



## The environmental management of the IDEC Group

The IDEC Group has formulated its long-term vision for 2050 and interim vision for 2030. As a global corporation, the Group aims to achieve sustainable growth while tackling societal challenges that include measures to deal with global warming and climate change.

Actions to ensure sustainability, in particular initiatives for climate change, are essential for companies from the standpoint of both responding to increased social needs and preserving the global environment. Moreover, in the effort to achieve sustainable growth, environmental strategies are an important part of the Group's business strategy, and therefore an environmental response is viewed as a transition opportunity. We will implement strategies for helping to achieve our Group's main purpose of ensuring safety, ANSHIN, and well-being for people around the world, through the development of eco-friendly products, environmental energy business, and other activities.

Specifically, "Promotion of initiatives to reduce environmental impact" are included as one item in the basic strategy outlined in the medium-term management plan. We have established sustainability KPIs and are pursuing an action plan that reflects our transition opportunities toward the achievement of the goal.

Beginning with what can be achieved right now, we are addressing to achieve carbon neutrality in order to realize our vision for 2050.

## Realize a sustainable society

Regarding the relationship between the global environment and corporate management, the IDEC Group recognizes that all humans desire to exist in harmony with the planet, and therefore the company's basic environmental policy is to act to preserve the environment as the most important issue for all business activities, and to strive to achieve sustainable development.

### Related materialities



### Climate change

- Contribute to the reduction of the environmental impact of customers and society through the use of the IDEC Group's technologies and products.
- Reduce CO<sub>2</sub> emissions through the in-house use of renewable energy.

### Major sustainability KPIs (FY2025)

- Renewable energy utilization ratio **18%**
- Reduction of CO<sub>2</sub> emissions **24%** (vs. FY2020)
- Reduction of industrial wastes **24%** (vs. FY2020)
- Cumulative ratio of enhanced eco-friendly products to total new products **60%** or higher (vs. FY2020)

For further information, please refer to the "Environment" of the IDEC sustainability website.

<https://us.idec.com/idec-us/en/USD/sustainability/environment>



## Development of eco-friendly products and equipment investment

We have established "The Procedure Manual for the Development of Eco-Friendly Products" and are developing products with the aim of achieving energy-saving, resource-saving and decarbonization from the design stage onward. We are reducing the number of parts used, making products more lightweight, phasing in the use of recycled plastics, and calculating a life cycle assessment (LCA) and carbon footprint (CFP) for major products. In addition, we score the degree of environmental consideration of new products based on the IDEC's own standards. New products that meet the standards are certified as "enhanced eco-friendly products" and are stamped with the IDEC's original eco-mark, compliant with ISO/JIS Q 14021 (Type II). The cumulative ratio of enhanced eco-friendly products launched since FY2020 was 74.1% as of FY2023.

Moreover, as a framework of promoting investments in environmentally conscious development, we introduced internal carbon pricing (ICP) in FY2023. In the initial year and FY2024, the ICP was set at JPY 6,000 and 8,000, respectively, and the price will be reassessed each year.

To ensure that the ICP concept is thoroughly disseminated within the company, the Environmental Strategy Committee has selected model cases and is calculating CO<sub>2</sub> emissions reduction amount and studying the impact on return on investment after applying ICP. As examples of studying, we are conducting simulations on the introduction of new energy-saving manufacturing equipment, investment in the development of eco-friendly products with a lower environmental impact than existing products, the installation of energy-saving air conditioning equipment, and replacement of gasoline vehicles with electric ones.

### Examples of enhanced eco-friendly products



**φ22 Smart RFID Reader  
"KW2D series"**

KW2D has a compact and smart design ideal for factory automation environments, and it can be mounted on φ22mm panel cut-out. Data can be recorded as electronic data by combining with a touch panel, which contributes to saving resources such as paperless.

Resource-saving / Space-saving / Reduce man-hours



Space-saving (total height of panel 9mm, depth 48.5mm)

**Main evaluation points**

### Effects

Resource-saving / Weight-saving / Reduce man-hours



Reduce the number of parts (non-use of screws) / Decrease the installed height by 7mm compared to conventional products

## Expanded adoption of self-consumption 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.

IDEK (unconsolidated) operated one additional power generation facility in FY2023, and is planning to operate three new facilities in FY2024.

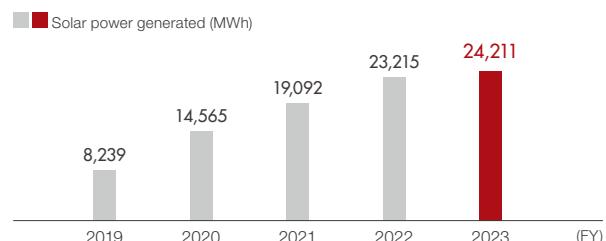
Among our Japanese group companies, power generation facilities have been installed in the factory and head office of IDEC FACTORY SOLUTIONS CORPORATION. Globally, solar power generation facilities are also in operation at our US office and factory and our UK factory.

## Environmental energy business

IDEK 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 from 2012.

There has been an increase in adoption of the self-consumption solar power generation equipment utilizing the roofs of buildings such as factories, warehouses, stores, facilities in recent years. It helps to reduce CO<sub>2</sub> emissions through green energy use. It also makes an invisible contribution to the safety and ANSHIN of the local community by providing emergency power to neighboring areas in the event of a disaster. We aim to achieve a better society through promoting the business.

### The amount of solar power generation in the environmental energy business (Japan)



## Realizing a circular economy

To achieve carbon neutrality, the IDEC Group has addressed initiatives for circular economy to use limited resources effectively. As a manufacturer, we pursue management practices that emphasize reducing environmental impact and considering environmental issues at all stages, from product design and development through manufacturing processes, logistics, and packing materials.

One example is the movement toward paperless operations to reduce paper consumption at workplaces by digitalization of references and design drawings in quality-related departments.

Moreover, in February 2022 the head office cafeteria installed a garbage disposer which decomposes garbage into water and carbon dioxide, as well as a unit that separates and collects the oils, leftover food, and vegetable scraps in wastewater in order to purify the grease traps constantly. By introducing them, it is expected to reduce approximately 8 ton of garbage discharged from the head office cafeteria each year to almost zero.



The garbage disposer



The grease ozonizer which constantly purifies grease traps

of film containing 25% or more biomass plastics at two sites in Japan. Through this and other actions, we have addressed Group-wide initiatives to reduce our environmental impact for realizing a circular economy.

In the future, we plan to further activate our Global Environmental Management System network and deploy each environmental initiative throughout the entire IDEC Group.



Replacement of plastic bags used in production processes with reusable plastic cases (Suzhou factory)

## Biodiversity

We consider biodiversity to be critical for our business continuity, and carry out diverse activities to protect biodiversity. In April 2023, the IDEC head office's green space was selected as a private business green space with excellent conservation and creation activities under the Social and Environmental Green Evaluation System Operation, Management and Active use program (SEGES OMA) of the Organization for Landscape and Urban Green Infrastructure. Through green space development centering on native species, we provide a habitat for wild birds, insects and so on, helping to preserve and improve biodiversity.

IDEK approved and signed the statement of BUSINESS FOR NATURE at the 15th Conference of the Parties (COP15) for mandatory assessment and disclosure of biodiversity framework.



The Suzhou factory (China) has addressed the initiative to reduce the amount of non-reusable plastic bags by using reusable soft trays and buckets instead of plastic bags. The final goal is to use zero plastic bags, and to reduce 2.7 ton of plastic bags annually. We plan to spread the similar initiative to other factories in Japan and overseas.

We are also reassessing our use of product packing materials. In December 2021, we began using bubble wrap made

## Information disclosure based on the TCFD recommendations

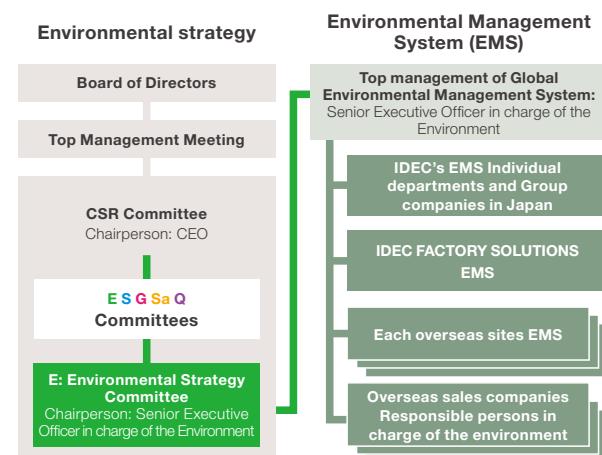
### Governance

The Environmental Strategy 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 Environmental Strategy Committee meets monthly under direction by the Senior Executive Officer in charge of the Environment. For striving activities further shifted to the environmental management, the Committee was changed its name from the Environment Management Committee to the Environmental Strategy Committee in December 2022 in order to incorporate responses to the environment into business plan strategically. Its activities include the audit of environmental items for eco-friendly products, calculation of product carbon footprint, encouragement of using internal carbon price, preparation for disclosing climate change-related information based on the TCFD recommendations, and planning and operation of the environmental events.

Decisions made by the Environmental Strategy Committee are determined through the CSR Committee or by the direct submission to the Top Management Meeting, where the policy is decided, and then reported to the Board of Directors.

### Framework of the environmental governance



### Strategy Selection on scenarios

Since the pandemic of COVID-19 in 2020, and especially in 2022, energy supply issues have risen caused by the worldwide unstable status in Europe, etc. Not only the unstable framework of energy supply-demand has been visible, but the price increase and inflation have proceeded due to the price escalation of fuels. The amount of fossil fuel consumption including coal and oil has increased in EU, and the amount of CO<sub>2</sub> emissions has increased due to the economic recovery on a world scale, which was reported in WEO 2022 that it would be difficult to accomplish the target of reducing CO<sub>2</sub> emissions defined at the Paris Agreement.

Considering the above situations, we have selected two transition risk scenarios and two physical risk scenarios, respectively. One is a scenario to "hold the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels" as a long-term target of the Paris Agreement, and the other one is in accordance with the current world status.

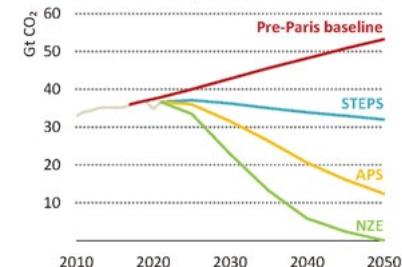
Specifically, we have selected WEO 2022's STEPS (2.6°C

scenario) and NZE (1.5°C scenario) as transition scenarios, and IPCC Fifth Assessment Report's RCP2.6 (2°C scenario) and RCP8.5 (4°C scenario) as physical risk scenarios.

Based on the recognition of the world image in accordance with each scenario, we have conducted analyses of IDEC Group's risks and opportunities.

### Energy-related CO<sub>2</sub> emissions in each WEO scenario

(2010 – 2050)



(Source: WEO 2022 issued by IEA)

### Risks and opportunities

The Environmental Strategy Committee has picked up the assumed risks and opportunities of the IDEC Group by reference to the risk and opportunity items of the CDP Climate Change Questionnaires. Specifically, we have quantified potential financial impact figure, magnitude of potential impact, likelihood, timeframe, and selected prioritized risk and opportunity items in a quantitative manner.

Subsequently, we have assumed the external environmental changes and the business impacts caused by them, considered responses by the IDEC Group as environmental strategies, and described them in the list and mapping of risks and opportunities. The list and map for the top five items are shown on page 48. For the detailed study results, see our sustainability website.

[Link to IDEC website](#)

Click here for detailed risks list

Click here for detailed opportunities list

Click here for detailed mapping of risks and opportunities

# Natural Capital

## Strategy Risks and opportunities

### Risks List

	Item	Timeframe	Potential financial impact	Responses by the IDEC Group
Market	① Increase in material costs	Short-term	A	<ul style="list-style-type: none"> <li>Respond to temporary sharp rise in material prices by deep mutual understanding with suppliers and customers continuously.</li> <li>Reduce manufacturing costs in anticipation of material cost increases in the medium to long-term, and reduce costs through redesigned products in a planned manner.</li> </ul>
	② Changing customers' behavior	Long-term	C	<ul style="list-style-type: none"> <li>Place the environmental strategy as one of the focused item in the medium to long-term plan, and check progress as a sustainability KPI.</li> <li>Increase the cumulative ratio of enhanced eco-friendly products for new products in the medium to long-term plans (sustainability KPI).</li> <li>Promote to develop technology on a continuing basis relating to consideration and introduction of eco-friendly packing materials and components.</li> </ul>
Transition risk	③ Technology delays to competitors (uncertain market signals)	Medium-term	C	<ul style="list-style-type: none"> <li>Consider and adopt eco-friendly components, and promote to raise awareness of the importance of consideration for the environment in the whole processes of developing new products.</li> <li>Consider to develop technology with the awareness of reducing CO<sub>2</sub> emissions in the overall recycling and life cycle.</li> <li>By collaborating with other companies in the long term, incorporate technologies that we do not possess in a planned manner and integrate them with our core technologies.</li> </ul>
				<ul style="list-style-type: none"> <li>Reduce the impact of increased energy purchase price by introducing the self-consumption solar power energy in a planner manner.</li> <li>Reduce indirect costs by making efforts of saving energies and improving operation ratios at factories.</li> </ul>
Current regulations	④ Tendency of carbon pricing	Medium-term	B	<ul style="list-style-type: none"> <li>Enhance BCP measures to increase our company's resilience.</li> <li>Prepare hazard maps of manufacturing sites and find potential risks.</li> <li>Prepare a recovery plan for each site and procedure manuals for employees to ensure business continuity in the event of a disaster.</li> <li>Change manufacturing sites to be multi-skilled for flagship products.</li> </ul>
	⑤ Climate change	Long-term	D	<ul style="list-style-type: none"> <li>Provide low-emission products and services throughout the life cycle, based on the concept of developing eco-friendly product we have currently addressed.</li> </ul>

A: Increased direct costs B: Increased direct and indirect costs C: Reduced sales due to decreased demand for products and services  
D: Reduced sales due to decreased production capacity

### Opportunities List

	Item	Timeframe	Potential financial impact	Responses by the IDEC Group
Resource efficiency	① Diverse business activities	Long-term	A	<ul style="list-style-type: none"> <li>Expand proposals relating to solar power generation business and fine bubble solutions for new markets.</li> <li>Innovate our environmental business, using the response as an opportunity.</li> <li>Develop products that use HMI and sensing technologies based on new needs, and propose solutions to resolve issues.</li> </ul>
	② Develop new products and services through R&D and technology innovations	Long-term	B	<ul style="list-style-type: none"> <li>Accelerate technology innovation of flagship products based on environmental aspects as well.</li> <li>Develop new products to meet the demands for market well-being and promote proposals for solutions.</li> <li>Applied research of easy recyclable materials to products.</li> </ul>
	③ Develop and/or enhance of low-emission products and services	Long-term	B	<ul style="list-style-type: none"> <li>Provide low-emission products and services throughout the life cycle, based on the concept of developing eco-friendly product we have currently addressed.</li> </ul>
	④ Use new technologies	Long-term	B	<ul style="list-style-type: none"> <li>Breakaway from prolongation of our conventional technologies.</li> <li>Enhance software and systems-related technologies by promoting M&amp;A and business collaborations, etc. as well as adoption and development of human resources.</li> <li>Promote to incorporate new technologies to meet diverse needs through cooperation and collaboration with other companies.</li> <li>Foster a corporate culture of well-being.</li> </ul>
	⑤ Participate in the renewable energy program and adapt to energy-saving measures	Long-term	A	<ul style="list-style-type: none"> <li>Deploy environment-related business such as solar power generation and fine bubble solutions.</li> <li>Enter into new markets using our new business as a door opener.</li> <li>Provide products and services that meet new market needs.</li> </ul>

A: Increased sales through entry into new and developing markets B: Increased sales as a result of increased demand for products and services

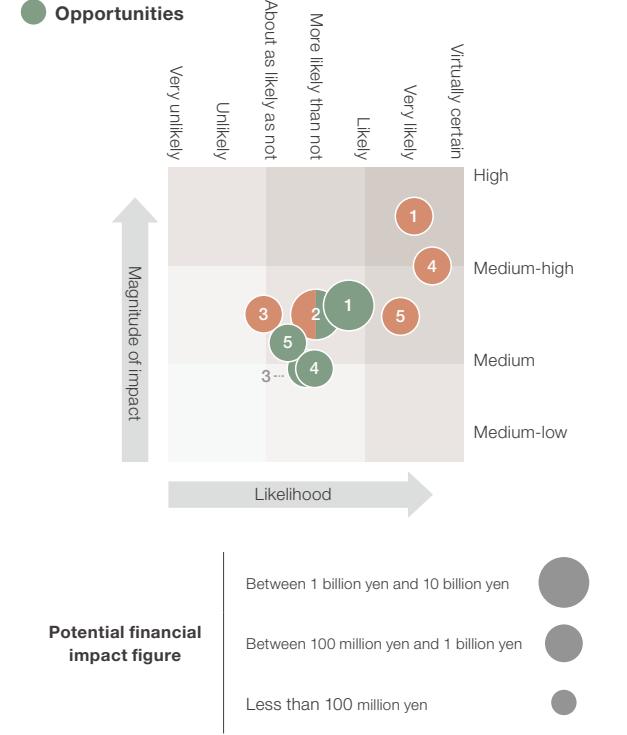
## Risk management

The identified results of risks and opportunities related to climate change, and risk items that have been assessed as important in our mapping and were considered at the Environmental Strategy Committee, are managed by referring to an integrated risk map of the IDEC Group. They are also reflected in the environment-related risks and opportunities associated with the materiality.

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.

## Mapping of major climate-related risks and opportunities

● Risks  
● Opportunities



# Natural Capital

## Transition plan

The IDEC has considered environmental strategy to be an important part of its business strategy and a transition plan reflects in the medium-term management plan. Specifically, we have set metrics and targets for reducing the CO<sub>2</sub> emissions amount to achieve a carbon neutrality, and we have established sustainability KPIs of the medium-term management plan together with other environmental targets.

As measures for reducing in-house CO<sub>2</sub> emissions amount, we have introduced self-consumption solar power generation in a planned manner, and we start to introduce CO<sub>2</sub>-free power partially in Japan since FY2024. We have also established the CSR procurement guidelines and green procurement guidelines to request our suppliers to reduce the environmental impact every year.

As for businesses, we are working to develop eco-friendly products and to increase the degree of contribution of our business, such as the environmental energy business. Therefore, we consider analysis of risks and opportunities to be an important process for incorporating environmental strategy into our business strategy. As shown in the list of major opportunities, we study the future responses of our Group based on elements that can serve as opportunities for our transition. What we have considered are reflected in stages in medium to long-term management plans and are incorporated into more specific action plans. In addition, as those metrics, we start to consider quantifying the degree of contribution of our business for environment-related business activities.

As for the development of eco-friendly products, one of the core environment-related business activities, we are penetrating the need for eco-friendly products and its importance to the business contribution, as well as using transition opportunities to create business opportunities to each department more than ever.

Naturally, such activities relating to the transition plan will be promoted as efforts whose environmental aspects are in harmony with realizing the main purpose of the IDEC Group, to "achieve safety, ANSHIN, and well-being for people around the world".

### Metrics and targets

Our medium-term management plan sets the targets to reduce Scope 1 and Scope 2 CO<sub>2</sub> emissions by 24% by FY2025, and by 50% by 2031 (compared to the levels in FY2020). From FY2024, we introduce the system that the progress level of achievement is reflected to executive compensation.

As for the CO<sub>2</sub> emissions amount of FY2023, we have switched to a power company with a lower emissions factor, and additional self-consumption solar power generation equipment has started operation, which resulted in the decrease of Scope 2 CO<sub>2</sub> emissions amount compared to that of FY2022. A factory operation increased due to a strong increase in sales, which resulted in the increased tendency of in-house CO<sub>2</sub> emissions amount compared to that of FY2020, but we could finally achieve the result of decreasing it slightly compared to that of FY2021. Each factory is working to increase the operation ratio, which resulted in the decreased intensity of carbon emissions steadily. Also, they have significantly increased our Return On Carbon (ROC), an indicator of the extent to which earnings have been efficiently achieved versus the amount of CO<sub>2</sub> emissions reductions implemented.

In FY2024, in addition to the introduction of additional self-

consumption solar power generation equipment and switch to contracts for power with a lower emissions factor, the effect of starting introduction of CO<sub>2</sub>-free power to major domestic factories including head office is expected, and we are working to achieve the medium-term reduction target.

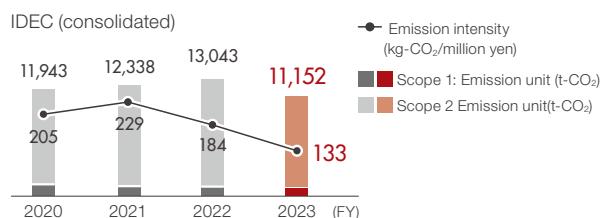
As for Scope 3, we began calculating both upstream (Categories 1-8) and downstream (Categories 9-15) emissions for the IDEC Group (consolidated) in FY2023. Generally, Category 11, use of sold products accounts for most of the Scope 3 emissions amount. Therefore, we seek to reduce the in-use CO<sub>2</sub> emissions amount of products we offer to customers by the further promotion of developing eco-friendly products as a manufacturer.

As for upstream, category 1, purchased goods and services accounts for the majority. Based on the CSR procurement guidelines and the green procurement guidelines we provide to our suppliers, we continue to request suppliers to improve their responses to environment and reduce the CO<sub>2</sub> emissions amount. In the future, we plan to improve our supplier engagement with our major customers by establishing more specific metrics.

### CO<sub>2</sub> emissions

IDECA (consolidated)	(Emission unit: t-CO <sub>2</sub> )			
	Scope 1	Scope 2	Scope 3 upstream	Scope 3 downstream
FY2020	<b>1,152</b>	<b>10,791</b>	-	-
FY2021	<b>948</b>	<b>11,390</b>	-	-
FY2022	<b>897</b>	<b>12,146</b>	-	-
FY2023	<b>781</b>	<b>10,371</b>	<b>213,925</b>	<b>870,694</b>

### CO<sub>2</sub> emissions (Scope 1 & 2)



### Return On Carbon (ROC)

