Welcome to the CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

(C0.1) Please provide a brief description and introduction of your company.

Optex Co., Ltd. (hereinafter referred to as "the Company") provides the world's No. 1 niche products and services in fields such as crime prevention, automatic doors, and the environment with sensing technology that has been refined since its founding in 1979 and on-site capabilities that solve issues specific to the environment in which it is used and the workplace. Although the head office is located in Shiga, the overseas sales ratio is more than 70%, and sensors and related products are sold to more than 80 countries around the world.

The main products in each business field are as follows.
・SEC-related: intrusion detection equipment and systems, floodlights for surveillance cameras, access control systems, image sharpening devices, sensor lighting
・ETR (entrance): Automatic door and shutter activation and safety assistance devices
・Others: Vehicle detection equipment and systems, water quality measurement equipment, disaster prevention equipment and systems, IoT devices, occupancy and presence detection equipment, etc.

Consolidated net sales for 2022 were 23,484 million yen, and the results by business segment are as follows.
・SEC-related 12,210 million yen
・ETR-related 6,372 million yen
・Others: 4,902 million yen

Climate change is progressing in various regions and is expected to become more serious in the future.
Based on the TCFD guidance, we use a variety of external scenarios to analyze and identify significant strategic impacts from climate-related risks and opportunities in our business.

· Carbon taxes, increased financial costs due to tighter market regulations
· Business impact when manufacturing plants are at risk of flooding due to increased extreme weather
· Business impact of CO2 reduction activities and climate-related disclosure determined to be insufficient
· Impact of products and technologies that contribute to low-carbon and physical risk countermeasures

In light of these impacts, we have committed to the long-term goal of reducing CO2 emissions by 30% or more by 2030 (compared to 2018 levels).
In addition, we provide many products that lead to low-carbon and energy efficiency improvements at our customers (products that contribute to others). We believe that achieving both "increasing the amount of contribution to reduction" and "reducing CO2 emissions from business operations" will lead to an increase in corporate value, and in addition to the previous reduction target, we have also committed to the goal of "making contributions to others four times or more of all emissions."
Under the strong leadership of the Chief Executive Officer, we will actively promote activities to achieve our goals and continue to intensify actions and investments that will contribute to a sustainable future.

C0.2

(C0.2) Provide the start and end dates of the reporting period, as well as whether you want to provide emissions data for past reporting periods.

Reporting year

start date

January 1, 2022

End Date

December 31, 2022

Appears when filling in emissions data from past reports

Yes

Select the number of reporting years in the past to present for Scope 1 emissions data

4 years

Select the number of reporting years in the past to present for Scope 2 emissions data

4 years

Select the number of reporting years in the past to present for Scope 3 emissions data

4 years

C0.3

(C0.3) Select the country/region where your company operates.

Canada
China
France
India
Japan
Netherlands
Poland
Republic of Korea
Thailand
United Kingdom of Great Britain and Northern Ireland (United Kingdom)
United States

C0.4

(C0.4) In this disclosure, please select the currency you want to use for all financial information.

JPY Japan

C0.5

(C0.5) Select the reporting boundary of climate-related impacts on your business that you are disclosing. Please note that this option should match the methodology you have chosen to consolidate your GHG inventory.

Financial Management

C0.8

(C0.8) Does your organization have an ISIN code or another unique market identification ID (e.g., ticker, CUSIP, etc.)?

Please indicate if you can provide a unique ID for your company	Provide your company's unique ID
no	

C1. Governance

C1.1

(C1.1) Is there a board-level supervisory body for climate-related issues within the organization?

Yes

C1.1a

(C1.1a) What is the position of the person responsible for climate-related issues on the Board of Directors (do not include the names of individuals).

Individual/Committee Positions	Responsibility for climate-related issues
Chief Executive Officer	The Company has clarified that directors are responsible for managing and monitoring information on climate-related responses and making decisions on corporate actions. Specifically, we have established a meeting body for climate-related responses in which all directors participate (Business Strategy Council [at least once a year], Quality and Environmental Management Review [at least once a year]), and input and output information such as climate-related response information, activity progress, review of risks, opportunities, targets, and activities, etc. We operate with a clear intention that the decision-maker is the CEO.

C1.1b

(C1.1b) Please provide details on the Board's oversight of climate-related issues.

How often climate-related issues are on the agenda	Governance structures that incorporate climate-related issues	Please explain
Scheduled - some meetings	Deliberation and guidance of the annual budget Supervision of large capital expenditures Review of innovation/R&D priorities Strategy deliberation and guidance Oversee and guide transition planning Monitoring Migration Plan Execution Scenario analysis supervision and guidance Oversee corporate goal setting Monitor progress toward corporate goals	We have incorporated climate-related measures into our management strategy and have set CO2 reduction targets (30% or more reduction compared to 2018) toward 2030, milestone targets, and annual targets. Climate-related medium-term and annual policies (targets and plans) are decided by the Business Strategy Council held from September to October every year, and are disclosed to all employees as management policies at the beginning of the year. The Business Strategy Council is a meeting body that shares the progress of the transition plan and climate-related information with all directors, including the CEO, and decides on climate-related medium-term and annual policies (targets and plans) after deliberating on the scenario analysis that has already been conducted, the risk management process, and the need to review strategies. Last year, we deliberated on the consideration of renewable energy investment (consideration of installing solar panels at Group facilities, encouraging major manufacturing contractors), initiatives to reduce CO2 emissions (establishment of an Asia hub warehouse, paperless activities at the head office), and expansion of R&D investment in products that contribute to others (entrance field: control to prevent unnecessary opening of doors and shutters, etc.), and reflected them in the policy and budget. Since these climate-related responses are widely related to business, have a significant impact on budget execution, and require cooperation with stakeholders and cooperation with parent company Optex Group Co., Ltd., we launched a climate-related response project (carbon neutral project) under the direct control of the CEO. We are working to ensure the certainty of execution of each theme

	Overseeing Value Chain Engagement Deliberation and guidance of the risk management process	and to speed up necessary revisions. In addition, since the annual plan is from January to December, we aggregate and analyze actual results after the completion of the fiscal year, reconsider the need to review budgets and strategies at the Quality and Environmental Management Review in February of the following year, and seek guidance from all directors, including the CEO. As mentioned above, we have established a system in which climate-related measures are incorporated into the meeting body that forms the core of the business cycle, supervise, monitor, guide, and review them without fail, and in terms of execution, we promote them through dedicated projects (carbon neutral projects) under the strong leadership of the CEO.

C1.1d

(C1.1d) Does your company have at least one director who is familiar with climate-related issues?

	Directors have insight into climate-related issues	Criteria used to assess directors' insights on climate-related issues
Row 1	Yes	The Company has directors who are familiar with climate-related information who have been supervising divisions responsible for promoting and managing climate-related issues (grasping the Group's CO2 emissions, promoting the expansion of contributions to others, etc.) for more than 10 years. He also oversees the infrastructure management department and is responsible for the Carbon Neutrality Project, which the Company is currently promoting. This director is responsible for acquiring and grasping internal and external information, making it the knowledge of the organization and the content of disclosure to the outside, promoting climate-related issues in the Group, and is evaluated by the scores of external organizations. The directors are mainly responsible for the following: ・Regular access to external information on climate-related regulations, financial disclosures, renewable energy trends, etc. ・Contact with external collaborators on climate-related issues. ・Understanding the trends and status of climate-related activities by stakeholders. ・Viewing information deemed necessary to promote climate-related issues (trends and compliance with relevant laws and regulations, requests from stakeholders, evaluation results of external organizations such as CDP and MSCI, etc.) and participation in external lectures. ・Monthly monitoring of the progress of Group climate-related issues and the status of Group CO2 emissions. ・Communicating information and enlightenment to other board members. ・Confirmation and approval of climate-related information to be provided or disclosed to external parties.

C1.2

(C1.2) Which position or committee is responsible for climate change at the management level?

Position or committee

Safety, Health, Environment, and Quality Committee

Climate-related responsibilities in this role

Assessing Climate-Related Risks and Opportunities
Managing Climate-Related Risks and Opportunities

Scope of Liability

Reporting Line

Report directly to the Board of Directors

Frequency with which this reporting line reports climate-related issues to the Board

Once a year

Please explain

The Group's compliance and risk management is overseen by the Compliance Promotion Committee (hereinafter referred to as the "Committee"), which is under the direct control of the CEO of the parent company, Optex Group Co., Ltd. Directors of the Company participate as committee members, and the impact and scope of risks and opportunities in areas along the value chain (direct operations, upstream and downstream), such as "business operation and management strategy," "technology and product development," "production management," "quality," "sales," "information management," "compliance," "financial reporting," "governance of subsidiaries," "personnel and labor," and "accidents and disasters, etc." (Local, temporary) to "critical" (international and long-term), frequency (ranging from "very high" (annually) to "very low" (about once every 50 years)), and those that are expected to lose or spend more than 1% of budget, net assets and profits, and those that may interfere with the conduct of business even if they are not (international and long-term, The frequency is also high, etc.) to have a significant impact. In addition, the identification and impact assessment also takes into account the time axis (short, medium, and long term), confirms the current status of the identified items, the timing when the impact is expected to be large, and the relationship with the future business plan, clarifies the priority, and allocates issues.

Risk identification and assessment are conducted at least once a year, and after the Compliance Promotion Committee compiles the results of evaluations by the main departments in each area, evaluates the appropriateness of consideration and implementation, including consistency with company-wide processes, compiles the results into a "risk map," and disseminates them to the entire company after consulting with the Board of Directors.
As mentioned above, the Compliance Promotion Committee conducts activities that include a comprehensive review of risk management, and meets at least once every six months.
Climate-related risks, including short-, medium-, and long-term risks, are incorporated into this risk management process, and items that are judged to have a significant business impact are separately scenario analysis (RCP8.5, RCP4.5, IEA) of the characteristics and characteristics of our business and the expected climate-related impacts (transition risks and physical risks) of the products and services we provide in two and four cases (RCP8.5, RCP4.5, IEA NZE2050, etc.).

Position or committee

Chief Executive Officer

Climate-related responsibilities in this role

Managing annual budgets for climate mitigation activities
Provide climate-related employee incentives
Preparation of a climate transition plan
Incorporating climate-related issues into strategies
Conduct climate-related scenario analysis
Setting climate-related corporate goals
Managing public policy collaborations that can have climate impacts
Managing value chain collaboration on climate-related issues

Scope of Liability

Reporting Line

CEO Reporting Line

Frequency with which this reporting line reports climate-related issues to the Board

At least once a quarter

Please explain

We have incorporated climate-related measures into our management strategy, set CO2 reduction targets for 2030 (30% or more reduction compared to 2018 levels), and set medium-term and annual targets.
Climate-related medium-term and annual policies (targets and plans) are decided by the Business Strategy Council held every September and October, and are disclosed to all employees along with other management policies at the beginning of the year.
The Business Strategy Council determines the need to review strategies and targets based on CO2 emission trends throughout the Group's value chain, the current situation from the perspective of laws, regulations, and policies, and the risks and opportunities expected in future business promotion.
The progress of these activities is monitored quarterly by the CEO and directors, and the frequency of reporting is at least once a quarter, including deliberations on measures related to climate-related issues described below.
Last year, we deliberated on measures that lead to CO2 reduction, such as considering the installation of solar panels at Group facilities, establishing an Asia hub warehouse and paperless activities at the head office, and expanding R&D investment in products that contribute to expanding the amount of contributions to others, and reflected them in our policies and budgets.
In addition, we have a system to incentivize individuals, organizations, and projects that contribute to the achievement of management goals, and this incentive evaluation also covers climate-related measures that we have set as management goals.
Last year, we received incentives for carbon neutrality projects that were recognized for their achievements in positioning climate-related measures in governance, materializing measures to achieve long-term goals, and participating in CDP.

Position or committee

Head of Environment, Health and Safety

Climate-related responsibilities in this role

Implementing the Climate Transition Plan
Monitor progress against climate-related corporate goals
Managing value chain collaboration on climate-related issues

Scope of Liability

Reporting Line

CEO Reporting Line

Frequency with which this reporting line reports climate-related issues to the Board

At least once a quarter

Please explain

Our management strategy includes "development of corporate infrastructure," and we have set climate-related measures (carbon neutrality projects) as one of the elements of infrastructure development.
The progress of all "Company Infrastructure Improvement" activities is monitored quarterly by the CEO and Directors.
In addition, since the annual management plan is from January to December, the results are aggregated and

analyzed after the completion of the fiscal year, and the "Quality and Environmental Management Review" in the following February deliberates on the necessity of reviewing the budget and strategy, and the guidance of the CEO and directors is sought.

Position or committee

Division Manager

Climate-related responsibilities in this role

Capital expenditures/operating expenses related to low-carbon products and services (including R&D)
Managing public policy collaborations that can have climate impacts

Scope of Liability

Reporting Line

CEO Reporting Line

Frequency with which this reporting line reports climate-related issues to the Board

Once a year

Please explain

The Company has set the expansion of the amount of contributions contributed by others as a management issue, and has set targets of "more than four times the amount of contributions contributed by others to all emissions" and "increasing sales from products contributed by others to 22.5% of consolidated sales (2025)." The Business Strategy Council, which meets annually for each business unit, focuses on climate-related laws, regulations, and policy trends and the expansion of products and services that lead to opportunities, and makes it a process to clarify the effects of contributions to others in the planning of each product. 77% (210,000
t-CO2) of our contribution to others (250,000 t-CO2) is accounted for by automatic door shutter sensors equipped with waste-opening prevention control. Last year, in our business strategy in the entrance field that handles these products, we formulated a plan to increase the composition ratio of products that contribute to others in addition to expanding sales in order to achieve 1 million t-CO2 contributions to others.

C1.3

(C1.3) Do you provide incentives for managing climate-related issues, including achieving goals?

	Awards incentives for the management of climate-related issues	comment
Row 1	Yes	

C1.3a

(C1.3a) Be specific about the incentives offered for managing climate-related issues (but do not include the names of individuals).

Eligibility for incentives

All employees

Types of incentives

Financial Rewards

incentive

Bonus – a fixed amount of money

Performance metrics

Achievement of climate-related targets

Incentive plans that this incentive is associated with

Short-term incentive plan

Additional information about incentives

We have a system to reward individuals, organizations, and projects that contribute to the achievement of management goals and the steady implementation and results of management and operational policies. The amount of compensation is determined by the CEO based on an evaluation of overall performance. (Conducted annually)
Last year, we promoted the positioning of climate-related measures in governance, the realization of measures to achieve long-term goals, participation in CDP, etc., and received rewards under this system for carbon neutrality projects that were recognized for their results.

Describe how incentives contribute to your company's climate commitment and/or the implementation of the climate transition plan

These incentives are related to our initiatives such as achieving our long-term goal of reducing CO2 emissions by 30% or more by 2030 compared to 2018, improving climate-related disclosure, and increasing sales of products that contribute to others to 22.5% of consolidated net sales (2025).

Eligibility for incentives

director

Types of incentives

Financial Rewards

incentive

Bonus – a fixed amount of money
salary raise

Performance metrics

Achievement of climate-related targets

Incentive plans that this incentive is associated with

Short-term and long-term incentive plans

Additional information about incentives

Our management strategy is to improve our corporate infrastructure. In addition to operational reforms, SCM reforms, manufacturing capability improvement, and personnel and education reforms, we have established climate-related measures (carbon neutrality activities). Each maintenance activity is promoted by a director who is responsible for each maintenance activity, and the department under the direct control of each director plays a central role, and the chief executive officer (CEO) monitors the progress of the activity on a quarterly basis.
Every February, we evaluate each maintenance activity according to the achievement status of the annual plan, and this is directly linked to the closing bonus.
In addition, the results of management issues, including infrastructure development, are linked to grades and points in the personnel system, and directors are motivated by expanding the dynamic range of points awarded when achieved/not achieved. This is a system that leads to long-term remuneration and provides incentives for directors.

Describe how incentives contribute to your company's climate commitment and/or the implementation of the climate transition plan

By incorporating climate change response (carbon neutrality activities) into our management strategy and incorporating it into our compensation system, including our personnel system, we will not only set a long-term goal of reducing CO2 emissions by 30% or more by 2030 (compared to 2018 levels), but also promote measures and investments within the Group to expand sales of products contributed to others to 22.5% of consolidated net sales (2025). Tangible results are beginning to be seen, such as achieving interim targets ahead of schedule.

We will also strive to achieve the long-term goal and believe that it will contribute to future activities with a view to a world view of 1.5°C.

C2. Risks and Opportunities

C2.1

(C2.1) Does your organization have processes in place to identify, assess, and respond to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How do you define short, medium, and long-term time perspectives?

	Start (year)	End (year)	comment
short term	0	1	Based on the three-year medium-term management plan, we have clarified the issues and targets to be tackled for the year, and linked performance, evaluation, and salary.
metaphase	1	3	The Company has formulated a three-year medium-term management plan, with a three-year medium-term period.
long-term	3	8	The Company has set a long-term management goal of reducing CO2 emissions by 30% or more by 2030 (compared to 2018 levels). We identify risks and opportunities based on scenario analysis, backcast from the assumed form through these analyses, and strive to align them with issues and targets in the medium- and short-term time horizons.

C2.1b

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

The Company identifies and evaluates serious risks that may impede business execution from all areas, including business operations and strategies, technology and product development, production management, quality, sales, information management, compliance, financial reporting, subsidiary governance, etc., personnel and labor, and accidents and disasters, and embodies responses in a risk map. By continuously responding to and monitoring these risks, we control risks for the entire Group, and those that are expected to lose or spend more than 1% of budget, net assets, and profits, not limited to short, medium, and long-term, have a significant impact. In addition, even if the financial impact does not exceed 1% of the budget, net assets or profits, if the item may interfere with business operations (widely and likely to occur) in terms of the scope of the impact (from "minor" (local and temporary) to "significant" (international and long-term) and the frequency of the impact (from "very high" (annually) to "very low" (about once every 50 years)), It is said that there will be a significant impact after consulting with the Board of Directors.

C2.2

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

Stages in the value chain covered

Direct operation
upper reaches
downstream

Risk Management Process

Integration into multi-specialized, enterprise-wide risk management processes

Frequency of evaluation

Multiple times a year

Target timeframe

short term
metaphase
long-term

Process details

The Group's compliance and risk management is supervised by the Compliance Promotion Committee, which is under the direct control of the CEO of the parent company, Optex Group Co., Ltd. Directors of the Company participate as committee members and discuss the impact and scope of risks and opportunities in areas along the value chain (direct operations, upstream and downstream) such as "Business Operations and Management Strategy," "Technology and Product Development," "Production Management," "Quality," "Sales," "Information Management," "Compliance," "Financial Reporting," "Governance of Subsidiaries," "Human Resources and Labor," and "Accidents and Disasters," etc. Local, temporary) to "critical" (international and long-term), frequency (ranging from "very high" (annually) to "very low" (about once every 50 years)), and those that are expected to lose or spend more than 1% of budget, net assets and profits, and those that may interfere with the conduct of business even if they are not (international and long-term, The frequency is also high, etc.) to have a significant impact. In addition, the identification and impact assessment also takes into account the time axis (short, medium, and long term), confirms the current status of the identified items, the timing when the impact is expected to be large, and the relationship with the future business plan, clarifies the priority, and allocates issues.

Risk identification and assessment are conducted twice a year (July and December of each year), and after the Compliance Promotion Committee compiles the evaluation results by the leading departments in each area, evaluates the appropriateness of consideration and implementation, including consistency with company-wide processes, compiles the results into a "risk map," and disseminates them to the entire company after consulting with the Board of Directors.
As mentioned above, the Compliance Promotion Committee conducts activities that include a comprehensive review of risk management, and meets at least once every six months. Climate-related risks, including short-, medium-, and
long-term, are also incorporated into this company-wide risk management process, and items that are judged to have a significant business impact in the risk assessment are separately scenario analysis of the characteristics and characteristics of our business and the expected climate-related impacts (transition risks and physical risks) of the products and services we provide (RCP8.5, RCP4.5, IEA NZE2050, etc.)

C2.2a

(C2.2a) What types of risks are considered in your organization's climate-related risk assessment?

	Relevance and inclusion	Please explain
Current regulations	Relevant and always included in ratings	We are subject to economic regulations such as the Global Warming Countermeasure Tax and the Containers and Packaging Recycling Act, the Waste Disposal Law, and the Fluorocarbon Emission Control Act in our business operations, and we recognize that current regulations are one of the related risks. We recognize the rise in product costs as risks in economic regulations such as the Global Warming Countermeasure Tax, and changes in the composition of usable materials (including packaging-related materials) and increases in recycling and disposal costs in laws and regulations that should be applied to products and services. The current level of regulations and applicable laws and regulations do not have a significant impact on our business or finances.
New regulations	Relevant and always included in ratings	We recognize that the introduction of new regulations is one of the risks related to business conduct. Here are some specific examples: • Although the carbon tax rate in Japan is at a low level compared to Europe and other countries, which is actively engaged in carbon neutrality, the movement for decarbonization, including the public and private sectors, has become active in response to the declaration of carbon neutrality in 2050, and further tax rates are likely to be raised in the future. As a result, it may be affected by higher product costs and increased financial burdens. • If regulations prohibiting the use of single-use plastic products are introduced and this affects the packaging materials of our products, the switch to alternative materials may increase product costs. • The EU's Border Carbon Adjustment Mechanism (CBAM) is scheduled to take effect from 1 October 2023. Only those whose production is carbon-intensive and have a high risk of CO2 emissions are covered, but there may be financial consequences even indirect. • If our products are subject to the EU Ecodesign Directive (ErP Directive) and it becomes necessary to further reduce standby power, there may be a financial impact due to the incurrence of response costs, or if we cannot comply with them, we may not be able to sell them, resulting in a decrease in sales.
technology	Relevant and always included in ratings	The sensors we mainly sell in the entrance field are mainly used to control the activation of doors and shutter openings and closing of buildings and safety aids. With the growing demand for ZEB and NearlyZEB, there is a need to realize more accurate and lean opening and closing control. Green building is becoming increasingly profitable and desirable as the demand for sustainable building options increases, especially in Europe and the United States, and green building evaluations that focus on the design and construction of sustainable buildings are becoming increasingly important. The sensor detects when a person or detection target enters an automatic door or shutter, but if a person or detection target can cancel a person or detection target that simply crosses the building unintentionally, the decrease in air conditioning efficiency can be suppressed, contributing to the reduction of CO2 emissions. There is a possibility of a decrease in sales if the technological superiority in terms of contribution to reduction is inferior to that of competitors, and an increase in technology development costs (financial impact) due to delays in the introduction and deployment of technology.
legal	Relevant and always included in ratings	If it is judged that the disclosure of information on climate change response, including the calculation and disclosure of CO2 emissions, or the reflection of information in business strategies is insufficient, or if false information is provided to investors, etc., lawsuits may be filed. In addition, we recognize that non-compliance with applicable tax systems and laws and regulations related to climate change may lead to similar risks in the worst case.
market	Relevant and always included in ratings	In the EU, where energy consumption in the building sector accounts for 40%, energy efficiency improvements in buildings are being actively pursued. Since the enactment of the directive, energy efficiency has come to affect the sale and rental price of buildings, and it is no exaggeration to say that our sensors (automatic door and shutter activation sensors) that control the opening and closing of building openings affect the energy efficiency of buildings,

		and they cannot be underestimated. As the demand for sustainable building options increases, the demand for sensors with lean open/close control may increase. While more advanced technological development is required, if it becomes difficult to pass on price increases due to intensified competition with competitors, it may affect our business. As shown in the example above, the sensors that we mainly sell are embedded in the system and used, and if the target system requires strengthening efforts to reduce GHG emissions, the technology, sales availability, and speed of response to these sensors may also affect our business.
reputation	Relevant and always included in ratings	As the demand for quantitative assessment and disclosure of ESG and climate change initiatives, such as CDP and MSCI, increases, an increasing number of investors and customers rely on these as a basis for investment decisions. Companies that do not participate in these may be excluded from consideration. In addition, if you participate but do not have a good score or results, it may be difficult to be preferentially selected by stakeholders, including investors and customers, and it may have a significant impact on your business, including difficulty in raising funds.
Physical risks of urgency	Relevant and always included in ratings	We recognize urgent physical risks as one of the risks related to our business. Comparing the daily precipitation in Japan Japan in the last 30 years (1977~2006) and the early 30 years of the 20th century (1901~1930), the number of days of 100 mm or more is about 1.2 times higher, and the number of days with 200 mm or more is about 1.4 times, and the number of very strong tropical cyclones with maximum wind speeds exceeding 45 m/s is also increasing. Even in China, where about 40% of our products are manufactured (based on procurement value), the average temperature increased by 0.24°C every 10 years from 1951 to 2019, which is higher than the world average. In addition, according to the "China Climate Change Bluebook (2022)" released by the China Meteorological Administration, the average annual rainfall from 1961 to 2021 is also on the rise. It has increased by 5.5 mm every 10 years, and has been increasing continuously since 2012. In particular, Guangdong Province, where our plant is located, accounts for about half of the typhoons that made landfall in China, and half of the typhoons that formed after 1949 are concentrated after 2000. As a result, annual rainfall exceeds 2,000 mm, and rainfall tends to be concentrated from April to June (accounting for about half of the annual rainfall). If these impacts worsen, increase in frequency, or become chronic, floods or landslides occur in the production areas of our main products, leading to the inability to operate, our business may be severely affected.
Chronic physical risks	Relevant and always included in ratings	In addition to acute physical risks such as disasters caused by abnormal weather, we recognize chronic physical risks as one of the risks related to our business. In recent years, we have expanded our provision of comprehensive solutions that include not only the sale of goods but also construction design support, construction and subsequent maintenance services, and we have also assigned a team dedicated to construction and maintenance. As an example of a chronic physical risk, the risk of heat stroke may increase due to the increase in extremely hot days. It is said that the number of people transported for heat stroke will double by the end of this century even if strict measures against global warming are taken, and that it will increase by 4-6 times by the end of this century if strict measures against global warming are not taken. We handle a large number of outdoor security equipment and outdoor disaster prevention lighting, and if the heat stroke response to the construction and maintenance personnel is inappropriate, the physical body of the personnel and the provision of services to customers may be affected.

C2.3

(C2.3) Have you identified any inherent climate-related risks that could have a material financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of the risks identified as having a significant financial or strategic impact on your business.

ID

Risk 1

Where in the value chain do risk factors arise?

Direct operation

Types of risks and key climate-related risk factors

New regulations
Carbon Pricing Mechanism

Key Financial Potential Impacts

Increase in overhead (operating expenses)

Description of company-specific content

We have set long-term targets for 2030, so we are analyzing the impact of carbon pricing until 2030.
The Group's Scope 1 and Scope 1 CO2 emissions are 982 t-CO2 (2022 market standard), and the composition ratio is 33.5% for Scope 1 (329 t-CO2) and 653 t-CO2 for 66.5% for Scope 2.
By facility, the head office of Japan had the highest Scope 2 emissions at 456 t-CO2, accounting for approximately 70% of the Group's Scope 2 (*456 t-CO2/653 t-CO2 = 0.698 → approximately 70%) and approximately 50% of Scope 1 and 2 (*456 t-CO2/982 t-CO2 = 0.464 →approximately 50%). This is because the head office owns and uses many evaluation facilities necessary for design and development.
Although the carbon tax rate in Japan is at a low level compared to Europe and other countries, which are aggressive, the movement for decarbonization, including the public and private sectors, has become active following the declaration of carbon neutrality in 2050, and if the tax rate is raised in the future, it may affect profits.
In the EU, the Border Carbon Adjustment Mechanism (CBAM) is scheduled to come into effect from October 1, 2023. Only those whose production is carbon-intensive and have a high risk of CO2 emissions are covered, but there may be financial consequences even indirect.
According to IEA NZE 2050, the future carbon price per ton is set at USD 75 for developed countries, USD 45 for emerging and developing countries in 2025, and USD 130 and USD 90 in 2030, respectively. Our company, which has bases in Japan and overseas, calculates the impact of carbon pricing based on the assumption that the global carbon price in 2030 will be uniformly 10,000 yen/t-CO2.

Temporal perspective

metaphase

possibility

Likely

Degree of impact

Medium~low

Is it possible to provide a potential financial impact?

Yes, a single estimate

Potential financial impact (currency)

9,536,000

Potential Financial Impact – Minimum (currency)

Potential Financial Impact – Maximum (currency)

Explanation of financial impact

Our own emissions (Scopes 1 and 2) in fiscal 2022 are approximately 982 t-CO2.
If the carbon tax is set at 10,000 yen/t-CO2 (*1), the annual tax burden will increase by 9.82 million yen (*2).
*1: The carbon price per ton envisaged by IEA NZE 2050 is assumed to be 75 US dollars in developed countries, 45 US dollars in emerging and developing countries, and 10,000 yen/t-CO2 at Japan yen, taking into account 130 US dollars and 90 US dollars in 2030, respectively. *2: 10,000 yen in 2030 / t-CO2×982t-CO2 - current carbon tax 289 yen / t-CO2 ×982t-CO2 = 9,536,202 yen ≈ 9,536,000 yen

Risk response costs

18,000,000

Explanation of response and cost calculation

Situation:
If new carbon tax regulations are enacted, there is a risk that the increased tax burden will affect revenues.
Issue: Of the Group's
Scope 1 and 2 emissions (982 t-CO2: market standard) in 2022, approximately 50% (456 t-CO2) is emitted from the head office (Japan). Since electricity (Scope 2) accounts for more than 90% of CO2 emissions at the head office, the reduction of electricity and the
procurement of renewable energy at the head office are important in achieving the Group's CO2 reduction target of reducing CO2 emissions by 30% or more by 2030 (compared to 2018).
On the other hand, Scope 1 (329 t-CO2), which accounts for 33.5% of the Group's CO2 emissions, is emitted from overseas facilities, so overseas facilities are tasked with controlling gasoline consumption.
With regard to the aforementioned reduction of electricity consumption at the head office, we have been gradually implementing high-efficiency air conditioning and LED lighting equipment since 2019 by considering measures such as controlling electricity consumption, renewable energy, and energy-saving capital investment, but we recognize that it is an issue to make short- and medium-term plans more concrete with a view to achieving long-term targets.
Action:
While addressing climate change is at the core of the company's strategy, the CEO issued instructions for launching a carbon neutrality project and developing a plan to achieve its long-term goals.
Activities in fiscal 2022 are as follows.
・Formulation of a plan toward the goal of reducing CO2 emissions by 30% or more by 2030 (compared to 2018)" (based on the Group's emission trends, plans to convert domestic facilities to renewable energy, energy-saving capital investment (head office evaluation equipment),
and switch overseas facilities to low-carbon vehicles and EVs), and to convert company vehicles to low-carbon vehicles and EVs at overseas facilities. The number of company vehicles at some overseas facilities decreased.
・Moved some overseas bases to small offices.
・Changed the power menu of the Tokyo Branch. (May 2022~)
・In the short and medium term, 20 million yen was recorded as solar panel installation costs at the head office and one domestic subsidiary.
・In the long term, we will formulate an energy-saving capital investment plan by 2030 and record 40 million yen.

【Results】
In FY2022, we changed the power menu at domestic facilities (Tokyo Branch) (May 2022~) [-6t-CO2/year], converted company vehicles to low-carbon vehicles and EVs at overseas facilities (1 unit in the UK, 2 units at the Netherlands base) [-27t-CO2/year], decreased the number of company vehicles at some overseas facilities (Korea base) [-6t-CO2/year], Moving to a small office (Korea base) [-6t-CO2/year] and other reduction measures were taken, resulting in a reduction of -142t-CO2 (*: 982t-CO2[2022]-1,124t-CO2[2021]) according to market standards. CO2 reduction is progressing smoothly, but in consideration of the increase in CO2 emissions associated with the normalization of social and economic activities from the coronavirus pandemic and the impact of the CO2 conversion factor of contracted electricity at the head office, we plan to install solar panels at the head office and one facility in Japan, replace the evaluation equipment with eco-friendly, and

hybridize domestic company vehicles, and will promote it from the next fiscal year onward. (We expect to reduce CO2 emissions by approximately 100 t-CO2 based on plans for the next fiscal year and beyond.)

【Countermeasure costs and breakdown】
In fiscal 2022, we spent 18,000 thousand yen (1,500 thousand yen / month / person × 6 people × 2 months) for carbon project activities.

comment

ID
Risk 2

Where in the value chain do risk factors arise?
upper reaches

Types of risks and key climate-related risk factors
Chronic physical risks
Other, please specify
Changes in precipitation patterns and types (rain, hail, snow/ice)

Key Financial Potential Impacts
Decreased sales due to lower production capacity

Description of company-specific content
We also conduct impact analysis using RCP8.5, which is expected to show significant impact from physical risks. According to RCP8.5 (4°C scenario), the forecast for the end of the 21st century based on the end of the 20th century is that the flood frequency will be 4 times, rainfall will increase 1.3 times, and the flow rate will increase 1.4 times. In Japan the last 30 years (1977~2006) and the early 30 years of the 20th century (1901~1930), the number of days of 100 mm or more has been about 1.2 times the number of days and the number of
days of 200 mm or more has been about 1.4 times, and the number of very strong tropical cyclones with maximum wind speeds exceeding 45 m/s is also increasing. According to the Ministry of Education, Culture, Sports, Science and Technology, the number of rivers that exceeded flood risk waters increased by about five times in 2014 → 2018, and since 1970, the top wind and flood damage insurance has been concentrated in the last 10 years.
Even in China, which manufactures about 40% of the Group's sales (based on procurement value), the average temperature in 2021 was 0.97°C above the average value of the previous year, the highest since 1901, and the average precipitation has been on an increasing trend from 1961 to 2021, increasing by 5.5 mm every 10 years. (China Climate Change Bluebook (2022))
In particular, Guangdong Province, where our product manufacturing contractor is located, accounts for about half of the typhoons that made landfall in China, and half of the super typhoons since 1949 have occurred since 2000. Annual rainfall exceeds 2,000 mm, and rainfall tends to be concentrated from April to June (accounting for about half of the annual rainfall).
If floods or landslides occur due to these effects, and manufacturing contractors in Guangdong Province, which account for about 40% of the Group's sales, become unable to operate, we take up the risk that this could have a significant impact on our business.

Temporal perspective
metaphase

possibility
About 50% chance

Degree of impact

high

Is it possible to provide a potential financial impact?

Yes, a single estimate

Potential financial impact (currency)

1,764,000,000

Potential Financial Impact – Minimum (currency)

Potential Financial Impact – Maximum (currency)

Explanation of financial impact

In the event of floods or landslides in the production areas of major products due to abnormal weather, which could have a significant impact on the business, the company in charge of manufacturing in the Optex Group launched a project (project name: M.S4.0) with all directors to optimize the allocation of production areas. We are promoting activities to increase the ratio of products procured from 6% (2022) to 16% by 2025.

We diversify our product procurement sources from the viewpoint of BCP and supply to customers. We do not anticipate that our four major plants (1 in China, 2 in Japan, and 1 in Vietnam) will be affected by abnormal weather at the same time, and we consider the impact on the Guangdong Plant in China, which produces approximately 40% of the Group's sales, as the greatest risk. In 2022, the equivalent value of products procured from the "Guangdong, China" plant was 8,819 million yen.
The financial impact of the same scale and the two-month outage of operations will be 8,819 million yen / 12 months × 2 months = 1,764 million yen.

Risk response costs

1,500,000

Explanation of response and cost calculation

Situation:
If abnormal weather causes floods or landslides in the main production areas of our products (China, Japan, Vietnam), resulting in the inability to operate, our business may be severely affected.
【Challenge】
We outsource about 40% of the total procurement amount to four factories in the three regions of "Guangdong, China", "Japan (Shiga and Fukui)", and "Hanoi, Vietnam", and the largest procurement is from "Guangdong, China" (42%), with the procurement amount in 2022 being 8,819 million yen. The risk is highest if the operation of the "
Guangdong, China" plant is disrupted, and if the operation is suspended for about two months, more than 10% of sales may be affected. In addition, when production is diverted to other plants, the supplier's parts procurement ratio affects the feasibility, and in addition, the acceleration of the shift to electric vehicles may further exacerbate the difficulty of parts procurement itself.
For this reason, we believe that it is necessary to reduce the ratio of product procurement from the Guangdong plant in China and to actively procure parts locally at the transition destination.
【Action】
・ Together with Optex Mfg, an operating company in charge of manufacturing within the Optex Group, we launched a project (project name: M.S4.0) in which all directors participate in order to optimize the allocation of production areas.
・ Conducted a field survey to grasp the possibility and appropriateness of increasing the product procurement ratio from Hanoi, Vietnam. We conducted audits of suppliers for each attribute of parts and parts that can be procured locally.
・In order to promote these activities, we hired one local staff member. ・ In line with the goal of increasing the product procurement ratio from Hanoi, Vietnam from the current 6% to

16% and the local procurement ratio of parts (on a monetary basis) from the current 10.8% to 31.8% by 2025, we decided on candidates for local suppliers (molded products, printed circuit boards, harness suppliers) for relocating to Hanoi, Vietnam, and reflected this in the short- and medium-term plan.
・From the next fiscal year, in order to strengthen the promotion and control of this issue at the practical level, we have decided to establish a "Vietnam Transfer Project" under the "M.S 4.0 Project" consisting mainly of directors.
【Results】
In fiscal 2022, we will show results based on the production area allocation optimization concept, system development, and planning and finalization.
From the next fiscal year, we judge that it is unlikely that local activities (China and Vietnam) will be restricted due to the new coronavirus infection, so we will further promote activities in accordance with the plan formulated in the project structure, increase the product procurement ratio and local procurement ratio, and reduce the risk of abnormal weather.
【Countermeasure Costs and Breakdown】
Expenses incurred in FY2022 are personnel expenses for the following project activities.
Project personnel cost: 1.5 million yen (*Personnel cost 1.5 million yen / person ×0.1 months ×10 people)

comment

ID
Risk 3

Where in the value chain do risk factors arise?
downstream

Types of risks and key climate-related risk factors
reputation
Increased stakeholder concerns or negative stakeholder feedback

Key Financial Potential Impacts
Lower sales due to lower demand for goods and services

Description of company-specific content
If investors and customers are judged to be inadequate in responding to climate change, there is a risk of a decline in stock prices and sales due to a decline in valuation. With an overseas sales ratio of 70% or more, we believe that our valuation has a very high impact on our stock price because we often provide our products to Europe and the United States, where there is a high level of interest in climate change initiatives. Some companies require information related to responses to CDP questionnaires, and if their emission reduction activities are insufficient or if the introduction of environmentally friendly or low-energy products to the market is delayed, they may be excluded from the transaction or the stock price of its parent company, Optex Group Co., Ltd., may decline.

Temporal perspective
metaphase

possibility
More than 50% of the time

Degree of impact
Medium~low

Is it possible to provide a potential financial impact?
Yes, a single estimate

Potential financial impact (currency)

678,000,000

Potential Financial Impact – Minimum (currency)

Potential Financial Impact – Maximum (currency)

Explanation of financial impact

If the number of issued shares of Optex Group Co., Ltd., the parent company, is calculated at the final closing price of 1,796 yen in 2022, the market capitalization will be slightly about 67.8 billion yen, and there is concern that a 1% decline in the stock price due to a decline in reputation will lead to a decline in corporate value of 680 million yen (*1). *1: 37,735,000 shares ×1,796 yen/share×0.01=677,720,600 yen ≈ 678,000,000 yen

Risk response costs

25,300,000

Explanation of response and cost calculation

Situation:
As the evaluation and disclosure of ESG and climate change initiatives increases, investors and customers are increasingly emphasizing these as factors for their investment decisions. If investors and customers are judged to be inadequate in responding to climate change, there is a risk of a decline in stock prices and sales due to a decline in valuation. With an overseas sales ratio of 70% or more, we believe that our valuation has a very high impact on our stock price because we often provide our products to Europe and the United States, where there is a high level of interest in climate change initiatives.
In recent years, some companies have requested information related to responses to CDP questionnaires, and if their own emission reduction activities are insufficient, or if the introduction of environmentally friendly and low-energy products to the market is delayed, it is assumed that they may be excluded from transactions or the stock price of its parent company, Optex Group Co., Ltd., may decline.

Challenge: A
1% decline in stock prices due to reputational decline could reduce corporate value by approximately 680 million yen, so we believe that the following is necessary to avoid risks.
・Position climate-related measures at the top of our management strategy, and set long-term targets in line with international agreements, our future business, and CO2 emission trends.
・ Develop a climate change response plan to achieve the long-term goals and disclose necessary and appropriate information.
・ Look at the entire value chain and share and collaborate with stakeholders.

【Action】
We have decided to launch a project under the direct control of the CEO (Carbon Neutrality Project) and are proceeding with our activities. Within the project, three teams have been organized: (1) carbon reduction, (2) carbon measurement, and (3) carbon information disclosure, and the main activities in fiscal 2022 are as follows.
[(1) Carbon reduction]
・Consideration of in-house reduction (consideration of installation of solar panels at the head office and subsidiaries within the group)
・ Change of head office electric power company / introduction of new evaluation equipment, consideration of energy conservation at the time of renewal and introduction of carbon pricing, sharing climate-related activities with partner factories (in Japan), joint consideration of solar panel installation
[(2) Carbon measurement]
・ Development of masters and models for CO2 aggregation
・ Development of framework for Scope 1 and 2 input and visualization within the group
・ Participation in CDP2022, B score obtained

[(3) Carbon information disclosure]
・ Expanded climate-related pages on HP (CO2 emissions, activity results, targets, Addition of simulation of contributions to others)
[Countermeasure cost and breakdown]
Countermeasure costs for FY2022 are 3,300 thousand yen for projects that include obtaining the cooperation of experts when participating in CDP, 4,000 thousand yen for enhancing climate-related information disclosure on the website, carbon neutrality project activity expenses (consideration of solar panel installation, introduction of new evaluation equipment, We spent 18,000 thousand yen (1,500 thousand yen/month/person× 2 months ×6 people) for the introduction of carbon pricing at the time of renewal, sharing climate-related activities with partner factories and jointly considering the installation of solar panels, and developing a framework for Scope 1 and 2 input and visualization within the Group.
The total cost of the measures is 25,300 thousand yen (3,300 thousand yen + 4,000 thousand yen + 18,000 thousand yen).

comment

In the short and medium term, we expect 2% (8,624 thousand yen) of the 431,200 thousand yen for the project to standardize the Group's business management infrastructure from 2018 to build a system for consolidated business reform and management visualization, and 1,060 thousand yen for external verification of CO2 emissions as climate change response expenses.

C2.4

(C2.4) Have you identified climate-related opportunities that could have a significant financial or strategic impact on your business?

Yes

C2.4a

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

ID

Opp1

Where in the value chain do opportunities arise?

Direct operation

Types of opportunities

Products and Services

Key climate-related opportunity drivers

Development and/or expansion of low-emission products and services

Key Financial Potential Impacts

Increased sales due to increased demand for goods and services

Description of company-specific content

Since many of the products we sell are installed and used in buildings, we also analyze the impact of decarbonization of buildings by 2030. According to IEA NZE 2050, buildings in many developed countries will have a long lifespan, with about half of existing buildings remaining in 2050, but energy efficiency improvements and electrification will reduce CO2 emissions by more than 95% between 2020 and 2050.
We provide sensors equipped with functions to prevent unnecessary opening of automatic doors and shutters at building openings (product names: "eSmooth Sensor" and "OAM-Explorer", as well as "activation sensors" and "various touch switches" that are expected to be equivalent to these). * Sales of "sensors equipped with

functions to prevent unnecessary opening of automatic doors and shutters in building openings," which was 914 million yen in 2021, increased by 19.2% in 2022 to 1,089 million yen. As a result, the contribution of sensors equipped with functions to prevent unnecessary opening of automatic doors and shutters at building openings increased from 186.9 t-CO2 (2021) to 210.8 t-CO2 (2022) (12.8%).
In particular, in the EU, where energy consumption in the building sector accounts for 40%, the Directive on the Energy Performance of Buildings (2002/91/CE & 2010/31/EU directives) has come into force, and the sale and rental price of buildings is influenced by energy efficiency. We expect to be able to expand the demand for our sensors as buildings become greener.
The growing demand for energy efficiency improvements is also an opportunity to expand sales of our other third-party products (e.g., LED solar sensor lighting and IoT-related devices that enable remote monitoring).

Temporal perspective

long-term

possibility

Likely

Degree of impact

high

Is it possible to provide a potential financial impact?

Yes, a single estimate

Potential financial impact (currency)

164,000,000

Potential Financial Impact – Minimum (currency)

Potential Financial Impact – Maximum (currency)

Explanation of financial impact

We view the growing interest in low-carbonization in the market as an opportunity to expand demand for products that contribute to others, and we are promoting activities with the management goal of increasing the ratio of products that contribute to others (*1: 2021 results) to 22.5% in consolidated net sales by 2025.
Our contributing products include sensors equipped with functions to prevent unnecessary opening of automatic doors and shutters in building openings, sensor LED lighting with solar, IoT-related devices that realize remote monitoring, etc., and in fiscal 2021, we sold 354,000 products that contributed to others, net sales were 4,012 million yen, and the amount of contributions to others was 248,000 t-CO2. Toward the 2025 target, assuming an annual increase of 0.7 percentage points in consolidated net sales, the impact in fiscal 2022 is 164 million yen (*2), calculated as the impact of sales of the same scale. *1: 4,012 million/20,172 million ≈ 20% from 4,012 million yen in net sales of products contributing to others and consolidated total sales of 20,172 million yen in 2021*2: The impact of FY2022 is calculated by multiplying the 2021 sales ratio of products contributing to others by 20% + 0.7 ≈ 20.7% and consolidated sales of 20,172 million yen in 2021 by 4,176 million yen (20,172 million yen×0.207) minus 4,012 million yen in 2021 to 164 million yen (4,176 million yen - 4,012 million yen)

Cost of realizing the opportunity

10,000,000

Describe strategies and cost calculations to realize opportunities

Situation: The demand for low-carbon and energy-efficient products and services is increasing. According to IEA NZE 2050, CO2 emissions will be reduced by more than 95% from 2020 to 2050 due to improved energy efficiency and electrification, and demand for products and services that contribute to these is expected to increase in the future.

Many of the products we provide are installed in buildings, and with the enforcement of the Directive on Energy Performance of Buildings (2002/91/CE & 2010/31/EU directives) and the activation of green building evaluations, we are receiving an increasing number of inquiries and inquiries from our customers.
【Challenge】
In order to take advantage of this opportunity, we place importance on (1) expanding products that contribute to others that customers can use to reduce CO2 emissions, and (2) communicating in an easy-to-understand manner the relationship between energy efficiency improvements and low-carbon products and services required by customers.
【Action】- In order to actively promote the expansion of products that contribute to others, we have been continuing this activity by adding consideration of contributions to others to the "Environmental Assessment" conducted at the new product development stage since June 2020. - In the entrance field, the Company decided to increase the composition ratio of automatic doors and shutter sensors equipped with waste-opening control and aim to increase the contribution of these cameras to others from 210,000 t-CO2 to 1 million t-CO2 by 2030. In response to this, we are reflecting this in our business plan and product roadmap. - We have various products that contribute to others, such as "battery operation of sensors = 0 power consumption" in the crime prevention field, "LED lighting equipment + sensor + solar = 0 power consumption" in the domestic solution field, "automatic door and shutter waste opening control = improvement of air conditioning efficiency" in the entrance field, and "realization of remote monitoring by IoT = unnecessary dispatch control (gasoline suppression)". In order to convey this information to all customers in an easy-to-understand manner, in 2022, we released a dedicated page on our website titled "If you accumulate niches, you will become a mountain." In addition to our intention to respond to climate change, we have set up animation videos of major low-carbon contribution products and physical risk countermeasure products, simulations of the amount of reduction contributions, etc. - Also in 2022, we launched a free download of a data booklet summarizing these sustainability solutions.
Results: In fiscal 2022, sales of products that contribute to others increased by 6% year on year to 375,000 units (previous year: 354,000 units), and sales of products that contributed to others increased by 32% year on year to 5,319 million yen (4,043 million yen in the previous year). * The amount of contributions to others (*) increased by 10.9% year-on-year due to increased sales (*248,000 t-CO2: 2021 → 275,000 t-CO2: 2022), and the year-on-year difference in sales of products that contributed to others was 1,276 million yen (5,319 million yen - 4,043 million yen), which was the effect of last year, and consolidated sales increased by 5.4% (1,276 million yen/23,484 million yen×100 yen). This contributed to 33% (5.4%/16.4%) of last year's consolidated sales increase.
In addition, sales of products contributed to others last year were 22.6% of consolidated sales (5,319 million yen/23,484 million yen ×100), and we were able to achieve our management targets ahead of schedule. We believe that strong sales of IoT-related devices that realize remote monitoring due to changes in business styles due to the novel coronavirus infection, and strong sales in the U.S. of sensors equipped with shutter waste opening prevention functions are also positive factors.
【Countermeasure costs and breakdown】In fiscal 2022, we spent 4,000 thousand yen for HP enhancement and 6,000 thousand yen for activities (1,500 thousand yen / month / person ×2 people × 2 months), for a total of 10,000 thousand yen.

comment

ID

Opp2

Where in the value chain do opportunities arise?

Direct operation

Types of opportunities

Products and Services

Key climate-related opportunity drivers

Other, please specify

Increasing demand for disaster prevention measures due to worsening heavy rain levels, increased frequency of heavy rainfall, and chronic rains

Key Financial Potential Impacts

Increased sales due to increased demand for goods and services

Description of company-specific content

As a countermeasure against flood damage caused by intensifying and frequent heavy rains, there is a growing demand for systems that can quickly and safely grasp the flooding of rivers and the flooding of river basin areas over a wide area. Since there are manpower and time constraints for visual information collection by humans, the Ministry of Land, Infrastructure, Transport and Tourism is calling for a demonstration experiment of a system for collecting information using sensors in Japan Japan.
As a sensor manufacturer, we are proposing remote monitoring system solutions that utilize sensors and IoT technology. Our OWU series is a gateway that easily converts sensors and switches to IoT, can be installed outdoors, and has developed a flood / flood monitoring system using sensors that notify flood and flood conditions by utilizing IoT know-how. We propose a low-cost and easy-to-install system to support proactive response and damage reduction of flood damage.

Temporal perspective

long-term

possibility

More than 50% of the time

Degree of impact

Moderate

Is it possible to provide a potential financial impact?

Yes, a single estimate

Potential financial impact (currency)

500,000,000

Potential Financial Impact – Minimum (currency)

Potential Financial Impact – Maximum (currency)

Explanation of financial impact

The domestic disaster prevention information system and service market is assumed to be more than 100,000 million yen, and if we acquire a 0.5% share of the market, we can expect approximately 500 million yen (100,000 million yen ×0.5%) as business opportunities.

Cost of realizing the opportunity

22,000,000

Describe strategies and cost calculations to realize opportunities

Situation]
Due to the worsening level of heavy rainfall, the increasing frequency of heavy rainfall, and the chronic occurrence of heavy rainfall, the demand for disaster prevention measures is increasing, and solutions utilizing new technologies are required.
【Challenge】
We believe that the challenge is to develop a system that can quickly and safely grasp the situation of river rise and inundation in the basin area over a wide range by utilizing our sensing and IoT technologies, and to expand sales.

【Action】
Position disaster prevention-related business as one of the pillars of our new business, and promote business development by making proposals to local governments and consultants in areas where flood countermeasures are an issue. The Ministry of Land, Infrastructure, Transport and Tourism and local governments are calling for demonstration experiments of information collection mechanisms using flood and flood sensors, and we are participating in them. In addition, it is important from the perspective of business continuity management to protect important equipment and assets from flooding in the facilities, factories, warehouses, etc. of private companies that are at risk of flooding, and we will propose our solutions to these markets as well.
【Results】As of 2022, more than 50 demonstration experiments have been conducted by local governments facing flood control issues (about 70% increase from the previous year), and have since been introduced to the site. In 2022, our flood and flood monitoring system was installed in the underpass that local residents use on a daily basis in Hikone City, Shiga Prefecture and Yao City, Osaka Prefecture. In the past, when there was a risk of flooding of the underpass due to heavy rain, it was necessary for a local government official to go to the site and visually check the situation. After adopting our system, the person in charge is automatically notified by e-mail in the event of flooding, which has been well received for improving the efficiency of patrols and speeding up flood control activities.
【Countermeasure costs and breakdown】
In order to promote this project issue, in 2022, personnel expenses of 18.75 million yen (1,500 thousand yen/month/person× 5 months ×2.5 people) and digital marketing and sales activity expenses of 3.25 million yen, for a total of 22 million yen. We will invest about the same amount of budget in 2023.

comment

C3. Business Strategy

C3.1

(C3.1) Does your strategy include a climate transition plan aligned with a 1.5°C world?

Row 1

Climate Transition Plan

No, our business strategy is affected by climate-related risks and opportunities, but we do not plan to develop a climate transition plan within two years

Explain why your organization does not have a climate transition plan to limit global temperature rise to 1.5°C or less and if you plan to create one in the future.

In 2021, we reviewed climate-related risks and opportunities, reidentified the significant strategic impact on our business, and set our own CO2 emission reduction target of "reducing CO2 emissions by 30% or more by 2030 (compared to 2018)" assuming the 2°C scenario.
In order to ensure the promotion of CO2 emissions, we have launched a project under the direct control of the CEO, and are expanding the scope of understanding of CO2 emissions, materializing our own emission reduction measures, expanding the amount of contributions to other companies to expand opportunities, and actively disclosing information.
Currently, the target value for 2030 is assumed to be the 2°C scenario, but the project name is "Carbon Neutral Project" in order to aim for carbon neutrality in the future.
In addition, we have started discussions with our parent company, Optex Group Co., Ltd., to introduce a transition plan consistent with the 1.5°C world, and although it will be difficult to introduce a transition plan consistent with 1.5°C within the next two years, we would like to introduce it within five years.

C3.2

(C3.2) Does your organization use climate-related scenario analysis to develop strategy?

	Using climate-related scenario analysis to inform strategies
Row 1	Yes, qualitatively and quantitatively

C3.2a

(C3.2a) Please specify your use of climate-related scenario analysis.

Climate-related scenarios	Scenario Analysis Scope	Temperature alignment for scenarios	Parameters, assumptions, analytical selection
Migration Scenarios IEA NZE 2050	Company-wide		We have set long-term targets for 2030, so we are analyzing the impact of carbon pricing until 2030. According to IEA NZE 2050, the future carbon price per ton is set at US$75 for developed countries, US$45 for emerging and developing countries in 2025, and US$130 and US$90 in 2030, respectively. This impact is a risk of an increase in the Group's burden by approximately 10 million yen. * Calculated by multiplying the Group's CO2 emissions [(1) approx. 1,000 t-CO2] by the carbon price [(2) 10,000 yen/t-CO2] [(1)×(2) = 10 million yen] In addition, since many of the products we sell are installed and used in buildings, we also analyze the impact of building decarbonization by 2030. According to IEA NZE 2050, buildings in many developed countries will have a long lifespan, with about half of existing buildings remaining in 2050, but energy efficiency improvements and electrification will reduce CO2 emissions by more than 95% between 2020 and 2050. We provide sensors equipped with functions to prevent unnecessary opening of automatic doors and shutters at building openings. We believe that sales of these doors will be able to expand as greening of buildings progresses, and in the entrance field where these products are handled, we aim to increase the composition ratio of automatic doors and shutter sensors equipped with waste-opening prevention control and increase the amount of contributions contributed by others from these sales from 210,000 t-CO2 to 1 million t-CO2. In addition, the growing demand for energy efficiency improvements will be an opportunity to expand sales of products that contribute to others, such as LED lighting for sensors with solar and IoT-related devices that enable remote monitoring. We are promoting activities with the goal of increasing the ratio of products contributed by others to 20% (2021) to 22.5% by 2025 in consolidated sales.
Physico-Climate Scenario Typical Concentration Path Scenario (RCP) 2.6	Company-wide		We are analyzing the impact of climate change countermeasures based on a scenario (RCP2.6) in which the temperature rise from pre-industrial levels rises to about 2°C. In RCP2.6 (2°C scenario), the forecast for the end of the 21st century based on the end of the 20th century is that the frequency of floods will double, rainfall will increase 1.1 times, and the flow rate will increase 1.2 times. We provide products that can be mounted in high outdoor places, such as outdoor perimeter security sensors and LED lighting products. There is concern that the intensification and frequency of heavy rains will stress these products and increase their problems. Even if these excessive impacts exceed product specifications, a decline in customer satisfaction

			can affect business revenue. We are working on our own rain resistance performance evaluation and strengthening of waterproofing inspection, which is reflected in our design and manufacturing. The expansion of these physical risks is also an opportunity to increase demand for products that lead to disaster prevention. As a countermeasure against flood damage caused by intensifying and frequent heavy rains, there is a growing demand for systems that can quickly and safely grasp the flooding of rivers and the flooding status of river basin areas over a wide area. Collecting information visually by humans is limited by manpower and time constraints, and in Japan, the Ministry of Land, Infrastructure, Transport and Tourism Japan is calling for a demonstration experiment of a system for collecting information using sensors. In response to this, in recent years, as a sensor manufacturer, we have proposed remote monitoring system solutions that utilize IoT technology on sensors and data obtained from sensors, and have developed a flood and flood monitoring system using sensors that notify flood and flood conditions by utilizing these know-how, and have started collaborative demonstration experiments with local governments.
Physical Climate Scenario RCP 8.5	Company-wide		We also conduct impact analysis using RCP8.5, which is expected to show significant impact from physical risks. According to RCP8.5 (4°C scenario), the forecast for the end of the 21st century based on the end of the 20th century is that the flood frequency will be 4 times, rainfall will increase 1.3 times, and the flow rate will increase 1.4 times. In Japan the last 30 years (1977~2006) and the early 30 years of the 20th century (1901~1930), the number of days of 100 mm or more has been about 1.2 times the number of days and the number of days of 200 mm or more has been about 1.4 times, and the number of very strong tropical cyclones with maximum wind speeds exceeding 45 m/s is also increasing. According to the Ministry of Education, Culture, Sports, Science and Technology, the number of rivers that exceeded flood risk waters increased by about five times in 2014 → 2018, and since 1970, the top wind and flood damage insurance has been concentrated in the last 10 years. Even in China, where about 40% of our products (procurement value basis) are manufactured, the average temperature in 2021 was 0.97°C above the average value of the previous year, which is said to be the highest since 1901, and the average precipitation has also been on an increasing trend from 1961 to 2021, and it is said that it increased by 5.5 mm every 10 years. (China Climate Change Bluebook (2022)) In particular, Guangdong Province, where the plant is located, accounts for about half of the typhoons that make landfall in China, and half of the super typhoons since 1949 occur after 2000. Annual rainfall exceeds 2,000 mm, and rainfall tends to be concentrated from April to June (accounting for about half of the annual rainfall). As a result of these effects, if floods or landslides occur in the production areas of major products, leading to the inability to operate, there is a risk of a significant impact on the business, so together with Optex Mfg, an operating company in charge of manufacturing in the Optex Group, we launched a project (project name: M.S4.0) with all directors to optimize the allocation of production areas. We are working to increase the ratio of product procurement from Hanoi, Vietnam from 6% (2022) to 16% by 2025.

C3.2b

(C3.2b) Describe in detail the focus issue you are addressing by using climate-related scenario analysis and summarize the results of your scenario analysis on that issue.

Row 1

Focus issues

In recent years, climate change has been progressing in various regions, such as rising temperatures and increasing frequency of heavy rains, and is expected to become more serious in the future. According to the Fifth Assessment Report (2013~2014) of the Intergovernmental Panel on Climate Change (IPCC), the global average surface temperature increased by 0.85°C between 1880 and 2012. Each of the last 30 years has recorded higher temperatures than any decade since 1850.
As an international regulation related to climate change countermeasures, the United Nations Framework Convention on Climate Change (UNFCCC) was adopted in 1992 and came into effect in 1994, and the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) has been held every year since 1995.
With extreme weather events on the rise and regulations tightening, there is an increasing movement towards strengthening the actions and investments needed for a low-carbon, sustainable future. Therefore, based on the TCFD guidance, we conducted a scenario analysis using various external scenarios. Key challenges to focus on include: - Increased financial costs due to carbon taxes and tighter market regulations
- Business impact when manufacturing plants are at risk of flooding due to increased extreme weather - Business impact of CO2 reduction activities and climate-related information disclosure judged to be insufficient- Impact of products and technologies that contribute to low-carbon and physical risk countermeasures

Based on these focal issues, we have set a long-term target of reducing CO2 emissions by 30% or more by 2030 compared to fiscal 2018 levels, and have reflected them in our medium- to long-term CO2 emissions reduction plans.

Results of climate-related scenario analysis on the issues of interest

We conducted the following three scenario analyses.
・Impact of financial costs of carbon pricing assumed in the medium to long term using the IEANZE2050 scenario
・ Impact of sales opportunities for products with increased demand due to flood risk and physical risks of outdoor products using the RCP2.6 scenario
・ Impact on production sites in the event of progress of climate change using the RCP8.5 scenario
In addition to the above, we also analyze the impact of reputation risk when climate-related information disclosure is judged to be insufficient.

1. Based on the IEA NZE 2050 carbon price (US$75 in developed countries in 2025, US$45 in emerging and developing countries, and US$130 and US$90 in 2030, respectively), the global carbon price in 2030 is assumed to be 10,000 yen/t-CO2, and the impact of carbon pricing is calculated. Based on the Group's overall Scope 1 and 2 results (approximately 1,000 t-CO2), we expect an increase in cost burden of approximately 10 million yen per year. However, the financial impact of this will be limited and will not have an undue impact on business operations.

2. RCP8.5 (4°C scenario) is said to increase the flood frequency by 4 times, rainfall by 1.3 times, and the flow rate by 1.4 times, and in Guangdong, China, where we manufacture products that account for about 40% of our sales (procurement amount in 2022 is 8,819 million yen), both rainfall and the frequency of occurrence of super typhoons are on the rise. If the operation of major plants is suspended for about two months due to abnormal weather, production and product supply may be affected, and more than 10% of net sales may be affected. In addition, when production is diverted to other plants, the supplier's parts procurement ratio affects the feasibility, and in addition, the acceleration of the shift to electric vehicles may further exacerbate the difficulty of parts procurement itself.

Since these effects could have a significant impact on business if operations and procurement were to be disrupted, we launched a project (project name: M.S4.0) with all directors to optimize the allocation of production areas together with Optex Mfg, an operating company in charge of manufacturing within the Optex Group. We are promoting activities to increase the ratio of products procured from 6% (2022) to 16% by 2025.

3. In recent years, the impact on business if CO2 reduction activities and climate-related disclosures are judged to be insufficient has become increasingly large. There are more and more opportunities for us to reduce our own emissions and disclose CO2 information, and some customers require participation in CDP as a condition for continuing transactions. For this reason, if it is determined that the response or information disclosure is insufficient, it may lead not only to an increase in reputation risk but also to the risk of business loss, so we have set a long-term target of reducing CO2 emissions by 30% or more compared to fiscal 2018 by 2030 and reflect this in our medium- to long-term CO2 emissions reduction plan. In 2022, we formulated our own reduction plan, participated in CDP, and added climate-related information pages to our website to disclose our targets, activities, and results.

4. Since many of the products we sell are installed and used in buildings, we also analyze the impact of building decarbonization by 2030. According to IEA NZE 2050, buildings in many developed countries will have a long lifespan, with about half of existing buildings remaining in 2050, but energy efficiency improvements and electrification will reduce CO2 emissions by more than 95% between 2020 and 2050. We provide sensors equipped with functions to prevent unnecessary opening of automatic doors and shutters at building openings. We believe that sales of these doors will be able to expand as greening of buildings progresses, and in the entrance field where these products are handled, we aim to increase the composition ratio of automatic doors and shutter sensors equipped with waste-opening prevention control and increase the amount of contributions contributed by others from these sales from 210,000 t-CO2 to 1 million t-CO2. In addition, the growing demand for energy efficiency improvements will be an opportunity to expand sales of products that contribute to others, such as LED lighting for sensors with solar and IoT-related devices that enable remote monitoring. This is also an opportunity to expand sales of flood sensors and other products, for which demand is expected to increase due to the expansion of physical risks.
We are promoting activities with the goal of increasing the ratio of products contributed by others to 20% (2021) to 22.5% by 2025 in consolidated sales.
After clarifying the impact of the issues in focus, we have set the targets and measures for each issue as described above and reflected them in our medium- to long-term CO2 emissions reduction plan. Through the implementation of the plan, we will steadily reduce risks and accelerate the creation of business opportunities.

C3.3

(C3.3) Describe whether and how climate-related risks and opportunities have impacted your strategy.

	Have climate-related risks and opportunities impacted your strategy in this area?	Impact description
Products and Services	Yes	i.how the strategy was impacted by climate-related risks and opportunities and the time range it covers; As climate change measures progress, customer awareness is increasing, and interest and demand for low-carbon products and products that reduce CO2 emissions (products that contribute to others) are increasing. The sensors and related products that we mainly sell have a high affinity with these interests and growing demand, such as low power consumption, creating system standby, and supporting low-carbon operations by realizing remote monitoring. For this reason, we have positioned this as an opportunity to further promote our business, and have set "expanding contributions to others" in our management strategy.

		ii.Regarding whether or not climate change adaptation and mitigation activities are included in the strategy, we set a target of "maintaining the contribution of others to at least four times the total emissions" in 2020, achieved it in 2021, and set this target as a management policy and target for 2022. This is consistent with the previous management strategy of "expanding contributions to others." The Business Strategy Council, which meets annually for each business unit, takes up climate-related laws, regulations, and policy trends, as well as the expansion of products and services that lead to opportunities, and incorporates the clarification of the effects of contributions to others in the planning of each product into the process. iii.Our energy-efficient products for the most important strategic decisions to date, impacted by climate-related risks and opportunities, include sensors with features to prevent wasteful opening of automatic doors and shutters in building openings, sensors with solar LED lighting, and IoT-related devices that enable remote monitoring. Products that will become necessary due to the expansion of physical risks include flood sensors. In order to expand sales of these products that contribute to others and new products that contribute to others, we have set a target of increasing sales from products contributed by others to 22.5% of consolidated sales (2025).
Supply Chain and/or Value Chain	Yes	i.how the strategy was impacted by climate-related risks and opportunities and the time range it covers; RCP8.5 (4°C scenario) is said to increase the flood frequency by 4 times, rainfall by 1.3 times, and the flow rate by 1.4 times, and in Guangdong, China, where we manufacture products that account for about 40% of our sales (procurement amount in 2022 is 8,819 million yen), both rainfall and the frequency of occurrence of super typhoons are on the rise. If the operation of major plants is suspended for about two months due to abnormal weather, production and product supply may be affected, and more than 10% of net sales may be affected. We believe that it is necessary to reduce the business impact of major production plants affected by such physical risks as much as possible, and we have embodied our strategy. ii.Whether or not the strategy includes climate change adaptation and mitigation activities If abnormal weather disrupts operations and procurement, it could have a significant impact on business. In addition, if production is directed to other plants in order to reduce this impact, the component procurement ratio of the destination will affect the feasibility, and in addition, the acceleration of the shift to electric vehicles may further exacerbate the difficulty of parts procurement itself. We have launched a project (project name: M.S4.0) in which all directors participate to optimize the allocation of production areas, and are promoting activities. iii. For the most important strategic decision to date, impacted by climate-related risks and opportunities, we outsource much of our product manufacturing to factories in four regions: Guangdong, China, Japan (Shiga and Fukui) and Hanoi, Vietnam. Procurement from "Guangdong, China" accounted for the largest amount (about 40%), and the actual sales equivalent of products procured from "Guangdong, China" in 2021 was 8,819 million yen, and based on scenario analysis, we judged that the inability to operate in "Guangdong, China" would be the riskiest case. In response to this, a strategic decision was made to launch a project under the direct control of the CEO, and measures to optimize the allocation of production

		sites and targets were embodied and reflected in the medium-term management plan. Since there is a balance between production and consumption areas, instead of completely balancing the procurement ratio of factories in the four regions, we will suppress "Guangdong, China," which has the highest procurement ratio, and increase "Hanoi, Vietnam," which has the lowest procurement ratio. Specifically, by 2025, we aim to increase the procurement ratio from "Guangdong, China" to the 42% → 30% range, and the procurement ratio from "Hanoi, Vietnam" to 6% → 16%. In addition, since it is important to increase the parts procurement ratio in order to increase the procurement ratio from Hanoi, Vietnam, we have set a target of increasing the parts procurement ratio to 31.8% (currently 10.8%).
Investment in R&D	Yes	i. How the strategy was impacted by climate-related risks and opportunities and the time range covered In terms of transition risks, there is a growing demand and interest in products that contribute to energy efficiency and CO2 reduction (products contributed by others), and in terms of physical risks, demand and interest related to disaster risk reduction. Specific examples of impacts in terms of transition and physical risks include: Many of the products we sell are installed and used in buildings, so we analyze the impact of building decarbonization by 2030. According to IEA NZE 2050, buildings in many developed countries will have a long lifespan, with about half of existing buildings remaining in 2050, but energy efficiency improvements and electrification will reduce CO2 emissions by more than 95% between 2020 and 2050. We provide sensors equipped with functions to prevent unnecessary opening of automatic doors and shutters at building openings. We expect to be able to expand sales of these buildings as greening progresses. Physical Risks: As a countermeasure against flood damage caused by intensifying and frequent torrential rains, there is a growing demand for systems that can quickly and safely grasp the flooding status of rivers and flooding in river basin areas over a wide area. Since there are manpower and time constraints for visual information collection by humans, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) Japan is calling for demonstration experiments on a system for collecting information using sensors in Japan. We believe that we can expand sales of our sensors by entering these markets, so we are investing. ii.Regarding whether or not climate change adaptation and mitigation activities are included in the strategy, we set a target of "maintaining the contribution of others to at least four times the total emissions" in 2020, achieved it in 2021, and set this target as a management policy and target for 2022. In order to expand sales of these products that contribute to others and new products that contribute to others, we have also set a target of increasing sales from products that contribute to others to 22.5% of consolidated sales (by 2025). In order to actively promote the expansion of contributions to others, we have added consideration of contributions to others to the environmental assessments conducted at the new product development stage, and are continuing these activities. iii. Through scenario analysis of the most important strategic decisions to date, impacted by climate-related risks and opportunities, we confirm that our products and technologies can contribute in various ways to addressing low-carbon and physical risks. Specific examples of strategic decisions in R&D are shown below.

		[Transition risk] We provide sensors equipped with functions to prevent unnecessary opening of automatic doors and shutters at building openings. We believe that we will be able to expand sales of these cameras as greening of buildings progresses, and in the entrance field where we handle these products, we have decided to increase the composition ratio of automatic doors and shutter sensors equipped with waste-opening prevention control and aim to increase the contribution of others from these sales from 210,000 t-CO2 to 1 million t-CO2. In response to this, we are reflecting this in our business plan and product roadmap. Physical Risks: In response to the occurrence of human and material damage caused by the increase in the frequency of sudden abnormal torrential rains, there is a growing demand for systems that can grasp the flooding status of rivers and other areas at an earlier and safer stage. Since evacuation may not be possible in time due to the timing of visual judgment of the situation at the site, it is required to automatically sense the water level and notify the user by wireless communication when the set water level is exceeded. We have developed flood sensors and related equipment that realize the required functions, participated in the one-coin flood sensor demonstration experiment promoted by the Ministry of Land, Infrastructure, Transport and Tourism, and started a demonstration experiment to grasp the situation in real time. We have drawn up a business strategy to aim for consolidated sales of 50 billion yen by 2030, and in this strategy, in addition to selling low-carbon products, we will enhance services and services that lead to low-carbon business. The company plans to increase the consolidated sales composition of the latter to approximately 22.5%. In addition to solving the elements mentioned above (expansion of products that can improve energy efficiency, development of products to combat physical risks, etc.), we are also simultaneously providing a service model that aims to achieve low carbon in the business itself, and total usability including security, communication quality with the outside, and smartphone operation is required to realize these factors. Since it is important to improve these capabilities in order to achieve our long-term strategy, we have set security evaluation, usability enhancement, and related skill improvement as company-wide issues and are working on them.
application	Yes	i. As there is a growing demand for quantitative assessments and disclosures of ESG and climate change initiatives such as CDP and MSCI about how strategies have been impacted by climate-related risks and opportunities and the time ranges they cover, an increasing number of investors and clients rely on these to inform investment decisions. Companies that are judged to be not proactive may be excluded from consideration or have a significant impact on their business, such as difficulty in raising funds, so we are considering and implementing strategies that include more proactive decarbonization initiatives and information dissemination. ii.With regard to whether climate change adaptation and mitigation activities are included in its strategy, we reviewed climate-related risks and opportunities in 2021, re-identified the significant strategic impact on our business, and set our own CO2 emission reduction target of "reducing CO2 emissions by 30% or more by 2030 (compared to 2018)" assuming the 2°C scenario. Active. In order to ensure the promotion of CO2 emissions, we have launched a project under the direct control of the CEO, and are expanding the scope of understanding of CO2 emissions, materializing our own emission reduction measures, expanding

		the amount of contributions to other companies to expand opportunities, and actively disclosing information. iii.The most important strategic decisions to date impacted by climate-related risks and opportunitiesClimate-related responses require a wide range of activities with an awareness of long-term goals, so in order to implement measures related to the risks and opportunities identified through scenario analysis, climate-related responses should be placed at the top of management strategies; We believe that it is important for the entire company to work together to promote the initiative. In response to this recognition, we have decided to launch a project under the direct control of the CEO (Carbon Neutrality Project) and are proceeding with our activities. Within the project, three teams have been formed: (1) carbon reduction, (2) carbon measurement, and (3) carbon information disclosure, and the main activities of last year are as follows. [(1) Carbon reduction], Consideration of in-house reduction (consideration of installation of solar panels at the head office and subsidiaries within the Group), introduction of new equipment for changing and evaluation equipment of the head office electric power company, consideration of energy conservation and introduction of carbon pricing at the time of renewal, sharing of climate-related activities with partner factories (in Japan), Joint study of solar panel installation [(2) Carbon measurement], development of masters and models for CO2 aggregation, development of framework for Scope 1 and 2 input and visualization within the group, participation in CDP2021, acquisition of B score [(3) Carbon information disclosure] ・Expanded the climate-related page on the website (added CO2 emissions, activity results, targets, simulations of contributions to others, etc.)

C3.4

(C3.4) Describe whether and how climate-related risks and opportunities have impacted your financial planning.

	Affected Financial Planning Elements	Impact description
Row 1	Sales Direct Costs overhead Capital expenditure Access to capital	【Revenue】Net sales in FY2022 increased 16.4% year on year to 23,484 million yen. We provide sensors and related products that lead to energy efficiency improvements (low power consumption, system standby, support for low carbon operation through remote monitoring, etc.). Taking the growing interest in low-carbonization in the market as an opportunity to expand demand for these products, we have set "expanding contributions to others" in our management strategy and are promoting activities with the goal of increasing the ratio of products that contribute to others from 20% (2021) to 22.5% in consolidated net sales by 2025. Our contributing products include sensors equipped with functions to prevent unnecessary opening of automatic doors and shutters in building openings, sensor LED lighting with solar, IoT-related devices that realize remote monitoring, etc., and in fiscal 2022, sales of products contributed to others increased by 6% year-on-year to 375,000 units (previous year: 354,000 units), and sales of products that contribute to others increased 32% year-on-year5, It was 319 million yen (4,043 million yen in the previous year). * The amount of contributions to others (*) increased by 10.9% year-on-year due to increased sales (*248,000 t-CO2: 2021 → 275,000 t-CO2: 2022) The year-on-year difference in sales of products that contributed to others was 1,276 million yen (5,319 million yen - 4,043 million yen), which was the effect of last year, and consolidated sales

		increased by 5.4% (1,276 million yen/23,484 million yen×100), This contributed to 33% (5.5%/16.4%) of last year's consolidated sales increase. In addition, sales of products that contribute to others last year accounted for 22.6% of consolidated sales (5,319 million / 23,484 million yen ×100), and we were able to achieve our management targets ahead of schedule. The main reasons for this were strong sales of IoT-related devices that realize remote monitoring due to changes in business styles caused by the novel coronavirus infection, and strong sales in the U.S. of sensors equipped with shutter waste opening prevention functions. Based on scenario analysis, we expect this trend to continue in the short to medium term, and we are considering setting new targets. Capital expenditures: Investments are required as part of climate change countermeasures as financial costs are expected to increase due to requests to reduce in-house emissions and tightened carbon taxes and market regulations. The Group's own emissions (approximately 1,000 t-CO2: Scope 1 and 2 markets) are as follows: (1) CO2 emissions from the head office account for about half of the Group's emissions, (3) the head office consumes a large amount of electricity from evaluation facilities (about 20% of the head office's power consumption), and (3) domestic facilities tend to emit a lot of Scope 2 emissions, and overseas facilities tend to emit more Scope 1 emissions (gasoline). In the short to medium term, we have recorded 20 million yen for the installation of solar panels at our headquarters and one domestic subsidiary, and 40 million yen for long-term investment in energy-saving equipment, mainly for renewable energy at domestic facilities, low-carbon vehicles and EVs at overseas facilities, and investment in energy-saving equipment (evaluation equipment at the head office). In FY2022, we spent 33.5 million yen on environmental conservation investments such as improving waterproofing treatment of facilities and updating lighting equipment, and 2.5 million yen in environmental conservation costs such as ventilation systems. Impact on Capital Expenditure/Capital Allocation: As climate-related opportunities in products and services include increased sales from sales of low-carbon, energy-efficient products (products contributed by others), the medium-term management plan for 2022-2024 states: The Board of Directors decided to invest 6.3 billion yen in research and development expenses, including products contributed by others. In the environmental assessment conducted at the new product development stage, we compare resource saving, energy conservation, recycling, and contributions to others with new products, and comprehensively evaluate the degree of improvement on a five-point scale of S, A, B, C, and D. The existing level is B and the improved product is S or A, and the ratio of products in S and A rank in fiscal 2022 was about 33%. In fiscal 2022, investment in climate-related opportunities will be approximately 630 million yen (R&D expenses of 1.9 billion yen ×33%), which is obtained by multiplying approximately 1.9 billion yen of R&D expenses by the above ratio. Climate-related opportunities have a high impact on R&D investment and are expected to remain at the same rate in the future. 【Impact on access to capital/direct/indirect costs】 If investors and customers are judged to be inadequate in responding to climate change, there is a risk of a decline in stock prices and sales due to a decline in valuation. With an overseas sales ratio of 70% or more, we believe that our valuation has a very high impact on our stock price because we often provide our products to Europe and the United States, where there is a high level of interest in climate change initiatives. In recent years, some companies have requested information related to responses to CDP questionnaires, and if their own emission reduction activities are insufficient, or if the introduction of environmentally friendly and low-energy products to the market is delayed, it is assumed that they may be excluded from transactions or the stock price of its parent company, Optex Group Co., Ltd., may decline. If the number of issued shares is calculated at the final closing price of 1,796 yen in 2022, the market capitalization will be about 67.8 billion yen, and if the stock price falls by 1% due to a decline in reputation, the corporate value may decrease by 680 million yen. We are working to materialize our own emission reduction measures, expand the amount of contributions to other companies to

		expand opportunities, and actively disclose information. In fiscal 2022, 3,300 thousand yen for projects that include obtaining the cooperation of experts when participating in CDP, 4,000 thousand yen for enhancing climate-related information disclosure on the website, and carbon neutral project activity expenses (consideration of solar panel installation, introduction of new evaluation equipment, introduction of carbon pricing at the time of renewal, sharing climate-related activities with partner factories and joint consideration of solar panel installation, Scope 1 and 2 input within the group, visualization framework, etc.) spent 18,000 thousand yen (1500 thousand yen / month / person ×2 months ×6 people). In the short and medium term, we expect 2% (8,624 thousand yen) of the 431,200 thousand yen for the project to standardize the Group's business management infrastructure from 2018 to build a system for consolidated business reform and management visualization, and 1,060 thousand yen for external verification of CO2 emissions as climate change response expenses.

C3.5

(C3.5) Does your financial accounting identify spending/revenue that aligns with your climate transition plan?

	Identify expenditure/revenue items that are aligned with the organization's climate transition plan
Row 1	No, but we plan to do it within the next 2 years

C4. Targets and Results

C4.1

(C4.1) Were there any emissions targets applied in the reporting years?

Total volume target

C4.1a

(C4.1a) Provide a total emissions target and details of progress against that target.

Target reference number

Paragraph 1

Is this a science-based goal?

Yes, we recognize this as a science-based goal, but we are not committed to applying for review of this goal by the SBT initiative within the next two years

Goal ambition

Aligned to 2°C target

Target introduction year

2021

Target Scope

Company-wide

scope

Scope 1
Scope 2

Scope 2 calculation method

Market Standards

Scope 3 Category

Base year

2018

Base year Scope 1 emissions covered by the target (metric tons CO2e)

434

Base year Scope 2 emissions covered by the target (metric tons CO2e)

828

Scope 3 Category 1 base year: Emissions from purchased goods and services covered by the target (metric tons CO2e)

Scope 3 Category 2 base year: emissions from targeted capital goods (metric tons CO2e)

Scope 3 Category 3 base year: emissions from fuel and energy-related activities (not included in Scope 1 and 2) covered by the target (metric tons CO2e)

Scope 3 Category 4 base year: emissions from upstream logistics covered by the target (metric tons CO2e)

Scope 3 Category 5 base year: Emissions from waste from targeted operations (metric tons CO2e)

Scope 3 Category 6 base year: Emissions from targeted business travel (metric tons CO2e)

Scope 3 Category 7 base year: emissions from commuting of employees covered by the target (metric tons CO2e)

Scope 3 Category 8 base year: emissions from upstream leased assets covered by the target (metric tons CO2e)

Scope 3 Category 9 base year: emissions from downstream logistics covered by the target (metric tons CO2e)

Scope 3 Category 10 base year: Emissions from processing products sold covered by the target (metric tons CO2e)

Scope 3 Category 11 base year: Emissions from the use of products sold covered by the target (metric tons CO2e)

Scope 3 Category 12 base year: Emissions from disposal of products covered by the target (metric tons CO2e)

Scope 3 Category 13 base year: emissions from downstream leased assets covered by the target (metric tons CO2e)

Scope 3 Category 14 base year: emissions from targeted franchises (metric tons CO2e)

Scope 3 Category 15 base year: emissions from targeted investments (metric tons CO2e)

Scope 3 emissions from other (upstream) in the base year covered by the target (metric tons CO2e)

Scope 3 emissions from other (downstream) sources in the base year covered by the target (metric tons CO2e)

Total Scope 3 emissions in the base year covered by the target (metric tons CO2e)

Total base year emissions covered by targets for all selected scopes (metric tons CO2e)

1,262

Percentage of total Scope 1 base year emissions covered by the target

100

Percentage of total Scope 2 base year emissions covered by the target

100

Scope 3 Category 1 base year: Scope 3 Percentage of total emissions from targeted goods and services in the Category 1 base year: Purchased goods and services (metric tons CO2e)

Scope 3 Category 2 base year: Scope 3 Percentage of total emissions from targeted capital goods in the base year of Category 2: Capital goods (metric tons CO2e)

Scope 3 Category 3 base year: Scope 3 Total emissions from targeted fuel- and energy-related activities (not included in Scope 1 and 2) in the total Category 3 base year: Fuel and energy-related activities (not included in Scope 1 and 2) (metric tons CO2e)

Scope 3 Category 4 base year: Scope 3 Total Category 4 base year emissions from upstream logistics covered by the target: Upstream logistics (metric tons CO2e)

Scope 3 Category 5 base year: Scope 3 Percentage of total emissions from Category 5 base year from emissions from emissions from targeted operations: Waste generated in operations (metric tons CO2e)

Scope 3 Category 6 base year: Scope 3 Percentage of total emissions from target business travel in the Category 6 base year: Business travel (metric tons CO2e)

Scope 3 Category 7 base year: Scope 3 Percentage of total emissions from target employee commuting of total Category 7 base year: Employee commute (metric tons CO2e)

Scope 3 Category 8 base year: Scope 3 Percentage of total emissions from targeted upstream leased assets in the Category 8 base year: upstream leased assets (metric tons CO2e)

Scope 3 Category 9 base year: Scope 3 Total Category 9 base year emissions from downstream logistics covered by the target: Downstream logistics (metric tons CO2e)

Scope 3 Category 10 base year: Scope 3 Percentage of total emissions from the processing of products sold covered by the target out of total emissions in the base year of Category 10: Processing of products sold (metric tons CO2e)

Scope 3 Category 11 base year: Scope 3 Percentage of total emissions from the use of products covered by the target of total emissions in the base year of category 11: Use of products sold (metric tons CO2e)

Scope 3 Category 12 base year: Scope 3 Percentage of total emissions from the total Category 12 base year from disposal of products sold covered by the target: disposal of products sold (metric tons CO2e)

Scope 3 Category 13 base year: Scope 3 Percentage of total emissions from targeted downstream leased assets in the Category 13 base year: downstream leased assets (metric tons CO2e)

Scope 3 Category 14 base year: Scope 3 Percentage of total emissions from target franchises in the base year of Category 14: franchise (metric tons CO2e)

Scope 3 Category 15 base year: Scope 3 Percentage of total emissions from targeted investments in the base year of Category 15: Investments (metric tons CO2e)

Scope 3 Percentage of total other (upstream) emissions in the base year covered by Scope 3 Other (upstream) emissions (metric tons CO2e)

Scope 3 Percentage of total other (downstream) emissions in the base year covered by Scope 3 Other (downstream) emissions in the target base year (metric tons CO2e)

Percentage of total Scope 3 base year emissions covered by the target (all Scope 3 categories)

Percentage of total base year emissions for all selected scopes covered by the target for all selected scopes

100

Target year

2030

Target reduction rate from base year (%)

30

Total emissions in the target year covered by the target for all selected scopes (metric tons CO2e) [Autocalculated]

883.4

Scope 1 emissions (metric tons CO2e) in the reporting year covered by the target

329

Scope 2 emissions in the reporting year covered by the target (metric tons CO2e)

653

Scope 3 Category 1: Emissions from purchased goods and services in the reporting year covered by the target (metric tons CO2e)

Scope 3 Category 2: Emissions from capital goods in the reporting year covered by the target (metric tons CO2e)

Scope 3 Category 3: Emissions from fuel and energy-related activities (not included in Scope 1 and 2) in the reporting year covered by the target (metric tons CO2e)

Scope 3 Category 4: Emissions from upstream logistics in the reporting year covered by the target (metric tons CO2e)

Scope 3 Category 5: Emissions from waste from operations in reporting years covered by the target (metric tons CO2e)

Scope 3 Category 6: Emissions from business travel in reporting years covered by the target (metric tons CO2e)

Scope 3 Category 7: Emissions from employee commuting in the reporting year covered by the target (metric tons CO2e)

Scope 3 Category 8: Emissions from upstream leased assets in the reporting year covered by the target (metric tons CO2e)

Scope 3 Category 9: Emissions from downstream logistics in the reporting year covered by the target (metric tons CO2e)

Scope 3 Category 10: Emissions from processing of products sold in the reporting year covered by the target (metric tons CO2e)

Scope 3 Category 11: Emissions from the use of products sold in the reporting year covered by the target (metric tons CO2e)

Scope 3 Category 12: Emissions from disposal of products sold in reporting years covered by the target (metric tons CO2e)

Scope 3 Category 13: Emissions from downstream leased assets in the reporting year covered by the target (metric tons CO2e)

Scope 3 Category 14: Emissions from franchises in reporting years covered by the target (metric tons CO2e)

Scope 3 Category 15: Emissions from investments in the reporting year covered by the target (metric tons CO2e)

Scope 3 for the reporting year covered by the target Other (upstream) emissions (metric tons CO2e)

Scope 3 in the reporting year covered by the target Other (downstream) emissions (metric tons CO2e)

Scope 3 emissions in reporting years covered by the target (metric tons CO2e)

Total emissions in reporting years covered by targets for all selected scopes (metric tons CO2e)

982

Does this target also cover land-related emissions?

No, it does not cover land-related emissions (e.g. non-FLAG SBT)

Percentage of target achieved relative to base year [autocalculated]

73.9566825145

Status of Targets for the Reporting Year

Setting up

Explain your target coverage and clarify exclusions

It covers all of the Group and there are no exclusions.
We are committed to the long-term goal of reducing CO2 emissions by 30% or more by 2030 (compared to 2018 levels). This target is for Scopes 1 and 2, but we are also conscious of both "reducing CO2 emissions from business operations" and "increasing the amount of contribution to reduction" which is an opportunity, and we are also committed to the goal of "contributing to others to at least four times the total amount of emissions."
Since our Scope 3 emissions are related to our goal of "contributing to others to at least four times the total emissions," and in particular, we are taking the following measures to more accurately grasp these emissions as "Category 1 (purchased products and services)." 1. The material and weight of all parts are obtained from parts suppliers and "CO2 emissions of parts" are calculated. In addition, "CO2 emissions from the time of production" of the manufacturing supplier are calculated for each product from the sum of "CO2 emissions during manufacturing". 2. For CO2 during use, set the standby and operation, operating hours per day, etc. for each product and register it. 3. In new product development, compare conventional products and new products from the perspective of 1.2 above, incorporate "environmental assessment" to measure the degree of improvement, into the process, and strive for continuous improvement.

Scope 3 activities are a form of continuation of the above activities and a separate activity theme set and promoted. In fiscal 2022, we jointly considered installing solar panels at manufacturing suppliers that would reduce paper by digitization [-80,000 sheets per year] and reduce CO2 emissions during manufacturing (3 out of 4 companies started consideration).

Plans to achieve the goals, as well as progress achieved at the end of the reporting year

In order to achieve our long-term goal of reducing CO2 emissions by 30% or more by 2030 (compared to 2018 levels), we are promoting activities centered on renewable energy at domestic facilities, energy-saving capital investment, and switching overseas facilities to low-carbon vehicles and EVs. This target, which was envisioned for 2021, assumes a linear progression curve from the base year of 2018. 2025 is the halfway point between the base year (2018) and the long-term target (2030), and the interim target is to reduce CO2 emissions by 15% by 2025.
In our base year (2018), our own emissions (Scope 1 and 2: market standard) were 1,262 t-CO2, a 30% reduction of the long-term target corresponds to a reduction of approximately 378 t-CO2, and a 15% reduction of the interim target corresponds to a reduction of approximately 190 t-CO2. In FY2022, the electricity menu of domestic facilities (Tokyo Branch) was changed (May 2022~) [-6t-CO2/year], company vehicles were converted to low-carbon vehicles and EVs at overseas facilities (1 unit in the UK, 2 units at the Netherlands base) [-27t-CO2/year], the number of company vehicles at some overseas facilities decreased (Korea base) [-6t-CO2], and moved to a small office (Korea base) [-6t-CO2] As a result of these reduction measures, we reduced the CO2 by 142t-CO2 (*982t-CO2[2022]-1,124t-CO2[2021]) according to the market standard. In total, we have achieved a cumulative total of 279 t-CO2 reductions (compared to 2018) until 2022, and we were able to achieve the interim target ahead of schedule, but in order to achieve the long-term goal, in consideration of the increase in CO2 emissions due to the normalization of social and economic activities from the corona disaster, the impact of the CO2 conversion factor of the contracted electricity at the head office, etc., solar panels are installed at the head office and one facility in Japan, and evaluation equipment is replaced. We plan to use hybrid vehicles for domestic company vehicles and will promote them from the next fiscal year onward. (We expect to reduce CO2 emissions by approximately 100 t-CO2 based on plans for the next fiscal year and beyond.)）

List the emission reduction initiatives that have contributed the most to achieving your goals

C4.2

(C4.2) Have you set any other climate-related targets that are valid for the reporting year?

Targets to increase low-carbon energy consumption or production
Other climate-related goals

C4.2a

(C4.2a) Provide details of your targets to increase low-carbon energy consumption or production.

Target reference number
Low 1

Target introduction year
2021

Target Scope
Company-wide

Target Type: Energy Carrier
electric power

Goal Type: Activity
Production (of raw materials)

Goal Type: Energy Source
Renewable energy sources only

Base year
2018

Consumption or production volume of the selected energy carrier in the base year (MWh)
22.8

Percentage of low-carbon or renewable energy in base year
1.4

Target year
2030

Share of low-carbon or renewable energy in the target year (%)
25

Share of low-carbon or renewable energy in the reporting year (%)
8

Percentage of target achieved relative to base year [autocalculated]
27.9661016949

Status of Targets for the Reporting Year

Setting up

Is this target part of the emissions target?

The renewable energy introduction target of "aiming for 25% or more renewable energy by 2030" is the most important measure to achieve our long-term goal of reducing CO2 emissions by 30% by 2030 (compared to 2018), and is part of the emission reduction target.

Is this goal part of a comprehensive initiative?

No, not part of a comprehensive initiative

Explain your target coverage and clarify exclusions

It covers all of the Group and there are no exclusions.

Plans to achieve the goals, as well as progress achieved at the end of the reporting year

Of the Group's 982t-CO2 emissions, CO2 emissions from electricity accounted for 653t-CO2 (Scope 2: market standard) and about 70% of the total (653/982t-CO2 ≈ 0.665), and more than 70% of these emissions were from the head office (456t-CO2 [Head Office Scope 2]/653t-CO2 [Company-wide Scope 2]=It is 0.698 →about 70%).
In order to achieve the long-term goal of reducing CO2 emissions by 30% or more by 2030 (compared to 2018 levels), it is important to reduce Scope 2 emissions at our headquarters and other facilities in Japan.

Since 2019, we have been gradually implementing high-efficiency air conditioning and LED lighting equipment, and from 2021 onward, we have begun considering short- to medium-term directions, including the introduction of renewable energy, with a view to achieving long-term targets.
In 2022, we worked to materialize measures in line with the short- and medium-term directions. The main plans are as follows: • Short- to medium-term: 20 million yen for solar panel installation costs at the head office and one domestic subsidiary (STRL Trastem), change of power menu at Tokyo branch • Long-term: Consider the introduction of renewable energy, formulate an energy-saving capital investment plan by 2030, record 40 million yen, etc.

The progress in fiscal 2022 was 6.7% [(1.4%-8.0%)÷ (1.4%-100%)], which is lower than the time-lapse ratio of 41.7%(*1), but we have confirmed that the measures plan meets the targets, and we will continue to promote them to ensure their achievement.

*1: Five years have passed in the 12 years from FY2018 to FY2030 → 5÷12=0.41666

List the initiatives that have contributed the most to achieving this goal.

C4.2b

(C4.2b) Provide details of other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Target introduction year

2021

Target Scope

Company-wide

Goal type: absolute or intensity

absolute value

Target type: Category and metric (or target numerator if reporting intensity target)

Energy Productivity

Other, please specify

We provide sensors and related products that lead to energy efficiency improvements (low power consumption, system standby, support for low carbon operation through remote monitoring, etc.). We have set a target of increasing the ratio of products contributed by others to 20% (2021) to 22.5% by 2025 in consolidated sales, and are promoting activities to "increase CO2 reduction" at customer sites.

Target denominator (intensity target only)

Base year

2021

Numbers or percentages for the base year

20

Target year

2025

Numerical value or percentage for the target year

22.5

Figures or percentages for the reporting year

22.6

Percentage of target achieved relative to base year [autocalculated]

104

Status of Targets for the Reporting Year

Achieved

Is this target part of the emissions target?

We provide sensors and related products that lead to energy efficiency improvements (low power consumption, system standby, support for low carbon operation through remote monitoring, etc.). We believe that achieving both "increasing the amount of CO2 reduced" and "reducing CO2 (CO2 emitted from business operations)" will lead to an increase in corporate value, and we are committed to the long-term goals of reducing CO2 emissions by 30% or more by 2030 (compared to 2018) and "contributing to others to at least four times the total amount of emissions."

This target is not part of the emission target because it is a target for activities that lead to "increasing the amount of CO2 reduced at the customer's site."

Is this goal part of a comprehensive initiative?

No, not part of a comprehensive initiative

Explain your target coverage and clarify exclusions

It covers all of the Group and there are no exclusions.

Plans to achieve the goals, as well as progress achieved at the end of the reporting year

List the initiatives that have contributed the most to achieving this goal.

We provide sensors and related products that lead to energy efficiency improvements (low power consumption, system standby, support for low carbon operation through remote monitoring, etc.). We believe that achieving both "increasing the amount of CO2 reduced" and "reducing CO2 (CO2 emitted from business) in business operations" will lead to an increase in corporate value (stock price), and we are committed to the long-term goals of "reducing CO2 emissions by 30% by 2030 (compared to 2018)" and "contributing to others to at least four times the total amount of emissions."
Action: With regard to contributions to others,
we have also set a medium-term target of increasing the ratio of products contributed to others in consolidated net sales from 20% (2021) to 22.5% by 2025. The main activities are (1) to improve the existing product by incorporating consideration of contributions to others into the new product development process, and (2) to increase the ratio of products contributed by others.
Results: Net sales in FY2022 increased 16.4% year on year to 23,484 million yen. In fiscal 2022, sales of products that contribute to others increased by 6% year on year to 375,000 units (previous year: 354,000 units), and sales of products that contributed to others increased by 32% year on year to 5,306 million yen (4,012 million yen in the previous year). * Due to the increase in sales, the amount of contributions to others* also increased by 10.9% from the previous year (*248,000 t-CO2: 2021 → 275,000 t-CO2: 2022).
The year-on-year difference of 1,276 million yen (5,319 million yen to 4,043 million yen) in sales of products contributed to the increase in consolidated sales of 5.4% (1,276 million yen/23,484 million yen×100) and the 33% (5.4%/16.4%) increase in consolidated sales last year.
In addition, last year, sales of products contributed to others accounted for 22.6% of consolidated sales (5,319 million yen/23,484 million yen ×100), and we were able to achieve our management targets ahead of schedule.
There are two main elements to the actions that contributed to the achievement of the goals.
The first is to consider and improve the contributions of others in the new product development process. In the new product development completed in FY2022, about 33% of the projects were able to improve the contribution to others compared to the existing one. In recent years, we have been expanding our contribution by reducing unnecessary dispatch (= suppressing gasoline consumption) by realizing remote monitoring.
The other is to increase the ratio of products that contribute to others.
Sales of IoT-related devices that realize remote monitoring, which were promoted by sales, and sensors equipped with shutter waste opening prevention functions in the U.S. were strong.
Our contributing products include sensors equipped with functions to prevent unnecessary opening of automatic doors and shutters at building openings, LED lighting with sensors with solar, and IoT-related devices that realize remote monitoring, and we see the growing interest in low-carbonization in the market as an opportunity to expand demand.
Based on scenario analysis, we expect this trend to continue in the short to medium term, and we are considering setting new targets.

Target reference number

Oth 2

Target introduction year

2021

Target Scope

Company-wide

Goal type: absolute or intensity

absolute value

Target type: Category and metric (or target numerator if reporting intensity target)

Resource consumption or efficiency
Percentage of paper from recycled or certified sustainable resources

Target denominator (intensity target only)

Base year
2021

Numbers or percentages for the base year
16.1

Target year
2023

Numerical value or percentage for the target year
100

Figures or percentages for the reporting year
64.5

Percentage of target achieved relative to base year [autocalculated]
57.6877234803

Status of Targets for the Reporting Year
Setting up

Is this target part of the emissions target?
Our reduction target of reducing CO2 emissions by 30% or more by 2030 (compared to 2018) covers Scopes 1 and 2.
This target is not part of the emissions target as it covers Scope 3 Category 1.

Is this goal part of a comprehensive initiative?
No, not part of a comprehensive initiative

Explain your target coverage and clarify exclusions
It covers all of the Group and there are no exclusions.

Plans to achieve the goals, as well as progress achieved at the end of the reporting year
The Company is promoting the rationalization and visualization of various management operations to strengthen the Group's business management foundation, and has taken up the balance between digitization and paper resource reduction as one of the themes. As of 2020, approximately 124,000 sheets of paper (A4 equivalent) were consumed annually for ledgers and various forms (receipts, invoices, purchase orders, delivery notes, declarations, etc.).
In order to reduce paper consumption through these efforts, we have planned the following activities and are promoting them.
・Digitization of ledgers by building a system to visualize management, which is being promoted as part of strengthening the Group's business management infrastructure (2021), digitization of delivery notes and invoices with the same system
, digitization and efficiency of settlement by introducing an expense settlement system (2022), Online filing (2022)
・Digitization of various forms through e-commerce (2022)
・Electronic storage of invoices using cloud services (2023) Since the reduction of various forms (receipts, invoices, order forms, delivery notes, etc.) requires the cooperation of business partners and customers, we are working together after explaining the benefits of digitization.

In 2021, we reduced the number of sheets of paper per year by approximately 20,000 sheets per year through system construction. (20,000 sheets/124,000 sheets×100 = 16.1%: 2021 target achievement rate) In 2022, we reduced the use of approximately 60,000 sheets of paper per year (20,000 receipts + 3,600 order forms + 35,000 delivery notes and invoices + 1,000 other sheets) by introducing an expense settlement system and an e-commerce system, and collaborating with related parties. (60,000 / 124,000 ×100 = 48.4%: 2022 target

achievement rate). The total number of reductions in 2021-2022 will be 80,000, a 64.5% achievement rate. (80,000 / 124,000 ×100=64.5%)

We feel that it is significant that we were able to work on e-commerce in collaboration with our customers. In addition, these activities will eliminate the incidental mailing and waste disposal generated by the exchange of paper, so we hope that these activities will lead to other CO2 reductions.

In 2023, we will continue to promote activities with the aim of reducing the number of sheets per year by 31,200 per year by utilizing cloud services.

List the initiatives that have contributed the most to achieving this goal.

Target reference number

Oth 3

Target introduction year

2021

Target Scope

Company-wide

Goal type: absolute or intensity

absolute value

Target type: Category and metric (or target numerator if reporting intensity target)

Low-carbon vehicles

Ratio of low-carbon vehicles in the company's fleet

Target denominator (intensity target only)

Base year

2018

Numbers or percentages for the base year

0

Target year

2030

Numerical value or percentage for the target year

30

Figures or percentages for the reporting year

13.3

Percentage of target achieved relative to base year [autocalculated]

44.3333333333

Status of Targets for the Reporting Year

Setting up

Is this target part of the emissions target?

Our reduction target of reducing CO2 emissions by 30% or more by 2030 (compared to 2018) covers Scopes 1 and 2.
This target is part of the emissions target because it covers Scope 1 reductions.

Is this goal part of a comprehensive initiative?

No, not part of a comprehensive initiative

Explain your target coverage and clarify exclusions

It covers all of the Group and there are no exclusions.

Plans to achieve the goals, as well as progress achieved at the end of the reporting year

The Group's reduction target of reducing CO2 emissions by 30% or more by 2030 (compared to 2018) covers Scopes 1 and 2.
In the base year 2018, the Group's total CO2 emissions were 1,262 t-CO2, consisting of 828 t-CO2 for Scope 2: Market Standard, 317 t-CO2 for Scope 1: Gasoline, and approximately 117 t-CO2 for Scope 1: Gas. Emissions from Scope 1: Gasoline and Gas related to this target account for approximately 34% of the Group's CO2 emissions.
Based on these trends by scope and CO2 emissions by facility, the Group has formulated plans centered on renewable energy at domestic facilities, energy-saving capital investment, and the conversion of overseas facilities to low-carbon vehicles and EVs.

The target for the conversion of our fleet to low-carbon vehicles and EVs is to increase the ratio of our fleet to low-carbon vehicles and EVs to 30% or more by 2030, and we aim to reduce CO2 emissions by about 100 t-CO2.

In 2022, the number of low-carbon vehicles and EVs in the company's own fleet (60 units) was 8, and the ratio of low-carbon vehicles and EVs was 13.3%. (8/60=0.1333→13.3%)
The achievement rate against the target is 44.4% (13.3%/30%=0.444→44.4%).

List the initiatives that have contributed the most to achieving this goal.

C4.3

(C4.3) Were there any emissions reduction initiatives in effect during the reporting year? This includes those in the planning and execution stages.

Yes

C4.3a

(C4.3a) Please also provide the total number of emission reduction activities at each stage and the estimated emission reduction (CO2 equivalent) for reduction activities in the implementation stage.

	Number of initiatives	Total estimated emissions reductions in metric tons CO2e equivalent per year (* only for rows)
Investigating	1	
Scheduled*	4	75.2
Start of implementation (partial)*	3	34.7
Implemented*	3	37.7
Unable to implement	0	

C4.3b

(C4.3b) Please provide details of the initiatives implemented in the reporting year in the table below.

Categories of initiatives and types of initiatives

Low carbon energy consumption
Low Carbon Power Mix

Estimated annual CO2e emissions reduction (metric tons CO2e)

11

Scope or Scope 3 category where emissions reductions are occurring

Scope 2 (market-based)

Voluntary/Obligatory

voluntary

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

0

Required investment amount (as specified in unit currency –C0.4)

0

Payback period

No payback

Estimated duration of activity of the initiative

Ongoing

comment

We have switched the contracted power of the Tokyo Branch to a power menu derived from renewable energy (solar power, wind power generation, etc.).
This is one of our initiatives to reduce CO2 emissions by 30% or more by 2030 (compared to 2018).

Categories of initiatives and types of initiatives

transport
Replacement of company-owned vehicles

Estimated annual CO2e emissions reduction (metric tons CO2e)

26.7

Scope or Scope 3 category where emissions reductions are occurring

Scope 1

Voluntary/Obligatory

voluntary

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

1,148,794

Required investment amount (as specified in unit currency –C0.4)

0

Payback period

No payback

Estimated duration of activity of the initiative

Ongoing

comment

IN 2022, INITIATIVES INCLUDE ONE COMPANY CAR EV IN OPTEX TECHNOLOGIES B.V. (THE NETHERLANDS), AND RAYTEC LIMTED. (UK) decreased by one company car (gasoline car). The calculation of annual savings is as follows:

* For EV vehicles, the charging cost is 32 yen/1 kWh, and the driving cost is 4.57 yen/km (32/7 = 4.57) from 7 km/1 kWh driving, and for gasoline vehicles, the gasoline cost is 150 yen/l, and the driving cost is 13.89 yen/km (150/10.8 = 13.89) from 10.8 km/l.
Since the driving cost reduction rate of gasoline vehicles → EVs is about 67% [(13.89-4.57)/13.89], the saving effect of switching to EVs is 702,394 yen / year from a reduction rate of 6,989 liters × 150 yen/l × 67% gasoline.
The saving effect of reducing gasoline vehicles is 446,400 yen / year from 2,976 liters × 150 yen / liter of gasoline.
The total amount is 1,148,794 yen.

C4.3c

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

way	comment
Financial Optimization Calculations	In addition to the value provided to customers and the return on investment ratio, the effect of reducing CO2 emissions, contributing to others, and improving physical risks are also important indicators for new product development. Even in the event that the investment size is larger than planned or the payback period is longer than planned, we actively invest if we judge that economic effects can be expected in the future. Last year, through active investment and the expansion of awareness and initiatives for decarbonization by customers and society as a whole, we were able to increase the ratio of sales of products contributed by others to 22.6% (2022) from 17.5% (2018) to consolidated net sales.
Internal Incentive/Reward Program	We have a system to incentivize individuals, organizations, and projects that contribute to the achievement of our management goals, and we also include climate-related responses that we have set as management goals. Last year, we received incentives for carbon neutrality projects that were recognized for their achievements in positioning climate-related measures in governance, materializing measures to achieve long-term goals, and participating in CDP.
other • Internal price of carbon	In order to achieve the goal of reducing CO2 emissions by 30% or more by 2030 (compared to 2018 levels), we have confirmed the impact of investment and carbon taxes required based on trends in our own emissions. The Group's own emissions (approximately 1,000 t-CO2: Scope 1 and 2 markets) tend to be (1) CO2 emissions from the head office account for about half of the Group's emissions, (3) the head office consumes a large amount of electricity from evaluation facilities (about 20% of the head office's power consumption), and (3) domestic facilities emit a lot of Scope 2 emissions and overseas facilities tend to emit more Scope 1 gasoline. As a result of considering the achievement of long-term targets in response to these circumstances, we have determined that it is effective to actively promote renewable energy at domestic facilities, switch to low-carbon vehicles and EVs at overseas facilities, and invest in energy-saving equipment (head office evaluation equipment) in order to minimize future carbon taxes in CO2 reduction. Internal carbon pricing has been reflected in our investment standards. Specifically, we have added internal carbon pricing to the requirements for drafting approval proposals for the introduction of infrastructure (including evaluation equipment) with annual CO2 emissions

	exceeding 1 t-CO2 and incorporated it into the decision-making process. (Directors involved in investments exceeding 5 million yen) In addition, the person in charge (director) of the Company's "Carbon Neutral Project" also oversees the infrastructure management department, and in particular, environment-related capital investment is promoted from a comprehensive perspective, lowering the hurdle of cost-effectiveness by simulating a payback period longer than normal capital investment.

C4.5

(C4.5) Do you classify your products and services as low-carbon products?

Yes

C4.5a

(C4.5a) Please specify your products or services that are classified as low-carbon products.

Levels of aggregation

Product or service family

Taxonomies used to classify products or services as low-carbon

The IEA Energy Technology Perspectives Clean Energy Technology Guide

Type of product or service

illumination

Other, please specify

LED Sensor Light

Product or service offerings

A product that uses a sensor to turn on LED lighting. We have a lineup of LED lighting products such as types that replace conventional light sources (light bulbs, mercury lamps, etc.) with LEDs, types equipped with sensors that turn on occasions only when necessary, and solar-powered types that do not require external power.

Contribute to CO2 reduction by reducing or reducing power consumption by replacing conventional light sources, realizing occasional lighting, and eliminating the need for external power.

For example, power consumption is reduced by about 50~60% by replacing light bulbs with LEDs, 80~90% by occasional lighting by installing sensors, and power consumption is reduced to zero when solar is installed.

Have you estimated the reduction contribution of this low-carbon product or service?

Yes

Method used to calculate the contribution to reduction

Other, please specify

Ministry of Economy, Trade and Industry "Guidelines for Quantifying Contribution to Greenhouse Gas Reduction"

Stages of the intended lifecycle of a low-carbon product or service

Stages of use

Functional units used

The functional unit for comparing an LED sensor light with a conventional light source is the use of an LED sensor light having the same brightness for 12 hours per day (used only at night) for one year, and the same operating period (12 hours / day× for one year).

The baseline product/service or baseline scenario used

The baseline is a conventional light source (such as "equivalent to a mercury lamp 80W") and power consumption corresponding to the brightness of our LED lighting products. Since the power consumption of a conventional light source depends on "rated power (W)", "rated luminous flux (lm)" and "light source type (general light bulb, small light bulb, etc.)", the power consumption is "rated power (W)" for each light source and brightness (= rated luminous flux) quoted from "Japan Light Bulb Industry Association: Guidelines for Light Bulb Type LED Lamp Performance Display, etc." The baseline CO2 emissions are the product of this power consumption, the operating hours per day (12 hours, used only at night), and the CO2 conversion factor per kWh.
"JISC8105-1 Lighting Fixtures - Part 1: General Rules for Safety Requirements" and "Japan Lighting Fixtures Association Guide 111"

The stage of the lifecycle covered by the base product/service or baseline scenario

Stages of use

Estimated evasion emissions for reference products/services or baseline scenarios (metric tons CO2e per functional unit)

55,976

Describe your company's reduction contribution calculation, including assumptions

Since the specifications differ depending on the product model, an example is shown below.

・ Calculation for our products "LC-2000 Series/LC-2000W/LC-2000C"

Based on the baseline scenario above, the annual CO2 emissions of the conventional light source "Mercury Lamp 80W", which corresponds to the target product, are as follows. 0.08 kW (80 W) × 12 hours (operating hours per day) × 0.445 → 155.9 kg-CO2/kwh (based on 2022 national location) ≈ 160 kg-CO2/unit/year → 0.16 t-CO2/unit/year is the baseline CO2 emissions estimate.
The LC-2000 Series/LC-2000W/LC-2000C are battery-powered products equipped with solar power, and CO2 emissions of 0.16 t-CO2/unit/year are avoided.

【Explanation of Calculation of Reduction Contribution】
CO2 emissions per unit / year of lighting products are calculated from the rated power (baseline) of conventional light sources, which corresponds to the brightness of our low-carbon products (lighting products), and the estimated value (CO2 emissions/unit/year: CONTi) of CO2 per unit per year that avoids this difference.
The amount of reduction contribution is the sum of the products of CO2 emissions/unit/year: CONTi, annual sales volume: SALEi, and useful life: LIFEi. (see below)
The sales volume is the annual sales volume for each product, and the service life is 10 years, which is the design life (based on derating and reliability tests of parts used).

・ Σ(CONTi×SALEi×LIFEi) * i: Each lighting product

Percentage of total sales for the reporting year that originated from low-carbon products or services

3.7

Levels of aggregation

Product or service family

Taxonomies used to classify products or services as low-carbon

No taxonomy was used to classify a product or service as low-carbon

Type of product or service

other

Other, please specify

Remote monitoring equipment and services for facilities and facilities (those that can remotely check images and signals)

Product or service offerings

Sensors and related devices have become IoT to enable remote video and signal monitoring. The number of unnecessary dispatches can be limited by switching from reactive maintenance to reactive maintenance by grasping the trend of signal changes, and by determining the necessity of dispatching to the site when abnormal signals or alarms occur.

By suppressing the number of dispatches, the total gasoline consumption consumed by the distance from the service base to the end user and the number of dispatched can be reduced by the amount that the number of dispatches can be suppressed, leading to a reduction in CO2 emissions.

Have you estimated the reduction contribution of this low-carbon product or service?

Yes

Method used to calculate the contribution to reduction

Other, please specify

Ministry of Economy, Trade and Industry "Guidelines for Quantifying Contribution to Greenhouse Gas Reduction"

Stages of the intended lifecycle of a low-carbon product or service

Stages of use

Functional units used

The functional unit for comparing "IoT-enabled sensors and related devices" and "non-IoT products (conventional)" is gasoline consumption when traveling by car by the annual number of dispatches in "non-IoT products (conventional)" and the average dispatch distance.

The baseline product/service or baseline scenario used

The baseline will be "products that are not IoT (conventional)". CO2 emissions (kg-CO2) from gasoline consumption are calculated by the product of the annual vehicle mileage (km: annual average number of dispatches× average dispatch distance), fuel consumption (km/l) and CO2 conversion factor (kg-CO2/l), and the difference between "IoT-enabled sensors and related equipment" and "non-IoT products (conventional)" is reduced.

There are five variables for calculating the above: (1) annual average number of dispatches (times/year), (2) average dispatch distance from service site to end user (km), (3) fuel consumption (km/l), (4) CO2 conversion factor (kg-CO2/l), and (5) service life. (1) and (2) are set based on actual results according to the use and purpose of the product, and (3), (4) and (5) are constants regardless of the purpose or purpose.

The stage of the lifecycle covered by the base product/service or baseline scenario

Stages of use

Estimated evasion emissions for reference products/services or baseline scenarios (metric tons CO2e per functional unit)

6,140

Describe your company's reduction contribution calculation, including assumptions

・ Calculation for our product "WATER it series (sensing service that makes water quality management operations smart)"

Water quality management in wastewater treatment and aquaculture is based on periodic on-site inspections, and the conventional annual CO2 emissions are 1.5 t-CO2 / site / year (*1) from the following, and the WATER it series (sensing service that smartens water quality management operations) can be monitored continuously and remotely, so it will be 0.5 t-CO2 / site / year (*2) from the following. The difference from the conventional 1.5t-CO2-0.5t-CO2 = 1.0t-CO2/site/year is an estimate of the reduction contribution per site. Since dispatch by periodic inspections occurs per site, not each unit, the average number of units installed per

site is 1.0 t-CO2 / site / year ÷ 5 units / site ≈ 0.2 t-CO2 / unit / year is an estimate of the annual reduction contribution per unit.

(*1) :(1) Average annual dispatch: 12 times/year, (2) Average distance dispatched from service site to end user: 100km [round trip], (3) Fuel consumption: 18.2km/l, (4) CO2 equivalent: 2.32kg-CO2/l, (5) Service life: From 10 years, 12 times/year × 100km ÷18.2km/l × 2.32kg-CO2/l ×10 years ≈1, 530kg-CO2 ≈ 1.5t-CO2/site/year
(*2):(1) Average annual dispatch: 4 times/year, (2) Average distance dispatched from service site to end user: 100km [round trip], (3) Fuel consumption: 18.2km/l, (4) CO2 conversion factor: 2.32kg-CO2/l, (5) Service life: From 10 years, 4 times/year × 100km ÷18.2km/l × 2.32kg-CO2/l ×10 years ≈510kg-CO2≈0.5t-CO2/site/year

*Fuel consumption: Source * Gasoline CO2 conversion factor * Service life is 10 years, which is the design life (based on derating and reliability tests of used parts).

The "WATER it series (sensing service that makes water quality management operations smart)" enables continuous measurement and remote monitoring of water quality at facilities, reducing the number of periodic inspections per year.
The "crime prevention sensor with camera that can be remotely monitored" can judge false alarms / true alarms by remote confirmation when an alarm occurs at a facility, so unnecessary dispatch can be suppressed.
"Devices capable of remote monitoring of device signals" can be converted from reactive maintenance to reactive maintenance by signal trend diagnosis, thereby suppressing the number of dispatches.

The reduction effect (CO2 emissions/unit/year) of enabling remote monitoring compared to the baseline is an estimated value for each relevant product calculated as in the previous example, and is referred to as [CONTi: CO2 emissions/unit/year].
In addition, the annual reduction contribution of the product is calculated by the following formula, taking into account the sales volume [SALEi].

・Σ(CONT1i×SALEi) * i: Device that enables remote monitoring

Percentage of total sales for the reporting year that originated from low-carbon products or services

5.38

Levels of aggregation

Product or service family

Taxonomies used to classify products or services as low-carbon

No taxonomy was used to classify a product or service as low-carbon

Type of product or service

other

Other, please specify

Automatic door shutter sensor to suppress waste opening

Product or service offerings

A sensor that suppresses "unnecessary opening" by passers-by crossing in front of doors and shutters. Unnecessary opening of automatic doors and shutters greatly impairs the efficiency of air conditioning in buildings, and in New York, a bill has been passed that prohibits opening doors when using air conditioners. By using sensors and images to read the walking speed and direction of a person's walking, we have developed a sensor that prevents passers-by from opening the door just by crossing in front of the automatic door, not only reducing air conditioning loss due to "wasteful opening" of the door, but also opening and closing the automatic door at the optimal timing according to the walking speed, improving safety compared to

the past. (Product name: eSmooth Sensor)
In addition, the "touch-type automatic door sensor" that is also in the lineup and the "automatic door shutter activation sensor" that recognizes the direction of movement of the approacher by microwave and cancels and controls the passing passerby have the same effect of reducing air conditioning loss.

Have you estimated the reduction contribution of this low-carbon product or service?

Yes

Method used to calculate the contribution to reduction

Other, please specify

Ministry of Economy, Trade and Industry "Guidelines for Quantifying Contribution to Greenhouse Gas Reduction"

Stages of the intended lifecycle of a low-carbon product or service

Stages of use

Functional units used

The functional unit for comparing the waste opening suppression sensor with the conventional sensor is the use of the waste opening suppression sensor for one year when conditions such as door size, building capacity, and number of openings and closings are constant. The system in which the sensor is installed is an automatic door and a shutter, and the number of sensors installed per opening is generally one each inside and outside the door / shutter (two in total), and this is assumed.
The functional unit for comparing the waste opening suppression sensor with the conventional sensor is the use of the waste opening suppression sensor for one year when conditions such as door size, building capacity, and number of openings and closings are constant.
The system in which the sensor is installed is an automatic door and a shutter, and the number of sensors installed per opening is generally one each inside and outside the door / shutter (two in total), and this is assumed.

The baseline product/service or baseline scenario used

Conventional automatic door shutter sensors detect not only intruders but also passers-by who only cross and open the opening. Energy consumption (air entry loss: kWh), including this "waste opening", is the baseline. The energy loss was set in accordance with "CEN/TR 16676:2014" and the following points were set in line with actual use.

- Number of days of heating and cooling: 125.1 days (half of the basic model)
- Door size: Japan double-pulling door size (Size classification: select Pedestrian S2)
- Building capacity: 300 m^3 (average area of general convenience stores: 110 m^2× ceiling height from 2.7m)
- Opening cycle: 8s (opening speed of 500 mm/s or more, closing speed of 350 mm/s or more in the automatic door safety guidebook, opening and holding time of 1~5 seconds, opening and closing 2 m double-drawn doors (2 + 3 seconds) + opening holding (median value 3 seconds) were set to open and close (median value 3 seconds) of the automatic door safety guidebook. * Safety Guidebook for Sliding Automatic Doors:

The product of the CO2 conversion factor of energy loss calculated http://jada-info.jp/topics/anzen_guide_book.html was the baseline CO2 emissions.

The stage of the lifecycle covered by the base product/service or baseline scenario

Stages of use

Estimated evasion emissions for reference products/services or baseline scenarios (metric tons CO2e per functional unit)

210,534

Describe your company's reduction contribution calculation, including assumptions

Energy loss (air entry loss: kwh) is calculated by the following equation based on CEN/TR 16676:2014 - Energy losses by industrial door, and the product of the difference between the baseline scenario energy loss

Ei_base and energy loss from low-carbon goods Ei_model and the CO2 conversion factor per kwh is Estimated CO2 emissions avoided by low-carbon products: ΔCO2/unit/year."

・ Ei = [Hb・tb+Hh・(tc-th)]・n・Ch・Cw / 3,600
・ ΔCO2/unit/year = (Ei_base - Ei_model)× 0.445 kg-CO2/kwh (2022 domestic location standard) The parameters and values of each parameter are as follows. * ( ) Figures are for baseline scenario
・ Hb : Heat flow (kW) 104.2 (104.2)
・ TB : Building air exchange time (s) 30.0 (30.0)
・ Hh : Building heating and cooling capacity (kW) 6 (6)
・ tc : Open cycle (s) 8 (8)
・ th : Heating and cooling 1°C Required time (s) 3.8 (3.8)
・ n: Number of openings and closings/year (times) 210,000 (300,000)
・ Ch: Days of heating and cooling (days) 121.5 (121.5)
・ CW: Influence of wind direction (%) 0.347 (0.347)
・ EI: Air intrusion loss (kWh) 8,267 (5,787)

From the above, the avoided CO2 emissions (ΔCO2/unit/year) are 1,103 kg-CO2/unit/year ≈ 1.1t-CO2/unit/year.
* (8267kwh-5787kwh)×0.445

[Explanation of calculation of reduction contribution] Waste opening suppression Automatic door shutter sensor has an estimated CO2 equivalent value (CO2 emissions/unit/year: CONTi) per year equivalent to the energy loss (air intrusion loss: kwh) of the building avoided by waste opening suppression. The avoidance effect eliminates the need for external power supply and power supply wiring.
For this reason, the baseline CO2 emissions per unit per year (CO2 emissions per unit / year: CONTi) due to the rated power of the external power supply drive type and the wiring used in the same series are the estimated value (CO2 emissions / unit / year: CONTi) of the CO2 to be avoided per unit.
The amount of contribution to reduction is calculated by the sum of the products of CO2 emissions/unit/year: CONTi, annual sales volume: SALEi, and service life: LIFEi, with sales units being the annual sales volume for each product, and service life being 7 years (from the life of mechanical relays), which is the design life.
Since this avoidance effect is limited only when installed in openings facing the outside of the building, the reduction contribution amount × outdoor installation ratio of 30% (:RATIO| average 47%, set from 37% to 30% mode) is the effective reduction contribution.

・Σ(CONTi×SALEi×LIFEi)×RATIO * i: Automatic door shutter sensor to suppress each waste opening

Percentage of total sales for the reporting year that originated from low-carbon products or services

4.64

C5.Emission calculation method

C5.1

(C5.1) Will this be the first year to report emissions data to CDP?

no

C5.1a

(C5.1a) Did your organization experience structural changes in the reporting year? Or are past structural changes included in this emissions data disclosure?

Row 1

Have there been structural changes?

Yes, other structural changes. Please specify

Change in CO2 conversion factorChange in applicable timing and expansion of Scope 3 boundaries

Name of the organization that acquired, dold, or merged

The structure of the organization has not changed, and the name of the organization remains Optex Corporation, including its subsidiaries, as disclosed in the previous year, but we are recalculating our base year emissions for the following reasons. 1) Changes to ensure the continuity of updates of CO2 conversion factors2) Changes due to the expansion of Scope 3, which was limited to the exclusion of some subsidiaries, to the entire Group

Details of structural changes, including completion dates

1) Changes to ensure the continuity of CO2 conversion factor updates The CO2 conversion factor updated every year is considered to be the result of two years ago. In the past fiscal year, we set the coefficient for two years ago, which is the actual result, but since it is difficult to ensure continuity in the annual renewal, the CO2 conversion coefficient that is updated every year from the current year's disclosure is applied to the next fiscal year.
As a result of this change, CO2 emissions (Scope 1+2) for the base year (2018) have increased from approximately 1,000 t-CO2 disclosed in the previous year to approximately 1,260 t-CO2.

2) Scope 3 disclosed in the previous year due to the expansion of Scope 3 to the entire group, which was limited to excluding some subsidiaries,
was calculated excluding some subsidiaries (STRL Trust, Genic, FSI, RAYTEC, FSS). Subsequent activities have made it possible to aggregate data based on the amount of activity, which accounts for approximately 75% of consolidated sales.
In response to this, Scope 3 is the value of the entire Group from the current year's disclosure.
As a result, the total of approximately 60,000 t-CO2 disclosed in Scopes 1, 2, and 3 disclosed in the previous year is now approximately 70,000 t-CO2.
As mentioned earlier, this is due to the expansion of the scope of understanding within the Group.

C5.1b

(C5.1b) Has your emissions calculation method, boundaries or reporting year definitions changed to reporting years?

	Are there any changes to the evaluation methodology, boundaries, or reporting year definitions?	Details of changes in assessment methods, boundaries, and/or reporting year definitions
Row 1	Yes, change in evaluation method Yes, boundary changes	■Changes to ensure continuity of CO2 conversion factors The CO2 conversion factors updated every year are considered to be the results of two years ago. In the past fiscal year, we set the coefficient for two years ago, which is the actual result, but since it is difficult to ensure continuity in the annual renewal, the CO2 conversion coefficient that is updated every year from the current year's disclosure is applied to the next fiscal year. CO2 emissions disclosed this year have been revised in line with this operation since 2018, the base year. As a result of this change, CO2 emissions (Scope 1+2) for the base year (2018) have increased from approximately 1,000 t-CO2 disclosed in the previous year to approximately 1,260 t-CO2. The amount of CO2 reduction to achieve the long-term target of reducing CO2 emissions by 30% or more by 2030 (compared to 2018) has also increased from approximately 300 t-CO2 (approximately 1,000 t-CO2 ×30%) disclosed in the previous year to 378 t-CO2 (approximately 1,260 t-CO2×30%). We will promote our activities.

		■Scope 3, which was limited to excluding some subsidiaries, was expanded to the entire Group Scope 3, which was disclosed the previous year, was calculated excluding the Group's independent subsidiaries (STRL Trustem, Genic, FSI, RAYTEC, FSS), but last year we expanded the Group's scope 3 grasp. From this year's disclosure, the scope of Scope 3 calculation has been expanded to the entire consolidated CO2 Group. The Group defines Scope 3 as 1~7, 11, and 12. CO2 emissions for categories 1, 2, 3, 6, and 7 are calculated from the total consolidated activities of the Group, and CO2 emissions for categories 4, 5, 11, and 12 are calculated from approximately 75% of consolidated net sales. In addition, external verification has been undergone in all scopes of Scopes 1, 2, and 3 for this year's disclosure. As a result of this change, the total of approximately 60,000 t-CO2 disclosed in Scopes 1, 2, and 3 disclosed in the previous year is now approximately 70,000 t-CO2.

C5.1c

(C5.1c) Has your base year emissions and past emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Recalculated scopes	Base year emissions recalculation policy, including criticality thresholds	Recalculation of past emissions
Row 1	Yes	Scope 1 Scope 2, Location Criteria Scope 2, market based Scope 3	1) Changes to ensure the continuity of CO2 conversion factor updates The CO2 conversion factor updated every year is considered to be the result of two years ago. In the past fiscal year, we set the coefficient for two years ago, which is the actual result, but since it is difficult to ensure continuity in the annual renewal, the CO2 conversion coefficient that is updated every year from the current year's disclosure is applied to the next fiscal year. The CO2 emissions disclosed this year have been revised in line with this operation since 2018, the base year for Scope 1, Scope 2 (both location-based and market-based), and Scope 3. As a result of this change, CO2 emissions (Scope 1+2) for the base year (2018) have increased from approximately 1,000 t-CO2 disclosed in the previous year to approximately 1,260 t-CO2. The amount of CO2 reduction to achieve the long-term target of reducing CO2 emissions by 30% or more by 2030 (compared to 2018) has also increased from approximately 300 t-CO2 (approximately 1,000 t-CO2 ×30%) disclosed in the previous year to 378 t-CO2 (approximately 1,260 t-CO2×30%). We will promote our activities. 2) Scope 3, which was limited to the entire Group, was expanded to the entire Group, and the Scope 3 disclosed in the previous year was calculated excluding the independent subsidiaries of the STRL Group (STRL Trust, Genic, FSI, RAYTEC, FSS), but last year we expanded the Group's scope 3 grasp. From this year's disclosure, the scope of Scope 3 calculation has been expanded to the entire consolidated CO2 Group. The Group defines Scope 3 as 1~7, 11, and 12. In calculating CO2 emissions, we set the threshold for "ascertaining the amount of	Yes

			activity equivalent to two-thirds or more of consolidated net sales," and CO2 emissions for categories 1, 2, 3, 6, and 7 are calculated from the amount of activity of the entire consolidated group, and CO2 emissions for categories 4, 5, 11, and 12 are aggregated from the amount of activity of approximately 75% of consolidated net sales. In this year's disclosure, we have also undergone external verification within all scopes of Scopes 1, 2, and 3, and have confirmed the validity of the process, including the conditions and methods for calculating CO2 emissions in the Group.	

C5.2

(C5.2) Provide base year and base year emissions.

Scope 1

Base year start
January 1, 2018

Base year ends
December 31, 2018

Base year emissions (metric tons CO2e)
434

comment

Scope 2 (location-based)

Base year start
January 1, 2018

Base year ends
December 31, 2018

Base year emissions (metric tons CO2e)
869

comment

Scope 2 (market-based)

Base year start
January 1, 2018

Base year ends
December 31, 2018

Base year emissions (metric tons CO2e)
828

comment

Scope 3 Category 1: Purchased goods and services

Base year start
January 1, 2018

Base year ends
December 31, 2018

Base year emissions (metric tons CO2e)
33,634

comment

Scope 3 Category 2: Capital Goods

Base year start
January 1, 2018

Base year ends
December 31, 2018

Base year emissions (metric tons CO2e)
1,245

comment

Scope 3 Category 3: Fuel and energy-related activities (not included in Scope 1 or 2)

Base year start
January 1, 2018

Base year ends
December 31, 2018

Base year emissions (metric tons CO2e)
225

comment

Scope 3 Category 4: Upstream transportation and logistics

Base year start
January 1, 2018

Base year ends
December 31, 2018

Base year emissions (metric tons CO2e)
2,842

comment

Scope 3 Category 5: Waste generated in operations

Base year start
January 1, 2018

Base year ends
December 31, 2018

Base year emissions (metric tons CO2e)
9.1

comment

Scope 3 Category 6: Business travel

Base year start
January 1, 2018

Base year ends
December 31, 2018

Base year emissions (metric tons CO2e)
87

comment

Scope 3 Category 7: Employee commuting

Base year start
January 1, 2018

Base year ends
December 31, 2018

Base year emissions (metric tons CO2e)
191

comment

Scope 3 Category 8: Upstream leased assets

Base year start

Base year ends

Base year emissions (metric tons CO2e)

comment
Not applicable

Scope 3 Category 9: Downstream transportation and logistics

Base year start

Base year ends

Base year emissions (metric tons CO2e)

comment

Not applicable

Scope 3 Category 10: Processing of products for sale

Base year start

Base year ends

Base year emissions (metric tons CO2e)

comment

Not applicable

Scope 3 Category 11: Use of products sold

Base year start

January 1, 2018

Base year ends

December 31, 2018

Base year emissions (metric tons CO2e)

36,258

comment

Scope 3 Category 12: End of life treatment of products sold

Base year start

January 1, 2018

Base year ends

December 31, 2018

Base year emissions (metric tons CO2e)

940

comment

Scope 3 Category 13: Downstream leased assets

Base year start

Base year ends

Base year emissions (metric tons CO2e)

comment

Not applicable

Scope 3 Category 14: Franchising

Base year start

Base year ends

Base year emissions (metric tons CO2e)

comment

Not applicable

Scope 3 Category 15: Investments

Base year start

Base year ends

Base year emissions (metric tons CO2e)

comment

Not applicable

Scope 3: Other (Upstream)

Base year start

Base year ends

Base year emissions (metric tons CO2e)

comment

Not applicable

Scope 3: Other (downstream)

Base year start

Base year ends

Base year emissions (metric tons CO2e)

comment

Not applicable

C5.3

(C5.3) Select the name of the standard, protocol or method used to collect activity data and calculate emissions.

Act on Promotion of Global Warming Countermeasures (Japan)
GHG Protocol: Standards for Calculating and Reporting Operators' Emissions (Revised Edition)

C6. Emissions Data

C6.1

(C6.1) What was your organization's total global Scope 1 emissions? (Unit: metric tons CO2e)

Reporting year

Total global emissions of Scope 1 (metric tons CO2e)

329

start date

January 1, 2022

End Date

December 31, 2022

comment

1st year of previous years

Total global emissions of Scope 1 (metric tons CO2e)

346

start date

January 1, 2021

End Date

December 31, 2021

comment

Last 2 years

Total global emissions of Scope 1 (metric tons CO2e)

322

start date

January 1, 2020

End Date

December 31, 2020

comment

3rd year of previous years

Total global emissions of Scope 1 (metric tons CO2e)
416

start date
January 1, 2019

End Date
December 31, 2019

comment

4th year in previous years

Total global emissions of Scope 1 (metric tons CO2e)
434

start date
January 1, 2018

End Date
December 31, 2018

comment

C6.2

(C6.2) Describe your company's policy on Scope 2 emissions responses.

Row 1

Scope 2, Location Criteria
Reporting Scope 2, Location Criteria

Scope 2, market based
Reporting Scope 2, market-based values

comment

C6.3

(C6.3) What was your organization's total global Scope 2 emissions? (Unit: metric tons CO2e)

Reporting year

Scope 2, Location Criteria
639

Scope 2, market criteria (if applicable)
653

start date

January 1, 2022

End Date

December 31, 2023

comment

The market-based CO2 conversion factor is updated annually, but the latest update is from two years ago. In last year's CDP response, actual values were used only in the past fiscal year, but since it is difficult to ensure continuity, we have changed the method to adopt the latest update as the next year's coefficient in accordance with general industry practice. As a result, there is a difference from the previous year's disclosure.

1st year of previous years

Scope 2, Location Criteria

655

Scope 2, market criteria (if applicable)

778

start date

January 1, 2021

End Date

December 31, 2021

comment

The market-based CO2 conversion factor is updated annually, but the latest update is from two years ago. In last year's CDP response, actual values were used only in the past fiscal year, but since it is difficult to ensure continuity, we have changed the method to adopt the latest update as the next year's coefficient in accordance with general industry practice. As a result, there is a difference from last year's CDP response.

Last 2 years

Scope 2, Location Criteria

700

Scope 2, market criteria (if applicable)

630

start date

January 1, 2020

End Date

December 31, 2020

comment

The market-based CO2 conversion factor is updated annually, but the latest update is from two years ago. In last year's CDP response, actual values were used only in the past fiscal year, but since it is difficult to ensure continuity, we have changed the method to adopt the latest update as the next year's coefficient in accordance with general industry practice. As a result, there is a difference from last year's CDP response.

3rd year of previous years

Scope 2, Location Criteria

740

Scope 2, market criteria (if applicable)

712

start date

January 1, 2019

End Date

December 31, 2019

comment

The market-based CO2 conversion factor is updated annually, but the latest update is from two years ago. In last year's CDP response, actual values were used only in the past fiscal year, but since it is difficult to ensure continuity, we have changed the method to adopt the latest update as the next year's coefficient in accordance with general industry practice. As a result, there is a difference from last year's CDP response.

4th year in previous years

Scope 2, Location Criteria

869

Scope 2, market criteria (if applicable)

828

start date

January 1, 2018

End Date

December 31, 2018

comment

The market-based CO2 conversion factor is updated annually, but the latest update is from two years ago. In last year's CDP response, actual values were used only in the past fiscal year, but since it is difficult to ensure continuity, we have changed the method to adopt the latest update as the next year's coefficient in accordance with general industry practice. As a result, there is a difference from last year's CDP response.

C6.4

(C6.4) Are there any Scope 1, Scope 2, or Scope 3 emission sources (e.g., facilities, specific greenhouse gases, activities, geographic locations, etc.) within the selected reporting boundaries that are not included in the disclosure?

no

C6.5

(C6.5) Indicate your company's total global Scope 3 emissions and disclose and explain exclusions.

Purchased goods and services

Evaluation Status

Relevant and calculated

Emissions in reporting year (metric tons CO2e)

31,014

Emission calculation method

Hybrid (combined) method

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

79.8

Please explain

Emissions for this category are calculated using a hybrid method.
We outsource the manufacture of products, which account for approximately 70% of consolidated sales, to four domestic and overseas companies*.
From these four companies, we obtain the amount of power consumed at the time of manufacturing and the material and weight of the parts used, and calculate CO2 emissions from the obtained information. *

CO2 emissions from products and services purchased from companies other than the above are calculated from costs by one company in China, Japan one company in Vietnam, and two companies other than the above, and the total CO2 emissions in this category are the sum of all of these.

Capital goods

Evaluation Status

Relevant and calculated

Emissions in reporting year (metric tons CO2e)

969

Emission calculation method

Methodologies based on spending

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

0

Please explain

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

Evaluation Status

Relevant and calculated

Emissions in reporting year (metric tons CO2e)

187

Emission calculation method

Average Data Method

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

0

Please explain

Upstream transportation and logistics

Evaluation Status

Relevant and calculated

Emissions in reporting year (metric tons CO2e)

2,916

Emission calculation method

Distance-based techniques

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

0

Please explain

For transportation from manufacturing contractors to regional hub warehouses, transportation between hub warehouses, and transportation from hub warehouses to customers, all transactions are recorded and CO2 emissions are calculated from transportation distances and transportation methods.

Waste generated in operations

Evaluation Status

Relevant and calculated

Emissions in reporting year (metric tons CO2e)

10

Emission calculation method

Average Data Method

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

0

Please explain

business trip

Evaluation Status

Relevant and calculated

Emissions in reporting year (metric tons CO2e)

94

Emission calculation method

Average Data Method

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

0

Please explain

Employer commuting

Evaluation Status

Relevant and calculated

Emissions in reporting year (metric tons CO2e)

210

Emission calculation method

Average Data Method

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

0

Please explain

Upstream leased assets

Evaluation Status

Not relevant, explanation of why

Please explain

None correspond to upstream leased assets.

Downstream transportation and logistics

Evaluation Status

Not relevant, explanation of why

Please explain

None correspond to the downstream of transportation and distribution.

Processing of products for sale

Evaluation Status

Not relevant, explanation of why

Please explain

Nothing corresponds to the processing of the goods sold.

Use of products sold

Evaluation Status

Relevant and calculated

Emissions in reporting year (metric tons CO2e)

32,786

Emission calculation method

Please specify how you intend to direct emissions during the use phase

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

0

Please explain

All products have Typ usage conditions set at the design and development stage, and the annual power consumption based on these conditions is calculated. CO2 emissions from the use of each product are calculated based on the "reported year of sales volume× annual power consumption× CO2 conversion factor (location-based) ×service life" of the country of sale.

End of life processing of products sold

Evaluation Status

Relevant and calculated

Emissions in reporting year (metric tons CO2e)

1,066

Emission calculation method

Average Data Method

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

0

Please explain

Downstream leased assets

Evaluation Status

Not relevant, explanation of why

Please explain

None correspond to downstream leased assets.

franchise

Evaluation Status

Not relevant, explanation of why

Please explain

Nothing falls under the category of a franchise.

investment

Evaluation Status

Not relevant, explanation of why

Please explain

None correspond to investments.

Other (Upstream)

Evaluation Status

Not relevant, explanation of why

Please explain

None of them fall under any other (upstream).

Other (downstream)

Evaluation Status

Not relevant, explanation of why

Please explain

None of them fall under any other (downstream).

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for the previous year.

1st year of previous years

start date

End Date

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scope 1 and 2) (metric tons CO2e)

Scope 3: Upstream logistics (metric tons CO2e)

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream logistics (metric tons CO2e)

Scope 3: Processing of products sold (metric tons CO2e)

Scope 3: Use of products sold (metric tons CO2e)

Scope 3: Disposal of products sold (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchising (metric tons CO2e)

Scope 3: Investment (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

comment

Last 2 years

start date

End Date

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scope 1 and 2) (metric tons CO2e)

Scope 3: Upstream logistics (metric tons CO2e)

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream logistics (metric tons CO2e)

Scope 3: Processing of products sold (metric tons CO2e)

Scope 3: Use of products sold (metric tons CO2e)

Scope 3: Disposal of products sold (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchising (metric tons CO2e)

Scope 3: Investment (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

comment

3rd year of previous years

start date

End Date

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scope 1 and 2) (metric tons CO2e)

Scope 3: Upstream logistics (metric tons CO2e)

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream logistics (metric tons CO2e)

Scope 3: Processing of products sold (metric tons CO2e)

Scope 3: Use of products sold (metric tons CO2e)

Scope 3: Disposal of products sold (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchising (metric tons CO2e)

Scope 3: Investment (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

comment

4th year in previous years

start date

End Date

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scope 1 and 2) (metric tons CO2e)

Scope 3: Upstream logistics (metric tons CO2e)

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream logistics (metric tons CO2e)

Scope 3: Processing of products sold (metric tons CO2e)

Scope 3: Use of products sold (metric tons CO2e)

Scope 3: Disposal of products sold (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchising (metric tons CO2e)

Scope 3: Investment (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

comment

C-CG6.6

(C-CG6.6) Do you evaluate the lifecycle emissions of any of your products or services?

	Assessment of Life Cycle Emissions	comment
Row 1	Yes	We know the CO2 emissions of all stages of the product life cycle (from raw material acquisition to disposal). In addition, at the design and development stage, we are conscious of CO2 emissions at the use stage from the standpoint of contributing to reduction, evaluate the improvement effects from existing products (or base models) in all projects, and clarify what kind of contribution it will lead to customers.

C-CG6.6a

(C-CG6.6a) Provide details on how your company evaluates the lifecycle emissions of any of its products or services.

	Products/Services Evaluated	Most commonly targeted lifecycle stages	Method/Standard/Tool Applied	comment
Row 1	Representative selection of products/services	From cradle to grave	GHG Protocol Product Accounting & Reporting Standard	

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon associated with your company?

no

C6.10

(C6.10) Detail your gross global emissions for Scope 1 and 2 for the reporting year, in metric tons CO2e per unit currency gross sales, and provide additional intensity indicators applicable to your business.

Intensity value

0.0000000418

Index numerator (combined Scope 1 and 2 combined global emissions, metric tons CO2e)

982

Denominator of the indicator

Total sales

Denominator of the indicator: the total amount per unit

23,484,000,000

Scope 2 value used

Market Standards

% change from the previous year

0.25

Increase or decrease in change

decrease

Reasons for the change

Changes in renewable energy consumption
Other Emission Reduction Activities

Please explain

The CO2 conversion factor updated every year is based on the results of two years ago. In the past fiscal year,
we set the coefficient for two years ago, which is the actual result, but since it is difficult to ensure continuity in the annual renewal, we have decided to apply the CO2 conversion factor updated every year from the current year's disclosure to the next fiscal year.
As a result, CO2 emissions in the base year (2018) have increased. In FY2022, we will change the power menu at domestic facilities (Tokyo Branch) (May 2022~) [-6t-CO2/year], convert company vehicles to low-carbon vehicles and EVs at overseas facilities (1 unit in the UK, 2 units in the Netherlands) [-27t-CO2/year], decrease in the number of company vehicles at some overseas facilities (Korea base) [-6t-CO2], move to a small office (Korea base) [-6t-CO2].

C7.Breakdown of emissions

C7.1

(C7.1) Does your organization create a breakdown of Scope 1 emissions by greenhouse gas type?

no

C7.2

(C7.2) Please provide a breakdown of Scope 1 emissions by country/region/administration.

Country/Region/Region	Scope 1 emissions (metric tons CO2e)
Japan	42.4
United Kingdom of Great Britain and Northern Ireland (United Kingdom)	152.9
France	46.5
Netherlands	28.4
Poland	6.5
United States	42.3
Republic of Korea	5.3
China	0
India	0
Thailand	0.8

Canada	4.1

C7.3

(C7.3) Please provide a breakdown of Scope 1 emissions if there are any other available classification methods.

By facility

C7.3b

(C7.3b) Please provide a breakdown of total Scope 1 global emissions by facility of operation.

facility	Scope 1 emissions (metric tons CO2e)	latitude	longitude
head office	20.3	35.092268	135.903782
Tokyo Branch Office	4.4	35.656029	139.761795
OPTEX (EUROPE) LIMITED	60.9	51.530308	-0.727651
OPTEX SECURITY SAS	46.5	46.01613	4.726889
OPTEX TECHNOLOGIES B.V.	9.7	52.029481	4.362386
OPTEX SECURITY Sp.z o.o.	6.5	52.205379	21.038881
OPTEX INCORPORATED	34.7	33.860119	-118.234216
OPTEX KOREA CO., LTD.	5.3	37.396697	126.972491
OPTEX (DONGGUAN) CO., LTD.(SHANGHAI OFFICE)	0	31.188353	121.4428
OPTEX PINNACLE INDIA PRIVATE LIMITED	0	28.443542	77.100548
OPTEX(THAILAND) CO., LTD.	0.8	13.769495	100.573675
FARSIGHT SECURITY SERVICES LTD.	23.8	52.578781	-0.211047
RAYTEC LIMITED	68.3	55.186972	-1.585781
FIBER SENSYS, INC.	7.5	45.564381	-122.911671
RAYTEC SYSTEMS INC.	4.1	45.348747	-75.903372
STRL Trastem Corporation	11.4	34.958439	135.75355
Genic Corporation	6.3	35.002595	135.887918
OPTEX SECURITY B.V.	18.6	52.293309	4.697486

C7.5

(C7.5) Please provide a breakdown of Scope 2 emissions by country/region/administration.

Country/Region/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Japan	483.6	498.4
United Kingdom of Great Britain and Northern Ireland (United Kingdom)	57.9	57.9
France	1.8	1.8
Netherlands	5.5	2.9
Poland	8.9	10.6
United States	64.2	64.2
Republic of Korea	6.2	6.2

China	3.9	3.9
India	2.4	2.4
Thailand	2.4	2.4
Canada	2.4	2.4

C7.6

(C7.6) Please indicate which of the total global Scope 2 emissions breakdown can be provided.

By facility

C7.6b

(C7.6b) Please provide a breakdown of total global Scope 2 emissions by facility of operation.

facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
head office	433.4	455.6
Tokyo	10.3	3.8
OPTEX (EUROPE) LIMITED	10.1	10.1
OPTEX SECURITY SAS	1.8	1.8
OPTEX TECHNOLOGIES B.V.	4.8	2.5
OPTEX SECURITY Sp.z o.o.	8.9	10.6
OPTEX INCORPORATED	38.2	38.2
OPTEX KOREA CO., LTD.	6.2	6.2
OPTEX (DONGGUAN) CO., LTD.(SHANGHAI OFFICE)	3.9	3.9
OPTEX PINNACLE INDIA PRIVATE LIMITED	2.4	2.4
OPTEX(THAILAND) CO., LTD.	2.4	2.4
FARSIGHT SECURITY SERVICES LTD.	23.1	23.1
RAYTEC LIMITED	24.7	24.7
FIBER SENSYS, INC.	26.1	26.1
RAYTEC SYSTEMS INC.	2.4	2.4
STRL Trastem Corporation	24	22.5
Genic Corporation	15.8	16.6
OPTEX SECURITY B.V.	0.7	0.4

C7.7

(C7.7) Can I provide a breakdown of the emissions data for the subsidiaries included in your CDP response?

Yes

C7.7a

(C7.7a) Please provide a breakdown of total Scope 1 and Scope 2 emissions by subsidiary.

Name of Subsidiary

Optex Corporation

Main Business Activities

Electrical equipment

Please select a unique ID that your company can provide to this subsidiary

No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)

24.7

Scope 2 emissions, location-based (metric tons CO2e)

443.8

Scope 2, market-based emissions (metric tons CO2e)

459.3

comment

Including Tokyo Branch

Name of Subsidiary

OPTEX (EUROPE) LIMITED

Main Business Activities

Electrical equipment

Please select a unique ID that your company can provide to this subsidiary

No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)

60.9

Scope 2 emissions, location-based (metric tons CO2e)

10.1

Scope 2, market-based emissions (metric tons CO2e)

10.1

comment

Name of Subsidiary

OPTEX SECURITY SAS

Main Business Activities

Electrical equipment

Please select a unique ID that your company can provide to this subsidiary

No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)
46.5

Scope 2 emissions, location-based (metric tons CO2e)
1.8

Scope 2, market-based emissions (metric tons CO2e)
1.8

comment

Name of Subsidiary
OPTEX TECHNOLOGIES B.V.

Main Business Activities
Electrical equipment

Please select a unique ID that your company can provide to this subsidiary
No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)
9.7

Scope 2 emissions, location-based (metric tons CO2e)
4.8

Scope 2, market-based emissions (metric tons CO2e)
2.5

comment

Name of Subsidiary

OPTEX SECURITY Sp.z o.o.

Main Business Activities

Electrical equipment

Please select a unique ID that your company can provide to this subsidiary

No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)

6.5

Scope 2 emissions, location-based (metric tons CO2e)

8.9

Scope 2, market-based emissions (metric tons CO2e)

10.6

comment

Name of Subsidiary

OPTEX INCORPORATED

Main Business Activities

Electrical equipment

Please select a unique ID that your company can provide to this subsidiary

No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)
34.7

Scope 2 emissions, location-based (metric tons CO2e)
38.2

Scope 2, market-based emissions (metric tons CO2e)
38.2

comment

Name of Subsidiary
OPTEX KOREA CO., LTD.

Main Business Activities
Electricity and gas network construction

Please select a unique ID that your company can provide to this subsidiary
No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)

5.3

Scope 2 emissions, location-based (metric tons CO2e)

6.2

Scope 2, market-based emissions (metric tons CO2e)

6.2

comment

Name of Subsidiary

OPTEX (DONGGUAN) CO., LTD.(SHANGHAI OFFICE)

Main Business Activities

Electrical equipment

Please select a unique ID that your company can provide to this subsidiary

No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)

0

Scope 2 emissions, location-based (metric tons CO2e)

3.9

Scope 2, market-based emissions (metric tons CO2e)

3.9

comment

Name of Subsidiary

OPTEX PINNACLE INDIA PRIVATE LIMITED

Main Business Activities

Electrical equipment

Please select a unique ID that your company can provide to this subsidiary

No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)

0

Scope 2 emissions, location-based (metric tons CO2e)

2.4

Scope 2, market-based emissions (metric tons CO2e)

2.4

comment

Name of Subsidiary

OPTEX(THAILAND) CO., LTD.

Main Business Activities

Electrical equipment

Please select a unique ID that your company can provide to this subsidiary

No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)

0.8

Scope 2 emissions, location-based (metric tons CO2e)

2.4

Scope 2, market-based emissions (metric tons CO2e)

2.4

comment

Name of Subsidiary

FARSIGHT SECURITY SERVICES LTD.

Main Business Activities

Electrical equipment

Please select a unique ID that your company can provide to this subsidiary

No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)
23.8

Scope 2 emissions, location-based (metric tons CO2e)
23.1

Scope 2, market-based emissions (metric tons CO2e)
23.1

comment

Name of Subsidiary
RAYTEC LIMITED

Main Business Activities
Electrical equipment

Please select a unique ID that your company can provide to this subsidiary
No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)
72.4

Scope 2 emissions, location-based (metric tons CO2e)
27.1

Scope 2, market-based emissions (metric tons CO2e)
27.1

comment

Name of Subsidiary

FIBER SENSYS, INC.

Main Business Activities

Electrical equipment

Please select a unique ID that your company can provide to this subsidiary

No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)

7.5

Scope 2 emissions, location-based (metric tons CO2e)

26.1

Scope 2, market-based emissions (metric tons CO2e)

26.1

comment

Name of Subsidiary

STRL Trastem Corporation

Main Business Activities

Electrical equipment

Please select a unique ID that your company can provide to this subsidiary

No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)

11.4

Scope 2 emissions, location-based (metric tons CO2e)

24

Scope 2, market-based emissions (metric tons CO2e)

22.5

comment

Name of Subsidiary

Genic Corporation

Main Business Activities

Electrical equipment

Please select a unique ID that your company can provide to this subsidiary

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)

6.3

Scope 2 emissions, location-based (metric tons CO2e)

15.8

Scope 2, market-based emissions (metric tons CO2e)

16.6

comment

Name of Subsidiary

OPTEX SECURITY B.V.

Main Business Activities

Electrical equipment

Please select a unique ID that your company can provide to this subsidiary

No unique ID

ISIN Code – Bond

ISIN Code – Shares

CUSIP Number

TICKER SYMBOL

SEDOL Code

LEI Number

Other unique identifiers

Scope 1 emissions (metric tons CO2e)

18.6

Scope 2 emissions, location-based (metric tons CO2e)

0.7

Scope 2, market-based emissions (metric tons CO2e)

0.4

comment

C7.9

(C7.9) How did total emissions (Scope 1+2) change in the reporting year compared to the previous year?

decrease

C7.9a

(C7.9a) Identify the reasons for the change in global total emissions (scopes 1 and 2 combined) and indicate how emissions have changed for each reason compared to the previous year.

	Change in emissions (metric tons CO2e)	Increase or decrease in changes in emissions	Emissions (percentage)	Explain the calculation
Changes in renewable energy consumption	1.8	decrease	0.282	The amount of CO2 reduction from the use of renewable energy in 2022 was 8.5 t-CO2, 1.8 t-CO2 (10.3-8.5 = 1.8 t-CO2) less than the previous year, and the reduction rate was 0.282% from the previous year. The calculation formula is as follows. 1.8t-CO2/639t-CO2(S1+S2:2021)×100=-0.282%*2021 renewable energy 22.3MWh → 10.3t-CO2 (0.462 kg-CO2/kWh: based on 2021 location) *2022 renewable energy 19.0MWh → 8.5t-CO2(0.445 kg-CO2/kWh: 2022 location criteria)
Other Emission Reduction Activities	140	decrease	21.4	In FY2022, we took measures to reduce the electricity menu at domestic facilities (Tokyo Branch) (May 2022~) [-6t-CO2/year], conversion of company cars to EVs at overseas facilities (1 in the UK and 2 in the Netherlands) [-27t-CO2/year], reduction in the number of company vehicles at some overseas facilities (Korea base) [-6t-CO2], and moving to a small office (Korea base) [-6t-CO2]. Approximately -140t-CO2 (* 982t-CO2[2022]-1,124t-CO2[2021]=142≈140) reduction on a market basis. ※140t-CO2/653t-CO2(S1+S2:2021)×100=-21.4%
Raising investment				Not applicable
takeover				Not applicable
merger				Not applicable
Changes in production volume				Not applicable
Methodological changes				Not applicable
Boundary changes				Not applicable

Changes in physical operating conditions				Not applicable
Not specified				Not applicable
other				Not applicable

C7.9b

(C7.9b) Are the actual C7.9 and C7.9a emissions calculations based on location-based Scope 2 emissions values or market-based Scope 2 emissions values?

Market Standards

C-CG7.10

(C-CG7.10) How did total Scope 3 emissions in the reporting year change compared to the previous reporting year?

decrease

C-CG7.10a

(C-CG7.10a) For each Scope 3 category calculated in C6.5, how do you compare emissions and identify the reasons for the change?

Purchased goods and services

Increase or decrease in change

increase

The main reasons for the change

Other, please specify

Due to price increases for purchased products

Change in emissions in this category (metric tons CO2e)

869

% change in emissions in this category

1.88

Please explain

CO2 emissions from purchased goods and services in the reporting year increased by 869 t-CO2 compared to the previous year.
The calculation of emissions for this category uses a hybrid method of calculating CO2 emissions from the following four activities. (1) Power consumption during the manufacture of products and products (2) Material and weight of parts obtained from suppliers (3) Purchase amount of products that do not fall under (1) above (4) Amount of services purchased other than (1), (2), and (3) above * (1) and (2) are the four major contractors that outsource the manufacture of manufactured products that account for approximately 70% of consolidated sales

.Compared to the previous year, the largest increase in CO2 emissions was (3) the amount of products purchased (other than the four main contractors), which increased by 761 t-CO2 from 2,454 t-CO2 in 2021 to 3,215 t-CO2 in 2022. （※3,215[2022]-2454[2021]＝761t-CO2）

This increase was due to increases in product prices due to soaring fuel prices and increased purchases due

to increased demand.

Capital goods

Increase or decrease in change

decrease

The main reasons for the change

Other, please specify

Impact of differences in the number of variants of development series over a year

Change in emissions in this category (metric tons CO2e)

139

% change in emissions in this category

12.6

Please explain

CO2 emissions from capital goods in the reporting year decreased by 139 t-CO2 compared to the previous year. Last year, the number of items in the "Buildings and Structures" category increased by 43 t-CO2 due to the establishment of a new office building at the U.S. base (FIBER SENSYS, INC.), and the "Machinery and Equipment" category increased by 121 t-CO2 due to investment in the automation of the FLX series of passive sensors for indoor crime prevention.

Together with the 26 t-CO2 increase in the "Vehicle Transportation Equipment" category, there was an increase of 190 t-CO2 (43+121+26=190), but the "Tools and Equipment" and "Others" categories decreased by 329 t-CO2 compared to the previous year, resulting in a total decrease of 139 t-CO2 (190-329=-139).

Since investment in new molds depends on the progress of new product development and the number of variants of the development series, this tends to result in large annual fluctuations.

As a result of this trend, CO2 emissions from the "Tools & Fixtures" category, for which this investment is recorded, increased from the previous year.

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

Increase or decrease in change

decrease

The main reasons for the change

Other, please specify

Energy-saving, gas saving, and normal recovery from the corona disaster that forced regular ventilation

Change in emissions in this category (metric tons CO2e)

7

% change in emissions in this category

3.61

Please explain

CO2 emissions from fuel- and energy-related activities in the reporting year decreased by 7 t-CO2 compared to the previous year. We are promoting the conversion of overseas bases to low-carbon vehicles and EVs, mainly at our overseas bases. In 2022, the number of low-carbon vehicles and EVs in the company's own fleet (60 units) will be 8, and the ratio of low-carbon vehicles and EVs will be 13.3% (8 units/60 units = 0.133→13.3%) However, due to the impact of the normalization of social and economic activities from the corona disaster, the consumption of gasoline and diesel remained unchanged from the previous year. In both 2021 and 2022, CO2 emissions from gasoline and diesel were 45 t-CO2.

Electricity consumption was also almost the same, from 1,682,537 kWh in 2021 to 1,684,969 kWh in 2022, but gas consumption decreased from 66,282 m³ to 52,825 kWh, which contributed to the decline in this category.

The decrease in gas consumption was attributable to the normal recovery from the coronavirus pandemic, which forced energy and gas conservation at overseas bases and regular ventilation.

Upstream transportation and logistics

Increase or decrease in change

increase

The main reasons for the change

Other, please specify

Change in emissions in this category (metric tons CO2e)

302

% change in emissions in this category

11.5

Please explain

CO2 emissions from upstream transportation and logistics in the reporting year increased by 302 t-CO2 compared to the previous year.
We have recorded transaction data for (1) transportation from manufacturing contractors to regional hub warehouses, and (2) transportation from regional hub warehouses to primary sales destinations, and calculate CO2 emissions from these.

The increase in CO2 emissions from the previous year was attributable to (1) transportation from manufacturing contractors to regional hub warehouses.
Although the number of transports decreased from 29,290 [2021] to 27,494 [2022], the proportion of air transport increased from 10.3% [2021] to 11.4% [2022] due to the impact of delivery due to difficulties in obtaining parts, which increased CO2 emissions from 989t-CO2 [2021] to 1500t-CO2 [2022].

Although we reduced the ratio of bulk transportation and air transportation to primary sales destinations, we were unable to cover all of the above increases in CO2 emissions.
As parts acquisition is gradually normalizing, we expect this impact to be minimized in the future.

Waste generated in operations

Increase or decrease in change

increase

The main reasons for the change

Other, please specify

Increased industrial waste at headquarters

Change in emissions in this category (metric tons CO2e)

1.4

% change in emissions in this category

15.5

Please explain

CO2 emissions from waste generated during the founding of the company in the reporting year increased by 1.4 t-CO2 from the previous year.
We have a plan to make our head office location-free in 2023 as part of our work style reform, and in 2022, industrial waste increased more than usual due to the abolition of personal cabinets.
This is the reason why CO2 emissions in this category increased compared to the previous year.

business trip

Increase or decrease in change

increase

The main reasons for the change

Other, please specify

Due to the increase in the number of employees

Change in emissions in this category (metric tons CO2e)

2.9

% change in emissions in this category

3.17

Please explain

CO2 emissions from business trips in the reporting year increased by 2.9 t-CO2 compared to the previous year.
This is due to an increase of 22 employees (704 [2021]→ 724 [2022]: 724-704 = 22 employees) compared to the previous year.

Employer commuting

Increase or decrease in change

increase

The main reasons for the change

Other, please specify

Due to the increase in the number of employees

Change in emissions in this category (metric tons CO2e)

6

% change in emissions in this category

2.94

Please explain

CO2 emissions from employee commuting in the reporting year increased by 6 t-CO2 compared to the previous year.
This is due to an increase of 22 employees (704 [2021]→ 724 [2022]: 724-704 = 22 employees) compared to the previous year.

Use of products sold

Increase or decrease in change

decrease

The main reasons for the change

Other, please specify

Improvement in electricity intensity (location-based) in the country of sale

Change in emissions in this category (metric tons CO2e)

2,963

% change in emissions in this category

8.29

Please explain

CO2 emissions from the use of products sold in the reporting year decreased by 2,963 t-CO2 compared to the previous year.
This CO2 emissions are calculated by the product of "product sales volume," "annual power consumption when using the product," "electricity consumption intensity in the country of sale (location-based)," and "useful life (fixed at 10 years)."
Compared to the previous year, the biggest reason for the decrease in CO2 emissions was the impact of the national average of electricity intensity (location-based) from 0.426 [kg-CO2/kWh] to 0.399 [kg-CO2/kWh].
In addition, there was a slight decrease in unit sales (about 3%) and a slight impact on the product mix.

End of life processing of products sold

Increase or decrease in change

decrease

The main reasons for the change

Changes in production volume

Change in emissions in this category (metric tons CO2e)

6

% change in emissions in this category

0.56

Please explain

CO2 emissions from end-of-life treatment of products sold in the reporting year decreased by 6 t-CO2 compared to the previous year.
CO2 emissions are calculated by multiplying the product of product sales volume, product mass, and waste intensity.
The decrease in CO2 emissions compared to the previous year was due to a slight decrease in unit sales (approximately 3%) and the impact of the product mix.

C8. Energy

C8.1

(C8.1) What percentage of business expenditure in the reporting year was due to energy use?

>0%, 5% or less

C8.2

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

	Indicates whether your company has implemented the following energy-related activities in the reporting year:
Fuel consumption (excluding raw materials)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	no
Consumption of purchased or acquired steam	no

Purchased or acquired cold and heat consumption	no
Generation of power, heat, steam, or cold heat	Yes

C8.2a

(C8.2a) Report your total energy consumption (excluding feedstock) in MWh.

	Calorific value	Energy from renewable energy sources (unit: MWh)	Energy from non-renewable energy sources (unit: MWh)	Total energy (renewable and non-renewable) MWh
Fuel consumption (excluding raw materials)	HHV (High Calorific Value)	0	1,550.6	1,550.6
Consumption of purchased or acquired electricity		0	1,685	1,685
Consumption of self-generated non-fuel renewable energy		19		19
Total energy consumption		19	3,235.6	3,254.6

C8.2b

(C8.2b) Select the application for your fuel consumption.

	Indicate whether your company will carry out activities for this energy use
Fuel consumption for power generation	no
Consumption of fuel for heat generation	Yes
Consumption of fuel for steam production	no
Consumption of fuel for cooling generation	no
Consumption of fuel for cogeneration or trigeneration	no

C8.2c

(C8.2c) Indicates the amount of fuel (excluding feedstock) consumed by your company in MWh by fuel type.

Sustainable Biomass

Calorific value

Inability to confirm calorific value

Total fuel consumed by the organization (MWh)

0

comment

Other biomass

Calorific value

Inability to confirm calorific value

Total fuel consumed by the organization (MWh)

0

comment

Other renewable fuels (e.g. renewable hydrogen)

Calorific value

Inability to confirm calorific value

Total fuel consumed by the organization (MWh)

0

comment

coal

Calorific value

Inability to confirm calorific value

Total fuel consumed by the organization (MWh)

0

comment

petroleum

Calorific value

HHV

Total fuel consumed by the organization (MWh)

892.3

comment

Database of emission intensity for calculating greenhouse gas emissions, etc. of organizations through the supply chain
covered by gasoline

natural gas

Calorific value

HHV

Total fuel consumed by the organization (MWh)

658.3

comment

Database of emission intensity for calculating greenhouse gas emissions, etc. of organizations through the supply chain
covered by gases

Other non-renewable fuels (e.g., non-renewable hydrogen)

Calorific value

Inability to confirm calorific value

Total fuel consumed by the organization (MWh)

0

comment

Total fuel

Calorific value

HHV

Total fuel consumed by the organization (MWh)

1,550.6

comment

Emission intensity database for calculating an organization's greenhouse gas emissions throughout the supply chain

C8.2d

(C8.2d) Provide details about the power, heat, steam and cooling that your organization generated and consumed in the reporting year.

	Total Production (MWh)	Amount of production consumed by the organization (MWh)	Total production from renewable energy sources (MWh)	Generation from renewable energy sources consumed by the organization (MWh)
electric power	19	19	19	19
hot	0	0	0	0
steam	0	0	0	0
Hot and cold	0	0	0	0

C8.2e

(C8.2e) Please specify the amount of electricity, heat, steam and cold calculated using zero or near-zero emission factors in the market-based Scope 2 figures reported in C6.3.

Countries/regions with low carbon energy consumption

Japan

Procurement method

Retail supply contracts with electricity suppliers (retail green power)

Energy Carrier

electric power

Types of low-carbon technologies

sunlight

Low-carbon energy (MWh) consumed through the selected procurement method in the reporting year

19.8

Tracking Techniques

contract

Country/region or energy attribute of the source (generation) of low-carbon energy

Japan

Can I report the year of commencement or repowering of a power plant?

Yes

Year of commencement of operation of the power generation facility (e.g., date of first commercial operation or repawing)

2022

comment

Changed from May 2022

C8.2g

(C8.2g) Provide a breakdown of non-fueled energy consumption by country/region in the reporting year.

Country/Region

Japan

Consumption of purchased electricity (MWh)

0

Consumption of self-generated electricity (MWh)

19

Purchased heat, steam and cold heat consumption (MWh)

0

Self-generated heat, steam and cold heat consumption (MWh)

19

Total Non-Fuel Energy Consumption (MWh) [automatically calculated]

38

Country/Region

Netherlands

Consumption of purchased electricity (MWh)

0

Consumption of self-generated electricity (MWh)

26.1

Purchased heat, steam and cold heat consumption (MWh)

0

Self-generated heat, steam and cold heat consumption (MWh)

11.4

Total Non-Fuel Energy Consumption (MWh) [automatically calculated]

37.5

C-CG8.5

(C-CG8.5) Does your organization evaluate the efficiency of either the goods or services?

	Product/Service Efficiency Evaluation	Comment
Row 1	Yes	In order to actively promote the design, development, and sales of "products that contribute to others" that customers use lead to improvements in energy efficiency, we have been continuing this activity by adding consideration of contributions to others to the "environmental assessment" conducted at the new product development stage since June 2020. In this "Environmental Assessment," resource conservation, energy conservation, recycling, and contributions to others are compared between existing products and new products, and a comprehensive evaluation is conducted as the degree of improvement in five stages of S, A, B, C, and D, and the existing level is B and the improved ones are S or A, and the ratio of products in the S and A ranks in fiscal 2022 was about 33%. In the entrance field, we have decided to increase the composition ratio of automatic doors and shutter sensors equipped with waste-opening prevention control, which is directly linked to improving the energy efficiency of buildings, and aim to increase the contribution of others from these sales from 210,000 t-CO2 to 1 million t-CO2 by 2030. In response to this, we are reflecting this in our business plan and product roadmap. In addition, we have "battery operation of sensors = 0 power consumption" in the crime prevention field, "LED lighting equipment + sensor + solar = 0 power consumption" in the domestic solution field, " automatic door and shutter waste opening control = improvement of air conditioning efficiency" in the entrance field, "realization of remote monitoring by IoT = unnecessary dispatch control (gasoline suppression)", etc. Since there are various products that contribute to others, in order to convey them to all customers in an easy-to-understand manner, in 2022, we released a dedicated page on our website titled "If you accumulate a niche, it will become a mountain." In addition to our intention to respond to climate change, we have set up videos anime of our major low-carbon contribution products and physical risk countermeasure products, simulations of the amount of reduction contributions, etc. Also in 2022, we launched a free download of a data booklet summarizing these sustainability solutions. Through these efficiency improvement initiatives, planning and implementation of measures, and disseminating information, the Company aims to increase the ratio of sales of products that contribute to others from 17.5% (2018) to 22.5% (2025)," and in fiscal 2022, sales of products that contribute to others increased by 6% from the previous year to 375,000 units (previous year: 354,000 units), and sales of products that contribute to othersSales increased 32% year on year to 5,319 million yen (4,043 million yen in the previous year). Net sales of products contributed to others accounted for 22.6% of consolidated sales (5,319 million yen/23,484 million yen ×100), and we were able to achieve our previous target ahead of schedule.

C-CG8.5a

(C-CG8.5a) Please provide details of the scale you used to evaluate the efficiency of your product or service.

Product or service category

Industrial Machinery

Product or service (optional)

We are actively promoting the design, development, and sales of "products that contribute to others" that customers can use to improve energy efficiency.
Typical products and services are as follows. • "Battery operation of sensors = 0 power consumption" in the crime prevention field• "LED lighting equipment + sensor + solar = 0 power consumption" in the domestic solution field• "Automatic door shutter waste opening control = improvement of air conditioning efficiency" in the entrance field, "Realization of remote monitoring by IoT = unnecessary dispatch control (gasoline suppression)", etc.

% of sales from this product or service in the reporting year

22.6

Efficiency figures for reporting year

22.6

Index numerator

Metric tons CO2e

Denominator of the indicator

Unit sales

comment

C9. Additional Indicators

C9.1

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

detail

Other, please specify

Percentage of low-carbon vehicles in the company's fleet

Index value

0.3

Index numerator

Number of low-carbon vehicles

Indicator denominator (intensity only)

Number of vehicles owned by the company

% change from the previous year

79.7

Increase or decrease in change

increase

Please explain

In 2022, the number of low-carbon vehicles and EVs in the company's fleet (60 units) was 8, and the ratio of low-carbon vehicles and EVs was 13.3%. (8/60 units = 0.133→13.3%)
The achievement rate of the target is 44.4% (13.3%/30%=0.444→44.4%).

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Will you invest in research and development (R&D) of low-carbon products or services related to sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	The Board of Directors decided to invest 6.3 billion yen in R&D expenses, including products contributed to others, in the medium-term management plan from 2022 to 2024, as an increase in sales through sales of low-carbon, energy-efficient products (products contributed by others) was cited as a climate-related opportunity in products and services. In the "environmental assessment" conducted at the new product development stage, we compare resource saving, energy conservation, recycling, and contributions to others with existing products with new products, and comprehensively evaluate the degree of improvement on a five-point scale of S, A, B, C, and D. The existing level is B and the improved product is S or A, and the ratio of products in S and A rank in fiscal 2022 was about 33%. In fiscal 2022, investment in climate-related opportunities will be approximately 630 million yen (R&D expenses of 1.9 billion yen ×33%), which is obtained by multiplying approximately 1.9 billion yen of R&D expenses by the above ratio. Climate-related opportunities have had a high impact on R&D investment and are expected to remain at the same rate in the future.

C-CG9.6a

(C-CG9.6a) Provide details of your investment in low-carbon R&D for capital goods products and services over the past three years.

Technical Areas

Unable to subdivide by technical area

Stages of development in the reporting year

Average percentage of total R&D investment over the past three years

30

R&D investment in the reporting year (currency selected in C0.4) (optional)

630,000,000

Average percentage of total R&D investment planned for the next five years

30

Describe how your R&D investments in this technology area align with your climate change efforts and climate transition plans

Based on the TCFD guidance, we use a variety of external scenarios to analyze and identify significant strategic impacts from climate-related risks and opportunities in our business. • Increased financial costs due

to carbon taxes and tighter market regulations• Business impact when manufacturing plants are at risk of flooding due to increased extreme weather• Business impact when CO2 reduction activities and climate-related information disclosure are judged to be insufficient• Impact of products and technologies contributing to low-carbon and physical risk counter measures Impact of these impacts" We are committed to the long-term goal of reducing CO2 emissions by at least 30% by 2030 (compared to 2018 levels).
In addition, we provide many products that lead to low-carbon society and energy efficiency improvement at our customers (products that contribute to others).

In order to align climate change with R&D investment, we are committed to achieving both "increasing the amount of contribution to reduction" and "reducing CO2 emissions from business operations," and we are also committed to the goal of "contributing to others to at least four times the total amount of emissions" with an awareness of "contribution" and "reduction."
Under the strong leadership of the Chief Executive Officer, we are actively promoting activities to achieve our goals and intensifying actions and investments that will contribute to a sustainable future.

C10. Verification

C10.1

(C10.1) What is the status of verification/assurance for the reported emissions?

	Verification/Assurance Status
Scope 1	Third-party verification/assurance in progress
Scope 2 (location- or market-based)	Third-party verification/assurance in progress
Scope 3	Third-party verification/assurance in progress

C10.1a

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

Verification/Assurance Implementation Cycle
Annual process

Status of verification/assurance acquisition in the reporting year
complete

Type of Verification/Assurance
Limited Warranty

Attach a statement

GHG Verification Statement_Optex .pdf

Page/Chapter
Pages 1 and 4 list Scope 1 emissions, and pages 2 and 3 are about verification/assurance.

Related Standards
ISO14064-3

% of verified reported emissions
100

C10.1b

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

Scope 2 methodology

Scope 2 Market Standards

Verification/Assurance Implementation Cycle

Annual process

Status of verification/assurance acquisition in the reporting year

complete

Type of Verification/Assurance

Limited Warranty

Attach a statement

GHG Verification Statement_Optex .pdf

Page/Chapter

Pages 1 and 4 list Scope 2 emissions, and pages 2 and 3 are about verification/assurance.

Related Standards

ISO14064-3

% of verified reported emissions

100

C10.1c

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

Scope 3 Category

Scope 3: Purchased goods and services
Scope 3: Capital goods
Scope 3: Fuel and energy-related activities (not included in Scope 1 or 2)
Scope 3: Upstream transportation and logistics
Scope 3: Waste generated in operations
Scope 3: Business travel
Scope 3: Employer commuting
Scope 3: Use of products sold
Scope 3: End of life processing of products sold

Verification/Assurance Implementation Cycle

Annual process

Status of verification/assurance acquisition in the reporting year

complete

Type of Verification/Assurance

Limited Warranty

Attach a statement

GHG Verification Statement_Optex .pdf

Page/Chapter

Scope 3 emissions are listed on pages 1 and 4, and pages 2 and 3 are about verification/assurance.

Related Standards

ISO14064-3

% of verified reported emissions

100

C10.2

(C10.2) Do you verify climate-related information reported in CDP disclosures beyond the emissions values reported in C6.1, C6.3, and C6.5?

No. We have not verified other climate-related information reported in the CDP disclosure.

C11.Carbon Pricing

C11.1

(C11.1) Are your operations and activities regulated by carbon pricing systems (ETS, cap-and-trade, carbon tax)?

Yes

C11.1a

(C11.1a) What are the carbon pricing regulations that affect your operations?

Japan Carbon Tax

C11.1c

(C11.1c) Please provide the following table for each regulated tax system:

Japan Carbon Tax

Period Start Date

January 1, 2022

End Date

December 31, 2022

Percentage of total Scope 1 emissions subject to tax

12.77

Total amount of taxes paid

13,440

comment

In order to strengthen global warming countermeasures, including the introduction of renewable energy and energy-saving measures toward the realization of a low-carbon society, the "Tax for Global Warming Countermeasures" was gradually enforced in Japan from October 1, 2012, and the tax rate was raised to the scheduled for April 1, 2016. This tax system requires all fossil fuel use to be borne widely and fairly according to the environmental impact, and specifically, the tax rate per unit (kiloliter or ton) is set so that the tax burden for each fossil fuel is equal to 289 yen per ton of CO2 emissions.

C11.1d

(C11.1d) What are your strategies for complying with regulated or expected to be regulated?

Situation: Currently, the tax burden is not large, but there are regulations for global warming countermeasure taxes in Japan. On the other hand, in Europe, a tax of 10,000~15,000 yen/1t-CO2 is imposed, and the Border Carbon Adjustment Mechanism (CBAM) is scheduled to be implemented from October 1, 2023 to fill this gap.
As a result, there is a possibility that further increases in the global warming countermeasure tax and new regulations such as a carbon tax will be imposed in the future.

【Challenge】
In anticipation of a new carbon tax, we believe that it is necessary to reduce the amount of electricity used and procure renewable energy.
【Action】
While addressing climate change is at the core of the company's strategy, the CEO instructed the launch of a carbon neutrality project and the formulation of a plan to achieve long-term goals.
Activities in fiscal 2022 are as follows.
・Formulate a plan toward the goal of reducing CO2 emissions by 30% or more by 2030 (compared to 2018) (based on the Group's emission trends, plans to convert domestic facilities to renewable energy, investment in energy-saving equipment (head office evaluation equipment), and switch overseas facilities to low-carbon vehicles and EVs)
・In the short and medium term, 20 million yen was recorded as solar panel installation costs at the head office and one domestic subsidiary.
・In the long term, we will formulate an energy-saving capital investment plan by 2030 and record 40 million yen.
【Results】
In FY2022, we will change the power menu at domestic facilities (Tokyo Branch) (May 2022~) [-6t-CO2/year], convert company vehicles to low-carbon vehicles and EVs at overseas facilities (1 unit in the UK and 2 units at the Netherlands base) [-27t-CO2/year], decrease in the number of company vehicles at some overseas facilities (Korea base) [-6t-CO2/year], moving to a small office (Korea base) [-6t-CO2/year], etc., and reducing CO2 by 142t-CO2 (* 982t-CO2[2022]-1,124t-CO2[2021]) on a market basis compared to the previous year. It was reduced.
CO2 reduction is progressing smoothly, but in consideration of the increase in CO2 emissions associated with the normalization of social and economic activities from the coronavirus pandemic and the impact of the CO2 conversion factor of contracted electricity at the head office, we plan to install solar panels at the head office and one facility in Japan, replace the evaluation equipment with eco-friendly equipment, and hybridize domestic company vehicles, and will promote it from the next fiscal year onward. (We expect to reduce CO2 emissions by approximately 100 t-CO2 in the next fiscal year and beyond.)）

C11.2

(C11.2) Did you cancel (amortize) your project-derived carbon credits during the reporting year?

no

C11.3

(C11.3) Does your organization use internal carbon pricing?

Yes

C11.3a

(C11.3a) Provide details of how your company uses internal carbon pricing.

Types of internal carbon prices

Shadow Price (Potential Price)

How the price is determined

Other, please specify

In IEA NZE 2050, the carbon price is 75 US dollars in developed countries, 45 US dollars in emerging and developing countries, and 130 US dollars and 90 US dollars in 2030, and we have bases in Japan and overseas, and we assume that the global carbon price in 2030 will be 10,000 yen/t-CO2.

Purpose of implementing this internal carbon price

Changes in internal behavior
Promoting Energy Efficiency
Promoting Low-Carbon Investment

Target Scope

Scope 1
Scope 2

Pricing approach used - spatial variation

Differentiation

Pricing approach used - fluctuations over time

Other, please specify

static

Describe how you see the price change over time

Actual price used – minimum (currency selected in C0.4, metric tons CO2e)

289

Actual price used – maximum (currency selected in C0.4, metric tons CO2e)

10,000

Business decision-making process to which this internal carbon price applies

Capital expenditure
operation
Product & R&D

Are these internal carbon prices enforceable in the decision-making process of these businesses?

Yes, in some decision-making processes (please specify)

The Group's own emissions (approximately 1,000 t-CO2) tend to be (1) the head office occupies about half of the Group and consumes a large amount of emissions from evaluation facilities (approximately 20% of the head office), and (2) domestic facilities tend to emit more Scope 2 emissions and overseas facilities tend to emit more Scope 1. Based on this trend, internal carbon pricing has been reflected in investment standards such as the introduction of renewable energy and energy-saving equipment at domestic facilities and the shift to low-carbon vehicles and EVs at overseas facilities. Specifically, we incorporate investments with CO2 emissions exceeding 1t-CO2/year into our decision-making process. (Directors involved in investments exceeding 5 million yen)

Describe how internal carbon pricing has contributed to your organization's climate commitment or the implementation of your climate transition plan

In order to achieve the long-term goal of reducing CO2 emissions by 30% or more by 2030 (compared to 2018 levels), it is necessary to actively and continuously implement measures that lead to low carbon, and to that end, we believe that strong management leadership, employee understanding and awareness improvement, and sharing facts are important.
Since the introduction of internal carbon pricing, the introduction of fixed assets has become an opportunity to think about decarbonization, and it has become an initiative that contributes not only to energy efficiency and low-carbon investment, but also to maintaining and improving employee awareness.

In fiscal 2022, it was applied when updating the thermal shock tester, which is one of the evaluation facilities at the head office.
The new equipment was 1.3 million yen more expensive than the existing equipment, but after considering the power cost and carbon price in its service life, we judged that there was not much difference and decided to introduce it. (Installed in June 2023)

C12. Engagement

C12.1

(C12.1) Do you work with your value chain on climate-related issues?

Yes, with suppliers
Yes, Customer/Client

C12.1a

(C12.1a) What are the details of the climate-related supplier collaboration strategy?

Types of engagement

Information collection (understanding supplier behavior)

Specific content of the engagement

Collect data on greenhouse gases from suppliers at least once a year

Percentage of suppliers per number

14

Percentage of total procurement expenditure (direct and indirect)

70

Percentage of supplier-related Scope 3 emissions reported in C6.5

80

Rationale for engagement coverage

We source our products from manufacturing suppliers. Since four domestic and overseas companies* account for approximately 70% of consolidated sales, we are targeting these four companies for engagement. * 1 in China, 1 in Vietnam, 2 Japan companies, and all parts

procurement for products manufactured by these four companies are specified by our company, and the materials and weights of all parts are obtained from parts suppliers. We calculate CO2 emissions from the obtained information, calculate the sum of the CO2 emissions at the manufacturing time of the manufacturing supplier, and calculate the CO2 until the product is produced for each product.

The impact of engagement, including success ratings

The four manufacturing suppliers we engage with obtain CO2 emissions from their production every month.
Success ratings are 100% informed, and last year we got 100%.
The acquisition of material and mass information from parts suppliers is based on the premise that it will be obtained, and the acquisition rate has always been 100%.

comment

The calculation of "CO2 for each product" from "CO2 from manufacturing" and "CO2 from parts" is positioned as an understanding of the situation in order to make efforts to reduce CO2 emissions of products and to prepare for future carbon footprint requests.

Types of engagement

Engagement and incentive (change in supplier behavior)

Specific content of the engagement

Conduct engagement campaigns and educate suppliers about climate change

Percentage of suppliers per number

14

Percentage of total procurement expenditure (direct and indirect)

70

Percentage of supplier-related Scope 3 emissions reported in C6.5

80

Rationale for engagement coverage

We source our products from manufacturing suppliers. Since four domestic and overseas companies* account for approximately 70% of consolidated sales, we are targeting these four companies for engagement.
*1 in China, 1 in Vietnam, 2 Japan

The impact of engagement, including success ratings

"Effect of engagement including success thresholds" This engagement has "number of interview opportunities" and "understanding and promoting the contents considered in interviews" as indicators of success, and the following two thresholds for success in engagement this year are as follows. 1. Provide opportunities for interviews at least once a year2.
Promote consideration and realization of renewable energy procurement jointly with two or more companies

As a result of the engagement in 2022, we were able to set up opportunities for interviews at least once a year with the four manufacturing suppliers we are engaged with, and by setting up opportunities for interviews with each company at least once a year, three of the four companies (one in China and two in Japan) achieved specific studies (installation location, investment, and effects) of solar panel installation.

From the above, we can say that the results of the engagement in 2022 were successful.

comment

Solar panel installations for the manufacturing suppliers we are engaged with are expected to begin in 2024 or later.
This will lead to a reduction in manufacturing CO2 emissions for our products, so we plan to reflect this in Scope 3 Category 1 results after this is realized.

C12.1b

(C12.1b) Describe details of your climate-related collaboration strategy with your customers.

Types of engagements and engagement details

Education/Information Sharing

Conduct engagement campaigns to inform customers about your achievements and strategies related to climate change

% of customers

100

Percentage of customer-related Scope 3 emissions reported in C6.5

22.6

Explain why you chose this group of customers and the scope of your engagement

Since receiving the Shiga Low Carbon Brand award in 2018, opportunities for customers to show interest have increased along with the progress of our activities toward the realization of a sustainable and decarbonized society internationally. Since 2019, the contributions we are focusing on to others have become more recognized by customers than when they were introduced, and we believe that it is necessary to better understand the relationship between "energy efficiency improvements and low carbon required by customers" and "the products and services we provide."

Our company includes "battery operation of sensors = zero power consumption" in the crime prevention field, "LED lighting equipment + sensor + solar = zero power consumption" in the domestic solution field, "automatic door and shutter waste opening control = improvement of air conditioning efficiency" in the entrance field, "realization of remote monitoring by IoT = unnecessary dispatch control (gasoline suppression)", etc. Since there are various products that contribute to others, in order to convey it to all customers in an easy-to-understand manner, we have released a dedicated page on our website titled "If you accumulate a niche, it will become a mountain".

On this page, in addition to our intention to respond to climate change, we have provided videos of the anime of major low-carbon contribution products and physical risk countermeasure products, simulations of the amount of reduction contributions, etc.

We have also started a free download of a data booklet summarizing these sustainability solutions.

The impact of engagement, including success ratings

Through these engagements, we believe that recognizing the value of our sustainability solutions and increasing the opportunities to use them will help us evaluate our success. For this reason, we have set increasing the ratio of sales of products contributed by others to consolidated net sales as a measure of success evaluation, and have been working with the goal of increasing the ratio from 17.5% in 2018 to 20% or more in 2021. We achieved this target in 2021 and set a new target of 22.5% by 2025. In fiscal 2022, sales of products that contribute to others increased by 6% year on year to 375,000 units (previous year: 354,000 units), and sales of products that contribute to others increased by 32% year on year to 5,319 million yen (4,043 million yen in the previous year).

Net sales of products contributed by others accounted for 22.6% of consolidated sales (5,319 million yen/23,484 million yen ×100), and we were able to achieve our management targets ahead of schedule. This is partly due to strong sales of IoT-related devices that realize remote monitoring due to changes in business styles due to the new coronavirus infection, but we do not believe that this is the effect of engagement alone, but we see it as a result based on the expansion of awareness and initiatives for decarbonization among customers and society as a whole.

Through these engagements, we will continue to actively promote contact with customers, provide information, and support so that we can contribute to social climate change issues.

Types of engagements and engagement details

Cooperation and Innovation

Campaign to encourage innovation to reduce climate change impacts

% of customers

12.5

Percentage of customer-related Scope 3 emissions reported in C6.5

0

Explain why you chose this group of customers and the scope of your engagement

At the Group's domestic facilities, there were many paper-based forms (receipts, invoices, purchase orders, delivery notes, tax returns, etc.), and approximately 120,000 A4 sheets of paper were consumed annually. In response to this, we are promoting activities to reduce the digitization of various forms at the Group's domestic facilities for all applicable customers and suppliers.
Since it is necessary to obtain the cooperation of customers and suppliers to reduce these papers, we have been collaborating to reduce paper resources since 2021 after explaining the benefits of digitization.

When engaging with customers, the purchase order is the one that you need to ask them to work with. Delivery notes and invoices are handled by us with the system in place, but purchase orders also depend on the customer's system.
Therefore, the order form (48,000 sheets / year) is targeted at about 500 domestic customers with a large number of order forms, with the goal of digitizing 50% (24,000 sheets / year) by 2024.
Since the number of domestic customers is 4,000, the target number of 500 customers is 12.5% (500 / 4,000 = 0.125 →12.5%).

The impact of engagement, including success ratings

In 2021, we reduced approximately 20,000 papers per year by building a system to visualize management, which is being promoted as part of strengthening the Group's business management foundation, and in 2022, through the introduction of an expense settlement system and e-commerce system and collaboration with related parties, approximately 60,000 sheets per year (20,000 receipts + 3,600 order forms + 35,000 delivery notes and invoices + 1 other, 000 sheets). This is a reduction of approximately 450 kg-CO2 (60,000 sheets× 7.56 kg-CO2/1,000 = 453.6 ≈ 450 kg-CO2).

Evaluation of the success of this engagement and last year's performance is as follows. (5) Evaluation of success in digitizing 100% of 124,000 sheets per year of various forms (receipts, invoices, purchase orders, delivery notes, declarations, etc.). The achievement rate is 64.5% (80,000/124,000×100=64.5%) from the cumulative results of 80,000 sheets / year (20,000 sheets / 2021 + 60,000 sheets / 2022) up to last year (6) The success evaluation is that 50% of order forms (24,000 sheets / year) that require cooperation from target customers will be digitized by 2024. In 2022, we achieved digitization of 3,600 sheets per year, and the achievement rate against the target of 50% was 15% (3,600 sheets / 24,000 sheets = 0.15→15%)

As mentioned above, we have been continuously improving with the understanding and cooperation of our customers and suppliers. In 2023, we aim to reduce the amount of use by 31,200 sheets per year in addition to the above.
We hope that this digitization will eliminate mailing and waste disposal incidentally generated by the exchange of paper, which will lead to a reduction in CO2 emissions.

C12.2

(C12.2) Does your supplier need to meet climate-related requirements as part of your purchasing process?

No, but we plan to introduce climate-related requirements within the next two years

C12.3

(C12.3) Are you collaborating on activities that may directly or indirectly affect policies, laws, or regulations that may affect climate?

Row 1

External collaboration that may directly or indirectly affect policies, laws and regulations that may affect climate

Yes, you are affiliated with or engaged with industry associations that may influence policies, laws, or regulations that may affect climate change

Does your organization have a written public commitment or statement of opinion to engage in engagement activities consistent with the goals of the Paris Agreement?

No, and we don't plan to do it in the next two years

Describe the processes your company has in place to ensure that collaboration with external organizations does not conflict with your climate commitment and climate transition plan

The Group is a member of the Shiga Association of Economy, Trade and Industry (hereinafter referred to as the Shiga Economy, Trade and Industry Association), and the Group's directors hold the positions of directors of the Association.
In 2018, through our participation in the association, we learned that Shiga Prefecture's efforts to realize a low-carbon society include "Shiga Low-Carbon Brand Certification," and we applied for it.
As a result, we were certified as a low-carbon brand for our "automatic door sensor to prevent waste opening," which was a good opportunity to incorporate contributions from others into our environmental management activities.
In addition, we participate in the annual Environmental Business Fair and actively cooperate with the Association. In addition, we have various

relationships with Shiga Prefecture, where our head office is located, and in the past, we designed a sensor that automatically measured the transparency of Lake Biwa, and the transparency measured continuously by our sensor was displayed on an electric bulletin board in front of the prefectural office. In 2018, we received the Shiga Biodiversity Initiative Certification together with our group company Opal Optex, and in 2021, we became a supporter of the Shiga CO2 Net Zero Movement, which is a support for efforts to reduce greenhouse emissions to net-zero by 2050.

As described above, the Group shares and collaborates with Shiga Prefecture and the Shiga Economic and Industrial Association as described above, and is working to coordinate with the Group's environmental management activities and strategies.

C12.3b

(C12.3b) Please specify which industry associations your company is a member of or involved in that may take a position on policies, laws, or regulations that may affect climate.

Industry Associations

Other, please specify

Shiga Economic Trade and Industry Association (hereinafter referred to as Shiga Economic Trade and Industry Association)

Does your position on climate change policies align with those organizations?

Have consistency

Did your organization seek to influence the position of industry associations in the reporting year?

Yes, we publicly endorse the current position of industry associations

Is your position consistent with or different from that of industry associations? Have you taken action to influence the position of industry associations?

The Environmental Committee of the Shiga Economic and Industrial Association is promoting the following initiatives under the slogan "Balancing decarbonization and environmental conservation with corporate management."

1. Initiatives for Carbon Neutral Decarbonization
・Green Growth Strategy for Carbon Neutrality by 2050, Response to Net Zero CO2 Emissions, Research on New Technologies for Decarbonization, CO2 Reduction Symposium

2. Research on Circular Economy, SDGs, Research on RE100 <circular economy, ESG investment, J-credit, etc., research on manufacturing that emphasizes environmental quality such as supply chain emissions, information gathering on green recovery, which is attracting attention as a recovery measure from the corona disaster

3. Research on biodiversity and natural environment conservation
・Tour of advanced companies (companies certified for biodiversity initiatives, etc.), collaboration with Shiga Prefecture and related organizations

4. Innovation ecosystem creation support project, construction of a value-building network that connects major companies, science and technology universities, and small and medium-sized enterprises (trial project assuming a successor project to Biwako Environmental Business Messe)
・Providing opportunities to match "desired technologies" and "technologies that can be provided" in green fields where new growth is expectedThe slogan and the above four initiatives are consistent with our position. The relationship between each theme is as follows.

1. Initiatives for carbon-neutral decarbonization 2. Research on a circular economy and the content is consistent with our policies, and we see collaboration as an opportunity to share and study initiatives and strengthen understanding of social demands.
・Participated in the "Shiga CO_2 Net Zero Movement Declaration" as a supporting company 3. Research on biodiversity and natural environment conservation,
and received Shiga biodiversity initiative certification together with Opal Optex Co., Ltd., which shares the site with our head office (2018) 4. Innovation ecosystem creation support project
・Our NSS business (Next Social Solution), which designs and provides sensors that automatically measure the transparency of Lake Biwa and participates in the Lake Biwa Environmental Business Messe held every year, originated from the delivery of equipment that automatically measures the transparency of Lake Biwa to Shiga Prefecture.
In this way, we believe that providing funds to organizations and better cooperation with prefectural governments, including organizations, will lead to both the promotion of climate-related responses and corporate management.
In order to increase our influence in the organization, we will continue to actively cooperate with the Group officers while being aware of the appointment of officers to officer positions.

Amount of funding you provided to this industry association in the reporting year (in the currency unit selected in C0.4)

255,000

Describe the purpose of your funding

Our position and the Organization are consistent with the slogan "Balancing Decarbonization/Environmental Conservation with Corporate Management" and in the themes of our initiatives (carbon neutrality, circular economy, biodiversity, etc.).
Through funding to organizations and the appointment of Group officers to executive positions, we intend to further accelerate our climate-related response.

In addition, Shiga Prefecture has an ordinance on the promotion of a net-zero CO2 society*, which is consistent with the goals of the Paris Agreement. One of the aims of funding is that the Shiga Economic Trade and Industry Association is collaborating with the Shiga Prefecture Net Zero Promotion Division, which promotes this ordinance.
※https://www.pref.shiga.lg.jp/file/attachment/5303366.pdf

Have you assessed that your collaboration with this industry association is consistent with the goals of the Paris Agreement?

Yes, I evaluated. Consistent

C12.4

(C12.4) Other than your response to CDP, have you published information about your response to climate change and GHG emissions for the reporting year? If it is public, please attach the relevant document.

publication

Voluntary disclosure documents

status

complete

Attaching documents

A decarbonized society pioneered by sensors.pdf
.pdf Climate Change Initiatives

Related Pages/Sections

Refer to the "Top Message" and "Niches Accumulate, Mountains Increase: Aiming to Increase CO2 Reduction Contribution with the Power of Sensors" in the attached report "Climate Change Initiatives" and the sections titled "Optex's Long-Term Goals" and "Optex's History of Decarbonization Activities" in the attached report "Decarbonized Society Pioneered by Sensors".

substance

Governance
strategy
Risks and Opportunities
Emission figures
Emission Targets
Other indicators
Other, please specify

The content includes a simulator of CO2 reduction contribution to reducing CO2 through effective sensor operation, product development that protects safety and security, actions to improve the renewable energy rate, and CDP response links.

comment

Our parent company, Optex Group Co., Ltd., has expressed its support for the Task Force on Climate-related Financial Disclosures (TCFD).
Based on the TCFD guidance, we use a variety of external scenarios to analyze and identify significant strategic impacts from climate-related risks and opportunities in our business. - Increased financial costs due to carbon taxes and tighter market regulations - Business impact when manufacturing plants are at risk of flooding due to increased extreme weather - Business impact of CO2 reduction activities and climate-related information disclosure judged to be insufficient- Impact of products and technologies that contribute to low-carbon and physical risk countermeasures
In light of these impacts, we have set a long-term goal of reducing CO2 emissions by at least 30% by 2030 compared to fiscal 2018 levels, which is reflected in our medium- to long-term management plan. To ensure our progress, we are intensifying the actions and investments necessary for a low-carbon and sustainable future, including the launch of projects under the direct control of the CEO.
We provide many products that lead to low-carbon and energy efficiency improvements at our customers (products that contribute to others). We believe that achieving both "increasing the amount of contribution to reduction" and "reducing CO2 emissions from business operations" will lead to an increase in corporate value, and we are also committed to the goal of "making contributions to others four times or more of all emissions."

C12.5

(C12.5) What environmental collaborative frameworks, initiatives and commitments are signatories/members of which your company is a signatory/member?

	Collaborative environmental frameworks, initiatives and commitments	Describe your role within each framework, initiative, and commitment
Row 1	Task Force on Climate-related Financial Disclosures (TCFD)	On behalf of the Group, parent company Optex Group Co., Ltd. has announced its support for the Task Force on Climate-related Information Disclosures (TCFD). We believe that the TDFD endorsement sends a message from the Company and Holding to our customers and investors that we will take steps to align our business to a low-carbon world. We want to not only buy in, but also develop better disclosure frameworks, indicators and commitments to help us achieve our goals in the Paris Agreement. We provide many products that lead to low-carbon and energy efficiency improvements at our customers (products that contribute to others). Believing that achieving both "increasing the amount of reduction contribution" and "reducing CO2 emissions from business operations" through these efforts will lead to an increase in corporate value (stock price), we are committed to both the targets of "reducing CO2 emissions by 30% or more by 2030 (compared to 2018)" and "contributing to others to at least four times the total emissions." Going forward, we will further disclose information on items including governance, strategy, risk management, and indicators and targets based on the TCFD framework, and contribute to the realization of a sustainable society and provide new value through our business activities.

C15.Biodiversity

C15.1

(C15.1) Does your organization have board-level oversight and/or executive-level responsibilities for biodiversity-related issues?

	Supervisory of biodiversity-related issues at the Board of Directors level and responsibility at the executive officer level

Row 1	No, and we don't plan to have both within the next two years

C15.2

(C15.2) Has your organization made public commitments or endorsed initiatives related to biodiversity?

	Indicate whether you have made a public commitment or supported initiatives related to biodiversity	Public Commitments Related to Biodiversity	Supported initiatives
Row 1	Yes, we have made public commitments related to biodiversity and publicly supported initiatives related to biodiversity	Declaration against avoidance of adverse effects on endangered and protected species	SDG

C15.3

(C15.3) Does your organization assess the impact and dependence of value chains on biodiversity?

Impact on biodiversity

Indicate whether your company will conduct this type of assessment

No, but we plan to do it within the next 2 years

Dependence on biodiversity

Indicate whether your company will conduct this type of assessment

No, but we plan to do it within the next 2 years

C15.4

(C15.4) Did you conduct business activities in or around areas with high impacts on biodiversity during the reporting year?

no

C15.5

(C15.5) What actions did you take during this reporting year to advance your biodiversity-related commitments?

	Did you take action during the reporting period to advance your biodiversity-related commitments?	Types of measures taken to advance biodiversity-related commitments
Row 1	Yes, we are taking steps to advance our biodiversity-related commitments	Education and recognition

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor overall performance of biodiversity-related activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	Indicators of state and benefit

C15.7

(C15.7) Other than your response to CDP, have you published information about your response to biodiversity-related issues in this reporting year? If it is public, please attach the relevant document.

Types of reports	substance	Attach the document and indicate where relevant biodiversity information is found in the document
In a self-prepared sustainability report or other voluntarily disseminated information	Details of biodiversity-related policies or commitments Impact on biodiversity	Opal Optex Co., Ltd., an operating company of the Group to which we belong, has independently developed and is promoting the Lake Biwa Environmental Experience Learning Program, which is titled "Learning from Lake Biwa," in which students learn the importance of environmental conservation and the preservation of Lake Biwa's rich biodiversity in a practical and effective manner. (*This project was certified by Shiga Prefecture under the Biodiversity Initiative Certification System: 2018) Targets and outlines are described in "4 Quality Education for All" in "Optex Group Businesses Contributing to the Achievement of SDGs Goals" and specific activities are described in "Opal Nature Experience Learning". 1, 2

1C15.7 Opal Nature Experience Learning .pdf

2C15.7 Optex Group .pdf Contributing to the Achievement of SDGS Targets

C16. Final Approval

C-FI

(C-FI) Use this field to provide additional information or circumstances regarding the fuel being relevant to your response. Note that this field is optional and not graded.

C16.1

(C16.1) Please specify who has signed (approved) your CDP Climate Change response.

	post	Job
Row 1	President & CEO	Chief Executive Officer

Submit your response

In which language do you want to submit your responses?

Japanese

Find out how your response should be treated by CDP

	I understand that my response will be shared with all soliciting parties	Permission to use responses
Please select your submission options	Yes	disclosure

Please check the following

I have read and agree to the applicable terms