

F0. Introduction

F0.1

(F0.1) Give a general description of and introduction to your organization.

Kao. The Company is a Japan-based company that operates through two business segments: Consumer Product and Chemical. The Consumer Product segment has three divisions. The Beauty Care division offers prestige cosmetics, premium skincare products such as face washes, as well as premium hair care products including shampoos, hair styling products and hair colouring products, among others. The Human Health Care division provides food and beverage products such as drinks, sanitary products including hygiene products and paper diapers, as well as personal health products such as bath additives. The Fabric and Home Care division offers fabric care products including detergents for apparel use, and home care products including detergents for kitchen use. The Chemical segment provides oil and fat products such as fatty acids; functional materials products such as surface acting agents and additives for plastic use, as well as specialty chemical products such as essences, among others. The Beauty Care business accounted for 39.3% of total turnover in 2017; Human Health Care business 19.8%; Fabric and Home Care business 22.5%; and Chemical business 18.4%. The Company reported JPY 1,489.4b in revenues and 33,560 permanent employees as of December 31, 2017.

F0.2

(F0.2) State the start and end date of the year for which you are reporting data.

	Start Date	End Date
Reporting year	January 1 2017	December 31 2017

F0.3

(F0.3) Select the currency used for all financial information disclosed throughout your response.

JPY

F0.4

(F0.4) Select the stage(s) of the value chain which best represents your organization's area of operation pertaining to forest risk commodities.

Manufacturing

F0.5

(F0.5) Do you produce, use, or sell materials or products that contain any of the forest risk commodities?

	Produce/use/sell	Disclosing	Explanation if produce/use/sell but not disclosing
Timber	Yes	Yes	<Not Applicable>
Palm Oil	Yes	Yes	<Not Applicable>
Cattle Products	No	<Not Applicable>	<Not Applicable>
Soy	No	<Not Applicable>	<Not Applicable>
Other - Rubber	No	<Not Applicable>	<Not Applicable>
Other	No	<Not Applicable>	<Not Applicable>

F0.6

(F0.6) Are there any parts of your direct operations not included in your disclosure?

No

F0.7

(F0.7) Are there any parts of your supply chain not included in your disclosure?

No

F1. Current state

F1.1

(F1.1) How does your organization produce, use, or sell your disclosed commodity(ies)?

Forest risk commodity

Timber

Activity

Using as input into product manufacturing

Form of commodity

Pulp

Paper

Boards, plywood, engineered wood

Primary packaging

Secondary packaging

Tertiary packaging

Source

Trader/broker/commodity market

Contracted suppliers (manufacturers)

Country/Region of origin

Canada

China

Germany

Japan

New Zealand

Taiwan (Province of China)

Thailand

United Kingdom of Great Britain and Northern Ireland

United States of America

% of procurement spend

11-20%

Comment

Kao purchases pulp for use mainly in our hygiene products, and paper for the packaging of our broad consumer products. We also use PPC (plan paper copier) at our offices.

Forest risk commodity

Palm Oil

Activity

Using as input into product manufacturing

Form of commodity

Crude palm oil (CPO)

Crude palm kernel oil (CPKO)

Palm oil derivatives

Palm kernel oil derivatives

Source

Contracted suppliers (manufacturers)

Country/Region of origin

Indonesia

Japan

Malaysia

Philippines

% of procurement spend

6-10%

Comment

Kao purchases crude palm oil, crude palm kernel oil, palm oil derivatives and palm kernel oil derivatives for use in our Consumer goods and Chemical products including Fatty Acid.

(F1.1a) Indicate from which State/region(s) and municipality(ies) your disclosed commodity(ies) originate.

Forest risk commodity

Palm Oil

Activity

Using as input into product manufacturing

Country/Region of origin

Indonesia

State/Region

Specify state/region (Riau)

Municipality

Specify municipality (1) (Dumai)

Please explain

The oil we purchase from the relevant supplier can be traced back to the palm oil mill.

Forest risk commodity

Palm Oil

Activity

Using as input into product manufacturing

Country/Region of origin

Indonesia

State/Region

Specify state/region (Belawan)

Municipality

Specify municipality (1) (Medan)

Please explain

The oil we purchase from the relevant supplier can be traced back to the palm oil mill.

Forest risk commodity

Palm Oil

Activity

Using as input into product manufacturing

Country/Region of origin

Malaysia

State/Region

Specify state/region (Sabah)

Municipality

Specify municipality (1) (Sandakan)

Please explain

The oil we purchase from the relevant supplier can be traced back to the palm oil mill.

Forest risk commodity

Palm Oil

Activity

Using as input into product manufacturing

Country/Region of origin

Malaysia

State/Region

Specify state/region (Selangor Darul Ehsan)

Municipality

Specify municipality (1) (Dengkil)

Please explain

The oil we purchase from the relevant supplier can be traced back to the palm oil mill.

F1.2

(F1.2) Indicate the percentage of your organization’s revenue that was dependent on your disclosed forest risk commodity(ies) in the reporting year.

	% of revenue dependent on commodity	Comment
Timber	81-90%	Most of our hygiene products use pulp and paper as major materials. And most of our consumer products use packaging material such as corrugated carton and paper box. These products account for around 82% of our total revenue.
Palm Oil	81-90%	We purchase Palm and Palm Kernel oil and their derivatives for many of our consumer products and chemical products for industrial use. Although the content ratio of such commodities per product is limited for our consumer products, they are widely applied, so that the products using palm oil, palm kernel oil and palm (kernel) oil derivatives account for more than 80% of our total revenue.
Cattle products	<Not Applicable>	<Not Applicable>
Soy	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>
Other	<Not Applicable>	<Not Applicable>

F1.3

(F1.3) Do you own or manage land used for the production of your disclosed commodity(ies)?

Forest risk commodity

Timber

Own and/or manage land?

Don't own or manage land

Type of control

<Not Applicable>

Description of type of control

<Not Applicable>

Country/Region

<Not Applicable>

Land type

<Not Applicable>

Size (Hectares)

<Not Applicable>

Do you have a system in place to monitor forests-related risks?

<Not Applicable>

Type of monitoring system

<Not Applicable>

Description of monitoring system

<Not Applicable>

Recent infraction(s)

<Not Applicable>

Explanation of infraction

<Not Applicable>

Forest risk commodity

Palm Oil

Own and/or manage land?

Don't own or manage land

Type of control

<Not Applicable>

Description of type of control

<Not Applicable>

Country/Region

<Not Applicable>

Land type

<Not Applicable>

Size (Hectares)

<Not Applicable>

Do you have a system in place to monitor forests-related risks?

<Not Applicable>

Type of monitoring system

<Not Applicable>

Description of monitoring system

<Not Applicable>

Recent infraction(s)

<Not Applicable>

Explanation of infraction

<Not Applicable>

F1.5**(F1.5) Does your organization collect production and/or consumption data for your disclosed commodity(ies)?**

	Data availability/Disclosure
Timber	Consumption data available, disclosing
Palm Oil	Consumption data available, disclosing
Cattle products	<Not Applicable>
Soy	<Not Applicable>
Other - Rubber	<Not Applicable>
Other	<Not Applicable>

F1.5a

(F1.5a) Disclose your production and/or consumption data.

Forest risk commodity

Timber

Data type

Consumption data

Volume

308000

Metric

Metric tons

Data coverage

Full commodity production/consumption

Please explain

We use our in-house backbone systems to centrally manage global consumption data.

Forest risk commodity

Palm Oil

Data type

Consumption data

Volume

417000

Metric

Metric tons

Data coverage

Full commodity production/consumption

Please explain

We use our in-house backbone systems to centrally manage global consumption data.

F1.6

(F1.6) Have you identified sufficient sources of sustainable materials to meet your current operational needs? If yes, what are you doing to ensure the security/continuity of this supply?

Timber

Sustainable source identified

Yes

Primary action to ensure supply

Engaging in capacity building activities in the value chain

Please explain

For its paper and pulp usage, Kao intends by 2020 to procure 100% recycled paper or paper certified as sustainable (certified paper). To achieve this objective, we requested our pulp/paper suppliers to use certified paper, and we conducted surveys of our suppliers using the WWF checklist, to verify the traceability of their paper materials. Based on our results, we then engaged with those not supplying sustainable raw materials. Following these activities, our suppliers established their own certification systems and improved their capabilities for supplying certified paper. Thus, traceability was verified for 99.8% of the paper Kao procured by 2017, 86% of which was certified paper. This means that the quantity of sustainable paper Kao can procure has increased.

Palm Oil

Sustainable source identified

Yes

Primary action to ensure supply

Supplier improvement plans to increase capacity of supply

Please explain

For its palm oil usage, Kao intends by 2020 to procure palm oil that can be completely traced back to its place of origin. To achieve this, we had initially set our goal to changeovers to RSPO certified oil. We, however, finally decided to verify ourselves that the palm oil we use is traceable and leads to zero-deforestation. The reason for this decision is that the supply of certified oil to the market is insufficient, and some environmental NGOs have pointed out that certified oil does not necessarily lead to zero-deforestation, or fully protect human rights. The approaches we have taken are described below: (1) Obtain information on palm kernel mills and palm oil mills from Tier-1 suppliers, and map this information (2) Verify that information through third-parties (3) Have third-parties conduct verifications on the palm kernel mills (4) Map the palm oil mill risks (using satellite photos, administration maps, and vegetation maps) Based on this mapping, we identified the palm oil mills that purchased palm fruit from farms potentially associated with deforestation, and visited those mills. These visits allowed us to clearly determine the traceability to the farms, and we requested those mills to identify high-risk farms and reconsider doing business with them. We are now monitoring their activities in this matter. Continuing and expanding this approach will aid us in ensuring the procurement of sustainable palm oil.

F1.7

(F1.7) Has your organization experienced any detrimental forests-related impacts?

No

F2. Procedures

F2.1

(F2.1) Does your organization undertake a forests-related risk assessment?

Yes, forests-related risks are assessed

F2.1a

(F2.1a) Select the options that best describe your procedures for identifying and assessing forests-related risks.

Timber

Value chain stage

Direct operations
Supply chain

Coverage

Full

Risk assessment procedure

Assessed as part of an established enterprise risk management framework

Frequency of assessment

Annually

How far into the future are risks considered?

> 6 years

Tools and methods used to identify and assess risks

Internal company methods
External consultants

Please explain

As part of our risk assessment for the consistent continuation of our business, Kao is now identifying the places of origin of all supplied pulp. The existing tools do not provide sufficient information for tracing places of origin. Therefore, we have developed internal company methods to achieve our objectives, including a risk assessment for deforestation for each procurement source (place of origin). Our internal company method specifies the procedures for the preferred procurement of certified pulp with clearly identified places of origin. For uncertified pulp, WWF Japan's Responsible Purchasing Checklist for Forest Products is used to evaluate the sustainability of their places of origin, based on suggestions by third-party consultants. This checklist tool allows us to independently check wood feedstock for its impact on deforestation, and its effect on society. Kao uses this tool because it is reliable, it was created objectively, and it allows us to comprehensively evaluate Kao's global suppliers using consistent benchmarks. For example, Kao identifies certified forest products, including FSC, as low-risk commodities that have been screened regarding deforestation risks, and chooses preferred suppliers that can supply those certified products. For suppliers of uncertified products, investigations are conducted using the WWF Japan checklist. Based on the checklist results, we assess any risks arising from raw materials supplied to Kao in our annual review after evaluating copies of logging permissions and environmental assessments. We plan to remit the WWF Japan checklist every three years. The risk assessment results will be used not only for supplier risk identification, but also for nominating locations to be audited and suppliers to be educated.

Palm Oil

Value chain stage

Direct operations
Supply chain

Coverage

Full

Risk assessment procedure

Assessed as part of an established enterprise risk management framework

Frequency of assessment

Annually

How far into the future are risks considered?

> 6 years

Tools and methods used to identify and assess risks

Internal company methods
External consultants

Please explain

As part of our risk assessment for the consistent continuation of our business, Kao now identifies the places of origin of all supplied palm oil. The available tools do not provide sufficient information for tracing the places of origin. Therefore, we have developed internal company methods, and we use them to evaluate traceability up to the mills. (1) Obtain information on palm oil mills from Tier-1 suppliers (2) Use risk-mapping to identify farms around the mills, and mills with higher potential risks for deforestation (3) Visit those mills to verify their conditions and request improvements The activities in (2) and (3) above are conducted in cooperation with third-party consultants. To identify the farms supplying the palm oil mills, we have started using Blunumbers as based on suggestions from our third-party consultants. As of 2017, we have obtained information from five Tier-1 suppliers (83%) and identified 89 palm oil mills with higher potential risks of deforestation (9.4%). We visited one of the 89 mills to identify their upstream suppliers and requested improvements.

F2.1b

(F2.1b) Which of the following issues are considered in your organization's forests-related risk assessment(s)?

Availability of forest risk commodities

Relevance & inclusion

Relevant, always included

Please explain

A large quantity of palm kernel oil is used for activators contained in detergents, one of Kao's key products. Timber is used for paper diapers and packing materials. Therefore, procurement of those raw materials is extremely vital for Kao. The Procurement Division performs risk management for the availability of forest-risk commodities, under the Risk and Crisis Management Committee.

Quality of forest risk commodities

Relevance & inclusion

Relevant, always included

Please explain

A large quantity of palm kernel oil is used for activators contained in detergents, one of Kao's key products. Timber is used for paper diapers and packing materials. Therefore, the quality of those procured raw materials is extremely vital for Kao. The SCM Division performs risk management for the quality of forest-risk commodities, under the Quality Management Committee.

Impact of activity on the status of ecosystems and habitats

Relevance & inclusion

Relevant, always included

Please explain

Kao states in its basic procurement policy that it is conscious of environmental conservation. In the K20 mid-term plan, Kao also sets proactive commitment to social issues as one of its objectives. A large quantity of palm kernel oil is used for activators contained in detergents, one of Kao's key products. Timber is used for paper diapers and packing materials. Therefore, if forest-risk commodities are obtained through illegal logging, this means that Kao unintentionally plays a role in adversely affecting the ecosystem and its habitats. This is inconsistent with our corporate policies and is a serious procurement risk for our business. Because conservation of the ecosystem and its habitats for forest-risk commodities is a company-wide policy, this issue relates to the entire value chain. Therefore, the Procurement Division manages this issue under the Risk and Crisis Management Committee.

Regulation

Relevance & inclusion

Relevant, always included

Please explain

A large quantity of palm kernel oil is used for activators contained in detergents, one of Kao's key products. Timber is used for paper diapers and packing materials. When a new regulation is introduced on the procurement of these materials, procurement may become more difficult, or the costs might go up. The Procurement Division performs risk management related to new regulations affecting forest-risk commodities, under the Risk and Crisis Management Committee.

Climate change

Relevance & inclusion

Relevant, always included

Please explain

A large quantity of palm kernel oil is used for activators contained in detergents, one of Kao's key products. Timber is used for paper diapers and packing materials. If forest-risk commodities are obtained through illegal logging, which decreases GHC absorption by forests and affects climate change, it also has a wide-ranging impact on Kao's business. The Procurement Division identifies and manages illegal logging situations related to forest-risk commodities, under the Risk and Crisis Management Committee.

Tariffs or price increases

Relevance & inclusion

Relevant, always included

Please explain

A large quantity of palm kernel oil is used for activators contained in detergents, one of Kao's key products. Timber is used for paper diapers and packing materials. Therefore, any new tariffs on forest-risk commodities, or increases in their prices, will drive the procurement costs up. The Procurement Division identifies and manages situations related to tariffs and prices for forest-risk commodities, under the Risk and Crisis Management Committee.

Loss of markets

Relevance & inclusion

Relevant, always included

Please explain

A large quantity of palm kernel oil is used for activators contained in detergents, one of Kao's key products. Timber is used for paper diapers and packing materials. If Kao uses forest-risk commodities obtained through illegal logging, its brand reputation may be damaged and we may risk being rejected by the market. The Procurement Division identifies and manages illegal logging situations related to forest-risk commodities, under the Risk and Crisis Management Committee.

Brand damage related to forest risk commodities

Relevance & inclusion

Relevant, always included

Please explain

A large quantity of palm kernel oil is used for activators contained in detergents, one of Kao's key products. Timber is used for paper diapers and packing materials. If Kao uses forest-risk commodities obtained through illegal logging, its brand reputation may be damaged and we may risk being rejected by the market. The Procurement Division identifies and manages illegal logging situations related to forest-risk commodities, under the Risk and Crisis Management Committee.

Corruption

Relevance & inclusion

Relevant, always included

Please explain

Malaysia and Indonesia, countries Kao procures its palm oil from, are recognized as high-risk regarding corruption related to their forests. On the other hand, international regulations against corruption, including the UK Bribery Act and USA Foreign Corrupt Practices Act, have become stricter than ever, and the Global Compact that Kao endorses identifies corruption prevention as one of its principles. Kao, deploying its business globally, recognizes corruption as a challenge concerning the entire value chain. Through the Kao Guidelines for Supplier's Assessment, we require our suppliers to eliminate corruption. The Procurement Division identifies and manages corruption situations related to forest-risk commodities, under the Risk and Crisis Management Committee.

Social impacts

Relevance & inclusion

Relevant, always included

Please explain

A large quantity of palm kernel oil is used for activators contained in detergents, one of Kao's key products. Timber is used for paper diapers and packing materials. In the regions where we procure palm oil and timber as raw materials in our key products, the deterioration of social circumstances related to the forests poses risks to the availability of forest-risk commodity supplies. This deterioration includes forced relocation of the residents, illegal labor, and conflicts with local residents. In particular, Indonesia and Malaysia, from which Kao procures palm oil, have experienced frequent conflicts with the local residents during forest development. These regions pose critical risks to us by making the stable procurement of raw materials more difficult. Kao recognizes that the social impact related to forest-risk commodities is a challenge concerning the entire value chain. The Procurement Division identifies and manages social situations under the Risk and Crisis Management Committee.

Other, please specify

Relevance & inclusion

Please select

Please explain

F2.1c

(F2.1c) Which of the following stakeholders are considered in your organization's forests-related risk assessments?

Customers

Relevance & inclusion

Relevant, always included

Please explain

Some chemical business customers require us to provide RSPO certified oil. If Kao cannot provide RSPO certified oil, we risk losing business opportunities. For this reason, Kao is now working on obtaining RSPO SCCS certification in our own plants, and has notified its chemical business customers that we can provide RSPO certified oil. Examples of specific engagement include our factory tours for our customers, explanations of the Sustainable Palm Oil Procurement Guidelines and the distribution of leaflets and sustainability data books.

Employees

Relevance & inclusion

Relevant, always included

Please explain

Kao uses palm kernel oil for activators contained in detergents, one of Kao's key products, and timber for paper diapers and packing materials. We state in our policy that zero-deforestation should be a part of our procurement of those forest risk-commodities. Without these go-ahead policies, there may be adverse impacts, including increases in job separation rates and difficulties in recruiting new employees. Kao communicates its zero-deforestation policy through its training opportunities for its employees, and through its corporate introduction to students.

Investors

Relevance & inclusion

Relevant, always included

Please explain

Kao uses palm kernel oil for activators contained in detergents, one of Kao's key products, and timber for paper diapers and packing materials. Without stating these go-ahead policies, including our zero-deforestation policy, we may risk limited support from our investors. As part of our engagement with our investors, Kao explains its policies and activities for zero-deforestation through its sustainability data books. Also, we occasionally discuss matters with our investors directly through various opportunities, including interviews, company tours and corporate explanation sessions.

Local communities

Relevance & inclusion

Relevant, always included

Please explain

Kao uses palm kernel oil for activators contained in detergents, one of Kao's key products. Many regions in Indonesia and Malaysia, where Kao procures its palm oil, have experienced frequent conflicts with the local residents regarding land development. Thus, these regions pose potential risks associated with social issues. In order to assess the adverse effects that palm oil mills may cause to the environment and to human rights in those surroundings, we have identified farms near the mills, and mills themselves, with higher potential risks of deforestation, using the risk-mapping approach for palm oil procurement as addressed in F2.1a. We also visited those regions to understand the full situation and make requests for improvements. In the future, we will meet and interview representative groups of local residents as well.

NGOs

Relevance & inclusion

Relevant, always included

Please explain

Kao uses palm kernel oil for activators contained in detergents, one of Kao's key products, and timber for paper diapers and packing materials. Some NGOs occasionally take radical action against the procurement of forest commodities, resulting in risks to Kao. We monitor these NGO actions and, when we may be subjected to negative campaigns, take the appropriate measures as based on conversations with these NGOs. For example, since 2013, we have continued discussions with the international NGO "Green Peace," which has requested the introduction of zero-deforestation policies for forest conservation in Indonesia. And in 2014, Kao introduced its Sustainable Palm Oil Procurement Guidelines that emphasize biodiversity conservation and support zero-deforestation for palm oil procurement. In addition, we endorse the philosophy of the public incorporated foundation OISCA, which deploys mainly agriculture/forestry development and environmental conservation activities in 30 countries globally. Based on their philosophy, we are now working on the "FURUSATO Environment Conservation Project in Northern Thailand" to further achieve zero-deforestation, and forest conservation. We have also been working on the "Kao Creating Forests for Everyone program," in cooperation with the Organization for Landscape and Urban Green Infrastructure since 2000.

Other forest risk commodity users/producers at a local level

Relevance & inclusion

Relevant, always included

Please explain

Kao uses palm kernel oil for activators contained in detergents, one of Kao's key products. Palm farms represent many potential risks. Kao has joined Bluenumber Initiative to verify that palm farms are risk-free, including no illegal logging.

Regulators

Relevance & inclusion

Relevant, always included

Please explain

A large quantity of palm kernel oil is used for activators contained in detergents, one of Kao's key products. Timber is used for paper diapers and packing materials. When a new regulation is introduced on the procurement of these materials, procurement may become more difficult, or the costs might go up. The Procurement Division traces regulator trends in introducing new regulations on forest commodities, under the Risk and Crisis Management Committee.

Suppliers

Relevance & inclusion

Relevant, always included

Please explain

Kao uses palm kernel oil for activators contained in detergents, one of Kao's key products. Because Kao has declared zero-deforestation as one of its corporate policies, if any of our palm oil suppliers procures oil from a farm involved in deforestation, we are no longer permitted to procure palm oil from that supplier. This may result in an impact to our product production. Also, knowledge that we procured palm oil from that supplier will adversely affect our reputation. In order to prevent these situations from occurring, Kao regularly performs risk assessments on each palm oil mill in collaboration with our suppliers. We cooperate with third-party agencies to check the conditions of land use within 50 km of the palm oil mill location, and we identify mills receiving palm fruit from farms possibly associated with deforestation. We visit the identified mills to verify that they do not procure from farms associated with deforestation, or we discuss how they can make improvements.

Other stakeholders, please specify

Relevance & inclusion

Please select

Please explain

F3. Risks and opportunities

F3.1

(F3.1) Have you identified any inherent forests-related risks with the potential to have a substantive financial or strategic impact on your business?

	Risk
Timber	Yes, both in direct operations and the rest of our value chain
Palm Oil	Yes, both in direct operations and the rest of our value chain
Cattle Products	<Not Applicable>
Soy	<Not Applicable>
Other - Rubber	<Not Applicable>
Other	<Not Applicable>

F3.1a

(F3.1a) How does your organization define substantive impact on your business?

-A definition of substantive financial impact: Items managed by the Risk and Crisis Management Committee that may seriously impact the financial status and operating results

-Evaluation standards and indexes for identifying changes in the impact: Forecast increase in spending by Kao (increase in purchased ingredient costs and other additional costs to be incurred) and a drop in sales

-Evaluation standards, thresholds and variation indicating changes in the impact: Cases that have at least a one billion yen impact on operating results

-Is the definition being applied: Kao applies this risk definition to both the direct operation and the supply chain.

F3.1b

(F3.1b) For your disclosed forest risk commodity(ies), provide details of risks identified with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Forest risk commodity

Timber

Type of risk

Reputational and markets

Geographical scale

Global

Where in your value chain does the risk driver occur?

Supply chain

Primary risk driver

Increased stakeholder concern or negative stakeholder feedback

Primary potential impact

Brand damage

Company-specific description

Kao markets disposable diaper products throughout Asia and the growth in sales of these products is one of Kao's growth drivers. These products use pulp, and if a negative campaign for pulp is waged, there will be a risk that the product's image may suffer, the market may shrink or sales may decrease. Such situations will lead to reduced operations at Kao plants, resulting in an increase in fixed costs over sales.

Timeframe

1-3 years

Magnitude of potential impact

High

Likelihood

Likely

Potential financial impact

5000000000

Explanation of financial impact

The sales of Kao disposable diaper, "Merries," are over 100 billion yen. If reputational and other risks for the product manifest themselves whereby reducing sales by 5%, it would have a negative impact of 5 billion yen or more. Although such risks have yet to surface, we are aware that they may manifest themselves in one to three years as the recognition of Forest Stewardship Council (FSC) certification improves.

Primary response to risk

Engagement with suppliers

Description of response

Kao aims to implement by 2020 the procurement of only raw materials that can be traced back to their places of origin, based on the Sustainable Pulp and Paper Procurement Guidelines. These materials include FSC certifications. This objective is shared with each of our suppliers. To achieve this objective, we continuously requested our paper/pulp suppliers to supply us with certified materials, including FSC certifications. This activity allowed our objective procurement rate to reach 99.8% in 2017. Thus, we can state that we now properly avoid risks. In Japan, our key market, Kao is now recognized as a leading company in addressing forest commodity risks. We introduced our case as a speaker in the CDP forest seminars.

Cost of response

0

Explanation of cost of response

There were no additional costs in procuring FSC certified materials, based on the Sustainable Pulp and Paper Procurement Guidelines. We also expect that there will be no additional costs in the future.

Forest risk commodity

Palm Oil

Type of risk

Reputational and markets

Geographical scale

Global

Where in your value chain does the risk driver occur?

Supply chain

Primary risk driver

Increased stakeholder concern or negative stakeholder feedback

Primary potential impact

Brand damage

Company-specific description

Almost all Kao cleaning products (ATTACK clothing detergent, Biore body detergent, etc.) use palm oil as an ingredient. Accordingly, palm oil is one of Kao's strategic ingredients. Palm oil is a commodity for which environmental or human rights are less likely to be considered in the supply chain. If it becomes obvious that human rights considerations are not taken into account, the procurement of ingredients may stop. Also, NGOs may criticize manufacturers that purchase ingredients from such suppliers, damaging the brand of the manufacturer. Not only would this lead to reduced sales of Kao detergents, but other negative impacts such as reduced profits due to an increased burden of plant fixed costs would occur as a result of plants operating less.

Timeframe

Current - up to 1 year

Magnitude of potential impact

High

Likelihood

Very likely

Potential financial impact

30000000000

Explanation of financial impact

The sales of Kao's consumer product business are 1.2 trillion yen. If, say, detergents using palm oil account for 50% of the sales, palm oil sales amount to 600 billion yen. If the reputational risk associated with procuring palm oil becomes evident and the sales amount drops by 5% accordingly, the negative impact will be roughly 30 billion yen. And we are aware that it would not be surprising if this risk were to manifest itself at any moment..

Primary response to risk

Greater traceability of forest-risk commodities

Description of response

Kao intends by 2020 to procure only raw materials that are not associated with deforestation at their places of origin, based on the Sustainable Palm Oil Procurement Guidelines. This objective is shared with all of our suppliers. To achieve this objective, Kao is investigating the deforestation risks at the places of origin through the following procedures: (1) Obtain information on palm kernel mills and palm oil mills from Tier-1 suppliers, and map this information (2) Identify the palm kernel mill supply chains (3) Conduct risk mapping of all palm oil mills, and identify those mills possibly conducting business with farms with higher deforestation risks (4) Visit and investigate those mills with higher risks As a result of these activities, traceability up to the palm oil mills reached 97% in 2017. The most important challenge for Kao now is to identify the risk levels of the farms. As a result of our activities, we predict that we can now avoid most risks to a certain extent. In Japan, our key market, Kao is recognized as a leading company in addressing forest commodity risks. In fact, a national Japanese broadcasting TV program reported on our activities for ensuring the traceability of palm oil.

Cost of response

10000000

Explanation of cost of response

We have calculated the expenses required to conduct third-party verifications and field investigations. These expenses will also be required annually in the future.

F3.2

(F3.2) Have you identified any forests-related opportunities with the potential to have a substantive financial or strategic impact on your business?

	Have you identified opportunities?
Timber	Yes
Palm Oil	Yes
Cattle products	<Not Applicable>
Soy	<Not Applicable>
Other - Rubber	<Not Applicable>
Other	<Not Applicable>

F3.2a

(F3.2a) For your selected forest risk commodity(ies), provide details of the identified opportunities with the potential to have a substantive financial or strategic impact on your business.

Forest risk commodity

Timber

Type of opportunity

Products & services

Where in your value chain does the opportunity occur?

Supply chain

Primary forests-related opportunity

Increased brand value

Financial incentives

<Not Applicable>

Company-specific description & strategy to realize opportunity

Kao offers some of its products with the FSC certification label displayed on their packages. This helps build our product brand, and contributes to the expansion of new ethical markets. As a result, our presence in those markets will continue to grow, leading to increased sales. For the growing demand for ethical products, including those showing the FSC certification label, Kao has joined the Japan Ethical Initiative, and actively cooperates with the FSC Japan in the activities it promotes. In 2017, we spoke about our activities in five sessions in seminars related to ethical consumption.

Estimated timeframe for realization

1-3 years

Magnitude of potential impact

Medium

Likelihood

Likely

Potential financial impact

5000000000

Explanation of financial impact

The sales of Kao's disposable diaper, "Merries," are over 100 billion yen. If the product's reputation improves and sales increase by 5%, it will have an impact of 5 billion yen or more. Although such an opportunity has yet to appear, we believe that it may do so in one to three years as more people become aware of the FSC certification.

Forest risk commodity

Palm Oil

Type of opportunity

Products & services

Where in your value chain does the opportunity occur?

Supply chain

Primary forests-related opportunity

Increased brand value

Financial incentives

<Not Applicable>

Company-specific description & strategy to realize opportunity

Kao is currently working to obtain RSPO supply chain certification in more plants to allow their product packages to display the RSPO certification label. We believe that we will be able to quickly offer our products when emerging ethical markets require RSPO certified products. For expanding ethical markets, Kao has joined the Japan Ethical Initiative, and actively cooperates with the Japan Sustainable Palm Oil Conference in the activities it promotes. In 2017, we spoke about our activities in five sessions in seminars related to ethical consumption.

Estimated timeframe for realization

1-3 years

Magnitude of potential impact

Medium-high

Likelihood

Likely

Potential financial impact

30000000000

Explanation of financial impact

The sales of Kao's consumer product business are 1.2 trillion yen. If detergents using palm oil account for 50% of the sales, this means that palm oil sales amount to 600 billion yen. If our reputation related to the procurement of palm oil improves and sales increase by 5%, the impact will be roughly 30 billion yen. Although such an opportunity has yet to appear, we believe that it may do so in one to three years as ethical consumption spreads.

F4. Governance

F4.1

(F4.1) Does your organization have a policy that includes forests-related issues?

Yes, we have a documented forests policy that is publicly available

F4.1a

(F4.1a) Select the options to describe the scope and content of your policy.

	Scope	Content	Please explain
Row 1	Company-wide	Commitment to avoiding deforestation and forest degradation Commitment to protect rights and livelihoods of local communities Commitments beyond regulatory compliance Commitment to innovation Recognition of the overall importance of forests and other natural habitats Description of business dependency on forests Recognition of potential business impact on forests and other natural habitats Description of forest risk commodities, parts of the business, and stages of value-chain covered by the policy List of timebound commitments and targets Description of forests-related standards for procurement Reference to international standards and widely-recognized forests-related initiatives	A large quantity of palm kernel oil is used for activators contained in detergents, one of Kao's key products. Timber is used for paper diapers and packing materials. This means that Kao's business activities rely heavily on those forest commodity supplies. Therefore, Kao includes its " Commitments beyond regulatory compliance" , "Description of our business dependency on forests" and "Reference to international standards and widely-recognized forests-related initiatives" in its Responsible Care Policy, which is Kao's environmental conservation policy including the issues of forest commodities. This is to clearly show internally and externally how much we rely on the ecosystem services forests provide, and to promote Kao's voluntary commitment to customer satisfaction, considering the status of Kao's globally deployed businesses, and the social responsibilities associated with those businesses. As for the "Recognition of the potential business impact on forests and other natural habitats", Kao states in its Guidelines for Sustainable Procurement of Raw Materials that "Kao recognizes the importance of global issues and risks such as scarcity of resources, global warming, degradation of biodiversity and other environmental problems, as well as human rights, and, to contribute to resolution of global issues, Kao strives for sustainable procurement of raw materials. " This content was added to the Guideline so that Kao could clearly show internally and externally how its activities impact forests and other natural habitats through its use of forest commodities, and to commit to the use and conservation of sustainable forests. For the same reasons, the seven themes listed below are also included in Kao's Environmental Statement, Responsible Care Policy, Guidelines for Sustainable Procurement of Raw Materials, Guidelines for Supplier's Assessment, and Environmental Statement. -Commitment to avoiding deforestation and forest degradation -Commitment to protecting the rights and livelihoods of local communities - Commitment to innovation -Recognition of the overall importance of forests and other natural habitats -Description of forest risk commodities, business areas, and stages of the value-chain covered by the policy -List of time bound commitments and targets - Descriptions of forest-related standards for procurement

F4.1b

(F4.1b) Do you have commodity specific sustainability policy(ies)? If yes, select the options that best describe their scope and content.

	Do you have a commodity specific sustainability policy?	Scope	Content	Please explain
Timber	Yes	Company-wide	<p>Commitment to avoiding deforestation and forest degradation</p> <p>Commitment to protect rights and livelihoods of local communities</p> <p>Commitments beyond regulatory compliance</p> <p>Commitment to innovation</p> <p>Recognition of the overall importance of forests and other natural habitats</p> <p>Description of business dependency on forests</p> <p>Recognition of potential business impact on forests and other natural habitats</p> <p>Description of forest risk commodities, parts of the business, and stages of value-chain covered by the policy</p> <p>List of timebound commitments and targets</p> <p>Description of forests-related standards for procurement</p> <p>Reference to international standards and widely-recognized forests-related initiatives</p>	<p>Kao supports zero deforestation at the source of its raw materials and includes "Commitments beyond regulatory compliance" and "Recognition of the potential business impact on forests and other natural habitats" in its Guidelines for Sustainable Procurement of Raw Materials in order to avoid contributing to the development of any environmentally-important forests, high-carbon stock forests or peatlands, regardless of how minimal the negative impact is, when procuring Timber products. This encourages Kao to comply with deforestation and procurement regulations, secures continued stable business operations, and helps us improve our voluntary customer-facing initiatives. Kao states the "Description of business dependency on forests" and "Reference to international standards and widely-recognized forest-related initiatives" in its Responsible Care Policy. These contents were added to the Policy because we recognize that our business depends on natural resources. Some of the raw materials that we procure are exposed to resource constraints on a mid- to long-term basis, therefore Kao has made it clear that we will reduce the usage of such materials and find alternative sources. At the same time, we are working on a procurement process that takes into account the ethical issues emerging as a result of globalization. We understand that the procurement of Timber has an impact on Kao's business activities, because it is used for paper diapers, one of Kao's key products, and packaging materials. For these reasons, the seven themes below are also included in Kao's Environmental Statement, Responsible Care Policy, Guidelines for Sustainable Procurement of Raw Materials, Guidelines for Supplier's Assessment, and Environmental Statement. - Commitment to avoiding deforestation and forest degradation - Commitment to protecting the rights and livelihoods of local communities - Commitment to innovation - Recognition of the overall importance of forests and other natural habitats - Description of forest-risk commodities, areas of the business, and stages of the value-chains covered by the policy - List of time-bound commitments and targets - Description of forest-related standards for procurement</p>

	Do you have a commodity specific sustainability policy?	Scope	Content	Please explain
Palm Oil	Yes	Company-wide	<p>Commitment to avoiding deforestation and forest degradation</p> <p>Commitment to protect rights and livelihoods of local communities</p> <p>Commitments beyond regulatory compliance</p> <p>Commitment to innovation</p> <p>Recognition of the overall importance of forests and other natural habitats</p> <p>Description of business dependency on forests</p> <p>Recognition of potential business impact on forests and other natural habitats</p> <p>Description of forest risk commodities, parts of the business, and stages of value-chain covered by the policy</p> <p>List of timebound commitments and targets</p> <p>Description of forests-related standards for procurement</p> <p>Reference to international standards and widely-recognized forests-related initiatives</p>	<p>Kao supports zero deforestation at the source of its raw materials and includes "Commitments beyond regulatory compliance" and "Recognition of the potential business impact on forests and other natural habitats" in its Guidelines for Sustainable Procurement of Raw Materials in order to avoid contributing to the development of any environmentally-important forests, high-carbon stock forests or peatlands, regardless of how minimal the negative impact is, when procuring Palm. This encourages Kao to comply with deforestation and procurement regulations, secures continued stable business operations, and helps us improve our voluntary customer-facing initiatives. Kao states the "Description of business dependency on forests" and "Reference to international standards and widely-recognized forest-related initiatives" in its Responsible Care Policy. These contents were added to the Policy because we recognize that our business depends on natural resources. Some of the raw materials that we procure are exposed to resource constraints on a mid-to long-term basis, therefore Kao has made it clear that we will reduce the usage of such materials and find alternative sources i.e. raw materials derived from inedible biomass, such as algae. At the same time, we are working on a procurement process that takes into account the ethical issues emerging as a result of globalization. We understand that the procurement of Palm has an impact on Kao's business activities, because a large quantity of palm kernel oil is used for activators contained in detergents, one of our key products. For these reasons, the seven themes below are also included in Kao's Environmental Statement, Responsible Care Policy, Guidelines for Sustainable Procurement of Raw Materials, Guidelines for Supplier's Assessment, and Environmental Statement. - Commitment to avoiding deforestation and forest degradation - Commitment to protecting the rights and livelihoods of local communities - Commitment to innovation - Recognition of the overall importance of forests and other natural habitats - Description of forest-risk commodities, areas of the business, and stages of the value-chains covered by the policy - List of time-bound commitments and targets - Description of forest-related standards for procurement</p>
Cattle Products	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Soy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

F4.2

(F4.2) Is there board-level oversight of forests-related issues within your organization?

Yes

F4.2a

(F4.2a) Identify the position(s) of the individual(s) on the board with responsibility for forests-related issues.

Position of individual	Please explain
Chief Executive Officer (CEO)	Since forest-risk commodities are closely tied to Kao's business, they must be monitored as business management issues, and are therefore under the CEO's oversight. The Board of Directors delegates the management of forest-related risks to the Internal Control Committee, and the management of forest-related opportunities to the Sustainability Committee. Our CEO serves as the chairperson of both Committees. The Risk and Crisis Management Committee, and the Responsible Care Promotion Committee, which constitute the Internal Control Committee, are engaged in the management of forest-related risks.

F4.2b

(F4.2b) Provide further details on the board’s oversight of forests-related issues.

	Frequency that forests-related issues are a scheduled agenda item	Governance mechanisms into which forests-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Providing employee incentives Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding corporate responsibility strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing innovation / R&D priorities Setting performance objectives	- Details on who briefs the board and on which subjects During the scheduled board meetings, the secretary-generals of the Risk and Crisis Management Committee(RCM), the Responsible Care Promotion Committee(RCP), and the Sustainability Committee(SC) report to the Board of Directors the plans and the results, and review drafts of plans (if modifications are required) on forest-risk commodities managed by each committee. - A description of how the selected governance mechanisms contribute to the board's oversight of forest issues RCM and RCP are both under the Internal Control Committee(IC), which in turn is under the control of the Board of Directors. RCM and RCP manage risks related to forest-risk commodities. SC, under the supervision of the Board of Directors, manages opportunities related to forest-risk commodities. Because forest-risk commodities have a large impact on Kao's businesses, and must be supervised as a business management issue, they are under the oversight of I C and SC, with the CEO serving as chairman on both. The Board confirms once, or more, annually the progress of Zero Deforestation in the Procurement of Palm Oil, Paper, and Pulp, the 2020 objective Kao has set forth. In addition, the Board receives reports on critical incidents occurring in that year, and any countermeasures, and provides instructions to review those countermeasures when necessary. In 2017, there were no critical incidents reported to the Board.

F4.3

(F4.3) Below board level, provide the highest-level management position(s) or committee(s) with responsibility for forests-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on forests-related issues	Please explain
Chief Executive Officer (CEO)	Both assessing and managing forests-related risks and opportunities	Annually	The Responsible Care Promotion Committee(RCP), which manages Kao Group's environment, health, etc., centrally, manages risks associated with forest-related issues as part of environmental items. RCP manages the status of activities of all Kao Group divisions and subsidiaries, and confirms the implementation status of measures to be taken by divisions and subsidiaries based on the operation plan established by the Risk and Crisis Management Committee(RCM). RCP and RCM are placed under the Internal Control Committee(IC), with the CEO serving as the chairman. In 2009, Kao released its Environmental Statement, and the Sustainability Committee(SC), chairman is the CEO, began the management including forest-related company-wide opportunity programs. Forest commodities have a great impact on Kao's business, and are therefore, supervised as a business management issue under the oversight of the CEO. There has been little development in forest issues. In addition, society has not demanded a reconsideration of our risk management plan created in the early 2010's. We do not foresee any delays in its progress toward its targets. For this reason, we are now requiring IC to report forest issues to the Board once a year. The frequency for SC to report on the same issue to the Board is also once yearly. Although an ethical market is growing in Kao's largest market territory, Japan, rapid changes have not been observed and we have a plan in place to respond to any changes that do occur.

F4.4

(F4.4) Do you provide incentives to C-suite employees or board members for the management of forests-related issues?

Yes

F4.4a

(F4.4a) What incentives are provided to C-Suite employees or board members for the management of forests-related issues?

	Who is entitled to benefit from these incentives?	Indicator for incentivized performance	Please explain
Monetary reward	Chief Purchasing Officer (CPO)	Achievement of commitments and targets	Every year the company assesses its achievements towards its 2020 targets: zero deforestation in the procurement of palm oil, paper, and pulp. More specifically, the company checks the number of years elapsed since the implementation of the plan and the rates of commodity procurements confirmed to not contribute towards deforestation. The CPO's remuneration includes a performance-based bonus. The company provides corporate shares based on the achievement of the business performance targets required by the mid-term plan. The performance-based bonus accounts for 28-35% of the baseline remuneration (when the performance-linked factor is set to 100%). The CPO's target achievement level is comprehensively evaluated for their multiple business targets (including the zero deforestation target), and the performance-based bonus is set according to the evaluation result.
Recognition (non-monetary)	No one is entitled to these incentives	No indicator for incentivized performance	Kao does not grant C-Suite employees or board members recognition (non-monetary).
Other non-monetary reward	No one is entitled to these incentives	No indicator for incentivized performance	Kao does not grant C-Suite employees or board members non-monetary rewards.

F5. Business strategy

F5.1

(F5.1) Are forests-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are forests-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, forests-related issues are integrated	5-10	By 2030, Kao intends to have a strong global presence with 2.5 trillion yen in sales, a 17% operating margin, and a 20% ROE. To achieve these targets, the company needs to examine future consumer preferences. Over the long term, Kao predicts that the number of ethical consumption-oriented consumers will increase. Therefore, the company is taking into consideration the heightened recognition of the FSC, and is working towards increased product sales with FSC-certified packages. In Japan, which is the company's largest marketing territory, Kao is a pioneer in introducing FSC-certified packages, including using FSC-certified paper in all cardboard boxes.
Strategy for long-term objectives	Yes, forests-related issues are integrated	5-10	"Kao focuses on its non-financial activities, such as ESG, so that these activities will have a positive impact on its finances. To give an example, Kao predicts long-term increases in ethical consumption. With an expectation of a heightened recognition of the FSC, the company will increase its product sales with FSC-certified packages. It also actively participates in symposiums to raise the visibility of FSC certification to consumers. To introduce FSC-certified packages, it has creatively developed a number of ways to print the FSC label on as many product packages as possible. For example, Kao worked with a printing company to create the smallest usable sized label and registered it with the FSC. Printing this label on the back, and inside, of boxes will make it easier for consumers to notice it." Reference URL: http://shitte-erabo.net/story/919/
Financial planning	Yes, forests-related issues are integrated	5-10	Kao focuses on its non-financial activities, such as ESG, so that these activities will have a positive impact on its finances. A part of this initiative is the goal to realize sustainable palm oil procurement by 2020. At the same time, because of the predicted increase in ethical consumption, many of Kao's factories have received SCCS certification based on the expectation of strong future demand for the RSPO-certified symbol. The company understands that these activities will require at least 7 million yen per year, which has already been included within the financial plan.

F6. Implementation

F6.1

(F6.1) Has your organization made a public commitment to reduce or remove deforestation and/or forest degradation from its direct operations and/or supply chain?

Yes

F6.1a

(F6.1a) Has your organization endorsed any of the following initiatives as part of its public commitment to reduce or remove deforestation and/or forest degradation?

New York Declaration on Forests

We Mean Business

Other, please specify (The Consumer Goods Forum)

F6.1b

(F6.1b) Provide details on your public commitment(s), including the description of specific criteria, coverage, and actions.

Commodity coverage

Timber

Criteria

No conversion of natural habitats

Zero gross deforestation and forest degradation

No new development on peatland

No conversion of High Conservation Value areas
No conversion of High Carbon Stock forests
Adoption of UN Global Compact principles
Adoption of Free, Prior and Informed Consent (FPIC) principles
Adoption of the UN International Labour Organization principles
No sourcing of illegally produced and/or traded forest risk commodities
No sourcing of forest risk commodities from unknown/controversial sources

Operational coverage

Supply chain

% of total production/ consumption covered by commitment

100%

Commitment timeframe

2020

Please explain

Kao has declared zero deforestation its goal. To achieve the zero deforestation targets set in its Sustainable Pulp and Paper Procurement Guidelines, the company uses the WWF Japan Responsible Purchasing Checklist for Forest Products to trace materials through its Tier-1 suppliers, identify the sourcing forests, and confirm that these suppliers have maintained social, environmental, and economical sustainability without any changes to the forest habitats. These activities resulted in a 99.8% traceability rate by 2017, and the company has checked whether or not the product materials met these criteria. If the checklist identifies any suppliers that are not addressing forest sustainability, or respecting the rights of native residents, Kao requests that they improve the situation, or it will consider cancelling their business transactions. The company actively introduces FSC-certified paper and PEFC-certified paper, which meets the FPIC's principles. By 2017, the company had switched 86% of its paper and pulp to certified paper. Additionally, to meet the 'zero gross deforestation and forest degradation' criteria, the company actively provides information externally. For example, Kao gave a presentation at the International Symposium on the Promotion of Deforestation-Free Global Supply Chains to Contribute to Halting Deforestation, held by the Forestry Agency in January, 2018. The company had begun preparing for this symposium in 2017.

Commodity coverage

Palm Oil

Criteria

No conversion of natural habitats
Zero gross deforestation and forest degradation
No new development on peatland
No conversion of High Conservation Value areas
No conversion of High Carbon Stock forests
Adoption of UN Global Compact principles
Adoption of Free, Prior and Informed Consent (FPIC) principles
Adoption of the UN International Labour Organization principles
No sourcing of illegally produced and/or traded forest risk commodities
No sourcing of forest risk commodities from unknown/controversial sources

Operational coverage

Supply chain

% of total production/ consumption covered by commitment

100%

Commitment timeframe

2020

Please explain

Kao implements the following measures to achieve its zero deforestation targets set in the Sustainable Palm Oil Procurement Guidelines. The company identifies palm oil mills from Tier-1 supplier information, and maps all risks based on land usage within 50 km of each mill. As of 2017, 100% of the palm kernel oil mills, and 97% of the palm oil mills, have been traced back to the plantations. The company checks whether these mills meet the criteria included in their corporate commitments. Palm oil mills near reserved forests or peatlands may negatively impact the natural habitat, or receive palm fruit bunches from palm plantations that are destroying the forests. Kao visits these high-risk mills with specialists, checks the state of their operations, and as needed, requests improvements while then paying close attention to future developments. To identify small-scale farmers, and track places of origin more accurately, the company started using Bluenumbers in 2017. Bluenumbers are a system for establishing global agriproduct traceability. Kao uses these numbers in its checks of environmental protections, human rights, and the FPIC status of small-scale palm plantations. If the company finds suppliers contributing to deforestation, or that do not respect the rights of native

residents, it will request them to improve the situation or it will consider cancelling their business transactions. To establish the 'Zero gross deforestation and forest degradation' criteria, Kao joined the Japan Sustainability Local Group (JSLG), a part of the Consumer Goods Forum (CGF), as a director in 2017. CGF has pledged to achieve zero net deforestation from palm oil procurement.

F6.2

(F6.2) Did you have any quantified targets for increasing sustainable production and/or consumption of your disclosed commodity(ies) that were active during the reporting year?

Yes

F6.2a

(F6.2a) Provide details of your target(s) for increasing sustainable production and/or consumption of the disclosed commodity(ies), and progress made.

Target reference number

Target 1

Forest risk commodity

Timber

Form of commodity covered

Pulp

Paper

Type of target

Traceability

Coverage

Supply chain

Traceability point

Forest

Third-party certification scheme

<Not Applicable>

Start year

2014

Start figure

0%

Target year

2020

Target

100%

% achieved

91-99%

Please explain

As part of our risk assessment for the consistent continuation of our business, Kao is now identifying the places of origin of all supplied pulp. The existing tools do not provide sufficient information for tracing places of origin. Therefore, we have developed internal company methods to achieve our objectives, including a risk assessment for deforestation for each procurement source (place of origin). In addition to this internal method described above, WWF Japan's Responsible Purchasing Checklist for Forest Products is used to evaluate the sustainability of their places of origin, based on suggestions by third-party consultants. This checklist tool allows us to independently check wood feedstock for its impact on deforestation, and its effect on society. Kao uses this tool because it is highly reliable tool chosen and used by many companies, and it allows us to comprehensively evaluate Kao's global suppliers using consistent benchmarks. The company uses paper certified by the globally recognized FSC and PEFC. Our achievement rate was almost 100% in 2017 (of which, 86% of the paper was certified). Kao plans to increase its ratio of certified

paper by offering various suggestions and recommendations to any suppliers found through the activities described above to be uncertified.

Target reference number

Target 2

Forest risk commodity

Palm Oil

Form of commodity covered

Crude palm oil (CPO)

Crude palm kernel oil (CPKO)

Refined palm oil

Palm oil derivatives

Palm kernel oil derivatives

Type of target

Traceability

Coverage

Supply chain

Traceability point

Mill

Third-party certification scheme

<Not Applicable>

Start year

2014

Start figure

0%

Target year

2020

Target

100%

% achieved

91-99%

Please explain

The palm oil supply chain is extensive. It covers refinery plants, palm kernel oil mills, palm oil mills, and palm plantations. The numbers of these facilities increase upstream, and it is difficult to check them all at once. As a first step toward zero deforestation from palm oil procurement, Kao set as a target palm oil mill traceability. The company obtains supply chain information from its Tier-1 suppliers (refinery plants) to identify and map the mills. The company has succeeded in tracing 100% of the palm kernel oil mills, and 97% of the palm oil mills. The company expects to achieve 100% traceability in 2018 by continuing to request supply chain information from its Tier-1 suppliers.

Target reference number

Target 3

Forest risk commodity

Palm Oil

Form of commodity covered

Crude palm oil (CPO)

Crude palm kernel oil (CPKO)

Refined palm oil

Palm oil derivatives

Palm kernel oil derivatives

Type of target

Traceability

Coverage

Supply chain

Traceability point

Plantation

Third-party certification scheme

<Not Applicable>

Start year

2014

Start figure

0%

Target year

2020

Target

100%

% achieved

91-99%

Please explain

As a measure for confirming zero deforestation associated with palm oil, we are conducting risk mapping for palm oil. By checking the status of land use within 50 kilometers of a mill for which traceability has been confirmed, we are identifying mills that purchase Fresh Fruit Bunch (FFB) from plantations with a high probability of causing deforestation. In particular, we conduct on-site investigations with experts of mills perceived as a high risk regarding the purchase of FFB and request them to make improvements as well as monitor the progress.

Target reference number

Target 4

Forest risk commodity

Palm Oil

Form of commodity covered

Crude palm oil (CPO)

Crude palm kernel oil (CPKO)

Refined palm oil

Palm oil derivatives

Palm kernel oil derivatives

Type of target

Third-party certification scheme

Coverage

Direct operations

Traceability point

<Not Applicable>

Third-party certification scheme

Other, please specify (RSPO SCCS)

Start year

2012

Start figure

0%

Target year

2020

Target

100%

% achieved

71-80%

Please explain

In order to respond to requirements from chemical product customers and consumer product markets for certified items, we are working on acquiring the Roundtable on Sustainable Palm Oil (RSPO) supply chain certificate at our group plants. As of 2017, 80% of our group plants have acquired the certification. In 2018, 100% of our group plants are expected to obtain certification.

F6.3

(F6.3) Do you have traceability system(s) in place to track and monitor the origin of your disclosed commodity(ies)?

	Do you have system(s) in place?
Timber	Yes
Palm Oil	Yes
Cattle products	<Not Applicable>
Soy	<Not Applicable>
Other - Rubber	<Not Applicable>
Other	<Not Applicable>

F6.3a

(F6.3a) Provide details on the level of traceability your organization has for your disclosed commodity(ies).

	% of total production/consumption volume traceable	Point to which commodity is traceable	Description of traceability system	Exclusions	Description of exclusion
Timber	91-99%	Forest	World Wide Fund for Nature (WWF) Japan's Responsible Purchasing Checklist for Forest Products should be used to trace ingredients from Tier-1 suppliers, identify the forest of origin, and confirm that the sustainability of the relevant forest is socially, environmentally and economically taken into account. If a supplier who does not take into account the sustainability of a forest is found, we will request to make improvements or consider suspending transactions with such a supplier.	Not applicable	
Palm Oil	91-99%	Mill	We confirm the traceability of palm oil through the following procedures. (1) Obtain the supply chain information (names, locations, etc., of palm kernel mills and palm oil mills) from Tier-1 suppliers (refinery plants). By mapping this information we identify the palm oil suppliers. (2) Conduct third party verifications for the above Tier-1 suppliers to confirm their initiatives, and the entire supply chain information. (3) Select a representative mill from among the palm kernel mills that supply palm oil to the Tier-1 suppliers, and conduct a third-party verification for that mill. (4) For the palm oil mills confirmed in (1), a third party institution performs risk mapping. During this risk mapping, the institution identifies possible deforestation by checking for the presence or absence of protected forest lands, traces of fire, peatland, etc., within 50 km of the palm oil mill, by using satellite photographs, administrative maps, vegetation maps, etc. (5) For palm oil mills determined as high risk during the risk mapping, conduct an on-site investigation with the appropriate specialists, request each mill to make improvements, and monitor the progress of these improvements. Kao WEB site http://www.kao.com/jp/corporate/sustainability/procurement/progress/progress-2017/	Specific supplier(s)	Specific supplier is a provider of derivatives of PalmOil
Cattle products	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Soy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

(F6.4) Do you specify any third-party certification schemes for your disclosed commodity(ies)? Indicate the volume and percentage of your production and/or consumption covered.

Forest risk commodity

Timber

Do you specify any certification scheme?

Yes

Third-party certification scheme

FSC Controlled Wood

PEFC Sustainable Forest Management certification

% of total production/consumption volume certified

86

Form of commodity

Pulp

Paper

Boards, plywood, engineered wood

Primary packaging

Secondary packaging

Tertiary packaging

Volume of production/ consumption certified

266000

Metric

Metric tons

Please explain

We are a participating member of the Consortium for Sustainable Paper Use (CSPU). We worked on various activities to improve the recognition of the FSC label in 2017. For example, we requested the FSC to modify the size of the certification label. The previously specified minimum label size was too large, making it difficult to put it on small-package products. The newly approved smaller label allows us to apply it to more products, increasing the number of opportunities for consumers to see it.

Forest risk commodity

Palm Oil

Do you specify any certification scheme?

Yes

Third-party certification scheme

RSPO Mass Balance

RSPO Book and Claim

% of total production/consumption volume certified

13

Form of commodity

Crude palm oil (CPO)

Crude palm kernel oil (CPKO)

Refined palm oil

Palm oil derivatives

Palm kernel oil derivatives

Volume of production/ consumption certified

54400

Metric

Metric tons

Please explain

As a RSPO member, we participate in the Round Table every year. We have and use voting rights for various agenda items. In a seminar hosted by the RSPO, we demanded improved transparency of the premium for certified products in 2017.

(F6.5) Do you specify any sustainable production/procurement standards for your disclosed commodity(ies), other than third-party certification? Indicate the percentage of production/consumption covered and if you monitor supplier compliance with these standards.

Forest risk commodity

Timber

Do you specify any sustainability standards?

Yes

Type of standard

Procurement

Description of standard

Sustainable Paper and Pulp Procurement Guidelines Kao commits to zero deforestation in its paper and pulp procurement, in consideration of preservation of biodiversity.

% of total commodity volume covered by standard

100%

Do you have a system in place to monitor compliance with this standard?

Yes

Type(s) of monitoring system

Auditing

Other, please specify (Confirmation of origin by WWF checklist)

% of suppliers in compliance with standards

91-99%

Please explain

In order to achieve zero deforestation as specified under Kao's Sustainable Pulp and Paper Procurement Guidelines, we use the World Wide Fund for Nature (WWF) Japan's Responsible Purchasing Checklist for Forest Products to trace raw materials from Tier-1 suppliers, identify the forest of origin, and confirm that the sustainability of the relevant forests are addressed socially, environmentally and economically. If, from the checklist, a supplier is found to not take into account the sustainability of a forest, or that the supplier does not respect the rights of the native population, we will request that they make improvements, or consider suspending transactions with them.

Forest risk commodity

Palm Oil

Do you specify any sustainability standards?

Yes

Type of standard

Procurement

Description of standard

Sustainable Palm Oil Procurement Guidelines Kao commits to zero deforestation in its palm oil procurement, in consideration of preservation of biodiversity.

% of total commodity volume covered by standard

91-99%

Do you have a system in place to monitor compliance with this standard?

Yes

Type(s) of monitoring system

Aerial monitoring system

% of suppliers in compliance with standards

91-99%

Please explain

We confirm the traceability of palm oil through the following procedures. (1) Obtain the supply chain information (names, locations, etc., of palm kernel mills and palm oil mills) from Tier-1 suppliers (refinery plants). By mapping this information, we identify the palm oil suppliers. (2) Conduct third party verifications for the above Tier-1 suppliers to confirm their initiatives, and the entire supply

chain information. (3) Select a representative mill from among the palm kernel mills that supply palm oil to the Tier-1 suppliers, and conduct a third-party verification for that mill. (4) For the palm oil mills confirmed in (1), a third party institution performs risk mapping. During this risk mapping, the institution identifies the status of the surrounding forests by using satellite photographs, administrative maps, vegetation maps, etc., within 50 km of the palm oil mill. If the presence of a protected forest lands, traces of fire, peatland, etc., are confirmed within that range, we determine that the relevant mill is at a high risk of having received palm oil or kernels from a farm likely to be contributing to deforestation. (5) For palm oil mills determined as high risk during the risk mapping, conduct an on-site investigation with the appropriate specialists, request each mill to make improvements, and monitor the progress of these improvements.

F6.7

(F6.7) Are you working with your direct suppliers to support and improve their capacity to supply sustainable raw materials?

	Are you working with direct suppliers?	Supplier engagement approach	Please explain
Timber	Yes, working with direct suppliers	Supplier questionnaires on environmental and social indicators	We administer a Self-Assessment Questionnaire (SAQ; social and environmental aspects) for all Tier-1 suppliers. • Main strategy of engagement Kao has established the Guidelines for Supplier's Assessment, which stipulates environmental, safety, legal, and other initiatives for all Tier-1 suppliers. We request our suppliers to perform this self-assessment, and we monitor the results to confirm their compliance with the Guidelines. We also request our main suppliers to respond to surveys under the CDP Supply Chain Program. • Estimated percentage 91-99% • Case study As a result of monitoring the self-assessment results, we visited suppliers who had not met the criteria last year, shared issues with them, and requested them to work on making specific improvements. In addition, regarding the forest issues addressed by the CDP Supply Chain Program, we requested 25 of our paper and pulp suppliers to respond to a survey in order to conserve the forests throughout the entire supply chain.
Palm Oil	Yes, working with direct suppliers	Developing or distributing supply chain mapping tool Supplier questionnaires on environmental and social indicators Supplier audits	We administer a Self-Assessment Questionnaire (SAQ; social and environmental aspects) for all Tier-1 suppliers. • Main strategy of engagement Kao has established the Guidelines for Supplier's Assessment, which stipulates environmental, safety, legal, and other initiatives for all Tier-1 suppliers. We request our suppliers to perform this self-assessment, and we monitor the results to confirm their compliance with the Guidelines. We also request our main suppliers to respond to surveys under the CDP Supply Chain Program. • Estimated percentage 91-99% • Case study As a result of monitoring the self-assessment results, we visited suppliers who had not met the criteria last year, shared issues with them, and requested them to work on making specific improvements. In addition, regarding the forest issues addressed by the CDP Supply Chain Program, we requested 25 of our paper and pulp suppliers to respond to a survey in order to conserve the forests throughout the entire supply chain.
Cattle products	<Not Applicable>	<Not Applicable>	<Not Applicable>
Soy	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>	<Not Applicable>
Other	<Not Applicable>	<Not Applicable>	<Not Applicable>

F6.8

(F6.8) Are you working beyond your first-tier supplier(s) to manage and mitigate forests-related risks?

	Are you working beyond first tier?	Please explain
Timber	Yes, working beyond first tier	In order to achieve zero deforestation as specified under Kao's Sustainable Pulp and Paper Procurement Guidelines, we use the World Wide Fund for Nature (WWF) Japan's Responsible Purchasing Checklist for Forest Products to trace raw materials from Tier-1 suppliers, identify the forest of origin, and confirm that the sustainability of the relevant forests are addressed socially, environmentally and economically. Last year, we investigated 13% (on a procurement volume basis) of our suppliers. If, from the checklist, a supplier is found to not take into account the sustainability of a forest, or that the supplier does not respect the rights of the native population, we will request that they make improvements, or consider suspending transactions with them.
Palm Oil	Yes, working beyond first tier	As part of procedure (5) below for verifying traceability and zero deforestation, we confirm the situation during on-site investigations of high-risk mills together with experts, and suggest and request improvements on issues. In 2017, we investigated one site out of 944 palm oil mill sites (0.1%). We plan to check seven sites (0.7%) in 2018. (1) Obtained palm kernel oil mill and palm oil mill information from Tier-1 suppliers and performed mapping (2) Performed third-party verification of such information (3) Performed third-party verification of the supply chain of palm kernel oil mills (4) Performed risk mapping of palm oil mills (Satellite photographs, administrative maps, geological maps) (5) Conducted on-site investigations of high risk mills
Cattle products	<Not Applicable>	<Not Applicable>
Soy	<Not Applicable>	<Not Applicable>
Other - Rubber	<Not Applicable>	<Not Applicable>
Other	<Not Applicable>	<Not Applicable>

F6.9

(F6.9) Do you participate in external initiatives or activities to further the implementation of your policies concerning the sustainability of your disclosed commodity(ies)?

Forest risk commodity

Timber

Do you participate in activities/initiatives?

Yes

Activities

Involved in multi-partnership or stakeholder initiatives

Initiatives

UN Global Compact

The Consumer Good Forum (CGF)

Other, please specify (JBIB, CSPU)

Please explain

Kao is the board member of CGF. We have participated in JBIB (Japan Business Initiative for Conservation and Sustainable Use of Biodiversity) that is an initiative where Japanese companies having high motivation to an action about the conservation of biodiversity and the sustainable use of natural capital. We participate in JBIB since its founding and play a role of vice president and contribute to level-up of members by introducing and promoting our activities for the reduction of deforestation. We also participate in CSPU (Consortium for Sustainable Paper Use) in order to improve social awareness and enhance the use of socially and environmentally responsible paper use. To achieve this objective, we hold information seminar and share our experience with other actors in collaboration with WWF and other participating companies.

Forest risk commodity

Palm Oil

Do you participate in activities/initiatives?

Yes

Activities

Involved in multi-partnership or stakeholder initiatives

Initiatives

UN Global Compact

The Consumer Good Forum (CGF)

Roundtable on Sustainable Palm Oil (RSPO)

Other, please specify (JBIB)

Please explain

Kao is the board member of CGF. We have participated in JBIB (Japan Business Initiative for Conservation and Sustainable Use of Biodiversity) that is an initiative where Japanese companies having high motivation to an action about the conservation of biodiversity and the sustainable use of natural capital. We participate in JBIB since its founding and play a role of vice president and contribute to level-up of members by introducing and promoting our activities for the reduction of deforestation.

F7. Linkages and trade-offs

F7.1

(F7.1) Has your organization identified any linkages or trade-offs between forests and other environmental issues in its direct operations and/or other parts of its value chain?

Yes

F7.1a

(F7.1a) Describe the linkages or trade-offs and the related management policy or action.

Linkage/tradeoff

Linkage

Type of linkage/tradeoff

Disaster risk reduction

Description of linkage/tradeoff

It is widely recognized that when combined with climate change, deforestation may cause devastating disasters. As the impact of climate change increases, tropical cyclones will intensify, and the impact of lumbering in forest basins will become greater in the forms of floods and landslides. In 2011 and 2017, typhoons struck Mindanao, where Kao's Philippines plant is located. This caused floods, damage to houses, and some of our employees had small impact on the lives. Fortunately, they had no major impact on the Kao plant operations. If it is a long-term shutdown due to a typhoon, it will have a significant financial impact. Kao desires an increase in the numbers of companies declaring zero deforestation, and that deforestation on the planet will be halted. By accelerating sustainable forest management efforts based on this declaration, disaster risks due to dwindling forests will be mitigated.

Policy or action

Many employees were affected by the typhoons that struck Mindanao. Fortunately, the plant did not suspend its operations and was not damaged. However, if the operational suspension becomes a reality, it will directly make a financial impact. Kao believes that if the numbers of companies declaring zero deforestation increase, thus reducing disaster risks, this kind of damage can be prevented in the future, resulting in reduced negative impacts. Therefore, we are introducing our activities with the Japan Business Initiative for Biodiversity (JBIB), with Kao's CPO serving as the vice chairperson, to raise awareness of deforestation prevention through the CDP SC Program. We will also confirm the number of companies declaring zero deforestation, including all companies, and Kao's most important suppliers.

Linkage/tradeoff

Tradeoff

Type of linkage/tradeoff

Other tradeoff, please specify (increase of water consumption)

Description of linkage/tradeoff

Using palm oil for Kao's main products, such as ATTACK clothing detergent and Bioré body soaps, means that large quantities of water are needed to grow and support the palm trees. Increasing the use of palm oil in our products means more water is consumed in the ingredient procurement phase of the product lifecycle, which in turn increases water consumption across the entire product lifecycle. The amount of water consumed for the entire Kao product lifecycle was 2,961 million m³ in 2017, in which the ingredient procurement phase accounted for 11%.

Policy or action

In order to reduce the water consumption resulting from the greater use of palm oil, Kao aims to reduce its palm oil usage per product by improving the performance of palm oil derivatives. We continue to conduct R&D on materials that achieve this objective, as well as for products using such materials. ATTACK NEO, an ultra-concentrated clothing detergent, is one outcome of these efforts. The quantity of water consumed in the production of palm oil during the ingredient procurement phase was calculated herein based on the widely used "Emission Factor Database on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain" (Ministry of the Environment, Ministry of Economy, Trade and Industry, etc.), combined with the amount consumed by Kao.

F8. Verification

F8.1

(F8.1) Do you verify any forests information reported in your CDP disclosure?

No, but we are actively considering verifying in the next two years

F9. Barriers and challenges

F9.1

(F9.1) Describe the key barriers or challenges to avoiding forests-related risks in your direct operations or in other parts of your value chain.

Forest risk commodity

Timber

Coverage

Other parts of the value chain

Primary barrier/challenge type

Limited public awareness and/or market demand

Comment

Forest risk commodity

Palm Oil

Coverage

Supply chain

Primary barrier/challenge type

Supply chain complexity

Comment

F9.2

(F9.2) Describe the main measures that would improve your organization's ability to manage forests-related risks.

Forest risk commodity

Timber

Coverage

Other parts of the value chain

Main measure

Increased demand for certified products

Comment

Forest risk commodity

Palm Oil

Coverage

Supply chain

Main measure

Investment in monitoring tools and traceability systems

Comment

F10. Signoff

F-FI

(F-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

F10.1

(F10.1) Provide the following information for the person that has signed off (approved) your CDP forests response.

	Job Title	Corresponding job category
Row 1	Representative Director, President and Chief Executive Officer	Chief Executive Officer (CEO)