KAO Corporation - Climate Change 2020

C0. Introduction

C0.1

(C0.1) Give a general description 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 Cosmetic Business provides cosmetics such as lotion, foundation and lipstick. The Skin Care and hair Care Business offers 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 Business 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 Business offers fabric care products including detergents for apparel use, and home care products including detergents for kitchen use. The Chemical Business 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 Cosmetic Business accounted for 20.1% of total turnover in fiscal 2019; The Skin Care and hair Care Business,22.7%; The Human Health Care Business,17.0%; The Fabric and Home Care Business,23.9%; and The Chemical Business,16.3%. The Company reported JPY 1,502.2 b in revenues and 33,603 permanent employees at December 31,2019.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2019	December 31 2019	No	<Not Applicable>

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

Australia
Austria
Belgium
Canada
China
China, Hong Kong Special Administrative Region
Czechia
Democratic People's Republic of Korea
Denmark
Finland
France
Germany
Indonesia
Italy
Japan
Malaysia
Mexico
Netherlands
New Zealand
Norway
Philippines
Russian Federation
Singapore
South Africa
Spain
Sweden
Switzerland
Taiwan, Greater China
Thailand
United Kingdom of Great Britain and Northern Ireland
United States of America
Viet Nam

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

JPY

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Chief Executive Officer (CEO)	Since climate change affects Kao's business, it must be monitored as a business management issue and is therefore under the CEO's oversight. CEO is a chairman of the Responsible Care Promotion Committee, which is one of the internal organizations responsible for Kao's response to climate change, a subordinate committee of the Internal Control Committees. This committee is approved by the Board, under the Kao corporate governance system. CEO is also a chairman of the Sustainability Committee, approved by the Management Committee. The Responsible Care Promotion Committee manages progress in risk-management activities, while the Sustainability Committee manages progress in activities related to locating new opportunities. The Responsible Care Promotion Committee is convened annually and reported of the Internal Control Committee. In 2019, CEO, as the chairman of ESG Committee, decided to set a new GHG emissions target (reduced by 22% by 2030) and obtain SBTi certification.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Monitoring implementation and performance of objectives	<Not Applicable>	Kao has set up a management structure so that we can swiftly respond to changes, realize efficient management that is sound, fair, and highly transparent, and continuously increase corporate value. Kao's Board of Directors conducts diversified deliberations and decision-making with respect to the medium- to long-term management direction for management strategies and the like, including risk assessment, based on the regulations of the Board of Directors and deliberation and reporting standards for the Board of Directors and the Management Committee. We have established the Internal Control Committee and the ESG Committee, chaired by the CEO directly and under control of the Board of Directors, which are in charge of managing risks and opportunities, respectively, related to climate change. The content of deliberations by the Internal Control Committee and the ESG Committee is reported to the Board of Directors for its final deliberation and decision. Note that with regard to decision-making on the mid- to long-term direction and strategy implementation deliberated on and determined by the Board of Directors, extensive authority is entrusted to the Management Committee. Serving as the main members of this committee are managing executive officers or higher executives who are in charge of Kao's main businesses and divisions. They have a wealth of experience in conducting business, and have a broad scope of authority to make and execute decisions quickly.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

i) Where in the organizational structure that/those position(s) and/or committee(s) lies

The Risk and Crisis Management Committee and the Responsible Care Promotion Committee under the Internal Control Committee, which is under the control of the Board of Directors, manage risks including climate change, water and forest.

The ESG Committee, which is under the control of the Board of Directors, manages ESG visions and its strategy including opportunities related to climate change, water and forest. The CEO serves as the chairman of the Internal Control Committee as well as the ESG Committee.

ii) A clear rationale for why responsibility lies with that/those position(s) and/or committee(s)

The ESG Committee and the Internal Control Committee, chaired by the CEO, deal with our climate-related issues. This is because we recognize that our response to climate change, water, and forestry is an important issue that requires management decisions as part of the Kao Group's business activities. Specifically, the ESG Committee discusses Kao's ESG activity strategy, the "Kirei Lifestyle Plan," including themes to work on and medium-term targets. Results are submitted to the Board of Directors for its approval. In addition, since risks associated with climate change, water, and forestry pose critical risks to the management of the company, the Risk and Crisis Management Committee, a subordinate organization of the Internal Control Committee, evaluates and manages such risks. Moreover, the Responsible Care Promotion Committee, a subordinate organization of the Internal Control Committee, manages legal and regulatory compliance regarding climate change, water, and forestry. Therefore, the person ultimately in charge of climate-related issues at Kao is the CEO, who serves as the chairman of both the ESG Committee and the Internal Control Committee.

ⅲ) A Company specific description of the responsibilities of each position and/or committee with regard to assessment and monitoring of climate-related issues.

Kao has laid out its corporate philosophy, “Kao way” which is the foundation of its corporate activity. The missions stipulating in the Kao way are “realization of enriched lifestyle with joy and satisfaction for people throughout the world” and ”contribution to sustainable society”. Kao recognizes that climate change is a great threat in the current and future generations’ realization of enriched lifestyle. Under such recognition, CEO, as the chairman of ESG committee, has formed 19 prioritized actions to realize “Kirei Lifestyle Plan” (“Decarbonization” is among them) and checks and assess the implementation status. Through a major KPI, Scope 1+2 emissions and product life cycle CO2 emissions have set out in “Decarbonization” “Responsible care promotion committee” which is under the “Internal governance committee”, monitors the activity status in the divisions, subsidiaries and affiliate companies every month. The monitoring results are reported to CEO in “Internal governance committee” and "ESG committee". CEO, the chairman of internal governance committee and ESG committee, approves the result of the discussion of the committees every month.

Furthermore, an audit is conducted yearly and the activities are checked and if delay happens corrective action is carried out accordingly.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity inventivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target Energy reduction target Efficiency project Company performance against a climate-related sustainability index	Evaluate by EVA which is related to all environmental matter such as level of achievement of GHG emission reduction objectives related to variable cost reduction by energy reduction projects and efficiency projects, responses to climate change problems related to variable cost reduction and sales increase, and expansion of sales of low-carbon products related to sales increase itself
Executive officer	Monetary reward	Emissions reduction target Energy reduction project Energy reduction target Efficiency project Company performance against a climate-related sustainability index	Evaluate all matters such as level of achievement of GHG emission reduction target and energy reduction target (basic unit and absolute quantity) by emission reduction projects, energy reduction projects and efficiency projects, responses to climate change problems, and expansion of sales of low-carbon products
Management group	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Efficiency project Company performance against a climate-related sustainability index	Evaluate all matters such as level of achievement of GHG emission reduction target and energy reduction target (basic unit and absolute quantity) by emission reduction projects, energy reduction projects and efficiency projects, responses to climate change problems, and expansion of sales of low-carbon products
Chief Procurement Officer (CPO)	Monetary reward	Environmental criteria included in purchases Supply chain engagement	Evaluate all matters of supply chain engagement such as GHG emission reduction activities and water risk management of each supplier.
Buyers/purchasers	Monetary reward	Environmental criteria included in purchases Supply chain engagement	Evaluate all matters of supply chain engagement such as level of GHG emission reduction activities and water risk management of related supplier.
Procurement manager	Monetary reward	Environmental criteria included in purchases Supply chain engagement	Evaluate all matters of supply chain engagement such as level of GHG emission reduction activities and water risk management of related supplier.
Environment/Sustainability manager	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Behavior change related indicator Supply chain engagement Company performance against a climate-related sustainability index	Evaluate all matters such as level of achievement of GHG emission reduction target and energy reduction target (basic unit and absolute quantity) by emission reduction projects, energy reduction projects and efficiency projects, responses to climate change problems, and expansion of sales of low-carbon products
Facilities manager	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target	Evaluate applicable matters such as level of achievement of GHG emission reduction target and energy reduction target (basic unit and absolute quantity) and responses to climate change problems
Process operation manager	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target	Evaluate applicable matters such as level of achievement of GHG emission reduction target and energy reduction target (basic unit and absolute quantity) and responses to climate change problems
Risk manager	Monetary reward	Other (please specify) (Locate climate change risks and determine response measures)	Locate climate change risks and determine response measures
All employees	Monetary reward	Emissions reduction project Energy reduction project Efficiency project Supply chain engagement Company performance against a climate-related sustainability index	Depending on each employee achievement of some project related to emission reduction, energy reduction and efficiency, responses to climate change problems, and expansion of sales of low-carbon products

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	2	
Medium-term	2	5	
Long-term	5	30	

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

We define an event as having a substantive financial impact if the amount of damage of revenue is expected to exceed 1 billion yen.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
-Description of a process for identifying and assessing climate-related risks Kao defines a risk that has a particularly significant impact on its management and thus requiring strengthening of the response as a corporate risk. The Risk and Crisis Management Committee, which holds a meeting at least four times a year, reviews the theme of corporate risks every year. The Committee also establishes its management system and operating plan, and reports at a meeting of the Board of Directors or the management meeting for their deliberation at least once a year. Our process for reviewing corporate risks comprises (1) interviews with top management and in-house risk survey (conducted at each division and subsidiary), (2) deliberation and confirmation by the Risk and Crisis Management Committee, and (3) decision-making during a meeting of the Board of Directors or the management meeting. In addition, since risks related to laws and regulations vary depending on the country in which we operate, every year during a meeting of the Responsible Care Promotion Committee each division and subsidiary evaluates and identifies them at the stage of preparing an implementation. -Description of a process for managing climate-related risks Managing legal and regulatory risks 1) The Responsible Care Promotion Committee (chaired by a managing executive officer, RC committee) prepares a list of environmental laws and regulations, including those on climate change, that the company should observe EVERY YEAR. 2) The responsible departments are put on the list. 3) The secretariat of RC Committee manages the status of legal compliance EVERY MONTH. Managing critical risks 1) The secretariat of the Risk and Crisis Management Committee (chaired by a managing executive officer, Risk Committee), as the responsible committee, interviews management and surveys departments and subsidiaries every year to prepare draft risk themes, including climate change, that should be managed. Here, risk themes are prepared toward achieving Kao's defined VISION FOR 2030, WHICH IS 11 YEARS AWAY. 2) The Management Committee deliberates and makes decisions on the draft themes. 3) Risk Committee holds four meetings a year to manage the status of risk themes, including climate change. 1) We make the matrix chart consisting of financial impact of risk and likelihood of risk in order to assess the level of importance. 2) We estimate the impact and likelihood of each risk item and identify important risk items from the chart. 3) The extracted important risk items are checked by Risk Committee and some of them are check and managed by management council or board of directors as needed. 4) The rest of the risk items are handled by relevant departments. -Description of a process for managing climate-related opportunities 1) We estimate the impact of each opportunity and feasibility of actions to get it making information exchanges among many relevant departments including business units and R&D, and then identify important opportunity items. 2) The extracted important opportunity items are discussed by the ESG Committee and reported to management council or board of directors and approved by them. 3) The rest of the opportunity items are handled by relevant departments. -Case study/example of how process is applied to physical risks and opportunities CASE STUDY (1) The inside of a plant was flooded due to local heavy rains with an amount of rainfall exceeding the design value for rainwater discharging from the plant, causing some electricity equipment to submerge and the plant to experience a power failure. We calculated the number of days the plant would shut down operations due to the incident and estimated the total damage to be 2 billion yen. In addition, we estimated the frequency of the incident to be once in five years. Risk Committee evaluated the adequacy of the risk assessment for this case and confirmed that the total amount of damage would be over 1 billion yen. Risk Committee periodically managed the progress of the risk by placing it under its control under the guidance of the Internal Control Committee, which is a higher-level committee. RISK COMMITTEE REPORTS TO THE BOARD OF DIRECTORS THE RESPONSE STATUS ONCE OR MORE A YEAR AND SEEKS GUIDANCE AS NECESSARY. CASE STUDY (2) An increase in temperature due to climate change manifested a continuous increase in demand for antiperspirants. Accordingly, the Beauty Care Business Division (BC Business) and the R&D worked together to significantly change the policies for product improvements that have been implemented on an ongoing basis. Development of a new product that far exceeds the performance of that of competitors was started with a target of bringing it to market in three years. When it was forecast that the impact of an increase in sales of the relevant product would be less than one billion yen, it was decided that the BC Business and R&D manage the status of product development. -Case study/example of how process is applied to transitional risks and opportunities CASE STUDY (3) An investigation by the secretariat of RC Committee confirmed that a nationwide cap-and-trade system is highly likely to be deployed in Japan, which accounts for 40% of Kao's Scope 1 emissions. A subsequent detailed investigation found that there is only one plant that is subject to this system, the plant would exceed the limit imposed by the system only slightly, and the additional cost would be about 10 million yen. Accordingly, it was decided that the SCM Division, which controls the plant, play a major role in responding to the risk and the RC Committee confirm the progress. CASE STUDY (4) An investigation by the secretariat of RC Committee confirmed that a nationwide cap-and-trade system is highly likely to be deployed in Japan, which is Kao's key market. This information was passed to the Chemical Business Division that sells cleansers for metal plated steel sheets that can be used at low temperatures. The sales person at the Chemical Business communicated the same information accurately to a customer, which led to a new business transaction.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	An example of risks regarding current regulation is the cap-and-trade system of the Metropolis of Tokyo. The Sumida Office in Japan, which bears plant, is subject to the cap-and-trade system of the Metropolis of Tokyo. Thus, the office must keep its emissions amount below the cap. The office manages monthly emissions, confirms whether or not emission rights must be purchased, and conducts risk assessment on the business impacts.
Emerging regulation	Relevant, always included	Japan, which accounts for approximately 50% of the Kao Group's greenhouse gas (GHG) emissions, has yet to deploy an emission trading system. Once deployed, there will be the risk that achieving sales targets becomes difficult because the production amount cannot be increased as planned due to restrictions imposed on plant operations. Therefore, Kao is monitoring trends with respect to the move toward deploying an emission trading system in Japan while evaluating risks that may arise if such a system is deployed.
Technology	Relevant, always included	Society is shifting to become more energy efficient, so failing to change with the times imposes the risk of lost sales opportunities. Although Kao has already developed products that contribute to reducing GHG emissions, such as a low temperature fixable toner, we must continue to develop highly energy efficient products ahead of other companies. To this end, we investigate market trends, conduct patent surveys, and evaluate risks associated with each technology trend at our offices and laboratories.
Legal	Relevant, always included	Because Kao is engaged in a wide range of business globally, accordingly it is susceptible to various lawsuits including climate-change cases. To prevent environmental lawsuits against us, such as climate-change cases, the Responsible Care Promotion Committee, a subordinate organization of the Internal Control Committee chaired by the CEO, manages the status of compliance with environmental laws, regulations, and amendment information—including those on climate change. Our production sites, in particular, are subject to numerous environmental laws; for Kao's plants to observe environmental laws and regulations, including those on climate change, we invested 0.973 billion yen and spent 3.366 billion yen in 2019.
Market	Relevant, always included	As an example of the risks associated with the market, there is a change in the market due to the rise in temperature. Since approximately 70% of the Kao Group's sales are accounted for by consumer products, seasonal changes in product demand due to temperature increases attributable to climate change pose the risk of lost sales opportunities. For example, a bath tablet "Bub" sales well in winter, and antiperspirant "8x4" and anti-UV products sales well in summer. Thus, Kao has been conducting sophisticated inventory management while evaluating the risks associated with store stock-outs.
Reputation	Relevant, always included	Approximately 50% of Kao's shares are held by investors outside Japan. If we are not actively involved in environmental, social, and governance (ESG) activities, there is a risk that financing, such as issuing of corporate bonds, may not proceed smoothly. For this reason, we must perform ESG activities to the same extent as other companies in our industry around the world. We benchmark such companies while evaluating the risks associated with Kao's ESG activity levels.
Acute physical	Relevant, always included	There is a risk that outdoor workers may suffer heatstroke due to increased temperatures during the summer caused by climate change, significantly reducing work efficiency. Since some Kao plants are chemical plants, they cannot avoid this risk. Therefore, they must take measures such as reducing the number of continuous work hours. Kao evaluates the risks associated with workloads and costs.
Chronic physical	Relevant, always included	An example of the risks associated with chronic phisical is that it affects the operation of factories located along the coast due to rising sea levels. Kao's factory in the Philippines is adjacent to the coast. Therefore, although measures against storm surges have been implemented, by sea level rises, it is expected that the level of the storm surge rises more than now. Therefore, Kao regularly evaluates the risk of storm surges at the plant.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Carbon pricing mechanisms

Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Japan, which accounts for about 70% of Kao's sales, 46% of our energy consumption and 40% of our scope 1 emissions, is considering introduction of a carbon tax. Introducing this regulation is expected to increase energy costs and reduce our productivity due to additional management work to deal with the regulation. These factors will reduce Kao's profits.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1455000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Kao's Scope 1 emissions in Asia(excluding Japan) are 291,000 t-CO2. If the carbon tax rate increases by 5,000 yen per t-CO2, we will have to pay approximately 1,455,000,000 yen (291,000 t-CO2 ×5,000 yen/t-CO2) in additional tax.

Cost of response to risk
72000000

Description of response and explanation of cost calculation
- action that is being implemented – Laws and regulations applicable to individual plants are carefully confirmed by each plant or the secretariat of the Responsible Care Promotion Committee. In addition, we have been upgrading facilities to install the latest equipment with high energy consumption efficiency and recovering heat from used steam in anticipation of the introduction of regulations. - Example or case study At Kao plants, we burn fossil fuel to generate steam which is used for chemical reactions. This steam is collected after use. If the steam traps installed on the collection lines do not work normally, steam will be emitted, resulting in the need to burn additional fossil fuel. Kao invested yen to inspect and replace steam traps at two plants in Malaysia and the Philippines, where there are many Scope 1 emissions (Malaysia: 46,000,000 Yen; Philippines: 26,000,000 Yen).

Comment

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact
Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Stronger tropical cyclones with heavier rainstorms increase the likelihood of flooding and other risks. In 2011, typhoon No. 21 struck Mindanao where Kao's Philippines plant is located, causing flooding and damaging houses. The island was hit by a typhoon in 2017, too. Although the plant was not directly affected by these typhoons, they had no small impact on the lives of the employees. The plant is one of Kao's most important factories. This is because the plant is producing raw materials for active agents used in many Kao products, if the factory is no longer operating, it will not be possible to produce many Kao products. Such natural phenomena impact a plant's production operations and may reduce sales as a result of reduced production amounts.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
573000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
For example, Pilipinas Kao Incorporated produces 100,000 tons of high-grade alcohol products in the Philippines. If it was affected by flooding damage that led to a cut in production and a subsequent decrease in sales from the chemical business in Asia (excluding Japan) by 1% to 57.3 billion yen, sales would fall by 573 million yen.

Cost of response to risk
50000000

Description of response and explanation of cost calculation
- action that is being implemented – Each plant assesses water risks associated with climate change, including drought, flooding, typhoon, and tsunami, and the status of progress is carefully confirmed by the secretariat of the Responsible Care Promotion Committee. At each base, we implement measures including disaster mitigation measures as required. -Example or case study If an unprecedented scale of typhoon hits the area where Kao Philippines is located, it is likely that neighboring rivers will overflow and the plant will be flooded at high tide, making it impossible to continue operating the equipment. To address this issue, we built a breakwater on the river side of the plant premises. In addition, we built a mangrove forest and breakwater on the coast line, which cost 50 million yen.

Comment

Identifier
Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Reputation	Increased stakeholder concern or negative stakeholder feedback

Primary potential financial impact
Decreased access to capital

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Kao issued corporate bonds worth 25 billion yen in 2018. Going forward, we will continue to source financing from the markets, such as by issuing corporate bonds, as our business expands. If we give long-term-investors who concerns climate change a negative impression due to insufficient efforts toward climate change, we will need to set a higher interest rate.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
125000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
If the interest rate for 25 billion yen of corporate bonds in total must be increased by 0.5%, the interest payment will be 125 million yen higher.

Cost of response to risk
24000000

Description of response and explanation of cost calculation
- action that is being implemented – In order to prevent the company's reputation from falling for investors and customers, the secretariat of the ESG Committee has been actively disclosing information related to Kao's climate change initiatives. In addition, the secretariat of the ESG Committee works with the IR Division to promote engagement with investors. Furthermore, as the contact point for customers on information disclosure, the Sales Division responds to them sincerely in collaboration with the secretariat of the ESG Committee. -Example or case study Kao has formulated and announced the Kirei Lifestyle Plan, the ESG strategy that includes a decarbonization strategy. In order to help investors and customers understand this strategy, we provide media referrals and investor visits. The number of personnel promoting climate change-related activities in the ESG Division, which serves as the secretariat of the ESG Committee, is three. The cost of these personnel is \24,000,000 (\24,000,000 = \20,000,000 (Kao employees) + \4,000,000 (temporary employees)).

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resource efficiency

Primary climate-related opportunity driver
Use of more efficient production and distribution processes

Primary potential financial impact
Reduced direct costs

Company-specific description
In accordance with the Paris Agreement, all countries have been developing plans to reduce greenhouse gas emissions. Thus, we consider that Kao, which engages in business in many countries, may be forced to reduce our greenhouse gas emissions directly in such countries. Countries with high GHG emissions or energy consumption

are Japan, Malaysia, Philippines, etc. in Kao group. It is a big opportunity to reduce the energy consumption of factories in these countries. In this light, Kao has launched emission-reduction activities ahead of others by voluntarily setting energy reduction targets and greenhouse gas emission targets. To further promote the activities, Kao has set a reduction target based on a scientific basis in 2019 and has been certified by SBTi. These reduction activities also contributed to lowering the cost of running the company, with the economic effects of 380 million yen in 2019. (Japan 223 million yen, Asia 96 million yen, US 6 million yen, EU 55 million yen)

Time horizon
Short-term

Likelihood
Virtually certain

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
361000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
To reduce the procurement of energy for the company, Kao implements many energy conservation activities. The amount of cost reduction resulting from effective activities including energy conservation activities (TCR) is estimated around 500 million yen. These reduction activities contributed to a reduction in corporate operation costs and had an economic effect of 361 million yen in 2018. (Japan 213 million yen, Asia 102 million yen, US 28 million yen, EU 18 million yen)

Cost to realize opportunity
754100000

Strategy to realize opportunity and explanation of cost calculation
- action that is being implemented – Energy-saving activities that are used to reduce the consumption and CO2 emissions are directly linked to cost reductions. Kao has established its energy-saving target and CO2 emission target, and the Responsible Care Promotion Committee manages its progress. The TCR Promotion Office manages the amount of costs associated with the activity. - Example or case study Kao has implemented a number of energy-saving activities to reduce corporate energy procurement. To reduce energy Kao purchases, a wide range of investment was made to curb CO2 emissions including introduction of solar panels and LEDs in 5 domestic and overseas plants. (Japan 506 million yen, Asia 204 million yen, US 44 million yen, EU 0.1 million yen)

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Other, please specify (Development and/or expansion of low emission goods and services)

Company-specific description
The temperatures are increasing and we are experiencing more periods of fair weather without rain as a result of climate change. Particularly in Japan, which accounts for 87% of sales in Kao's fabric care business, the desire to wash clothes will grow as the sweat rate increases due to the rise in temperatures and humidity. In addition, since in Japan it is common to dry clothes outdoors, having greater number of fine days that are suitable for washing will raise the number of washes. Together, these factors are set to boost the demand for detergents, which presents a great opportunity for Kao's fabric care business. Kao's 2009 launch in Japan of ATTACK NEO, a time-saving detergent that reduces the burden of housework associated with washing, created the market for single rinse clothing detergent. The ratio of sales of products with a low environmental burden that have cleared Kao's unique, strict certification criteria, including single-rinse clothing detergent, has reached 27% in Japan. This sales ratio is expected to increase as the number of washes increases in the future.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
3000000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Raising temperature and/or increasing sunny days in Japan may increase the frequency of laundry washing. This trend would improve the sales of the laundry detergent

and related products in Kao. Further raising temperature would bring the opportunity of increasing laundry detergent related products like as softer, bleach and so on. If sales of the Fabric and Home Care Business including laundry detergents in Japan increased 10% more, the revenue would increased 3 billion yen.

Cost to realize opportunity
7919000000

Strategy to realize opportunity and explanation of cost calculation
- action that is being implemented – Kao operates a matrix that combines business units and functional units. In addition, the Kao R＆D Division conducts matrix management between product development and basic research divisions. A close relationship is maintained in the company's corporate production and quality assurance department and customer Communications department. -Example or case study Since the launch of the 2009 clothing detergent attack Neo, Kao continuously develop and launch products that can reduce the amount of water used when using products. In 2017, the liquid detergent for liquid type was extended to non-concentrated type. In 2019, Kao invested 2.361 billion yen and spent 5.558 billion yen on R&D to support environmental protection, including the development of products as measures against climate change. (7,919,000,000=2,361,000,000+5,558,000,000)

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Upstream

Opportunity type
Resilience

Primary climate-related opportunity driver
Resource substitutes/diversification

Primary potential financial impact
Other, please specify (Increased reliability of supply chain and ability to operate under various conditions)

Company-specific description
At Kao, the ingredient procurement phase accounts for 38% of the entire greenhouse gas (GHG) emissions throughout the Kao product life cycle; this figure is approximately four times the percentage of Scopes 1 and 2 combined (9%). Kao set the goal of reducing the emissions throughout the Kao product life cycle by 22% (2030 goal when compared with the 2017 level). To achieve this goal, we will improve the resilience to climate change of Kao suppliers by encouraging them to promote activities that reduce greenhouse gas (GHG) emissions. We think this will help them maintain their competitiveness in terms of their supplies and other competitors, leading to their sustainable growth. We understand that this will in turn ultimately improve the sustainability of Kao's own business. As part of our endeavors to promote such activities, we request our suppliers to construct a GHG management system and reduce their GHG emissions through the CDP SC program, evaluate their response to a survey using Kao's unique method, and feed the results back to them.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
125000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Fiscal 2018 marks the tenth year of Kao’s participation in the CDP SC Program. In recognition of our greenhouse gas emission reduction activities that take into account climate change measures in the entire product life cycle, including the supply chain, as stated in the response to the CDP 2017 survey, Kao was chosen to be on the Supplier Engagement leader board by CDP, an international NGO. If our reputation grows through such activities, it will allow us to set a 0.5% lower interest rate for the total corporate bond of 25 billion yen, which means that the amount of interest payable will be reduced by 125 million yen.

Cost to realize opportunity
6400000

Strategy to realize opportunity and explanation of cost calculation
- action that is being implemented – Kao requests important suppliers to respond to surveys through the CDP SC program. We evaluate the obtained responses with our unique five-stage evaluation method and feed the individual results back to respective suppliers along with the overall results distributed to all our suppliers. The purpose of this effort is to ensure that the suppliers understand the activities to mitigate climate change that Kao expects them to conduct, help them recognize the status of their activities as part of Kao’s whole supply chain. -Example or case study As a result of activities through Kao's CDP SC program, considering climate change measures throughout the entire product, including the supply chain, has been assessed to have implemented activities to reduce greenhouse gas emissions, Kao was selected as the "Supplier Engagement leader board" from CDP in 2018. Kao paid nearly 5.2 mil Yen to participate in three CDP SC programs. We have also joined Sedex in response to requests from Kao suppliers, and doing so cost roughly 1.2 mil Yen. The total payment we made through these activities was 6.4 mil Yen (6.4 = 5.2 + 1.2). The Supplier engagement leader board is selected by a company that is highly acclaimed for its approach to suppliers. In addition, Kao is selected FTSE4 Good for the twelfth year in Jul. 2019, DJSI World for sixth year in Sep.. Further Kao has been continuing the annual dividend for 30 consecutive periods.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, quantitative

C3.1b

(C3.1b) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
2DS	- How the selected scenario(s) were identified, with reference to the inputs, assumptions and analytical methods used. Kao analyzed the climate-related risks with the scenarios on the assumption that reduction efforts based on the Paris Agreement will be made throughout the world for 2050. Since Kao has set an SBT target, we used the 2°C scenario (2DS), which is one of the emission scenarios envisioned by the SBT for analyzing the climate-related risks with the scenarios. The input information includes the IPCC 5th Report and IEA World Energy Outlook. Examples of the input information include climate scenarios for each assumed temperature increase, sector-specific example measures, and regulations imposed by the government. - A description of the time horizon(s) considered, and why they are relevant to your organization. Kao has set a new greenhouse gas emission target by 2030, and has also given directions for reduction efforts based on the Paris Agreement. Accordingly, we have conducted a scenario analysis for 2030. - A description of the areas of your organization that have been considered as part of the scenario analysis. Since our analysis suggests that the scenario analysis will bring various risks and opportunities to our segments (Beauty Care, Human Health Care, Fabric & Home Care, and Chemical) and affect our business strategies, we target all of our business divisions and offices. - A company specific description summary of the results of the conducted scenario analysis. In order to achieve the sales target defined in the K30, we predict that we will emit 1.6 times more CO2. However, we found out that the 2DS requires us to reduce our emissions to 0.8 times the current level. This result shows that we must double the current CO2 efficiency. - A description of how the results of the scenario analysis have informed your business objectives and strategy. As a way of achieving the above efficiency, we have set the following policies as requirements: upgrading the current improvement rate for energy usage efficiency; installing renewable electricity facilities and purchasing renewable electricity to reduce scope 2 emissions; and developing new technologies to reduce scope 1 emissions. Reducing energy usage in businesses that consume a large amount of energy (in particular the Human Health Care and Chemical businesses, which have a large production volume and use a great amount of process energy) is an important issue in our business strategy. In addition, since the temperature rise in the summer is expected to continue, the development of summer products was promoted, and it was introduced to the market from time to time, aiming to increase sales. - A case study/example of how the results of scenario analysis have directly influenced your business objectives and strategy. In accordance with the above policies, in 2019 Kao introduced and launched and began operating solar panels (total generation capacity: 4.251 MWh) at Kao group plants, including the Tochigi Plant.

C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Kao is implementing short- and medium-term responses to climate-related risks and opportunities in its products. Due to the recent reduction in the average rainfall and a change in the rainfall pattern caused by climate change, demand for Kao's water-saving products is increasing in Chinese, Australian, and Japanese markets. Furthermore, the conclusion of the Paris Agreement has raised consumers' interest on the prevention of global warming. In order to respond to such demand, Kao has been marketing products that help reduce CO2, including water-saving products, since 2009. Kao is expanding product lines for summer, such as antiperspirants and UV products, because of the temperature increase in summer and longer summer period. The sales of environmentally-friendly products including watersaving products exceeded 2.3 billion yen in 2019.
Supply chain and/or value chain	Yes	In recent years, more people around the world are asking for palm oil that has not been taken from a plantation that was developed by illegally cutting down tropical rainforests. To meet such needs, Kao has set a goal of purchasing only palm oil for which its origin can be traced back fully to a plantation by 2020. We expect to spend about 200 million yen every year to achieve that goal.
Investment in R&D	Yes	Global warming has become increasingly apparent, causing the consumers' preferences to change as well. Many Kao products use a lot of water to rinse cleaning agents during use stage of products life cycle. Kao has been strategically conducting research on cleaning agents that can reduce the amount of water used since 2009. In 2019, we invested 2,361 million yen and spent 5,559 million yen on environmental response studies.
Operations	Yes	A rise in sea water temperature due to global warming has caused the typhoons in the Pacific Ocean to increase in scale. In 2009, a typhoon approached Mindanao in the Philippines, which caused the rivers near the Kao plant to overflow and the plant operations to be suspended. In response to such a disaster, Kao strategically planed and responded to the medium-term plans primarily from factories along the coast and/or close to rivers. Kao spent approximately 50 million yen building a new breakwater.

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Capital expenditures Acquisitions and divestments Access to capital Assets Liabilities	-Revenues Kao aims to achieve sales of 2.5 trillion yen in 2030. In order to do so, we have stepped up our environmental, social, and governance (ESG) activities in 2018, in the hope that non-financial activities represented by ESG activities will have a positive financial impact. The Paris Agreement has changed the field of climate change significantly for 2030. Since the Agreement aims to achieve a target of 2°C around the world, we expect an increase in the sales of products that contribute to the mitigation of climate change. For example, TO ACHIEVE THE SALES GOAL FOR 2030, we must add approximately 1 trillion yen to the 2019 results. We expect an increase in sales of environmentally-friendly products, including climate change-related products like as laundry detergent "Attack" , to comprise 30% of that figure, or 300 BILLION YEN. - Operating costs Following the conclusion of the Paris Agreement, companies are expected to set scopes 1 and 2 emission goals based on the Science Based Targets (SBT). Although Kao has already set a GHG reduction goal and has been engaging in activities, we must increase our efforts to meet the SBT target. We expect to spend an additional cost of APPROXIMATELY 100 MILLION YEN every year to achieve the emission target based on the SBT in 2030. Kao has purchased renewable electric to reduce Scope 2 even if we need additional cost. -Capital expenditures / capital allocation Following the conclusion of the Paris Agreement, companies are expected to set scopes 1 and 2 emission goals based on the Science Based Targets (SBT). Although Kao has already set a GHG reduction goal and has been engaging in activities, we must increase our efforts to meet the SBT target. In order to achieve the emission target based on the SBT in 2030, we require three times more investment. We expect the amount of investment to be ROUGHLY 3 BILLION YEN. For example we will install new PV panel on our plants continuously. -Acquisitions and divestment The Chemical Business Division has set a goal of having 80% of its products be environment-related products that contribute to reducing environmental impact including climate change by 2020 from plan from the view of finance. As part of this effort, we purchased Collins Inkjet and Chimigraf Holding in 2016. In addition, as one of our growth strategies, we aim to achieve high profitability (200 billion yen in sales and 10% in operating profit margin) in the Consumer Products Business in Europe and the U.S. To that end, we believe that it is important to utilize our hair care assets, especially our salon assets, so we purchased Oribe Hair Care in December 2017 for approximately 45 billion yen. Additionally we purchased Washing Systems, LLC in August 2018 for approximately 30 billion yen. We expect to make INVESTMENTS OF 150 TO 200 BILLION YEN per year for our growth, including those in merger and acquisition activities for medium-term. By launching shampoo products that reduce the amount of water needed for rinsing through Oribe Hair Care, and releasing clothing detergent products that also reduce the volume of water needed for rinsing through Washing Systems, we can reduce greenhouse gas emissions related to clean water production and sewage treatment in the U.S. -Access to capital For financing, we aim to obtain and maintain a high rating that allows us to finance large-scale investments. In recognition of our excellent efforts in taking care of the health of our employees, we were able to borrow money at a low cost from the viewpoint of health management. However, we have yet to be able to do so from the viewpoint of climate change. Kao aims to achieve actual sales of +5% in CAGR terms and 15% in operating profit margin in 2020. If we can secure financing at low interest rates due to receiving high marks for our climate change-related activities, we expect the cost burden of investment in growth businesses, which we will continue to make in the future, to fall. This will contribute to achieving the 2020 target of a 15% operating profit. We also plan to continue increasing the operating cash flow at a pace that will exceed the growth rate achieved in 2018 when 195.6 billion yen in sales was recorded. - Assets Kao decides its capital investment based on economic value added (EVA) management. We aim to improve the EVA by investing in projects in which the net operating profit after tax (NOPAT) during the medium-term period exceeds the total capital cost. In 2018, the EVA was 93.5 billion yen. To this end, capital investment is needed for introducing new production lines. - Liabilities Kao aims to achieve sales of 2.5 trillion yen in 2030. In order to do so, we have stepped up our environmental, social, and governance (ESG) activities in 2018, in the hope that non-financial activities represented by ESG activities will have a positive financial impact. The Paris Agreement has changed the field of climate change significantly for 2030. Since the Agreement aims to achieve a target of 2°C around the world, we expect an increase in the sales of products that contribute to the mitigation of climate change. To this end, as capital investment to introduce new production line is necessary, corporate bonds of about 20 to 30 billion yen is possibly issued and it might affects Kao's financial long-term plan.

C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Both absolute and intensity targets

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Year target was set

2018

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Base year

2017

Covered emissions in base year (metric tons CO2e)

1058113

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2030

Targeted reduction from base year (%)

22

Covered emissions in target year (metric tons CO2e) [auto-calculated]
825328.14

Covered emissions in reporting year (metric tons CO2e)
964120

% of target achieved [auto-calculated]
40.377625933233

Target status in reporting year
Underway

Is this a science-based target?
Yes, this target has been approved as science-based by the Science-Based Targets initiative

Please explain (including target coverage)
a) baseline year emissions covered by target:1,058,113 (t-CO2) b) emissions in 2019 : 964,120 (t-CO2) c) (b/a -1)x100 = -8.9% d) % achieved: 8.9(%)*100/22(%)=40.38(%)

Target reference number
Abs 2

Year target was set
2018

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 1+2 (market-based) +3 (upstream & downstream)

Base year
2017

Covered emissions in base year (metric tons CO2e)
11910135

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
95.42

Target year
2030

Targeted reduction from base year (%)
22

Covered emissions in target year (metric tons CO2e) [auto-calculated]
9289905.3

Covered emissions in reporting year (metric tons CO2e)
11455000

% of target achieved [auto-calculated]
17.370042023415

Target status in reporting year
Underway

Is this a science-based target?
Yes, this target has been approved as science-based by the Science-Based Targets initiative

Please explain (including target coverage)
a) baseline year emissions covered by target:11,910,135 (t-CO2) b) emissions in 2019 : 11,455,000 (t-CO2) c) (b/a -1)x100 = -3.82% d) % achieved: -3.82(%)*100/22(%)=17.36(%) The boundary of this target is consumer products in all of Kao group.

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number
Int 1

Year target was set
2009

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 1+2 (market-based)

Intensity metric
Other, please specify (CO2換算高/売上高　Metric tons CO2e per unit revenue)

Base year
2005

Intensity figure in base year (metric tons CO2e per unit of activity)

1.02

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure
100

Target year
2020

Targeted reduction from base year (%)
35

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]
0.663

% change anticipated in absolute Scope 1+2 emissions
-4.66

% change anticipated in absolute Scope 3 emissions
0

Intensity figure in reporting year (metric tons CO2e per unit of activity)
0.642

% of target achieved [auto-calculated]
105.882352941176

Target status in reporting year
Underway

Is this a science-based target?
No, but we are reporting another target that is science-based

Please explain (including target coverage)
a) Normalized baseline year emissions covered by target: 993,000 (t-CO2) b) Normalized baseline year amount of sales: 971,000 (million-Yen) c) a)/b)=1.02 d) Emissions in 2019: 964,000 (t-CO2) e) Amount of sales in 2019: 1,502,000 (million-Yen) f) d)/e)=0.642 g)[1- {c)-f)}/c)]*100=37.2(%) h) % achieved: 37.2(%)/35(%)*100=106(%) The boundary of this target is all Kao sites.

Target reference number
Int 2

Year target was set
2009

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 1+2 (location-based) + 3 (upstream and downstream)

Intensity metric
Metric tons CO2e per unit revenue

Base year
2005

Intensity figure in base year (metric tons CO2e per unit of activity)
921

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure
100

Target year
2020

Targeted reduction from base year (%)
35

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]
598.65

% change anticipated in absolute Scope 1+2 emissions
-35

% change anticipated in absolute Scope 3 emissions
-35

Intensity figure in reporting year (metric tons CO2e per unit of activity)
732

% of target achieved [auto-calculated]
58.6319218241042

Target status in reporting year
Underway

Is this a science-based target?
No, but we are reporting another target that is science-based

Please explain (including target coverage)
a) Normalized baseline year emissions covered by target: 6,248,000 (t-CO2) b) Normalized baseline year amount of sales: 678,000 (million-Yen) c) a)/b)=9.2 d) Emissions in 2019: 7,328,000 (t-CO2) e) Amount of sales in 2019: 1,00,576 (million-Yen) f) d)/e)=7.3 g) {c)-f)}/c)=20.65(%) h) % achieved: 20.65(%)*100/35(%)=59.00(%) The

boundary of this target is consumer products in Japan.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

No other climate-related targets

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	127	5391
Implementation commenced*	4	0
Implemented*	235	102648
Not to be implemented	2	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in buildings	Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

1698

Scope(s)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

52200000

Investment required (unit currency – as specified in C0.4)

228000000

Payback period

4-10 years

Estimated lifetime of the initiative

3-5 years

Comment

Having completed the plan announced in 2015 to use LED lighting at each plant, logistics center, and office in Japan, at present we are actively promoting the use of LED lighting at subsidiaries in countries other than Japan.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

5733

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
179000000

Investment required (unit currency – as specified in C0.4)
270000000

Payback period
1-3 years

Estimated lifetime of the initiative
1-2 years

Comment
In order to improve the efficiency of steam use, we continuously strengthen the maintenance of steam traps and improve the amount of steam recovered. We are also actively promoting on-site improvement activities to reduce the energy required, such as lowering the set temperature to keep the tank warm and shortening operating time.

Initiative category & Initiative type

Low-carbon energy generation	Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)
2067

Scope(s)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
32400000

Investment required (unit currency – as specified in C0.4)
304000000

Payback period
4-10 years

Estimated lifetime of the initiative
Ongoing

Comment
We are promoting the introduction of solar power generation facilities for private consumption at Kao-owned facilities. In 2019, the facilities installed at Kao Japan's Tochigi Plant (total power generation: 1,522MWh) and Toyohashi Plant (total power generation: 397MWh) started to generate electricity. The Kao Group's total power generation in 2019 was 4,251 MWh.

Initiative category & Initiative type

Low-carbon energy consumption	Low-carbon electricity mix

Estimated annual CO2e savings (metric tonnes CO2e)
93150

Scope(s)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
0

Payback period
No payback

Estimated lifetime of the initiative
Ongoing

Comment
Kao Group is promoting the purchase of renewable electricity. Kao Chemical Co., Ltd., Kao Manufacturing Germany, three bases at Kao Corporation S. A., Kao Chimigraf, Morton Brown, Kao USA, Kao Japan (Kawasaki Plant), Kao Sanitary Products Ehime Co., Ltd. have replaced all purchased electricity with renewable power. In addition, we purchase renewable electric power at Kao Co., Ltd. Tochigi Plant, Kashima Plant, Odawara Plant, Toyohashi Plant, Kao Paper Fuji Co., Ltd.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	We promote the introduction of methods with a lower CO2 reduction cost to achieve the reduction amounts required by law. We have reviewed the effectiveness of methods with a high-reduction potential by introducing them on a trial basis.
Dedicated budget for energy efficiency	We promote the introduction of methods with a lower CO2 reduction cost to achieve the reduction amounts required by law. We have reviewed the effectiveness of methods with a high-reduction potential by introducing them on a trial basis.
Dedicated budget for low-carbon product R&D	At the time an opportunity is located, we estimate the potential reduction amount with regard to customers in the product development stage, confirm with customers whether the reduction amount is attractive to them, and start development.
Dedicated budget for other emissions reduction activities	We promote the introduction of methods with a lower CO2 reduction cost. We have reviewed the effectiveness of methods with a high-reduction potential by introducing them on a trial basis.
Partnering with governments on technology development	When we estimate CO2 reduction costs in preparing budgets such as the energy-conserving investment and the low-carbon investment, we also include public assistance such as available subsidies.
Other	The methodologies mentioned above are all applicable to either Scope 1, 2, or 3, targeting the medium-term objective to reduce LC-CO2 by 35 percent by 2020, and their degree of effectiveness has been clarified.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Group of products

Description of product/Group of products

CO2 emission reduction products (including Water saving products) and less package material products on personal care business

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Addressing the Avoided Emissions Challenge- Chemicals sector

% revenue from low carbon product(s) in the reporting year

27

% of total portfolio value

<Not Applicable>

Asset classes/ product types

<Not Applicable>

Comment

shown above indicates the sales ratio for products intended for Japanese consumers.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)
653145

Comment

Scope 2 (location-based)

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)
447267

Comment

Scope 2 (market-based)

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)
404968

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
644039

Start date
<Not Applicable>

End date
<Not Applicable>

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
443636

Scope 2, market-based (if applicable)
320081

Start date
<Not Applicable>

End date
<Not Applicable>

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?
Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source
7 gasses (except CO2) on scope 1 from Factories, Offices, Warehouses, sales car outside Japan

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
No emissions excluded

Relevance of market-based Scope 2 emissions from this source (if applicable)
No emissions excluded

Explain why this source is excluded
Data for Factories, Offices, Warehouses and sales car outside Japan had been collected only CO2. Based on the collected data in Japan, the total emissions of except CO2 from these sources is estimated to be less than 0.5% of all the emissions.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Metric tonnes CO2e
4295000

Emissions calculation methodology
Activity volume is input by type of raw material used for sold products. The emissions intensity used is the emissions intensity by type of raw material which set by Kao from the emissions intensity database (ver.2.0) prepared by the Ministry of the Environment and the Ministry of Economy, Trade and Industry in Japan and so on.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
24

Please explain
Activity volume is the investment amount. The emissions intensity used is the emissions intensity database (ver.2.0) prepared by the Ministry of the Environment and the Ministry of Economy, Trade and Industry in Japan. As for the activities in countries outside Japan, the emissions intensity in Japan is used also.

Capital goods

Evaluation status
Relevant, calculated

Metric tonnes CO2e
342000

Emissions calculation methodology
Activity volume is the investment amount. The emissions intensity used is the emissions intensity database (ver.2.0) prepared by the Ministry of the Environment and the Ministry of Economy, Trade and Industry in Japan. As for the activities in countries outside Japan, the emissions intensity in Japan is used also.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Relevant, calculated

Metric tonnes CO2e
30000

Emissions calculation methodology
Activity volume is the consumption of energy by type.The emissions intensity used is the emissions intensity database (ver.2.0) prepared by the Ministry of the Environment and the Ministry of Economy, Trade and Industry in Japan. As for the activities in countries outside Japan, the emissions intensity in Japan is used also.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Metric tonnes CO2e
254000

Emissions calculation methodology
Activity volume is the case where the Kao Group is a cargo owner. Raw materials and such like having a cargo owner as the supplier are included in Category 1. Calculation methodology and the emission intensities Kao used obey under Law Concerning the promotion of the measures to cope with Global Warming in Japan .

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Waste generated in operations

Evaluation status
Relevant, calculated

Metric tonnes CO2e
56000

Emissions calculation methodology
Activity volume is classified by type of waste and processing . The emission intensity used is the emissions intensity database (ver.2.0) prepared by the Ministry of the Environment and the Ministry of Economy, Trade and Industry in Japan. As for the activities in countries outside Japan, the emissions intensity in Japan is used also.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Business travel

Evaluation status
Relevant, calculated

Metric tonnes CO2e
4000

Emissions calculation methodology
Activity volume is the number of employees. The emissions intensity used is the emissions intensity database (ver.2.0) prepared by the Ministry of the Environment and the Ministry of Economy, Trade and Industry in Japan.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Employee commuting

Evaluation status
Relevant, calculated

Metric tonnes CO2e
17000

Emissions calculation methodology
Activity volume is the numbers of employees and work days.The emissions intensity used is the emissions intensity database (ver.2.0) prepared by the Ministry of the Environment and the Ministry of Economy, Trade and Industry in Japan.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Emission from these equipment has included in "Scope 1 and Scope 2"

Downstream transportation and distribution

Evaluation status
Relevant, calculated

Metric tonnes CO2e
107000

Emissions calculation methodology
Activity volume is the weight of sold products which excluded Kao delivered to store directory. The emissions intensity used is the emissions intensity database (ver.2.0) prepared by the Ministry of the Environment and the Ministry of Economy, Trade and Industry in Japan.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Processing of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
111000

Emissions calculation methodology
Activity volume is the number of sold of fatty alcohols, tertiary amine and many kinds of surface active agents. The emissions intensity used is model number which decided by result of the emission intensity on Kao factory. Kao processes these material same as our customers.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Use of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
4510000

Emissions calculation methodology
Calculated according to the scenario established by Kao. Activity volume is the amount of usage of electricity, gas, and such like in house from sold products. The emissions intensity used is set by Kao from the emissions intensity database (ver.2.0) prepared by the Ministry of the Environment and the Ministry of Economy, Trade and Industry in Japan and so on.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

End of life treatment of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
1432000

Emissions calculation methodology
Calculated according to the scenario established by Kao. Activity volume is the type and volume of ingredients, containers and packaging and used water in house for each sold product. The emissions intensity used is set by Kao from the emissions intensity database (ver.2.0) prepared by the Ministry of the Environment and the Ministry of Economy, Trade and Industry in Japan and so on.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Kao has no downstream leased assets.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Kao has no Franchises.

Investments

Evaluation status
Relevant, calculated

Metric tonnes CO2e
7000

Emissions calculation methodology
Activity volume is the number of shares of stock holding on the securities report by type of issue. The emissions intensity used is the latest figure for GHG emissions for each company according to the holding ratio of stocks. Please note that companies with no published data available are excluded from the calculation. Kao's share is calculated by multiplying the activity volume by emissions intensity and then dividing the number proportionally at the ratio of the number of shares owned by Kao to the amount of outstanding shares.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Other (upstream)

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain

Other (downstream)

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	72034.83	

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
6e-7

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
964120

Metric denominator
unit total revenue

Metric denominator: Unit total
1502241000000

Scope 2 figure used
Market-based

% change from previous year
6.75

Direction of change
Decreased

Reason for change
Sales decreased 0.38% year-on-year, but CO2 emissions decreased significantly to 7.11% year-on-year. We are promoting the introduction of renewable energy power at many plants in Japan and overseas at Kao Chemical Co., Ltd., Kao Manufacturing Germany, Kao Corporation S.A., Kao Chimigraf, Morton Brown, Kao USA, Kao Japan (Kawasaki Plant, Tochigi Plant, Kashima Plant, Odawara Plant, Toyohashi Plant), Kao Sanitary Products Ehime Co., Ltd., Kao Paper Fuji Co., Ltd. We believe that the introduction of solar power generation facilities for private consumption at Kao-owned facilities contributed greatly to the reduction of CO2 emissions in 2019 at Kao Japan (Toyohashi Plant and Wakayama Plant), Kao Sanitary Products Ehime Co., Ltd., Kao Industrial Thailand, Shanghai Kao, Kao Penang Group, Kao USA, etc.

Intensity figure
0.2652137188

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
964120

Metric denominator
unit of production

Metric denominator: Unit total
3635255

Scope 2 figure used
Market-based

% change from previous year
7.86

Direction of change
Decreased

Reason for change
Total production amount increased 0.81% year-on-year, but CO2 emissions decreased significantly to 7.11% year-on-year. We are promoting the introduction of renewable energy power at many plants in Japan and overseas at Kao Chemical Co., Ltd., Kao Manufacturing Germany, Kao Corporation S.A., Kao Chimigraf, Morton Brown, Kao USA, Kao Japan (Kawasaki Plant, Tochigi Plant, Kashima Plant, Odawara Plant, Toyohashi Plant), Kao Sanitary Products Ehime Co., Ltd., Kao Paper Fuji Co., Ltd. We believe that the introduction of solar power generation facilities for private consumption at Kao-owned facilities contributed greatly to the reduction of CO2 emissions in 2019 at Kao Japan (Toyohashi Plant and Wakayama Plant), Kao Sanitary Products Ehime Co., Ltd., Kao Industrial Thailand, Shanghai Kao, Kao Penang Group, Kao USA, etc.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	641923	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	235	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	879	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	975	IPCC Fifth Assessment Report (AR5 – 100 year)
PFCs	0	IPCC Fifth Assessment Report (AR5 – 100 year)
SF6	27	IPCC Fifth Assessment Report (AR5 – 100 year)
NF3	0	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Japan	259297
Asia Pacific (or JAPA)	290745
US, Latin America and Caribbean (USLAC)	46392
Eastern Europe, Middle East, and Africa (EEMEA)	47604

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Production	629304
Office,sales	14734

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Japan	188293	98048	958654	134774
Asia Pacific (or JAPA)	209234	213756	990411	1335
US, Latin America and Caribbean (USLAC)	20153	6175	123203	13261
Europe, the Middle East, Africa and Russia (EMEAR)	25956	2102	170172	73665

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Production	407759	287811
Offices, sales	35877	32270

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	67825	Decreased	6.53	Due to the "change in renewable energy consumption" in 2019, emissions decreased significantly despite a year-on-year increase in production. In 2019, 67,825 (tCO2e) was reduced by promoting emission reduction projects through the introduction of renewable energy. Since the total emissions of Scope 1 and Scope 2 in 2018 were 1,037,927 (tCO2e), we reached (-67,825 /1,037,927)*100 = -6.53% (In other words, emissions decreased by 6.53% from the previous year).
Other emissions reduction activities	7431	Decreased	0.72	In 2019, 7,431 (tCO2e) was reduced through energy conservation activities promoted throughout the Kao Group. Since the total emissions of Scope 1 and Scope 2 in 2018 were 1,037,927 (tCO2e), we reached (-7,431 /1,037,927))*100 = -0.72% (In other words, emissions decreased by 0.72%).
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	3313	Increased	0.32	In 2019, 3,313 (tCO2e) increased due to changes in production volume from the previous year. Since the total emissions of Scope 1 and Scope 2 in 2018 were 1,037,927 (tCO2e), we reached (3,313 /1,037,927))*100=0.32% (In other words, emissions increased by 0.32%).
Change in methodology	2251	Decreased	0.22	In 2019, 2,251 (tCO2e) was reduced due to changes in the emission factor of power companies. Since the total emissions of Scope 1 and Scope 2 in 2018 were 1,037,927 (tCO2e), we reached (-2,251/1,037,927)*100 = -0.22% (In other words, emissions decreased by 0.22%).
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	1843	Decreased	0.18	-0.18%=(-1,843/1,037,927)*100
Other	2230	Increased	0.21	In 2019, 2,230 (tCO2e) increased due to changes in product composition, etc. Since the total emissions of Scope 1 and Scope 2 in 2018 were 1,037,927 (tCO2e), (2,230/1,037,927)*100=0.21% (In other words, emissions increased by 0.21% from the previous year).

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	2946077	2946077
Consumption of purchased or acquired electricity	<Not Applicable>	559221	1641841	2201062
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	0	41377	41377
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	4169	<Not Applicable>	4169
Total energy consumption	<Not Applicable>	563390	4629295	5192685

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)
Motor Gasoline

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
34223

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
34223

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
2.32166

Unit
metric tons CO2e per m3

Emissions factor source
GHG reporting protocol in Japan (in Japan case)

Comment

Fuels (excluding feedstocks)
Kerosene

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
11275

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
11275

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
2.48948

Unit
kg CO2e per liter

Emissions factor source
GHG reporting protocol in Japan (in Japan case)

Comment

Fuels (excluding feedstocks)
Other, please specify (A-heavy oil)

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
18573

MWh fuel consumed for self-generation of electricity
1613

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
16960

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
2.70963

Unit
kg CO2e per liter

Emissions factor source
GHG reporting protocol in Japan (in Japan case)

Comment

Fuels (excluding feedstocks)
Other, please specify (C-heavy oil)

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
7536

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
7536

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
2.99585

Unit
kg CO2e per liter

Emissions factor source
GHG reporting protocol in Japan (in Japan case)

Comment

Fuels (excluding feedstocks)
Liquefied Petroleum Gas (LPG)

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
1884

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
1884

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
2.99889

Unit
metric tons CO2 per m3

Emissions factor source
GHG reporting protocol in Japan (in Japan case)

Comment

Fuels (excluding feedstocks)
Liquefied Natural Gas (LNG)

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
2482304

MWh fuel consumed for self-generation of electricity
7277

MWh fuel consumed for self-generation of heat
312680

MWh fuel consumed for self-generation of steam
841235

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
1321113

Emission factor
2.23403

Unit
metric tons CO2e per m3

Emissions factor source
GHG reporting protocol in Japan (in Japan case)

Comment

Fuels (excluding feedstocks)
Diesel

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
390281

MWh fuel consumed for self-generation of electricity
26663

MWh fuel consumed for self-generation of heat
11196

MWh fuel consumed for self-generation of steam
352422

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
2.58496

Unit
kg CO2e per liter

Emissions factor source
GHG reporting protocol in Japan (in Japan case)

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	301973	220948	4169	4169
Heat	0	0	0	0
Steam	0	41377	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.

Sourcing method
Green electricity products (e.g. green tariffs) from an energy supplier, supported by energy attribute certificates

Low-carbon technology type
Other, please specify (Solar, wind, hydro, biomass)

Country/region of consumption of low-carbon electricity, heat, steam or cooling
Europe

MWh consumed accounted for at a zero emission factor
73665

Comment
Kao Chemical Germany , Kao Manufacturing Germany, three bases of Kao Corporation, S.A., Kao Chimigraf and Molton Brown have converted all purchased electricity into renewable energy sources.

Sourcing method
Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type
Low-carbon energy mix

Country/region of consumption of low-carbon electricity, heat, steam or cooling
United States of America

MWh consumed accounted for at a zero emission factor
13209

Comment
Kao USA has converted all purchased electricity into renewable energy sources.

Sourcing method
Green electricity products (e.g. green tariffs) from an energy supplier, not supported by energy attribute certificates

Low-carbon technology type

Hydropower

Country/region of consumption of low-carbon electricity, heat, steam or cooling
Japan

MWh consumed accounted for at a zero emission factor
44120

Comment
In 2018 and 2019, Kao Japan purchased 100% hydroelectric electricity "Aqua Premium" from TEPCO (Tokyo Electric Power Company Holdings, incorporated) at Odawara Plant, Kashima Plant, and Tochigi Plant. In July 2019, Arida Training Center began purchasing "Aqua Premium".

Sourcing method
Unbundled energy attribute certificates, other - please specify (Renewable Energy Certificates)

Low-carbon technology type
Biomass

Country/region of consumption of low-carbon electricity, heat, steam or cooling
Japan

MWh consumed accounted for at a zero emission factor
10660

Comment
In 2018 and 2019, Kao Japan purchased Renewable Energy Certificates electricity at Kawasaki plant.

Sourcing method
Unbundled energy attribute certificates, other - please specify (J-Credit)

Low-carbon technology type
Solar

Country/region of consumption of low-carbon electricity, heat, steam or cooling
Japan

MWh consumed accounted for at a zero emission factor
14965

Comment
In July 2019, Kao Japan began purchasing J-Credit electricity at Toyohashi plant and Fuji plant.

Sourcing method
Other, please specify (Providing a ZERO CO2 menu utilizing non-fossil certificates)

Low-carbon technology type
Solar

Country/region of consumption of low-carbon electricity, heat, steam or cooling
Japan

MWh consumed accounted for at a zero emission factor
62165

Comment
In 2018 and 2019, Kao Japan purchased Shikoku Electric Power's non-fossil certified electricity listed in a catalog of zero CO2 emissions at Ehime Plant. In November 2019, Kao Japan started purchasing electricity with zero CO2 emissions using non-fossil certificates at Kawasaki Plant, Tochigi Plant, Kashima Plant, and Odawara Plant.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Please select

Metric value

Metric numerator

Metric denominator (intensity metric only)

% change from previous year

Direction of change
<Not Applicable>

Please explain

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
KAO_Independent Assurance Report_2020 and Letter.pdf

Page/ section reference
P.1-P.2

Relevant standard
ISAE 3410

Proportion of reported emissions verified (%)
100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
KAO_Independent Assurance Report_2020 and Letter.pdf

Page/ section reference
P.1-P.2

Relevant standard
ISAE 3410

Proportion of reported emissions verified (%)
100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category
Scope 3: Purchased goods and services

Verification or assurance cycle in place
Annual process

Status in the current reporting year

Complete

Type of verification or assurance
Limited assurance

Attach the statement
KAO_Independent Assurance Report_2020 and Letter.pdf

Page/section reference
P.1-P.2

Relevant standard
ISAE 3410

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Upstream transportation and distribution

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
KAO_Independent Assurance Report_2020 and Letter.pdf

Page/section reference
P.1-P.2

Relevant standard
ISAE 3410

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Use of sold products

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
KAO_Independent Assurance Report_2020 and Letter.pdf

Page/section reference
P.1-P.2

Relevant standard
ISAE 3410

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: End-of-life treatment of sold products

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
KAO_Independent Assurance Report_2020 and Letter.pdf

Page/section reference
P.1-P.2

Relevant standard
ISAE 3410

Proportion of reported emissions verified (%)
100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Energy consumption	ISAE 3000	Total energy consumed by Kao

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

EU ETS

Tokyo CaT - ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS
4.14

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2019

Period end date
December 31 2019

Allowances allocated
7012

Allowances purchased
19659

Verified Scope 1 emissions in metric tons CO2e
26671

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

Tokyo CaT - ETS

% of Scope 1 emissions covered by the ETS
1.4

% of Scope 2 emissions covered by the ETS
0

Period start date
April 1 2019

Period end date
March 31 2020

Allowances allocated
11927

Allowances purchased
0

Verified Scope 1 emissions in metric tons CO2e
9023

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

・A description of your strategy for complying with the systems in which you participate

Some of Kao bases are already subject to the emissions trading system (ETS). Our policy is to prioritize the reduction of our emissions, so we will purchase emission rights if the amount of emissions exceeded the allocation. We do not have a financial strategy that takes into account an increase in the purchase cost for emission rights because we expect to reduce emissions for certain through our production improvement efforts and the improvement in energy consumption rate. Thus, it is unlikely that we will exceed the allocation. However, we have been deploying a strategy to make a capital investment and implement additional measures for reducing emissions that are rolled out across the company, with priority to plants that consume a large amount of energy, including those subject to the ETS.

・An example of how you have applied your strategy

Through the Responsible Care Committee, which manages the activities of Kao bases, we share Kao Group’s energy-saving technologies and promote activities to reduce our emissions. In particular, we are actively working to introduce energy-saving technologies that can be applied easily, such as the installation of LEDs and the recovery of steam.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?
No

C11.3

(C11.3) Does your organization use an internal price on carbon?
Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price
Drive low-carbon investment

GHG Scope
Scope 1
Scope 2

Application
Kao considers the internal carbon price to be part of the cost of calculating the amortization period of the equipment.

Actual price(s) used (Currency /metric ton)
3500

Variance of price(s) used
The internal carbon prices implemented by Kao are implemented by the SCM Department, which accounts for most of Kao's Scopes 1 and 2 emissions. Although Kao uses fixed cost, we plan to differentiate them to achieve the 2°C target.

Type of internal carbon price
Implicit price

Impact & implication
Each of Kao's plants has introduced internal carbon pricing to promote energy-saving investment. Specifically, they calculate the sum of the cost of energy reduced by the introduction of energy-saving equipment and the carbon price of the amount of CO2 reduced as the cost advantage. The Responsible Care Promotion Committee made a resolution on and runs this initiative. We determine whether or not to make a capital investment based on the evaluation of various items. One such item is "number of years for simple recovery of investment." Kao has stipulated the estimation method and the base years for this item and requires that the number of years for simple recovery of investment calculated from the above-mentioned cost advantage and the total investment be below the base years. The projects in which investment is now possible as a result of introducing internal carbon pricing include the solar panels with 1,500-kW generation capacity installed at the Tochigi Plant, and the solar panels with 336-kW generation capacity installed at the Toyohashi Plant. The solar panels installed at these two plants generate a total power output of 1,900 MWh per year, reducing CO2 by approximately 1,100 tons.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our suppliers
Yes, our customers
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Information collection (understanding supplier behavior)

Details of engagement
Collect climate change and carbon information at least annually from suppliers

% of suppliers by number
100

% total procurement spend (direct and indirect)
100

% of supplier-related Scope 3 emissions as reported in C6.5
38

Rationale for the coverage of your engagement
Kao aims to help realize a sustainable society and considers our suppliers to be business partners vital to Yoki-Monozukuri (a strong commitment by all members to provide products and brands of excellent value for consumer satisfaction). Thus, the Kao Guidelines for Supplier Assessment stipulate that we request all our suppliers to fulfill social and environmental responsibilities, and we monitor the plants of all suppliers through CSR self-assessment to check for any issues. We monitor all suppliers because it is difficult to identify the main suppliers based on transaction amounts or volumes because Kao's businesses are diverse and suppliers are distributed across different areas. Kao visits suppliers that we have determined pose a risk and we share issues and work to make improvements. 94% of plants (of suppliers to Kao Corporation) fulfilled our environmental criteria. Kao also participates in the CDP SC program and requests that important suppliers respond to surveys. We evaluate the received responses by using our unique evaluation method, feed back the results to suppliers, and request that they make improvements to respond to climate change. Under Kao's unique evaluation method, we set CO2 reduction targets, build a structure to manage the status of progress, promote reduction activities, and further evaluate the implementation of advanced activities, such as the introduction of renewable energy.

Impact of engagement, including measures of success
・Method to measure engagement outcomes Monitoring CSR self-assessment and conducting surveys through the CDP SC program to identify the percentage of important suppliers who have set reduction targets ・Measures of success 95% or more supplier plants fulfill the criteria determined in CSR self-assessment monitoring. 80% or more of suppliers have set reduction targets as determined in surveys through the CDP SC program. ・Impact of engagement As a result of engagement based on monitoring as part of the CSR self-assessment, the number of plants that have achieved the environmental criteria in 2017 increased by 73 compared to 2016 (Kao supplier plants). As for the activities of important suppliers through the CDP SC Program, the number of suppliers who have set reduction targets in 2017 increased by 4% (9 companies) from 2016.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement
Education/information sharing

Details of engagement
Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number
91

% of customer - related Scope 3 emissions as reported in C6.5
44.23

Portfolio coverage (total or outstanding)
<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement
We are aware that the amount of CO2 emissions when products are used (category 11 of scope 3) accounts for 40% of the entire product life cycle. We are engaging in "eco together" activities with various stakeholders to reduce the environmental load when products are used, and such important stakeholders include customers. Since Japan accounts for approximately 70% of Kao sales, we deem it rational that we target purchasers and future purchasers of Kao products in Japan for such engagement. Specifically, we use environmentally-friendly products that reduce CO2 emissions or the amount of water consumed when they are used (such as clothing detergents and tableware detergents) to engage with customers. As engagement methods, we visit elementary and middle schools to give lectures, offer plant tours to students and general consumers, and participate in environmental events held by local governments and at stores. We further enhance engagement with customers by actively interacting with the users and customers of our products through our website and encourage them to take action for climate change through energy-saving, water-saving, and electricity-saving activities.

Impact of engagement, including measures of success
the impact of climate-related engagement strategy with your customers Of the total CO2 emissions through Kao products' entire life cycle (11,455 Kton-CO2), those when products are used (category 11 of scope 3) account for 39%. This means reducing greenhouse gas emissions by engaging with customers has a great impact on lowering CO2 output through the entire product life cycle. Thus, Kao has added the activity of engaging with customers, "eco together with customers," to the strategy to reduce its environmental burden. -description of measures of success We use the number of people we engaged, sales of environmentally-friendly products, etc., to measure the effect of our engagement. We engaged with 190,000 people in 2019 and with 1.42 million people since 2014, exceeding the target of 1.4 million people by 2019. In 2019. The ratio of sales of products with a low environmental burden that have cleared Kao's unique strict certification criteria in Japan was 27%, lower than the 29% of the previous year. This is attributed to some refill products not displaying a "eco together" logo even though they met the standards.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

We have confirmed that around 40% of CO2 emissions in the life cycles of Kao products are attributable to the stage of product usage (Scope 3, Category 11). Aiming to reduce environmental impact, we have been engaging in the "Let's eco together" activity with various stakeholders. Our business partners, including those in the distribution field, are important stakeholders.

Since many customers who use our products still purchase them in distributors' stores, we consider distributors to be important partners for engaging in climate change-related activities.

Kao held environmental events at 70 stores and administrative facilities in Japan in 2019 under a theme strongly related to climate change: "Saving electricity, saving water, and reducing trash." Approximately 40,000 people attended these events.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers
Trade associations

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify (Act on Promotion of Global Warming)	Support with minor exceptions	Kao actively cooperates with the Ministry of the Environment to promote policies related to the Act on Promotion of Global Warming Countermeasures in Japan. Specifically, the Ministry has been promoting a policy that encourages companies to calculate GHG emissions in the value chain. Kao supports this policy by releasing the calculation results for Scope 3 on the "Green Value Chain Platform" website run by the Ministry of the Environment.	Kao supports the policy that encourages companies to calculate GHG emissions in the value chain. However, we disagree with making the calculation and reporting compulsory. The main reason is because while the Ministry of the Environment provides the intensity to be used for such calculation, none is available for imported materials, for example; since Kao conducts business on a global basis, calculating emissions according to specific rules that apply only in Japan would be a significant burden.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association
Japan Chemical Industry Association

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Chemical industry provides highly-functional materials with society contributing to the reduction of the risks in society from climate change. ICCA, International Council of Chemical Associations, quantified the contributions and has addressed actions leading to contributions to society. As a part of that ICCA and WBCSD, World Business Council for Sustainable Development, draw up the guidelines for the contributions calculations.

How have you influenced, or are you attempting to influence their position?
Kao supports activities for measures pursuing total optimization based on "c-LCA (carbon-Life Cycle Analysis)" that the Japan Chemical Industry Association has developed and proposes both at home and abroad. In addition, Kao joined an LCA working group of the Japan Chemical Industry Association to participate in developing c-LCA analysis, providing examples of possible contributions to emission reduction based on the methodology. Kao in a member of Japan Chemical Industry Association, which is a board member of ICCA.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Some members of secretariat on Kao Responsible Care promotion Committee and Sustainability Committee attend several kinds of committees of Japan Chemical Industry Association as their members and update information on domestic and global strategies trend of government and industries. The secretariats check the consistency between Kao's strategies for climate change and JCIA's ones depending on its relevance.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In mainstream reports

Status
Complete

Attach the document
Kao yu-ho 2019.pdf

Page/Section reference
Strategy p13 Mid-term business plan Governance p14 Risks related to Kao's business Risks & opportunities p15 Risks related to responding to social issues Risks & opportunities p16 Risks related to major earthquakes, natural disasters, accidents, etc. Risks & opportunities p17 Risks related to extreme weather

Content elements
Governance
Strategy
Risks & opportunities

Comment

Publication
In voluntary communications

Status
Complete

Attach the document
klp-pr-2020-e-all.pdf

Page/Section reference
Governance P86 Decarbonization promotion structure Strategy P97-102 Decarbonization Risk&Opportunity P84 Risks and opportunities related to realization of our vision by 2030 Emissions figures & target P87-89 Mid- to long-term targets and performance

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

C15. Signoff

C-FI

(C-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.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	President and Chief Executive Officer	Chief Executive Officer (CEO)