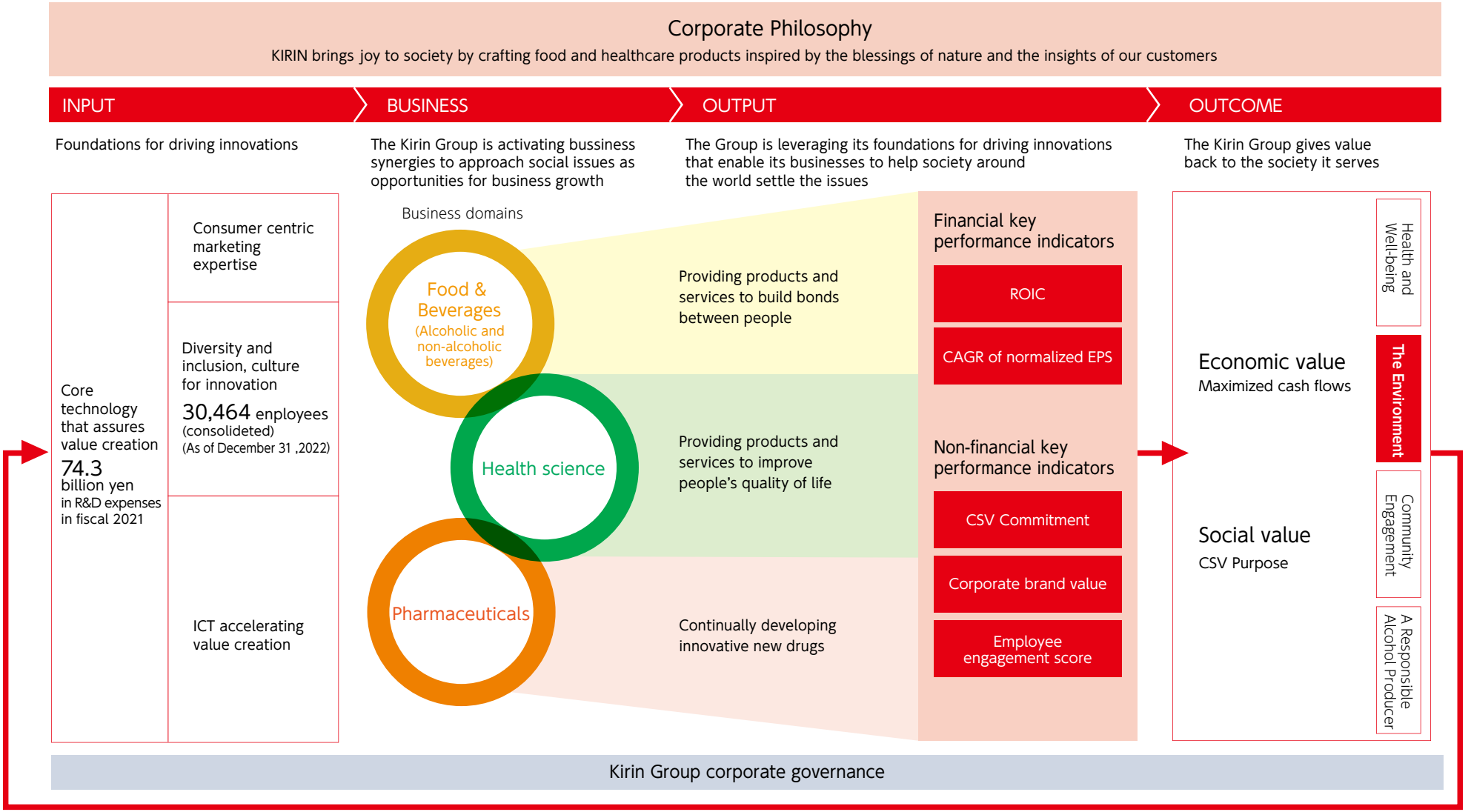
Value Creation Model

The Kirin Group places CSV at the core of our management. We will work to solve social issues through our business activities and achieve sustainable growth together with society by simultaneously creating social and economic value. The "value creation model" below is a continuous mechanism that amplifies these two types of value creation through a cycle of reinvesting economic value gained in our capabilities as an organization.
Operating our businesses across the three areas from food and beverages to pharmaceuticals requires the input of natural capital and the resolution of environmental issues in areas such as containers and packaging, and climate change. We believe that realizing solutions to these issues and sustainable use of natural capital through our businesses will contribute to the value we give back to society. For this reason, we regard that the “environment,” which is indicated as one of the non-financial targets in the value creation model below, is an important factor for value creation.
On page 11, under “Kirin's Environmental Value Correlation,” we explain how environmental issues relate to the Kirin Group’s value creation model.



Identification of Materiality

When formulating the Kirin Group 2022-2024 Medium-Term Business Plan, the second stage of our Long-Term Management Vision, the Kirin Group Vision 2027, announced in 2022, we assessed the importance of sustainability issues. In accordance with the flow for the identification of materiality (below), we updated our social and environmental analysis, and after dialogue with internal and external stakeholders, as well as discussions among management including the Group CSV Committee on multiple occasions, and deliberation at meetings of the Board, we revised the Management Issues for Sustainable Growth (Group Materiality Matrix) (below on the right) in anticipation of the situation in ten years' time. We use this process to identify the issues that are most important to the Kirin Group and its stakeholders and which areas the Kirin Group can positively impact.

As a result, we reconfirmed that the following four important issues related to the environment that we set in the Kirin Group's Environmental Vision 2050 are highly material issues for Kirin Group management: "sustainable use of biological resources," "sustainable use of water resources," "sustainable recycling of containers and packaging," and "overcoming climate change." The beta version of TNFD framework, published in March 2022, recommends a holistic approach to climate and nature-related issues. The holistic approach is a fundamental concept of the 2013 Kirin Group Long-Term Environmental Vision, in which we clearly state that the four environmental issues of "biological resources," "water resources," "containers and packaging," and "climate change" are not independent but "interrelated environmental issues." The Kirin Group has continuously pursued this concept since we turned our focus to environmental activities with a global perspective in early 1990.

As a pioneer of the holistic approach, we intend to contribute to increased global awareness of this concept and the resolution of environmental issues. Through this process, we identify the most important issues for the Kirin Group and its stakeholders, and examine which domains the Kirin Group can make a positive impact in.

Flow for the identification of materiality

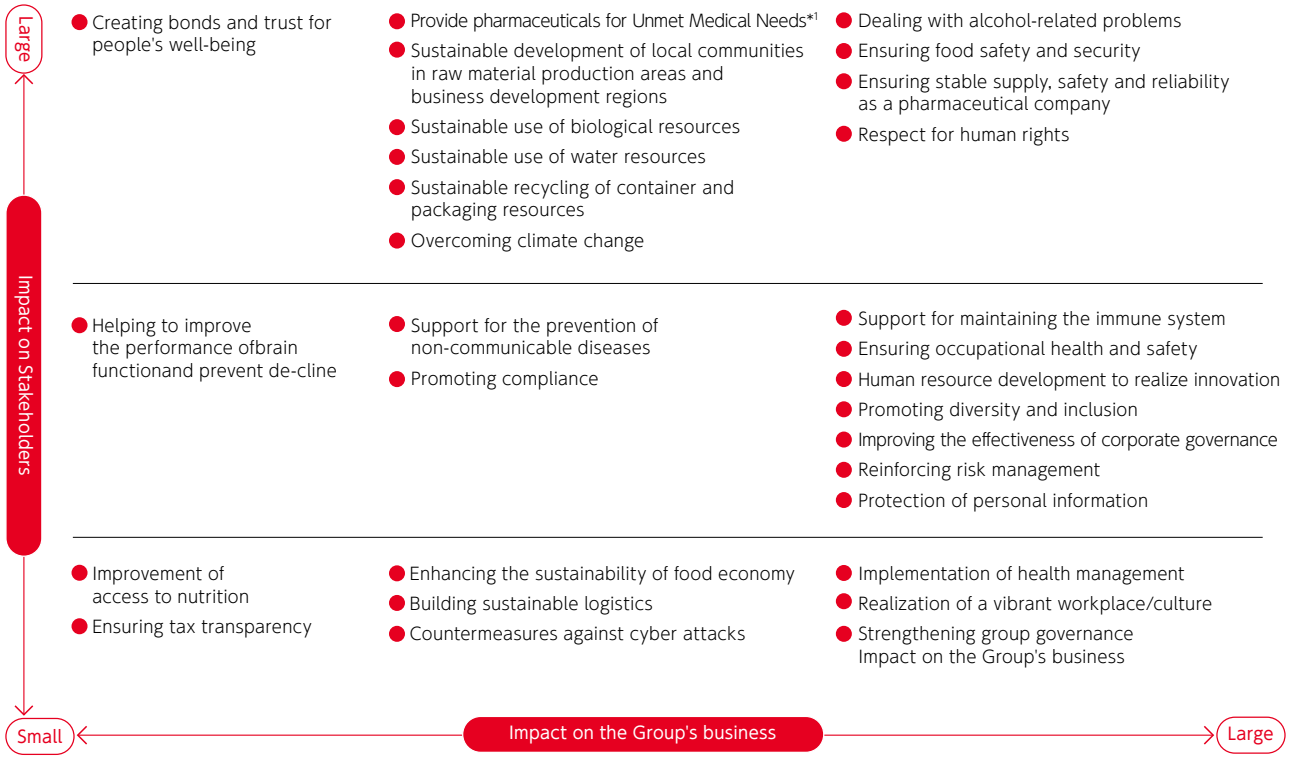
Step1
Social environment analysis
We identify issues that we need to address by referring to trends in discussions and policies surrounding the Kirin Group in Japan and overseas, the results of scenario analyses, and other factors

Step2
Stakeholder engagement
We reflect a diverse range of dialogue with external experts, NGOs, and various other stakeholders in discussions within the Kirin Group

Step3
Discussion at the senior management level
Based on the input information, senior management fully discusses and assesses risks and opportunities for our businesses and society

Step4
Deliberations by the Board
After discussions among senior management, the Board selects and makes resolutions concerning important themes for our sustainable survival and growth together with society in the future

Management Issues for Sustainable Growth (Group Materiality Matrix) (Updated in 2022)



*1 Provision of pharmaceuticals for diseases for which there are no effective treatments, including rare diseases

Global Trends and Kirin's Actions

In the Kirin Group, we have enhanced the level of our environmental management by repeatedly anticipating global trends and engaging in initiatives on a trial basis.
Taking the opportunity of the 1992 Global Environment Summit in Rio de Janeiro, in 1991, the previous year, we established the Kirin Group's Basic Policy for Addressing Global Environmental Issues.
In 1993, the year after the Summit, we revised our management philosophy to state: "We aim to be a corporate group that considers the global environment." In this way, we accelerated our environmental management by making a major shift from activities centred on pollution control to activities with a global perspective.
It resulted in industry firsts, such as our subsequent corporate presentation at the 1997 Third Conference of the Parties to the United Nations Framework Convention on Climate Change held in Kyoto, "Water Source Forest Activities" launched in 1999, the lightest weight returnable beer bottle in Japan in 2003, and 100% FSC certified paper for paper containers in 2020.
Our response to advanced disclosure frameworks has further significantly raised the level of the Kirin Group's environmental management.
From around 2008, we began full-fledged measures to respond to questionnaires sent by the CDP, an environmental non-governmental organization (NGO) that currently has the greatest influence on responses to environmental issues such as climate change. At that time, not so many people did not think that ESG would become such an important issue in Japan, but we thought that answering the questionnaire would be the best way to proactively identify environmental issues that required a global response. The "mental exercises" required to respond appropriately to the CDP questionnaire contributed to our multilayered understanding of global environmental issues, as well as the Kirin Group Long-Term Environmental Vision, which we disclosed in 2013.
Thanks to our quick response to the scenario analysis called for in the TCFD guidance released in 2017, we have ensured that an understanding has spread from management to employees that the Kirin Group's environmental themes of "biological resources," "water resources," "containers and packaging," and "climate change" must be approached not as separate issues, but as interrelated issues in a holistic manner. This shared understanding formed the basis for subsequent enhancements to the level of environmental management.
In this way, we have created a shared understanding within the company that responding to advanced disclosure frameworks will improve the level of environmental management, which in turn made it easier for us to take on the challenge in 2022 of disclosing information on a trial basis based on the LEAP approach advocated in beta v0.1 of the TNFD framework issued in 2021.
Although there are risks involved in trying the disclosure of information on a trial basis at an early stage, we believe it will contribute to the acquisition of large amounts of feedback, leading to a multilayered understanding of environmental issues, clarification of our vision, and enhancement of the level of environmental management. Going forward, we will continue taking the lead in achieving a decarbonized society, being nature positive, and building a circular economy, by continuing to take on new challenges one step ahead of global environmental challenges.

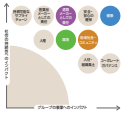
Earth Summit (1992) / Kyoto Protocol (1997) / The Tenth meeting of the Conference of the Parties (COP10) to the Convention on Biological Diversity (2010) / Paris Agreement; SDGs (2015) / TCFD (2017) / IPCC Special Report on Global Warming of 1.5°C (2019) / Publication of TNFD Framework beta version 0.1 (2021) / 2023

- Kirin Brewery's Kobe Plant, an advanced model brewery for low-carbon and water-saving production, completed (1997)

- Formulation of the Kirin Group Basic Policy on Initiatives Targeting Global Environmental Issues (1991)
- "Consideration for the global environment" specified in our Corporate Philosophy (1993)
- 100% recycling achieved at all breweries (1998)
- Start of "Water Source Forestation Activities" (1999)

- Reduced weight for all large bottles (2003)

- Action Plans for Becoming a Low-Carbon Corporate Group announced (2009)
- Declaration of Support for Biodiversity Conservation announced (2010)
- Guidelines for the Procurement of Sustainable Biological Resources and an Action Plan announced (2013)
- Start of support for tea farms in Sri Lanka to acquire Rainforest Alliance certification (2013)
- Start of development and deployment of lightweight medium bottles (2014)
- Use of 100% recycled PET bottles started (2014)
- Survey of water risks to natural capital and major global business sites (2014)
- Group Materiality Matrix announced (2016)



- CSV Commitment announced as SDGs Initiative (2017)
- Became the first food and beverage manufacturer in Japan to be approved by SBT (2017)
- First Japanese food and beverage company to support the TCFD recommendations (2018)
- Start of water source conservation activities in Sri Lankan tea farms (2018)

- Kirin Group Plastic Policy announced (2019)
- Announcement of CSV long-term and non-financial targets "Kirin Group CSV Purpose" (2019)

- Achieved use of FSC-certified paper in 100% of paper containers at Kirin Brewery, Kirin Beverage, and Mercian (2020)
- Joined RE100 (2020)
- Upgraded SBT to1.5℃ (2020)
- Joined the Alliance to End Plastic Waste (2021)
- Expressed support and commitment to the United Nations Food Systems Summit 2021 (2021)
- Successfully developed mass plant propagation technology for hops (2022)
- Expanded R100 PET bottles to cover the *Nama-cha* series (2021)
- Launched year-round products using tea leaves from certified farms in Sri Lanka (2021)
- 100% renewable energy purchased at Kirin Brewery's Nagoya Plant (2021)
- Kirin Group Action Plan for the Sustainable Use of Biological Resources (2021)

- Began continuous support for donations of surplus inventory to local governments and food banks (2022)
- Became the first global food and beverage company to obtain approval for an SBT Net-Zero (2022)
- Invested in offshore wind power generation (three sites) through participation in a consortium (2022)
- First food and beverage company in Japan to execute a transition-linked loan (2023)
- 100% of electric power purchased at Kirin Brewery's Toride Plant (fifth site) converted to renewable energy (2023)
- 100% of electric power purchased at two Kyowa Kirin plants and three research laboratories converted to renewable energy (2023)
- Mariko Vineyard selected as an approved site for biodiversity by the Ministry of the Environment (2023)

- Responded to the CDP questionnaire (from 2008)
- Kirin Group's Long-Term Environmental Vision announced (2013)
- Trial disclosure based on the TCFD recommendations (2018)
- Kirin Group's Environmental Vision 2050 announced (2020)
- Trial disclosure based on the LEAP approach (2022)
- Further enhancin the level of environmental management

Kirin Group's Environmental Vision 2050

Enrich the Earth with Positive Impact

Against the backdrop of the climate crisis, the ongoing loss of biodiversity, and the increasing severity of global environmental problems such as ocean pollution caused by plastics, society is approaching a major turning point. Industries such as Kirin Group that rely on water, agricultural products, and other blessings of nature are vulnerable to climate change, and must move quickly to overcome these issues.
In scenario analysis based on the TCFD final report, which we have been conducting since 2017, we have seen the enormous scale of the impact of climate change on agricultural products and water resources, and it has become clear that minimizing and neutralizing negative impacts will not be sufficient to limit the impact on natural capital and deliver a sustainable planet to the next generation. We also expect that corporate environmental initiatives will evolve from being self-contained to having a positive impact on wider society.
In order to meet these demands from society, we have further developed our existing holistic approach to the environment with the Kirin Group's Environmental Vision 2050, which the Board deliberated, resolved, and renewed in 2020, as well as the "positive impact" approach that we have newly introduced.
With regard to renewable energy sources, we prioritize "additionality," i.e., contributing to the decarbonized society by adding and increasing renewable energy in the world. We aim to build a "society that continuously recycles plastics" by developing our own commercialization techniques for chemical recycling. With regard to natural capital, we aim to be "nature positive," whereby the expansion of our businesses will contribute to the restoration of ecosystems and increase of their services.
Under this new vision, together with the young people who will lead the future, we will create a prosperous world for the next generation.

Kirin Group's Environmental Vision 2050

Enrich the Earth with Positive Impact

Biological Resources
A society that values sustainable biological resources.

Water Resources
A society that values sustainable water resources.

Containers and Packaging
A society that circulates containers and packaging in a sustainable way.

Climate Change
A society that has overcome climate change.

Input to and Output from Kirin Products
Environmental Interactions

Kirin and its broad stakeholders enrich society and the Earth for future generations through positive impact on people and the environment.

Efforts for Realization

Biological Resources
A society that values sustainable biological resources.

Cultivate, expand and procure sustainable agricultural raw materials
- Procure agricultural raw materials that comply with certification schemes, such as FSC, RSPO and the Rainforest Alliance.
- Cultivate agricultural raw materials that are suited to global warming and expand them to raw material production areas.
- Promote recycling and reduction of product waste, thereby bringing food waste generated by production activities to zero.

Stand by the side of farmers to make raw material production areas sustainable
- Expand support in acquiring sustainable certifications, such as the Rainforest Alliance, and solve environmental issues, etc., in production areas.
- Examine and research contributions to affluent biodiversity by sustainable agriculture and expand the outcomes to raw material production areas.

Water Resources
A society that values sustainable water resources.

Bring water, used as a raw material, to a sustainable state
- Continue to reduce the volume of water use in group operational bases.
- Further promote water source forestation activities in Japan.

Solve problems with water in a way that suits the characteristics of basin regions where our business bases are located
- Minimize risk during water-related disasters by reinforcing resilience and efficiency for supply chains.
- Implement water source preservation activities and education programs to preserve water in raw material production areas, thereby solving water issues in the value chain.

Containers and Packaging
A society that circulates containers and packaging in a sustainable way.

Develop and disseminate sustainable containers and packaging
- Use sustainable containers and packaging that employ recycled materials and biomass.
- Aim to develop new containers and services.

Build a resource-recycling system to make containers and packaging sustainable
- Take the lead in improving the recycling system in Japan.
- Contribute to collection of resources and establishment of recycling infrastructure in areas where operations are maintained.

Climate Change
A society that has overcome climate change.

Realize Net-zero GHG emission from the entire value chain
- Achieve RE100 at an early stage and source the company's energy from 100% renewable energy.
- Realize Net-Zero GHG emissions from in the entire value chain.

Lead to build a decarbonized society
- Build a business model that contributes to a decarbonized society with customers and other stakeholders.
- Support research to mitigate climate change and expand responsible renewable energy to society.

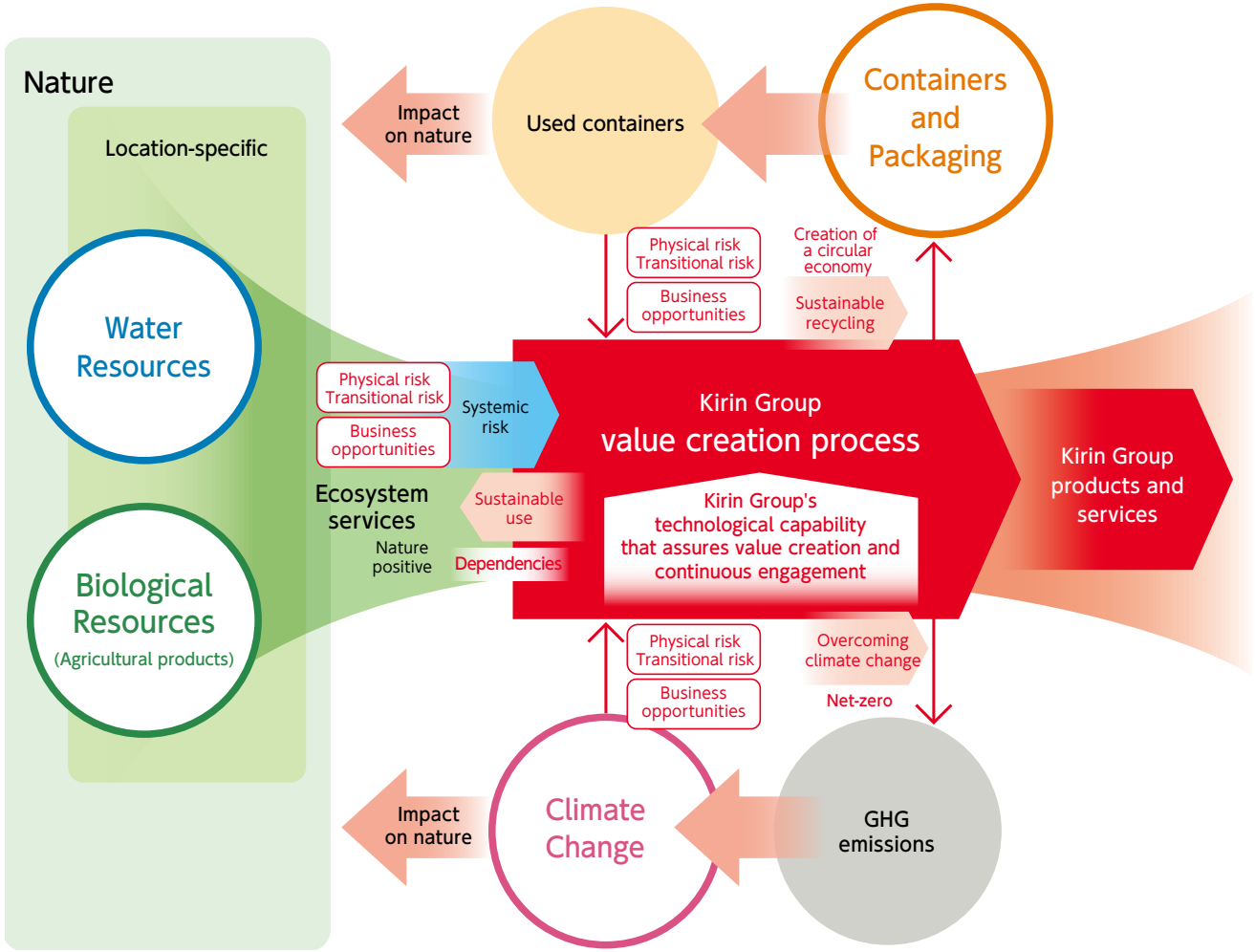
Kirin's Environmental Value Correlation

The Kirin brewing philosophy of "Reverence for Life" is behind the Kirin Group's environmental management. Malt, hops, and water are all blessings from nature, and yeast, which breaks down the sugar in wort into alcohol and carbonic acid and determines the flavor of beer, is also a microorganism. The idea is that in order to produce great-tasting beer, we need to continue to work directly with "life" and study the life sciences.

The idea of "Reverence for Life" is based on the teachings of respect for the diversity of humanity and the natural environment of Dr. Albert Schweitzer, who won the Nobel Peace Prize in 1952, namely his idea that, "I am life that wills to live, in the midst of life that wills to live." This idea also serves as the backbone of our CSV management, in which we contribute to those around us (social value), as well as our own company (economic value).

The Kirin Group was quick to view natural capital as a source of value creation, and it is fair to say that we selected agricultural products and water as the first targets for TCFD scenario analysis not only because we recognize that we are a company that uses ecosystem services, but also because we have put our brewing philosophy of "Reverence for Life" into practice at the management level.

Our corporate culture, which is fostered through developing the life sciences, has led to R&D capabilities and engineering technologies that go beyond areas outside of the life sciences, such as packaging, and contributes to the competitive advantage of the Kirin Group's engineering and R&D capabilities. At the same time, it acts as the driver for our holistic approach to four environmental issues. Such an organizational culture that values science lead to not only the industry-leading pursuit of getting our science-based GHG emissions reduction targets validated by the Science Based Targets initiative (SBTi) but also our intention to contribute to the setting of scientific targets related to natural capital through participation in the pilot program of the Science Based Targets Network. Consortiums with NGOs and other companies, collaboration with local communities, and participation in global initiatives are all aspects of our holistic approach.



Kirin's Strengths in Environmental Management

INPUT

■ Core technology that assures value creation

Engineering capabilities

Kirin Group engineering

Engineers with a thorough understanding of the manufacturing process, production technology, and maintenance techniques support production facilities to lead the decarbonized society.

Research and development capabilities

Kirin Central Research Institute

Our main mission is R&D and business development in the health science field. In addition to technologies for the exploration, evaluation, and production of health functional materials, the company also possesses advanced component analysis technologies and cultivation and production technologies for raw materials (plant mass propagation technologies).

Institute for Future Beverages

Our mission is to use the five senses and the power of science to create new tastes and values in drinks, and to enrich people's lives. In every genre, we take on the challenge of creating foods that are both healthy and delicious.

Institute of Health Sciences

This institute was newly established in 2023 within the Health Science Business Division to enhance the value of specialty materials, such as *Lactococcus lactis* strain Plasma, *Human Milk Oligosaccharide* (HMO), and *citicoline*, and to vigorously execute business plans.

Institute for Packaging Innovation

Our mission is to provide new value and solve social issues through packaging innovation. In addition to developing and evaluating container and packaging-related technologies for the alcoholic beverage and soft drinks business, we are also taking on the challenge of developing chemical recycling technologies.

■ Continuous engagement

Contributions to rule making and policy proposals

SBTN(The Science Based Targets Networks)

We were the first company in the Japanese pharmaceutical and food and beverage industries to participate in the SBTs for Nature Corporate Engagement Program (CEP), an initiative for setting targets related to natural capital.

TNFD(Taskforce on Nature-related Financial Disclosures)

We participated in TNFD pilot testing for corporate reporting and actions concerning risks related to natural capital. We were a global pioneer in trialing the disclosure of information based on the LEAP approach. Also conducted scenario analysis with TNFD members at the request of TNFD.

TCFD(Task force on Climate-related Financial Disclosures)

We began disclosing information in line with the TCFD final report in 2018. Kirin was the first company in the Japanese food and beverage industry to express support for TCFD.
For the second year in a row, we won the highest number of votes for "excellent TCFD disclosure" selected by asset management institutions for Japanese equities entrusted by the GPIF.

AEPW(Alliance to Plastic Waste)

In March 2021, Kirin became the first Japanese food and beverage company to participate. By solving the world's plastic waste problem from a global perspective, we aim to create a "society that continuously recycles plastics," together with other participating companies.

Collaboration with various organizations, generations,and local communities

NGO

We work with international NGOs such as the Rainforest Alliance, WWF Japan, FSC Japan, and Earthwatch Japan to promote solutions to various environmental issues.

Consortiums

We collaborate with other companies and NGOs, including the Consortium for Sustainable Paper Use and the Rainforest Alliance Consortium.

Local communities

We engage with people in producing areas to identify issues and consider and implement solutions, including tea farms in Sri Lanka and local communities in areas around the fields that Mercian manages.

Next generation

We promote engagement with the next generation through collaboration with the Kirin School Challenge, Japan Environmental Youth Network, etc.

OUTCOME

■ Holistic solutions to environmental issues • Kirin Group value creation

Performance Highlights (Environmental Value Created in 2022)

The Kirin Group was a global pioneer in disclosing information on a trial basis based on the "LEAP" approach advocated in the beta v0.1 of the TNFD framework in 2022. As one of four companies selected from around the world in March 2023, Kirin is leading the world in the disclosure of non-financial information related to natural capital, such as testing scenario analysis methods with TNFD members. In addition, we continue to receive high praise for our TCFD-compliant disclosure, including receiving the highest number of votes for “excellent TCFD disclosure” selected by the GPIF's domestic equity asset management institutions for the second consecutive year.

Over more than three years, the spread of COVID-19 has had a significant impact on the Kirin Group's progress in resolving environmental issues. Strict restrictions on going out continued in Sri Lanka, meaning that trainers were mostly unable to travel to farms. Under these conditions, the government abruptly declared a ban on the use of chemical fertilizers and pesticides, which, combined with the subsequent economic collapse in Sri Lanka, forced a long period of stagnation in efforts to support the acquisition of sustainable farming certification and conserve water sources within farms. Even under these difficult circumstances, the Kirin Group continued to support the acquisition of certification, while the Rainforest Alliance and local trainers did their utmost to ensure that the farms continued to grow tea. Following the declaration of WHO of the end of the global emergency over COVID-19, we will resume our activities in earnest, and will also discuss new measures to support small farms with the Rainforest Alliance, which we plan to announce later this year.

Ongoing ecological research since 2014 has scientifically demonstrated that the Château Mercian Mariko Winery in Ueda City, Nagano Prefecture, has achieved Nature Positive status by transitioning from idle, devastated land to hedge and grass cultivation, and the results were presented at COP15 in 2022. We are also engaged in procedures aimed at contributing to the OECMs*1 of the new global “30by30”*2 goal.

The ratio of recycled resins used in PET bottles for containers and packaging in fiscal 2022 was approximately 1.7 times higher than previous year. Our plan to achieve practical uses for chemical recycling is making progress, and we believe we will be sufficiently able to achieve our target of 50% by 2027. We already use 100% FSC-certified paper for paper containers in the alcohol and non-alcoholic beverages business in Japan, and together with our efforts related to PET bottles, we will contribute to the creation of the circular economy.

From 2021 to the first half of 2023, the Kirin Group has been accelerating measures to install large-scale solar power generation facilities at breweries and plants, and to make the electricity purchased at breweries and plants 100% renewable. By the end of 2023, we expect 43% of the electric power used by Kirin Brewery to come from renewable energy, and we also expect Kyowa Kirin to reduce its CO_2 emissions by 53% compared with 2019. As energy prices soar as a result of rising demand for energy caused by economic recovery from the spread of COVID-19 and the geopolitical impact since February 2022, we will turn this risk into an opportunity, and lead the creation of a decarbonized society.

Biological Resources

A society that values sustainable biological resources

Cultivate, expand and procure sustainable agricultural raw materials

Paper and Printed Materials FSC-certified paper or recycled paper **100%**

RSPO (domestic primary and secondary raw materials) **100%**

The product using tea leaves from certificated farm
- 250ml LL slim *Kirin Gogo-noKocha Straight Tea* (2021~)

Stand by the side of farmers to make raw material production areas sustainable

Number of large farms assisted to obtin certification **94** (2013 to 2022)

Number of small farms that received training **9**
2022-2024 Target : Cumulative total of 5,350 farms

Water Resources

A society that values sustainable water resources

Bring water, used as a raw material, to a sustainable state

Non-financial target for water efficiency (Lion) **3.6kL/kL**
2025 target : 2.4kl/kl or less

Rate of reduction of water consumption per unit of production across Kirin Group **▲32%**
Actual in 2022 compared with 2018

Solve water issues according to the watershed characteristics of business locations

Number of water source conservation in Sri Lanka Cumulative Total **15**

Water source forest conservation activities **11**

Containers and Packaging

A society that circulates containers and packaging in a sustainable way.

Develop and disseminate sustainable containers and packaging

Percentage of recycled resins used in PET bottles **8.3%**
2027 target: 50%

Percentage of FSC-certified paper used for paper containers (Japan) **100%**

Build a resource-recycling system to make containers and packaging sustainable

Systems for collecting used PET bottles
- Launched a horizontal recycling trial to recycle used PET bottles into new PET bottles, at TOBU RAILWAY, Kiyosu City in Aichi Prefecture, and CHIBAYAKU GROCERIES, inc. “Yacs Drug” drugstores
- Introduced recycling boxes with new functions, designed to industry-wide specifications aimed at reducing contamination with foreign materials, next to vending machines

Climate Change

A society that has overcome climate change.

Realize Net-Zero GHG emissions from the entire value chain

Scope1+Scope2 Compared with 2019 **▲18%**
2030 target: -50%

Scope3 Compared with 2019 **▲1%**
2030 target: -30%

Lead to build a decarbonized society

Products compatible with decarbonization
- Steinlager (certified carbon zero beer under the Toitu program)
- XXXX Zero (Climate Active certified carbon zero beer)

*1 A target to effectively conserve at least 30% of land and sea areas as healthy ecosystems by 2030, with the goal of halting and reversing biodiversity loss by the same year. It was adopted as a new global target at the Fifteenth meeting of the Conference of the Parties (COP15) to the Convention on Biological Diversity held in December 2022.

*2 An acronym for Other Effective area-based Conservation Measures, which are geographically defined areas other than Protected areas, such as national parks, but that can effectively conserve biodiversity over the long term. Such areas can be included when achieving numerical targets under 30by30 targets.

*3 For details on calculation boundaries for each type of performance data, etc., see the content of our activities (→P.41~P.75)

Progress (2022)

Theme	We will create together	Major item	Minor item	Targets	2020	2021	2022
Biological Resources	A society that values sustainable biological resources	Supporting Sri Lankan tea farms to obtain Rainforest Alliance certification	Number of large farms assisted to obtain Rainforest Alliance certification (Number of farms trained) KBC	Total: 15 farms (2022 to 2024)	– Total number of certified large farms: 94 (2013 to 2022)	–	Total 4 farms
			Number of small farms assisted to obtain Rainforest Alliance certification (Number of farms trained) KBC	Total: 5,350 farms (2022 to 2025)	– Cumulative total of 120 small farms(2018 to 2022)	–	Total 9 farms
		Other	Use of FSC-certified paper or recycled paper for office paper KB KBC ME	100% (2020)	100%	100%	100%
			Response to sustainable palm oil *Except palm kernel oil KB KBC ME KIW	100% (2020)	100%	100%	100%
			Reduction of food waste (Compared with 2015 levels) KB KBC ME	-75% (2025)	-44%	-81%	-92%
Water Resources	A society that values sustainable water resources	Water reduction	Reduction of water consumption rate LN	2.4kl/kl (2025)	3.6kL/kL	3.5kL/kL	3.6kL/kL
			Rate of reduction of water use volumes (Compared with 2019 levels) KKC	-40% (2030)	-22%	-25%	-33%
			Rate of reduction of water use volumes (Compared with 2015 levels) KHB	-32% (2030)	-43%	-52%	-52%
		Water source conservation activities at Sri Lankan tea farms	Number of water source conservation sites KBC	5 sites (2020)	5 sites	12 sites	15 sites
Containers and Packaging	A society that circulates containers and packaging in a sustainable way	PET bottles	Ratio of usage of recycled resin for PET bottles KB KBC ME	50% (2027)	1.4%	4.9%	8.3%
		Paper container	Use of FSC-certified paper for 6-can packs KH KB KBC ME	100% (2020)	100%	100%	100%
			Use of FSC-certified paper for gift boxes KH KB KBC ME	100% (2020)	100%	100%	100%
			Use of FSC-certified paper for drink boxes KH KB KBC ME	100% (2020)	100%	100%	100%
			Use of FSC-certified paper for cardboard cartons for products KH KB KBC ME	100% (2020)	100%	100%	100%
Climate Change	A society that has overcome climate change	Reduction in GHGs	GHG emissions from the entire value chain KG	Net-Zero (2050)	4,721ktCO2e	4,491ktCO2e	4,876ktCO2e
			GHG emission reduction rate – Scope 1 + Scope 2 (Compared with 2019 levels) KG	-50% (2030)	-10%	-14%	-18%
			GHG emission reduction rate – Scope 3 (Compared with 2019 levels) KG	-30% (2030)	-7%	-11%	-1%
		Renewable energy	Ratio of renewable energy in plant purchased electric power KG	100% (2040)	12%	17%	27%

KG Kirin Group KH Kirin Holdings KB Kirin Brewery KBC Kirin Beverage ME Mercian KKC Kyowa Kirin KHB Kyowa Hakko Bio LN Lion KIW Koiwai Dairy Products

External Evaluation

The Kirin Group conducts transparent information disclosure to its investors and other stakeholders.
As such, we have been selected for and rated by the following global indices.

CDP "climate change" category "A-List"
(four consecutive years)

CDP "water security" category "A-List"
(seven consecutive years)

"Gold Award" in the "Environmentally Sustainable Company Category" for the first two years, and "Special Award" the fourth year
* Declined in FY2021 due to receiving the award for two consecutive years

CDP Supplier Engagement Rating "Leader Board"
(five consecutive years)

"SDGs Strategy and Economic Value Award" at the Fourth Nikkei SDGs Management Grand Prix
(four consecutive years)

The "Kirin Group Environmental Report 2020" won the "Climate Change Reporting Grand Prize (Minister of the Environment Award)" in the 24th Environmental Communication Award

Development of Lightweight PET Bottle "the 46th Kinoshita Prize for packaging technology"

New Thin Film Deposition Technology for PET bottles WorldStar Award and Kinoshita Prize

The middle-sized bottle also received WorldStar Packaging Awards

Kirin School Challenge won the Encouragement Award in the Career Education Awards

Judge's Special Award in the 6th Ikimono Nigiwai Corporate Initiatives Contest

Minister of Land, Infrastructure, Transport and Tourism Award under the Excellent Green Logistics Commendation Program

Ranked No. 1 in WWF Japan's "Ranking for Corporate Measures Against Global Warming in the Food Sector"

Kirin Namacha Decaffeinated Tea Drink won WorldStar Packaging Awards

Fuji-Sankei Group Award in the 26th Global Environment Awards

Kirin School Challenge won the Judges Committee Encourage Award at the FY2017 Corporate Awards for Youth Experience Activities

Yokohama Plant won the Green Cities Awards and Green Social Contribution Award

Logistics Environmental Grand Prize at the 18th Logistics Environmental Award

King of Beasts Award in WWF Japan's "Business & Diversity Katte-ni Award"

Selected for the following indices

MSCI ESG RATINGS AA

2023 CONSTITUENT MSCI JAPAN ESG SELECT LEADERS INDEX

FTSE Blossom Japan Index

FTSE4Good

FTSE Blossom Japan Sector Relative Index

2023 Sompo Sustainability Index