Value Chain Overview and Linkage with Significant Risks and Opportunities

The Kirin Group will actively promote initiatives to address various social issues in order to connect the desire to enjoy and pass on the bounty of the abundant earth into the future together with all people involved in the value chain. In order to realize the "Kirin Group's Environmental Vision 2050," which aims to "Enrich the Earth through Positive Impact," we identify risks and opportunities at each stage of our value chain and implement response strategies to ensure the steady achievement of our targets. (For details on the "Kirin Group's Environmental Vision 2050", see (→P.11).)

Research & Development > Procurement > Manufacturing > Supply and Logistics > Sales

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Sustainable use of biological resources / Sustainable use of water resources / Sustainable recycling of containers and packaging / Overcoming climate change

Activities in Response to Significant Risks and Opportunities

Physical Risk/Chronic

Procurement

Impact of climate change and nature loss on agricultural products [medium to long Term]

Due to global warming and reduced diurnal temperature variation may significantly reduce yields of raw agricultural commodities, which could lead to higher procurement costs. Through water risk and water stress assessments in sourcing regions for agricultural raw materials, we have identified serious drought and flood risks that may adversely affect agricultural production. Furthermore, heavy rainfall associated with climate change and surrounding land development driven by economic growth have led to soil erosion and soil runoff in agricultural areas. Along with these factors, changes in the state of nature—such as land productivity declines caused by soil degradation and the reduction of pollinators—may also result in lower yields of agricultural raw materials and increased procurement costs.

Response strategy

▶Support for farms to acquire certification for sustainable agriculture (adaptation measures)

To secure climate-resilient sourcing regions and mitigate risks from climate change and nature-related changes, we will continue to support the adoption of sustainable farm certification. In addition, through training on disaster risk management and cultivation practices that maintain yields while reducing the use of agrochemicals such as pesticides and fertilizers—we aim to reduce the impacts of environmental change on raw agricultural products and lower the environmental footprint of farming.

▶Development of heat and drought tolerance technologies for climate change adaptation (adaptation measures)

To enable the stable production of hops with strong tolerance to environmental stresses such as heat and drought, associated with climate change, we will advance breeding and cultivation technologies.

▶Accumulation of mass plant propagation technologies (adaptation measures)

We will continue to expand applications and accumulate knowledge of the "mass plant propagation technologies" developed by the Kirin Central Research Institute, to address yield risks from climate change. We expect its use when heat-tolerant varieties become commercially available. Given the difficulty of envisioning a beer business independent of key crops such as barley and hops, we will advance breeding technologies adapted to warming, while contributing to stable sourcing and the sustainability of agriculture.

▶Development of alternative raw materials and new production technologies (adaptation measures)

Barley, a vital agricultural input for our core product, faces the risk of yield declines due to climate change. Accordingly, advancing technical expertise to enable beer-like flavors without reliance on barley is regarded as a potential adaptation measure. In addition, we assess and analyze the medium- to long-term impacts of climate change on crop yields by region for raw materials used for the isomerized sugar needed in beer-flavored beverages.

▶Introduction of perennial grains into annual crop production systems (adaptation measures)

In many wheat-producing regions of Australia, intensive cultivation of annual crops has negatively affected water quality and soil health. By integrating perennial grains into the production system in these areas, we aim to simultaneously achieve ecosystem restoration and productivity improvement.

▶GHG emission reduction (mitigation measures)

To minimize the risk of declining agricultural yields, we are working to reduce GHG emissions across our value chain as a climate change mitigation measure. In March 2026, we renewed "SBT Net-Zero certification." As part of this recertification, we established a new FLAG (Forest, Land and Agriculture) target, which focuses on reducing emissions associated with deforestation and land use change, and aim to achieve a 33% reduction by 2030 compared with 2019 levels. In addition we aim to achieve net-zero by 2050, meet the "SBT 1.5°C" target by 2030, and 100% renewable electricity by 2040 under RE100.

▶Risk assessment of water and land use based on the SBTN methodology

We support the initiatives of the Science Based Targets Network (SBTN) to promote the establishment of integrated, science-based targets for nature (SBTs for Nature), which address a broad range of aspects of nature, including climate, freshwater, land, oceans, and biodiversity. In line with this initiative, we are working to apply the methodologies presented in the SBTN Technical Guidance.

Activities

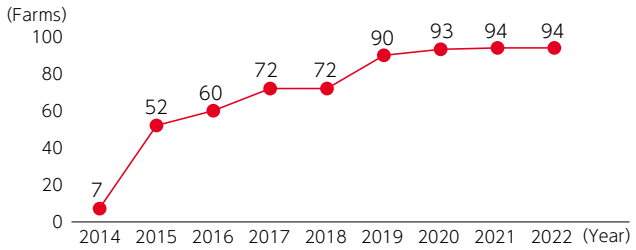
▶Support for obtaining Rainforest Alliance certification for raw agricultural product farms

Rainforest Alliance (RA) certification is an international system that verifies agricultural producers and businesses meet stringent standards for sustainable agriculture and forest management. These standards encompass environmental protection, human rights, worker welfare, and community well-being. Certified farms and businesses are authorized to use the RA frog seal, a symbol of ecosystem health indicating that products are produced using sustainable practices. The Kirin Group supports RA certification for tea plantations in Sri Lanka, a key sourcing region for "Kirin Gogo-no-Kocha," and for coffee farms in Vietnam, which supply approximately 30% of our coffee beans. Certification provides third-party recognition of environmental and social practices, which enhances product value. It contributes to improved livelihoods and educational opportunities in local communities. To promote sustainable sourcing, we have expanded the number of farms supported for certification as a key management indicator. To date, with our support, 94 large tea estates and 4,804 smallholder tea farms, as well as 659 coffee farms (including transitions from UTZ certification), have obtained certification. In August 2021, we also launched a year-round product, "Kirin Gogo-no-Kocha Straight Tea," using tea leaves sourced from certified plantations.

Activities in Response to Significant Risks and Opportunities

Physical Risk/Chronic

Number of Large Farms Obtaining Certification in Sri Lanka



Supporting Growers to Obtain Rainforest Alliance Certification

▶Development of heat and drought tolerance technologies for climate change adaptation (adaptation measures)

The Kirin Group's Institute for Future Beverages and CULTA, a University of Tokyo spinoff, are conducting joint research to enhance the heat tolerance in hops and enable climate-resilient production. The establishment of indoor cultivation technology now allows multiple harvests a year under controlled conditions, compared to conventional annual evaluations tied to harvest cycles. As heat-tolerant hop varieties are commercialized, integration with mass propagation technologies is expected to further accelerate R&D to address yield and quality risks, contributing to sustainable hop production.

In 2025, the Institute for Future Beverages and Kirin Central Research Institute developed a technology to induce heat and drought tolerance to hop seedlings. By applying a six-week heat treatment at 25°C during liquid culture propagation, this method enables the enhancement of stress tolerance without genetic modification, while maintaining the intrinsic flavor profile of hops. Laboratory and field trials in Iwate Prefecture confirmed that treated seedlings showed higher plant height and chlorophyll content, as well as a tendency toward increased cone yields compared to untreated seedlings. This technology is expected to support stable hop cultivation and sourcing under climate change, contributing to the sustainable supply of brewing ingredients.

▶Utilization of plant mass propagation technology

To address the risk of reduced agricultural yields due to climate change, rapid and large-scale propagation technology is required when climate-resilient, heat-tolerant varieties are commercialized. Kirin Central Research Institute has developed proprietary "bag-type culture vessel technology," enabling the mass production of disease-free seedlings and genetically identical (clonal) plants, with multiplication rates ranging from tens of thousands to hundreds of thousands, depending on the plant species. The plants are grown in small plastic film bags with aerated nutrient solutions for growth, allowing more efficient use of water resources compared to soil-based cultivation and enabling stable production even in water-stressed regions. In combination with the deployment of heat-tolerant varieties, this technology is expected to contribute significantly to establishing a sustainable and resilient agricultural supply system.

▶Possession of technology for achieving beer flavor using soybeans

"Kirin Nodogoshi Nama," a beer-flavored alcoholic beverage sold by Kirin Brewery in Japan, is brewed using isomerized sugar and soybeans instead of barley. By possessing brewing technology that reproduces beer flavor with raw materials expected to have a stable supply, we can address the risk of reduced barley yields. Although climate change is expected to impact soybean yields differently across regions, the overall global yield is not expected to change significantly.

Research and analysis on isomerized sugar used to beer-flavored beverages has shown that the probability of a simultaneous 10% yield decrease in corn in the four major production regions (USA, China, Brazil, Argentina) exceeds 80% by the end of the century under a 4°C scenario, and about 10% around 2050 under a 2°C scenario. However, for other agricultural products that can be used as raw materials for isomerized sugar, such as sugarcane and potatoes, the yield is not expected to decrease globally, despite regional variations. Based on these results, we believe that combining production regions, crops, and brewing technologies will allow us to respond to medium- to long-term yield fluctuations under climate change, and that brewing technology that does not rely on barley is effective as an adaptation measure to address physical risks.

▶Introduction of perennial grains into annual crop production systems

The "The Good Grain" initiative, in collaboration with Sustainable Table and Stone & Wood, explores the potential for ecosystem restoration and productivity improvement by introducing perennial grains (Mountain Rye) into annual crop production systems. Largescale cultivation and malt production are being promoted in demonstration fields, and new uses in beer brewing are being tested. Additionally, symposiums involving the supply chain, agricultural industry, and brewing industry are held to share results and challenges.

▶GHG emission reduction

We will implement GHG emission reductions across the entire value chain, from product development to sales (details on GHG emission reduction initiatives (→P.53-57)).

▶Risk assessment of water and land use based on SBTN methodology

The Kirin Group is working toward target setting in line with SBTN Technical Guidance v1.1. In 2025, based on the methodologies outlined in Steps 1 and 2, we conducted a risk assessment and prioritization related to water resources and land use across our upstream value chain and our own production sites (Details (→P.22)).

Activities in Response to Significant Risks and Opportunities

Physical Risk/Chronic

Manufacturing

Impact of water pollution on production [medium to long Term]

At sites located in regions with a high risk of water pollution, increased investment may be required to enhance or upgrade water purification and treatment facilities. In addition, in water risk assessments conducted for our production sites, water quality is positioned as one of the key evaluation factors, and priority sites with higher levels of risk have been identified.

Response Strategy

▶Understanding the actual situation through risk assessment

In water risk assessments targeting our production sites, we include water quality as the evaluation axis to identify high-risk sites and consider appropriate responses measure.

▶Advanced water saving technologies (adaptation measures)

We aim to reduce water use to lower the volume required for wastewater treatment and water quality management. Based on water stress and water risk assessments, we will promote appropriate water reduction measures tailored to country- and region-specific water stress levels, grounded in scientific evidence.

▶Minimization of wastewater impact (mitigation measures)

Through the establishment and proper operation of an environmental management system, we comply with environmental regulations, including water pollution prevention laws in each country. In addition, we set voluntary standards that exceed legal requirements in order to minimize the impact of wastewater.

Activities

▶Understanding the actual situation through risk assessment

In 2025, we assessed water risks at 64 of our production sites. Basin risk assessments included water quality as an evaluation axis to identify priority sites requiring focused action. Going forward, we will advance on-site assessments at these priority sites and implement measures to address water pollution risks (Details →P.23).

▶Advanced water saving technologies

The Kirin Group is advancing the construction and expansion of water purification and reuse facilities at breweries located in water-scarce areas. In 2024, Lion's Tooheys Brewery introduced a reverse osmosis water recycling plant, enabling the reuse of approximately 270 million liters of water annually and thereby reducing water withdrawals. In addition, at our breweries, we use equipment and piping cleaning processes at our breweries, we strictly manage water use in equipment and piping cleaning processes and implement cascade reuse by using high-clarity rinse water in the initial cleaning stage. Under our quality assurance framework, we share and accumulate know-how on water reuse tailored to water quality, enabling high levels of water savings. (Details on water saving technologies →P.49).

▶Minimization of wastewater impact

The Kirin Group complies with water pollution control regulations in each country and has established voluntary standards that exceed legal requirements to minimize wastewater impact. In addition, we have developed the "Kirin Group Environmental Management Policy (KGEMP)" as a guidance for environmental management and have established a system in which environmental officers are appointed across the Group. Each business site works to reduce GHG emissions and water withdrawals and prevent pollution while ensuring strict compliance with applicable laws and regulations. Regular internal audits are conducted to verify system compliance and progress toward targets (Details on environmental management systems →P.59).

Activities in Response to Significant Risks and Opportunities

Physical Risk/Chronic

Manufacturing | Supply and Logistics | Sales

Environmental pollution from improper disposal of used containers [medium to long Term]

If used containers are not properly recycled and are released into the environment, they may have a negative impact on a wide range of ecosystems in the form of greenhouse gas emissions, damage to the natural environment, and marine plastic pollution. Furthermore, stricter future regulations on the improper disposal of plastic containers could present transition risks, potentially increase extended producer responsibility and diminishing corporate brand value.

Response Strategy

▶Building a society that recycles plastics

In accordance with the "Kirin Group Plastic Policy" that we established in 2019, the Kirin Group is progressively increasing the ratio of recycled resin used in alcoholic and non-alcoholic beverage PET bottles in Japan to meet the targets of 50% by 2027 and of 100% sustainable container use by 2050.

Additionally, Lion has developed the "Sustainable Packaging Strategy" to enhance recycling efforts in Australia and New Zealand. In collaboration with the Australian Packaging Covenant Organization (APCO), Lion set ambitious goals to incorporate over 50% recycled material in its packaging by 2025 and ensure that 100% of its packaging is reusable, recyclable, or compostable. Results achieved in 2025 under the strategy, recycled content of packaging was 70.22% and recyclability of packaging was 98.9%.

Activities

▶Horizontal recycling of PET bottles

We are collaborating with various companies to efficiently segregate, collect, and recycle used PET bottles, promoting bottle-to-bottle horizontal recycling. Our partnerships have gradually expanded, including WELCIA YAKKYOKU, Tobu Railway, and Chiba Yakuhin in 2022, Sugi Pharmacy and Tokyo Tatemono in 2023, and Yomiuri Land in 2024; and MUFG Bank in 2025. In a collaboration with MUFG Bank, initiatives were implemented at 134 branches in the Kanto area to eliminate leftover beverages in PET bottles and ensure thorough separation, thereby preventing the mixing of substances that hinder recycling and promoting horizontal recycling with lower energy consumption and GHG emissions. At some branches, the collected PET bottles are processed on dedicated bottle recycling lines, where contamination is minimized, which is expected to improve the yield of recycled PET resin.

We are also strengthening collaboration by forming agreements with municipal governments. In 2023, we signed a partnership agreement on the horizontal recycling of PET bottles with Asahi Soft Drinks Co., Ltd. and the Joso Regional Municipal Union, comprising four cities (Joso, Toride, Moriya, and Tsukubamirai). All used PET bottles sorted by citizens in these cities are recycled mechanically or chemically to regenerate PET bottle material, which is then reused in PET bottle products. In 2025, we signed new partnership agreements with Samukawa Town and Chigasaki City in Kanagawa Prefecture, as well as Toyota Tsusho Corporation. Through this initiative, we aim to establish a local Circular Economy for PET bottles by collaborating with the municipalities where Kirin Beverage's Shonan Plant is located. Under this agreement, approximately 240 t of used PET bottles generated annually in Samukawa Town and Chigasaki City are expected to be horizontally recycled.

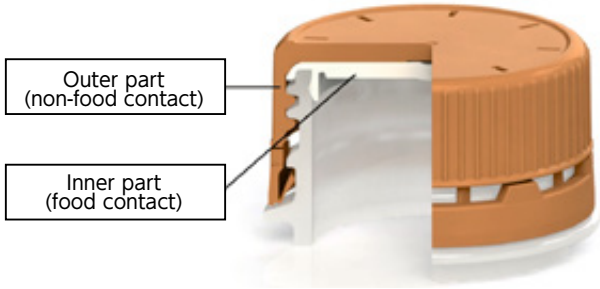
New Functional Recycling Box and Awareness Sticker

Furthermore, new functional recycling boxes with educational stickers have been installed near vending machines in various locations. With consumer cooperation in depositing only beverage containers, we efficiently collect empty containers, promoting horizontal recycling throughout society.

▶Horizontal recycling of beverage caps

In 2024, we conducted Japan's first proof-of-concept trial for the practical implementation of horizontal recycling of caps used for alcoholic beverage PET bottles in collaboration with Nihon Yamamura Glass Co., Ltd. This initiative utilizes two-piece caps with 10% recycled resin in the outer part (non-food contact) to enable horizontal recycling into caps for the same purpose. The trial will use approximately 40,000 caps, with an estimated reduction in GHG emissions of about 1.7 g per cap.

Two-Piece Cap Used in the Proof-of-Concept Trial



▶VicReturn initiative

In Victoria, Lion continues to play an active role as a founding member of VicReturn, the coordinator of the container deposit scheme launched in November 2023. From October 2024 to September 2025, we estimated the number of Lion's containers collected by applying the overall collection rates under the scheme (for glass and aluminum). As a result, the estimated collection volume was 82 million containers, corresponding to a weighted average collection rate of 69.9%.

Activities in Response to Significant Risks and Opportunities

Physical Risk/Acute

Manufacturing Supply and Logistics

Disruption of operations owing to floods [short to long term]

If climate change leads to more frequent and severe disasters such as typhoons and torrential rainfall, there is a high probability of significant impacts, including production shutdowns. Having operated in Japan and Australia—where water environments differ greatly—the Kirin Group has gained experience-based insights that water-related risks vary by country and region and are highly dependent on specific basins and locations. Based on this understanding, we have been conducting regular water risk assessments based on scientific information since 2014.

Response Strategy

▶Sharing of knowledge on responses to floods (adaptation measures)

We share the knowledge and experiences of locations that have dealt with flooding within the group to minimize damage.

▶Insurance for floods (adaptation measures)

We will consider insurance at business sites as an effective measure against natural disasters, including floods.

▶Addressing flooding at facilities (adaptation measures)

Flooding could have a serious impact on business continuity; therefore, at site with critical supply responsibilities, we will implement physical mitigation measures as necessary to ensure uninterrupted supply to customers.

Activities

▶Re-evaluation and analysis of water risks across the group

New Belgium Brewing's Asheville Brewery in the United States had not previously been assessed as high-risk under conventional risk evaluation tools. However, in September 2024, it suffered flood damage from Hurricane Helene. This experience led us to recognize the need to review the consistency between tool-based assessments and actual conditions, as well as the precision of the assessment grid, and the comprehensiveness of evaluation criteria. We subsequently conducted a water risk assessment targeting our production sites (Details →P.23).

In addition, we are working to set water-related targets in accordance with SBTN Technical Guidance v1.1. In 2025, based on the methodologies outlined in Steps 1 and 2 of the guidance, we conducted risk assessments and prioritization for water resources and land use across our upstream value chain and our own production sites (Details →P.22). We will accumulate insights from new water risk assessment and analysis results, while examining and sharing response measures for similar events in the future, thereby strengthening the Group's resilience to water-related risks.

▶Decision-making on insurance coverage using wind and water damage simulation systems

In 2020, we used the natural disaster model AIR to simulate wind and water damage for our main 20 business sites in Japan, thereby estimating loss percentages and amounts of damage for each recurrence period. For 200-year disasters (a disaster occurring once every 200 years), the total exposure across the Kirin Group was approximately 1.0 billion yen. At KYOWA PHARMA CHEMICAL, however, we calculated that the annual amount of damage from a wind and water disaster of a scale occurring once every 500 years would be equivalent to 42% of the value of its property. Accordingly, in 2022, we surveyed the site, and confirmed that the amount of damage would be precisely equivalent to 17%. We also surveyed Thai Kyowa Biotechnologies, which is located in an area where flood and other water risks are expected, in 2023. Going forward, we will continue to survey sites and assess the possibility of insurance for business sites that we have judged to be at high risk of future flood damage, based on our wind and flood simulation system.

▶Flood prevention measures at Kyowa Kirin

Kyowa Kirin recognizes that flooding and other water-related hazards could result in prolonged operational disruptions at its own pharmaceutical plants, as well as at contract manufacturers of active pharmaceutical ingredients (APIs) and packaging suppliers, leading to significant financial impacts from recovery costs, production stoppages, and lost business opportunities. At its own sites, the Company has formulated flood risk management policies and is implementing mitigation measures, including the geographic diversification of critical production assets, waterproofing of buildings, elevation of key equipment, and installation of flood barriers, with further capital investments planned as needed. In addition, we are advancing risk assessments and response measures across the supply chain to avoid production disruptions and minimize impacts. Given the potential exposure of API manufacturers and packaging suppliers, we are also engaging with these partners to assess their flood risk preparedness, identify gaps, and promote the development of business continuity plans (BCPs) and disaster response drills.

Activities in Response to Significant Risks and Opportunities

Physical Risk/Acute

Procurement Supply and Logistics

Impact on transportation from floods [short to long term]

If climate change leads to more frequent and severe disasters such as typhoons and torrential rainfall, there is a high probability of impacts on product distribution and raw material transportation. In particular, ports involved in raw material procurement—including collection hubs in exporting countries and port silos and warehouses in importing countries—may face the risk of flood damage to stored raw materials. Having operated in Japan and Australia—where water environments differ greatly—the Kirin Group has gained experience-based insights that water-related risks vary by country and region and are highly dependent on specific basins and locations. Based on this understanding, we have been conducting regular water risk assessments based on scientific information since 2014.

Response Strategy

▶ Sharing of knowledge on responding to floods (adaptation measures)

We utilize response manuals for widespread logistics disruptions caused by natural disasters to address similar incidents. Additionally, we continuously update these manuals and accumulate knowledge whenever new disasters occur.

▶ Diversification of suppliers (adaptation measures)

We mitigate risks by diversifying suppliers. In collaboration with suppliers, we work to ensure a stable supply chain to deliver safe and reliable products to customers at optimal price.

Activities

▶ Utilizing knowledge for responding to transportation impacts from typhoon damage

Immediately after we recovered from major damage to logistics networks from the 2018 West Japan Torrential Rain Disaster, we created a manual for responding to similar events. As a result, we were able to avoid any significant impact from subsequent typhoon damage on product distribution, including Typhoon Faxai, which caused significant damage, particularly in Chiba Prefecture, and Typhoon Hagibis, the first typhoon to receive the designation of a Disaster of Extreme Severity (both occurred in 2019) and a Specified Anomalous Disaster.

In 2022, to understand the risk of port flooding, we surveyed flooding risks and the presence of countermeasures at major barley shipping ports overseas. The results showed that flooding risk is relatively low in Canada, Australia, and the United Kingdom. In the Netherlands and Germany, while there is a potential flooding risk of 0.5 to 5 meters in the future, planned countermeasures have been already developed. The survey revealed that even when flooding risk at the port itself is not high, port functions may still be disrupted if railways and roads connecting to the port or adjacent urban areas are affected by flooding. For acute physical risks such as flooding, we believe that accumulating risk analysis, assessment, and countermeasures at each stage of the value chain will help enhances the resilience of our business operations.

▶ Diversification of malt suppliers and long-term contracts with hop farmers

We have diversified our procurement of malt, the main ingredient of beer, across three continents: North America, Europe, and Australia. We combine procurement measures for hops, such as adopting long-term contracts with producers, as part of efforts to secure the necessary amounts, and minimize the impact of market prices.

Activities in Response to Significant Risks and Opportunities

Physical Risk/Acute

Manufacturing | Supply and Logistics

Disruption of operations owing to droughts [short to long term]

Water resources are essential in the production processes for alcoholic and non-alcoholic beverages, pharmaceuticals, and biochemical products. Severe droughts caused by climate change have the potential to disrupt production. Having operated in Japan and Australia—where water environments differ greatly—the Kirin Group has gained experience-based insights that water-related risks vary by country and region and are highly dependent on specific basins and locations. Based on this understanding, we have been conducting regular water risk assessments based on scientific information since 2014.

Response Strategy

▶Advanced water reduction technology (adaptation measures)

We assess water stress and water related risks based on scientific evidence, and promote appropriate reduction in water use according to the level of water stress in each country and region.

▶Sharing drought response knowledge (adaptation measures)

We enhance the resilience of each business by sharing the knowledge and insights gained from drought experiences across our global sites.

▶Water source forest conservation activities at domestic production sites (mitigation measures)

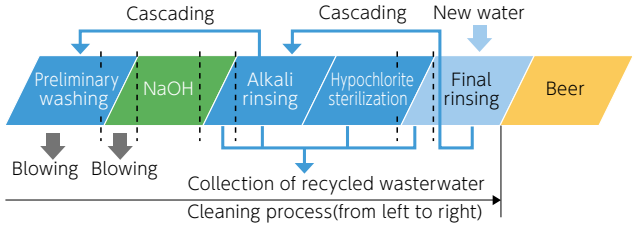
Launched in 1999, these water source forest conservation activities aim to conserve biodiversity and promote groundwater recharge in water source areas surrounding our production sites, thereby contributing to the sustainable use of water resources.

Activities

▶Introduction of reverse osmosis (RO) water recycling plant at Tooheys Brewery

Unlike Japan, which is relatively water-abundant, Australia faces chronic water scarcity. For example, in Sydney, New South Wales, there is a high risk of drought, and a significant amount of water is used for industrial purposes rather than daily living, necessitating water conservation in the business sector. To reduce water use, the Kirin Group has set a target to build three water recycling facilities in Australia that treat and reuse water used in brewing operations. In 2024, Tooheys Brewery installed its second reverse osmosis (RO) water recycling plant, following the facility at Castlemaine Perkins Brewery in Queensland. The recycled water is used for equipment cleaning and other purposes. This facility's introduction allows for the reuse of approximately 270 million liters of water annually, contributing to water savings. This is equivalent to approximately 108 Olympic-size swimming pools. In addition, a $7.2 million investment will save over $700,000 in annual water bills.

The Water Used for Cleaning Is Cascaded for Repeated Use According to Water Quality.



▶Strict management of flow rate and flow velocity to avoid wasting water in the production process

In our production process, we use a lot of water in cleaning and sterilizing processes. We have established management system to strictly control quality of the cleaning processes and water consumption by optimizing flow rate and other parameters. We also actively promote reuse of water, depending on purposes. For example, the final rinse water from cleaning processes, which has relatively high clarity, can be reused in the initial cleaning stage of pipes and equipment. In this way, the water used for cleaning is cascaded for repeated use according to water quality. Ensuring effective cleaning while balancing the volume and timing of recovered and reused water requires advanced operational expertise. The Kirin Group shares and accumulates such know-how across sites, enabling high levels of water conservation.

▶Addressing water risks in watershed through a landscape approach

The Fort Collins Brewery, under the Kirin Group, uses water from the Colorado River Basin in the United States. In recent years, the Colorado River Basin has experienced a decrease in river flow due to reduced snowfall. Despite this, water demand has increased due to the expansion of agriculture and dairy farming upstream, and population growth downstream. Additionally, there are stringent restrictions on water usage imposed by geographical and historical contexts. This water stress cannot be resolved through our water-saving efforts alone. Therefore, the Kirin Group has begun collaborating with watershed stakeholders and the community to find solutions together. In March 2023, we held a TNFD scenario analysis workshop with TNFD stakeholders and local water experts to discuss and consider strategies for addressing water stress issues. In 2025, we participated in the TNFD Nature Transition Plan pilot Program and developed a transition plan. Through this program, in addition to our going efforts to reduce water use intensity at our breweries, we reaffirmed the importance of a landscape approach that includes collaboration with stakeholders and strengthening watershed resilience. By collaborating not only within our company but also with local communities, experts, and environmental organizations, we are strengthening our ability to approach shared challenges. We share this knowledge across the entire group to enhance our response capabilities.

Activities in Response to Significant Risks and Opportunities

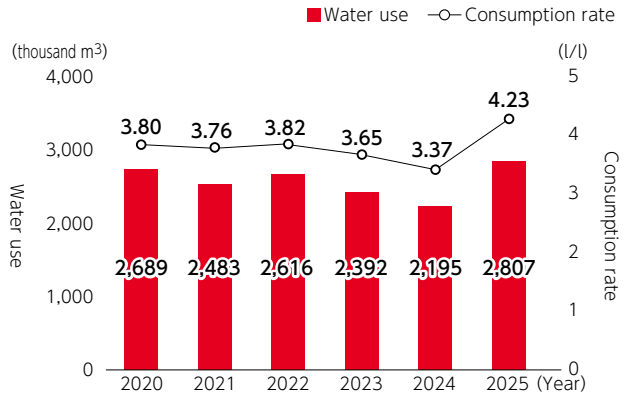
Physical Risk/Acute

▶Water Source Forest Conservation Activities at domestic manufacturing sites

On Water Source Forest Conservation Activities, which help protect the water sources for our plants, began in 1999 in Tanzawa district in Kanagawa Prefecture—the water source area for Kirin Brewery's Yokohama Plant—pioneering such efforts in the industry. These activities are now carried out 11 locations across Japan. Based on medium- to long-term agreements with local governments and other stakeholders that manage water source forests, we promote activities such as tree planting, undergrowth clearing, branch pruning, and thinning. As a result, many of these forests have become healthier and more vibrant. At some locations, interested customers are also invited to participate in these activities. In 2025, we compiled and assessed baseline information on biodiversity and natural disaster risks in the watershed where these water source forests are located.

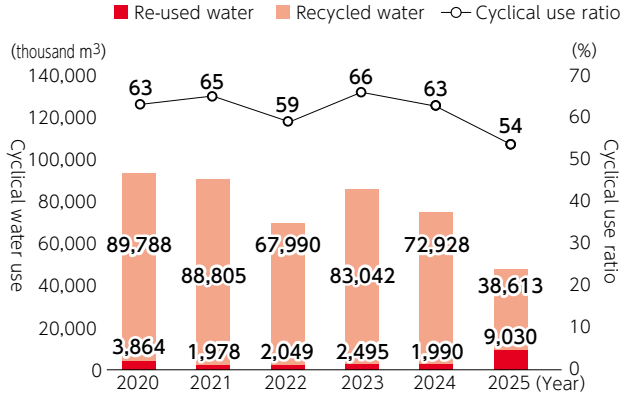
Metrics and Targets

Water Use and Consumption Rate
(water use / production volume) of Lion(Oceania region)

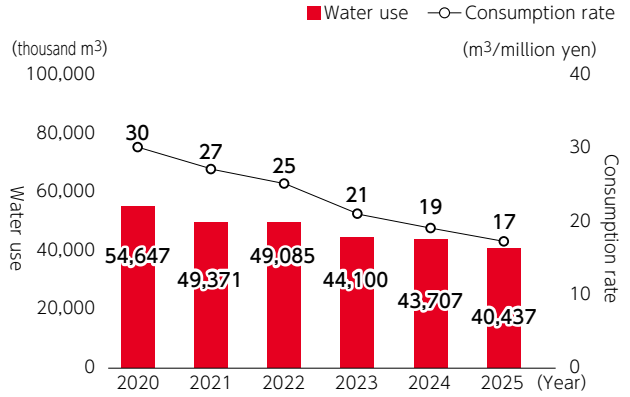


*From 2025, irrigation water usage at Lion's vineyards has been added to the calculation scope.

Cyclical Water Use and Cyclical Use Ratio
(cyclical use / (tap water use + cyclical use)) of Entire Group



Water Use and Consumption Rate
(water use / sales revenue) of Entire Group



Activities in Response to Significant Risks and Opportunities

Physical Risk/Acute

Procurement

Impact on agricultural products from floods and droughts [short to long term]

Water risks, water stress, and disasters caused by climate change may reduce the yields of raw agricultural materials, increasing the financial impact on procurement. Having operated in Japan and Australia—where water environments differ greatly—the Kirin Group has gained experience-based insights that water-related risks vary by country and region and are highly dependent on specific basins and locations. Based on this understanding, we have been conducting regular water risk assessments based on scientific information since 2014.

Response Strategy

▶Responses to water stress in areas producing agricultural raw materials (adaptation measures)

In addition to mitigating long-term climate risks by reducing GHG emissions, it is essential to strengthen our preparedness for floods and droughts as part of our short-term strategy. For this purpose, priority sites will be narrowed down after conducting water risk analysis in production areas. Among the priority sites, action sites will be identified and water resource conservation activities and training will be promoted, as well as appropriate disaster mitigation measures and sustainable water use management. This will contribute to the risk reduction of yield declines due to extreme weather events and to ensuring a stable agricultural product supply.

▶Development of heat and drought tolerance technologies for climate change adaptation (adaptation measures)

To enable the stable production of hops with strong tolerance to environmental stresses such as heat and drought, associated with climate change, we will advance breeding and cultivation technologies.

▶Prevention of soil runoff in areas producing agricultural raw materials (adaptation measures)

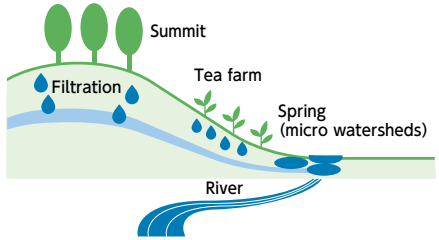
Soil runoff leads to a decline in agricultural productivity and negatively impacts the conservation of water resources. Enhancing soil conservation and water management practices is crucial for ensuring the sustainability of agricultural land, particularly as precipitation patterns become more unpredictable. Effective soil management can reduce erosion during rainfall, improve water permeability, and increase water retention during droughts. Additionally, maintaining forests and vegetation supports water source recharge and contributes to the stability of the regional water cycle. Through these measures, we aim to mitigate procurement risks.

Activities

▶Training on measures to address water stress in agricultural production areas

Many tea farms in Sri Lanka's highlands plant tea on steep slopes. Where geological conditions are favorable, rainwater permeates underground and resurfaces as springs within the farms. These springs are called micro-watersheds. Though small in area, these micro-watersheds serve as critical water sources. Most originate in the central highlands and feed the rivers that supply Sri Lanka's coastal cities. Recognizing their importance, we began conservation activities in 2018 and have protected 35 water sources by the end of 2025. As part of these efforts, we trained 1,750 local residents on water source conservation and distributed pamphlets on water stewardship and watershed protection to approximately 15,000 people. Some farms have embedded water education into childcare and primary school programs for harvest workers' families. In Vietnam, coffee farms have incorporated similar training since 2020 as part of their certification process, teaching techniques to prevent soil desiccation during droughts and methods for water storage. We visit tea farms in Sri Lanka annually to monitor the progress of water source conservation activities.

Mechanism of Micro Watersheds



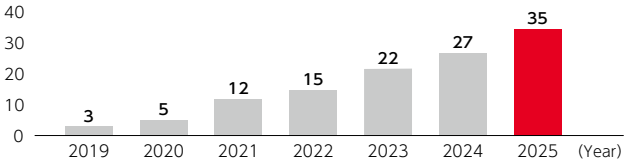
▶Development of plant heat and drought tolerance technologies for climate change adaptation

We have developed a technology to enhance the heat and drought tolerance of hops—a crop highly vulnerable to climate change—without compromising flavor. The technoology uses heat treatment during the cultivation process to confer stress tolerance to seedlings, eliminating the need for genetic modification. Field trials have confirmed stable growth and consistent yields. Going forward, we plan to scale up production and expand its implementation across different varieties and regions to strengthen supply stability (Details →P.44).

▶Cover crop training to prevent soil runoff

In Sri Lanka, the impact of climate change has led to frequent occurrences of drought and heavy rain. Urbanization, industrialization, and inappropriate land use have exacerbated soil erosion and runoff, which are significant problems. Tea farms, often situated on steep, sunny slopes, face additional challenges. Heavy rains not only cause the runoff of fertile soil but have also led to landslides that have resulted in loss of lives. Covering the ground with grass (cover crops) is an effective soil management measure that enriches ecosystems and serves as an adaptation strategy to climate change. This approach prevents soil runoff by shielding the ground from direct rainfall during heavy rains and helps retain water during droughts. In our training activities to support the acquisition of certification for sustainable tea farms in Sri Lanka, we teach how to identify grasses that negatively impact tea cultivation. We instruct tea farms to ensure that the ground is covered with well-rooted grasses. In collaboration with neighboring universities, we have developed a method that is accessible to farm workers, providing them with science-based guidance.

Number of Areas Where Water Sources Were Conserved among Sri Lankan Tea Farms



Number of Residents Educated on The Importance of Water

100%

Group training : 1,750 people
Distribution of pamphlets : 15,000 people

Activities in Response to Significant Risks and Opportunities

Physical Risk/Acute

Research & Development | Procurement

Impacts of diseases and air pollution on agricultural products [short to medium term]

With climate change and the degradation and pollution of the natural environment, there is growing concern about the impact of diseases and air pollution on agricultural yields. In Sri Lanka, air pollutants from neighboring India are damaging tea leaves in lowland areas. Global warming is expected to exacerbate grape diseases. Additionally, Brazil, a major producer of oranges for processing, has experienced a sharp decline in production due to extreme heat, low rainfall, and disease.

Response Strategy

▶Research and measures from a long-term perspective (adaptation measures)

We will leverage our strength of having fields where we are able to conduct surveys and tests to solve various issues related to the environment through a scientific approach and research and development with a long-term perspective.

Activities

▶Research and measures from a long-term perspective

We consider integrated pest management (IPM) to be an effective approach to addressing crop diseases, and pilot initiatives have already begun in selected vineyards and tea plantations. Enhancing on-farm biodiversity is expected to contribute to greater ecosystem stability. We are also investigating the potential of cover cropping to enrich ecosystems and suppress disease occurrence, as well as initiating research on the early detection of insects and mites that may act as vectors of disease.

Long-term, ongoing research is necessary to solve various issues related to climate change and natural capital. In the Kirin Group, we have our own vineyards, and we have established strong relationships of trust with tea farms in Sri Lanka through long term engagement.

One of the major diseases in grape cultivation is downy mildew, with serious damage reported worldwide. To mitigate this damage, it is urgent to accurately identify the pathogens affecting grape quality and yield and to develop technologies that maximize control effectiveness. The Institute for Future Beverages has established the following two technologies:

【 Development of technology for year-round maintenance and management of downy mildew pathogens 】

The research team has developed an innovative method to stably maintain and manage downy mildew pathogens throughout the year. This technology allows for the continuous cultivation of pathogens in the laboratory without relying on conventional overwintering by oospores in leaf litter.

【 Establishment of technology for pesticide efficacy evaluation 】

Utilizing the aforementioned maintenance technology, the team has established a drug resistance evaluation system that can be assessed year-round. This technology is expected to significantly contribute to the early detection of resistant bacteria and the verification of the effectiveness of new pesticides.

The development of these technologies will significantly advance downy mildew control strategies and enable more effective and sustainable disease management. These research results received a conference presentation award from the American Society for Enology and Viticulture (ASEV) Japan.

Activities in Response to Significant Risks and Opportunities

Transition Risk/Policy

Procurement | Manufacturing | Supply and Logistics

Financial impact of carbon pricing on energy, agricultural products, and raw material procurement [short to medium term]

The introduction of carbon pricing mechanisms—including carbon taxes, emissions trading schemes, and carbon border adjustment measures—will likely drive up energy procurement and logistics costs. In Japan, emissions trading through the GX League is expected to expand. Power generators may be required to purchase emission allowances, which could increase our energy procurement costs.

Carbon taxes and border adjustment measures could also significantly increase agricultural commodity prices. As carbon pricing boosts demand for biofuel feedstocks such as corn and soybeans, competition for raw materials used in alcoholic and non-alcoholic beverages may intensify. In addition, carbon pricing is expected to increase natural gas prices, which would affect nitrogen fertilizer costs.

Response Strategy

▶Activities Energy saving/renewable energy/switch of energy source

To minimize the financial impact of carbon pricing, we will first reduce GHG emissions in accordance with our roadmap, aiming for the 1.5°C-aligned SBT targeting 2030 for Scope 1 and Scope 2 emissions. Specifically, cost savings from energy efficiency are expected to offset, to the greatest extent possible, both the depreciation associated with capital investments and the higher costs of renewable energy procurement. Since the outlook for technological innovations in areas such as switching energy sources and trends in energy costs are currently unclear, we cannot accurately estimate costs for 2030 onward. We will, however, incorporate measures to reduce GHGs aimed at achieving our RE100 renewable energy target by 2040 and the net-zero target by 2050 into our business plan.

▶GHG emission reduction through logistics optimization

To reduce GHG emissions in logistics departments, we will develop various initiatives such as modal shifts, joint deliveries with industry peers, and higher loading ratios. GHG emissions from upstream transportation (category 4), including the transportation of products, account for approximately 10% of total Scope 3 emissions, and are a major target for the reduction of emissions. In recent years, reducing the impact of transportation has also been an important initiative from the perspective of reducing the risk that we will not be able to transport products owing to the shortage of truck drivers.

▶GHG emission reduction through lightweight packaging

By lightweighting containers and packaging such as bottles and labels, we will reduce GHG emissions in manufacturing and logistics.

▶Increasing the ratio of recycled materials in packaging

We will adopt can lids that increase the ratio of recycled aluminum, thereby reducing Scope 3 emissions, instead of primary aluminum ingot which requires significant electricity during manufacturing.

▶GHG emission reduction at the sales stage

By introducing high energy-efficient heat pump vending machines, we will reduce Scope 3 emissions.

▶Risk mitigation through mass plant propagation technologies

To address the competition risks with beverage raw materials arising from increased demand for biofuel crops such as corn and soybeans, we are exploring the use of mass plant propagation technologies to improve cultivation efficiency and help mitigate potential raw material shortages and price increases.

▶Measures against fertilizer price increases

In response to the rising prices of nitrogen fertilizers, we support the acquisition of sustainable farm certifications and provide proper fertilizer management training to farmers.

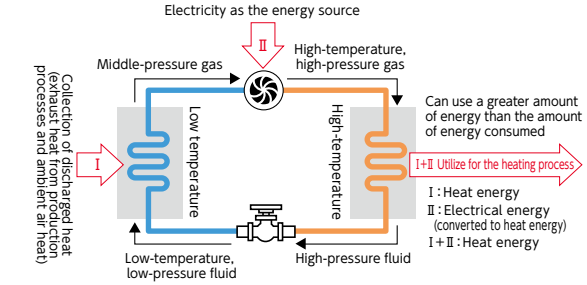
Activities

▶Energy saving/renewable energy/switch of energy source

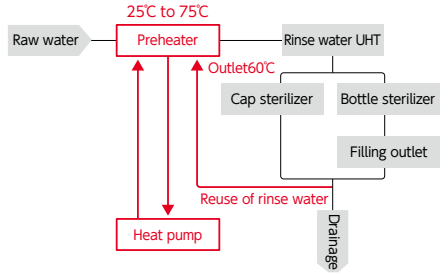
【 Utilization of heat pumps in production processes 】

The Kirin Group believes that reducing dependency on fossil fuel combustion and increasing that on electricity, and, furthermore, using renewable electricity are the most effective ways of energy efficiency. Kirin Brewery reduced GHG emissions by approximately 70% over the 25 years from 1990 to 2015. Since 2019, heat pump systems have been introduced at wastewater treatment plants in six Kirin Brewery plants, reducing CO_2 emissions by approximately 4,800 t annually. This represents roughly 3% of Kirin Brewery's total emissions. At Shinshu Beverage, about 970 tonnes of CO_2 emissions are reduced annually by reusing waste heat, which is difficult to use directly, in the bottle cap rinsing process. The Kirin Brewery Okayama Plant has reduced annual CO_2 emissions by approximately 180 tonnes by reusing waste heat and using thermal energy from the atmosphere in a hot water sterilization process for cans.

Heat Pump System



Shinshu Beverage Production Line



【 Improving compressor efficiency 】

At the Kirin Beverage Shonan Plant, in 2021, we switched our high-pressure compressors for PET bottle molding from V-type reciprocating compressors to screw compressors and horizontally

Activities in Response to Significant Risks and Opportunities

Transition Risk/Policy

opposed reciprocating compressors with variable frequency drives, thereby reducing annual power usage by around 8%. These machines enable us to recover waste heat from themselves and to reuse the heat to other processes.

Improving Compressor Efficiency

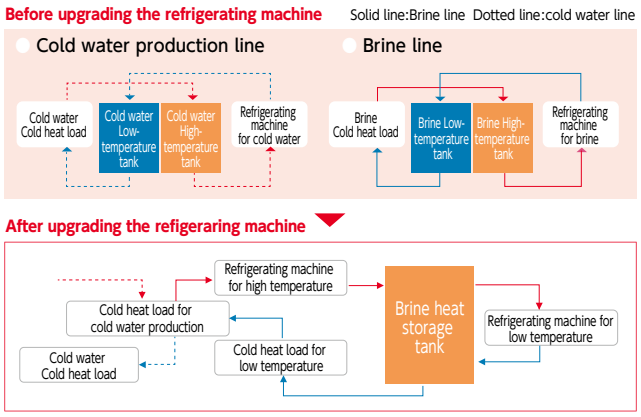
Inverter-controlled pneumatic machinery

The Information and product images above are as of the end of June 2023.

【 Improving the efficiency of refrigeration systems 】

At Kirin Brewery, we reduce energy consumption through improving the efficiency of refrigerating systems. We are implementing a phased approach to the refrigeration system, which cools cooling media in multi-steps, a methodology to maximize energy efficiency of refrigerators.

Improving The Efficiency of Refrigeration Systems



【 CO_2 recovery and reuse in fermentation processes 】

Beer fermentation generates enormous quantities of CO_2 in addition to alcohol. This CO_2 is captured through dedicated pipelines connected to fermentation tanks and reused in subsequent processes, such as beer carbonation, significantly reducing CO_2 emissions to the atmosphere.

▶Renewable energy

【 Switch purchased electricity for plants to 100% renewable 】

Kirin Brewery has achieved 100% of renewable energy for purchased electricity at Sendai and Nagoya plants since 2022, Fukuoka and Okayama plants since January 2023, Toride plant since April 2023, and Hokkaido Chitose, Yokohama, Shiga, and Kobe plants, as well as all sales sites, since January 2024. As a result, Kirin Brewery has achieved 100% renewable energy for purchased electricity at all production and sales sites, and the proportion of renewable energy in all electricity usage is 66%.

We aim to achieve RE100 target as soon as possible and replace all electricity used in our global operation with renewable energy in the future.

Kyowa Kirin completed to switch purchased electricity to renewable of its production sites and research laboratories in Japan. Kyowa Kirin expanded the initiative from Takasaki Plant, Bio Production Technology Laboratories, Fuji Research Park, and CMC Research Center, in 2020, to Ube Plant in April 2023. Through these initiatives, Kyowa Kirin Group reduced CO_2 emissions from its operation by more than 55% by the end of 2023 compared with those of 2019 and has already achieved its 2030 target.

Since January 2022, all “Château Mercian” wineries (Château Mercian Katsunuma Winery, Château Mercian Mariko Winery, and Château Mercian Kikyogahara Winery) have achieved 100% renewable energy by applying renewable energy certificates with purchased electricity. At breweries in Australia and New Zealand for Lion, 100% of purchased electricity has been sourced from renewable energy since January 2023.

Kirin Brewery Sendai Plant

Kirin Brewery Nagoya Plant

Kirin Brewery Fukuoka Plant

Kirin Brewery Okayama Plant

Kirin Brewery Toride Plant

Château Mercian Katsunuma Winery

Château Mercian Mariko Winery

Château Mercian Kikyogahara Winery

【 Use of large-scale solar power generation 】

Kirin Group values, in its renewable energy procurement, “additionality,” which refers to creating new sources of renewable energy in the world, as well as “ethical procurement,” which refers to considering the environmental impact and human rights in generating energy. Kirin Brewery has introduced large-scale photovoltaic system at all nine plants (eight plants, excluding Yokohama Plant, use PPA model*1). At Mercian Fujisawa Plant, we introduced photovoltaic electricity based on PPA model from March 2023. This initiative has reduced annual GHG emissions by approximately 124 tonnes and increased the proportion of renewable energy in electric power used by Mercian from approximately 5% before introduction to approximately 8%. At Kyowa Kirin, we have introduced large-scale photovoltaic system (1.47MW) based on PPA model at Ube Plant in March 2023. This initiative reduced annual CO_2 emissions by approximately 1,029 tonnes. Vietnam Kirin Beverage introduced a large-scale solar power generation facility (369 KW) using the PPA model, which starts operation in May 2025. This is expected to reduce CO_2 emissions by approximately 340 tonnes annually. Kirin Group Logistics, Kyowa Hakko Bio, and Shinshu Beverage also rent parts of their premises and build roofs to large-scale solar power generation facility companies, contributing to the effective use of their assets and promoting the spread of natural energy.

Additionally, we launched Japan’s first virtual PPA contract in February 2026 and plan to expand this approach further. When procuring renewable energy, we carefully assess financial impacts and sustainability risks across the Group before implementation.

*1 PPA stands for the “Power Purchase Agreement” model and refers to an agreement between a business that sells electricity to users (PPA provider) and the users of electric power. At Kirin Brewery, MCKB Energy Service Co., Ltd., a subsidiary of Mitsubishi Corporation Energy Solutions Ltd., acts as a PPA provider, installing megawatt-class solar power generation facilities on the roofs of breweries, while Kirin Brewery purchases and uses the power generated.

Kirin Brewery Hokkaido Chitose Plant

Kirin Brewery Kobe Plant

Kirin Brewery Shiga Plant

Mercian Fujisawa Plant

Activities in Response to Significant Risks and Opportunities

Transition Risk/Policy

【 Use of solar power generation in Australia 】

Lion installed a photovoltaic system at Castlemaine Perkins Brewery in 2019 and to Little Creatures Brewery in Victoria in 2020. Tooheys Brewery, the largest brewery in New South Wales, collaborates with Australian Hotels Association (AHA), contracting PPA with a renewable energy distributor. By leveraging the buying power of Tooheys, AHA was able to introduce renewable energy at a lower price, successfully reducing the electricity unit cost for hotels' pubs from 11.5c/kWh to 6.9c/kWh. In May 2020, Lion became Australia's first large-scale carbon neutral brewer, certified by Climate Active*2. Lion discloses carbon credits used to offset its emissions for a year in the annual report to comply with certification requirement set by Climate Active. The requirement is a new standard for carbon neutral certification in Australia. In New Zealand, Lion has obtained Toitū*3 carbon zero certification since 2021.

*2 A third-party certification body established by the government of Australia.
*3 A third-party certification body established by the government of New Zealand.

Lion's Little Creatures Geelong

【 Introduction of renewable energy certificates 】

Since 2021, Kyowa Hakko Bio has introduced Renewable Energy Certificates (I-REC) at Thai Kyowa Biotechnologies in Thailand. This marked the first adoption of I-RECs in Thailand's pharmaceutical and food industries. By sourcing a portion of the facility's electricity from renewable sources, the initiative reduced annual CO_2 emissions by 9,050 tons in 2024. Renewable energy certificates have also been introduced at Shanghai Kyowa Amino Acid (I-REC) and BioKyowa (REC) (These entities are no longer part of the Kirin Group due to business portfolio restructuring in 2025.)

▶Switch of energy source

【 Switch of energy source from heavy oil to natural Gas 】

Most of the fuel we use at breweries is consumed in boilers that generate steam. At all plants of Kirin Brewery and Kirin Beverage, at all plants of Kirin Brewery and Kirin Beverage, and Mercian Yatsushiro plant, we completely switched the fuel to natural gas, which generates less CO_2 emissions than heavy oil. We have achieved more efficient boiler operations through the installation of highly efficient gas boilers. To meet part of the plant's heat and electricity needs, cogeneration systems have been installed to provide both heat and electricity.

【 Introduction of electric boilers 】

Lion began operating electric boilers in 2025. Replacing the existing LPG fuel is expected to reduce CO_2 emissions by approximately 700 tons annually.

【 Launch of green hydrogen demonstration project 】

Kirin Brewery, along with Mitsubishi Corporation, MCKB Energy Service which is sponsored by Mitsubishi Corporation Clean Energy, Takasago Thermal Engineering and Miura, will start a pilot project in June 2026 to switch part of the boiler fuel used at Kirin Brewery's Hokkaido Chitose Brewery from fossil fuels to green hydrogen and utilize green hydrogen-derived steam in the beer production process.

In the beer production process, a large amount of steam is used for wort boiling and other processes. In this project, part of the boiler fuel used to produce steam will be switched from city gas to green hydrogen, with a plan to meet up to approximately 23% of the annual heat demand with hydrogen, reducing GHG emissions by approximately 464 tonnes per year.

▶GHG emission reduction through logistics optimization

【 Joint delivery and modal shift 】

The Kirin Group regards logistics as a noncompetitive sector and is actively engaging in initiatives together with other companies. In 2017, Kirin Brewery and Asahi Breweries opened a joint delivery center in Kanazawa City, Ishikawa Prefecture, and launched joint train transportation from plants in western area of Japan. Neither of the companies has plants on the coastal side of Japan Sea, so products previously had to be transported by truck over long distances—of 200 km—from their plants on the Pacific Ocean side. This logistic was inefficient and heavy burdens for truck drivers. Joint transportation using train containers not only reduced

Scheme of the Demonstration Project

Activities in Response to Significant Risks and Opportunities

Transition Risk/Policy

significant GHG emissions but also shortened driving distances of trucks, significantly reducing burdens of drivers. Thus, the joint delivery contributes to solve truck driver shortages of logistic industry, one of the biggest issues in Japanese society. Through these efforts, we have successfully completed modal shifts from long distance truck transportation, equivalent to 10,000 vehicles a year, to railway containers, and we estimate that we can thus annually reduce GHG emissions by approximately 2,700 tCO_2e. In September 2017, we began joint delivery with Asahi Breweries, Suntory, and Sapporo Breweries in the eastern Hokkaido area. We estimate that the Hokkaido case results in a reduction in annual GHG emissions of approximately 330 tCO_2e.*1

*1 Japan Business Federation (Keidanren) "Contribution to Reduction through Global Value Chains, 5th Edition" (in Japanese)
https://www.keidanren.or.jp/policy/vape/gvc2018.pdf

【 Optimizing inventory and transportation volumes through AI analysis 】

Kirin Beverage and Asahi Soft Drinks have fully introduced the production, sales, and inventory management service "MOVO PSI" developed by Hacobu and JDSC as of November 1, 2024, to optimize inventory and transportation volumes. "MOVO PSI" analyzes PSI (Production, Sales, Inventory) information between companies using AI (machine learning) to level daily order quantities and replenishment volumes. The demonstration experiment achieved results such as reducing transportation costs by up to about 9.1% and inventory days by up to about 13.2%, further improving logistics efficiency by increasing self-transport loading efficiency and reducing out-of-stock rates.

Additionally, Kirin Beverage and Kao jointly transport between their logistics centers starting from February 2025 and will gradually increase delivery volumes. Specifically, the empty truck sections connecting Kao's Kawasaki Logistics Center (Kanagawa Prefecture) and Koshoku Logistics Center (Nagano Prefecture), and Kirin Beverage subsidiary Shinshu Beverage Plant (Nagano Prefecture) and Kirin Beverage Kawasaki Logistics Center (Kanagawa Prefecture) will be utilized to optimize truck transportation efficiency and reduce GHG emissions (approximately 15% in the corresponding sections).

The logistics industry faces structural issues such as truck driver shortages, and this initiative was realized under three conditions:
1. Both shippers can utilize logistics data.
2. Sufficient load can be secured for return trips.
3. There are available transportation sections to connect. Both companies aim to reduce the number of trucks by over 300 annually and will expand joint transportation sections and promote cross-industry collaboration in the future.

【 Vendor-managed warehouses 】

The use of vendor-managed warehouses can reduce long-distance transportation. As a result, GHG emissions are reduced, contributing to a more sustainable supply chain. With the aim of mitigating the risk of not being able to transport due to an unavailability of trucks and optimizing transportation efficiency, we started a trial operation of raw materials procurement and distribution system using raw materials warehouses (vendor-managed warehouses) close to Kirin Beverage's plants, Shonan Plant and Shiga Plant, in October 2019. By establishing vendor-managed warehouses, raw material and ingredient suppliers can transport desired amount of cargo with their convenient schedules, thereby maximizing efficiency. This initiative has made it easier for plants to cope with sudden changes in production plans and contributed greatly to improving production flexibility.

【 In-line blow aseptic filling machines 】

In the past, we purchased empty PET bottles from container manufacturers and shipped them to plants where we filled them with beverages. With inline blow aseptic filling machines, we mold PET bottles from preforms, thick, compact, semi-processed bottle, in our production processes and fill them under aseptic conditions. This system reduces GHG emissions of empty bottle transportation since trucks can carry much more preforms than empty molded PET bottles. In 2003, we installed preform molding equipment to a soft drink production line at Kirin Distillery, the first case in the Japanese beverage industry, reducing transportation loads of preforms.

【 Importing wine in large bags 】

Mercian imports some of its wine via marine transportation in specially designed 24 kl bags (equivalent to approximately 32,000 750 mL bottles) with low oxygen permeability and fills the wine into bottles in Japan. Compared to importing bottled wine, this method reduces Mercian's GHG emissions from marine transportation by roughly 60% by eliminating needs to transport heavy bottles by sea. Bottling in Japan enables Mercian to use Ecology Bottles (made with at least 90% recycled glass), lightweight bottles, and PET bottles as containers. This production system reduces resource consumption and GHG emissions significantly throughout the value chain.

▶GHG emission reduction through lightweight packaging

Making containers and packaging lighters lead to reducing GHG emissions from production and transportation of the containers and packaging. For the "Iced Tea Glass Bottle" a lightweight PET bottle developed for the "Kirin Gogo-no-Kocha" brand, we redesigned the bottle body with diagonal ribs to maintain strength and grip while switching from shrink labels to roll labels. This reduced the amount of plastic used in the labels by approximately 44%, resulting in annual reduction of approximately 117 t of plastic and 849 t of GHG emissions (Details →P.76).

▶Increasing the ratio of recycled materials in packaging

Primary aluminum ingots in the manufacturing process consume a large amount of electricity, resulting in higher GHG emissions compared to recycled materials, posing an environmental challenge. To address this, Kirin Brewery, in collaboration with three domestic beer companies, has fully adopted "EcoEnd™" beverage can lids, which produce approximately 40%*1 fewer GHG emissions during manufacturing. Starting sequentially from February 2025, some beer products sold by each company will use "EcoEnd™" lids. Developed jointly by Toyo Seikan and UACJ, "EcoEnd™" meets the required strength and other characteristics for can lids while promoting the circular use of recycled materials. As a measure to reduce Scope 3 emissions, consideration will be given to adopting it for products other than beer.

*1 Reduction amount per can lid compared to conventional products of Toyo Seikan.

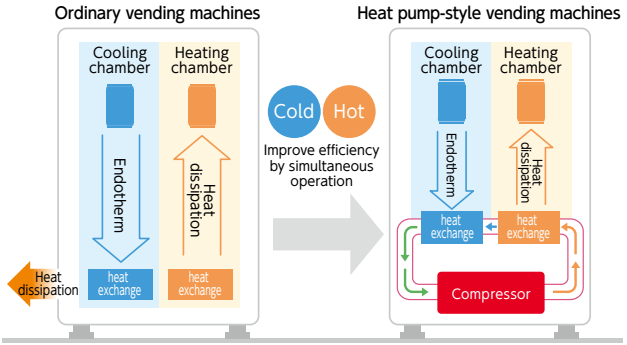
Activities in Response to Significant Risks and Opportunities

Transition Risk/Policy

▶GHG emission reduction at the sales stage

Kirin Beverage is the first in the industry to introduce heat pump type vending machines in 2006, and from 2012, almost all newly installed vending machines for cans and PET bottles are of this type. As of February 2026, we have switched more than 94% of vending machines installed into this type. Heat pump-type vending machines pump up waste heat generated from cooling functions and use the heat to warm up the products. This system reduces electricity consumption compared to conventional vending ma - chines. Some models offer higher energy-saving performance with heat sources not only by recovering waste heat released by the cooling function but also by capturing heat from outside the machine and with improved insulation performance by effective use of vacuum insulation materials. These vending machines have evolved to the point where electricity consumption can be reduced by about 40% compared to 2013. The “Green Power Vending Machines” that we began introducing from January 2024, achieve net-zero CO_2 emissions by obtaining Renewable Energy Certificates (REC) equivalent to the annual energy consumption required for operation, we established an application scheme for acquiring REC and will promote their further introduction.

Heat Pump Function



▶Risk mitigation through plant mass propagation technology

The Kirin Group’s mass plant propagation technology consists of four underlying technologies: stem propagation technique (organ culture method), sprout propagation technique (PPR method), embryo propagation technique (somatic embryo method), and potato propagation technique (micro tuber method).

This original technology is globally unprecedented. Plant propagation is normally performed using seeds and cutting. These methods result in a limited cultivation period, and the growth rate can be low depending on the plant. However, The Kirin Group’s mass propagation technology that we developed makes it possible to significantly increase the number of quality plants with the same characteristics as the parent plant, regardless of the season.

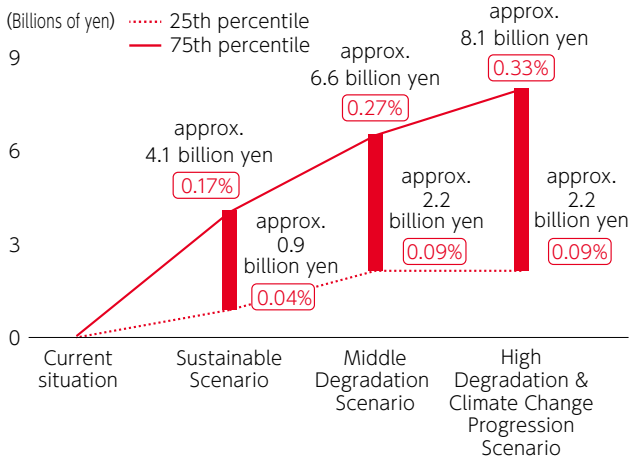
The Kirin Central Research Institute has successfully applied this technology to hops, a raw material for beer, using a world-first approach to promote the formation of axillary buds. By enabling the mass propagation of hops, this technology contributes to stabilizing the supply and improving the quality of raw materials for beer production.

Plant mass propagation technology is expected to have a positive impact on the sustainability of agriculture and ecosystems by accelerating the dissemination of varieties adapted to environmental changes, as well as the mass propagation of new varieties, endangered species, and useful plants.

▶Measures against fertilizer price increases

The Kirin Group conducts Rainforest Alliance certification support training for tea farms in Sri Lanka. The training provides scientific methods to increase yields while reducing the use of pesticides and fertilizers (see details on certification support (→P.60)).

Impact on Agricultural Product Procurement Costs from Carbon Pricing in 2050 (percentage of revenue)



*Recalculated with 2025 data

Activities in Response to Significant Risks and Opportunities

Transition Risk/Policy

Manufacturing

Early replacement of currently held assets for decarbonization [medium to long term]

As policies, regulations, and societal expectations around decarbonization intensify, continuing to operate existing fossil fuel-based equipment for their originally planned lifespans may become increasingly difficult. Our decarbonization roadmap anticipates transitioning boiler fuel—used for heat in processes such as wort boiling—from natural gas to GHG-free energy sources like green hydrogen. This would require replacing equipment such as boilers earlier than initially expected. We also anticipate accelerated demand for electrifying our truck fleet, potentially requiring vehicle replacements before full depreciation (Details of the roadmap →P.30).

Research & Development | Procurement | Manufacturing | Supply and Logistics | Sales

Cost of regulatory response [medium to long term]

In 2023, the ISSB (International Sustainability Standards Board) finalized the IFRS Sustainability Disclosure Standards (IFRS S1 and S2), establishing a global baseline for sustainability reporting. Jurisdictions worldwide are using these standards as a reference for mandatory corporate disclosure requirements. In Japan, the Sustainability Standards Board of Japan (SSBJ) published standards aligned with ISSB in March 2025, which are expected to be gradually mandated starting from the fiscal year ending March 2027. The Kirin Group operates across multiple jurisdictions, including Japan, Australia, the United States, and the EU, and will be required to report or disclose sustainability information in accordance with each jurisdiction's requirements, including SSBJ standards in Japan. Specifically, we must explain how sustainability issues such as climate change and natural capital impact corporate value, along with our responses to associated risks and opportunities. This necessitates building systems to accurately and promptly collect value chain-wide information and integrate it into management decision-making.

Manufacturing

Cost of responding to pollution-related regulations [medium to long term]

In responding to regulations on environmental impacts, such as contamination caused by pharmaceutical effluents, there is a risk of increased costs due to hiring specialized personnel and engaging external experts for advice and consultation.

Procurement | Manufacturing

Cost of responding to land use-related regulations [medium to long term]

Environmental regulations related to land use such as mandatory biodiversity net gain requirements or restrictions on agricultural land conversion to prevent deforestation—may increase compliance costs through hiring specialized personnel and engaging external experts. Additionally, constraints on agricultural production expansion could lead to higher raw material procurement costs.

Research & Development | Supply and Logistics | Sales

Cost of responding to genetic resource-related regulations [medium to long term]

Compliance with international frameworks governing access to and use of genetic resources may lead to increased costs due to hiring specialized personnel and engaging external experts for advice and consultation.

Procurement | Manufacturing

Increase in cost of relocating production and procurement areas due to expansion of protected areas [medium to long term]

The expansion of protected areas for biodiversity conservation may result in existing production facilities or sourcing regions being designated as protected zones, restricting operations. This would necessitate site relocation, significantly increasing costs for capital investment and supply chain restructuring.

Response Strategy

▶ Identification of trends in technology and implementation of our roadmap with adaptive updates

We will proceed with our transition plan based on our Net Zero roadmap, which is constantly updated considering technological trends.

▶ Advancement of data collection and calculation methods

We will strengthen the organizational structure responsible for sustainability-related disclosure and enhance data collection and calculation by introducing an IT system.

▶ Refinement of data calculation

When calculating Scope 3 emissions data, we will replace the conventional estimation method using emission factors based on literature values with calculations based on primary data from suppliers.

▶ Improvements to environmental management systems

By establishing and appropriately operating an environmental management system, we ensure compliance with environmental regulations and prevent pollution of the natural environment.

The risks of "Cost of responding to pollution-related regulations," "Cost of responding to land use-related regulations," "Cost of responding to genetic resource-related regulations," and "Increase in cost of relocating production and procurement areas due to expansion of protected areas" were newly identified in our 2025 assessment of risks and opportunities based on integrated scenarios (Details →P.20-21). Going forward, we will closely monitor regulatory developments and implement appropriate measures to mitigate these risks.

Activities in Response to Significant Risks and Opportunities

Transition Risk/Policy

Activities

▶Identification of trends in technology and implementation of our roadmap with adaptive updates

The use of GHG-free energy requires technological innovation and infrastructure development. Although the full-fledged transition will not take place until 2030, we will update existing plant facilities, including boilers and trucks in accordance with regulations. If we misjudge the timing of introducing modern technology, there is a risk that our existing technology and facilities may become obsolete because of regulatory changes or shifts in societal trends. Accordingly, we will develop a long-term roadmap for facility renewal and intro - duction and constantly update it to ensure a smooth transition.

▶Advancing data collection and calculation methods

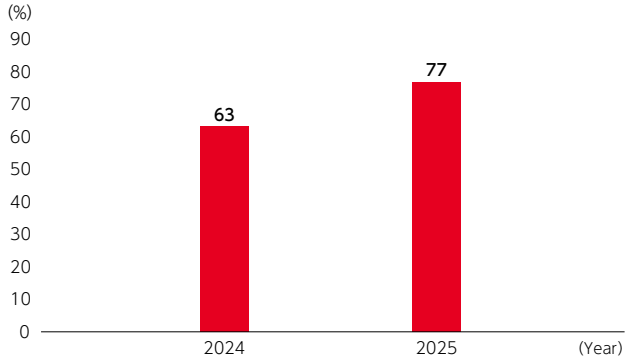
As a global leader in CSV, we established a Corporate Disclosure Section to oversee financial and non-financial disclosures across the Group, building an organizational structure to consistently execute disclosures aligned with international standards such as ISSB and SSBJ. We ensure standards-compliant disclosure of environmental non-financial information through resolute personnel and appropriate management systems. We have also transitioned to system-based data collection methods and begun gathering non-financial data. Previously, we collected Scope 3 data individually from each company and aggregated it manually in the department responsible. The new system reduces the burden of aggregation and calculation, enabling higher-quality disclosures.

▶Refinement in data calculation

For Scope 3 data disclosure, we previously relied on secondary data such as literature-based emission factors. Now, leveraging our Supply Chain Environmental Program launched in 2024, we are collecting primary data that reflects suppliers' GHG reduction efforts. By replacing literature-based factors with supplier-specific primary data, our calculations now capture the impact of each supplier's emissions reduction initiatives, enabling disclosures that better reflect actual conditions. Through continuous engagement, the primary data coverage ratio (Tier 1 suppliers' Scope 1+2) reached 77% in 2025. We will continue collaborating with suppliers to identify additional measures to reduce supply chain emissions.

Additionally, through The Consumer Goods Forum (CGF), we collaborate with major domestic food companies on industry-wide initiatives beyond what individual manufacturers can achieve alone. We have established a supplier decarbonization support platform that calculates and provides supplier-specific emission factors based on common methodologies. By standardizing processes such as third-party assurance across companies, the initiative enables the industry to focus resources on actual emissions reduction.

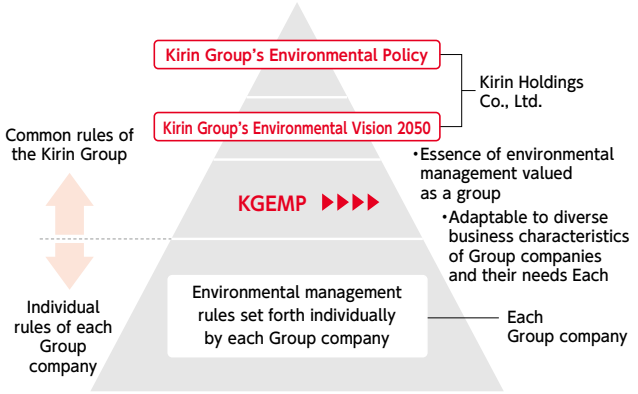
Primary Data Coverage for Tier 1 Suppliers (Scope 1+2)



▶Establishment and operation of environmental management systems

The Kirin Group has established the "Principle for Kirin Group's Global Environmental Management (KGEMP)," which outlines the essential elements of environmental management that the group values. KGEMP requires the appointment of a Chief Environmental Officer, who is responsible for the overall environmental management of the group, and an Environmental General Manager for each business company, who holds responsibility and authority over environmental matters. The principles mandate compliance with all environmental laws and other relevant regulations across all business sites, reduction of environmental impacts such as GHG emissions and water intake, prevention of pollution, and confirmation of system conformity and legal compliance through internal environmental audits. It includes monitoring the achievement of goals and conducting management reviews. As of December 2025, 74% of domestic and 71% of overseas business sites have obtained environmental management system certification (including self-declaration of conformity). (details on the status of environmental management certification (→P.93))

Principle for Kirin Group's Global Environmental Management (KGEMP)



Activities in Response to Significant Risks and Opportunities

Transition Risk/Policy

Procurement

Incompatibility with rapid agricultural policy transitions [short to long term]

Sri Lanka's sudden ban on the import of chemical fertilizers and agricultural chemicals in the first half of 2021 (later withdrawn) led to a decline in yields of many agricultural products and caused great damage to the Sri Lankan economy. Political and macroeconomic influences can cause indirect changes in the use of land because of changes to crops produced and reduced yields per unit area. This could encourage deforestation. Without sufficient preparation, the transition to organic farming may weaken agriculture itself and lead to the destruction of the natural environment in the area surrounding agricultural land.

Response Strategy

▶Support for training farmers in sustainable agriculture

We recognize that proactively implementing environmental initiatives ahead of policy changes can help mitigate challenges during periods of rapid transition. Through training and support programs, we aim to equip farmers with the knowledge and resources needed to successfully adopt sustainable agricultural practices.

▶Appropriate engagement with experts and policymakers

We will strengthen our network with experts and policymakers through active participation in global environmental initiatives, collaboration with environmental organizations through supporting farmers, and participation in research projects with academic societies and government institutions. By leveraging these networks, we will gain knowledge about agricultural technologies, policy trends, and business, while improving agricultural sustainability.

Activities

▶Training for obtaining Rainforest Alliance certification

The Kirin Group has supported Sri Lankan tea farms to acquire Rainforest Alliance Certification. From 2022 to 2024, a total of 9 large farms and 4,804 small farms participated in the training. In Sri Lanka, droughts and frequent heavy rains caused by climate change have become serious problems. Urbanization, industrialization, soil erosion and outflow due to the inappropriate use of land are also major concerns. Since large tea farms are often located on steep, sunny slopes, heavy rains not only wash away the fertile soil, but in the past have caused landslides, in some cases taking the lives of people living on the farms. Covering the ground with grass (cover crops) not only enriches the ecosystem but also prevents soil erosion and retains water during droughts, making it an effective adaptation measure to climate change. The training teaches how to identify grasses that negatively affect tea cultivation and ensures that the ground in the tea farms is covered with good, deep-rooted grasses. Training also teaches scientific methods to increase yields while reducing the use of pesticides and fertilizers. In addition to protecting the forests, the reduced expenditure on pesticides and fertilizers improves the farms' profitability and increases the safety of the tea leaves.

Furthermore, the Kirin Group has supported coffee farms to acquire Rainforest Alliance Certification since 2020 in Vietnam, which accounts for about 30% of the coffee beans procured by the Kirin Group. Through the training, we aim to improve coffee quality by creating a system that can flexibly respond to environmental changes such as climate change, reducing water usage, preventing river pollution, considering biodiversity, and introducing regenerative agriculture. Currently, the training is being conducted in Gia Lai Province, Vietnam, and in 2025, 62 training schools were held, with 1486 farms participating.

▶Joint investment project with NPO to support regenerative agriculture

Stone & Wood Brewery, a subsidiary of Lion, has launched a joint investment project with an NPO in 2024 to promote the diffusion of regenerative agriculture. The project foundation supports local charitable organizations and provides sustainable agriculture projects, educational support, and community support to farmers who wish to introduce regenerative agriculture. This initiative has built valuable networks with environmental organizations, experts in regenerative agriculture, and local non-profit organizations.

Metrics and Targets

Targets and Results of Certification Support Training

Metrics	Targets	Results
Number of large tea farms Assisted to obtain certification in Sri Lanka (number of farms that received training)	15 (2022-2024 cumulative)	9 (2022-2024 cumulative)
Number of small tea farms assisted to obtain certification in Sri Lanka (number of farms that received training)	5,350 (2022-2025 cumulative)	6,924 (2022-2025 cumulative)
Number of coffee farms assisted to obtain certification in Vietnam (number of farms that received training)	2,000 (2024-2026 cumulative)	1,822 (2024-2025 cumulative)

Activities in Response to Significant Risks and Opportunities

Transition Risk/Market

Manufacturing | Supply and Logistics

Social resistance to fossil-derived raw materials [medium to long term]

The use of plastics is increasingly recognized not only as a driver of marine pollution but also as a contributor to climate change, leading to growing negative perceptions of fossil-based packaging materials. In Japan, heightened attention to plastic-related issues is reflected in the enactment of the "Act on Promotion of Resource Circulation for Plastics" in April 2022. Plastics are derived from fossil resources, increasing concern over climate change and geopolitical risk is expected to further focus attention on GHG emissions from incineration as well as the depletion of fossil-based resources.

Response Strategy

▶Plastic resource recycling

In line with the "Kirin Group Plastic Policy" formulated in 2019 to address plastic-related issues, we are reducing plastic use and shifting to PET bottles made from recycled PET resin, which represents a major plastic material within the Group. The policy sets a target to increase the recycled content ratio of PET bottles in Japan to 50% by 2027. We have promoted the use of recycled PET resin through mechanical recycling. We are also expanding the adoption of chemical recycling, which enables the production of high-purity recycled PET resin from contaminated used PET bottles and other PET resin products, while improving the efficiently of used PET bottle collection. Through these combined efforts, we reduce the use of fossil-derived raw materials and contribute to the transition to a Circular Economy.

Activities

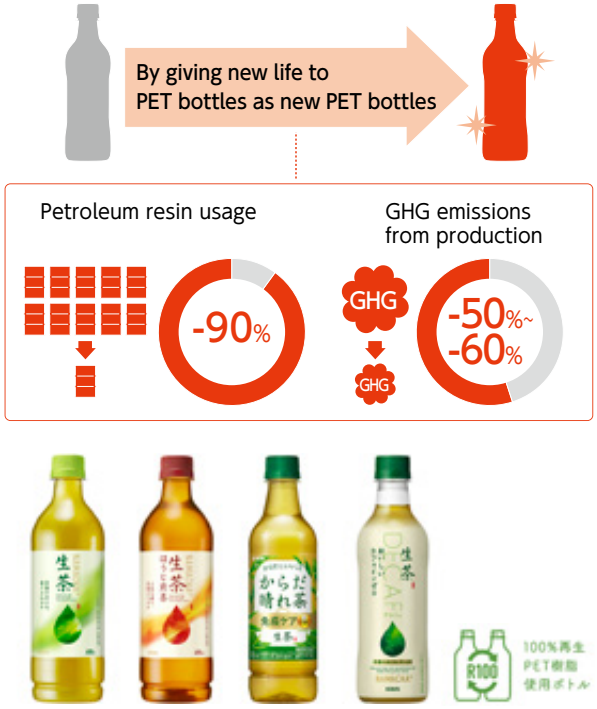
▶R100 PET bottles

The Kirin Group is gradually expanding the use of "R100 PET bottles," using 100% recycled PET resin for the bottle body.

R100 PET bottles use mechanically recycled resin. By using this resin, we can reduce petroleum-based resin by 90% and GHG emissions by 50-60%, compared with conventional PET resin.

We began using recycled resin for some of the packaging of "Kirin Gogo-no-Kocha Oishii Muto (sugar-free)" in February 2014. Subsequently, in 2019, we began using "R100 PET bottles," which use 100% recycled PET resin, for "KIRIN NAMACHA Decaf." Our use of "R100 PET bottles" as of April 2026 is shown below.

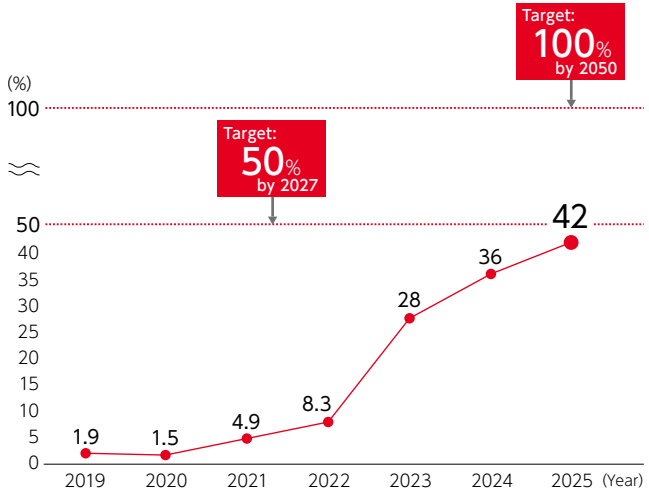
R100 PET Bottles



KIRIN NAMACHA : 600 ml (First photo from the left)
KIRIN NAMACHA *Hoji Sencha* : 600 ml (Second photo from the left)
KIRIN NAMACHA *Karada-Hare-cha* : 525 ml (Second photo from the right)
KIRIN NAMACHA *oishii caffeine Zero* : 430 ml (First photo on the right)
* Product photos are as of the end of April 2026.

Metrics and Targets

PET bottles: Trends in The Use of Recycled PET Resin (Japan)



Activities in Response to Significant Risks and Opportunities

Transition Risk/Market

Procurement

Concerns about deforestation [medium to long term]

As recognition of the importance of forests as GHG sinks increases, concerns about business activities that lead to deforestation are likely to increase, potentially leading to a stronger negative perception. The worst forest fires in Australia's history in 2019-2020 and the wildfires in California in 2025 have brought renewed attention to the relationship between climate change and forests.

The United Nations Food System Summit was held in 2021. The EU's "Farm to Fork" strategy and Japan's "Green Food System Strategy" have strengthened the focus on sustainable agricultural production. The COVID-19 pandemic and geopolitical developments have increased awareness of food security. Growing interest in sustainable agriculture is expected to lead to heightened attention to forest-related issues as well.

Response Strategy

▶Promotion of sustainable forestry and agriculture

The Kirin Group will continue efforts to expand sustainable forestry and agriculture, increasing the share of certified paper and raw materials sourced from certified farms.

▶Creation of high-quality forest-based carbon credits

We will conduct joint research aimed at creating forest-based carbon credits.

▶No-Deforestation Commitment

As part of our SBT Net-Zero recertification (certified in March 2026) and the establishment of our FLAG target in 2025, the Kirin Group will advance its no-deforestation commitment.

Activities

▶Promotion of sustainable forestry and agriculture

The Group established the use of sustainable paper in the "Action Plan for the Sustainable Use of Biological Resources," and in 2020, achieved the use of FSC-certified paper or recycled paper for major paper containers and packaging in the domestic beverages business (Kirin Brewery, Kirin Beverage, and Mercian). In the 2021 revision of the "Action Plan for the Sustainable Use of Biological Resources," the scope of companies was expanded, and initiatives have been further advanced.

In terms of sustainable agriculture, we support the acquisition of Rainforest Alliance certification, which promotes more sustainable farming practices, at tea farms in Sri Lanka and coffee farms in Vietnam. Since August 2021, we have been selling a year-round product in the Kirin Gogo-no-Kocha line that uses tea leaves from farms with Rainforest Alliance certification.

▶Creation of high-quality forest-based carbon credits

In March 2025, The Kirin Group started a joint research project with Hitachi to create forest-based carbon credits. By utilizing the Kirin Group's unique "mass plant propagation technology" and Hitachi's "natural measurement technology and digital technology related to MRV (Measurement, Reporting, and Verification)," we aim to generate high-quality forest-based carbon credits while achieving both GHG reduction and biodiversity conservation in reforestation areas. (Related column →P.63)

▶No-Deforestation Commitment

The Kirin Group aims to source raw materials without deforestation and has identified coffee, palm oil, and paper as high-risk commodities. For these commodities, we verify that raw materials are produced on land not subject to deforestation since the cut-off date (2020); and establish and strengthen management systems, including traceability and monitoring. Additionally, we have assessed risks based on TNFD's LEAP approach for palm oil and coffee and adopted FSC-certified paper for paper containers and packaging, advancing concrete actions to prevent deforestation (Details on no-deforestation commitment → P.30).

Column: R&D Strategy in the Environmental Field and Advancing Forest-Based Carbon Credits

The Kirin Group is commitment to addressing global social challenges through cutting-edge technologies such as fermentation, biotechnology, and AI-driven drug discovery. In addition to basic research, we are investing in environmental R&D grounded in plant science. Recently, we have undertaken joint research aimed at generating high-quality forest-based carbon credits (see previous page). In this column, we spoke with Daisuke Fujiwara, Senior Executive Officer of Kirin Holdings (R&D Strategy, President of R&D), to explore the significance of these initiatives within the Group's R&D strategy, as well as recent developments and future outlook.

— How do you position environmental initiatives within the R&D strategy, and what is the significance of addressing them through corporate research?

We have been engaged in plant research since 1980. While we possessed world-class capabilities in mass plant propagation technology, for many years we struggled to identify clear commercial applications and translate our expertise into economic value. In recent years, however, the emergence of the carbon credit market has transformed the carbon absorption capacity of plants into a measurable economic value. This represents a major turning point—our accumulated technological assets are now aligned with addressing social challenges and transformed into business opportunities. R&D in the environmental field represents both a "social responsibility" and a "new growth opportunity." Under our Creating Shared Value (CSV) philosophy, we have consistently sought to create both social and economic value. Many of our young researchers are deeply passionate to address social challenges such as an environmental conservation and well-being. I believe the role of a corporate research institute is to channel this passion and technical capability into sustainable business.

— How do you evaluate and balance short-term profitability with long-term social value and corporate value creation in environmental R&D investments?

We plan to expand our R&D expenditures through 2035, with investments in the environmental field positioned as a key priority. However, we are not an academic institution. Our investment must be supported by a clear path to financial return. For this project, our goal is to clarify the business direction within ten years—preferably within five years. From the perspective of accountability to our investors, I believe this is a reasonable timeframe. We aim to create business value that is sustainably scalable through social implementation. Forest-based carbon credits represent an area where short-term milestone management can be balanced with a long-term growth vision, which is a key factor in our investment decision.

— Could you explain the aims of the joint research with Hitachi, Ltd.?

While it has been challenging to monetize plant technologies on their own, the emergence of clearly defined value of carbon credits provided the starting point for this collaboration. However, generating high-quality credits requires advancements in MRV (Measurement, Reporting, and Verification), which cannot be achieved by our own company alone. Partnering with Hitachi, which has strengths in digital technologies, was therefore a optimal approach. At present, we are conducting trials at experimental sites to visualize forest value, assess biodiversity impacts, and evaluate economic viability. By establishing rigorous monitoring metrics in plantation forests, we aim to achieve both environmental integrity and economic rationality.

— What are the intended uses for the credits generated, and what is the long-term vision?

First, we intend to use the credits to offset our own emissions. If surplus credits are generated, we would consider external sales. We are not limited to the J-Credit framework. We are also exploring international carbon markets over the longer term. As implementation of the Paris Agreement Article 6 rulebook progresses, demand for high-quality credits that meet international standards is expected to grow. Our joint research with Hitachi represents a strategic step toward future market opportunities.

— How do you view the impact on local communities and industries?

This initiative also represents an effort to create new economic value for forests in collaboration with the forestry industry. By building a value chain from seedling supply through reforestation to credit generation, we aim to contribute to the revitalization of local economies. Enhancing the value of forests is expected to align with initiatives such as watershed conservation activities and support the development of sustainable regional models. We position this as a foundation for integrated initiatives that generate "positive impacts" for both nature and people from multiple perspectives.

— Finally, could you share a message with stakeholders?

Research is the pursuit of bringing to life a future that can only be scientific foresight. In corporate research, we must not only realize such a future, but also implement it widely in society and connect it to sustainable profits. While maintaining perspective as both a researcher and a business leader, I am committed to building a research framework that clearly defines pathways to financial value creation. The environmental field cannot be addressed by a single entity alone. That is why we collaborate with partners to transform technology into social value and then into economic value. Our R&D serves as a growth engine that enhances corporate value by addressing social challenges, including environmental issues. We would greatly appreciate your continued support from a long-term perspective.

Daisuke Fujiwara
Senior Executive Officer
R&D Strategy, President of R&D Divisiony