ULVAC's Vision

Message to Our

Contribution to a Sustainable Global Environment

At the 'COP28 (28th Conference of the Parties to the United Nations Framework Convention on Climate Change)' held in November 2023, the 'Global Stocktake (GST)' was conducted to assess the global progress towards achieving the goals of the Paris Agreement. The GST emphasized the necessity to reduce greenhouse gas emissions by 43% by 2030 and 60% by 2035 (both compared to 2019 levels) to limit the global average temperature increase to 1.5°C.

We have signed the 'United Nations Global Compact' and are committed to the principles of environmental responsibility advocated by the UN. Additionally, we support the recommendations of the 'Task Force on Climate-related Financial Disclosures (TCFD)' and disclose the impacts of climate change on our business. Furthermore, we respond to surveys from CDP, an international NGO, and strive to improve our commitments and transparency in information disclosure.



Aiming to be a company that continues to contribute to the future of people and the planet, ULVAC is responding to the above-mentioned changing external environment by conducting various activities in accordance with its Environmental Philosophy, Environmental Policy, and Environmental Targets described below.

Environmental Philosophy

The ULVAC Group understands that the conservation of the global environment is one of the most important issues facing humanity. While effectively utilizing resources in all aspects of our operations, we take into consideration biodiversity so as to contribute to bringing about a better living environment and a more prosperous society.

Environmental Policy

• Reduction of Greenhouse Gas Emissions

We reduce greenhouse gas emissions, a main cause of climate change, through all of our activities. We are committed to developing products that conserve energy and reduce our environmental footprint.

Prevention of Environmental Pollution

In conducting business, we comply with environmental laws and regulations. We manage hazardous chemicals appropriately in our manufacturing processes to prevent environmental contamination and health hazards.

Environmental targets and continuous improvement

We establish environmental targets and strive to improve our environmental performance by reviewing these targets

In addition, we continuously improve our environmental management system through routine revisions. Environmental education and information disclosure

Through environmental education, we enhance individual awareness and appropriately disclose environmental information.

Environmental Targets

- **1** Greenhouse gas emission reduction targets
- Reduce greenhouse gas emissions in 2030 by 50% as compared with 2023 (Scope 1 and 2) • Achieve net zero greenhouse gas emissions
- by 2050
- **2** Water consumption reduction target
- Reduce water use per unit* to 2020 levels or lower

*Water withdrawal/Net sales (consolidated)

3 Zero environmental accidents



Environmental Activities for FY2023

About ULVAC

In growth areas such as semiconductors and electronic components, we are making active investments in various regions around the world. Specifically, China and South Korea are positioned as strategically important regions, and we are advancing capital investments in these areas. As a result, in terms of material balance, while electricity usage is increasing in these strategic regions, we have set a goal to reduce greenhouse gas emissions by 1% compared to the previous year (based on our company's standards) as part of our energy-saving measures. Additionally, we are actively promoting the installation of renewable energy facilities, such as solar power systems, and procuring renewable energy. We have also revised the baseline year for the "Greenhouse Gas Emissions Reduction Target" to 2023 and changed the reduction target from 30% to 50%.

Waste overall emissions have decreased. A significant reduction was observed in waste oil and waste acid, with the reduction in the use of cutting oil due to the renewal of processing equipment in China being a contributing factor for waste oil. There have been no significant changes in other types of waste, and the proportion of waste directed to final disposal relative to total emissions has increased, resulting in a 0.9% increase in the final disposal rate.

Regarding water, the total water intake decreased by 8% compared to the previous year. The target for reducing unit water consumption* to below the 2020 level (0.77) was also achieved, with a result of 0.55. Going forward, we will continue to manage and work towards reducing our environmental impact related to water.

In the fiscal year in question, we reduced greenhouse gas emissions by 7.1% compared to the previous year. Specifically, the introduction of renewable energy accounted for a reduction of 3,656 tons of CO₂, and energy conservation activities contributed to a further reduction of 2,707 tons of CO₂.

Material Balance (from the 2023 fiscal year results)



Trend of CO₂ emissions from energy sources



*Emission factors are from the International Energy Agency (IEA) Emissions Factors 2021 edition

Trend of waste amounts



*1 Water usage per unit: Water intake / Sales revenue (consolidated)

OUTPUT				
CO ₂ emissions	83,465 t (from usage of electricity, gas, and fuel)			
Total waste emissions	4,925 t Total recycled amount 3,515 t Final disposal amount 121 t			
Final disposal rate	2.5 %			





Trend of solar power generation



Message to Our

Initiatives Related to the Recommendations of the Task Force on Climaterelated Financial Disclosures (TCFD) and Climate Change Response

At ULVAC, addressing climate change is positioned as one of the key management issues. As part of our medium- to long-term goals for reducing greenhouse gas emissions, we have set targets to reduce emissions by 50% by 2030 (compared to 2023 levels, Scope 1 and 2) and achieve net-zero emissions by 2050. Through efforts such as energysaving initiatives in Japan and abroad, the adoption of renewable energy with low greenhouse gas emission, and the development of environmentally friendly products, we are committed to reducing greenhouse gas emissions and

tackling climate change. Additionally, ULVAC supports the recommendations of the Task Force on Climaterelated Financial Disclosures (TCFD) and is committed to disclosing relevant information. Furthermore, ULVAC responds to surveys from the international non-profit organization "CDP."*



*CDP: CDP is a non-profit organization managed by a UK-based charity. It sends questionnaires to companies and municipalities regarding climate change and other environmental issues to assess and disclose the environmental impact of their activities. The scores are regarded as an important criterion for investment decisions

Governance

Under the supervision of the Board of Directors, the executive officers responsible for sustainability and the environment monitor the progress of the set goals.

- The Sustainability Promotion Committee, which includes internal directors, executive officers, and department heads, meets twice a year. In these meetings, we recognize societal trends and the current status of the company, and discuss measures to address the challenges. If significant issues arise related to management, they are discussed in the Management Council or the Board of Directors, where decisions are made accordingly.
- The Global Environmental Management Committee, chaired by the executive officer responsible for the environment and consisting of environmental leaders from group companies, meets twice a year. In addition, we have established the Environmental Performance Management Committee, which meets four times a year. In these committees, we set goals, monitor progress, review efforts towards achieving the goals, and discuss measures to address challenges. The outcomes are reported at the Management Council. The progress of these initiatives is monitored by the Sustainability Promotion Committee, and the executive officer responsible for sustainability reports to the Board of Directors at least once a year.

Strategy

Based on scenarios published by the IPCC (Intergovernmental Panel on Climate Change) and the IEA (International Energy Agency), we have identified climate change risks and opportunities. Specifically, we analyzed the scenarios indicating a potential global average temperature increase of 4°C or more (e.g., RCP8.5-SSP5) and those aligned with

Main Risks

Category	Factors	Measures
Market	Increase in business costs due to changes in customer behavior	Implementation of renewable energy and energy-saving measures in business activities
Policy and regulation	Carbon pricing	
Technology	Replacement of existing products/services with lower emission alternatives	Research and development of products and services for manufacturing equipment that contribute to technological innovation in various fields, and promotion of products with low power consumption
Acute and chronic	Business continuity risks due to extreme weather events like typhoons and heavy rain	Establishment and implementation of business continuity plans during natural disasters

Main Opportunities

Category	Factors	Measures
Products & Services	Increasing expectations for devices and technologies that contribute to low-power devices, power devices, and lithium-ion batteries, expanding demand for low-power products	Research and development of products and services for manufacturing equipment that contribute to technological innovation in various fields, and promotion of products with low power consumption

the Paris Agreement's targets of limiting the temperature rise to below 2°C, or ideally to 1.5°C (e.g., RCP2.6, IEA NZE 2050). Based on these scenarios, we have organized the main risks and opportunities that may affect our business in the medium to long term as follows:

- Impact of carbon pricing
- Risk of disasters due to extreme weather events like typhoons and heavy rainfall

• Expansion of market opportunities for power devices and EV batteries Specifically, detailed analyses of risks and opportunities related to these three points were conducted, and the guantitative impacts on the business were assessed. Going forward, we will continue to guantify further impacts and develop specific measures to strengthen our response towards sustainable business operations

About ULVAC

Risk Management

- For all risks that could cause significant damage to the business, the Corporate Planning Office is designated as the responsible department. This office is responsible for identifying such risks and devising countermeasures, which are then directed to relevant internal departments and group companies. This process enables the identification of risks and promotes company-wide response efforts, with results being reported to the Risk Management Committee. In this committee, detailed identification and analysis of these risks are conducted, along with discussions on business reports and improvement measures. Through monitoring, early detection, reporting, and appropriate actions are implemented. In addition, for medium- to long-term sustainability risks, the Sustainable Management Promotion Office is designated as the responsible department. This office directs relevant internal departments and group companies to identify risks related to sustainability, and the results are reported to the Sustainability Promotion Committee. The committee manages the progress of efforts to address these mediumto long-term risks. Ultimately, the Board of Directors receives reports from these committees and oversees the management of risks. Through this framework, our group aims to achieve management stability and sustainable arowth.
- ULVAC has significant development and manufacturing bases in Japan, which account for approximately 60% of the total greenhouse gas emissions (Scope 1 and 2) across the entire group. Therefore, if a carbon tax at the level expected in the NZE (Net Zero Emissions Scenario: the scenario in IEA's World Energy Outlook, aiming for net-zero greenhouse gas emissions by 2050) is imposed in Japan, it is anticipated to pose a significant risk to our company. To address this risk, we have estimated the impact for 2030 and 2050 under the NZE scenario, based on our greenhouse gas emissions in Japan, and have assessed the potential risks. Additionally, the energy cost increase risk is monitored by a meeting led by the executive officer responsible for the environment, along with related departments. We assess trends and conduct risk evaluations based on the ongoing developments. Furthermore, in 2023, we revised our target to reduce emissions subject to taxation by aiming for a 50% reduction in Scope 1 and 2 emissions by 2030, compared to 2023 levels. To achieve this target, we have set a goal for the use of renewable energy and plan to purchase the necessary amount of renewable energy based on the progression of Green House Gas emissions.
- Regarding Scope 3, environmental impact is significant in the upstream value chain (with suppliers and material purchases) and downstream (during the use of products by customers). Recognizing the importance of offering environmentally friendly products, we are working to consider environmental factors starting from the development stage
- We have developed a business continuity plan in anticipation of disasters caused by extreme weather events such as typhoons and heavy rainfall, and we are implementing measures to ensure continuous business operations.

Metrics and Targets

• As a responsible member of society, the ULVAC Group has set medium- and long-term goals for reducing greenhouse gas emissions. We have established a target to reduce emissions by 50% by 2030 (compared to 2023 levels) and achieve net-zero emissions by 2050. We are actively promoting efforts in energy conservation both domestically and internationally, installing solar power systems, and introducing renewable energy. Through these initiatives, as well as the development of environmentally friendly products, we are committed to reducing greenhouse gas emissions and addressing climate change.

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Reduce greenhouse gas emissions by **50%** by **2030**

Net-zero greenhouse gas emissions by 2050

Message to Our

Contribution to a Sustainable Global Environment

Effective use of water

Globally, water risks such as heavy rainfall, flooding, and water shortages are a concern due to the progression of climate change. At our company, we have assessed and confirmed the impact that water risks may have on our business operations.

By using the water risk assessment tool WRI Aqueduct and extracting high environmental impact sites as defined by our company, we have identified the locations exposed to water risks. Our company identifies business locations with Extremely High or High Baseline Water Stress as water-stressed areas. Locations exposed to water risks are found in parts of China and Thailand, accounting for 8% of the consolidated group. This includes business sites involved in high-environmental-impact film formation, and in addition to the overall group's water usage reduction targets, specific targets are set for each subsidiary, and concrete actions are being promoted.

Management of Chemical Substances

When using chemicals in manufacturing processes, we strive to minimize environmental impacts as well as ensure worker safety by checking the amount of chemicals used and personal protective equipment in advance and conducting risk assessments. Additionally, to comply with environmental regulations related to products in various countries, a cross-functional organization centered around the Quality Assurance Department, Procurement Department, and Environmental Department is advancing the development of a chemical management system for environmentally considerate products. We collect information to appropriately respond to frequently revised environmental regulations and conduct internal training on product-contained chemicals, taught by external instructors, across the group to support compliant manufacturing. Furthermore, we are promoting a management system across the entire supply chain by holding briefings for suppliers to understand the importance of managing product-contained chemicals and to request the provision of information on these chemicals

Biodiversity Initiatives

ULVAC recognizes the preservation of the global environment as one of humanity's shared critical issues and declares in its philosophy a commitment to effectively utilize resources in all aspects of business activities, consider biodiversity, and contribute to the development of a hospitable Earth and a prosperous society

Specifically, we have been actively participating in the 'Forest Regeneration Partners' system led by Kanagawa Prefecture, continuing our efforts to contribute to the protection of local water source forests for three years. Through this partnership, we conduct forest conservation activities three times a year. These activities take place in the Yadorigi water source forest located in Ashigarakami District, Kanagawa Prefecture, where we are surrounded by lush greenery, performing thinning operations and environmental education through the observation of aquatic life."

ULVAC aims to remain a business that contributes to the creation of a sustainable and environmentally conscious society by 2050. To achieve this goal, we are promoting environmentally conscious management, protecting and nurturing local ecosystems, and fulfilling our responsibility to pass on rich forests to future generations





"ULVAC Green Products" Certification Program for Environmentally Friendly Products

In recent years, global challenges, particularly climate change, have become more apparent, and they are increasingly posing risks not only to businesses but also to our very lives. For companies, environmental initiatives have become even more crucial in achieving a sustainable society. We have established the "ULVAC Green Products" certification system, which focuses on effectively utilizing resources and considering environmental impact from all perspectives, including the impact throughout the product lifecycle. This system certifies products that meet one or more of the evaluation criteria related to environmentally conscious design, as defined by our company, and meet the specified standards. In order for our products to contribute to the development of a livable planet and a prosperous society, we will continue to develop and release ULVAC Green Products.

Evaluation Items

Environmental friendliness elements		Items
Resource conservation and recycling	REDUCE	Reduced parts count
		Space-saving, compact, lightweight, and simplified
		Selection of environmentally friendly materials
		Easy-to-assemble, easy-to-disassemble structure
		Reduced maintenance frequency
		Reduced packaging materials
		Reduced consumption of water resources, such as industrial water
		Longer service life
	REUSE	Active use of reused and recycled items
	RECYCLE	Design for recycling
		No use of hazardous chemicals
Climate action	Reduction of electricity consumption	Reduced electricity consumption
	Deduced concurrentian of	Reduced consumption of cooling water, nitrogen, etc.
	energy other than electricity	Use of alternatives to greenhouse gases used in the process and reduced use of greenhouse gases
Other		Reduced noise

Introduction of Next-Generation Platform

New Film Deposition Equipment model for Semiconductor

ENTRON-EXX

Mai

	n
Features Up to 10% reduction in installation floor space	
Simplified Plug-In Platform connectio	n
Software Extensibility	

ENTRON-EXX is a new model developed to meet the needs of the increasingly advanced and complex semiconductor manufacturing processes. Inheriting the productivity and flexibility of the previous model, ENTRON-EX W300, which has been adopted by customers worldwide since its release in 2005, the ENTRON-EXX enhances data collection and analysis capabilities. By adopting a highly expandable equipment design, it supports the next generation of semiconductor manufacturing.

Compared to the previous model, it reduces electricity consumption in standby mode by 20% and allows for a 5% to 10% reduction in cleanroom floor area, reflecting a design that prioritizes sustainability and minimizes environmental impact.

