



22-D-1332 February 1, 2023

JCR Green Bond Framework Evaluation by Japan Credit Rating Agency, Ltd.

Japan Credit Rating Agency, Ltd. (JCR) announces the following Green Bond Framework Evaluation Results.

JCR Assigns <u>Green 1(F)</u> to the Green Bond Framework of Asahi Group Holdings, Ltd.

Issuer :		Asahi Group Holdings, Ltd. (security code: 2502)	
Subject	:	Green Bond Framework of Asahi Group Holdings, Ltd.	

<Green Bond Framework Evaluation Results>

Overall Evaluation	Green 1(F)
Greenness Evaluation (Use of proceeds)	g1(F)
Management, Operation and Transparency Evaluation	m1(F)

Chapter 1: Evaluation Overview

Asahi Group Holdings, Ltd. is the holding company of the Asahi Group, which includes Asahi Breweries, Ltd. and Asahi Soft Drinks Co., Ltd. Established in 1949, Asahi Breweries (established in 1889 as its predecessor) became the parent company, and in July 2011, it shifted to a holding company structure. Asahi boasts a strong presence in the domestic alcoholic beverage industry with several leading brands in beer-type beverages, RTD, and western liquors, especially "Asahi Super Dry" at its core brand. Its beverage business is also the third largest in the domestic market. Consequently, the company has built a solid business foundation in the domestic liquor and beverage market. In FY2021, Asahi Group has expanded its business not only domestically but also globally. The sales income by region was 55% in Japan, 21% in Europe, 22% in Oceania, and 2% in Southeast Asia in fiscal year ended December 2021. The medium-to long-term management policy, which was renewed in 2022, stipulates the concept of the long-term strategy, "contribute to a sustainable society and respond to changing conceptions of wellbeing through delivering great taste and fun."

Asahi Group Holdings recognizes that water, agricultural products and other "gifts of nature" are essential for their business activities. The Group acknowledges that "gifts of nature" are inevitable for the business continuity, and it places the sustainability issues including environments at the core element of its management. Based on this recognition, Asahi Group Holdings formulated the Asahi Group Environmental Vision 2050 and set out its vision of the world's ideal state for 2050 as "Planet Positive." The Group's environmental goal is to reduce the negative impacts on environment from its business activities to zero and to maximize the value to the global environment through enhancing a circular economy. The Company aims to integrate management with sustainability by establishing a system to promote sustainability, led by the Global Sustainability Committee, which is chaired by the Group CEO and is responsible for formulating sustainability policies and strategies, as well as making investment decisions related to sustainability.



The subject of this evaluation is Green Bond Framework ("the Framework") published by Asahi Group Holdings to use the proceeds only to expenditures to the projects to improve environment. JCR evaluates whether this framework aligns with the Green Bond Principles¹ and Green Bond Guidelines². These principles and guidelines are voluntarily published by the International Capital-Marketing Association (ICMA) and the Ministry of Environment, respectively, and are not legally regulated based on evidences. JCR however refers these principles and guidelines as they are referred to as unified standards domestically and globally.

Asahi Group Holdings decided the use of proceeds as follows: i: construction of "Tosu Brewery", ii: procurement of recycled PET and biomass plastics, and iii: purchase of renewable energy. Asahi Group Holdings set up eligibility criteria which consists of certification or effects to improve quantitative environment for the use of proceeds, respectively. In addition, it is stipulated that appropriate measures should be taken when implementing the eligible projects, taking into account the negative impacts on the environment. Based on the above, JCR evaluates the use of proceeds in this framework is expected to improve the environment.

The selection of projects is confirmed by Sustainability departments of Asahi Group Holdings and other departments in charge of environmental measures, and then evaluated and selected by the Management Strategy Committee of Asahi Group Holdings or the Management Committee of each Group company. Unallocated funds are managed in cash or cash equivalents and then allocated. The allocation of funds and unallocated balances are checked by Finance Department on a quarterly basis and approved by the head of Finance Division, and cash management is subject to internal and external audits. Allocation of Proceeds and the content of environmental improvement status are also appropriate. Based on the above, JCR evaluated that the management and operation system of Asahi Group Holdings has been appropriately established and is transparent.

Based on JCR Green Finance Evaluation Methodology, JCR assigned "g1(F)" for "Greenness Evaluation (Use of Proceeds)" and "m1(F)" for "Management, Operation and Transparency Evaluation." As a result, JCR assigned "Green 1 (F)" for the overall "JCR Green Bond Framework Evaluation."

The Framework meets the standards for the items required in the Green Bond Principles and the Ministry of the Environment's Green Bond Guidelines.

¹ ICMA(International Capital Market Association) Green Bond Principles 2021 years https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/

² Ministry of the Environment Green Bond Guidelines 2022 years https://www.env.go.jp/content/000062495.pdf

Chapter 2: Current Status of the Project on Each Evaluation Factor and JCR's Evaluation

Evaluation Phase 1: Greenness Evaluation

Based on the current status described below and JCR's evaluation of the subject, JCR evaluated that the proceeds were fully used for green projects and assigned the highest rank of "g1(F)" for Phase 1: Greenness Evaluation.

(1) JCR's Key Consideration on This Factor

In this section, JCR first confirms whether the proceeds set out in the Framework is used for green projects that have clear environmental improvement effects. Then, in cases where the use of proceeds is expected to have a negative impact on the environment, JCR confirms whether the impact is fully examined by an internal specialist department or an external third party and whether necessary measures have been taken for its workaround and mitigation. Finally, JCR confirms the consistency with the Sustainable Development Goals (SDGs.)

(2) Current Status of Evaluation Targets and JCR's Evaluation

a. Environmental Improvement Effects of the Project

<The Framework for Use of Proceeds>

The proceeds of the green bond is planned to allocate to new or existing projects that meet the eligibility criteria described below. If the proceeds are allocated to the existing projects, such projects are considered launching or starting its operation within 24 months prior to the date of the green bond issuance.

- **GBP** Category Green buildings, renewable energy, energy efficiency, and environmentally-friendly production technologies and processes Corresponding Respond to Climate Change: "Asahi Carbon Zero" initiative Details of the use <Project Overview> of Proceeds Asahi Breweries, Ltd. has named the new plant scheduled to start operations in 2026 "Tosu Brewery," and concluded a memorandum of understanding on Asahi Breweries' business expansion into Tosu City, with Saga Prefecture and Tosu City on October 14, 2022. As a model facility for Asahi Group's next-generation production system, the Tosu Brewery aims to, by renovating the manufacturing method and other initiatives, achieve a 50% reduction of energy consumption compared with the current levels and promote renewable energy for the energy to be used. Furthermore, under Asahi Carbon Zero, a medium- to long-term target of Asahi Group aims at achieving zero CO2 emissions across all supply chains by 2050, CO₂ capture technologies and other initiatives will be introduced with the goal of achieving carbon negative, which the CO₂ absorption volumes exceed CO₂ emissions in 2026. Moreover, a diverse range of the Group companies' products, such as beers, non-alcohol beer-taste beverages, and ready-to-drink beverages, and containers is manufactured, in addition to soft drinks products, with the aim of streamlining distribution and increasing brewery capacity utilization. By relocating the factory, the Tosu Brewery can manufacture and ship the majority of the products throughout the Kyushu region. The current CO₂ emission is
- Construction of Tosu Brewery



	expected to be reduced by 30% in logistics operations by improving the demand-to- supply ratio and shortening the delivery distance within the Kyushu region. <projects by="" funded="" proceeds="" the=""></projects>		
	 Environmentally-friendly buildings: Acquisition of "fourstars" in the Building-Housing Energy-efficiency Labeling System (BELS) Implementing facilities that help revamp production methods to reduce energy usage: Achieving a 50% reduction compared to the usage before the adoption Promoting the use of renewable energy at plants: Implementing solar power generation facilities, using biomass energy, purchasing electricity generated from renewable energy sources, using ammonia-fired gas turbines, and purchasing carbon offsets Efforts to capture CO₂: Adopting carbon capture and methanation technologies 		
	Enorts to capture CO_2 . Adopting carbon capture and methanation definition gets		

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■ Procurement of recycled PET and biomass plastic

GBP Category	Eco-efficient and/or circular economy adapted products, production technologies and processes				
Corresponding Initiative	Sustainable Packaging : Dealing with the Plastic Issue "3R+Innovation"				
Details of the use of Proceeds	<project overview=""> In response to the issue of plastics used in its products, which requires an urgent solution, the Asahi Group set a goal of achieving a 100% conversion to eco-friendly materials* for PET bottles by 2030. * Recycled materials, biomass materials, etc. The latest concrete efforts are described below. Asahi Soft Drinks Co., Ltd started to use recycled PET bottles for some of its products in July 2019 and is gradually expanding the use. The Company started to use PET bottles, 100% made from mechanically recycled resin for some "Wilkinson Tansan" 500ml PET products in February 2022, and PET bottles, 100% made from chemically recycled resin for some large sized PET bottles in April 2022. In Australia, Asahi Beverages Pty Ltd. runs New South Wales-base Australia's largest joint venture for construction and operation of PET bottle recycling plants, and its new recycling plant with the capacity of processing up to 28,000 tons of used PET bottles annually started operations in March 2022. <projects by="" funded="" proceeds="" the=""> • Procurement of recycled PET: Raw materials that comply with the "Guidance on the Use of Recycled Plastic Materials in Recycled PET Resin's Food Equipment, Containers, and Packaging" (issued by Ministry of Health, Labor and Welfare on April 27, 2012)</projects></project>				
	 Procurement of biomass plastics: Raw materials that should obtain certifications such as the Biomass Plastic Mark (Japan BioPlastics Association), Biomass Mark (Japan Organic Recycling Association), and Rice Ink Mark (Rice Ink Consortium), etc. 				

Purchase of Renewable Energy

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100	

GBP Categories	Renewable Energy
Corresponding Initiative	Respond to Climate Change: "Asahi Carbon Zero"
Details of the use of Proceeds	<project overview=""></project>
0111000000	In accordance with the Asahi Group Environmental Vision 2050, Asahi Group
	implemented the Asahi Carbon Zero initiative to cope with the climate change.
	Under the Asahi Carbon Zero policy, the Asahi Group aims to reduce the CO2
	emission by 70% in Scope 1 and 2, and by 30% in Scope 3 by 2030 (compared
	with those in 2019).
	Of total 33 plants of the Asahi Group in Japan, 29 plants switched to renewable
	energy sources for power purchased as of April 2022. With this change, the Asahi
	Group raised the ratio of renewable energy to approximately 79% (251GWh) in
	its all sites in Japan, reducing annual CO ₂ emissions by 114,000 tons. The Asahi
	Group aims to make all of its sites in Japan purchase power generated from
	renewable energy sources by 2025, by driving its efforts to achieve "RE100" and
	"Asahi Carbon Zero." Including plants outside Japan, the Asahi Group expects to
	switch to renewables at 60 out of total 66 plants worldwide (as of February
	2023), or approximately 90% of the total by 2025.
	<projects by="" funded="" proceeds="" the=""></projects>
	• Purchase of renewable electricity by domestic and overseas operating companies

<JCR's Evaluation for the Framework>

i. All of the proceeds is allocated to ABC, which are expected to contribute to the reduction of CO₂ emissions

The three eligible categories of Asahi Group Holdings' use of proceeds under this framework are all material measures to achieve the Asahi Group Environmental Vision 2050's goal of becoming "Planet Positive" for the world in 2050, and environmental improvement effects are expected.

Use proceeds 1: Construction of "Tosu Brewery"

Use of proceeds 1 contributes to the Asahi Carbon Zero initiatives formulated by Asahi Group Holdings as a medium-to long-term goal for climate change. This project falls under "Green building," "Renewable energy," "Energy efficiency," "Circular economy adapted products, production technologies and processes and/or certified eco-efficient products " in the Green Bond Principles, and "Projects concerning Green Building," "Projects for renewable energy," "Projects for energy efficiency," " Projects concerning eco-efficient products, production technologies, and processes ," in the Green Bond Guidelines.

Based on its Environmental Vision 2050, the Asahi Group formulated Asahi Carbon Zero as a medium-to longterm goal for climate change. The Asahi Carbon Zero CO₂ Reduction Target, defined in the 2050 Scope1,2,and 3 as "Achieve CO₂ Emissions of Zero and Carbon Neutral," "Reduce CO₂ Emissions by 70% in Scope1 and 2 in 2030 (compared to those in 2019) and Reduce CO₂ Emissions by 30% in Scope3 (compared to those in 2019)," was certified by SBT Initiative as a scientific level for achieving the 1.5°C target set under the Paris Agreement. In order to achieve this goal, various energy conservation and environmental measures are promoted, including the introduction of renewable energy, the recovery of steam and other waste heat in the manufacturing process, the use of cryogenic energy, such as filling cans in rows at room temperature, the introduction of cogeneration facilities, fuel-conversion, and activities at all workplaces using ISO14001.

The Tosu Brewery is expected to become a model factory for the next-generation production system in the Asahi Group. The new factory reduces energy consumption by 50% compared to the conventional factory and promotes the use of renewable energy, not only for buildings but also for manufacturing methods, introduction facilities and other details in consideration of the environment. In addition, by introducing CO₂ recovery technique, the Toso Brewery aims at the Carbon Negative realization in the independent factory in 2026.

The Tosu Brewery is qualified to acquire BELS four-star certification as an environmentally friendly building. BELS is an English acronym for Building-housing Energy-efficiency Labeling System. BELS is a building energy efficiency's performance indicator system under which third-party assessment bodies evaluate and accredit the energy efficiency performance of new and existing buildings. The outer skin performance (performance standards and specification standards) and primary energy consumption (performance standards and specification standards) are subject to evaluation, and the evaluation results are expressed in stars according to the achievement values of the energy efficiency standards. High evaluation requires excellent energyefficiency performance. In BELS, the number of stars is ranked from one to five by Building Energy Index. BEI is a measure of energy efficiency performance that uses the designed primary energy consumption as the molecular weight and the standard primary energy consumption as the denominator, and is compared with the standard value. One star is the existing energy saving standard, two-star is the current energy saving standard, and three-star is the guidance standard, and four-star which exceed the three-star is the qualification standard, which clearly effects on the environmental improvement.

The introduction of equipment that contributes to energy conservation effects of 50% or more, converted from the total amount of fuel and electricity used before and after the introduction of equipment, is set as a qualification standard. As concrete measures, energy reduction by reforming production processes such as high concentration charging, maturation in fermentation tanks, and ordinary-temperature filling of all containers, and energy supply efficiency improvement by introduction of ejectors, distributed installation of boilers, and introduction of high-efficiency refrigerators are planned. Asahi Breweries introduces solar power generation facilities, biomass energy generation facilities, purchasing electricity derived from renewable energy, utilization of ammonia in gas turbines, switch to renewable energy by purchasing carbon offsets and CO₂ recovery and methanation technologies as an initiative to recover CO₂.

The Tosu Brewery is expected to make the plant more efficient in terms of logistics and improve the plant's capacity to operate by making a variety of products, including beer, non-alcoholic beer taste beverages, RTD, and Asahi beverage products, and by responding to the production of multiple containers. In addition, with the relocation of the Kyushu Plant, the Tosu Brewery can manufacture and ship the most of the products to the Kyushu Area. This leads to an increase in the supply-demand ratio and shortening of the delivery distance in the Kyushu Area, which is expected to reduce CO_2 emissions in logistics.

In order to reduce CO_2 emissions at the manufacturing stage, the existing facilities of the Asahi Group continued to promote the installation of cogeneration systems and anaerobic wastewater treatment facilities, the introduction of energy-efficient lights such as LED, energy conservation at distribution bases, and the



introduction of renewable energy. As a new clean energy model, a biomethane gas fuel cell power generation system began to be developed, and CO₂ separation/recovery test equipment and methanation demonstration tests are also started. The Tosu Brewery has a policy of sharing best practices in the group and of aiming to achieve "Asahi Carbon Zero" by making use of the know-how accumulated through various environmental initiatives to date.

Use of proceeds 2: Procurement of recycled PET, procurement of biomass plastic

Use of proceeds 2 contributes to "3R+Innovation" formulated by Asahi Group Holdings as a group goal for addressing plastic issues. This project falls under "Pollution prevention and control (waste prevention)," "Circular economy adapted products, production technologies and processes and/or certified eco-efficient products," in the Green Bond Principles, and "Projects for pollution prevention and control," among the fund uses exemplified in the Green Bond Guidelines.

Asahi Group Holdings believes that it is important to pay attention not only to its functions as a means of communication through design and labeling, but also to the ease of use at the stage of use and the sustainability of raw material resources, while ensuring the quality maintenance and transportation strength of containers and packaging in providing products. From the viewpoint of environmental considerations, in particular, in order to promote 3R of containers and packaging (reduce, reuse, and recycle), the weight reduction of containers and packaging, improvement of recyclability, and adoption of recycled materials and biomass-based materials are promoted in cooperation with industry groups for each material. In 2020, 3R+Innovation, a strategic direction toward 2030, was set in response to the serious marine plastic waste and micro-plastic problems to which the global environments are currently facing. In 2022, the Group set a new target of switching the materials of PET bottles to 100% environmentally-friendly materials by 2030.

Group-wide Targets 3R+Innovation Examine the Realize 100%

utilization of materials for plastic containers that can be used effectively by 2025*1

Achieve a 100% conversion to ecofriendly materials for PET bottles by 2030^{*2, 3}

development of ecofriendly materials and sales methods that do not make use of plastic containers*3

*1 Targeted containers: PET bottles, plastic bottles, caps used for PET and plastic bottles, certain plastic containers and plastic cups (used for sales), etc.

**1 argeted containers: PE1 bottles, plastic bottles, caps used for PE1 and plastic bottles, certain plastic containers and plastic cups (used for sales), etc. Effective use: Reusable, recyclable, recyclable, thermal recyclable, etc. Target companies: Asahi Breweries, Ltd., Asahi Soft Drinks Co., Ltd., Asahi Holdings (Australia) Pty Ltd., and Asahi Holdings Southeast Asia <u>Sdn</u>. Bhd. **2 Eco-friendly materials: Recycled materials, biomass materials, etc. **3 Target companies: Asahi Breweries, Ltd., Asahi Soft Drinks Co., Ltd., Asahi Europe & International Ltd., Asahi Holdings (Australia) Pty Ltd., and Asahi Holdings Southeast Asia <u>Sdn</u>. Bhd.

(Source: this framework)

The use of capital contributes to "realize 100% utilization of materials for plastics containers that can be used effectively by 2025" and to "achieve a 100% conversion to eco-friendly materials for PET bottles by 2030." In particular, Asahi Beverage Co., Ltd. established Containers and Packaging 2030 for the use of recycled PET and plant-derived environmental-friendly materials, and is working on expanding the use of label-less instruments in order to reduce the weight of plastic-made containers and packaging, which is one of its goals. The main regional goals set by the Asahi Group for sustainable packaging are as follows:

Japan	Aiming to reduce the weight of plastic containers and packaging by expanding "label-less bottles" *Sales target for "label-less bottles" in 2022: 109% YoY
Europe	Reducing the use of plastic containers and packaging by 25% by 2030 (compared with that in 2019)
Oceania	Building partnerships to collect and recycle more plastics by 2025
Southeast Asia	Using 30% recycled materials for PET bottles by 2025

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(Source: Asahi Group Holdings Annual Report 2021)

Two types of recycled PET raw materials are assumed: material recycling and chemical recycling. Material recycling is recycled into various products through recycling (flaking, pelletizing, and polyester raw material.) When only material recycling PET is used however the repetitive recycling may be limited, and the color of the bottle may not always stay clear. On the other hand, chemically recycled plastics are converted into monomers by depolymerization and then re-polymerized to produce plastics. Accordingly, virgin-equivalent qualities are obtained as raw materials for PET bottles. Therefore, by using a material recycled material in combination with a chemical recycled material, a high-quality PET bottle can be remanufactured. Material recycling PETs are widely distributed in the marketplace at present, and chemical recycling and bio-materials are supplied. Asahi Group Holdings plans to achieve the above target by utilizing biomass materials in addition to material recycling and chemical recycling.

Regarding the recycling of PET bottles, the recycling rate is higher in Japan, while the recycling rate in Europe and the U.S. is less than 50% (88.8% in Japan, 41.0% in Europe and 18.0% in the U.S. as of 2020.) The Asahi Group is to promote the use of recycled materials throughout the Group, and it is expected to contribute to improve the recycling rate overseas.

Use of proceeds 3: Purchase of renewable energy

Use of proceeds 3 contributes to the Asahi Carbon Zero initiatives formulated by Asahi Group Holdings as a medium-to long-term goal for the climate change. This project falls under the "Renewable energy" under the Green bond Principles, which falls under the "Project on renewable energy" in the fund uses exemplified in the Green bond Guidelines.

The Asahi Group is actively promoting to purchase renewable energy power in domestic and overseas operating companies as an initiative to achieve Asahi Carbon Zero. In October 2020, Asahi Group Holdings participated in RE100, a global initiative, which aimed at making 100% renewable energy from its business activities. By 2050, Asahi Group Holdings aims to increase the use of electricity to 100% renewable energy.

Asahi Breweries Co., Ltd. is actively promoting the use of electricity from renewable energy sources. For example, in 2007, Asahi Breweries Co., Ltd. introduced the largest-scale photovoltaic power generation facility at its domestic brewery in the Hakata Plant, and in 2009, it concluded a purchasing contract with Japan Natural Energy Co., Ltd. for green electricity from wind power generation and biomass power generation for 40 million kWh a year, the largest in the food industry at that time, which was used for the production of beer. Asahi Quality and Innovations Co., Ltd., which is responsible for R&D of the Asahi Group, is conducting a demonstration experiment of power generation using a fuel cell that utilizes bio-methane gas generated from



wastewater treatment facilities in the Asahi Breweries Ibaraki Plant, and is also developing a new system. As of April 2022, 29 out of the 33 domestic factories of the Asahi Group already replaced the purchased electricity with renewable energy. In Japan, Asahi Breweries Co., Ltd aims to make all production bases' purchased electricity 100% renewable energy by 2025.

Regarding the state of renewable energy introduction at overseas subsidiaries, in Europe, four factories in the Netherlands and Italy were switched to renewable energy, mainly wind power, in 2020. In Poland, three plants were switched to full-capacity wind power generation in 2021, and by 2025, the country aims to make all 17 plants achieve 100% renewable energy. In Oceania, in 2021, the Yatara and Avotsford plants, the largest breweries of Carlton & United Brewerys in Australia, completed the installation of photovoltaic power generation facilities. In addition, PPA is considering to expand the purchasing of electricity from renewable energy sources, and plans to make all 14 plants achieve 100% renewable energy by 2025. Malaysian Etika Beverages Sdn. Bhd. signed an on-site PPA electricity purchasing contract in 2020 and completed the installation of photovoltaic power generation systems on the roof of the plant in March 2022. The company is also considering the use of on-site PPA at other operating companies in Southeast Asia and plans to expand the use of renewable energy.

b. Negative Impacts on the Environment

Asahi Group Holdings is to take the followings into account when implementing the eligible projects specified in this framework.

- Restriction of nighttime work, control of outdoor work, periodic environmental measurement, etc. are carried out as measures to prevent from having noise, air pollution, etc. in the construction of Tosu Brewery.
- The Tosu Brewery already concluded an agreement with Tosu City on environmental conservation in terms of noise, air pollution, waste, and wastewater, which are expected to be occur during the operation of the plant. The company pledges not only to comply with relevant laws and regulations, but also to actively engage in pollution prevention and environmental conservation measures. The arrangement of the distribution facility in which 24 hours of operation is expected is taken into consideration upon design
- The labor safety environment of the worker who performs the construction work is secured, and the labor environment and health of worker after the work is done is also taken into consideration
- In the use of recycled PET, in particular, in chemical recycling, there is a concern that CO₂ emissions may be increased due to the nature of the manufacturing process, and therefore, Asahi Group Holdings strives to grasp LCA in the technology concerned
- Confirm that biomass use is a raw material that does not conflict with food.
- In procuring renewable energy and environmentally conscious materials, Asahi Group Holdings requests the understanding and compliance of the Asahi Group Supplier's Code of Conduct based on the Asahi Group Basic Procurement Policy.

JCR assesses that all eligible projects are appropriately addressed, taking into account the negative environmental impacts.



c. Consistency with SDGs

JCR evaluated the use of proceeds set out in the Framework contributes to the following SDGs' goals and targets in reference to ICMA's SDGs mapping.



Goal 7: Affordable and clean energy

Target 7.3. By 2030, to double the global rate of improvement in energy efficiency



Goal 9: Industry, Innovation and Infrastructure

Target 9.4. By 2030, to upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities



Goal 11: Sustainable cities and communities

Target 11.6. By 2030, to reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management



Target 12: Responsible Consumption and Production

Target 12.5. By 2030, substantially to reduce waste generation through prevention, reduction, recycling and reuse



Objective 13: Climate Action

Target 13.1. To strengthen resilience and adaptive capacity to climate-related disasters and natural disasters in all countries.



Target 15: Life on Land

Target 15.2 By 2020, to promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.

Evaluation Phase 2: Management, Operation and Transparency Evaluation

Based on the current situation described below and JCR's evaluation of the subject, JCR evaluated that the management and operational systems are well developed with high transparency and that the project can be implemented as planned and the proceeds of fund can be adequately allocated. In Phase 2, JCR evaluated that the management, operation and transparency ranked the highest level of "m1(F)".

1. Appropriateness and Transparency Concerning Selection Standards and Processes for Use of Proceeds

(1) JCR's Key Consideration on This Factor

In this section, JCR confirms that the objectives to be achieved through green financing, the appropriateness of green project selection standards and processes, and whether or not a series of processes are properly disclosed to investors and others.

(2) Current Status of Evaluation Targets and JCR's Evaluation

a. Goals

Asahi Group set forth Asahi Group Environmental Principles to make all employees in Asahi Group aggressively work on environmental issues under the recognition that we conduct business projects by enjoying gifts of nature based on the Group's "Asahi Group Philosophy."

<The Framework for Green Finance Issuance Objectives >

Asahi Group Environmental Principles

The Asahi Group aims to comply with these principles as a guideline for all employees to proactively address environmental issues, and strive to realize Planet Positive set forth in our Environmental Vision 2050 with our stakeholders.

- <u>To Construct Environmental Management System</u>
 We create a management system for regularly monitoring environmental activities, and take actions towards continuous improvements.
- 2. <u>To Proactively Promote Environmental Activities by Employees</u>

We develop human resources that are able to proactively promote environmental activities on their own, and engage in efforts to foster the corporate culture and raise the environmental awareness of society as a whole.

3. To Strengthen Efforts for the Global Environment

We strive to preserve the global environment through such efforts as the prevention of pollution, sustainable use of resources, mitigation of and adaptation to climate change, and protection of biodiversity.

4. <u>To Collaborate with Stakeholders</u>

We collaborate with stakeholders with diverse backgrounds, including local communities, and strive to create environmental value based on innovation and generate synergy.

5. <u>To Promote Engagement</u>

We disclose transparent and reliable information, and proactively strive to have communication with stakeholders.

6. <u>Compliance</u>

We comply with environmental laws and regulations in each country/region, international rules, and the standards of the industry and our own Company.

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The Asahi Group Environmental Vision 2050 was formulated in 2019 in order to take on the challenge of realizing a sustainable society along with business growth by aiming to create more environmental value (plus) for society by utilizing the Asahi Group's proprietary technologies. In February 2023, Asahi revised the Asahi Group Environmental Vision 2050 to accelerate its environmental initiatives in response to changes in the social situation regarding recent environmental initiatives and heightened expectations and demands for the company. From "Neutral & Plus" based on the existing vision of zero environmental impact (neutral) and creation of environmental value (positive), the new vision aimed at positively impacting the global environment is "Planet Positive", which is the ideal state of the world in 2050.

Asahi Group Environmental Vision 2050

At the Asahi Group, we have been relying on the blessings of nature for more than 100 years to create products and services. Because of the deepening of global environmental problems, we cannot help but have a sense of impending crisis that not only the sustainability of our business but also the survival of the human race are under threat.

As we would be unable to continue our business without these blessings of nature, we are determined to achieve Planet Positive, which will reduce the burden on the environment from our business to zero, and maximize value to the global environment through circularity.



(Source: this framework)

ecosystem

through soil

improvement

through

support for

farmers

maintaining appropriate

water quality

and quantity

access in

water-stressed

regions

ecosystem

through the

build-out of a

closed loop

The Green Bond, implemented with reference to this framework, aims to raise funds to address climate change and waste containers and packaging. Asahi Group Holdings also aims to raise the awareness of environmental issues among each employee and further promote company-wide sustainability initiatives through green bond financing. JCR confirmed that the goals that Asahi Group Holdings is seeking to achieve through the issuance of Green Bonds contribute to realize the goal of the Asahi Group Environmental Vision 2050.

Selection criteria b.

across the

value chain and

preservation of

the ecosystem

technologies

for reduction,

absorption,

and collection

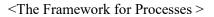
products that

do not

generate waste

The eligibility criteria for this framework are described in Evaluation Phase 1 of this report. JCR assesses that the selection criteria for the project are appropriate.

c. Processes



Eligible projects are to be evaluated and selected by Asahi Group Holdings' Management Strategy Committee or at respective Group company's management meetings, based on the Group's Sustainability Strategy determined by the Global Sustainability Committee. When selecting a project, we check the consistency with our Sustainability Strategy and confirm that the following measures are taken to deal with environmental and social risks:

- To comply with environmental laws and regulations required by the national or local government in which the project is located; and to implement surveys to identify environmental impact as necessary
- · To sufficiently explain for local residents before implementing a project

We confirm the compliance with the Group's Code of Conduct, policies, and guidelines listed below:

- · Asahi Group Code of Conduct and Group Policies
- · Procurement policies and guidelines: Asahi Group Sustainable Procurement Principles
- Asahi Group Supplier Code of Conduct
- · Environmental policies and guidelines: Environmental Principles
- Green Purchasing Guidelines

<JCR's Evaluation for the Framework>

When selecting projects that is subject to the use of green bonds, the departments in charge of environmental measures, including Sustainability department of Asahi Group Holdings, confirm the consistency with the Company's sustainability strategy. The division in charge of the project, etc. confirm from the viewpoints of consistency with the sustainability strategy and whether it is consistent with the roadmap for achieving global targets for key measures, such as "Asahi Carbon Zero" and "3R+Innovation." Subsequently, evaluation and selection are conducted at the Management Strategy Committee of Asahi Group Holdings or the Management Committee of each Group company, which deliberates on important matters related to business execution. JCR assesses that management is appropriately involved in the project-selection process set forth in this framework.

Objectives, selection criteria, and processes for Green Bond of Asahi Group Holdings are disclosed in this Evaluation Report. Asahi Group Holdings plans to disclose the subject projects through amended issuance registrations and websites at the time of issuance of the Green Bond. Therefore, transparency to investors is considered to be ensured.





2. Appropriateness and Transparency of Management of the Proceeds

(1) JCR's Key Consideration on This Factor

It is usually assumed that the management of the proceeds varies widely depending on issuers. JCR confirms whether the proceeds are surely appropriated to the green project and whether a mechanism and internal system are in place to make tracking easy.

JCR also focuses on whether the proceeds are scheduled to be used for a green project at an early stage and on the management and operation methods for unallocated funds.

(2) Current Status of Evaluation Targets and JCR's Evaluation

<The Framework for Management of the Proceeds>

Management of Proceeds

Finance of Asahi Group Holdings, Ltd. ("Finance") manages proceeds from green bonds issued under the Green Bond Framework. Finance tracks and manages the proceeds on a quarterly basis using an internal management system as long as the green bonds are outstanding. The proceeds are to be allocated within 24 months from the issuance of the green bonds. Until the proceeds are fully allocated, the amount equal to that of green bond proceeds is held in cash or cash equivalents.

<JCR's Evaluation for the Framework>

Procurement funding through green bonds is tracked and managed quarterly by Finance department of Asahi Group Holdings using an internally managed system as long as the green bonds have a balance. The allocation status of funds and unused balances are reported to the head of Finance department on a quarterly basis, and the report content is approved by the head of Finance division. Procurement funding is managed in cash or cash equivalents until the full amount of funding is allocated.

The management of proceeds is subject to internal audits by Internal Audit department and external audits by auditing firms. Books for the management of procurement funds is retained until redemption of the Green Bond and the retention period under law.

Based on the above, JCR evaluates that the fund management system of Asahi Group Holdings is appropriately established, and the management method of the fund procurement is disclosed in this evaluation report, so it is highly transparent.

3. Reporting



(1) JCR's Key Consideration on This Factor

In this section, JCR evaluates whether the disclosure system for investors before and after the issuance of green Bond, which is implemented with reference to the Framework, is planned in detail and in an effective manner.

(2) Current Status of Evaluation Targets and JCR's Evaluation

<The Framework for Reporting>

Allocation Report

Asahi Group Holdings intends to report on the allocation of proceeds to eligible projects and environmental impacts on an annual basis, on its corporate website or in the Integrated Report. The initial report is published within one year after the issuance of the green bond to the extent disclosable.

- Overview of eligible projects funded by the proceeds
- Amounts of proceeds allocated and unallocated to each eligible project category
- Share of financing and refinancing
- The expected allocation timing for any unallocated proceeds, and how to manage those proceeds during the period in which they remain unallocated
- CFO's statement about the confirmation of the allocation of green bond proceeds to eligible projects

If the condition of proceeds changes significantly after the full allocation, we disclose the information on a timely basis.

When the condition of proceeds changes significantly after the full amount of proceeds was allocated, disclosure shall be made in a timely manner.

Impact Reporting

As long as the green bonds are outstanding, we disclose the environmental improvement effects of eligible business to the extent practicable.

Eligible Businesses	GBP categories Reporting items	
Eligible Businesses Construction of Asahi Breweries Tosu Plant	GBP categories Green buildings, renewable energy, energy efficiency, environmentally friendly production technologies and processes	Reporting items • Progress in the Asahi Carbon Zero Initiative • The overview and certification type/rank obtained of building certified as green buildings • Actual values of the Tosu Brewery as a whole for the following amounts: ✓ Electric energy generated by type of power generation ✓ Renewable energy (electricity) purchased ✓ Reductions in CO ₂ emissions
		√Rate of change in energy usage after changes in production methods/facilities

Procurement of recycled PET, Procurement of Biomass Plastic	Eco-efficient and/or circular economy adapted products, production technologies and processes	 Progress initiatives towards sustainable containers/packaging The volume of eco-friendly materials such as and biomass-plastic
Purchase of Renewable Energy	Renewable energy	• The amount of renewable energy (electricity) purchased

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<JCR's Evaluation for the Framework>

a. Reporting on the allocation status of the proceeds

Asahi Group Holdings annually discloses the allocation status of the proceeds from the green bond as stipulated in this framework on its website. The Company also plans to timely disclose if the funding condition significantly changes after the full amount of the proceeds was appropriated.

b. Reporting on environmental improvement effects

Asahi Group Holdings plans to annually disclose the contents specified in this framework as reporting on environmental improvement effects in the Green Eligible projects on its website. The items to be disclosed include qualitative index such as electric power generation/CO₂ reduction.

JCR evaluates that Asahi Group Holdings has an appropriate reporting system. JCR confirmed that Asahi Group Holdings disclosed the Green Bond issued by the Company for the first time on Oct. 15, 2020 on its website.



4. Organization's Environmental Initiatives

(1) JCR's Key Consideration on This Factor

In this section, JCR evaluates whether the management of the issuer/borrower positions environmental issues as a high priority for management and whether the green Bond policy, process and selection criteria for green projects are clearly positioned through the establishment of a department specializing in environmental issues or in collaboration with external organizations.

(2) Current Status of Evaluation Targets and JCR's Evaluation

Based on its mission of "realizing the taste of products and services that exceed consumer expectations and bringing more fun to life for everyone," Asahi Group Holdings adopted "Asahi Group Philosophy" as its guiding principle for action, which is "enhancing corporate value through co-creation with all stakeholders." To put the Group Philosophy into practice, the Company updated its medium-to long-term management policy based on back-casting from mega-trends, with the long-term strategic concept of "contributing to a sustainable society and respond to changing conceptions of wellbeing through delivering great taste and fun" in February 2022. Asahi Group Holdings believes that the Group's business activities are based on the "gifts of nature," including fisheries and agricultural products, and business cannot continue without the "gifts of nature." Based on this belief, the Group placed environmental and other sustainability initiatives at the core of its management, and set sustainability and management integration as one of the core strategies of its medium-to long-term management policies. Through the steady implementation of the strategy, the Company aims to increase its corporate value over the medium- to long-term through the sustainable growth of the Group and co-creation with stakeholders.

In order to realize the integration of sustainability and management, Asahi Group Holdings formulated "Cheer the Future" as its corporate statement and set a "Sustainability Story" that outlines the reasons for working on sustainability, how to work on it, and its working details. Based on this philosophy, the Company is strengthening its sustainability promotion and improving engagement with stakeholders inside and outside the company.



(Source: this framework)

Along with the establishment of the sustainability story and the structuring of the sustainability strategy, the materiality issues were reviewed based on opinions expressed in the megatrend analysis in related divisions, each regional headquarters and operating company, and long-term strategy, and discussions with sustainability consultants. The Company established a key policy to accelerate the integration of sustainability with management as an approach and designated key initiatives to focus on management resources. Asahi Group established global targets for key initiatives and incorporated them into regional headquarters' targets and plans. The progress of these targets and plans is managed under the Asahi Group's sustainability governance system.

Material Issues/Objectives/Key Initiatives				
Material Issues	Objectives	Initiatives (highlighted in red: Key Initiatives)		
Environment	Realizing sustainability across the value chain	Respond to Climate Change		
		Sustainable Packaging		
		Sustainable Agricultural Raw Materials		
	As a group, we aim to manage risks	Sustainable Water Resources		
Human Rights	and create opportunities while aspiring to make a positive impact for business and society with our	Respect for Human Rights		
Communities		Realize Sustainable Communities through the Creation of		
		People-to-People Connections		
Health	products and services.	Create Value of Health		
Responsible		Reduction in Inappropriate Drinking		
Drinking		Solution of Alcohol-related Issues through Creation of New		
		Drinking Opportunities		

(Source: this framework)

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♦ Global Targets in Key Initiatives					
Material Issues	Key Initiatives	Global Targets			
Environment	Respond to Climate Change	 Reduce our CO₂ emissions in Scope 1, 2, and 3 to zero thereby becoming carbon neutral by 2050 (compared with 2019) Reduce CO₂ emissions by 70% in Scope 1 and 2 and by 30% in Scope 3 by 2030 (compared with those in 2019) 			
	Sustainable Packaging	 Realize 100% utilization of materials for plastic containers that can be used effectively^{*1} by 2025 Achieve a 100% conversion to eco-friendly materials^{*2} for PET bottles by 2030 Examine the development of eco-friendly materials and sales methods that do not make use of plastic containers *1 Reusable, recyclable, compostable, thermal recyclable, etc. *2 Recycled materials, biomass materials, etc. 			
Communities	Realize Sustainable Communities through the Creation of People-to- People Connections	 Work to resolve social issues in the key areas of food, regional environment, and disaster relief through our business Create opportunities for employees to participate in community support activities 			
Responsible Drinking	Reduction in Inappropriate Drinking Solution of Alcohol- related Issues through Creation of New Drinking Opportunities	 Achieve a 15% sales composition ratio of non-alcohol and low-alcohol beverages of main alcohol beverage products by 2025* * Beer-type beverages, RTD, non-alcohol beverages 			

(Source: this framework)

Asahi You.Us, Ltd. is one of the Asahi Group's new group companies, which develops sustainability businesses under the umbrella of Asahi Group Japan, Ltd. in order to solve local social issues through sustainable products and services and to aim to realize a sustainable and prosperous society by engaging in new sustainability businesses. As part of its environmental initiatives, the Group also formulated the Asahi Group Environmental Vision 2050 and set out its vision of the world's ideal state for 2050, the "Planet Positive" vision. The Group's environmental goal is to reduce the environmental impact of its businesses to zero and to maximize the value to the global environment through recycling. Asahi Group Holdings' specific environmental initiatives include the introduction of renewable energy, the use of steam and other exhaust heat in the manufacturing process, the use of cold heat, such as the normal-



temperature filling of can rows, the introduction of cogeneration facilities, the introduction of fuel conversion, and the promotion of a variety of energy-saving and environmental measures at all business sites utilizing ISO14001, thereby reducing CO₂ emissions by 70% in Scope1, 2 and by 30% in Scope3 by 2030 (compared to those in 2019), addressing the mid-to long-term climate change target of "Asahi Carbon Zero," which aims to achieve carbon neutrality by 2050, and tackling the issues of plastic containers and packaging by reducing the environmental burden of containers and packaging and switching to environmentally-friendly materials. Green bonds, which are implemented by reference to this framework, are issued by Asahi Group Holdings with the aim of raising funds for specific initiatives aimed at realizing the Asahi Group Environmental Vision 2050, and contribute to realizing the Group's vision for the environment.

Asahi Group Holdings' stance on environmental and other sustainability initiatives as the basis of management is also backed by its sustainability promotion system. Asahi Group Holdings, headed by the Global environmental Committee, chaired by the Group CEO, formulates sustainability policies and strategies, and makes investment decisions related to sustainability. In addition, Asahi Group Holdings established a Sustainability Task Force as the Group's sustainability promotion system to implement PDCA of specific measures related to each sustainability critical theme, such as the Sustainability Executive Committee, which specifically incorporates the strategies determined by the Committee for each regional headquarters and operating company with the aim of integrating management and sustainability. Consulting and support for technical fields such as greenhouse gas calculations and sustainability promotion are also provided by external specialized agencies as necessary. These sustainability promotion systems and specialized external organizations provide the entire Group with specialized knowledge of sustainability in the business activities of Asahi Group Holdings, and they are also involved in the formulation of this framework and the selection of uses of funds as needed.

Based on the above, JCR highly appreciates that Asahi Group Holdings positions environmental issues as a key management issue, and that it has a conference body on environmental issues to engage in initiatives from the practical and managerial perspectives, and formulated the content of this framework while incorporating the knowledge of internal operational departments and external experts.



■Evaluation result

Based on its JCR Green Finance Evaluation Methodology, JCR assigned "g1 (F)" for the "Greenness Evaluation (Uses of Proceeds)" and "m1 (F)" for the "Management, Operation and Transparency Evaluation." As a result, JCR assigned "Green 1 (F)" for the "JCR Green Bond Framework Evaluation." The Framework meets the standards for the items required in the Green Bond Principles, the Green Loan Guidelines, the Green Bond Guidelines and the Green Loan and Sustainability Linked Loan Guideline.

	[JCR Green Bond Framework Evaluation Matrix]						
		Mana	agement, Oper	ration, and Tran	sparency Evalu	uation	
		m1(F)	m2(F)	m3(F)	m4(F)	m5(F)	
	g1(F)	Green 1(F)	Green 2(F)	Green 3(F)	Green 4(F)	Green 5(F)	
Greenness	g2(F)	Green 2(F)	Green 2(F)	Green 3(F)	Green 4(F)	Green 5(F)	
-	g3(F)	Green 3(F)	Green 3(F)	Green 4(F)	Green 5(F)	Not qualified	
Evaluation	g4(F)	Green 4(F)	Green 4(F)	Green 5(F)	Not qualified	Not qualified	
n	g5(F)	Green 5(F)	Green 5(F)	Not qualified	Not qualified	Not qualified	

(Responsible analysts for this evaluation) Atsuko Kajiwara and Katsuto Kobayashi

Important explanations of this Evaluation

1. Assumptions, Significance and Limitations of JCR Green Bond Framework Evaluation

JCR Green Bond Framework Evaluation, which is determined and provided by Japan Credit Rating Agency, Ltd. (JCR), covers the policies set out in the Green Finance Framework, and expresses JCR's comprehensive opinion at this time regarding the appropriateness of the Green Project as defined by JCR and the extent of management, operation and transparency initiatives related to the use of funds and other matters. Therefore, JCR Green Bond Framework Evaluation is not intended to evaluate the effects of specific environmental improvements and the management, operation and transparency of individual bonds and borrowings, etc. to be implemented based on these policies. In the event an individual bond or individual borrowing based on this Framework is subject to a green finance evaluation, a separate evaluation is needed. JCR Green Finance Framework Evaluation does not prove the environmental improvement effects of individual bonds or borrowings implemented under this Framework, and does not assume responsibility for their environmental improvement effects. JCR confirms the environmental improvement effects of funds procured under the Green Bond Framework measured quantitatively and qualitatively by the issuer or by a third party nominated by the issuer, but in principle it does not directly measure such effects.

Method used to conduct this evaluation
 The methodologies used in this assessment are described in "JCR Green Finance Evaluation" on the "Sustainable Finance ESG" section of the JCR website (https://www.jcr.co.jp/en).

- Relationship with Acts Concerning Credit Rating Business JCR Green Bond Evaluation is determined and provided by JCR as a related business, which is different from its activities related to the credit rating business.
- 4. Relationship with Credit Ratings The Evaluation is different from the Credit Rating and does not assure to provide or browse a predetermined credit rating.
- 5. Third-Party Evaluation of JCR Green Bond Framework Evaluation

There are no capital and/or personnel relationships that may result in a conflict of interests between the subject of this evaluation and JCR.

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Glossary

JCR Green Bond Framework Evaluation: This evaluates the extent to which the funds procured through green Bond are appropriated for green projects as defined by JCR and the degree to which the management, operation and transparency of the green Bond are ensured. Evaluations based on a 5-point scale are given from top to bottom using the Green1 (F), Green2 (F), Green3 (F), Green4 (F), and Green5 (F) symbols.

- Status of Registration as an External Evaluator of Green Finance
- · Registered as an External Reviewer of Green Bonds by the Ministry of the Environment
- ICMA (registered as an observer with the Institute of International Capital Markets)
- Status of registration as a credit rating agency, etc.
 - Credit Rating Agency: the Commissioner of the Financial Services Agency (Rating) No.1
 - EU Certified Credit Rating Agency
 - NRSRO: JCR has registered with the following four of the five credit rating classes of the U.S. Securities and Exchange Commission's Nationally Recognized Statistical Rating Organization (NRSRO): (1) financial institutions, broker-dealers, (2) insurance companies, (3) general business corporations and (4) governments and municipalities. If the disclosure is subject to Section 17g-7 (a) of the Securities and Exchange Commission Rule, such disclosures are attached to the news releases appearing on the JCR website (https://www.jcr.co.jp/en/).

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