



Good Practices

in Corporate Disclosure Related
to Biodiversity and Natural Capital





About these Good Practices

Recent years have seen increasingly active ESG finance, which reflects consideration for nonfinancial information concerning the three factors of the environment (E), society (S), and governance (G). In addition, corporate disclosure of ESG related information and finance reflecting consideration for such disclosure are broadening steadily. It is based on the recommendations on the disclosure of climate change-related information with an impact on finance, announced by the Task Force on Climate-related Financial Disclosures (TCFD), which was established in 2015 by the Financial Stability Board (FSB).

With regard to biodiversity and natural capital ("biodiversity etc." hereinafter), there is growing awareness of the importance of the risk of biodiversity loss, for example, "biodiversity loss" was identified as one of the world's top five risks in the *Global Risk Report 2020* (World Economic Forum, 2020). As with climate change, it can be considered important to promote the disclosure of corporate information on biodiversity etc. and the ESG finance with consideration for biodiversity etc.

This brochure introduces good practices by companies taking leading roles in initiatives to disclose information concerning biodiversity etc. We hope that these practices will serve as reference for companies considering making progress on disclosure concerning biodiversity etc. and for investors planning to invest with consideration for biodiversity etc. in the future.

Definitions of biodiversity and natural capital in this brochure are based on the following definitions from the *Natural Capital Protocol* (Natural Capital Coalition, 2016), with a focus on biological resources in particular with regard to natural capital.

- Natural capital: The stock of renewable and non-renewable natural resources (e.g., plants, animals, air, water, soils, and minerals) that combine to yield a flow of benefits to people
- Biodiversity: The variability among living organisms from all sources, including inter alia, terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems

The following parties cooperated in the preparation of these Good Practices:

Keidanren Committee on Nature Conservation

Hiroshi Ishihara, Former Head of Planning Sub-Committee

Response Ability, Inc./Japan Business Initiative for Biodiversity (JBIB)

Naoki Adachi, PhD, CEO./Executive Director

Resona Asset Management Co., Ltd.

Minoru Matsubara, Executive Officer, Responsible Investment Division

Asset Management One Co., Ltd.

Megumi Sakuramoto, Chief ESG Analyst



Points considered important in disclosure

The following points can be considered important with regard to disclosure concerning biodiversity etc., with a focus on corporate disclosure to investors in particular. Please refer to the *Final Report, Recommendations of the Task Force on Climate-Related Financial Disclosure* (TCFD, 2017) and *Evaluation Criteria for Environmentally Sustainable Enterprises* (Ministry of the Environment, 2018).

- When biodiversity etc. are considered important topics in business, they are presented together with valid reasons for considering them important.
- Business risks and opportunities related to biodiversity etc. are identified with consideration for the company's business model as a whole and the time axis (business periods).
- Strategies, guidelines, commitments, etc. for responding to issues of biodiversity etc. are formulated.
- Management activities, supply chain/value chain management, etc. are specified in connection with risks related to biodiversity etc.
- Key performance indicators (KPIs) and targets to assess and manage risks and opportunities related to biodiversity etc. are established. And these performance results are disclosed.
- Corporate governance concerning risks and opportunities related to biodiversity etc. is described.

This brochure introduces case studies to represent examples of progress on disclosure concerning biodiversity etc. with regard to the above points in particular.





Ajinomoto Co., Inc.

Main businesses	Japan food products, international food products, life support, and healthcare	as of 2019
Disclosure media	(i) <i>Ajinomoto Group Integrated Report 2019</i> (ii) <i>Ajinomoto Group Sustainability Data Book 2019</i>	
Overall assessment	Ajinomoto Co., Inc. lists "sustainable materials sourcing" and other materiality items that have a substantial impact on its ability to create value, identifies business risks and opportunities, and describes initiatives underway to address them. A long-term environmental vision* and specific and quantitative medium- and long-term targets are set, and progress is managed to enable steady initiatives toward the vision. Important raw materials are identified in the areas of agriculture, forestry, and fisheries resources. Moreover it is apparent that this company is utilizing its own technologies with regard to the area of agriculture and forestry resources while also striving to contribute to the international management of fisheries resources.	

* as of 2019

Analysis of materiality | Identification of risks and opportunities

Materiality items	Related opportunities and risks ○Opportunity ●Risk	Key initiatives by the Ajinomoto Group
Sustainable materials sourcing	<ul style="list-style-type: none"> ● Increased risk of raw material procurement failure due to delays in addressing social and environmental issues across the supply chain ● Increased risk of raw material procurement failure due to climate change 	<ul style="list-style-type: none"> ● Management of fair operating practices (traceability, etc.) ● Promoting sustainability to suppliers ● Human rights due diligence ● Identifying important raw materials and engaging in responsible procurement (paper, palm oil, skipjack, etc.) ▶ p57 ● Ensuring fair competition and providing thorough employee training ● Contributing to sustainable agriculture by using co-products
Reduction of food loss and waste	<ul style="list-style-type: none"> ○ Cost reduction through initiatives to reduce product returns and waste ● Depletion of food resources 	<ul style="list-style-type: none"> ● Using raw materials in manufacturing process without waste ● Upgraded, optimal supply-chain management using digital technology ▶ p45 ● Reducing product returns and waste by extending product best-before dates, etc. ● Reducing food loss and waste during product use by consumers ● Proposing eco-friendly lifestyles for enjoying food without leftovers
Climate change adaptation and mitigation	<ul style="list-style-type: none"> ○ Collaboration with outside organizations on decarbonization ● Higher production costs due to delays in initiatives to eliminate carbon emissions or increased carbon tax burden ● Procurement risk of sustainable raw materials ● Damaged corporate value due to delayed response to climate change 	<ul style="list-style-type: none"> ● Long-term effort to turning the overall product lifecycle carbon neutral ● Initiatives to reduce energy use during production and transportation ● Shifting to renewable energy ● Disclosing information in line with the Task Force on Climate-related Financial Disclosures (TCFD) (scenario analysis, etc.) ▶ p58 ● Lowering environmental impact by feed-use amino acids (reduction of soil and water pollution)
Contribution to a circular economy	<ul style="list-style-type: none"> ○ Development of environmentally-friendly materials ● Damaged corporate value due to delays in waste reduction or recycling efforts 	<ul style="list-style-type: none"> ● Supplying highly biodegradable amino acid-based detergent ● Promoting the 3Rs of containers and packaging (reduction of plastic waste, etc.) ▶ p59 ● Using biodegradable plastic/plant-derived raw materials/certified paper ▶ p57, 59 ● Promoting use of environmentally-friendly product labels
Conservation of water resources	<ul style="list-style-type: none"> ● Production stagnation due to droughts, floods or water quality deterioration ● Raw material procurement failure due to water resource depletion 	<ul style="list-style-type: none"> ● Maintaining forests for water sources ● Developing wastewater treatment technology

Source: (i), p. 12

Materiality items identified as those effectively impacting the ability to create value include "sustainable materials sourcing" and "reduction of food loss and waste," in the area of food resources, and relevant opportunities and risks are identified. In addition, with regard to the materiality items related to

global sustainability of "climate change adaptation and mitigation" and "contribution to a circular economy," initiatives are identified in areas such as development of raw materials reflecting risks to sustainable raw-materials procurement and consideration for the environment.

Analysis of materiality

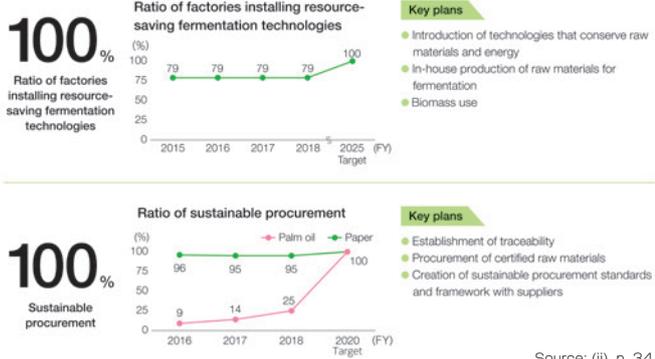
Raw materials critical to the Ajinomoto Group

Agriculture and forestry resources	<ul style="list-style-type: none"> · Palm oil, an ingredient in processed foods and specialty chemicals · Paper, used as office paper and in containers and packaging for processed consumer foods · Sugar crops, used in fermentation process of amino acids · Coffee beans
Fisheries resources	<ul style="list-style-type: none"> · Skipjack, an ingredient in HON-DASH® and in bonito flakes · Shrimp, an ingredient in frozen foods, etc.

Source: (ii), p. 39

Based on comprehensive grasp of the raw materials used in business activities, critical raw materials are identified in the areas of agriculture, forestry and fisheries resources in consideration of dependency on the raw materials, availability of alternatives and the relevance to environmental sustainability etc. These analyses are reviewed annually.

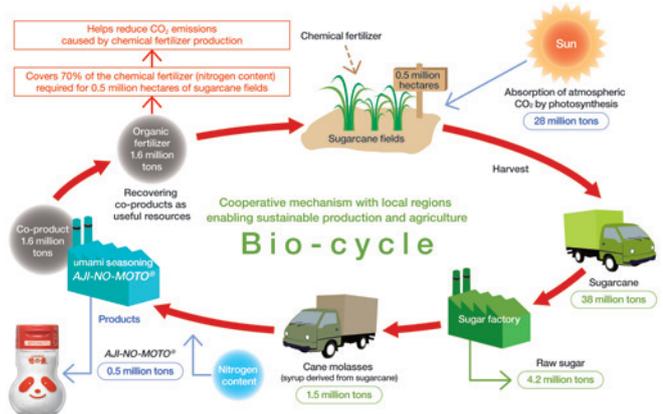
Secure food resources and conserve ecosystems and biodiversity to achieve sustainable procurement



Source: (ii), p. 34

The long-term environmental vision on food resources calls for "Secure food resources and conserve ecosystems and biodiversity to achieve sustainable procurement" and "Cut food loss and waste within lifecycle by half by 2050." Medium- to long-term environmental targets concerning food resources include the ratio of factories installing resource-saving fermentation technologies in the fermentation of amino acids, the procurement ratio of sustainable raw materials, and values related to reducing food loss and waste, and these results are disclosed.

Initiatives



The chart assumes worldwide annual production of approximately 0.5 million tons of the umami seasoning Aji-no-MOTO® by the Group using only sugarcane. The values of sugarcane grown and sugar production are commonly used global figures, and the values of resources used for producing Aji-no-MOTO® are based on actual statistics from the Group.

Source: (ii), p. 35

Initiatives related to sustainable raw materials procurement includes the purchase of certified products and the establishment of traceability. In addition, this company is advancing initiatives utilizing its own technologies and other solutions. Information is disclosed on initiatives in areas, such as contributing to sustainable agriculture which uses byproducts (co-products) remaining from the amino-acid production process as fertilizers and feeds and the development and adoption of fermentation technologies that use low volumes of resources.

Fishery

Ajinomoto Co., Inc. is committed to conserving resources and working toward sustainable use, as a company that uses skipjack as an ingredient in its major flavor seasoning product, HON-DASHI®. Since 2009, the Company has conducted the joint skipjack tagging survey with the National Research Institute of Far Seas Fisheries (NRIFS) in Japan. In 2015 the Company began a joint survey with Tokyo University of Marine Science and Technology and other universities, and in 2018 launched a consortium from the survey's parent organization.

In recent years, skipjack catches have fallen significantly in waters around Japan, resulting in difficult times for skipjack fishery. To contribute to sustainable regional development and the skipjack fishing industry which supports Japan's food culture, the Company has been actively sharing the knowledge of skipjack ecology gained from surveys with industry stakeholders.

In fiscal 2019, the Company will continue to advance the study of skipjack ecology, better resource management, and the establishment of international resource management rules.

Fiscal 2018 survey results

- Wide-area survey using archival electronic tags
Progress: Published paper on findings, including identification of three migration routes
- Coastal survey using ultrasonic waves
Progress: Continued skipjack behavior survey using pinger tags

Source: (ii), p. 44

As initiatives related to fisheries resources, disclosed information includes a tagging survey for skipjack, (raw material used as one of main products), elucidation of life ecology of skipjack, and progress toward more appropriate resource management and formulation of international resource management rules.



Kao Corporation

Main businesses	Cosmetics, skincare/haircare, human healthcare, fabrics and home care, and chemicals
Disclosure media	(i) <i>Kao Integrated Report 2019</i> (ii) <i>Kao Sustainability Data Book 2019</i>
Overall assessment	Kao Corporation strongly expresses its recognition that the perspectives of the environment, society, and governance (ESG) are important to increase corporate value over the long term. And it identifies responsible procurement of raw materials as one material theme of such efforts. This company describes its progress in areas, such as the purchase of certified products and confirming traceability, based on policies and medium-term targets reflecting an analysis of business risks and opportunities related to biodiversity etc. This company also shows consistency among the initiatives. It describes progress on initiatives to address the issue of ocean plastic waste from the perspectives of both risks and opportunities.

Analysis of materiality

Four key issues



Source: (ii), p. 28

The 19 material themes among ESG commitments and actions include responsibly sourced raw materials and zero waste. Furthermore, biodiversity is identified as one key issue

in the environmental field to be addressed throughout all stages of the product lifecycle.

Identification of risks and opportunities | Formulation of strategy etc.

Risks related to realization of our vision by 2030

The palm oil used as a raw material by Kao is also a food, while pulp and paper become transformed in innumerable ways for use in people's lives. With global population growth and economic development, the demand for palm oil, paper and pulp is growing worldwide. If we do not give consideration to sustainability, these resources will not last long, and an inability to procure raw materials will call our business survival into question.

Unless we are able to procure sustainable raw materials free of involvement with deforestation or human rights violations, there is a risk that our corporate reputation takes a hit, we lose society's trust and have difficulty continuing to do business.

Opportunities related to realization of our vision by 2030

We defined our Basic Policies on Conservation of Biodiversity in 2011, and declared our commitment to Zero Deforestation Declaration in 2014, taking a leadership role in biodiversity conservation. We are working to procure sustainable palm oil, paper and pulp for long-term business continuity. We are also working to develop substitutes for palm oil, for which demand will only continue to grow. Our focus is on microalgae, which are natural, high-yield sources of non-edible oil. At the same time, we are working to develop the oil production technology needed, with the goal of industrial production. These activities will contribute to the stable procurement of raw materials at low cost.

Source: (i), p. 72

In the area of biodiversity, risks and opportunities related to realization of the vision for 2030 are identified. Anticipated risks include difficulty in long-term raw materials procurement and business continuity in the absence of consideration for sustainable use of palm oil, paper, and pulp. Opportunities include the establishment of *Basic Policies on Conservation of Biodiversity*, sustainable procurement, and progress on the development of production technologies for plant oils to replace

palm oil aiming at industrial production. These are considered to contribute to improvement of business continuity as well as stable and low-priced supplies of raw materials.

With regard to procurement, *Guidelines for Supplier's Assessment* and *Guidelines for Sustainable Procurement of Raw Materials* are established.

<p>2020 mid-term targets</p> <p>1. Promoting the sustainable procurement of raw materials</p> <p>Procurement of certified raw materials</p> <p>With the goal of realizing zero deforestation, we are aiming to switch to procuring palm oil, paper and pulp from sustainable sources by 2020.</p> <p>With regard to procurement of palm oil and palm kernel oil, besides joining the RSPO*1 and promoting the obtainment of SCCS*2 certification and the procurement of certified sustainable palm oil, we are also aiming to confirm zero deforestation in the producing areas and 100% procurement of palm oil and palm kernel oil traceable to the source by 2020.</p> <p>Regarding procurement of paper and pulp, we are aiming to ensure that, by 2020, all paper, pulp and packaging materials used in our products, and all paper used in the offices, are either recycled paper or paper from a sustainable source. In particular, in the case of pulp, by 2020 we aim to purchase only pulp that has traceability back to the area where the timber was logged.</p> <p>Sustainable sourcing of natural plant resources</p> <p>We recognize that indiscriminate harvesting of natural plant resources has led to their depletion and resource plundering, and are continuing to diversify sourcing routes and to convert natural plants to artificially cultivated materials, giving due consideration to the natural environment and the community in the producing areas.</p>	<p>Performance in 2018</p> <p>Performance</p> <p>1. Promoting the sustainable procurement of raw materials</p> <p>Procurement of certified raw materials</p> <ul style="list-style-type: none"> • Palm oil and palm kernel oil procurement Confirmation of traceability to the palm oil mill based on supplier information: Approximately 98% completed in purchased amount Palm kernel oil mill verification by third-party organizations: 4 mills that are representative of palm kernel oil mills in their respective regions • Paper and pulp procurement*1 100% confirmation of traceability Of this, 88% ratio of certified paper/pulp materials*2 (as of December 2018) <p>*1 Covers paper/pulp used in Kao products (excludes some products). *2 Calculated based on the ratio of certified materials as of December 2018 and the annual procurement amount for 2018.</p> <ul style="list-style-type: none"> • Sustainable sourcing of natural plant resources Glycyrrhizate derivatives used in cosmetics and quasi-drug products are produced from glycyrrhiza (licorice root), a leguminous plant. Starting from 2016, we have been switching from wild glycyrrhiza to glycyrrhizate derivatives produced from cultivated glycyrrhiza in specified plantations to achieve biodiversity preservation and sustainable use.
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Source: (ii), pp. 141-142

The 2020 targets and the 2018 performance are disclosed with regard to the procurement of sustainable raw materials

for the main raw materials of palm oil, paper, and pulp.

Excerpt from Our Philosophy & Action on Plastic Packaging

We strive to lead the way and create innovative solutions that make life beautiful for our consumers without detracting from the vitality of nature.

Our Beliefs

We believe that the plastic we do use should be made within limits our one planet can safely handle.

Our Beliefs

We believe plastic should never enter nature, but that every piece should either be reused or recycled.

Our Beliefs

We believe that the plastic that has already entered nature should be recovered and renewed.

Our Actions

Our action on plastic packaging is driven by our 4R programme based on continuous improvement and bold innovation.

<p>Reduce</p> <p>Reducing the amount of plastic used by making our packaging thinner and lighter, and reducing product volumes through concentration.</p>	<p>Replace</p> <p>Replacing virgin fossil-fuel-based plastics with lower impact alternatives, wherever possible from recycled sources.</p>
<p>Reuse</p> <p>Innovating new packaging formats, such as refill pouches, that help our consumers reuse their original packaging many times.</p>	<p>Recycle</p> <p>Increasing the percentage of our plastic packaging by weight that is made from recycled resins, and the amount that is practically recyclable by consumers.</p>

Source: (ii), p. 80

Ocean plastic waste is identified as an emerging risk. And the impact on business activities of development, such as enhancement of laws and regulations in each country on plastics used in products, containers, and packaging, is recognized. An approach is identified of further enhancing related initiatives in the areas of both opportunities and risks.

Our Philosophy & Action on Plastic Packaging, published in October 2018, describes actions, such as replacement with plant-based and other sustainable raw materials and the development of new refillable packages and containers, indicating that efforts are underway based on a 4Rs (Reduce, Replace, Reuse and Recycle) perspective.



Bridgestone Corporation

Main businesses	Tires and diversified products (chemical and industrial products, roofing materials, sporting goods, bicycles, etc.)
Disclosure media	(i) Annual Report (ii) Sustainability Report 2018-2019 (iii) CSR Website (Environment In harmony with Nature)
Overall assessment	Based on a long-term vision for the year 2050 and later, Bridgestone identifies the clear goals of "In balance with nature" and "Towards 100% suitable materials." With regard to the latter in particular, this company identifies the three actions of reducing raw materials consumption, recycling resources and using them effectively, and switching to renewable resources while disclosing progress on these in quantitative terms. With regard to its main raw material of natural rubber, this company appears to be taking leadership in the industry through means, such as the establishment of a global platform to improve the supply chain in terms of the environment, society, and economics in cooperation with other tire makers and other firms.

Analysis of materiality

To help ensure a healthy environment for current and future generations...

In Harmony with Nature
To contribute to biodiversity through habitat enhancement, and through environmental education and research.

Value Natural Resources
To continually improve natural resource conservation through operational improvements and product design.

Reduce CO₂ Emissions
To continually reduce emissions of greenhouse gases, including CO₂ from our products' complete lifecycle.

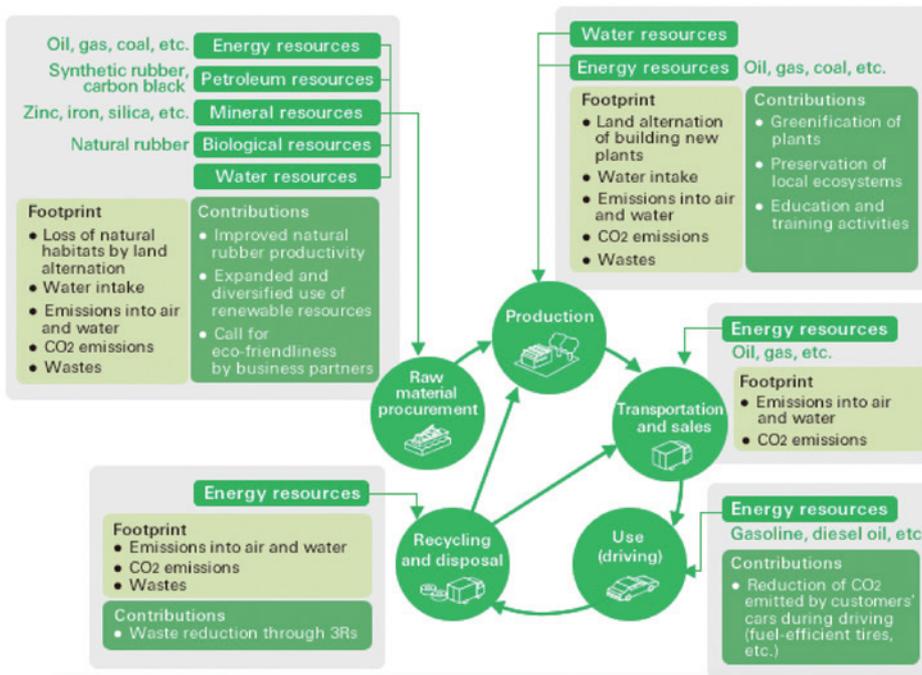
Source: (ii), p. 10

as one of its priority areas. In doing so, it calls for the Group to be "in harmony with nature" and to "value natural resources." It also identifies policies that include continuous contribution to biodiversity conservation and improvement of resource productivity throughout its products and manufacturing processes while putting water resources to effective use. In addition, it identifies procurement as one area of management fundamentals essential to support its efforts in priority areas as a responsible enterprise.

"Our Way to Serve" has been established as the global CSR structure for the Bridgestone Group. It identifies "Environment"

Identification of risks, opportunities, etc.

Map of the relationship between the Bridgestone Group's business activities and biodiversity (tire business)



Source: (iii) Environment| In harmony with Nature

The impact on and contributions to ecosystems in each stage of the product lifecycle are studied with reference to "Business

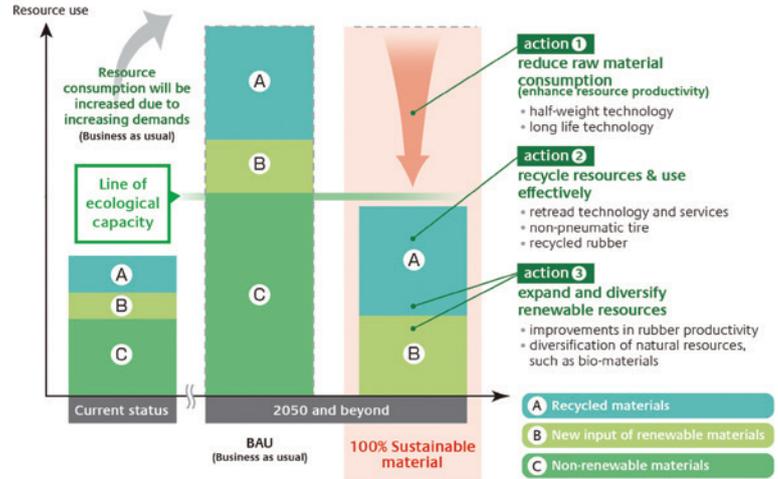
& Biodiversity Interrelationship Map" from the Japan Business Initiative for Biodiversity (JBIB).



Source: (ii), p. 28

* Refer to source (ii) for notes 7, 8, and 9.

Thinking on achieving 100% sustainable materials



Source: (ii), p. 33

This company identifies its long-term environmental vision for the year 2050 and later as “In balance with nature” and “Towards 100% sustainable materials.” In the area of 100% sustainable materials, it aims to conduct its businesses in harmony with the earth’s natural abilities of self-purification and maintenance and specifies three actions; to reduce raw materials consumption, to recycle resources and use them

effectively, and to replace resources with renewable one, in light of the possibility of resource depletion in the future due to increased demand. In connection with these, it discloses results over the most recent four years in the volumes of raw materials used, volumes of rubber recycled, and resource productivity.

Initiatives | Governance

“2018 was a stand-out year for the Bridgestone Group’s engagement with WBCSD. Through our Tire Industry Project, the Group’s leadership in developing and launching the multi-stakeholder Global Platform for Sustainable Natural Rubber (GPSNR) was commendable. The GPSNR is a timely venture, building on WBCSD’s core mission, that by working together we can accelerate the transition to a sustainable world. Importantly, it is the dedication of WBCSD members like the Bridgestone Group that drives high-impact business solutions to address the most challenging sustainability issues.”

—Peter Bakker, President and CEO, World Business Council for Sustainable Development

Partnerships

Although the Bridgestone Group’s commitments are significant, it cannot address supply chain improvements alone. That is why it is working collaboratively with 10 other leading tire companies that represent 65 percent of the world’s tire manufacturing capacity through the global Tire Industry Project (TIP) operated under the World Business Council for Sustainable Development.

TIP members are using a scientific approach to continue to improve the sustainability efforts of the industry. They are also building on the existing body of knowledge to address the life-cycle impact of tires.

Together with other stakeholders, TIP members recently launched the Global Platform for Sustainable Natural Rubber (GPSNR) to transform the natural rubber supply chain for the better. Through the GPSNR, TIP companies, including Bridgestone and other stakeholder members, will work to harmonize standards to improve respect for human rights, prevent land-grabbing and deforestation, protect biodiversity and water resources, improve yields and increase supply chain transparency and traceability.

Even with these partnerships, it is important to realize that the majority of natural rubber production in the world is conducted by smallholder rubber farmers in Southeast Asia. The Bridgestone Group uses large volumes of natural rubber, but unfortunately, productivity of the rubber trees raised by these farmers is often low and the quality of natural rubber produced varies. To help smallholder farmers improve the quality of their operations, the Bridgestone Group provides Hevea rubber tree seedlings and conducts technical training in key producing countries using the same productivity-improvement techniques the Group developed for its own rubber farms.

Source: (ii), p. 43

With regard to procurement, this company is advancing sustainable procurement activities based on *Global Sustainable Procurement Policy*, formulated in 2018. It also discloses information on how it is deploying global initiatives toward realization of a sustainable supply chain in cooperation with 11 tire makers through the Tire Industry Project (TIP) operated under the World Business Council for Sustainable Development (WBCSD). It also has participated in launching the Global Platform for Sustainable Natural Rubber (GPSNR), an initiative centered on TIP members that aims to improve the environmental, social, and economic aspects of the natural rubber supply chain, as well as making progress on the formulation of standards for purposes, such as preventing deforestation and preserving biodiversity and water resources. The message from the CEO describes the view that the ultimate goals of management, becoming a truly global company and a leader in its industries in all aspects, can be achieved only based on making people happy around the world and preserving an enriched environment. This message notes that the GPSNR has been launched as a practical initiative toward these aims.



Sekisui House, Ltd.

Main businesses	Built-to-Order, Development, Supplied Housing, Overseas Businesses
Disclosure media	(i) <i>Business Report 2019 (The 69th Report)</i> (ii) <i>Sustainability Report 2019</i>
Overall assessment	ESG is identified clearly as a management priority. And a "society in which humans and nature coexist" is cited as an important theme of such management. Deterioration of the urban ecosystem and the importance of traceability in procurement are recognized as topics. And their relations to the company's businesses are taken into consideration. KPIs are specified for targets reflecting the long-term 2050 Vision and medium-term initiatives for 2030, as well as guidelines established by the company itself. And organization structures for management of progress on initiatives toward these goals are established.

Analysis of materiality

Main ESG Themes	Material Topics (See page 85)
Society in which humans and nature coexist Page 43-	Biodiversity

Source: (ii), p. 33

<p>(1) Deterioration of the urban ecosystem As green spaces shrink due to urbanization in recent years, effective planting will not only lead to ecosystem preservation but will also support our lifestyles in a variety of ways, such as creating spaces for relaxation, revitalizing regions, and reducing flood damage by storing rainwater. Many trees are planted every year when new living spaces are created. However, cultivated and non-native trees tend to be extremely difficult to use for local birds and insects. Many of them are also unable to adapt to Japan's climate and natural features and have low resistance to pests. It is necessary to carefully consider compatibility when selecting plant species in order to protect regional ecosystems.</p>	<p>(2) The importance of traceability in procurement Lumber is an important renewable resource material that helps build our living spaces and Sekisui House uses approximately 300,000 cubic meters of lumber each year. However, functional degradation of environmental preservation and disruptions in our everyday lives due to practices like illegal logging present obstacles to sustainable forest management. Additionally, ensuring lumber traceability has also become an extremely important issue because distribution channels are complicated. For this reason, initiatives have been spreading throughout the world to secure appropriate lumber procurement, including Japan's Act on Promoting the Distribution and Use of Legally Harvested Wood (Clean Wood Act).</p>
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Source: (ii), p. 43

ESG initiatives are identified as important topics of management. And a "society in which humans and nature coexist" is cited as a main ESG theme. Biodiversity is identified as a material (important) topic. ESG considerations, including conservation of the ecosystem, also are incorporated into the Medium-Term Management Plan. In addition, deterioration of the urban ecosystem and importance of traceability in procurement are recognized as topics related to a "society in which humans and nature coexist."

Identification of risks and opportunities

Megatrend	Business environment	Risks	Opportunities	Policies and initiatives
Ecosystem conservation	Responses to ecosystem change due to global warming	Changes in vegetation regions and adaptive areas for plants used for afforestation	Proposals for effective arrangements for shrubs and trees	Increasing greening through the fulfillment of the Gohon no ki indigenous landscaping concept
	Demand for effective use and re-use of water resources	Demand for the introduction of water conservation business and facilities	Popularization of water-saving housing facilities	Popularizing and expanding environmental reforms

Source: (ii), pp. 21-22

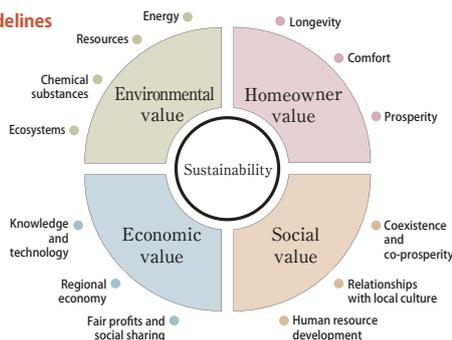
Risks and opportunities, along with megatrends and business environment, are analyzed from the perspective of sustainability. Ecosystem conservation is identified as one of megatrends. Changes in vegetation regions and adaptive areas for plants used for afforestation, and demand for the introduction of the water conservation business and facilities,

are recognized as risks. Proposals for effective arrangements for shrubs and trees, and popularization of water-saving housing facilities, are recognized as opportunities.

Formulation of strategy etc.

4 Key Values and 13 Guidelines

In 2005, we announced our Sustainable Vision targeting balanced management based on four key values that focus on sustainability as the cornerstone of our management. In 2006, we formulated 13 guidelines as guiding principles based on these four key values.



Source: (ii), p. 29

It is noted that value creation is based on the *Sustainable Vision*, which aims to achieve management well balanced in terms of four values, including the environment. Furthermore, the *13 guidelines* that embody this vision include guidelines related to ecosystems.

Sustainability Vision 2050 (excerpts)

Our Goals	Main Actions Taken	2030 Goals	2050 Challenge Objectives
<p>Leading the Way to Societies in which humans and nature coexist</p> <p>Rich natural networks contribute to the protection of biodiversity and alleviate climate change, contributing not only to the protection of ecosystem services that support our lifestyles, but also to improving the quality of people's lifestyles and strengthening connections between people. We will maximize this network function to realize coexistence between humans and nature.</p>	<ul style="list-style-type: none"> Launched Gohon no ki indigenous landscaping project (2001) ...Total number of trees planted: 15 million (2018) Formulated Wood Procurement Guidelines (2007) 	<p>Leading the Mainstreaming of Biodiversity</p> <p>Regarding the number of trees planted under the Gohon no ki indigenous landscaping project, which proposes the planting of mainly native tree species in consideration of local ecosystems, we will maintain the pace of planting 1,000,000 trees each year and promote further expansion of urban greening while also aiming for 100% procurement of sustainable FairWood fair Lumber products for use in all standard Sekisui House homes.</p>	<p>Maximizing Ecosystem Networks through Business</p> <p>We will procure 100% FairWood products to realize Zero Deforestation, which is linked to the destruction of ecosystems. We also aim to become Japan's number one corporation in terms of urban greening contributions, intelligently utilizing green infrastructure functions such as ecosystem conservation, disaster prevention/reduction and comfort through green housing construction and community development.</p>

Source: (ii), pp. 31-32

Sustainability Vision 2050 identifies "leading the way to societies in which humans and nature coexist," as one of the goals. 2030 Goals include leading the mainstreaming of biodiversity, maintaining the pace to plant 1 million indigenous trees per year under the Gohon no Ki (five trees) project, and aiming for

100% procurement of sustainable FairWood fair lumber products. As 2050 challenge objectives, maximizing ecosystem networks through its businesses is specified.

Setting and management of KPIs

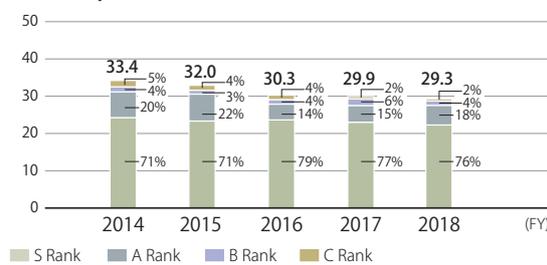
Key performance indicators (KPIs)

Indicator	Unit	FY2014	FY2015	FY2016	FY2017	FY2018	Total from 2001 to 2018	Definition and remarks
Number of trees planted annually	Tens of thousands	81	99	107	103	93	1,502	15 million trees by 2020

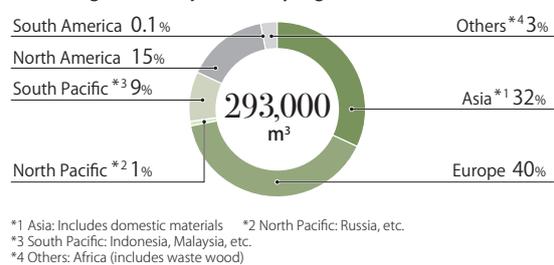
Source: (ii), p. 45

Indicator	Unit	FY2014	FY2015	FY2016	FY2017	FY2018	Target	Definition and remarks
Ratio of Rank S and Rank A wood products as defined by the Wood Procurement Guidelines	%	91	93	93	92	94	95	Survey results of around 50 of our main wood suppliers

FairWood procurement volume and rank breakdown (10,000 m³)



Percentage of wood products by region



10 Wood Procurement Guidelines

- Source wood products from areas with relatively low risk of illegal logging.
- Source wood products from areas without sensitive ecosystems.
- Do not source wood products from areas where local ecosystems are seriously damaged due to large-scale logging of natural forests.
- Do not use endangered species for wood products.
- Minimize CO₂ emissions when producing, processing, and transporting wood products.
- When logging wood products, avoid conflict with local communities and refrain from unfair labor practices.
- Source wood products from areas of controlled logging, so as not to exceed the rate of forest regeneration.
- Source wood products from domestic forests where well-planned forest management is in place to conserve ecosystems.
- Source wood products from plantation forests that are managed so as to promote conservation and ecosystem development.
- Use recyclable wood building materials.

Wood product procurement ranking

Depending on their total score, procured wood products are classified into four ranks, from high to low: S, A, B, and C. Minimally acceptable scores are set for Guidelines 1 and 4, as we place a high priority on these two items.

Total score (maximum 43 points)	Rank
34 and above	S
26 to 34	A
17 to 26	B
Below 17	C

Source: (ii), p. 46

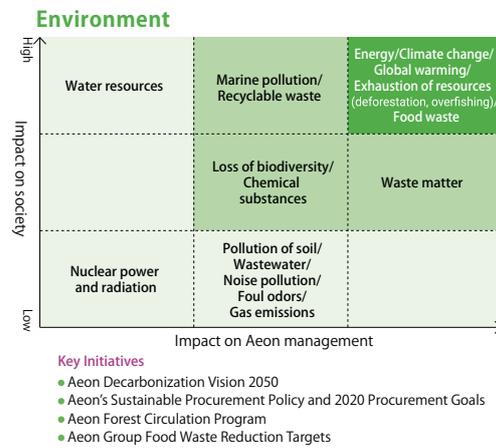
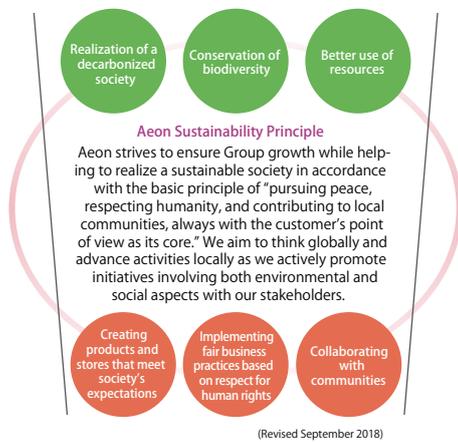
KPIs include the annual number of trees planted under the Gohon no Ki (five trees) project, and the ratio of Rank S and Rank A wood products as defined by the Wood Procurement

Guidelines, which reflect considerations of legal compliance and biodiversity. Results on these KPIs are disclosed.



Main businesses	General Merchandise Stores, supermarkets, health and wellness, financial services, shopping center development, services and specialty store, international businesses, shared function companies, etc.
Disclosure media	(i) <i>AEON Report 2019</i> (ii) <i>AEON Sustainability Data Book 2019</i>
Overall assessment	AEON Co., Ltd. identifies "conservation of biodiversity" as a key issue reflecting consideration of the value the company's business activities can deliver to society. This company also analyzes "exhaustion of resources" as an issue that has major impacts on society and business. Procurement policies are formulated reflecting risks related to fisheries and forestry resources. And comprehensive goals are set regarding the various bio-resources the company handles. Related results are disclosed. With regard to disclosure to important customers in the retail sector, action guidelines under the biodiversity principle are identified. Relevant initiatives are underway.

Analysis of materiality | Strategies etc.



Aeon's Sustainability Principle identifies six key issues derived from considering what kinds of value can be provided to society by business activities themselves from a long-term perspective. It includes "conservation of biodiversity" and "better use of resources." In addition, concrete initiatives

based on these key issues are mapped from the perspectives of their impacts on society and on Aeon's management. And exhaustion of resources is analyzed to have major impacts from both perspectives.

Formulation of strategy etc. | Identification of risks and opportunities

Aeon Biodiversity Principle
Aeon's business depends on the blessings of nature, such as agricultural and marine products. Recognizing this, Aeon formulated the Aeon Biodiversity Principle toward the conservation of biodiversity, which is essential in achieving a sustainable society.

Basic Principle
Recognizing the impact of our overall corporate activities on the ecosystem, we actively focus on reducing this impact as well as on conservation activities, working in collaboration with our stakeholders, including our customers, local authorities, and non-profit organizations. We focus on the following points related to the ecosystem in our corporate activities:

Through our corporate activities, we

1. Remain conscious of blessings and burdens.
2. Engage in initiatives that protect and nurture.
3. Disclose information on our activities.

Action Guidelines (Excerpt)

1. Products: We will set sustainability targets for resource managed fresh seafood and processed products, engage in their purchase and sale while sharing those targets with our business partners, and communicate related information to customers.
2. Stores: We will continue to promote tree-planting campaigns with local customers at new store sites and continue to develop Eco Stores with less environmental impact than conventional facilities.
3. With Customers: Through tree-planting campaigns and other programs, we will share environmental awareness and learn together with all of our customers.

Formulated in March 2010

Aeon Sustainable Procurement Principle

1. Eliminating illegal gathering or trading of natural resources and illegal fishing.
2. Establishing and managing Aeon standards from the perspective of biodiversity preservation and preventing the depletion of natural resources.
3. Minimizing the use of non-renewable resources.
4. Establishing traceability, including place of production and fishing methods, for agricultural products and marine resources.
5. Preventing the destruction of forest land with high conservation value.

Formulated in February 2014

Source: (ii), p. 20

Source: (ii), p. 22

The biodiversity principle is formulated based on the understanding that business activities would be impossible without the blessings of nature. Its action guidelines call for setting targets and implementing purchasing and sales activities accordingly, concerning products for which resources are managed with consideration for sustainability, as well as communicating related information to customers. In

addition, together with formulation of the sustainable procurement principle, procurement policies are specified under which efforts are made toward sustainable procurement through conducting risk identification and assessment for individual fisheries and forestry (paper, pulp, lumber) resources and the study of feasible measures.

Aeon Sustainable Procurement Policy and 2020 Goals and FY2018 Performance

Subcategory	KPI	Scope Covered	Target	FY2018 Results (Rate of Achievement)	Summary of Actions/Initiatives Undertaken in FY2018
Promoting sustainable procurement (products)	Sustainable procurement initiatives in agricultural products	Consolidated Group companies in Japan	FY2020: • Conduct management through Good Agricultural Practice (GAP) based on Global Food Safety Initiative (GFSI)*1 for all private brands • Have organic products account for 5% of agricultural product sales	• Percentage of products with GAP certification based on GFSI: 92.2% (private brand products) • Organic products as a percentage of agricultural product sales: 20% achieved	1) Held GAP briefing for contract manufacturers 2) Held kick-off meetings and area meetings on organic products 3) Increased farms, processing bases, and participating operating companies 4) Expanded TOPVALU Gurinai Organic brand to 356 items, making it the largest lineup of organic products in Japan's retail industry (perishable and processed products) (as of the end of February 2019)
	Sustainable procurement initiatives in livestock products	Consolidated Group companies in Japan	FY2020: • Conduct management through Food Safety Management System (FSMS) based on GFSI or conduct management through GAP based on GFSI at plants that process private brands	• Food Safety Management System (processing plant) product sales: 70% (of PB products) • Food Safety Management System (farm) product sales: 25% (of PB products)	1) Decided to seek Safe Quality Food (SQF) certification 2) Advanced measures for Tasmanian beef and Junkikei (healthy chicken)
	Sustainable procurement initiatives in fishery products	Consolidated Group companies in Japan	FY2020: • Have all consolidated subsidiaries that operate GMS or SM obtain Marine Stewardship Council (MSC)*2 or Aquaculture Stewardship Council (ASC)*3 Chain of Custody (CoC) certification • Provide sustainability-proven private brand products for all major fish species	• Percentage of CoC certification: 70% (Group total) • Sales of MSC- and ASC-certified products: 52.0% (of marine products) • Percentage of sustainability-proven products: 51.9% (private brand products)	1) MSC certification: 41 items spanning 22 fish species 2) ASC certification: 18 items spanning 9 fish species 3) Established permanent Fish Baton area carrying only MSC- and ASC-certified products at 67 stores of Aeon Retail Co., Ltd. (as of the end of May 2019)
	Sustainable procurement initiatives in paper, pulp, and timber	Consolidated Group companies in Japan	FY2020: Use sustainability-certified (Forest Stewardship Council (FSC®)*4 or equivalent) raw materials for all private brands in major product categories	Percentage of FSC®-certified materials used in major categories • Health and beauty care: 56.1% • Stationery: 70.8%	1) Launched approximately 80 FSC®-certified stationery products and H&BC private brand products 2) Used FSC®-certified paper for tags on private-brand apparel and food packaging
	Sustainable procurement initiatives in palm oil	Consolidated Group companies in Japan	FY2020: Use sustainability-certified (Roundtable on Sustainable Palm Oil (RSPO)*5 or equivalent) raw materials for all private brands	• Use of RSPO-certified materials: 0%	1) Established RSPO Procurement Policy 2) Held RSPO in-house seminar 3) Investigated usage volumes in private brand products 4) Considered RSPO procurement methods 5) Joined RSPO

Note 1: Regarding the procurement of fishery products, Aeon formulated the Aeon Sustainable Seafood Procurement Policy in 2014.

Note 2: Regarding the procurement of paper, pulp, and timber, Aeon formulated the Aeon Forest Resources Procurement Principle (Paper/Pulp/Timber) in 2016.

*1 GFSI (Global Food Safety Initiative): GFSI is an industry-driven global collaboration to advance food safety powered by The Consumer Goods Forum (TCGF, which is composed of global food manufacturers and retailers). GFSI also recognizes food safety certification programs.

*2 MSC (Marine Stewardship Council): MSC is an organization that manages and promotes the MSC certification program, which certifies socially responsible and sustainable fisheries.

*3 ASC (Aquaculture Stewardship Council): ASC is an organization that implements the world's leading certification and labeling program for responsibly farmed seafood.

*4 FSC (Forest Stewardship Council): FSC is an organization established to support environmentally appropriate, socially beneficial, and economically viable management of the world's forests.

*5 RSPO (Roundtable on Sustainable Palm Oil): RSPO was formed to promote the growth and use of sustainable palm oil products through trusted global standards and engagement of stakeholders.

Source: (ii), p. 22

KPIs are set for each key issue. Regarding promotion of sustainable procurement for conservation of biodiversity, targets has been formulated for 2020, including having all consolidated subsidiaries that operate general merchandise

stores or supermarkets obtain Marine Stewardship Council (MSC) or Aquaculture Stewardship Council (ASC) chain-of-custody (CoC) certification. Relevant results are disclosed.

Subcategory	KPI	Scope Covered	Target	FY2018 Results	Summary of Actions/Initiatives Undertaken in FY2018
Reducing the number of plastic shopping bags	Percentage of customers declining plastic shopping bags (nationwide store average)	Consolidated Group companies in Japan for GMS and SM businesses	FY2017: Over 70% FY2020: Over 80%	65.6% (29 Group Companies. Number of stores that have stopped providing free plastic shopping bags at cash registers increased by 70 stores, 1,701 stores in total) * Out of 1,701 stores, more than 80% of customers declined plastic shopping bags	1) Shared information with Group companies on stores that had stopped providing free plastic shopping bags at cash registers and on refusal rates for plastic shopping bags at cash registers 2) Strengthened promotion by SM companies and encouraged active participation in regions in relation to agreement on ending free bag distribution at cash registers

Source: (ii), pp. 108-109

With regard to the key issue of the better use of resources, the company also recognizes the issue of ocean plastic waste, and thus KPIs, targets, and results of existing initiatives to reduce the use of plastic bags are disclosed. It is

also noted that other initiatives have been begun with regard to one-way plastics as well. In addition, KPIs, targets, and results are also identified with regard to reducing the volumes of container and packaging materials and food waste.



Kirin Holdings Company, Limited

Main businesses	Japan beer and spirits, Japan non-alcoholic beverages, Oceania integrated beverages, pharmaceuticals
Disclosure media	(i) <i>Kirin CSV Report 2019</i> (ii) <i>Kirin Group Environmental Report 2019</i>

Identification of risks and opportunities

	Key environmental and social issues	Major risks	Time period	Major opportunities	Time period
	<ul style="list-style-type: none"> ● Contraction of agricultural production ● Expansion of idle and devastated land ● Environmental destruction and human rights problems caused by unsustainable agriculture ● Impact of climate change on agricultural production regions 	<ul style="list-style-type: none"> ● Procurement risks of Japan-grown key agricultural products by Japanese farmers ● Reputation risk caused by environmental destruction and human rights issues caused by unsustainable agriculture mainly in developing countries ● Procurement risks due to harvest depletion and decline in quality of key agricultural products as a result of climate change ● Regulatory risks 	Short – medium	<ul style="list-style-type: none"> ● Protection of the natural environment and community revitalization in agricultural production areas and stable procurement of key agricultural products ● Securing of agricultural products and improvement of reputation through support to sustainable farm certification ● Expectations of ethical consumption 	Short – medium
			Short – medium		Short – long
			Medium – long		Short – long
			Short – long		Short – long

Source: (ii), p. 11

This company identifies "biological resources" as one important environmental topic considered to be involved in its businesses. Based on environmental and societal issues, this company lists, as major risks, procurement risks for important Japanese agricultural products, reputational risks arising from environmental destruction and human-rights issues of agriculture in developing countries, and procurement risks resulting from climate change. Also, this company lists, as

major opportunities, stable procurement of important agricultural products and reputational improvements from supporting sustainable farm certifications. In addition, as the periods over which risks and opportunities could arise, this company assumes the short term (within three years), the medium term (through 2030), and the long term (through 2050). These timings at which each risk and opportunity can be expected to appear are disclosed.



Maruha Nichiro Corporation

Main businesses	Fishery & Aquaculture, Trading, Overseas Business, Processing, Logistics, etc.
Disclosure media	(i) Sustainability Website

Protection of marine resources

Medium-Term sustainability vision

Main objective	Medium-term goals		Action plan
	Item	Goal	
Protect marine resources	Promote sustainable use of fishery resources	<ul style="list-style-type: none"> ● Promote certification acquisition for sustainable fishing and farming ● Strengthen efforts to abolish illegal, unreported, and unregulated fishing (IUU) ● Expand full-life cycle aquaculture business ● Promote eco-friendly farming technology 	<ul style="list-style-type: none"> ● Promote the use of marine products obtained through sustainable fishing/aquafarming certificates (MSC/ASC) ● Promote acquisition of sustainable aquafarming certificates ● Implement a stricter verifications of imported fishery product traceability ● Promote dialogue in Japan and abroad ● Increase production of full-life cycle aquaculture of pacific bluefin tuna ● Strengthen R&D systems for aquafarming technologies

Source: (i), Maruha Nichiro Group's Medium to Long-term Sustainability Management Plan (2018), p.16

This company has formulated the *Medium to Long-term Sustainability Management Plan (FY 2018-2021)* toward achievement of its *Long-term Sustainability Vision (FY 2018-2027)*, identifying the protection of marine resources as the main objective. The medium-term goals include the promotion of certification acquisition for sustainable fishing and aquafarming, promotion of eco-friendly aquafarming technology, enhancement of efforts to abolish illegal, unreported, and unregulated fishing (IUU), and

expansion of full-life cycle aquaculture businesses. In addition, the company's President & CEO has been appointed the first chairperson of the global environmental initiative, *Seafood Business for Ocean Stewardship (SeaBOS)*, under which major seafood businesses and scientists from around the world cooperate to lead science-based strategies and activities toward sustainable seafood production and sound marine environments. This company discloses information on its efforts aiming to protect marine resources, to use them sustainably, and to realize long-term sustainable value creation.

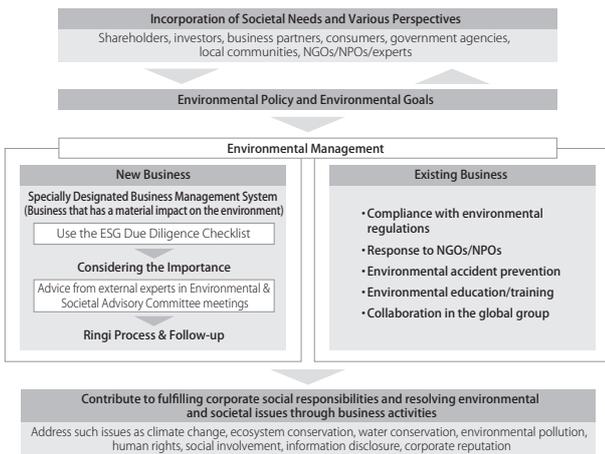


Mitsui & Co., Ltd.

Main businesses	In various fields, such as iron & steel products, mineral & metal resources, infrastructure projects, mobility, chemicals, energy, and food, sells varied and diverse lines of products, and develops projects related to logistics, finance, and international business in support of these activities, among its other diversified business
Disclosure media	(i) <i>Mitsui & Co., Ltd. Integrated Report 2019</i> (ii) <i>Mitsui & Co., Ltd. Sustainability Report 2019</i>

Assessment of impact of business activities on ecosystems

Responding to Environmental and Social Risks (as of April 2019)



Source: (ii), p. 40

This company has established systems for taking the environment and society into consideration in doing business, not only at the stage of launching a new business but also at the operation stage as well. This company discloses information on the fact that for a new business project, it utilizes the *ESG Due Diligence Checklists* which summarizes the environmental and social risks of each business with reference to international standards on environmental and social considerations to carry out ESG impact assessment regarding matters, such as pollution prevention, ecosystems, and water stress, and the fact that decisions on proceeding with such project are made by the representative directors through internal reviews and with attention to advice by a committee of outside experts held depending on importance of the relevant project's environmental and/or social impacts.



MS&AD Insurance Group Holdings, Inc.

Main businesses	Domestic nonlife insurance, domestic life insurance, financial services, risk-related services, international businesses
Disclosure media	(i) <i>MS&AD Integrated Report 2019</i> (ii) <i>MS&AD Holdings Sustainability Report 2019</i>

Products and services related to natural capital risks

Identify and inform on risks	Prevent risks from occurring/minimize the impact	Reduce the economic burden
Assessing risks, including the depletion/degradation of natural capital (Analysis examples) <ul style="list-style-type: none"> • Future risk of water depletion at business facilities that use large volumes of water • Assessment of the sustainability of supply chains which primarily depends on natural resources 	Proposals on risk management measures based on research/analysis findings (Proposal example) <ul style="list-style-type: none"> • Consultation on land use that considers local ecosystems 	Provision of risk coverage (Coverage example) <ul style="list-style-type: none"> • Expenses incurred during recall when a sustainability certification of the used materials is revoked and expenses needed for apology

Source: (ii), p. 35

The "resilient and sustainable society" that the company aims to achieve by 2030 under its *Vision 2021* medium-term management plan is described as the one that can be realized only based on a solid environmental foundation including natural capital. This company also recognizes that business models with consideration for the sustainability of natural capital will support

the sustainability of society as a whole, including business enterprises. This company discloses information on efforts in areas, such as risk assessment and risk impact reduction, as well as alleviation of the economic burden from risks once they have been realized.



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Produced by : Office for Mainstreaming Biodiversity, Biodiversity Policy Division,
Nature Conservation Bureau, Ministry of the Environment Japan
Chuo Godochosha No. 5, 1-2-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8975 Japan
Tel. +81-3-3581-3351

