# Environment TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

Target SDGs

Climate change has become a major global societal challenge and the IDEC Group identifies it as one of our important management issues. We will promote initiatives to realize a sustainable society.

## Climate change initiatives and information disclosure based on the TCFD recommendations

The IDEC Group has been conscious of eco-friendliness since its foundation in 1945 through its “Save all” and “Pursuit of saving” bywords. We have formulated “The IDEC Way” in 2019 and have since been maintained a management focus on environmental issues and reduction of environmental impact through the realization of safety, ANSHIN, and well-being. Responding to climate change is a major societal challenge globally. We identify it as one of our priority issues. Having set the Vision for 2030 in the Materiality, we are promoting various initiatives aimed at achieving a sustainable society.

### Vision for 2030 concerning climate change

- **Contributing to the reduction of the environmental impact of customers and society through the use of the IDEC Group’s technologies and products.**
- **Reduce $CO_2$ emissions through the in-house use of renewable energy.**

▶ P.07

Based on that background, we expressed our support for the Task Force on Climate-related Financial Disclosures (TCFD) and participated in the TCFD Consortium in May 2021. With regard to the four requirements (governance, strategy, risk management, and metrics and targets) based on the TCFD recommendations, we made preparations according to the steps of the scenario analysis advocated by Japan’s Ministry of the Environment, and disclosed climate change initiatives and relevant information that align with the TCFD guidance for the first time in FY2023. By enhancing information disclosure, we aim at achieving the management that is even more eco-friendly and realizing a sustainable society.

### Governance

The Environment Management Committee, which is a specialist committee of the CSR Committee chaired by the CEO, plays a key role in the effort to disclose climate-related financial information.

The Environment Management Committee meets monthly under direction by the Senior Executive Officer in Charge of the Environment. Also, the Environment Promotion Department was established in October 2021 to strengthen environmental efforts and is involved in the Committee’s activities. Decisions made by the Committee are submitted to the Top Management Meeting, where the policy is decided, and then reported to the Board of Directors.

### Governance system addressing to climate change

| Name | Overview | Number of meetings |
|---|---|---|
| Board of Directors | Supervision of important matters related to climate change | 7 times per year* |
| Top Management Meeting | Decision making of important matters related to climate change | 8 times per year* |
| CSR Committee | Review of important items related to climate change, and submission of these to the Top Management Meeting | Twice a year |
| Environment Management Committee | Management of climate-related opportunities | Once a month |
| Risk Management Committee | Management of climate-related risks | Twice a year |
| Executive Officer in charge | Senior Executive Officer in Charge of the Environment | |
| Responsible Departments | Strategic Planning , Environment Promotion, Accounting , CSR, HR&GA | |

* Decision making and supervision of the submitted items by the CSR Committee are conducted twice a year.

### The disclosure process of climate-related financial information

1. **Scenario selection**
   Adoption of two scenarios for transition risks and physical risks, respectively based on IDEC’s current state and future goals
2. **Identification of climate-related risks and opportunities**
   Scenario analysis, and identification and organization of climate-related physical risks, opportunities, and transition risks
3. **Assessment of business impact and determination of significance**
   Analysis and assessment of business impact of risks and opportunities to determine their significance
4. **Review and reflection of measures**
   Review of measures to respond to risks and opportunities according to their significance, recommendations to business plans, and reflection to metrics and targets

# Environment TCFD

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

## Strategy: Scenario Selection

In order to evaluate the impact of climate-related risks and opportunities, we selected two authorized scenarios for each of transition risks and physical risks. The baseline scenarios, assuming society in 2030, are one in which the increase in average temperature is kept below 2°C compared to the level at the time of the pre-Industrial Revolution, and the second wherein the measures against global warming remain conventional and the temperature continues to rise.

### Transition risk scenarios

- Sustainable Development Scenario (SDS)
- Stated Policies Scenario (STEPS)

Note: Both scenarios are based on the World Energy Outlook (WEO) issued by the International Energy Outlook (IEO) .

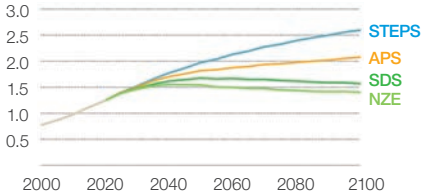
### Physical risk scenarios

- ICPP's RCP2.6 (2°C scenario)
- ICPP's RCP8.5 (4°C scenario)

Note: Representative Concentration Pathways (RCP) by the International Conference on Parallel Processing (ICPP)

### Median surface temperature rises by the WEO scenario

(degrees celsius)

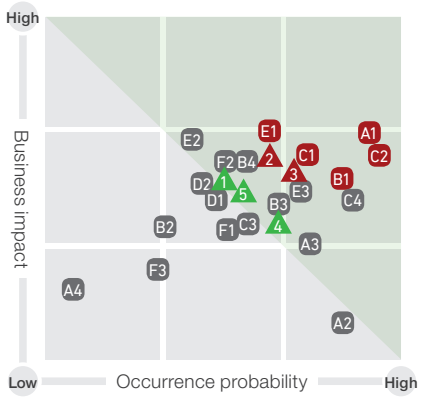



Source: IEA (2021) World Energy Outlook


## Strategy: Risks and opportunities

Based on the assumed scenarios, the Environment Management Committee examined the risks and opportunities that may be caused by climate change. We identified transition risks, physical risks, and transition opportunities by category, and conducted analysis of their business impact and time period, evaluation of major items, and mapping of the analysis results. Although risks are not expected to have significant business impact in the current situation and in the short term, we will continue to systematically implement measures to address medium- to long-term risks, aiming to become a more resilient company and incorporate the transition opportunities in our business strategy.

### Mapping of climate-related risks and opportunities




■Risks ▲Opportunities
Major risks and opportunities in red.
The symbols and numbers are mirrored by those in the "List of climate-related risks and opportunities".

### List of climate-related risks and opportunities

| Type | | Category | | Item | Major item | Time period | Occurrence probability | Business impact |
|---|---|---|---|---|---|---|---|---|
| Risk | Transition risk | A Policy and laws | 1 | Increase in carbon pricing (increase in carbon tax and power charges) | ● | Medium to long | A | B |
| | | | 2 | Tighter obligation to report emissions | | Short to medium | A | D |
| | | | 3 | Tighter orders and regulations for existing products and services | | Medium to long | B | C |
| | | | 4 | Litigation (initiated by stakeholders) | | Long | D | D |
| | | B Technology | 1 | Replacement of existing products and services with options with lower emissions | ● | Medium to long | A | B |
| | | | 2 | Failure to invest in new technology | | Short to medium | C | C |
| | | | 3 | Cost of moving to a low emission technology | | Medium | B | C |
| | | | 4 | Technology delays to competitors | | Short to medium | B | B |
| | | C Market | 1 | Changes in customer behavior or irregular changes in market trends | ● | Medium to long | B | B |
| | | | 2 | Increase in raw material procurement and manufacturing costs (including introduction or increase of carbon taxes) | ● | Medium to long | A | B |
| | | | 3 | Changes in raw material quality and properties | | Medium to long | B | C |
| | | | 4 | Generation of cost in capital investment for energy saving and renewable energy | | Short to medium | A | C |
| | | D Reputation | 1 | User product satisfaction (environmental) | | Medium to long | C | C |
| | | | 2 | Increasing concerns or negative feedback by stakeholders | | Medium to long | C | B |
| | Physical risk | E Acute risks | 1 | Damage to manufacturing sites and supply chain disruption caused by extreme weather events | ● | Medium to long | B | B |
| | | | 2 | Pandemic or stalled economic activities caused by a new virus outbreak | | Short to medium | C | B |
| | | | 3 | Increased lead time in raw material procurement | | Short to medium | B | C |
| | | F Chronic risks | 1 | Lack or suspension of supply of natural resources caused by effects of extreme fluctuation in rainfall and weather patterns | | Medium to long | B | C |
| | | | 2 | Interruption of power supply caused by effects of extreme fluctuation in rainfall and weather patterns | | Medium to long | B | B |
| | | | 3 | Nature destruction and unexpected accidents caused by the progress in conversion from thermal power generation to other power generation methods | | Medium to long | C | D |
| Opportunity | | Migration opportunities | 1 | Increase in sales of core products driven by the spread of energy-saving equipment and manufacturing equipment | | Medium to long | C | B |
| | | | 2 | Increase in market share and sales through manufacturing with low environmental impact | ● | Short to long | B | B |
| | | | 3 | Business expansion in the environmental field driven by expanding use of solar power generation and fine bubbles, and diversified services | ● | Short to long | B | B |
| | | | 4 | Greater needs for and business expansion of remote monitoring and automatic control as effects of changing human behavior | | Short to medium | B | C |
| | | | 5 | Business expansion of safety-related products in response to the worsening work environment caused by abnormal weather | | Medium to long | B | C |

### Definition of occurrence probability and business impact

**Occurrence probability**

| | |
|---|---|
| A | May occur almost certainly. |
| B | May occur when certain conditions are met. |
| C | May occur when a few conditions are met. |
| D | The probability of occurrence is not high. |

**Business impact**

| | |
|---|---|
| A | May have a significant impact on business continuity and growth. |
| B | May have a significant impact on operating margin. |
| C | May have a significant impact on sales and profits. |
| D | There is no significant impact on the business. |

# Environment TCFD

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

## Risk management

The identified results of risks and opportunities related to climate change, and the risk items that have been assessed as important in our mapping, are managed by referring to an integrated risk map of the IDEC Group (P.49). They are also reflected in the environment-related risks and opportunities associated of the Materiality (P.08).

Important items of risk and opportunity are evaluated by the Environment Management Committee, taking into account both the likelihood and extent of impact. The Environment Promotion Department describes environmental risk management items on a risk management table annually, specifies performance indicators, and reports the progress of the achievement to the Risk Monitoring Subcommittee (P.48).

## Transition plan

IDEC considers the climate strategy as an important part of its business strategy and is promoting the reflection of its environmental response to its annual policy and medium- to long-term business strategy.

In the future, we will make more accurate quantification of risks and opportunities, continue to monitor qualitative information, and estimate the financial impact of quantitative items over the medium- to long-term, in particular to improve the transition plan and its disclosure method.

## Metrics and targets

Our medium-term management plan sets the targets to reduce Scope1 and Scope2 $CO_2$ emissions by 24% by FY2025 and by 50% by FY2031 (compared to the levels in FY2020). With regard to Scope3, we began calculating upstream (Categories 1-7) emissions in Japan in FY2021. We will expand the range of calculation to the Scope3 downstream (Categories 8-15) and make preparation for its disclosure. The expansion of global-based disclosure is also proceeding at the same time.

As for the reduction of industrial waste, we have set a target of 24% reduction by FY2025 (compared to the level in FY2020).

Going forward we plan to set targets and work on other metrics, which include the results of shifting to renewable energy, the ratio of eco-friendly products to total new products, as well as ISO 14001 compliance at all global bases, establishing of internal carbon prices, and the study of international disclosure standards.

**Medium-term plan target for FY2025**

- Reduction in $CO_2$ emissions ..... 24% ↘
- Reduction in industrial wastes ..... 24% ↘
- Cumulative ratio of eco-friendly products to total new products ... 60% or more ↗

## $CO_2$ emissions

### IDEC (Japan*)

(Emission unit: t-$CO_2$)

| | Scope1 | Scope2 | Scope3 upstream | Scope3 downstream |
|---|---|---|---|---|
| FY2020 | 553 | 3,997 | - | - |
| FY2021 | 501 | 4,360 | 68,900 | - |
| FY2022 | 505 | 4,169 | 112,900 | - |

*Japan=IDEC non-consolidated + group companies in Japan

### IDEC (consolidated)

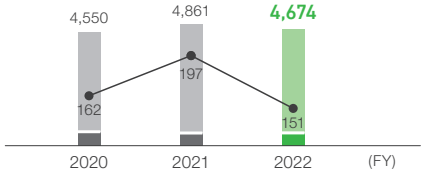
(Emission unit: t-$CO_2$)

| | Scope1 | Scope2 | Scope3 upstream | Scope3 downstream |
|---|---|---|---|---|
| FY2020 | 1,152 | 10,791 | - | - |
| FY2021 | 948 | 11,390 | - | - |
| FY2022 | 897 | 12,129 | - | - |

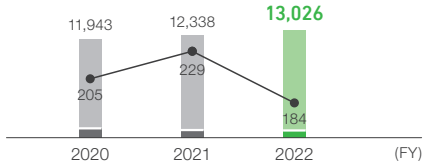
## $CO_2$ Emissions (Scope1&2)

Scope1: Emission unit (t-$CO_2$) Scope2: Emission unit (t-$CO_2$) Emission intensity (kg-$CO_2$/million yen)

### IDEC (Japan)




### IDEC (consolidated)




## Calculations of Supply chain $CO_2$ emissions

- **Scope1** ..... The amount of emissions from a reporting company's GHG emission sources to the air directly.
- **Scope2** ..... The amount of indirect emission from energy sources.
- **Scope3** ..... The amount of indirect emissions related to reporting company's business activities in the Group's supply chain not within a Scope1&2 boundary.

# Environment TCFD

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

## TCFD reference table

The following index provides references to the IDEC Group's disclosures on recommendations of the Task Force on Climate-related Financial Disclosure.

### Governance

| TCFD Recommendations | Disclose the organization's governance around climate-related risks and opportunities | | |
|---|---|---|---|
| Recommended disclosure | | Where applicable in IDEC Report 2022 | |
| a) | Describe the board's oversight of climate-related risks and opportunities. | Sustainability promotion system | P.30 |
| | | Governance<br>Governance system to address to climate change | P.31 |
| | | Corporate governance system | P.39 |
| b) | Describe management's role in assessing and managing climate-related risks and opportunities. | Sustainability promotion system | P.30 |
| | | Governance<br>Governance system to address to climate change | P.31 |
| | | Corporate governance system | P.39 |
| | | Risk management system | P.48 |

### Strategy

| TCFD Recommendations | Disclose the actual and potential impact of climate-related risks and opportunities on the organization's business, strategy and financial planning where such information is material. | | |
|---|---|---|---|
| Recommended disclosure | | Where applicable in IDEC Report 2022 | |
| a) | Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term. | Materiality-based risks and opportunities | P.08 |
| | | Strategy: Risks and opportunities<br>Mapping of climate-related risks and opportunities<br>List of climate-related risks and opportunities | P.32 |
| | | Risk map and identification of high risk events | P.49 |
| b) | Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning. | Value creation process | P.05 |
| | | Materiality | P.07 |
| | | Transition plan | P.33 |
| c) | Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario. | Strategy: Scenario Selection | P.32 |
| | | Transition plan | P.33 |

### Risk management

| TCFD Recommendations | Disclose how the organization identifies, evaluates, and manages climate-related risks. | | |
|---|---|---|---|
| Recommended disclosure | | Where applicable in IDEC Report 2022 | |
| a) | Describe the organization's processes for identifying and assessing climate-related risks. | Materiality-based risks and opportunities | P.08 |
| | | Steps for disclosing climate-related financial information | P.31 |
| b) | Describe the organization's processes for managing climate-related risks. | Strategy: Risks and opportunities<br>Mapping of climate-related risks and opportunities<br>List of climate-related risks and opportunities | P.32 |
| | | Risk map and identification of high risk events | P.49 |
| c) | Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management. | Strategy: Risks and opportunities<br>List of climate-related risks and opportunities | P.32 |
| | | Risk management<br>Transition plan | P.33 |

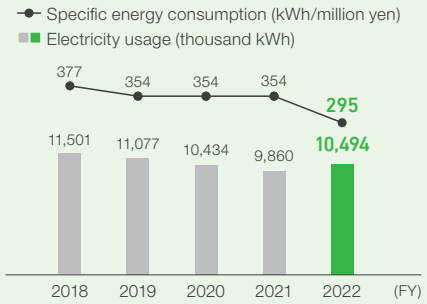
### Metrics and targets

| TCFD Recommendations | Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material. | | |
|---|---|---|---|
| Recommended disclosure | | Where applicable in IDEC Report 2022 | |
| a) | Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process. | Metrics and targets | P.33 |
| | | Environment | P.35 |
| | | Non-financial data | P.53 |
| b) | Disclose Scope1, Scope2, and, if appropriate, Scope3 greenhouse gas (GHG) emissions, and the related risks. | $CO_2$ emissions | P.33<br>P.53 |
| c) | Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets. | Metrics and targets | P.33 |
| | | Environment | P.35 |

# Environment

In conjunction with the ongoing increase in green procurement and green purchasing, and developing eco-friendly products, we are promoting global environmental management, including obtaining ISO 14001 certification and adopting solar power generation in Japan and overseas.

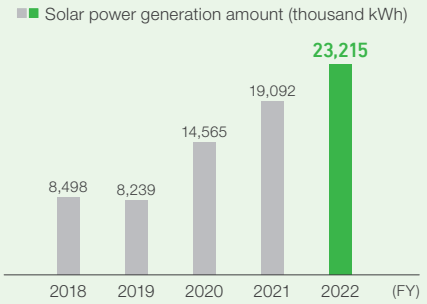
**Electricity usage** (IDEC unconsolidated)




We strive to raise the awareness of energy conservation among employees through posters and stickers that encourage energy conservation. At the same time, we have systematically introduced acquired self-consuming solar power generation facilities so as to reduce electricity usage based on traditional fuel.

*Some past fiscal year data has been corrected.

**Solar power generation amount in the environmental energy business**




In addition to 4 solar power plants in the Kansai area, we added 11 new solar power plants in FY2022. We are working to transfer from fossil fuel to renewable energy for power generation, with the aim of contributing to helping to slow global warming.

## Expanded adoption of self-consuming solar power generation

By accelerating the introduction of our own solar power generation facilities for our offices and factories both in Japan and overseas, we are reducing the environmental impact we create by replacing electricity with renewable energy.
IDEC (unconsolidated) made investment for one additional power generation facility in FY2022, and plans investment for three more facilities in FY2023. The amount of investment in FY2023 is expected to increase by approximately 3.7 times that of FY2022, or about 0.14 billion yen. Among the group companies, IDEC FACTORY SOLUTIONS CORPORATION installed a solar power generation facility in its new factory, which started operation in FY2022. Solar power generation facilities are also in operation at our U.S. office and our factory in Taiwan.


IDEC CORPORATION (U.S.)


APEM Inc. (U.S.)

## Environmental energy business

IDEC SYSTEMS & CONTROLS CORPORATION, a group company, is developing a renewable energy business that provides one-stop services from solar power plant construction to follow-up. Our particular focus is the introduction of dedicated, own-use solar power generation facilities, utilizing the roofs of buildings such as factories, warehouses, stores, and facilities. There has been an increase in adoption of this type in recent years, as it helps reduce $CO_2$ emissions and can provide emergency power to neighboring areas in the event of a disaster, thereby contributing to the safety and ANSHIN of the local community. We plan to introduce more similar cases with the aim of achieving a better society.

## Fine bubble business

IDEC is conducting research on the application of its world-leading fine bubble (microscopic bubble) technology in the environment and industries. Specifically, applications are being made in a wide range of fields, such as for industrial cleaning and various applications in the agricultural and fisheries industry.

# Environment

## Promotion of developing eco-friendly products

In light of trends such as reducing environmental impact in society and protecting the global environment, we have specified procedures in consideration of the environment in the development process of new products.
In FY2023, "The Procedure Manual for the Development of Eco-Friendly Products" has been revised, which scores the degree of environmental consideration of new products based on IDEC's own standards such as energy efficiency improvement, resource saving, space saving, and a longer product life. IDEC's original eco mark is stamped on products that meet the required scores set in the procedure in a way of appealing to customers.
Our target is to make eco-friendly products represent 60% of all new products launched since FY2020 on a cumulative basis.

**Example of eco-friendly products**

**LF3D series LED illumination units**

| | | |
|---|---|---|
| Energy saving | Luminous efficiency | 37% increase |
| Space saving | Volume | 50% decrease |

* Compared to the conventional model

## The IDEC Group's environmental activities in 15 countries and regions

During the CSR month of October, various initiatives are implemented to address environmental issues at our global bases.

### IDEC ASIA (THAILAND) CO., LTD.

Paper bags handmade from recycled copy wrapping paper were given to hospitals which suffered from a shortage of medicine bags for patients.

### IDEC TAIWAN CORPORATION

In addition to reducing the number of copies used by shifting to electronic means, the company installed containers for recycling resources and has since been promoting the sorting and recycling of waste.

## Efforts in Japan to reduce the environmental impact

Conventionally, packaging wraps and cardboard to transport materials were used between domestic factories. We have newly adopted reusable eco-friendly packing band and uniform-sized folding containers. This not only reduces the volume of packaging materials and cardboard used, but also reduces man-hours.

Reduction of about 1.1 tons of packaging materials and 17 tons of cardboard

We are also considering the introduction of new product packaging materials. In December 2021, we began to use bubble wrap made of film containing 25% or more biomass plastics at two sites. We plan to expand use of this material in various other places in Japan from FY2023.
Moreover, efforts made at IDEC headquarters include the reduction of copy machines installed on each floor so as to reduce usage of copy paper, and the campaign for not using plastic bottles.

## Enhancement of environmental education

As part of efforts to raise environmental awareness among employees, we have distributed the series of must-know environmental words in Japanese and English via internal intranet since FY2022. From FY2023, E-Learning courses on these environmental words has been launched. Specifically, the session will be included in the ISO 14001 training plan, and will be gradually rolled out to other offices nationwide.
In order to expand the course globally, we are in the process of the multilingual development of these educational tools, starting from English. Going forward, we will strengthen cooperation with environmental key persons at our major bases. A target for FY2024 is to cooperate with the key persons and to make effective use of the environmental education tools at each base.


Web tools for environmental education