirifuri (Nikko City, Tochigi)
- 5. Ohmi (Hino Town, Shiga)
- 6. Akagi (Shibukawa City, Maebashi City, Gunma)

Wisdom of Water (Suntory) Corporate Sponsored Research Program Organization for Interdisciplinary Research Project The University of Tokyo

Suntory Holdings Ltd. established the Wisdom of Water (Suntory) Corporate Sponsored Research Program Organization for Interdisciplinary Research Project at the University of Tokyo in April 2008, conducting this research program for 5 years. The initiative aimed to enhance societal interest in water, thereby promoting solutions to water issues and the creation of rich aquatic environments. It also sought to contribute to the development of researchers in the academic field by leveraging the expertise of both organizations in various activities.

- For more information, see the Wisdom of Water (Suntory) Corporate Sponsored Research Program Organization for Interdisciplinary Research Projects at the University of Tokyo

Activity Examples

"Water Map of Japan"

"Water Drill" educational contents for elementary students

The Wisdom of Water and Scientific Study of Forests and Water websites

- "Water Drill" educational contents for elementary students (in Japanese)
- Scientific Study of Forests and Water (in Japanese)
- The Frontlines of “Wisdom of Water” (in Japanese)

Official Partnership for National Parks

Suntory Group has concluded the "Official Partnership for National Parks" with the Ministry of the Environment in 2016.

The Official Partnership for National Parks aims to promote the appeal of Japan's national parks globally and increase the number of domestic and international visitors. The aim of attracting more visitors both from Japan and overseas is to deepen people's understanding of conserving the natural environment and revitalize the areas where the national parks are located.

We will continue to promote the wonders of the national park along with our Natural Water Sanctuary Initiative.

back to previous page

Suntory Mizuiku - Education Program for Nature and Water

Suntory Group is supported by the bounty of water and nature, and we engage in environmental activities to preserve beautiful water for the future, including Natural Water Sanctuary initiatives to protect the forests where water is nurtured.
One of these activities is Suntory “Mizuiku”* — education program for nature and water, a next-generation environmental education program launched in 2004.
Mizuiku is a program unique to Suntory that helps children experience the wonder of nature, become aware of the importance of water and the forests nurturing it, and consider what they can do to pass on water to future generations. The program marked its 20th anniversary in 2024.
The program is deployed in Japan and, in collaboration with local NGOs and other organizations, in eight other countries. As of the end of 2024, the cumulative number of participants exceeded 1,190,000.

* Mizuiku is a registered trademark of Suntory Holdings Limited.
Sponsor: Ministry of the Environment, Ministry of Education, Culture, Sports, Science and Technology, etc.

Suntory Mizuiku Expanding in 9 Countries

Suntory Group’s efforts to spread Mizuiku

2004	Launched Outdoor School of Forest and Water at Aso (Kumamoto Prefecture)
2005	Launched Outdoor School of Forest and Water at Hakushu (Yamanashi Prefecture)
2006	Kicked off the Teaching Program at Schools
2008	Launched Outdoor School of Forest and Water at Okudaisen (Tottori Prefecture)
2014	Established Suntory Environmental Vision toward 2050
2015	Launched Mizuiku program in Vietnam (first Mizuiku program overseas)

2019	Launched Mizuiku program in Thailand
2020	Developed online content for Mizuiku programs in Japan Launched Mizuiku program in France
2021	Launched Mizuiku program in China
2022	Launched Mizuiku program in Spain Concluded comprehensive collaboration agreement with Vietnam's Ministry of Education and Training
2023	Launched Outdoor School of Forest and Water at Kita Alps (Nagano Prefecture) Launched Mizuiku programs in the UK and New Zealand
2024	Hosted the special project Mizuiku Program for Adults to mark the Mizuiku program's 20th anniversary
2025	Launched Mizuiku program in Australia

Japan

Mizuiku in Japan is centered on two programs: the Outdoor School of Forest and Water, offering shared hands-on nature experiences for parents and children, and the Teaching Program at Schools for elementary schools. In Japan, we have steadily expanded activities by deepening curriculum, expanding its coverage, and developing online content.
Mizuiku received the Ministry of Education, Culture, Sports, Science and Technology's Excellent Company Taiken Award (Jury Award for Excellence for Companies Promoting Youth Experiential Activities) in fiscal 2024.

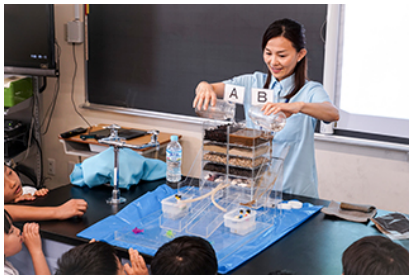
Outdoor School of Forest and Water

This hands-on nature program, geared to elementary school students from grades 3 through 6 and their parents or guardians, is held in the home regions of Suntory Tennensui (Mineral Water). Participants experience for themselves the importance of water and of the forests that produce it amid the great outdoors at Hakushu (Yamanashi prefecture), Kita Alps (Nagano prefecture), Okudaisen (Tottori prefecture), and Aso (Kumamoto prefecture). The Outdoor School of Forest and Water staff conduct the program together with expert instructors who play active roles locally in environmental education.

Outdoor School of Forest and Water

Teaching Program at Schools

We offer in-school study programs for elementary school students together with their teachers. We believe we can make a difference by teaching the cycle and importance of nature through videos and experiments, so that together we can pass down water to future generations. We also conduct online classes, and elementary schools all over Japan can participate.

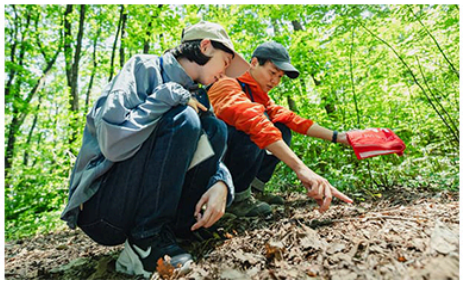
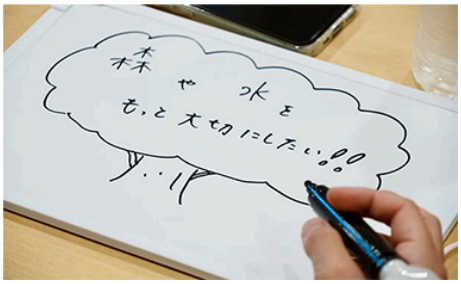
Teaching Program at Schools

Suntory Mizuiku — Education Program for Nature and Water website (in Japanese)

Special Project - Mizuiku Program for Adults

First established in 2004, the Mizuiku program celebrated its 20th anniversary in 2024. With "20 years" as the keyword, we hosted a Mizuiku program for adults in August 2024 as a special 20th anniversary project. The program targeted people in their 20s and 30s who were elementary school students 20 years ago.
Approximately 100 people were selected from the many applicants to take part in the program, which was hosted at the four water source locations of Suntory Tennensui (Mineral Water): Hakushu, Kita Alps, Okudaisen, and Aso.
Participants had the opportunity to visit a forest where water is nurtured, toured a Suntory Tennensui factory, and participated in a workshop where they thought about the promises they would make to themselves 20 years from now. Through these experiences, they were able to reflect on the past, present, and future, and use their five senses to think about what they can do to pass on water to future generations.



Vietnam

We have offered the Mizuiku program in Vietnam since March 2015.
As the first country outside of Japan to launch the Mizuiku program, "Mizuiku - I love clean water" program has been implemented in Vietnam for 10 years. In 2023, the program expanded it nationwide through a partnership with the Ministry of Education and Training. Through lessons at elementary schools and forest experiences in the field, we teach elementary school students about the importance of water and sanitation along with the critical nature of water source conservation. We also support the renovation of toilets and hand-washing facilities at elementary schools, helping to improve the sanitation environment for children in the country.

Mizuiku Vietnam website

Thailand

We have offered a Mizuiku program in Thailand since July 2019.
With cooperation from local NGOs, we are developing water awareness projects in elementary schools in Rayong and Chonburi provinces. We are also engaged in erosion prevention projects in the northern province of Chiang Mai and the southern province of Nakhon Nayok. By slowing stream currents, installing small weirs to support permeation of underground water, and planting trees to prevent soil from flowing into streams, we can prevent sediment-related erosion, and we plan to continue these efforts.

France

Since July 2020, we have offered a workshop-based water education program for elementary school students in partnership with Grand Parc Miribel Jonage, a nature park located near its Meyzieu Plant. The program includes content on the role forests have in cultivating water, experiments to show how rainwater becomes underground water, and more.
Suntory Beverage & Food France currently collaborates with a local NGO to provide Mizuiku program in website so that elementary school teachers can make access to it and implement Mizuiku classes.

Workshop-based water education program in France

China

Since September 2021, with the cooperation of the Shanghai Volunteer Foundation, a local public interest group, we have been conducting a Mizuiku program for elementary school students in Shanghai and Beijing. This program teaches elementary school students the basic knowledge about water and the habit of saving water, through experiments and videos about how nature works with contents tailored to the local situation such as by questioning “where does city water come from and end up in?”

Spain

We have offered the Mizuiku program in Spain since May 2022. With support from local environmental experts, we are offering an educational program at elementary schools in the province of Toledo. The field component of the program is carried out in the natural environment in the vicinity of Toledo, where our factory is located. The program teaches children the importance of water, such as by deepening their understanding of the natural water cycle and how it relates to their daily lives, how to use water responsibly, and the relationship between water and biodiversity, as well as provides training and ideas on how to preserve and improve the quality and quantity of water in the future.

United Kingdom

In May 2023, we launched the Mizuiku program in the United Kingdom. In collaboration with a charitable organization that conserves the environment of local rivers, we are developing a nature experience program for children up to elementary school age and their families in the Severn River basin, the water source for the Coleford Factory. The program teaches students about the importance of water and water conservation, including basic knowledge about water and the water cycle, and the relationship between water and biodiversity.

New Zealand

In May 2023, we launched the Mizuiku program in New Zealand. In collaboration with an NPO that works to preserve local river environments, we are developing on-site classes for elementary school students. The program conveys to students the mechanisms of nature and the importance of water, and covers basic water knowledge, including the water cycle, as well as ocean pollution prevention, including upstream river cleanup.

Australia

In July 2025, we launched the Mizuiku program in Australia. Partnering with a local NPO, we support environmental activity projects at elementary schools, and provide programs that teach basic knowledge about water, such as the water cycle, and expose students to indigenous culture. These programs teach students about the importance of water, water source conservation, and watershed culture.

back to previous page

Achieving the AWS Certification for Water Stewardship

First in Japan to earn International Certification for Water Stewardship, the Alliance for Water Stewardship (AWS)

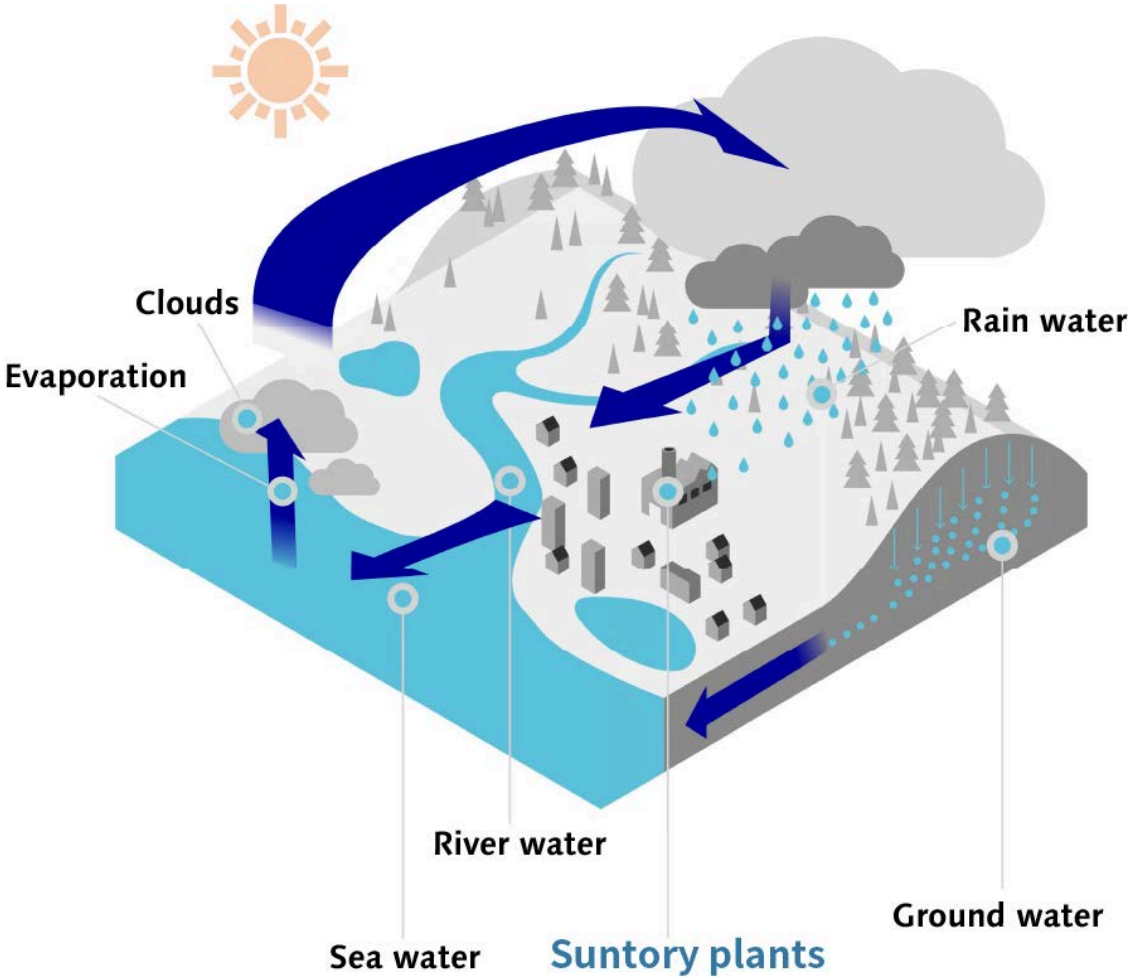
Suntory Group achieved the first AWS International Certification in Japan for the Suntory Okudaisen Bunanomori Water Plant (Tottori Prefecture) in 2018, followed by the Suntory Kyushu Kumamoto Plant (Kumamoto Prefecture) in 2019, and the Suntory Minami Alps Hakushu Water Plant (Yamanashi Prefecture) in 2021. In 2023, the Kyushu Kumamoto Plant achieved "Platinum" certification, the highest AWS certification level. Additionally, in 2025, both the Okudaisen Bunanomori Water Plant and the Minami Alps Hakushu Water Plant also achieved the "Platinum" certification.
This page introduces its significance.

Harumichi Seta
Senior General Manager, Sustainability Management Division
Suntory Holdings Limited

Why Suntory is promoting the AWS

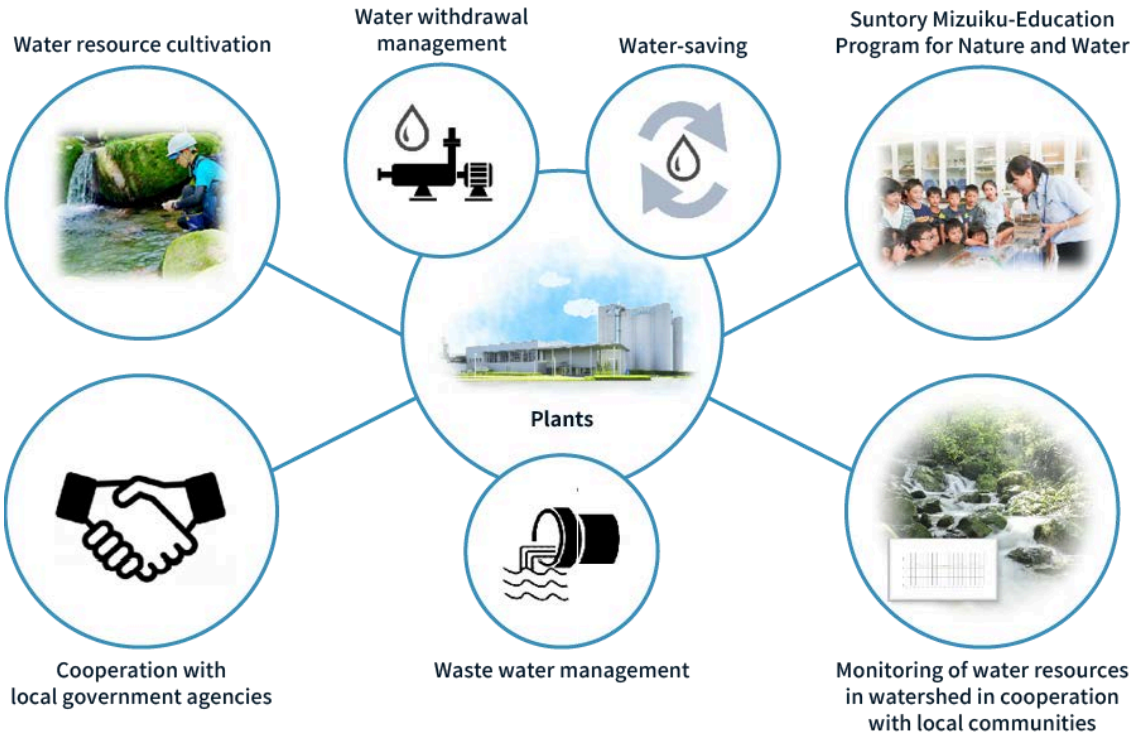
Suntory Group has been providing new values to people through its products and services to enrich their lives, which is the core of our business. Water is the most critical resource required for us to continue offering value to customers and the essential resource for local communities and the ecosystem. Furthermore, water is a local resource that circulates depending on the local climate and geographical conditions. Evaporated sea water becomes clouds, rain down to become part of a river or groundwater, and then join larger rivers and back to the sea. This geographical zone is called a catchment. The water we withdraw to produce our products is part of the water cycle, connected to the more significant flow of the catchment like rivers or underground aquifers. Suntory regards itself as a part of the natural water cycle and promotes water stewardship activities in catchments around its plants to preserve the healthy water cycle.

Water Cycle in a Catchment



Water stewardship indicates the responsible management and planning of water resources at the catchment level in collaboration with key stakeholders such as governmental agencies and the local community, in addition to managing water within our own plants. The initiative aims to promote the use of water that is socially and culturally equitable, environmentally sustainable, and economically beneficial throughout the entire catchment. Suntory Group conduct initiatives to contribute to a healthy water cycle in the watersheds based on Suntory Group's "Sustainable Water Philosophy," which has four pillars—understanding the natural water cycle, promoting environmentally conscious water use, conserving watersheds, and engaging with the local community. In addition to using water carefully through continuous water-saving activities and wastewater management at plants, Suntory Group established the Institute for Water Science in 2003 to conduct hydrologic studies and scientifically understand the water cycle in watersheds around our plants. In the same year, the Natural Water Sanctuary Initiative began in the Kyushu Kumamoto Plant to conserve the water source, have now expanded the area to 26 locations totaling about 12,000ha in Japan and achieved the target of recharging more than twice the amount of water withdrawn by our plants in Japan. We continue to realize our vision for the next 50 and 100 years with the support of experts in various fields and residents and to create a forest that nurture groundwater for the watersheds. Moreover, we conduct the Suntory *"Mizuiku"*-education program for nature and water at the Natural Water Sanctuaries and local elementary schools near Tennensui Water Plants and cooperate with local government agencies and the community to monitor the catchments' groundwater level and water resources. Furthermore, we implement forest maintenance and paddy impounding to recharge groundwater and disseminate attractiveness to vitalize local communities under signed partnership agreements with local government agencies. We became the first company to earn the internationally respected standard for water stewardship in Japan, the AWS Certification, to continuously deepen such integrated water resource management itself according to our "Sustainable Water Philosophy."

Integrated Water Resource Management



About AWS

The Alliance for Water Stewardship (AWS) is an organization globally promoting water sustainability established by NGOs, such as the World Wildlife Fund (WWF), The Nature Conservancy (TNC), and companies. The AWS Certification is an international certificate for sustainable water use targeting plants globally and aims to promote water stewardship.

For the certificate audit of Okudaisen Bunanomori Water Plant, Suntory Kyushu Kumamoto Plant, and The Minami Alps Hakushu Water Plant, the assessment body highly evaluated our integrated water resource management efforts aligned with Suntory Group's "Sustainable Water Philosophy," including understanding the water balance in the catchment areas around the plants, implementing water source conservation activities based on scientific data, promoting water conservation and water quality management at the plants, and collaborating with stakeholders while ensuring appropriate information disclosure.

Initiatives as a Leading Company

Suntory Holdings Limited received the request from the AWS to take leadership as a company that leads the promotion of water sustainability in Japan. Endorsing its purpose, we signed a partnership agreement with AWS Asia Pacific in February 2021 followed by signing between Suntory Holdings and AWS International Secretariat in 2023. We also became the first company with AWS membership in Japan.
As the initiatives under the partnership agreement, we supervised the Japanese edition of the AWS International Standards issued in August 2021. We also introduced the certification of the AWS for Suntory Kyushu Kumamoto Plant through a case study, etc., of water source conservation activities by winter paddy impounding at the 4th Asia Pacific Summit held in April 2022, in cooperation with the Water Stewardship Asia Pacific. Suntory will advocate the importance of water resource management by the private sector. In addition, in February 2023, we established the AWS Japan Day Executive Committee with WWF Japan and held Japan's first "AWS Conference - Responsible Management of Water Resources in the Watershed for Businesses," which was attended by numerous Japanese companies, central ministries, local governments, universities, and NGOs.
To leverage the network cultivated through these activities, in March 2025, the Japan Water Stewardship Leadership Group was collaboratively launched under AWS by MS&AD Insurance Group Holdings, Inc., Kurita Water Industries Ltd., Suntory Holdings Limited, Coca-Cola (Japan) Company, Limited, and Yachiyo Engineering Co., Ltd. with the aim of expanding efforts to advance credible water stewardship in Japan.
Various water issues have become apparent in Japan, such as aging water infrastructure, rising water utility charges, and the devastation of water catchment forests. Agricultural products imported to Japan also rely on water resources in the places they are produced, with droughts and heavy rains contributing to rising raw material prices. To deal with such water risks, we will continue to be a leading presence for networking with stakeholders to promote water stewardship.

Achieving the AWS Certification by Suntory

2018

＜First in Japan＞

Suntory Okudaisen Bunanomori Water Plant

Achieved the AWS Certification

Commitment to AWS (Suntory Okudaisen Bunanomori Water Plant)

2019

Suntory Kyushu Kumamoto Plant

Achieved the AWS Certification

Commitment to AWS (Suntory Kyushu Kumamoto Plant)

2021

＜First in Japan＞

Signed partnership agreement with AWS Asia Pacific

＜First in Japan＞

Member of the AWS Supporting Companies

Suntory Minami Alps Hakushu Water Plant

Achieved the AWS Certification

Commitment to AWS (Suntory Minami Alps Hakushu Water Plant)

2023

＜First in Japan＞

Suntory Kyushu Kumamoto Plant

Achieved the AWS "Platinum" Certification

Signed a collaboration agreement with AWS International Secretariat

ALLIANCE FOR WATER STEWARDSHIP
PLATINUM CERTIFIED

2025

Suntory Okudaisen Bunanomori Water Plant

Suntory Minami Alps Hakushu Water Plant

Achieved the AWS "Platinum" Certification

Launch of AWS Japan Water Stewardship Leadership Group

We will continue to further engage in AWS activities

For more information on community engagement at our plants, see Identifying and Resolving Watershed Issues, and Community Engagement.

AWS Activity Report 2024

- AWS Activity Report (Suntory Okudaisen Bunanomori Water Plant)
- AWS Activity Report (Suntory Kyushu Kumamoto Plant)
- AWS Activity Report (Suntory Minami Alps Hakushu Water Plant) SUNTORY
- back to previous page

Identifying and Resolving Watershed Issues, and Community Engagement

We recognize that Suntory Group's business activities are part of the natural water cycle. For over 20 years, we have collaborated with diverse stakeholders to conserve water resources. As a member of watershed communities, it is essential for Suntory Group to transition to more sustainable water resource management to achieve continuous business growth. Our engagement strategy focuses on working with stakeholders to spread sustainable water use practices throughout society. By doing so, we aim to contribute to the sustainable development of regional communities and the maintenance of rich ecosystems, facilitating a broader societal transition toward sustainability.

Process

To achieve our water replenishment targets outlined in our Environmental Targets toward 2030, Suntory Group collaborates with local stakeholders to identify water-related issues in the watersheds where our plants are located. With the agreement of key stakeholders, we advance initiatives to conserve water resources that address these challenges. Additionally, Suntory Group seeks to facilitate a transition toward a society with sustainable and healthy water cycles by participating in international rule-making and building cross-industry alliances that extend beyond the value chain.

Stakeholder Engagement

Water is a local resource, meaning water-related issues vary from region to region and from watershed to watershed. Local water-related stakeholders are diverse, ranging from local governments and authorities in charge of water services, to NGOs, experts (university researchers and consultants, etc.), and local residents.
Through dialogue, Suntory Group seeks to understand the needs and capabilities of these diverse entities. We consider the most effective cooperation framework and approach to advance our initiatives, starting from building consensus. This process forms the basis of our regional engagement efforts.

Identification of Watershed Issues

The insights gained by Suntory Group over more than 20 years of water resource replenishment activities in Japan also represent a significant advantage in our community engagement efforts.
Our earnest dedication to the "Suntory Natural Water Sanctuaries" as a core business has fostered trust among local communities, helping them understand our commitment to solving water-related challenges. Additionally, the data and scientific knowledge accumulated at the Institute for Water Science greatly assist in accurately identifying issues in each watershed, facilitating consensus-building with stakeholders.

Community Engagement Initiatives Related to Water

Japan

Hokuto City, Yamanashi Prefecture: Over Two Decades of Groundwater Monitoring

In Yamanashi Prefecture's former Hakushu Town (now Hokuto City), the Hakushu Town Groundwater Conservation Ordinance was established in 1996. Following a request by the then-mayor for the cooperation of the first plant manager of the current Suntory Tennensui (Mineral Water) Minami Alps Hakushu Water Plant in 1998, we established the Hakushu Town Groundwater Conservation and Utilization Council together with other large-scale companies and local businesses. This Council, funded by contributions from participating businesses, has set up observation wells to continuously monitor groundwater levels. Independent evaluations have concluded that groundwater levels have remained stable over the long term, indicating no significant issues.
Suntory Group has participated in this Council since its inception and has been cooperating with groundwater level monitoring efforts for over 20 years.
In recognition of these efforts as well as water stewardship activities[*1], such as water resource cultivation at Suntory Natural Water Sanctuary Minami Alps and the Mizuiku next-generation environmental education program conducted in collaboration with local governments in Yamanashi Prefecture such as Hokuto City, Suntory Minami Alps Hakushu Water Plant received the highest “Platinum” certification from the Alliance for Water Stewardship (AWS) in 2025.

*1 Comprehensive water resource management undertaken continuously in cooperation with local governments and local communities from the perspective of the entire watershed, not just within our own factory or other places of business.

For more information, see Achieving the AWS Certification for Water Stewardship.

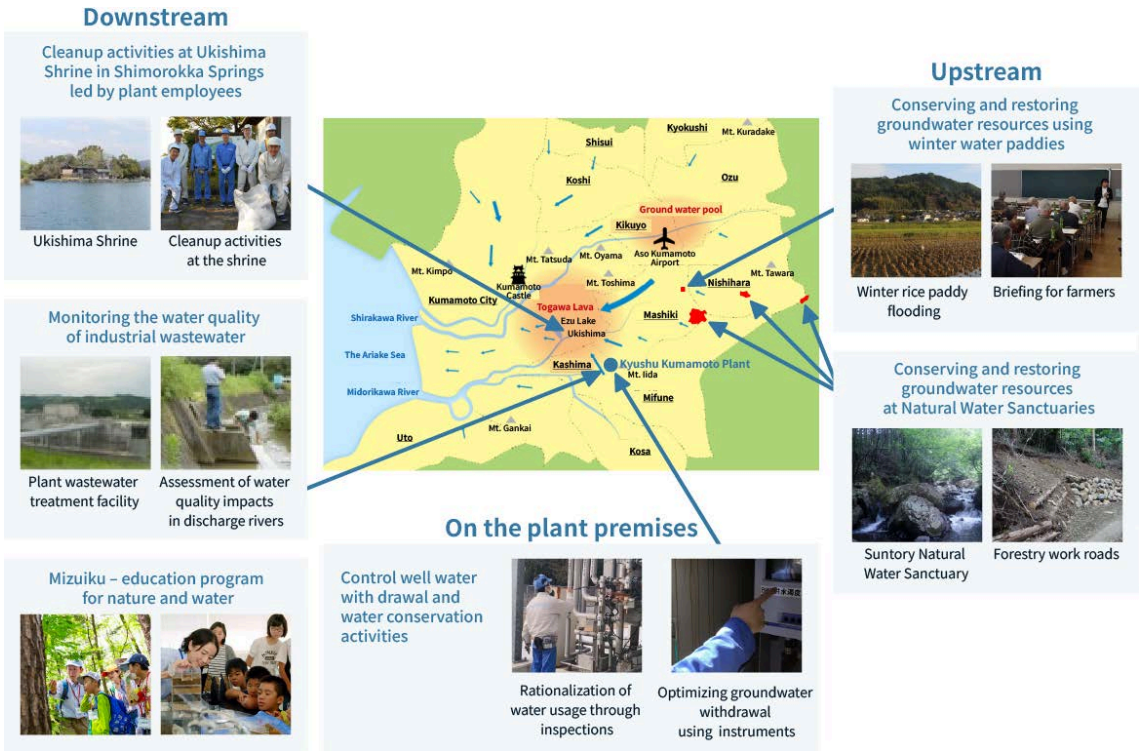
Kumamoto City, Kumamoto Prefecture: Supporting Groundwater Visualization and Building Corporate Cooperation Frameworks

Past Initiatives

In the water- and greenery-rich Kumamoto region, citizens, government, and businesses have long collaborated to conserve and utilize groundwater. This initiative has been recognized worldwide, having received the UN ‘Water for Life’ Top Award (Water Management Category) in 2013.
Suntory Group has also restored more than twice the amount of groundwater withdrawn by our plants in Japan through initiatives such as water withdrawal management and water conservation activities on the grounds of its Kyushu Kumamoto Plant, as well as groundwater conservation and restoration activities (Suntory Natural Water Sanctuaries) in upstream areas and “winter water paddies” (an initiative to conserve and restore groundwater by flooding fields in the winter) in downstream areas.
We also continue to engage in dialogue with various local stakeholders, striving to foster understanding of our efforts and relationships of trust.
In recognition of these efforts, the Suntory Kyushu Kumamoto Plant received the highest “Platinum” certification from AWS in February 2023.

For more information, see Achieving the AWS Certification for Water Stewardship.

Suntory's Water Stewardship in the Kumamoto Region



Created based on Groundwater *Flow in the Kumamoto Region* published by the Kumamoto Groundwater Foundation

New Regional Issues and Suntory's Contributions

In Kumamoto Prefecture, the rapid development of semiconductor-related industries and urban areas is progressing. The introduction of water-intensive industries has raised concerns among local governments and residents about the possibility of groundwater, which is showing signs of recovery, declining again and leading to a critical situation.
Furthermore, with industrialization and urbanization, it is becoming more difficult to secure land to maintain traditional methods of groundwater conservation and restoration, such as flooding winter rice paddies. In response, in 2025, Suntory Group partnered with local universities and financial institutions to launch Kumamoto Water Positive Action[*1], an initiative that promotes the expansion of green infrastructure to encourage companies to voluntarily conserve and restore groundwater.
In response to the issue of reduction in the area of rainwater penetration due to land development, this action will utilize green infrastructure[*2] such as rain gardens to ensure rainwater penetration functions in areas undergoing development and work to conserve the water cycle by promoting groundwater restoration and flood mitigation. In addition, the initiative supports the voluntary installation of green infrastructure by land development companies. It also promotes research and development of innovative financial methods to create credit from the value of groundwater restoration through green infrastructure, based on the principle of nature credits[*3].
By utilizing these financial methods, the initiative aims to further introduce green infrastructure through public-private partnership funding mechanisms.

Furthermore, presenting simulations based on accurate groundwater data is essential to encouraging companies to take action. Suntory Group has in place a joint research agreement between the Kumamoto Groundwater Foundation and our Institute for Water Science. Under this agreement, we are working with the local community to build a simulation model that can predict the future using data sets from the past. Furthermore, by providing knowledge about visualizing groundwater flow, we will contribute to formulating proposals and policies regarding water and land use in the future.

*1 For this initiative, water positivity is defined as "responding to the negative impacts on water caused by land alteration and water withdrawal within the watershed through conservation of the natural environment that nurtures water, water resource replenishment, and the use of reclaimed water, thereby returning equal or greater amounts of water to the watershed."

*2 Concepts and initiatives that utilize the diverse functions of the natural environment to resolve social issues, such as natural disasters and global warming, and promote the development of sustainable and attractive regions, cities, and nations.

*3 Measurable positive outcomes for ecosystems and biodiversity that result from nature conservation, restoration and responsible management. It is attracting worldwide attention as an economic means to provide funds for the improvement and enhancement of nature and biodiversity.

Southeast Asia

Vietnam: Community Engagement at the National Level

Vietnam is the first country outside of Japan where Suntory Group launched Mizuiku - education program for nature and water. Mizuiku, which began in 2015, will mark its 10th anniversary this year (2025).

In Vietnam, unlike Japan, illegal dumping into rivers near urban and town areas remains prevalent, making river pollution a serious issue. The government also places high importance on this issue. Recognizing that education is key to solving this issue, Suntory Group held ongoing discussions with the government. As a result, an agreement was signed with the Vietnam's Ministry of Education and Training in October 2022. The Ministry of Education and Training is the equivalent of Japan's Ministry of Education, Culture, Sports, Science and Technology. With Vietnam's government understanding the seriousness of water issues, this agreement demonstrates that the effectiveness of Mizuiku has been seen within the framework of public education and represents an example of advancing environmental education at the national level.

Suntory Group is currently working with the Ministry of Education and Training to provide Mizuiku curriculum training to school teachers across Vietnam and to promote the program's expansion nationwide.
As one concrete initiative, we have compiled a training textbook for teachers (an official educational material equivalent to the textbooks published by the Japanese Ministry of Education, Culture, Sports, Science and Technology). Based on this textbook, training on how to run Mizuiku classes was provided to school teachers in 63 prefectures across Vietnam in 2024, with many teachers taking part.
As of 2024, teachers who completed this training have been conducting Mizuiku in their own classes, reaching approximately 530,000 students.

For more information on Mizuiku in Vietnam, see Suntory Mizuiku - Education Program for Nature and Water.

Thailand: Joint Research with a University

In Thailand, we are conducting joint research with Chiang Mai University. We are conducting research on the water balance of the entire watershed, including Pasak Jolasid Dam, which is the water source for our Saraburi Plant, and how to encourage local engagement.
Additionally, we are analyzing how groundwater flows and identifying which areas would most benefit from activities to enhance groundwater recharge.
Based on the knowledge gained, we plan to decide on what initiatives to implement in which areas at Pasak Jolasid Dam and the entire Pasak watershed.
Additionally, we have been implementing Mizuiku since July 2019.

For more information on Mizuiku in Thailand, see Suntory Mizuiku - Education Program for Nature and Water.

Europe

Toledo, Spain: Joint Research with a University

To assess the future impacts of climate change on the Guajaraz Reservoir, which serves as the water source for the Toledo Plant, we are developing a simulation model and conducting analysis in collaboration with a hydrological research team from the University of Alcala. In this research, we assessed the impacts of climate change on the Guajaraz Reservoir using a hydrological model called SWAT+. Of the climate change scenarios based on future projections of greenhouse gas concentrations by the Intergovernmental Panel on Climate Change (IPCC), we made future projections using RCP 8.5, which has the highest greenhouse gas emissions. We are now estimating how much the amount of water flowing into the reservoir from rivers upstream will decrease by the end of the 21st century.
We are also conducting Mizuiku in Spain.

For more information on Mizuiku in Spain, please see Suntory Mizuiku - Education Program for Nature and Water.

Aiming to Understand the Water Cycle and Improve Water Risk Assessment Taking into Account Water Infrastructure

Recognition of Issues

Monsoon Asia, including Japan, is home to more than 50% of the world's population and is characterized by annual precipitation far exceeding the global average. However, 70 to 90% of precipitation occurs during the rainy season, with little rainfall for long periods during the dry season, making water supplies unstable. In this region, water infrastructure is highly developed, including water storage in dams and water transport between watersheds using canals. This infrastructure is in place to support the robust water needs of local communities and ecosystems.

To accurately understand the supply risks relative to water demand, it is important to evaluate the role of water infrastructure in addition to the natural water cycle. Further, by assessing the potential for annual water shortages on a regional basis, specific countermeasures can be implemented effectively.

Development of Water Security Compass

To address these issues, Suntory Holdings, in collaboration with the Graduate School of Engineering at The University of Tokyo and Nippon Koei Co., Ltd., a subsidiary of ID&E Holdings Co., Ltd., established the University of Tokyo Social Cooperation Program called "Global Water Cycle"[*1] and jointly developed the online platform "Water Security Compass."

Water Security Compass is the world's first[*2] online platform that utilizes a cutting-edge model developed by The University of Tokyo and others to simulate the global water cycle. It takes into account the impact of seasonal changes and infrastructure such as dams on water volume to accurately understand water demand and supply in various parts of the world and then visualizes[*3] the current and future water resource shortage situation for each use.
The platform has been available free of charge since the summer of 2024, with the primary aim for it to be used in research on water resources in a wide range of fields across industry, government, and academia[*4].

*1 Global Water Cycle Social Cooperation Program was established in 2022 with the aim of combining the knowledge of companies and universities to promote research and development, social implementation of developed technologies, and human resource development. This is an industry-academia collaboration framework involving The University of Tokyo, Suntory, and Nippon Koei.

*2 Based on a survey by The University of Tokyo's Social Cooperation Program called Global Water Cycle.

*3 For Japan, the simulation was performed at a much higher resolution (approximately 2 square km) than before. (Currently, only Western Japan is available.)

*4 The currently released version is a trial version (beta version) prior to the official version. The official version is scheduled to be released in 2025, with further improvements and corrections to data and functions planned for the future.

Toward Actionable Indicators

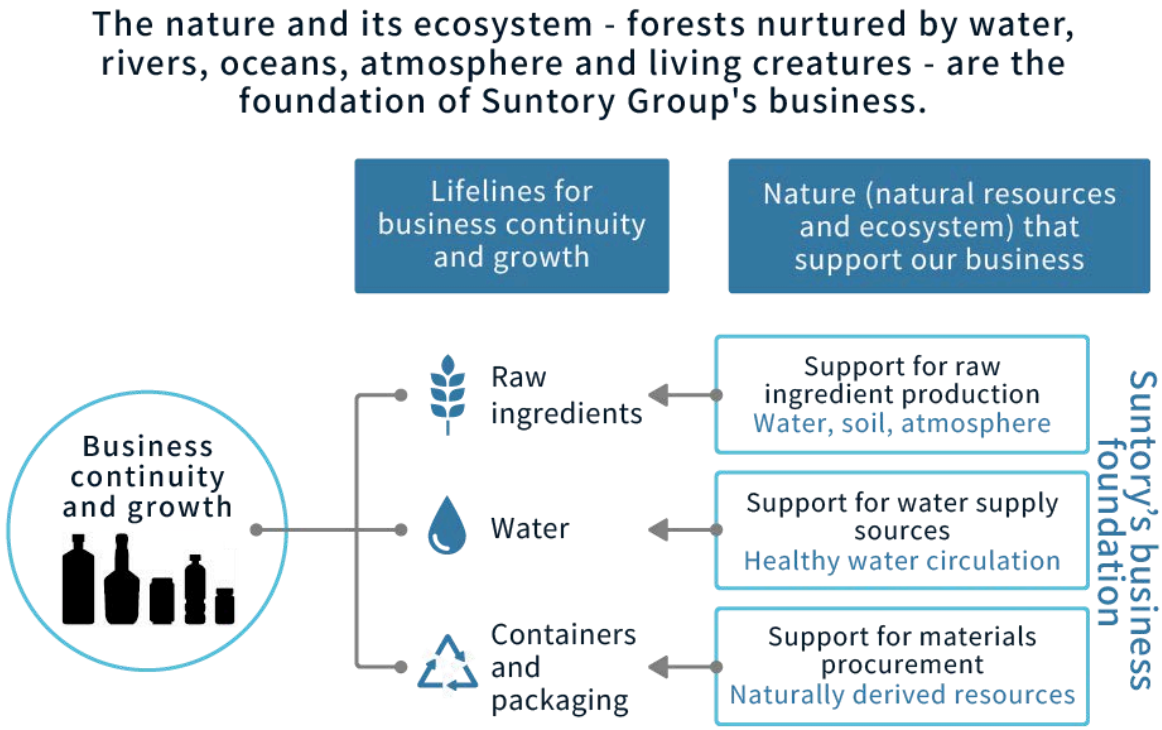
In corporate responses to water risks, the importance of data-driven hypothesis development and decision-making will continue to grow.
The Water Security Compass aims to assist companies in accurately identifying areas with high drought risk by leveraging data. By serving as an actionable indicator, it contributes to more effective resource risk management.
At Suntory Group, we not only use the Water Security Compass internally but also promote its widespread adoption through engagement with international initiatives.

For more information, see Water Risk Assessment

Biodiversity

Our Policy and Approach

Suntory Group products are crafted from the gifts of nature, meaning that the global environment itself is a vital foundation for Suntory Group's business. To protect this foundation, we engage in activities that conserve and restore the natural environment and biodiversity.



We depend on these gifts of nature (natural capital). At the same time, this dependence also means that ecosystem degradation and loss of biodiversity can also present a serious risk to our business continuity. As such, we recognize that proactively engaging in activities that conserving biodiversity will create new opportunities to improve our corporate value–for example, securing sustainable procurement of raw ingredients and gaining the trust of local communities.
Suntory Group supports the goals of the 30by30 initiative (Kunming-Montreal Global Biodiversity Framework) to halt biodiversity loss and put nature on a recovery track by 2030, a goal agreed upon by the world to achieve a sustainable society. We are committed to contributing to this goal through our business activities.

We also participate in Science-Based Targets for Nature (SBTN), which sets out methods for natural capital management based on scientific knowledge. By setting targets and promoting action grounded in science, we aim to create a positive impact on biodiversity. With this policy, we will balance measures for climate action (carbon neutrality, etc.) with biodiversity conservation, handing the regenerative power of nature to future generations.

Disclosure Based on TNFD Recommendations

In May 2023, Suntory Group became the only Japanese company among 17 globally participating in the pilot implementation of guidance provided by the Science Based Targets Network (SBTN). This initiative aims to set and pursue science-based goals related to nature, following the corporate guidance issued by SBTN.
We have started disclosure of the Taskforce on Nature-related Financial Disclosures (TNFD) based on assessments and progress

made in the SBTN validation pilot.
For more information, see the following.

For more information, see our Disclosure Based on TNFD & TCFD.

Promotion Structure

Global Sustainability Committee

Suntory Group has established a system for promoting environmental management centered on the Global Sustainability Committee (GSC). Under the supervision of the Chief Sustainability Officer, GSC formulates strategies related to the seven key themes of sustainability, which include water, climate action, raw ingredients, containers and packaging, health, human rights, and lifestyle culture. GSC also oversees the progress of these strategies and analyzes the business risks and growth opportunities, reporting to the Board of Directors on a quarterly basis.

For more information on the Global Sustainability Committee, see Environmental Management.

Biodiversity-related risks and opportunities have also been integrated into Suntory Group's enterprise risk-management processes and are regularly monitored by senior management and the Board of Directors. For example, key issues related to water sustainability and biodiversity are positioned as items for risk oversight by the Board of Directors and reflected in our management strategies and business plans as necessary.

Moving forward, we will enhance our governance framework related to biodiversity and integrate these considerations into our management strategies, in alignment with the TNFD framework. We will endeavor to utilize the knowledge we have gained from measures for climate action, such as governance based on TCFD, to establish a system for discussing and advancing natural capital across the entire Group.

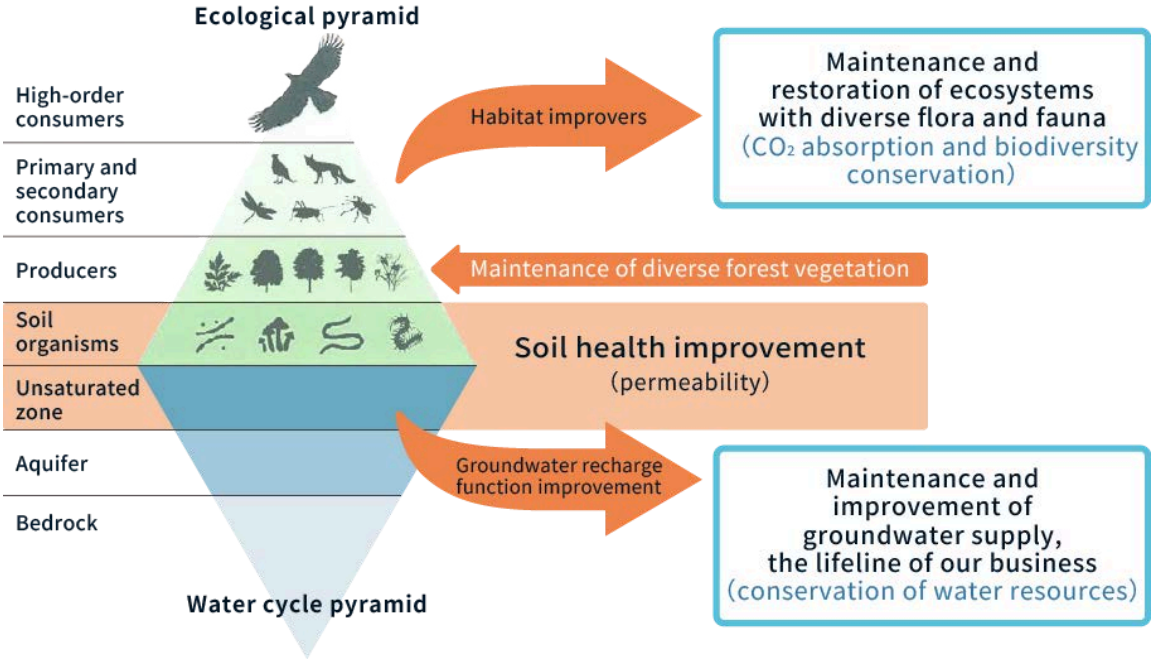
Initiatives

Water Sustainability

Suntory Natural Water Sanctuary

To ensure the safety, security, and sustainability of groundwater, Suntory Group has been cultivating forests in the watersheds around our plants as Suntory Natural Water Sanctuaries to nurture groundwater. These forests recharge more than twice the amount of water withdrawn by our plants in Japan.
Forests that nurture pristine groundwater are also rich in biodiversity. When the forest ecosystem is restored, the flora and fauna also begin to thrive in new ways. Suntory Group systematically manages its Natural Water Sanctuaries through ongoing ecosystem monitoring of flora and fauna, including birds. Considering how wild birds are a barometer of environmental health, we have experts conduct annual wild bird surveys to furnish a broader understanding of the changes taking place in the entire supporting ecosystem.

At Natural Water Sanctuaries in Japan, we are carrying out an Eagle and Hawk Chick-Rearing Support Project to support the nesting and breeding of birds of prey, which are at the top of the ecological pyramid. The aim is to continue maintaining forests rich in biodiversity from the perspective of protecting birds.
We have expanded our Natural Water Sanctuaries to 26 locations in 16 prefectures throughout Japan, which in total cover more than 12,000 hectares. In these sanctuaries, we promote forest conservation activities in cooperation with regional governments and local forestry officials.



30by30 Alliance for Biodiversity

In April 2022, Suntory Group joined the 30by30 Alliance for Biodiversity,*1 which aims to halt and reverse biodiversity loss to realize a sustainable society.

*1 The 30by30 Alliance for Biodiversity was established as a voluntary coalition of local governments, companies, and NPOs to conserve or protect at least 30% of Japan's land and sea areas by 2030.

Additionally, 6 Suntory Natural Water Sanctuaries have been certified as Sites Coexisting with Nature promoted by the Ministry of the Environment as part of an initiative aimed at achieving 30by30 goals. Sites Coexisting with Nature are areas where biodiversity conservation efforts through private-sector initiatives are certified by the Japanese government. Certified areas, excluding overlaps with protected areas, are registered in the world OECM (Other Effective area-based Conservation Measures) database. The fact that Suntory's forest conservation areas are among Japan's OECMs is also of great significance in terms of our contribution to international targets.

- 1. Hyogo Nishiwaki-Monryusan (Nishiwaki City, Hyogo)
- 2. Tokyo Akigawa (Akiruno City, Tokyo)
- 3. Shizuoka Oyama (Oyama Town, Shizuoka)
- 4. Nikko Kirifuri (Nikko City, Tochigi)
- 5. Ohmi (Hino Town, Shiga)
- 6. Akagi (Shibukawa City, Maebashi City, Gunma)

Publication of a Biodiversity Report

In September 2022, Suntory Group published the Suntory Natural Water Sanctuary Biodiversity Restoration Report, which summarizes the diverse issues facing Japan's forests and communicates examples of advanced initiatives in our Natural Water Sanctuaries.
The report introduces Japan's ecological challenges such as satoyama (community forest) degradation and the increase in invasive alien species, and also introduces our efforts to restore forests and biodiversity – for example, forest floor management and rare species protection. We will continue to evolve our science-based forest-nurturing efforts and actively communicate the results.

Download the Suntory Natural Water Sanctuary Biodiversity Restoration Report

For more information, see Suntory Natural Water Sanctuary.

Suntory's Peatland Water Sanctuary Initiative in Scotland

Suntory Group is expanding conservation efforts at critical biodiversity sites beyond Japan. In Scotland, we have embarked on initiatives to conserve peatlands and water sources that nurture peat, an essential raw material for whisky-making. We are engaged in restoring peatlands in areas where peat was previously mined and to regenerate ecosystems in nature reserves in collaboration with the Royal Society for the Protection of Birds (RSPB).

The peatland restoration project began on areas near the Ardmore Distillery in partnership with Forestry and Land Scotland, which owns the land, and the James Hutton Institute, which is assisting with research, planning, and execution for the restoration. Restoration activities subsequently began on Islay and in northern Scotland, where peat was mined for scotch in the past, and in nature reserves in Airds Moss and the Oa, activities were launched in collaboration with the Royal Society for the Protection of Birds of Scotland.
With additional activities planned, Suntory Group has set a goal of restoring sufficient peatlands by 2040 to equate to twice the volume of peat we harvest to make Scotch whiskies. Peatland conservation and restoration contributes not only to maintaining ecosystem services such as improved water purification and water retention, but also to climate change mitigation through peat's ability to sequester large amounts of carbon from the atmosphere. This project will be beneficial both from a climate and biodiversity perspective, also contributing to the conservation of Scotland's natural environment.

Recovery work has raised the water table of this peatland, and restoration of marshland vegetation is progressing

Ardmore Distillery

-Sustainability Stories- The Peatland Water Sanctuary™ Initiative: For Peat, an Important Ingredient in Whisky, and for the Future of the Planet

Raw Ingredients

Suntory Group promotes initiatives in and outside Japan aimed at conserving biodiversity in the agricultural crops it uses for key raw ingredients.
For example, Suntory Beverage & Food Great Britain and Ireland has been supporting sustainable agriculture for blackcurrant farmers since 2004, promoting the conservation of river and wetland ecosystems with biodiversity plans tailored to each farm and its surrounding habitat. In 2022, the company published the report, Farm Stewardship Programme, which summarizes its efforts to conserve biodiversity on blackcurrant farms across the UK and the results.
Other efforts within the Group include adopting regenerative agriculture methods that contribute to soil biodiversity, such as attempts at soil improvement and crop rotation for sustainable procurement of malting barley (a raw ingredient in beer) and the use of green mulches at vineyards (a cover crop method that maintains vegetation between vines). This shift in agricultural methods will help improve farmland soil fertility and conserve biodiversity while also building a raw ingredients procurement system that is resilient to future climate change.

Download the Farm Stewardship Programme Report

Cover crops

Vineyard with grass mulch
at Suntory Tominooka Winery

Farm Stewardship
Programme Report

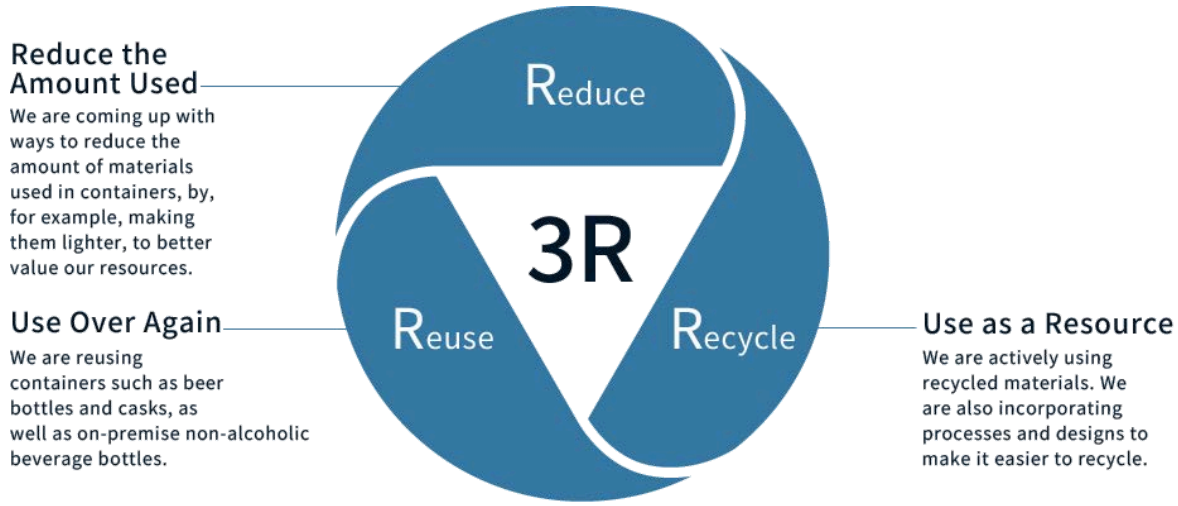
In terms of procurement, we carry out risk assessments for key raw materials in our Basic Policy on Sustainable Procurement and are strengthening our raw material procurement standards with biodiversity in mind. For paper packaging and agricultural products that directly contribute to deforestation, we are moving toward the use of certified paper and environmentally friendly raw materials, and are working to conserve biodiversity throughout the supply chain. Using the TNFD framework, we will also advance upstream biodiversity risk assessments for the value chain (for agricultural production areas and forest production areas) and deepen our consideration of conservation activities and commitments in cooperation with external stakeholders regarding key regions and raw materials.

Please see Sustainable Procurement for specific initiatives and achievements regarding agricultural crops for raw ingredients.

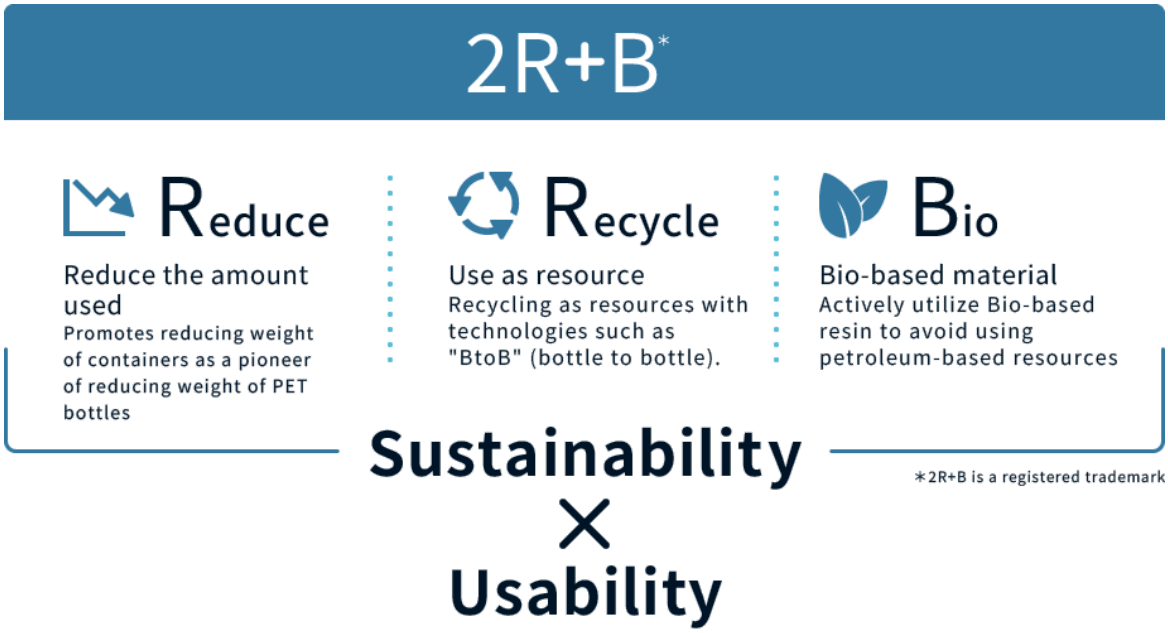
Container and Packaging Initiatives

In addition to ecological efforts for water and crops, Suntory Group aims to leverage limited natural resources by, promoting the 3Rs (reduce, reuse, recycle) for raw ingredients and packaging and containers in collaboration with diverse stakeholders, employing renewable resources, and building efficient resource recycling systems.
Especially with regard to PET bottles, Suntory Group is working to reduce the use of virgin petroleum-based materials and substituting them with alternatives such as recycled and bio-based materials under our unique 2R+B strategy*. From the development stage, we pursue efficient use of resources by reducing resin content and replacing petroleum-derived raw materials with renewable materials wherever possible in order to reduce environmental impact throughout the lifecycle of our containers and packaging.

* (Reduce/Recycle + Bio)



Concept of 3Rs in Containers and Packaging



2R+B Strategy

Through these initiatives related to containers and packaging, we aim to reduce the footprint of waste and resource extraction on ecosystems. The environmental impact of improper handling of used plastics has become a social issue affecting the environment. Suntory Group seeks to contribute to resolving these issues by strengthening bottle-to-bottle recycling and developing bio-based PET. Going forward, we will strive to further increase the proportion of sustainable materials in our containers and packaging, which will both reduce environmental impact and conserve biodiversity. We will work with suppliers and other business partners to advance efforts to minimize ecosystem impacts throughout the value chain, from the procurement of packaging materials to disposal and recycling.

For more information, see Packaging & Resource Efficiency.

Suntory Bird Conservation Activities

Recognizing that wild birds are barometers of the environment, Suntory Group has advocated that protecting birds leads to protecting human beings and the natural environment and started its bird conservation activities in 1973. In 1989, we established the Suntory Fund for Bird Conservation to provide financial assistance to bird conservation activities inside and outside Japan. As of 2024, we have provided grants totaling over 700 million yen to 517 projects. To this day, we continue to support bird conservation projects by NPOs and research institutions around the country. These projects are wide-ranging and include habitat conservation, protection of rare species, and environmental education.

Suntory bird conservation activities first focused on raising awareness about common wild birds. Since the launch of our Save the Birds! campaign in 1973, we have used television commercials, newspaper ads, and posters to share photographs and messages about wild birds, which has raised public interest in nature conservation. We have also been communicating the importance of bird watching and conservation to future generations through activities such as sponsoring a poster-sketching contest for elementary and junior high school students in honor of Japan's annual bird week and providing support to bird-loving groups across Japan.

1st Save the Birds! Campaign newspaper ad

Since wild birds sit at top of the ecological pyramid, tracking their movements can tell us about the health of the entire ecosystem. Given their importance, we not only provide support through the Suntory Fund for Bird Conservation but also conduct wild bird surveys in our own water replenishment forests Natural Water Sanctuaries to help monitor the forest ecosystems.

Guided by our philosophy of being an enterprise “sustained by nature and water,” Suntory Group will continue its work to conserve biodiversity, always having gratitude and reverence for the ecosystems that nurture water and living things. We will share with external parties the knowledge and technologies we have gained through our business activities and deepen our partnerships with government, NPOs, and local communities while contributing to the realization of a sustainable society that coexists in harmony with nature.

For more information, see Bird Conservation Activities.

Bird Conservation Activities

Suntory Bird Conservation Activities

Wild birds are said to be barometers of natural environment. This is because birds have wings and fly away when the environment deteriorates and return when it improves. Suntory Group, which depends on the rich gifts of nature, has been carrying out bird conservation activities since 1973 to share with society the importance of protecting wild birds, based on the belief of "Today Birds, Tomorrow Humans - Happiness that happens to birds today may make tomorrow's humans happy." These activities are in line with the principles of the international framework 30by30, which to achieve nature positive.

History of Suntory Bird Conservation Activities

Year of activity	Content
1973	- Start of Save the Birds! Campaign (May) - The first publication of a newspaper ad with an illustration of wild birds (received Asahi Advertising Award) - Established a bird sanctuary in the Hakushu Distillery (Yamanashi prefecture)
1989	- Foundation of the Suntory Fund for Bird Conservation
1990	- The 1st Fund Granting Ceremony of the public trust, Suntory Fund for Bird Conservation
1993	- Start of the Save 1000 Albatrosses! Campaign
2006	- Newly established Grant for Community Bird Activities to the Suntory Fund for Bird Conservation
2014	- Newly established Grant for Riparian Large Bird Conservation to the Suntory Fund for Bird Conservation
2016	- Received the Wood Pencil at the D&AD Awards 2016, the ADC Award at the 2016 ADC Awards and the monetary prize at the Design for Asia Awards (DFAA) for the Line of Life Project to build kites of birds with children in the hopes of returning storks to a habitat where they can live normally
2018	- Relevant businesses certified under Japan Committee for the United Nations Decade on Biodiversity(UNDB-J)
2021	- Supported "eBird Japan," the Japanese version of "eBird," the world's largest bird observation database.
2025	- The 36th Fund Granting Ceremony of the public trust, Suntory Fund for Bird Conservation (Total of ¥745.6 million from the 1st to 36th fund granting have been made to 534 organizations)

1st Save the Birds! Campaign newspaper ad

The Suntory Fund for Bird Conservation

As one of the activities commemorating the 90th anniversary of our founding, we enhanced bird conservation activities with the establishment of the Suntory Fund for Bird Conservation in 1989. As this initiative is designated to promote global environmental conservation through the protection of wild birds, funds are granted for bird protection activities both in Japan and overseas.
Over the 36 years since becoming a charitable trust in 1990, the Fund has granted total of ¥745.6 million to 534 organizations up to 2025, making great achievements.

The Fund currently has 3 grant categories. The first is the Bird Conservation Groups Activities Grant, which supports organizations both in Japan and overseas that protect rare and endangered species. The second is the Regional Bird-watching Activities Grant, which provides subsidies for the purchase of binoculars and other equipment to school clubs and volunteer groups that work to protect and observe familiar wild birds. The aim is to expand the base for wild bird conservation in local communities. The third is Waterfront Large Bird Conservation, which supports the development and restoration of environments in which large waterside birds such as storks, crested ibises, and cranes live. Significant results are beginning to appear in recent years through this support, such as the return of Oriental white storks and Japanese crested ibises to the wild.

The 2020 presentation ceremony was cancelled to avoid the risk of new coronavirus (Covid-19) infection; the 2021 and 2022 ceremonies were held online; We continue to hold hybrid events from 2023 by connecting online with grantees outside Japan and regional grantees in Japan.

The 36th Fund Granting Ceremony of Public Trust Suntory Fund for Bird Conservation

About the Suntory Fund for Bird Conservation (in Japanese)

The Hakushu Distillery Bird Sanctuary

We began bird conservation activities in 1973 and that same year, Suntory became the first private-sector company in Japan to open a wild bird sanctuary, which is located at the Hakushu Distillery in Yamanashi Prefecture.
Surrounded by rich forests and many clear streams, the Hakushu Distillery is a relay point of migration for wild birds. Suntory periodically conducts bird research (monitoring) in the sanctuary, using the data to create a better environment for birds and other living creatures. We will continue to improve the environment with the advice of experts.

Suntory Bird Conservation Activities: “Today Birds, Tomorrow Humans” (in Japanese)

Blue-and-white Flycatcher

Ural Owl

Red-flanked Bluetail

Narcissus Flycatcher

Hanging boxes in the Bird Sanctuary

Communication

We are putting out a broad range of information through our websites and other tools to familiarize more people with these wild birds. On the Japanese Bird Encyclopedia website, anyone can enjoy learning about over 200 species of wild birds through illustrations with explanations, bird calls, and pictures.
The portal site "eBird Japan" (operated by Cornell University Lab of Ornithology and the Wild Bird Society of Japan), which provides access to the world's largest bird observation database of birdwatchers' records, and the bird identification app Merlin are tools that make it easy to enjoy birdwatching activities in Japan and overseas. Suntory is working to promote the use of these tools as the main sponsor. Wild bird observation records collected using these tools are used as big data from citizen engagement at Cornell University, serving as a valuable information platform for global bird conservation.

Japanese Bird Encyclopedia website

The portal site "eBird Japan" (operated by Cornell University Lab of Ornithology and the Wild Bird Society of Japan)

Save the Birds Activity leaflets

- Japanese Bird Encyclopedia (in Japanese)
- Wild Bird Society of Japan: eBird Japan (wbsj.org) (in Japanese)
- Save the Birds activity leaflets (in Japanese)
- Video: Line of Life Project, a Suntory bird conservation activity (in Japanese)

Climate Action

Our Policies and Approach

Global warming affects water resources and raw materials, which are central to Suntory Group's beverage business, making climate change a critical issue for our business continuity. Suntory Group has set a 1.5°C target to limit the rise in global average temperatures to 1.5°C above pre-industrial levels. To achieve this, we seek to decarbonize our entire value chain, from the production process for raw ingredients and product manufacturing to the delivery of products to consumers. We are working together with various stakeholders, including business partners in raw materials, manufacturing, and logistics, as well as our customers to promote climate action measures as a unified group.

Additionally, following the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), we conduct long-term scenario analyses and incorporate evaluations of the risks and opportunities climate change poses to our business into our management strategies. For example, we have identified key risks such as increased costs from the introduction of a carbon tax, insufficient water resources at production sites, and increased procurement costs for raw ingredients due to declining agricultural yields. In response, we have implemented measures such as the use of internal carbon pricing, capital investment, and water replenishment initiatives.
At the same time, we recognize opportunities for increased demand for beverages that prevent heatstroke due to rising temperatures and improved brand value through water resource conservation. These opportunities are being leveraged to drive business growth through the strengthening of our product portfolio and the continuation of water source protection activities.

Promoting Structure

Global Sustainability Committee

To promote environmental management at Suntory Group, we have established a system centered around the Global Sustainability Committee (GSC). Under the supervision of the Chief Sustainability Officer, GSC formulates strategies related to the 7 key themes of sustainability, which include water, climate action, raw ingredients, containers and packaging, health, human rights, and lifestyle culture. GSC also oversees the progress of these strategies and analyzes the business risks and growth opportunities, reporting to the Board of Directors on a quarterly basis.

For more information on the Global Sustainability Committee, see Environmental Management.

Targets and Progress

Environmental Vision toward 2050

Climate Action Measures

- Aim for net **zero** greenhouse gas emissions across the whole value chain by 2050

Continue to promote energy conservation, proactively implement renewable energy solutions, utilize next-generation infrastructure options and work together with stakeholders across the value chain in order to contribute to realizing a decarbonized society

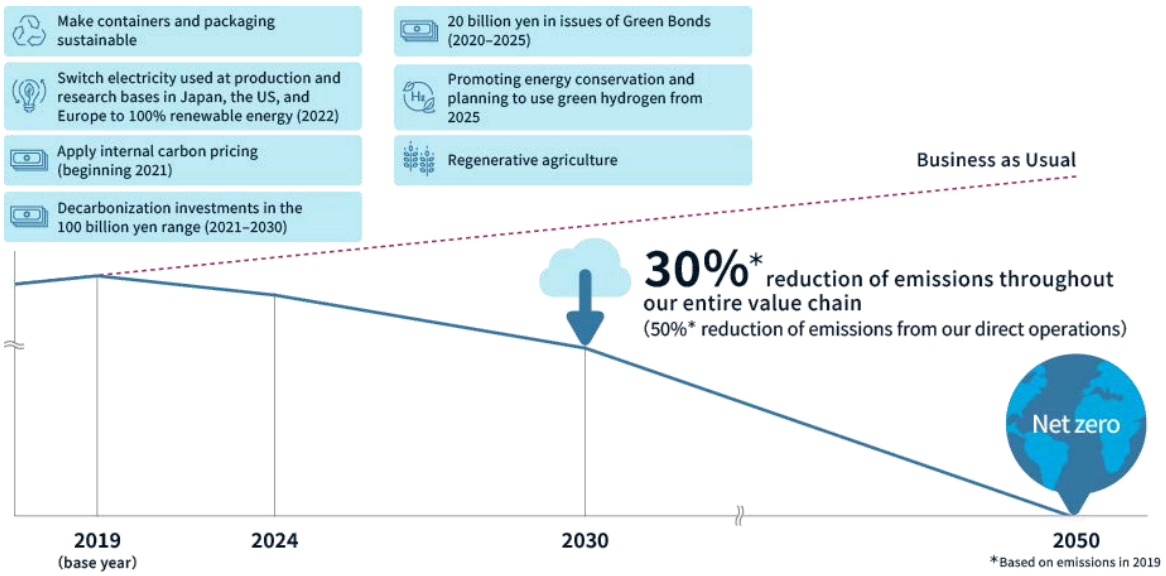
Environmental Targets toward 2030	2024 Progress
Greenhouse gas (GHG)	
• Reduce GHG emissions from our direct operations by **50%***1	• **32**% reduction compared to 2019
• Reduce GHG emissions across our entire value chain by **30%***1	• **13**% reduction compared to 2019

*1 Based on emissions in 2019.

* The greenhouse gas (GHG) emission reduction target set in Environmental Targets toward 2030 has been certified as a 1.5°C Target by the SBT Initiative.

For more information on GHG emissions achievements, see the List of achievements data.

Road Map to Net Zero



Our Initiatives

Decarbonization Investments to Achieve Environmental Targets toward 2030

Suntory Group plans to invest approximately 100 billion yen from 2021 to 2030 to promote decarbonization. This investment is expected to reduce GHG emissions by about 1 million tons by 2030.

Furthermore, without sufficient decarbonization measures, it is estimated that additional costs of up to about 9.5 billion yen by 2030 and about 35 billion yen by 2050 could be incurred due to the introduction or strengthening of carbon taxes in various countries. To mitigate these financial risks, we are pursuing a strategy of investing in decarbonization and utilizing internal carbon pricing to achieve the reduction targets set out in our Environmental Targets toward 2030 in order to avoid the risk of mid- to long-term cost increases.

Initiatives to Reduce Own-site Emissions (Scope 1 and 2)

Internal Carbon Pricing

Suntory Group introduced internal carbon pricing in 2021. Internal carbon pricing is widely used in making management decisions, mainly capital investment decisions contributing to climate change countermeasures.

<ICP Summary of Suntory Group>

Price	8,000 yen per ton
Approach	Shadow price
Scope	Internal Suntory Group
Prerequisites for price calculation	Calculated based on forecasts by the IEA and other international organizations, benchmarks used by other companies in the industry and those promoting advanced environmental initiatives, as well as evaluation of past internal decision-making.

Initiatives in Production and R&D

Use of Renewable Energy

Suntory Group uses 100% renewable energy for electric power purchased at all alcohol and non-alcohol manufacturing sites and R&D facilities in Japan, the Americas, and Europe. This contributes to an annual reduction of approximately 230,000 tons* of GHG emissions.
In addition to procured power, we are actively installing solar panels and introducing biomass boilers to generate renewable energy in-house.

* Based on power procured, 2023

Suntory Minami Alps Hakushu Water Plant

Suntory Kita Alps Shinano-no-Mori Water Plant

Carcagente Plant (Spain)

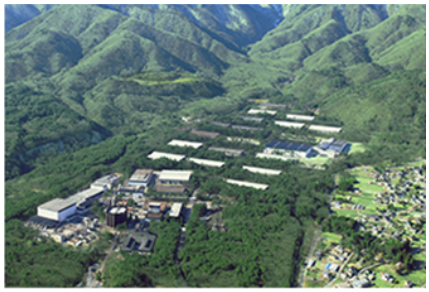
Biomass boiler
(Chita Distillery)

Biomass boiler
(Suntory Kita Alps Shinano-no-Mori Water Plant)

Fred B. Noe Craft Distillery
(Suntory Global Spirits, North America)

Installing Japan's largest 16-megawatt P2G (Power to Gas) system for in-house green hydrogen production

In September 2022, Suntory Holdings Ltd. signed a basic agreement with Yamanashi Prefecture to realize an environmentally harmonious and sustainable society. Suntory aims to install a 16-megawatt P2G system, Japan's largest, at the Suntory Minami Alps Hakushu Water Plant and Suntory Hakushu Distillery by 2025. The system will utilize electricity derived from solar power and other renewable energy sources, making it capable of producing “green hydrogen,” which does not emmit CO_2 during the hydrogen production process.
The green hydrogen produced will be used as fuel for heat energy at our Hakushu facilities. Additionally, we plan to explore and implement the utilization in the surrounding communities in collaboration with Yamanashi Prefecture.



Suntory Minami Alps
Hakushu Water Plant and
Suntory Hakushu Distillery

P2G system

Promoting Energy Conservation

Suntory Group is engaged in a wide range of initiatives to conserve energy. Suntory Spirits Ltd. Gunma Brewery is actively making use of natural energy, while the Suntory World Research Center has introduced equipment to reduce its environmental impact. In addition, there are sites such as Iwanohara Vineyard and Suntory Okudaisen Bunanomori Water Plant, which take advantage of their locations’ heavy snowfall by using “snow rooms” that store winter snow throughout the year.

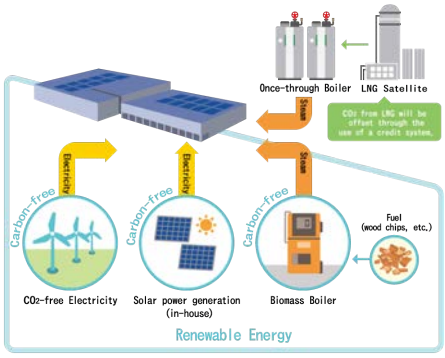
Gunma Brewery

Suntory World Research Center

Snow room at Suntory Okudaisen Bunanomori
Water Plant

Suntory Group's First Net-Zero CO_2 Emissions Plant in Japan

The Suntory Kita Alps Shinano-no-Mori Water Plant (Omachi City, Nagano Prefecture) which started operation in May 2021 as a fourth water source for Suntory Tennensui (Mineral Water,) became Suntory Group's first net-zero CO_2 emissions plant in Japan through adoption of solar power generation facilities and boilers which use biomass fuel, electric power procurement derived from renewable energy as well as offsetting.
Suntory Kita Alps Shinano-no-Mori Water Plant has achieved carbon neutrality and is the first non-alcoholic beverage factory in Japan to acquire ISO 14068-1, an international standard.



- ISO 14068-1 Carbon Neutrality Report Executive Summary (in Japanese) (549KB)
- ISO 14068-1 Carbon Neutrality Report (in Japanese) (1.9MB)

Initiatives in Offices and Other Facilities

Actions in the Offices

Our major offices purchase 100% renewable electricity. In addition, various initiatives are carried out by all employees daily with higher awareness on saving energy in each office. The Odaiba Office in Tokyo installs use of reused water, automatic lighting control system, and human detection sensors for lights in toilets and escalators. Greenhouse gas (GHG) emission reductions are being promoted in each office through Cool Biz and Warm Biz campaigns and proactive use of web conferencing.

Suntory Hall and Suntory Museum of Art Purchase 100% Renewable Electricity

Purchased energy at Suntory Hall and Suntory Museum of Art is 100% renewable energy.
Through these efforts, the two facilities have been able to reduce CO_2 emissions by approximately 900 tons per year compared to the past.

Suntory Hall

Suntory Museum of Art

Initiatives to Reduce Emissions from Raw Ingredient Procurement and Logistics, etc. (Scope 3)

Supplier Engagement

Data Gathering, Goal Setting, and Sharing Best Practices

Suntory Group holds annual policy briefings for its principal business partners, including raw material suppliers, contract manufacturers, and logistics partners, to promote awareness of and support for sustainability initiatives. In addition, through presentations to explain Group initiatives and the use of surveys, we monitor the status of CO_2 emission reduction targets set by major business partners and are considering policies for future procurement initiatives.

We are also working with our suppliers to decarbonize the value chain throughout the Group. Each year, we hold GHG reduction policy briefing sessions for our major suppliers of packaging materials and raw ingredients to share the Group's policies and to support the formulation of reduction plans and the introduction of renewable energy at each company. We are accelerating the reduction of Scope 3 emissions through collaboration with such business partners.

Raw Ingredient-related Initiatives

The gifts of nature, including agricultural crops and other raw ingredients, are essential inputs for Suntory Group products. As such, we are collaborating with business partners in the supply chain to implement a broad range of climate change-related initiatives. In particular, it is estimated that GHG emissions from agriculture and forestry account for about a quarter of all such emissions*. Suntory Group also estimates that agriculture-derived GHG emissions account for about 20% of GHG emissions in our value chain, and is working to effect a shift to sustainable agriculture.

* IPCC 5th Report WG3 SPM

Barley

To reduce GHG emissions originating from raw ingredients, Suntory Group is collaborating with malt supplier Muntons, agricultural consulting firm Future Food Solutions, and barley farmers to implement a range of initiatives in a project to procure barley for malting produced through regenerative agriculture*1 in the United Kingdom.
Through agricultural approaches such as the use of cover crops*2 and no-till farming, the project hopes to reduce GHG emissions from agriculture by 50% within five years while regenerating soil biodiversity, enhancing soil fertility, reducing chemical fertilizer and pesticide use, and using water more effectively.

*1 Agricultural methods that focus on enhancing soil fertility by regenerating its ecosystem to make crop production sustainable

*2 Cover crops that can enhance soil fertility by supplying organic matter to the soil, preventing erosion, etc.

Green Tea

To promote sustainable tea leaf procurement, the raw material for green tea beverages, Suntory Group has launched a long-term initiative in collaboration with tea farming areas. By working with the Kuma Regional Agricultural Cooperative (JA Kuma) to introduce environmentally friendly tea farming processes, we have reduced GHG emissions by over 30%* compared to conventional processes.
In conjunction with the pursuit of high-quality tea production, we hope to go on contributing to stable succession and training of successors in tea farming regions.

* GHG emitted per weight unit during the production of green tea material, from raw leaves to rough tea

Blackcurrant

Suntory Beverage & Food Great Britain and Ireland has been conducting research on new, climate change-resistant species of blackcurrant. In July 2020, after years of research in collaboration with the James Hutton Institute, an agricultural research facility, we harvested a new climate change-resistant species, named Ben Lawers.

Wine Grapes

In collaboration with the University of Yamanashi, Suntory Tominooka Winery has introduced a new, secondary-shoot cultivation technique for wine grapes. The daily temperature range normally begins to expand as nighttime temperatures start to drop around mid-July, causing the sugar content of grapes to increase as they ripen. However, climate warming has recently slowed the ripening process. In secondary-shoot

cultivation, the tips of shoots that sprout in April are trimmed, and the resulting side shoots are nurtured. This shifts the start of ripening from mid-July to early September, when temperatures start to drop, and grapes are harvested in mid-November.
In other vineyard initiatives, we are promoting formation of soil rich in biodiversity by minimizing the use of pesticides and fertilizer. This boosts the population of microorganisms and beneficial insects in the soil and decreases the population of pests. We also store carbon by carbonizing pruned branches and mixing them into the soil.

For more information on our raw material initiatives, see Supply Chain Management

Initiatives in Containers and Packaging

Suntory Group aims to eliminate the use of virgin petroleum-based materials in PET bottles by switching to 100% recycled or bio-based derived materials for all PET bottles used by the Group by 2030. We are conducting activities based on our unique 2R+B (Reduce, Recycle + Bio) strategy to reduce the amount of plastic used by reducing the weight of containers (Reduce), recycling containers for use as a resource (Recycle), and using bio-based material (Bio). The development of weight reduction and recycling technologies has produced a reduction in CO_2 emissions.
In particular, in Japan, “bottle-to-bottle” horizontal recycling*1 allows PET bottles to be recycled multiple times as a resource, reducing CO_2 emissions by approximately 60%*2 relative to manufacturing PET bottles from virgin petroleum-based materials. As of May 31, 2024, our use of virgin petroleum-based materials was 300,000 tons less than it would have been had we not utilized horizontal recycling.

*1 Recycling used PET bottles into new PET bottles

*2 Processes from used PET bottles to the preform production

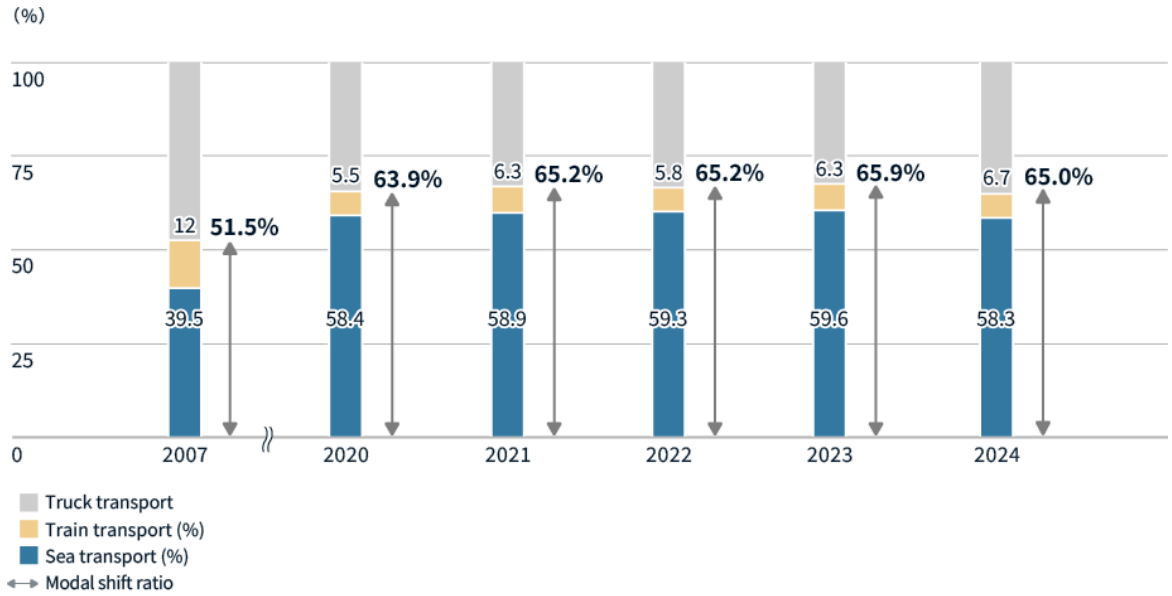
For more information on our container- and packaging-related initiatives, see Packaging & Resource Efficiency

Initiatives in Logistics

Suntory Group is working to reduce the environmental impact of our logistics operations, including transport and delivery operations and warehouse operations.
We are working to shorten transport and delivery distances traveled from plants to customers by promoting local production for local consumption, maximizing utilization of large vehicle load capacity, and switching to next-generation fuels and transport modes with lower GHG emission levels.
In warehouse operations, we are working to shorten operating hours and reduce power consumption.
During 2024, sales (KL) are 100% of the previous year. GHG emissions are also 100% of the previous year at 158,000 [CO_2-ton] while the basic unit was 22.5 CO_2-ton/thousand KL sold.

Reducing GHG Emissions with a Modal Transport Shift

1.Enhancing the modal shift rate
We are promoting a modal shift to rail and ocean transport, which emits less GHG than trucks. Even as we promote local production and consumption to reduce total transport distances, we have been able to maintain a high modal shift rate.



2.Enhancing usage of fuels with less GHG emissions

To encourage our transportation partners to use next-generation fuels that emit less GHGs than conventional fuels, we identified issues for expanded use in the future and are engaged in discussions for solving those issues. The next-generation fuels were introduced in 2022, and we used them at roughly the same levels in 2024.

For more information, see Introduction of Renewable Fuels in Truck Transport in Japan.

Collaborative Efforts with Logistics Partners

To further reduce environmental impact, Suntory Group calculates GHG emissions based on data such as logistics partners' mileage, fuel consumption, and loading volume, and uses this information to formulate specific reduction measures. Through regular meetings, we collaborate by sharing examples of activities and exchange opinions to promote improvements. Our logistics partners are also working to obtain external certification for environmental management.

Collaborative Efforts with Other Companies

We are partnering with other companies for reducing environmental impact in logistics through joint distribution and joint use of containers.

Coordination	Description	Starting from	Results
NISSIN FOODS HOLDINGS CO.,LTD.	Joint transport in the Obihiro area of Hokkaido	June 2017	Approximate annual GHG reduction of 50 tons (Total figures for both companies)
4 major beer companies in Japan	Joint distribution in some areas of Hokkaido (Kushiro/Nemuro)	September 2017	Reduction of approximately 330 tons of GHG emissions per year (*Figures apply to all four beer companies)
4 major beer companies in Japan	Joint use of railways between Kansai/Chugoku area and Kyushu area	April 2018	Reduction of approximately 1,500 tons of GHG emissions per year (*Figures apply to all four beer companies)
4 major beer companies in Japan	Joint collection of beer pallets[*1] *1 News Release	November 2018	Reduction of approximately 4,778 tons of GHG

			emissions per year (*Figures apply to all four beer companies)
Unicharm Corporation	Joint use of railway containers between Shizuoka area and Fukuoka area	February 2021	Reduction of approximately 2 tons of GHG emissions per year (*Total figures for both companies)
Daio Logistics Co., Ltd.	Joint Kanto-Kansai transport	August 2022	Approximate annual GHG reduction of 115 tons (*Two-company total)
Daio Logistics Co., Ltd.	Parties share one-way rail containers*2 *2 News Release	August 2022	Approximate annual GHG reduction of 100 tons
Daio Logistics Co., Ltd.	Railroad Container Round-trip Utilization between Kanto and Shikoku	June 2023	Approximate annual GHG reduction of 31 tons
Japan Freight Liner Company	Utilization of ocean 40ft containers for return trips	July 2023	Approximate annual GHG reduction of 89 tons
Unicharm Corporation	Round-trip transport using the relay method	April 2024	Annual GHG reduction of 223 tons (figures for both companies combined)
Daikin Industries, Ltd.	Round-trip transport using double-articulated trucks*3 *3 News Release	July 2024	Annual GHG reduction of 68 tons (figures for both companies combined)

Reducing Environmental Impact of Sales Vehicles and Vehicle Accidents

We are proactively saving energy by replacing most of the vehicles used in our sales activities with hybrid vehicles.
In addition, by introducing vehicle operation management systems and drive recorders that can acquire driving data such as driving distance, driving behavior, and fuel efficiency in sales vehicles. We promote safe driving and eco-driving by feeding back the result of the analysis of collected data.

Energy Conservation in Vending Machines

Suntory Group is implementing various initiatives to promote energy conservation in vending machines for our domestic businesses to reduce GHG across the value chain.

Key Features of Suntory Vending Machines

Heat-pump Function
This allows to recycle the heat generated in the cooling chamber for the heating chamber.

Peak-cut feature
Cuts cooling for a fixed period of time to help balance power usage during peak hours, up to a maximum of 11 hours, in summer.

Vacuum Heat Insulation
Improves energy efficiency to prevent loss of heating and cooling.

Zone Heating and Cooling
Reduces power consumption through heating and cooling products just prior to actual sales.

Smart Energy-Saving Feature
Determines sales quantities and temperature of products, reduces power comsumption accordingly.

LED Illumination
Uses LED lighting for reduced power consumption.

Dimmer Function
Incorporates light dimmer that reduces brightness by 50%.

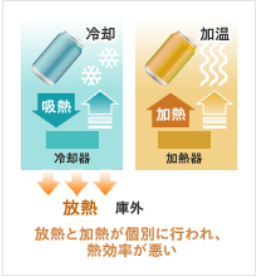
Fluorocarbon measures
Use of coolants (CO2,R-1234YF) minimizing global warming to prevent destruction of the ozone layer.

Promoting a 24-hour Lights Out
With indoor vending machines having a 24-hour "Lights Out" rule and outdoor machines having no lighting during daytime hours, this has resulted in a reduction of approximately 65% in electricity now compared to 2007.

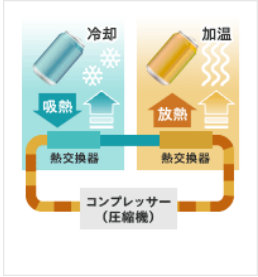
Initiatives to Reuse Vending Machine Parts
In order to make use of parts retrieved from retired vending machines, Suntory has been working to develop both the technologies to reuse parts as well as a control system for stock of reuse parts.

What is a Heat-Pump Vending Machine?

A heat-pump vending machine in Japan is a vending machine with a built-in system to collect heat generated by the cooling chamber for the heating chamber. These vending machines largely contribute to energy saving through function to effectively use heat inside the vending machine and latest machine can even exchange heat with the atmosphere.



Vending machines prior to heat-pump type



Heat-pump vending machine

Introduction of Carbon-Offset Vending Machines with Net-Zero GHG Emissions

In September 2024, we began rolling out carbon-offset vending machines that achieve net-zero GHG emissions. By acquiring a FIT Non-Fossil Certificate* equivalent to the annual electricity consumption required for operation, a carbon-offset vending machine is deemed to have used electricity derived from renewable energy, making it possible to offset the machine's GHG emissions. POP displays on the vending machines that state "FIT Non-Fossil Certificate Obtained" and "Net Zero Greenhouse Gas Emission" emphasize that the vending machine contributes to reduced environmental impact on the planet.

* Certificate for renewable energy sources such as solar, wind, small hydroelectric and biomass that are subject to FIT (Feed-in Tariff) schemes.

Ensuring Reasonable Waste Disposal of Vending Machines

We are leading the industry in building a Vending Machine Waste Disposal System that collects and recycles vending machines to throw away, which we have expanded nationally since January 1997. We are strictly managing disposal from the initial selection of vending machines to

discard to the final disposal in compliance with the revisions to the Wastes Disposal and Public Cleansing Act in April 2001. We are properly processing broken machines by understanding the amount of machines to collect based on the Act for Rationalized Use and Proper Management of Fluorocarbons even in regards to the fluorocarbons that are used as a refrigerant in vending machines.

Strategies for Adapting to Global Warming

To better adapt to climate change, we are expanding our portfolio of heatstroke-prevention beverages* and conducting educational initiatives relating to heatstroke at supermarkets and other in-store environments, as well as heatstroke prevention classes for elementary school students.

* The Ministry of Health, Labour and Welfare's recommended salt equivalent for beverages to prevent heat stroke is 0.1 g to 0.2 g/100 ml.

Participation in Initiatives

SBT Initiative Certification

Suntory Group has signed the “Business Ambition for 1.5℃,” a campaign led by the Science Based Targets initiative*1 in partnership with the UN Global Compact and the We Mean Business*2 coalition to hold global temperature increases to 1.5℃ above pre-industrial levels.
Suntory Group has had its 2030 emissions reduction targets approved by the Science Based Targets initiative as consistent with levels required to meet the goals of the Paris Agreement.

The 1.5°C target is a science-based target to limit the increase in global average temperature to 1.5°C above pre-industrial levels.

*1 The SBTi is an international initiative jointly established by the United Nations Global Compact (UNGC), CDP (a coalition of institutional investors that promotes disclosure of information on climate change measures), World Resources Institute (WRI), and World Wide Fund for Nature (WWF). It drives ambitious climate action in the private sector by enabling companies to set science-based emissions reduction targets.

*2 We Mean Business is a global nonprofit coalition working with the world's most influential businesses to take action on climate change. Together they catalyze business leadership to drive policy ambition and accelerate the transition to a zero-carbon economy.

SCIENCE BASED TARGETS

Endorsement of Task Force on Climate-related Financial Disclosures (TCFD) Recommendations

Suntory Group has declared its endorsement of recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), established by the Financial Stability Board(FSB).

Based on the TCFD’s recommendations, we conducted scenario analysis for climate change , identifying the risks and opportunities it poses to our business and estimating the potential financial impacts. We will continue to enhance the disclosure of related information going forward.

* Abbreviation for the Task Force on Climate-related Financial Disclosures

For more information, see Disclosure Based on TNFD & TCFD.

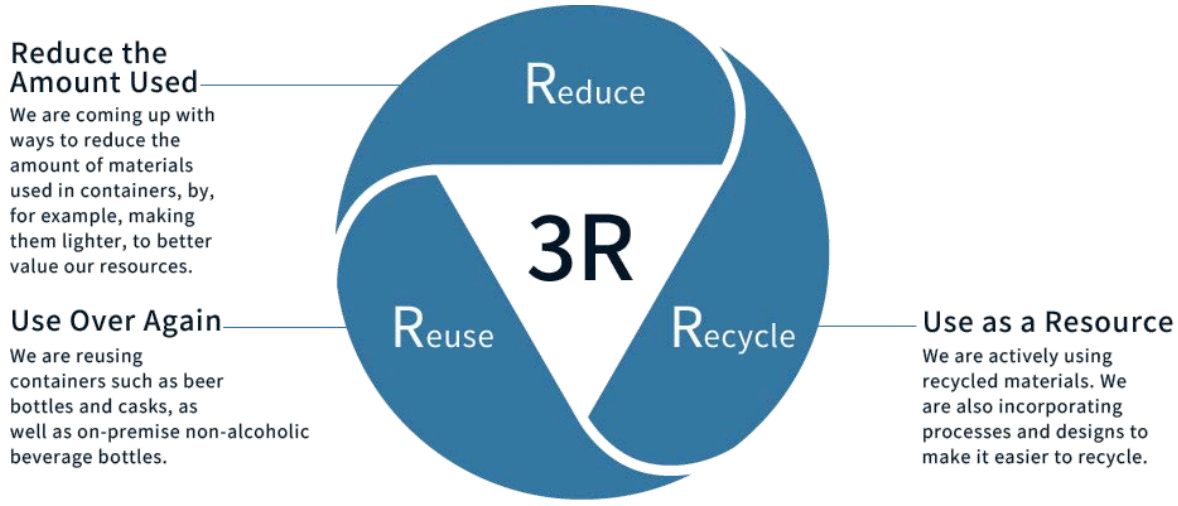
Packaging & Resource Efficiency

Our Policies and Approach

Suntory Group is committed to promoting the realization of a circular society by collaborating with diverse stakeholders to find solutions to various challenges. All Suntory Group employees strive to act responsibly, taking the lead in creating a sustainable future.
Containers and packaging protect and preserve the quality of products until they reach customers. However, much of this packaging used to become waste after consumption. Recognizing the significant social impact of containers and packaging, Suntory Group established our own “Guidelines for the Environmental Design of Containers and Packaging” in 1997. These guidelines ensure that designs, including label materials and glass bottle colors, are developed with recyclability in mind. Additionally, the Group is committed to reducing the environmental impact of containers and packaging from a Life Cycle Assessment (LCA) perspective.

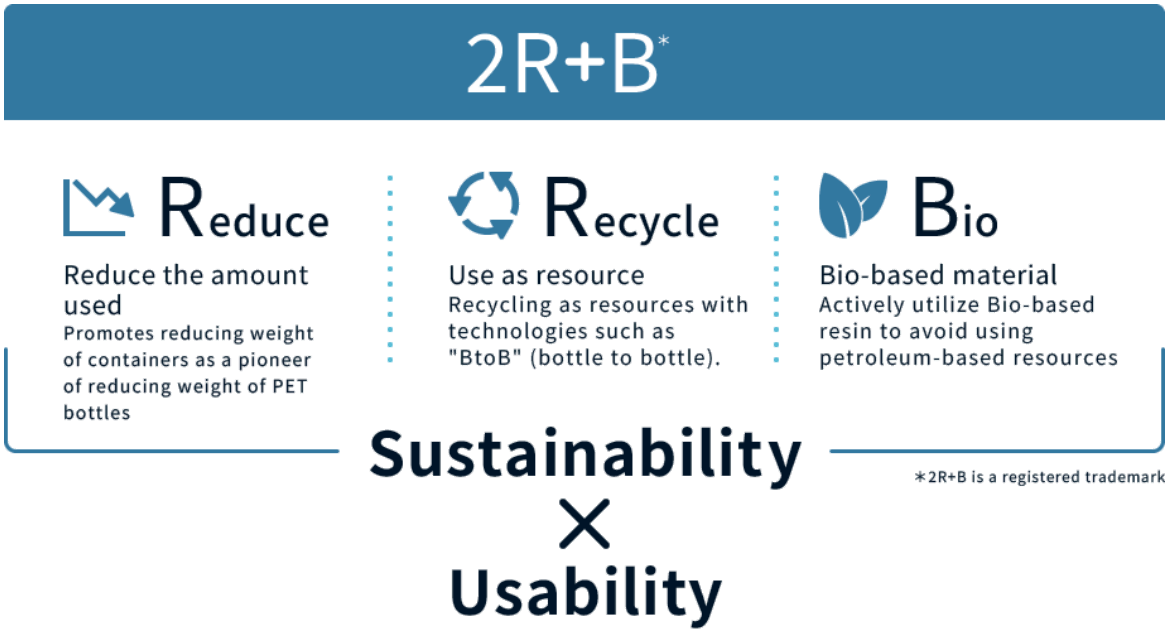
3Rs of Containers and Packaging

Under the 3R principles of Reduce, Reuse, and Recycle, Suntory Group develops containers and packaging with environmental considerations. We focus on user-friendly designs that consider actions from consumption to sorting of empty containers. Our efforts include reducing weight, adopting materials that lessen environmental impact, and designing for easier recycling.



2R+B Strategy

For PET bottles, we are committed to maximizing resource efficiency by reducing resin usage and incorporating recycled materials. We aim to replace virgin petroleum-based materials with renewable alternatives to the extent possible. This approach is guided by Suntory Group's unique 2R+B (Reduce, Recycle + Bio) strategy.



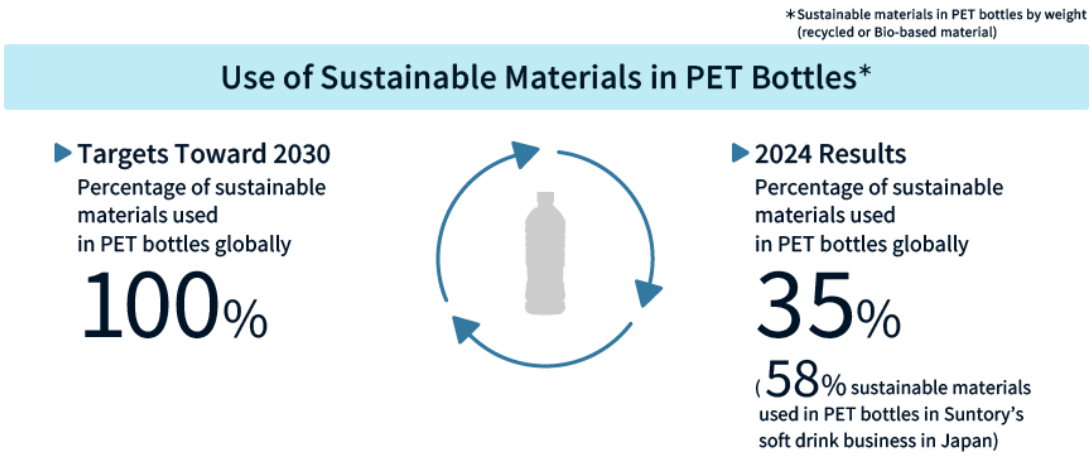
Promoting Structure

Global Sustainability Committee

Suntory Group has established a system for promoting environmental management centered on the Global Sustainability Committee (GSC). Under the supervision of the Chief Sustainability Officer, GSC formulates strategies related to the 7 key themes of sustainability, which include water, climate action, raw ingredients, containers and packaging, health, human rights, and lifestyle culture. GSC also oversees the progress of these strategies and analyzes the business risks and growth opportunities, reporting to the Board of Directors on a quarterly basis.

For more information on the Global Sustainability Committee, see Environmental Management.

Targets and Progress



Our Initiatives

Initiatives for Plastic

While plastic products have enriched our lives through their utility, improper handling after use has led to environmental impacts, becoming a significant social issue. In Japan, the Ministry of the Environment has formulated the “Plastic Resource Recycling Strategy” as a strategy to comprehensively promote resource recycling while recognizing the convenience of plastic products.
Suntory Group also established the Plastic Policy in 2019 to strongly lead the transformation toward a circular and net-zero society, focusing on PET bottle containers through the 2R+B (Reduce, Recycle + Bio) strategy. In line with this Policy, Suntory Group aims to make all PET bottles used globally 100% sustainable, using only recycled or bio-based materials by 2030, thereby eliminating the use of virgin petroleum-based materials.

Suntory Group Plastic Policy

Expressing gratitude toward the gifts of nature that are the source of our products, Suntory Group is firmly committed to leading the transformation towards a circular and net-zero society, fostering a world where diverse life thrives harmoniously.
While plastics offer numerous benefits due to their utility, we aim to ensure that the plastic containers and packaging we use maintain their useful functions without negatively impacting the global environment. Together with various stakeholders, we are actively pursuing solutions to these challenges. Additionally, each employee within the Suntory Group is encouraged to act responsibly, taking the lead in creating a sustainable society.

1. Recycle & Renewable:

(1) Aim to switch all the PET bottles used globally for Suntory products to be made of recycled or bio-based material by2030, achieving zero use of virgin petroleum-based materials.

(2) Actively work and collaborate with government agencies, industry, environmental non-governmental and non-profit organizations for the measures necessary to develop an efficient recycling system based on the situation of each country where we do business.

2. Reduce & Replacement:
Reduce the amount of plastic used by changing the design of containers and packaging and look for the introduction of alternative containers that do not negatively impact the environment in order to effectively utilize resources.

3. Innovation:
Actively invest in innovation for materials and processes that improve the recycling rate and minimize environmental impact.

4. New Behavior:
Promote activities that drive change in consumer behavior. Each Suntory employee will work to change their lifestyle, promote sorting and collection, and actively participate in social contribution activities such as cleaning up rivers and beaches.

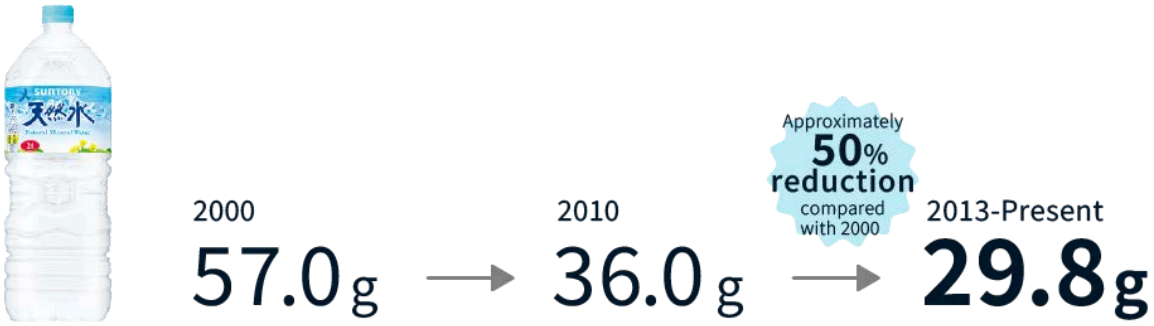
Reduce: Lightweighting

For approximately 20 years, Suntory Group has been working to reduce the weight and thickness of PET bottles, caps, and labels. We strive to effectively use resources while maintaining and improving quality at the point of consumption (quality of contents and ease of bottle use).

Change in Weight of 550mL Suntory Tennensui PET Bottles*1

*1 500-mL capacity through 2009

Change in Weight of 2L Suntory Tennensui PET Bottles



For more information, see Reduce: Lightweighting

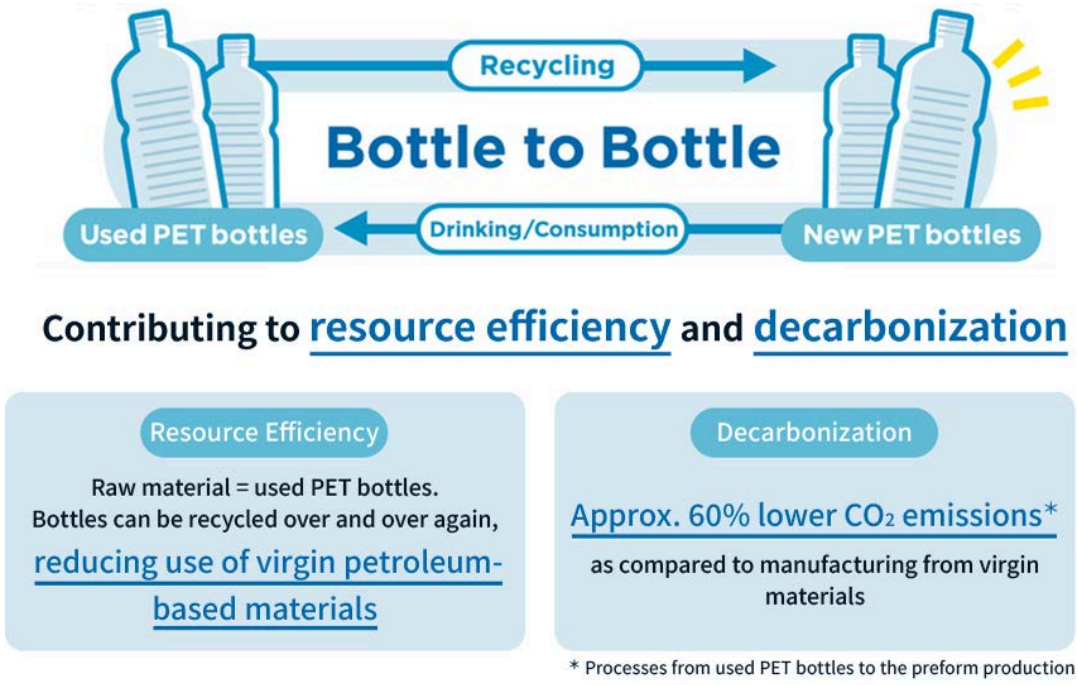
<Efforts Focused on Achieving 100% Sustainable PET Bottles by 2030>

Recycle: Promotion of “Bottle to Bottle” Horizontal Recycling

As the next step after lightweighting, and as a core activity toward achieving the 2030 goal of 100% sustainable PET bottles, is the "bottle-to-bottle" horizontal recycling process, where used PET bottles are transformed into new ones.
Starting with the introduction of 100% recycled PET bottle* in 2012—the first in Japan's soft drink industry—we have been advancing "bottle-to-bottle" horizontal recycling. We also developed the world’s first "FtoP direct recycling technology,"[*2] which reduces CO_2 emissions compared to conventional methods.

*1 Mechanical recycling

*2 Joint development among 4 companies including Kyoei Sangyo Co., Ltd



For more information, see Recycle: “Bottle to Bottle” Horizontal Recycling

<Efforts Focused on Achieving 100% Sustainable PET Bottles by 2030>

Bio: PET Bottles Using Bio-based Material

To achieve 100% sustainable PET bottles, Suntory Group prioritizes "bottle-to-bottle" horizontal recycling for its low environmental impact, aiming to repeatedly circulate PET bottles as resources in a sustainable society. However, in the broader beverage market, new resources are needed for recycling into products other than PET bottles and to accommodate market growth. Consequently, alongside promoting "bottle-to-bottle" recycling, we are developing bio-based PET bottles to supplement the shortage of recycled materials.
In 2013, we introduced PET bottles with 30% plant-based materials for "Suntory Natural

Water" in the 550ml size, and since 2023, this has been expanded to all 2L bottles as well. In 2013, we introduced PET bottles with 30% plant-based materials for Suntory Tennensui (mineral water)550-mL PET bottles, and since 2023, this has been expanded to all 2L bottles as well.

PET bottle using 100% plant-based material (right)
Current PET bottle (using 30% plant-based material) (left)

Suntory Group and the U.S. biotech venture Anellotech are collaborating on the development of 100% plant-based PET bottles. In 2019, the team succeeded in producing "paraxylene," a precursor that constitutes 70% of PET bottle material, from non-food plant-based sources (wood chips) that do not impact the food supply chain. By 2021, the team successfully developed prototypes of 100% plant-based PET bottles using this technology, marking a significant step toward commercializing PET bottles made entirely from plant-based materials without affecting the food supply chain.

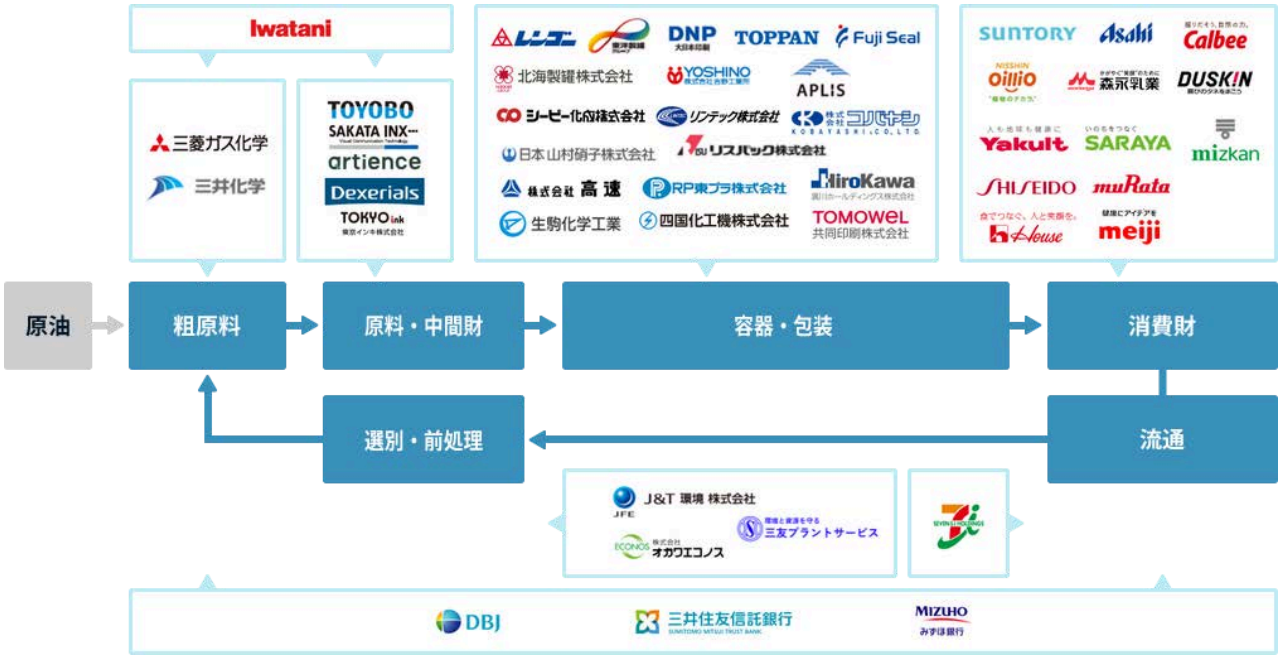
* Excluding some products for vending machines

Collaboration with Stakeholders

Initiatives for Recycling Used Plastic

R Plus Japan Ltd. was established as a joint venture by 12 companies (including Suntory Group) across the value chain for the purpose of contributing to resolving plastic-related challenges and achieving a sustainable society. Operations began in June 2020, and as of March 2025, the initiative has expanded to include 48 companies and is working with Anellotech to develop technologies to recycle used plastics to be recycled efficiently.
Currently in Japan, it is said that many plastics other than PET bottles are incinerated*. This new technology involves chemical recycling that directly converts general plastics, including PET bottles, back into basic chemicals (such as benzene, toluene, xylene, ethylene, and propylene) that serve as raw materials for plastics. This process requires fewer steps than traditional chemical recycling methods that go through an oilification process, helping to reduce CO_2 emissions and energy consumption. We expect that once established, this technology will allow for more efficient recycling of a larger amount of used plastics.
R Plus Japan aims to address global plastic issues by developing technology and implementing it socially through cross-industry collaboration.

* Includes thermal recovery (heat utilization), in which heat generated during incineration is recovered and utilized for power generation and heat supply



For more information, visit the R Plus Japan website

Social Activities

Suntory Group employees make an effort to change their lifestyle, promote sorting and collection, and actively participate in social contribution activities such as cleaning up rivers and beaches.
Suntory PepsiCo Vietnam Beverages in Vietnam conducted a beach cleanup near Hanoi in cooperation with Ocean Conservancy, a global marine nature conservation organization, with employees and their families.

Alliance Membership

Clean Ocean Materials Alliance (CLOMA)

Suntory Group has been a member of the Japan Clean Ocean Material Alliance (CLOMA) since its inception in 2019. CLOMA is a public-private alliance established at the call of the Ministry of Economy, Trade and Industry. Through this alliance, we aim to collaborate closely with government agencies and industries to develop and promote the use of alternative materials for plastics, and aim to build an efficient recycling system that meets the needs of each country through information dissemination and technical consulting services to overseas countries.

Global Plastic Action Partnership (GPAP)

In 2019, Suntory Group joined the Global Plastic Action Partnership (GPAP), a global alliance dedicated to solving environmental challenges caused by plastics.

* GPAP is a global alliance for a circular economy of plastics, created by a public-private partnership based on the World Economic Forum with the aim of solving environmental challenges caused by plastics. Its members include the governments of the United Kingdom and Canada, as well as a wide range of businesses, investors, experts, NGOs, and other citizen organizations. In addition to sharing information and best practices at the global level, it also engages in community-based project activities at the local level.

WWF Japan's Plastic Circular Challenge 2025*

In 2022, Suntory Group joined the Plastic Circular Challenge 2025 organized by WWF Japan (World Wide Fund for Nature Japan) with the aim of realizing a sustainable society.

* The Plastic Circular Challenge 2025 is a framework for companies to respond to WWF Japan's call for action to solve the problems of plastics. Participating companies have set a milestone year of 2025 as their commitment to containers and packaging and single-use plastics, and will promote activities based on a "Sustainable Circular Economy" approach.

Cans/Bottles/Barrels/Paper Packaging/Cardboard

Reduce: Lightweighting

Lightweighting in Cans

We are furthering the lightweighting of cans such as those used for beer and coffee, aiming to minimize resource usage while maintaining the usability for customers.
Initiatives for aluminum cans include reducing the lid diameter of beer cans in 2008 and thinning the body of beer and chu-hi cans in 2014. In addition, we have implemented thinner bodies for steel coffee cans, steadily advancing our efforts in lightweighting.

Boss Rainbow Mountain Blend
The Premium Malt's
-196°C Chu-Hi Strong Zero <Double Lemon>

Lightweighting of Glass Bottles

In 2014, the medium glass bottle of The Premium Malt's was lightened by approximately 10g, bringing its weight down to 460g. The body of the bottle where the label is applied was indented by 0.2 to 0.3 mm to

prevent scratches when bottles collide. Furthermore, we have improved the design to minimize chipping when opened with a bottle opener, enhancing the overall quality of the bottle.

The Premium Malt's medium glass bottle

Reducing the Weight of Cardboard

Suntory Group is working to reduce the environmental impact of beverage cartons by using short-flap cardboard cartons in cooperation with the industry. We began using these cartons in 2012 for non-alcoholic beverages in small PET bottles, achieving about a 20% reduction in paper use compared to traditional cartons. Short flap cardboard cartons have been used for beer and RTD products since 2019.

Short flap cardboard cartons that reduce cardboard usage on its sides

Reuse: Promoting Collection and Reuse of Containers

Reusing Glass Bottles and Barrels

In Japan, returnable containers, such as bottles and kegs, are widely used for beer and soft drinks intended for restaurants, and these are collected, cleaned, and reused through our own channels. Additionally, for glass bottles disposed of by liquor stores and restaurants, we established a dedicated collection route through specialist contractors in 1974, supporting collection through distribution channels. For one-way bottles, we utilize the effective sorting and collection routes provided by local municipalities.
Suntory Beverage & Food is retrieving certain glass bottles of the Schweppes and Orangina brands from restaurants and bars in Spain and France, where they are then washed and refilled.

Recycle: Promoting Container Recycling

The World's First 100% Recycled Aluminum Can

Suntory Spirits Ltd. launched the world's first 100% recycled aluminum can[*1] in its limited editions of The Premium Malt's CO_2 Reduction Can (350 mL, 5.5% ABV) and The Premium Malt's 〈Kaoru〉 Ale CO_2 Reduction Can (350 mL, 6% ABV) in 2022. This first of its kind 100% recycled aluminum can[*1] was jointly developed by UACJ Corporation and Toyo Seikan Group Holdings, Ltd. and emits 60% less CO_2 compared to when creating a regular aluminum can[*2].

*1 First as a commercialized SOT (Stay on Tabs) can which uses only recycled aluminum derived from canned materials (based on research by Toyo Seikan Group and UACJ, as of July 2022)

*2 350 mL beverage aluminum can produced by Toyo Seikan using UACJ aluminum material

First Adoption of Low-Environmental-Impact Can Lids "EcoEnd™" for Beer Products

We have adopted "EcoEnd™" can lids, which emit approximately 40%[*1] less greenhouse gases (GHG) during manufacturing, for some of our beer products. The production of new aluminum ingots uses large amounts of electricity, resulting in a larger GHG footprint and environmental impact than recycled aluminum. EcoEnd™ reduces the use of new aluminum ingots by 41% by increasing the percentage of recycled raw materials[*2] to 75% through adjusting the post-melting composition and developing manufacturing techniques. With these lids, we have been able to reduce GHG emissions by approximately 40% while ensuring the same quality as conventional beverage can lids.

*1 Compared with Toyo Seikan Co., Ltd. conventional products. Reduction per lid.

*2 GHG emissions are 3% of new aluminum ingots.

Shifting to Recycled Paper Containers

Conventional paper containers for alcoholic beverages have an aluminum-metallized coating inside to preserve product quality. However, separating the paper and aluminum for recycling has been difficult. New paper containers have improved recyclability through the use of non-aluminum transparent barrier coatings.
We have adopted highly recyclable paper containers for shochu, spirits, and wine. As of April 2024, we have switched approximately 90% of conventional paper containers for alcoholic beverages to the new containers.

Suntory Umeshu
Delica Maison

Introduction of Cans Using Green Aluminum*1

In January 2024 Suntory Spirits Ltd. introduced Green Aluminum*1 in its limited edition of The Premium Malt's (350ml, 5.5% ABV). The Green Aluminum used in this product was designed and produced in a joint effort among 4 other companies from different fields; Sumitomo Corporation, Sumisho Metalex Corporation, Kobe Steel, Ltd. and Daiwa Can Company. The Green Aluminum was allocated using a mass balance*2 method, and reduced CO_2 emissions by 25%*3 compared to conventional aluminum cans*4.

The Premium Malt's 350ml

*1 Aluminum produced using renewable energy sources with reduced CO_2 emissions

*2 Under the mass balance approach, for a product manufactured by mixing a material that has a specific characteristic with those without that characteristic, the characteristic can be allocated to a part of the output of the product in proportion to the amount of the material with the characteristic used in the production process.

*3 Verified and validated from a third-party impartial and neutral standpoint by DNV Business Assurance Japan K.K.

*4 350ml beverage aluminum cans published in the Japan Aluminum Association Beverage Aluminum Can Inventory Survey Report (July 2023)

Use of FSC®-Certified Cardboard

Suntory Group is adopts FSC-certified* paper packaging materials for its domestically produced products. For the beverage business, we completed the switch to FSC-certified cardboard packaging for all Suntory Tennensui (Mineral Water) brand products in 2018. For the alcoholic beverage business, we have adopted the use of FSC-certified cardboard packaging and six-pack paper packaging, and promote the use of FSC-certified paper packaging throughout the Group.

* Forest Stewardship Council (FSC) is an international organization that certifies timber produced from forests globally as well as the distribution and manufacturing processes of the cut timber. We are creating a mechanism for consumers to support responsible forest management by identifying wood produced from responsible forest management and their associated products, and delivering those products to consumers. This certification considers the environmental conservation of these forests and recognizes timber produced in an economical and sustainable manner which generates revenue for the local community.

Overview of Waste Management

Promoting Waste Reduction and Recycling

To contribute to the realization of a circular society, Suntory Group is working to reduce the output of by-products and waste and to achieve 100% resource recovery.
Suntory Beverage & Food Europe has set the target of zero waste from its factories and is engaging in waste-reduction and recycling activities.

With the target of reducing food waste from products by 50%, it is donating surplus products to charitable organizations to support people struggling with poverty as part of its efforts to achieve this target.

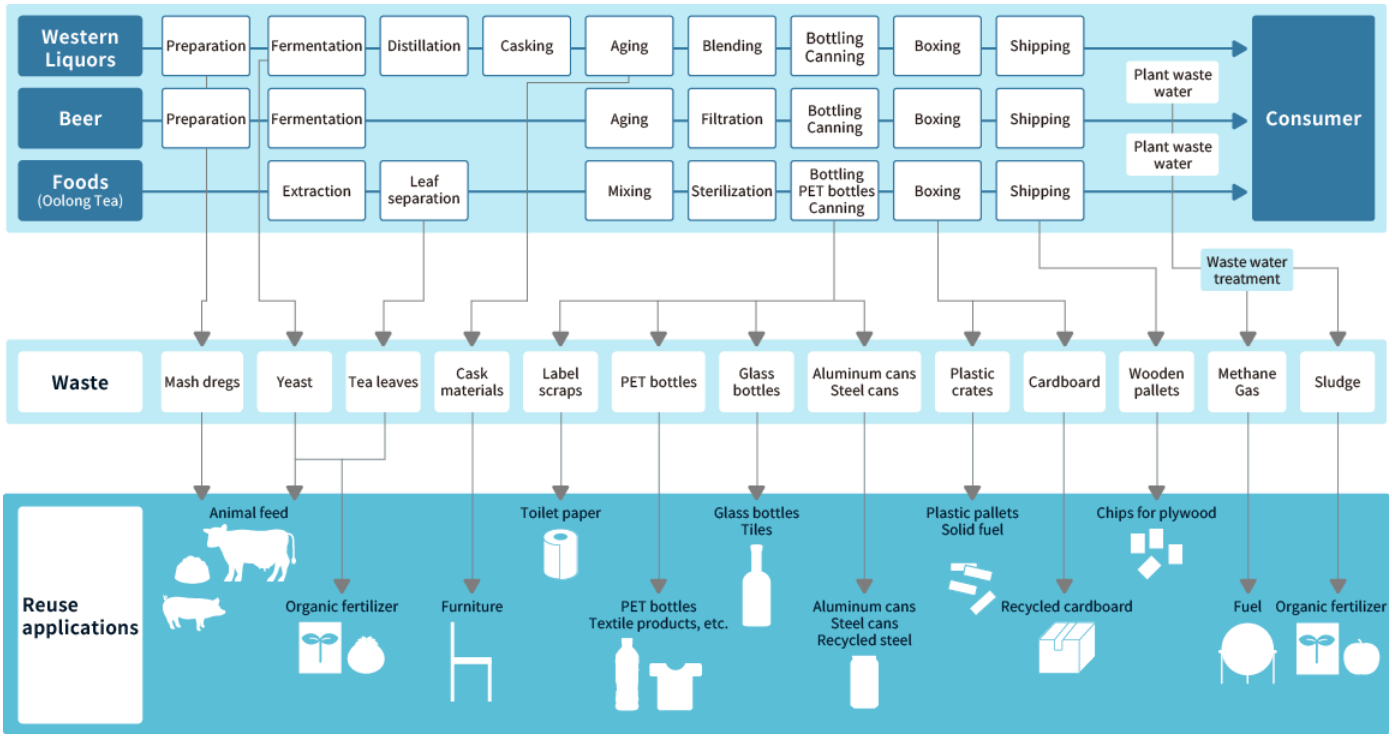
By-products and Waste Generation Performance

Area	Amount of discharge (thousand tons)		
	2022	2023	2024
Japan	230	271	251
Americas	541	427	301
Europe	144	166	139
Asia	54	32	32
Oceania	6	3	2
Africa	-	-	-
Total	975	900	724

* Data covers 27 production plants in Japan and 52 production plants overseas.

Recycling Rate of Japanese Plants and Flow for Reuse of By-products and Waste Generated in Each Production Process

	2022	2023	2024
Amount of discharge (thousand ton)	230	271	251
Amount recycled (thousand ton)	230	271	245
Recycling rate (%)	100.0	99.9	97.8



By-products and Waste Generation, Recycling Rate and the Purpose of Use for Recycled Products

Type of waste	Main Purpose of Use	2022		2023		2024	
		Generation (t)	Recycling Rate (%)	Generation (t)	Recycling Rate (%)	Generation (t)	Recycling Rate (%)
Vegetable (glycation, tea, coffee dregs, etc.)	- Animal feed - Fertilizer	167,855	100	203,440	100	158,404	100
Sludge (excess sludge, etc.)	- Fertilizer	28,396	100	30,444	100	28,472	100
Wood waste (cask, palletes)	- Furniture materials - Plywood raw materials	3,658	100	4,243	98	3,993	98
Glass and ceramic scrap	- Glass materials - Base course material	1,172	100	1,224	100	1,281	100
Paper scraps (cardboards, paper labels, etc.)	- Recycled paper - Cardboard materials	5,735	100	5,671	100	5,660	100
Plastic	- Palette - Solid fuel -	5,810	100	6,036	100	5,838	100

	Supplementary fuel						
Metal scraps (aluminum, steel)	- Aluminum - Steel ingredients	3,123	100	3,033	100	2,693	100
Other		13,979	100	16,863	100	44,196	87
Total		229,728	100	270,953	100	250,537	98

* Data covers 27 production plants in Japan

Applications of Recycled Materials

The by-products and waste generated by Suntory Group are being resourcefully reused for various purposes.

Barrel cabinet

Dining Set “TARURU”

Drink sampling tray made from barrel

Products in the line-up of “Suntory Barrel Story” created from whisky cask materials that have fulfilled their distillery role

For more information, see “Suntory Barrel Story”

Establishing a Circular Utilization Cycle for Food Waste – Izutsu Maisen Co., Ltd.

Izutsu Maisen Co., Ltd. is actively working to reduce and reuse food waste so as not to waste the precious gifts of nature. A symbolic effort in this regard is the establishment of a circular utilization cycle for bread crusts.
Izutsu Maisen cuts off the crusts of the bread when they make their popular fillet katsu sandwiches. These bread crusts are generally given to business operators who are able to recycle them as feed. Since 2012, recognizing that feed mixed with bread crusts is well-suited for pig cultivation, the company developed an original brand of pork called "Sweet Temptation." This pork is then used as a raw ingredient for tonkatsu and other products, thus creating a circular utilization system.

Original Amai-Yuwaku pork brand

Reduce: Lightweighting

Lightweighting of PET Bottles

The 550ml Suntory Tennensui (Mineral Water) PET bottle (excluding products for vending machines) was developed by Suntory and is the lightest such bottle made in Japan* (11.9 g). Compared with PET bottles from 2000, bottle weight has been reduced by around 50%. Additionally, with 30% plant-based materials used, the usage of virgin petroleum-based materials has decreased by over 60% per bottle since 2000. Similarly, for the 2L bottles, bottle weight has been reduced by around 50% and includes 30% plant-based materials, achieving a reduction of virgin petroleum-based material usage by more than 60% per bottle compared to 2000.

* PET bottles for mineral water (500 ml to 600 ml) in Japan. As of April 2025

Change in Weight of 550ml Suntory Tennensui PET Bottles[*1]

*1 500-ml capacity through 2009

Change in Weight of 2L Suntory Tennensui PET Bottles

Thinnest Roll Label[*1] for PET Bottle Beverages in Japan

We are also working to reduce environmental impact by thinning the labels on PET bottle products. We achieved the thinnest PET bottle roll label in Japan at 16 μm[*2] in 2012. We are using an even thinner label of 12 μm for the 2L and 550ml PET bottles of Suntory Tennensui in 2014 and now use these labels on all our products with roll labels. This has allowed us to reduce CO_2 emissions by 25%[*3] compared to the conventional (16 μm) labels.

*1 Labels that peel off from the glued area instead of peeling off at the perforations

*2 1/1,000 mm

*3 Reduction rate in the film (label) manufacturing process

Japan's thinnest roll label at 12μm thickness

Introduction of water-based flexographic printing and water-developed flexo plates to reduce CO_2 emissions during label manufacturing

Suntory Group is advancing the transition to water-based flexographic printing for the manufacturing of labels for a wide range of products, including Suntory Green Tea Iyemon, Suntory Tennensui , Suntory Oolong Tea, GREEN DA・KA・RA, and GREEN DA・KA・RA Barley Tea, reducing CO_2 emissions during label production by more than half compared to traditional oil-based gravure printing. Moreover, in 2024, the water-developed flexo plates, which can reduce CO_2 emissions by about 30% during label plate production, were introduced for the first time*1 in the domestic beverage industry for the labels of Suntory Tennensui 550ml PET bottles manufactured at the Suntory Kyushu Kumamoto Plant.

*1: Based on our research

Lightest PET Bottle Caps in Japan

We are also reducing the environmental impact of our PET bottle caps. Since 2016, we have adopted 1.85g bottle caps, which are the lightest in Japan*1 and use 30% plant-based material, for Suntory Tennensui. This innovation reduces the use of petroleum-based material by around 35%*2 and decreases CO_2 emissions by around 27% compared to conventional PET bottle caps.
In addition, we use recycled pellets from used caps as part of seed pots for Suntory Flowers.

*1 As of April 2025

*2 Per bottle of the Suntory Tennensui natural mineral water (550 ml)

Development of PET Bottles in the Alcoholic Beverage Business

We are taking great advantage of the technology cultivated in our soft drink business in our alcoholic beverage business. Suntory Spirits Ltd. has launched the 4L PET bottle weighing 110g, which is the lightest in Japan, for whisky products such as Kakubin, Torys and other alcoholic products starting from June 2016. By making it up to 18% lighter than the conventional 134g or 120g, the use of PET resin is reduced, resulting in an annual CO_2 emissions reduction of approximately 460 tons(17%)*. We have also removed the grip used on conventional PET bottles and adopted a new deep grip section in the center of the bottle for ease of use in collaboration with the PET bottle manufacturer.

* Based on our calculations

Old 4L PET bottle and
new lightweight 4L PET bottle

Development of World's Lightest* Heat-resistant PET Bottle in Southeast Asia

The Japanese manufacturing technology and design capabilities for reducing weight of PET bottles have been used to introduce lightweight PET bottles in Group companies in Europe and Asia. In 2020, we succeeded in developing the world's lightest* heat-resistant PET bottle weighing 15g that also pursues functionality, versatility, and design. This heat-resistant PET bottle utilizes technology that prevents deformation of the bottle by dropping nitrogen to create positive pressure.
We have introduced this bottle to Suntory PepsiCo Beverage (Thailand) and Suntory PepsiCo Vietnam Beverage (Vietnam). We also introduced 100% recycled materials for these bottles from 2023.

* In the 450-ml class of heat-resistant PET bottles (as of April 2025, according to our own research)

Lightest heat-resistant bottle with liquid nitrogen injection in Southeast Asia

Introduction of In-house PET Bottle Production Technology at Suntory Global Spirits

Suntory Global Spirits introduced in-house bottle production technology for the first time for large 1.75L spirits bottles in 2017. This in-house production not only achieved a 14% reduction in bottle weight but also significantly improved transport efficiency by shifting from bottle transportation to preform transportation, greatly contributing to reducing environmental impact.
We introduced even lighter bottles in 2023, and reduced the bottle weight by approximately 26% compared to before the introduction of in-house production in 2017. We are also considering using this in-house bottle production technology to further development across other sizes, such as 100ml to 1L.

Initiatives to Reduce Weight at Suntory Beverage & Food Europe

Suntory Beverage & Food Europe is also working on reducing the weight of other packaging materials such as cardboard and metal. In Spain, the company changed the structure of the cardboard ring used to bundle cans (from PremCollar to CanCollar), reducing the amount of

cardboard used by 231 tons and cutting annual CO_2 emissions by 226 tons. The 330ml steel can and 250ml can have also been changed to aluminum, achieving significant weight reduction.

back to previous page

Recycle: Promote “Bottle to Bottle” Horizontal Recycling

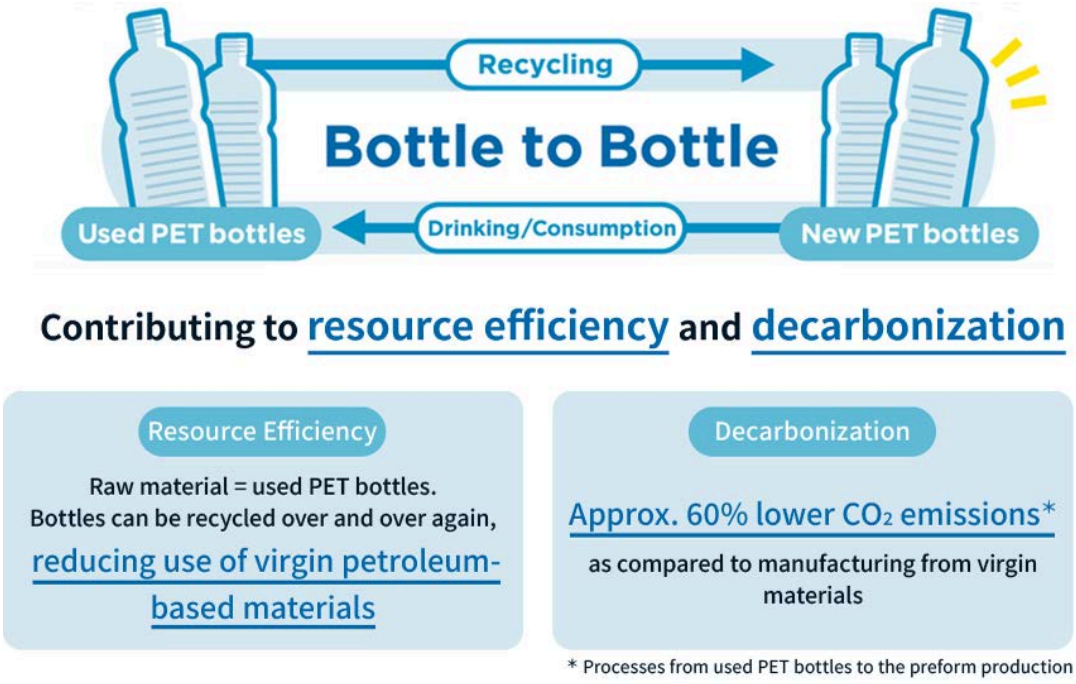
Initiatives in Japan

The Value of “Bottle to Bottle” Horizontal Recycling and Our Work to Achieve It

“Bottle to Bottle” Horizontal Recycling

“Bottle to bottle” horizontal recycling refers to recycling used PET bottles into new ones. PET bottles are resources that can be recycled many times, which can help reduce the use of virgin petroleum-based materials and CO_2 emissions. “Bottle to bottle” horizontal recycling through mechanical recycling* is a recycling method with low environmental impact (in terms of CO_2 emissions during processes from raw material procurement to preform production).).

* Mechanical recycling: A method in which recycled resin—obtained by crushing, washing, and otherwise processing used PET bottles into a raw material to be used for new PET bottles—is further processed under high temperature and reduced pressure for a certain period of time to remove impurities in the recycled material and make PET resin of suitable quality for beverage containers.



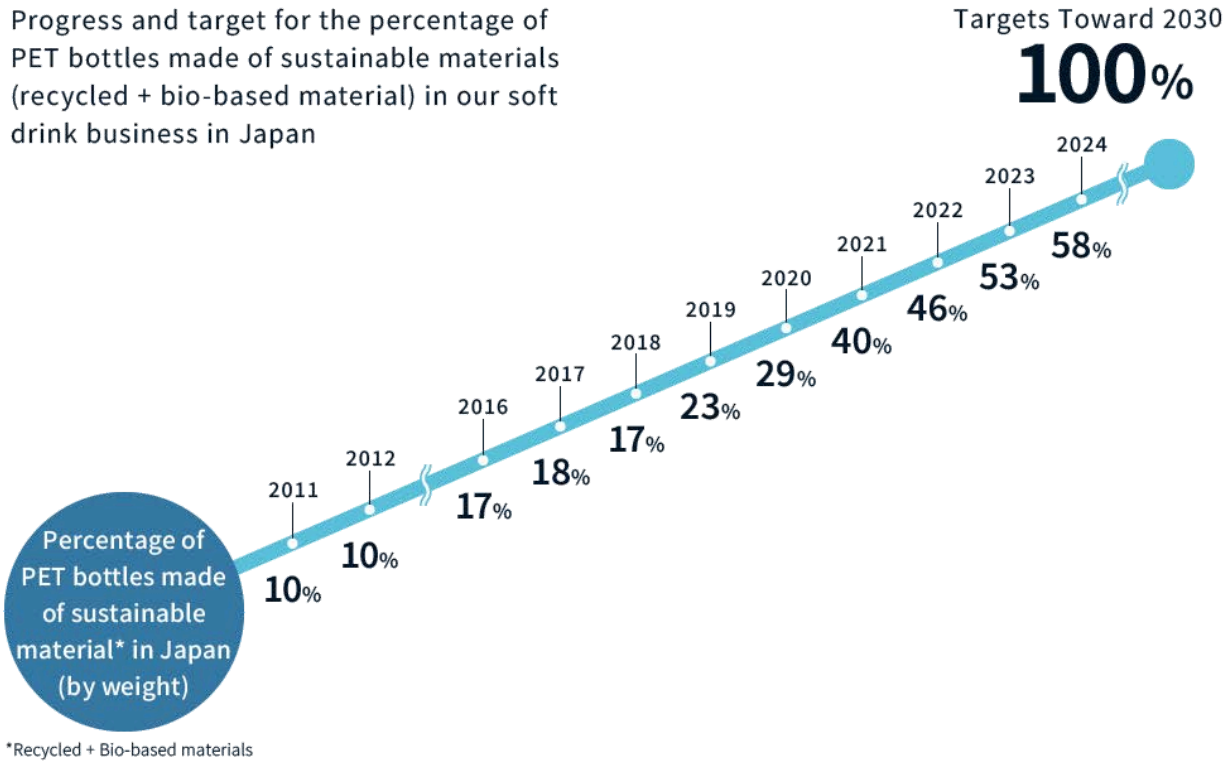
Efforts to Create 100% Sustainable PET Bottles

For over a decade, Suntory Group has been pioneering efforts toward a sustainable society by collaborating with partner companies on horizontal recycling, transforming used PET bottles into new beverage bottles. In 2011, In collaboration with Kyoei Sangyo Co., Ltd., we established the Japanese soft drink industry’s first “bottle to bottle” mechanical recycling system. The following year, in 2012, we launched the industry’s first 100% recycled PET bottle[*1]. This marked the beginning of a series of technological innovations, including the development of the world’s first F-to-P direct recycling technology,[*2] which reduces CO_2 emissions compared to conventional alternatives. With these and other initiatives, we have been furthering technological innovation and proactively commercializing and promoting “bottle to bottle” horizontal recycling over many years.

In 2019, we also established the Suntory Group Plastic Policy. In it, we set a target of achieving 100% sustainable PET bottles, switching all PET bottles used globally to 100% recycled or bio-based materials, eliminating the use of virgin petroleum-based materials by 2030. We are engaged in various initiatives to achieve this. By 2024, we expanded our use of sustainable materials (recycled or bio-based materials) to account, by weight, for 58% of all PET bottles for our soft drink business in Japan.

*1 Mechanical recycling

*2 Joint development among four companies including Kyoei Sangyo Co., Ltd.



Active Introduction of Recycled PET Bottles within the Group

To achieve our 2030 target of making our PET bottles 100% sustainable, we are moving forward with the adoption of recycled materials.
In Japan, we have introduced 100% recycled PET bottles for all GREEN DA-KA-RA Yasashii Mugicha (680ml, 600ml), Yasashii Rooibos (600ml), and Yasashii Corn-cha (600ml) products. Many of our other products, including Craft Boss and Iyemon, also use 100% recycled PET bottles. We have adopted the logo mark “Bottles are resources! Towards a Sustainable Bottle” on all PET bottled products* to communicate to consumers that PET bottles are a resource that can be recycled many times. In addition to our efforts within our soft drink business in Japan, all of the 720ml PET bottles used in our wine business in Japan are now 100% recycled bottles. Going forward, we will continue to pursue these efforts Group-wide.

* Excluding label-less products

Yasashii Mugicha 680ml
Yasashii Rooibos 600ml
Yasashii Corn-cha 600ml
Delica Maison Red 720ml

Logo “Bottles are resources! Towards a Sustainable Bottle”

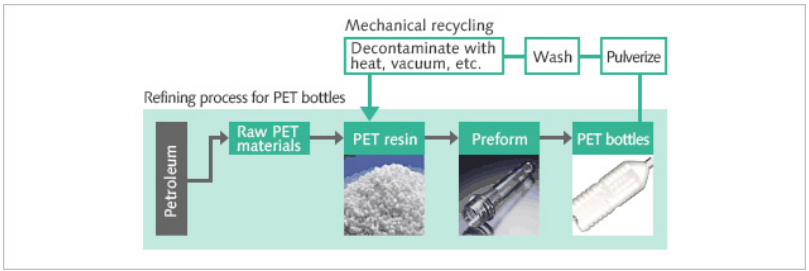
Promoting Horizontal Recycling with Local Governments and Corporations

With the aim of realizing a circular society, Suntory Group is committed to “bottle to bottle” horizontal recycling—in which used PET bottles are recycled into new PET bottles—in cooperation with local governments and companies.
We have concluded “bottle to bottle” horizontal recycling agreements with distribution companies, commercial facilities, and local governments, under which we advance “bottle to bottle” horizontal recycling that takes used PET bottles collected at stores and other locations in the wider community and transforming them into new PET bottles. In addition, we offer educational programs about PET bottle recycling at elementary and middle schools within the municipalities where we have concluded agreements, as well as holding consumer awareness events at commercial and similar facilities.

Development of the “Bottle to Bottle” Horizontal Recycling System

Establishment of a Mechanical Recycling System

In 2011, in collaboration with Kyoei Sangyo Co., Ltd., Suntory Group established the Japanese soft drink industry’s first “bottle to bottle” mechanical recycling system[*1] and, in 2012, published a joint research paper[*2] on the safety evaluation of recycled PET bottles. Since its introduction in 2011, this system has received several environmental awards and has been recognized as a pioneering example of sustainable resource circulation.



“Bottle to bottle” horizontal recycling using mechanical recycling method makes it possible to recycle PET bottles as a resource over and over again, without using virgin petroleum-based materials. In addition, it reduces CO_2 emissions by approximately 60%[*3] relative to manufacturing PET bottles from virgin petroleum-based materials.
Of the PET bottle recycling systems that have been adopted in Japan, mechanical recycling is the most efficient method in terms of costs and has the lowest environmental impact (CO_2 emissions).[*4] While the recycling process may add some color to the bottles, it does not affect the quality or safety of the containers in any way.

*1 Mechanical recycling system: A method in which recycled resin—obtained by crushing, washing, and otherwise processing used PET bottles into a raw material to be used for new PET bottles—is further processed under high temperature and reduced pressure for a certain period of time to remove impurities in the recycled material and make PET resin of suitable quality for beverage containers.

*2 Japanese Journal of Food Chemistry and Safety, Vol. 19 (1), 2012, pp. 7–13

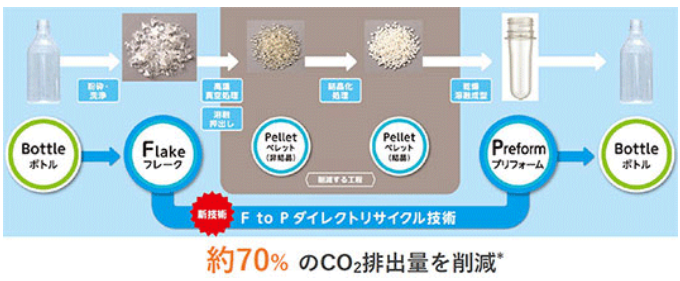
*3 Processes from used PET bottles to the preform production

*4 Based on our research

Adoption of F-to-P direct recycling technology

In 2017, we collaborated with Kyoei Sangyo Co., Ltd. and overseas machinery manufacturers (EREMA in Austria and SIPA in Italy) to develop F-to-P direct recycling technology, which promises to further reduce our environmental impact. We began production in the fall of 2018. F-to-P direct recycling technology is a technology that can directly manufacture preforms after melting and filtering flakes made from collected PET bottles that have been crushed and washed at high temperatures. The F-to-P direct recycling technology can reduce CO_2 emissions by 70%* compared with PET bottles made of virgin petroleum-based materials.

Example products that use F-to-P direct recycling technology



F-to-P direct recycling technology process

* Processes from used PET bottles to the preform production

Awareness-Raising Activities to Promoting “Bottle to Bottle” Horizontal Recycling

Engaging in Awareness-Raising Activities

To realize a sustainable society, Suntory Group has been working to promote understanding of horizontal recycling initiatives and encourage proper sorting of used PET bottles by engaging in events such as seminars for external audiences. In 2021, we signed an agreement with Waseda University on the realization of a resource-circulating society, and we are also making efforts for the next generation. At elementary and junior high schools in municipalities with which we have concluded bottle to bottle" horizontal recycling agreements, we offer educational programs on the importance of promoting "bottle to bottle" horizontal recycling and how to properly sort PET bottles, providing an opportunity for students to think about recycling and resource circulation. At companies with which we have concluded these agreements, we also hold educational seminars for employees and events for their families.

Communication with Consumers

Since 2022, driven by the desire for people to view PET bottles not as garbage but as a resource, and of recycling bins not as garbage bins but as something more like postal boxes that "deliver" the resource to the next person, we have been holding "PET bottle post" events and proactively communicating with consumers and engaging in awareness-raising activities on the theme of proper sorting not only at home but also when out and about.

PET bottle post

Promoting Horizontal Recycling Through Industry Cooperation

Since 2022, we have been rolling out installation of recycling boxes with industry-standard specifications in outdoor areas, where PET bottles are often not properly sorted from other waste.
New recycling boxes with innovations such as a downward-facing insertion slot have been shown to reduce the amount of foreign matter put into them. This improves the quality of collected PET bottles and contributes to "bottle to bottle" horizontal recycling. Using recycling boxes with industry-standard specifications will improve efficiency for vending machine operators and recycling processes and promote PET bottle resource circularity.

For more information, visit the Japan Soft Drink Association website

"Bottle to Bottle" Horizontal Recycling Progress Through Packaging Improvements

In order to further promote "bottle to bottle" horizontal recycling, we believe that making it easy for consumers to sort their PET bottles from other waste is an important factor.
Suntory Group therefore introduced label-free bottles in 2020 and have adopted them for flagship products including the Suntory Tennensui (Mineral Water), Craft Boss, and Iyemon brands. This move eliminates the task of removing bottle labels, making it easier to prepare them for recycling. We hope this will contribute to further encouraging "bottle to bottle" horizontal recycling.

In addition, we developed and launched in April 2023 a new 2L PET bottles for Suntory Tennensui that is easy to crush down to approximately one-sixth of its original size when empty. This new bottle resolves frustrations related to storing empty PET bottles in the home until recycling collection day, such as bottles taking up space or popping back to their original size even after crushing. By making it a more satisfying process to engage with, we

also hope to encourage customers to remove caps and labels when they sort their bottles for recycling, leading to higher-quality PET bottle recycling.

Initiatives Outside Japan

Introducing Recycled PET Bottles Overseas

Suntory Beverage & Food Europe (SBFE)—which operates principally in the UK, France, and Spain—has also been pursuing initiatives aimed at making its PET bottles 100% sustainable by 2030. MayTea and Pulco introduced 100% recycled PET bottles in France in 2021, following the example of Ribena, which had already done so in the UK. In 2022, Suntory Beverage & Food Europe has started 100% recycled PET bottles in its Lucozade Sport brand in the UK and Ireland. These initiatives allowed us to increase the proportion of recycled plastic (rPET) used in SBFE PET bottles from 36% in 2022 to 44% in 2023.
In addition, Suntory Beverage & Food Asia Pacific, which operates principally in Vietnam and Thailand, introduced 100% recycled PET bottles in Vietnam in 2022 (the first such bottles used by Suntory Group in Asia) and in Thailand in 2023 (a first for the country).

Ribena's 100% recycled PET bottle

Development of New Technology to Drive Horizontal Recycling

SBFE is participating in a consortium with green biotech company Carbios. In June 2021, the consortium successfully developed the world's first PET bottle of food-grade quality made from chemical recycling using enzymatic technology*. A prototype was made for SBFE's Orangina brand, and a Japanese technical team helped test aspects of the prototype that Carbios could not manage, including the safety and ease of manufacturing the bottle. In September 2021, Carbios opened its first demonstration plant with the goal of launching commercial plant operations in 2027. This innovative technology breaks down polyethylene terephthalate (PET) into its building blocks using a special enzyme that only breaks down PET plastic to create the raw materials of PET bottles that can then be reused. This technology is expected to enable an end recycled product on par with virgin PET, even when using source PET bottles not optimally separated from other waste or including a high proportion of colored PET bottles (common in Europe).

* Based on our research

back to previous page

Pollution Prevention and Chemical Substance Management

Our Policies and Approach

Many of Suntory Group products use agricultural products and water as primary ingredients, suggesting a lower risk of environmental pollution from chemicals compared to other industries. However, the production process does involve emissions from boiler combustion and the use of chemicals for equipment cleaning and sterilization, which could pose a risk to the surrounding environment. Therefore, we prepare for all types of abnormalities and emergencies by implementing response measures, conducting regular inspections of equipment and facilities, and strengthening safety education for employees. These efforts enhance pollution prevention from both a hardware and software perspective.

Promotion Structure

Suntory Group's Global Risk Management Committee identifies and discusses important risk factors, including various sustainability-related issues, and monitors the status of responses.
Additionally, for sustainability-related issues, the Global Sustainability Committee (GSC) formulates strategies to promote sustainable management, promotes initiatives, and confirms progress.

For more information on the promoting structure, see Environmental Management.

Our Initiatives

Preventing Air Pollution

Suntory Group is committed to reducing air pollutant emissions by promoting cleaner energy sources and advanced exhaust gas treatment. Specifically, we are working to reduce SOx and NOx emissions by converting to boiler fuel, sulfur-free natural gas and carbon-neutral fuels, and using low-NOx burners. Each plant has established in-house voluntary standards that stricter than legal requirements and constantly monitors air pollutants such as sulfur oxides (SOx) and nitrogen oxides (NOx) in exhaust gas.

Please see the Data List for NOx and SOx emission results.

Preventing Water Pollution

For water discharged into the environment, each plant sets its own water quality standards that are stricter than the legal requirements, and uses advanced wastewater treatment facilities and rigorous management to maintain these standards.

Please see Performance Data for BOD and COD wastewater discharge results.

Preventing Soil Pollution

Suntory Group's plants use chemical substances for cleaning equipment and other purposes. These substances are strictly controlled to prevent leakage. However, in the unlikely event of a leakage of cleaning agents or chemicals, each plant has installed dikes around chemical tanks and conducts periodic inspections to prevent soil contamination.

Measures for Alcohol Evaporation

Some amount of alcohol vaporizes from the cask during the storage of whisky. We place collection equipment to prevent any evaporated alcohol from escaping the plant. In addition, regular monitoring (concentration measurement, etc.) is done to confirm if alcohol evaporation can be reduced.

Chemical Substance Management

Suntory Group manages chemical substances in accordance with Pollutant Release and Transfer Register (PRTR) Law, Poisonous and Deleterious Substances Control Act, Fire Service Act and other related laws.

Waste Management

In terms of proper waste management, we are promoting the digitization of waste manifests to ensure compliance with the manifest system and strengthen centralized management of waste information. In addition, we continue to implement training programs for production sites, sales offices, cultural sites, head office functions, and Group companies to improve their knowledge and skills in waste management through methods such as group training, on-site visits, and role-playing to ensure the proper disposal of waste. We call such a lectures “Waste management seminars” and “Surveillance seminars at waste treatment facility” to improve the knowledge and audit ability on waste management. We continue initiatives for thorough implementation of proper disposal of waste.

Management of PCB Disposal

We store PCB wastes appropriately and report their storage status to the local government based on “Law Concerning Special Measures Against PCB Waste.” We have registered to Japan Environmental Storage & Safety Corporation (JESCO) as a subcontractor for the disposal of PCB and began disposal of equipment that includes PCB from 2007. Status of the use and storage of equipment that includes PCB is as follows.

Quantity of equipment that uses PCB (as of December 2024)

	Stored	Used	Total owned
Capacitor	0	0	0
Transformer	0	0	0
Stabilizer for lighting device	1	0	1

Claims, Accidents and Lawsuits

Suntory Group implements thorough environmental risk management. In the most recent fiscal year (2024), we had no major environmental accidents, lawsuits, or administrative actions.