Transform Tomorrow Today

UBE Corporation

Integrated Report 2023

Supplementary Information (Environment and Safety / Quality Assurance)

Outline of Environment and Safety Activities

In order to advance its medium-term environment and safety policies, the UBE Group strives to improve its environment and safety activities through the use of the PDCA cycle.
Fiscal 2022 evaluation: Plans were mostly achieved.

		FY2022 Action Plans	FY2022 Results
Common to All	**Cultivate a culture of safety**	1. Ensure that everyone makes safety the top priority 1-1. Ensure that each business site is well informed and surveys understanding levels 1-2. Clarify and reinforce basic rules at each business site	1. Ensured that everyone makes safety the top priority 1-1. Developed guidelines for assessing understanding of stance that safety is the top priority and conducted comprehension survey 1-2. Each business site clarified and again enforced basic rules
		2. Cultivate a culture of safety 2-1. Implement plan to cultivate a culture of safety and establish framework	2. Cultivated a culture of safety 2-1. Audited activities to confirm progress and provide guidance 2-2. Each business site continued activities in line with its goals for improving a culture of safety
		3. Strengthen change management responsiveness (particularly for Chemical Group companies) 3-1. Clarify change management targets and step up risk assessments	3. Strengthened change management responsiveness (particularly for Chemical Group companies) 3-1. Audited and guided change management procedures and implementation progress 3-2. Each site is deploying change management efforts based on procedures
Occupational Safety and Health	**Occupational safety**	1. Eliminate major disasters 1-1. Continue implementing measures (and ensuring implementation) to address significant risks 1-2. Undertake safety activities (and enhance their effectiveness) with contractors 1-3. Educate and train personnel to enhance safety awareness	1. Eliminated major disasters 1-1. Identified work that could lead to major accidents at each business site, formulating and implementing plans to reduce risks (such as those for intrinsic safety) 1-2. Included joint patrols with contractors and subcontractors, participation in safety meetings, and stronger audits in environmental and safety management plans at each business site to foster integrated safety activities 1-3. Included education and training to raise safety awareness in environmental and safety management plans at each business site, and are undertaking efforts
	Enhance workplace environments	1. Improve workplace environments 1-1. Reinforce measures for workplaces needing improvements (in management categories II and III)	1. Improved workplace environments 1-1. Reviewed workplaces needing noise control measures and expanded management area
Process Safety and Disaster Prevention	**Eliminate facility accidents**	1. Eliminate facility accidents (prevent recurrences of similar incidents) 1-1. Share and disseminate accident information 1-2. Strengthen facilities maintenance and management	1. Eliminated facility accidents (prevented recurrences of similar incidents) 1-1. Shared and disseminated accident cases in accident information liaison meetings 1-2. In safety management liaison meetings, shared and disseminated examples of activities at designated special safety management guidance workplaces within the Company
	Eliminate environmental accidents	1. Eliminate environmental accidents 1-1. Identify environmental risks and deploy environmental risk reduction measures	1. Eliminated environmental accidents 1-1. Ensured efforts to implement environmental risk reduction measures and prevent environmental accidents (using Guidelines for Environmental Accident Prevention to identify environmental risks and reduce risks)
	Enhance safety of high-pressure gas accredited business sites	1. Enhance safety of certified high-pressure gas sites (including at UBE Elastomer Co. Ltd.) 1-1. Pursue ongoing improvements by stepping up use of safety evaluation	1. Enhanced safety of certified high-pressure gas sites 1-1. Clarified issues at business sites in light of Security Improvement Center assessment and self-evaluation of security capabilities, formulated and implemented improvement plans
	Natural disaster countermeasures	1. Undertake natural disaster countermeasures 1-1. Identify weaknesses at each business site and implement plans 1-2. Identify issues common to all business sites in Ube and implement plans	1. Undertook natural disaster countermeasures 1-1. All business sites and Group companies formulated and implemented three-year action plans 1-2. Identified issues and assessed progress, transitioning to regular management
Environmental Conservation	**Reduce environmental risks**	1. Reduce environmental risks 1-1. Implement and confirm effectiveness of measures to reduce environmental risks 1-2. Roll out at other business sites	1. Reduced environmental risks 1-1. Each business site continued to install additional environmental meters and additional temporary storage tanks to handle leakages 1-2. Created Guidelines for Environmental Accident Prevention to identify issues and roll out risk reduction initiatives at each business site
Environmental Issues	**Low-carbon economy contributions and responses**	1. Step up efforts to tackle environmental issues	1. Planned and implemented measures to reach environmental targets 1-1. GHG emissions in fiscal 2022 were 3,820 kt-CO_2e/y (for the UBE Group) 1-2. Environmentally friendly products and technologies accounted for 46% of sales in fiscal 2022 for the UBE Group
		2. Keep helping to improve ESG evaluations and develop internal human resources	2. Educated employees about environmental issues 2-1. Provided environmental education at two business sites 2-2. Provided e-learning for all employees
		3. Lay groundwork for disclosing product greenhouse gas (GHG) emissions	3. Streamlined data collection for each business 3-1. Completed logic for calculating GHG emissions intensities by product 3-2. Completed phase 1 of systematic GHG emissions intensity calculations by product
	Keep reducing environmental impact	1. Push ahead with improvement plans to attain medium-term goals 1-1. Reduce industrial waste Benchmark: External landfill disposal amount Fiscal 2022 target: 85% reduction (from fiscal 2000 level) 1-2. Chemical substance emissions reductions Benchmark: Total emissions of 20 priority chemical substances*2 Fiscal 2022 target: 35% reduction (from fiscal 2010 level)	1-1. Reduced external landfill disposal amount Fiscal 2022 result: 84% reduction (from fiscal 2000 level) See page 11 for trends in landfill disposal and intermediate treatment amounts 1-2. Reduced emissions of 20 chemical substances Fiscal 2022 result: 38% reduction (from fiscal 2010 level) See page 12 for time trends for substances subject to PRTR Law*3 and VOCs*4
Environmental and Safety Audits and Inspections		1. Implement environment and safety audits and inspections	1. Implemented environment and safety audits and inspections 1-1. Audited eight headquarters sites and four machinery divisional sites 1-2. Inspected six headquarters sites and one machinery divisional site
Dialogue with Communities		1. Promote dialogue with communities	1. Held RC Regional Dialogue Meetings*5 with community stakeholders 1-1. Results of 14th RC Chiba Regional Dialogue Meeting (conducted by sharing and reviewing documents): SDG initiatives in Chiba Prefecture Environmental Administration (Chiba Prefecture Environmental Policy Division), presentations by two companies (Nippon Soda Co., Ltd., and Koei Chemical Company, Limited), and questionnaire survey 1-2. Results of 17th RC Ube Regional Dialogue Meeting (conducted online): Ube Method and Environmental Conservation Agreement (Environmental Policy Section of Ube City's Environmental Department), Member Company Activity Reports (UBE Corporation's Ube Chemical Factory east and west area, Fujimagari Area, Ube site of Techno-UMG Co., Ltd., and Ube plant of Central Glass Co., Ltd.)

(Continued on page 2)

Self-Evaluation
★★★: Achieved ★★: Mostly achieved ★: Not achieved

Self-Evaluation	FY2023 Action Plans	SDGs	RC*1 Code
★★	1. Ensure that everyone makes safety the top priority 1-1. Ensure that each business site is well informed and surveys understanding levels 1-2. Clarify and reinforce basic rules at each business site 2. Cultivate a culture of safety 2-1. Assess effectiveness of implementation of plans to cultivate a culture of safety 3. Strengthen change management responsiveness 3-1. Set up change management mechanisms at all Group companies	–	–
★★	1. Eliminate major disasters (Halve number of occupational accidents and eliminate lost work time injuries) 1-1. Deploy major risk countermeasures to enhance intrinsic safety 1-2. Undertake safety activities with contractors 1-3. Educate and train personnel to enhance safety awareness	8 DECENT WORK AND ECONOMIC GROWTH	Occupational Safety and Health
★★	1. Improve workplace environments 1-1. Keep enhancing measures at workplaces requiring improvements 1-2. Build self-regulated chemical substances management system		
★★	1. Eliminate facility accidents (prevent recurrences of similar incidents) 1-1. Keep sharing and disseminating accident cases 1-2. Continue to strengthen facilities maintenance and management 1. Eliminate environmental accidents 1-1. Push ahead with environmental risk reduction measures based on improvement plans 1-2. Share and disseminate accident information 1. Enhance safety of certified high-pressure gas sites 1-1. Keep undertaking and confirming improvements 1. Undertake natural disaster countermeasures 1-1. Keep pushing ahead with natural disaster action plans 1-2. Strengthen Group company initiatives	11 SUSTAINABLE CITIES AND COMMUNITIES	Process Safety and Disaster Prevention
★★	1. Eliminate environmental accidents 1-1. Identify environmental risks and deploy environmental risk reduction measures	6 CLEAN WATER AND SANITATION	Environmental Conservation
★★	1. Step up efforts to tackle environmental issues 2. Keep helping to improve ESG evaluations and develop internal human resources 3. Lay groundwork for disclosing product GHG emissions	6 CLEAN WATER AND SANITATION, 7 AFFORDABLE AND CLEAN ENERGY, 13 CLIMATE ACTION, 14 LIFE BELOW WATER, 15 LIFE ON LAND	
★★	1. Push ahead with improvement plans to attain medium-term goals 1-1. External landfill disposal amount Fiscal 2023 target: 87% reduction (from fiscal 2000 level) See page 11 for medium-term targets for reducing industrial waste 1-2. Total emissions of 20 chemical substances Fiscal 2023 target: 29% reduction (from fiscal 2010 level) See page 12 for medium-term targets for reducing chemical substance emissions	6 CLEAN WATER AND SANITATION, 11 SUSTAINABLE CITIES AND COMMUNITIES, 12 RESPONSIBLE CONSUMPTION AND PRODUCTION	
★★★	1. Implement environment and safety audits and inspections	–	Management System
★★★	1. Promote dialogue with communities	17 PARTNERSHIPS FOR THE GOALS	Dialogue with Communities

Glossary

*1 Responsible Care (RC): Under RC, corporations that handle chemical substances voluntarily preserve the environment, safety, and health throughout product life cycles, from the development of chemicals through their manufacture, distribution, use, and final consumption to disposal and/or recycling, and communicate and engage with society by disclosing activity outcomes.

*2 20 chemicals selected independently: methyl alcohol, butyl alcohol, toluene, epsilon-caprolactam, styrene, ammonia, cyclohexane, cyclohexanone, oxalic acid, vinyl acetate, xylene, n-hexane, ethylbenzene, chloromethane, benzene, dimethyl phthalate, N,N-dimethylacetamide, boric acid compound, phenol, hydrogen fluoride and its water-soluble salts

*3 PRTR (Pollutant Release and Transfer Register) Law: This legislation requires companies to identify business site chemical substance emissions and transfer volumes and report to the government. The Ministry of the Environment discloses the submitted information on its website. Such disclosure is designed to encourage voluntary efforts to improve chemical substance management.

*4 Volatile organic compounds (VOCs): These organic chemicals evaporate or sublimate easily, entering the atmosphere as gases. They are factors in the forming of suspended particulate matter (PM) and photochemical oxidant pollution.

*5 Responsible Care (RC) Regional Dialogue Meetings: Local members of the RC Committee of the Japan Chemical Industry Association are encouraged to engage with residents, civic groups, government officials, and other local stakeholders and convene meetings regarding RC implementation items (environmental conservation, safety and disaster prevention, etc.). A dialogue meeting is held in each district to deepen mutual understanding of initiatives.

Occupational Safety and Health

Preventing Occupational Accidents

Fostering a Safety-Driven Corporate Culture

To make existing safety activities more comprehensive and effective, in fiscal 2016 we launched initiatives aimed at fostering a safety-driven corporate culture, encompassing eight elements. These are organizational governance, positive involvement, resource management, work management, motivation, learning and knowledge transmission, risk perception, and mutual understanding. In keeping with findings from assessments based on headquarters' evaluation standards, business sites identify issues and formulate and execute plans to cultivate a safety culture as part of ongoing improvement efforts.

Eliminating Major Disasters

We have undertaken a range of activities to prevent occupational accidents. In fiscal 2018, we initiated efforts that centered on eliminating major incidents. We conduct risk assessments of work that is highly susceptible to serious accidents. We implement systematic risk reduction measures and endeavor to make operations inherently safe. From fiscal 2020, we undertook safety activities with partner companies*, adding safety education and training from fiscal 2021 as a priority item.

We investigate the causes of all incidents regardless of whether they result in lost work time, striving to prevent similar incidents by assessing and rolling out measures.

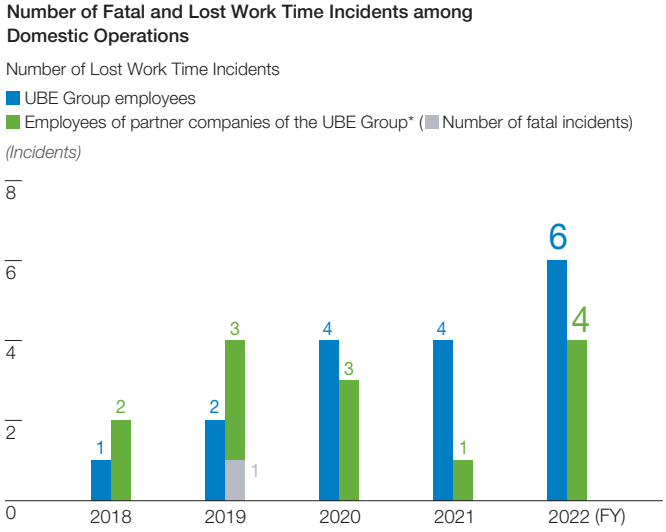
Occupational Safety and Health Council

This is a forum in which representatives of the Companywide union and UBE's occupational safety and health officers gather to review annual occupational safety and health results and plans for the new fiscal year and discuss requests from both sides. Participants share prevailing issues and discuss ways to address them. We reflect forum results in the following year's plans. Many major accidents have occurred among subcontractors. Labor representatives and management recognize the importance of coordinating better with those firms. Our annual plans accordingly include measures to foster safety activities with subcontractors.

Labor–Management Councils

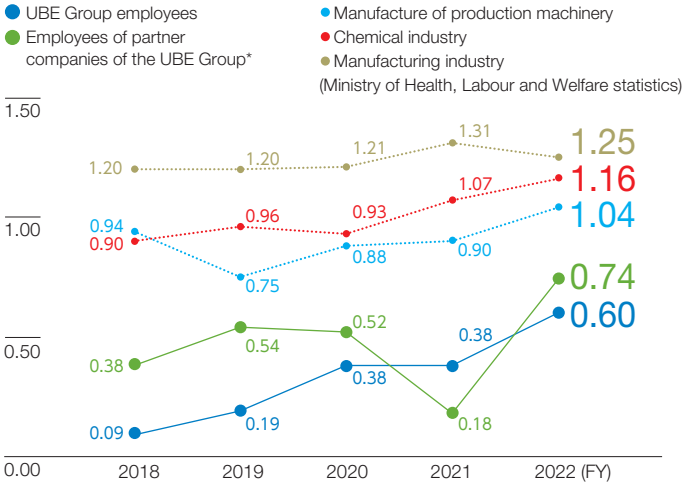
Following Occupational Health and Safety Council discussions with Companywide union representatives, regional business sites convene gatherings to discuss local union and management requests.

Number of Fatal and Lost Work Time Incidents among Domestic Operations



Note: Data excludes former Construction Materials Company.

Lost Work Time Injury Frequency Rate



Note: Data excludes former Construction Materials Company.

Glossary

** Partner companies: Including construction and other contractors*

Measures to Prevent Occupational Accidents

	Goals	Activities	Status and History of Initiatives
1. Setting occupational accident-related benchmarks	Prevent occupational accidents	Establish numerical goals	Fiscal 2022 goal: 0 incidents with lost work time and 14 without, for a total of 14 Fiscal 2022 result: 10 incidents with lost work time and 18 without, for a total of 28
2. Use of occupational accident information	Prevent similar accidents	Create occupational accident information database and publish it on intranet	We are using information on occupational accidents at each business site as important data sources for facilities and operational risk assessments.
3. Audits and inspections	Drive ongoing improvements at business sites • Improve weak areas • Enhance safety levels	(1) Audits • Audits conducted by the Head Office and business site environmental safety personnel • Quantitative evaluation of offices in line with checklists and feedback • Chemical substance management audits Audit three management areas (work, work environments, and health) as covered by the Occupational Safety and Health Act (2) Inspections • Members of the president-chaired inspection committee visit business sites • Confirming results of audit and activity achievements and conveying reviews	History of improvement activities inspired by audits and inspections • Fiscal 2013: Summarize outstanding activities in Best Practices and Safety and Health Guidelines and publish these on intranet • Fiscal 2016: Begin assessments according to eight culture of safety components, which are organizational governance, positive involvement, resource management, work management, motivation, learning and knowledge transmission, risk perception, and mutual understanding • Fiscal 2017: Start disclosing evaluation criteria and verifying gaps between these and self-evaluations • Fiscal 2018: Publish evaluation criteria on intranet and integrate UBE Group evaluation criteria in a culture of safety • Fiscal 2018: Audit all Chemicals business sites • Fiscal 2019: Audit Research and Development Department • Fiscal 2019: Establish Companywide criteria in three management areas, build database for substances handled in-house and related regulations, formulate quantitative risk assessment techniques for chemical substances, and sequentially and continuously improve • Fiscal 2017: Launch small safety team reports and group discussions
4. Safety and health rallies	Share information Encourage activities	Annual UBE Group health and safety rallies Participants: Approximately 300 people (Group executives and employees, including online) participating	Zero accident efforts and resolutions to enhance workplace environments • Recognition by the president (to entities and individuals for outstanding contributions to health and safety) • Small safety team presentations on experiences • Special lectures from outside instructors on safety and health management • Reciting safety goals after rallies

Process Safety and Disaster Prevention

We endeavor to eliminate process accidents through initiatives that ensure our facilities are safe and secure. We also undertake activities to minimize damage in the event of major natural disasters. Our focuses in fiscal 2022 were on eliminating facilities and environmental accidents, improving safety at high-pressure gas facilities, and preparing for natural disasters.

Efforts to eliminate facilities accidents entail sharing information about incidents through accident information liaison meetings and business sites rolling out measures to prevent similar recurrences. We are also stepping up facilities maintenance and management through safety management liaison meetings. We endeavor to eliminate environmental accidents by identifying environmental risks and deploying measures to reduce those risks. For certified high-pressure gas sites, we set up an improvement agenda in line with assessment findings from the Japan Industrial Safety Competency Center and engage in systematic improvement initiatives. We push ahead with measures to address natural disasters by having each business site conduct self-assessments in line with self-assessment criteria for such measures, and pursue ongoing improvements. We also respond to the Industrial Process Safety Action Plan of the Japan Petrochemical Industry Association.

Industrial Process Safety Action Plans

See page 5 for progress with the Industrial Process Safety Action Plans.

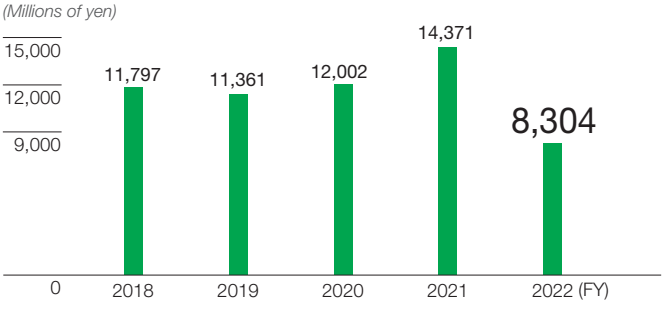
Initiatives for Process Safety and Disaster Prevention

UBE Group Facility-Related Accidents

		Number of Accidents				
	(FY)	2018	2019	2020	2021	2022
UBE		4	4	13	5	5
Group companies		0	3	2	3	5

In fiscal 2022, the UBE Group recorded 10 accidents, investigated their causes, and implemented recurrence prevention measures.

Occupational Safety, Health, and Disaster Prevention Expenditures of the UBE Group



Plant Safety Assessment

Plant safety assessments of new, additional, or modified offices and facilities are carried out following the methods stipulated in the plant safety assessment standards. In fiscal 2022, the UBE Group carried out 129 such safety assessments.

Response to the Japan Petrochemical Industry Association's Industrial Process Safety Action Plans

	Initiatives that Member Companies Should Take	UBE's Initiatives
1. Commitment of corporate management to industrial process safety	(1) Commitment to basic principles and policies related to process safety and other aspects of safety	Establishing and maintaining the UBE Corporate Philosophy, UBE Management Principles, and UBE Group Environmental and Safety Guidelines Messaging from top management to employees and partner companies about industrial process safety On-site roundtable meetings with top management held at facilities, facilitating direct communication between the president and employees
	(2) Commitment to policy on resource allocation for industrial process safety	Building an educational structure and using educational and training facilities to develop human resources Providing explanations to facilities regarding budgets and staffing for production plans, maintenance plans, and capital investment plans prepared by process safety divisions
2. Setting goals for industrial process safety	(1) Set numerical targets for process safety	Numerical target: Zero major facility accidents
3. Formulating action plans to implement industrial process safety measures	(1) Risk assessment	Conducting risk assessments with the participation of several departments from comprehensive and diverse perspectives for normal and unstable circumstances and when deploying new facilities and processes
	(2) Education and training to develop human resources	Participating in classes, on-the-job training, and risk assessment and educating about operational principles and know-how through experiential education and providing plant simulator education
	(3) Utilize information about accidents	Horizontally sharing information on accidents inside and outside the Company and their countermeasures through the Accident Information Liaison Group
	(4) Organizational operations	Implementing change management with operational management, facility management, process safety management, and design divisions when facilities are newly established or renovated and when procedures change
	(5) Facility maintenance and deterioration countermeasures	Update based on results of assessments of remaining service lives and formulate repair plans Harness the IoT, including for tablets
	(6) Maintain and enhance earthquake resistance of high-pressure gas facilities and conduct voluntary seismic assessments of existing piping	Assessing compliance with seismic resistance standards for high-pressure gas facilities, undertaking measures, and conducting seismic diagnoses of existing piping systems
	(7) Incorporate new methods and technologies to enhance safety	Incorporating operational data to analyze operational patterns, deploying future change prediction system, utilizing driving training simulators, smart devices, and electronic reporting system
	(8) Safety management that encompasses partner companies	Group companies and related partner companies hold joint safety management meetings Staff in charge of operational management, facility management, and staff from partner companies meet before construction begins to confirm safety
4. Surveying and evaluating achievement of goals and implementation of measures	(1) Structure and operations relating to attainment surveys and assessments	Progress is checked and evaluated through annual audits Strategic Management Meeting considers the results of the year's activities when discussing measures for the next year
	(2) Respond to results of above survey and assessments	Based on assessment results, act on key priorities, which are to eliminate facilities and environmental accidents, improve the safety of certified high-pressure gas sites, and undertake measures to tackle natural disasters
5. Initiatives to advance each company's own process safety activities (cultivating a culture of safety)	(1) Approaches to developing a culture of safety	Institute safety awards within the Group and at business sites Each business site formulated goals and plans to improve the safety culture and undertook improvement initiatives
6. Leveraging external knowledge	(1) Harnessing third-party institutions	Have the Japan Industrial Safety Competency Center assess business site safety Set improvement goals based on assessment results and acted
	(2) Disseminating information externally	Provide safety and security information to local industry associations
7. Communicating about risks with communities	(1) Risk communications tools and frequency	Hold regular dialogue with local residents Hold events for local citizens
8. Efforts to prevent industrial accidents from earthquakes, tsunamis, and other natural disasters	(1) Evacuating employees in event of major earthquakes and tsunamis and approaches to facility setups	Formulating responses for earthquakes and tsunamis and conducting evacuation training, and assessing and reinforcing seismic resistance of facilities and piping Creating and implementing earthquake and tsunami countermeasure plans and formulating business continuity plans

Environmental Issues: Tackling Global Warming

GHG Emissions

(FY)	2020	2021*2	2022*2	
	kt-CO_2e/y			
Scope 1	10,690	3,790	3,400†*1	Direct GHG emissions from a reporting entity, due to fuel use, etc.
Scope 2	580	520	420†*1	Indirect GHG emissions from electricity and heat purchased from other entities
Scope 3	13,460	13,410	12,230	Indirect GHG emissions throughout the supply chain, such as those that occur during material procurement, transport and product processing, use and disposal
Total	24,730	17,720	16,050	

**1 The figure with "†" mark was assured by the third party assurance. Please see the assurance statement on page 14.*
**2 Data for fiscal 2021 and beyond is aggregated and excludes the former Construction Materials Company.*

Scope 3 Emissions by Category

	Category	(FY)	GHG Emissions *(kt-CO_2e/y)* 2020*1	2021	2022
1	Purchased goods and services		2,040	3,080	2,490
2	Capital goods		100	40	70
3	Fuel and energy-related activities not included in Scope 1 or Scope 2		460	350	300
4	Upstream transportation & distribution		700	160	140
5	Waste generated in operations		10	20	40
6	Business travel		0	0	10
7	Employee commuting		0	10	10
8	Upstream leased assets		0	0	0
9	Downstream transportation & distribution		540	70	70
10	Processing of sold products		180	450	460
11	Use of sold products		7,650	1,510	1,630
12	End-of-life treatment of sold products		1,760	1,100	910
13	Downstream leased assets			No relevant activities	
14	Franchises			No relevant activities	
15	Investments		20	6,620*2	6,110*2
Total			13,460	13,410	12,230

Note: Numbers may not add up due to rounding.
**1 Domestic activities only in fiscal 2020*
**2 Category 15 for fiscal 2021 and beyond includes equity-based shares of GHG emissions of Mitsubishi UBE Cement Corporation (former Construction Materials Company).*

GHG Emissions by Sector in Fiscal 2022

Business Sites		*kt-CO_2e/y* Scope 1	Scope 2	Total
Chemicals Business		3,230	400	3,630
	Domestic	2,360	110	2,470
	Thailand	600	280	880
	Spain	270	10*1	280
Machinery Business		170	20	190
Total		3,400†*2	420†*2	3,820

Note: Numbers may not add up due to rounding.
**1 Electricity purchased externally is renewables-based.*
**2 The figure with "†" mark was assured by the third party assurance. Please see the assurance statement on page 14.*

Emissions Data by GHG Category

GHG Categories	(FY)	*kt-CO_2e/y* 2020	2021*2	2022*2
CO_2		10,410	3,390	3,140
CH_4*1		10	0	0
N_2O		850	920	680
HFC*1		0	0	0
PFC		0	0	0
SF_6*1		0	0	0
NF_3		0	0	0
Total		11,270	4,310	3,820

**1 Less than 10,000 t-CO_2e/y*
**2 Data for fiscal 2021 and beyond is aggregated and excludes the former Construction Materials Company.*

GHG Emission Intensity (GHG emissions per unit of production)

		t-CO_2e/t-Lc		
	(FY)	2020	2021*	2022*
GHG emission intensity		3.263	2.521	2.733

** Data for fiscal 2021 and beyond is aggregated and excludes the former Construction Materials Company.*

Energy Consumption Data

	MWh/year						
	2020		2021*		2022* (FY)		
	Total	Derived from Renewable Energy	Total	Derived from Renewable Energy	Total	Derived from Renewable Energy	Notes
Fuel consumption	19,030,000	670,000	8,417,000	0	6,131,000	0	Biomass
Purchased electricity consumption	840,000	60,000	800,000	176,000	629,000	160,000	Power from renewable energy
Purchased steam consumption	1,050,000	0	1,425,000	0	1,079,000	0	
Private power generation (renewable energy)	2,000	2,000	2,000	2,000	2,000	2,000	Solar power
Total	20,920,000	730,000	10,644,000	178,000	7,841,000	162,000	

Note: Numbers may not add up due to rounding.
** Data for fiscal 2021 and beyond is aggregated and excludes the former Construction Materials Company.*

Energy Type Consumption Data

		MWh/year		
Energy Type	(FY)	2020	2021*	2022*
Thermal coal		16,170,000	6,963,000	5,144,000
Kerosene and light oil		370,000	263,000	157,000
Liquefied natural gas		650,000	626,000	391,000
Liquefied petroleum gas		130,000	138,000	129,000
Petroleum coke		520,000	0	0
Heavy oil		270,000	201,000	122,000
Gas and oil by-products		250,000	226,000	188,000
Biomass		670,000	0	0
Total		19,030,000	8,417,000	6,131,000

** Data for fiscal 2021 and beyond is aggregated and excludes the former Construction Materials Company.*

Environmental Issues:
Water Resource Usage and Fluorocarbon Emission Restriction

Water Resource Usage

UBE Group Water Resource Usage (Fiscal 2018 through 2022)

Scope of coverage: UBE's domestic plants and laboratories and key domestic consolidated subsidiaries with plants. See page 16 for details.

			(FY)	2018	2019	2020	2021	2022
Water resource withdrawals (Millions of cubic meters)	Chemicals Business	Tap water		0.2	0.2	0.2	0.2	0.2
		Groundwater		2.0	2.0	2.0	2.2	2.0
		Industrial water		79	84	81	83	64
		Seawater		105	114	107	115	302*1
		Subtotal		186	200	190	200	369†*2
	Machinery Business	Tap water		0.1	0.1	0.2	0.1	0.1
		Groundwater		0.0	0.0	0.0	0.0	0.0
		Industrial water		0.9	1.0	1.0	0.9	0.8
		Seawater		0.0	0.0	0.0	0.0	0.0
		Subtotal		1.0	1.1	1.2	1.0	1.0
	Total (UBE Group)			187	201	191	201	370
Water discharges (Millions of cubic meters)	Chemicals Business	Sewers		0.0	0.0	0.0	0.0	0.0
		Rivers and lakes		2.1	2.1	2.1	2.2	2.1
		Ocean areas		140	156	145	152	342*1
		Subtotal		142	158	147	154	345
	Machinery Business	Sewers*3		0.0	0.0	0.0	0.0	0.0
		Rivers and lakes		0.0	0.0	0.0	0.0	0.0
		Ocean areas		0.8	0.9	0.8	0.8	0.7
		Subtotal		0.8	0.9	0.8	0.8	0.7
	Total (UBE Group)			143	159	148	155	345

**1 Including cooling seawater for private power generation*
**2 The figure with "†" mark was assured by the third party assurance. Please see the assurance statement on page 14.*
**3 Wastewater volume 10,000 m^3 or less*

Response to the Fluorocarbon Emission Restriction Law

Promulgated in April 2015, the Act on Rational Use and Appropriate Management of Fluorocarbons is aimed at reducing leaks of fluorocarbon refrigerants (chlorofluorocarbon, hydrochlorofluorocarbon, and hydrofluorocarbon) to help prevent global warming and the further destruction of the ozone layer. We comply strictly with laws and regulations relating to chlorofluorocarbon refrigeration and air conditioning equipment inspections. We endeavor to prevent fluorocarbon leaks by improving their recovery and filling methods and strengthening equipment operations management.

We are systematically replacing chlorofluorocarbon refrigeration equipment from our processes with alternatives that use low global warming potential hydrofluorocarbons or non-chlorofluorocarbon refrigerants.

Environmental Issues:
Recycling Plastic Resources

Flow of Plastic Resources (UBE Corporation, Fiscal 2022)

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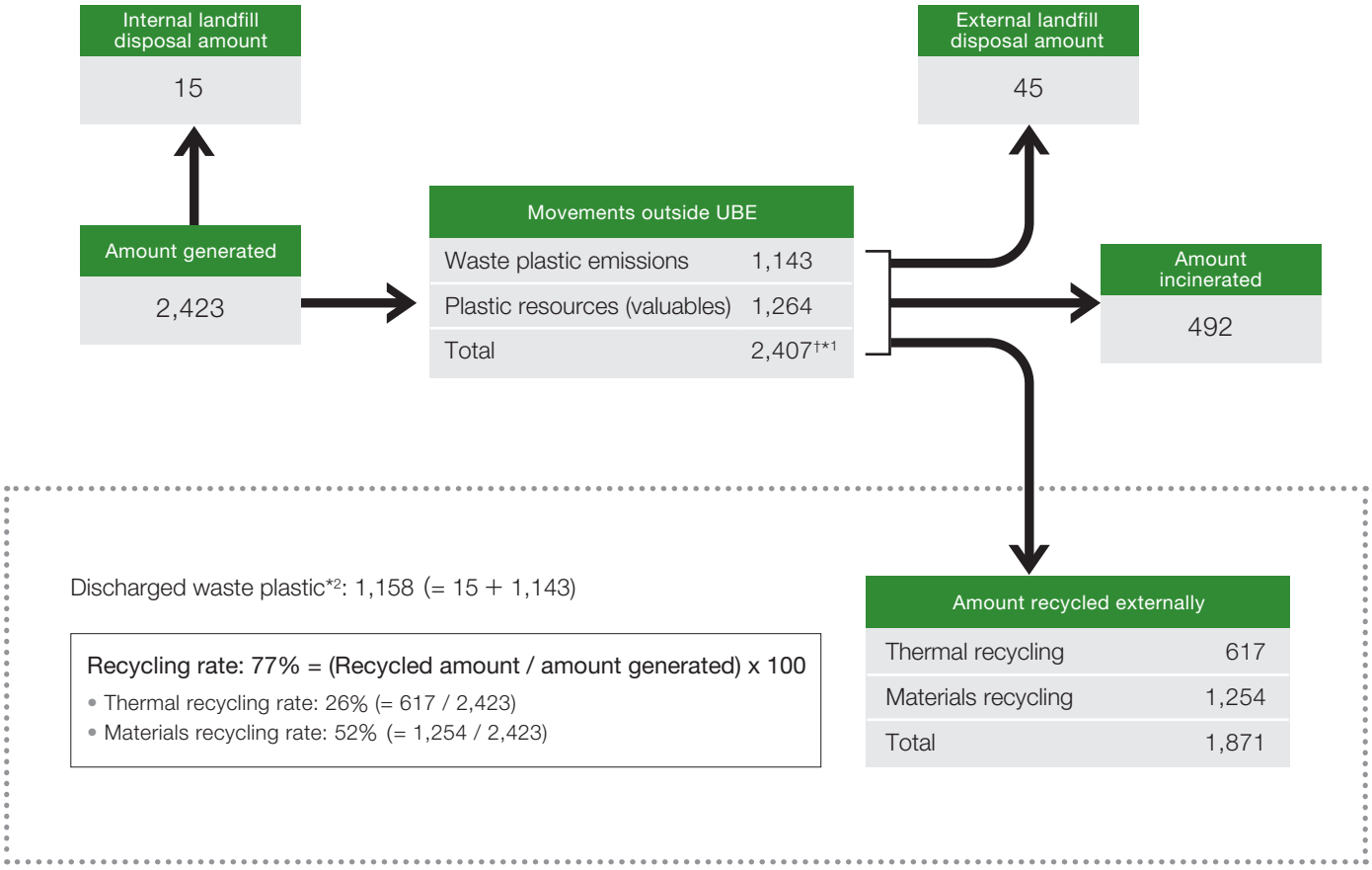


**1 The figure with "†" mark was assured by the third party assurance. Please see the assurance statement on page 14.*
**2 Including in-house internal landfill disposal and recycled amount that are subject to calculation under the Plastic Resource Circulation Act*

The Plastic Resource Circulation Act, which went into effect in April 2022, requires businesses to minimize and recycle waste plastic. UBE's efforts to use plastic resources effectively resulted in a 77% recycling rate in fiscal 2022. We will continue to push ahead with plastic recycling.

Data covers eight UBE business sites. These are the Sakai Factory, Ube Chemical Factory, Ube Chemical Factory Fujimagari Area, Ube Electronic and Industrial Materials Factory, Ube Research Laboratory, Pharmaceutical Research Laboratory, Future Tech Laboratory, and Osaka Research & Development Center.

Environmental Preservation:
Environmental Performance and Environmental Accounting

Environmental Performance

Overview of Group Environmental Impact (Fiscal 2018 through 2022)

Scope of coverage: UBE's domestic plants and laboratories and key domestic consolidated subsidiaries with plants. See page 16 for details.

Input

		(FY)	2018	2019	2020	2021	2022 Note 2
Total energy	Crude oil equivalent (Thousands of MWh)		21,970	22,140	20,920	21,340	7,841
Total raw materials (Thousands of tons)			16,383	16,298	15,381	15,819	2,177
Water resources (Million m^3)	Freshwater used		92	97	94	96	68
	Seawater used		106	115	108	116	302 Note 1

Business activities (manufacturing) of the UBE Group

Output

		(FY)	2018	2019	2020	2021	2022
Airborne emissions	GHG (kt-CO_2e/y)		12,010	12,110	11,270	11,840	3,820
	SOx*1 (t)		2,873	2,652	2,589	2,296	1,095
	NOx*2 (t)		16,149	16,071	15,274	14,956	3,275
	Dust (t)		356	371	392	364	115
	PRTR substances*3 (t)		198	180	190	194	143
Soil emissions	PRTR substances (t)		0	0	0	0	0
Waterborne emissions	Wastewater (Million m^3)		147	163	152	159	345 Note 1
	COD*4 (t)		642	705	658	687	1,347
	Total phosphorus (t)		9	11	10	11	18
	Total nitrogen (t)		468	466	420	455	466
	PRTR substances (t)		97	112	82	91	72
Industrial waste emissions	External landfill disposal amount (t)		6,730	6,463	6,267	5,895	5,159
	Recycled volume (t)		370,451	389,000	340,543	379,024	214,755

Notes: 1. Fiscal 2022 data includes cooling seawater for private power generation.
2. Fiscal 2022 data excludes the former Construction Materials Company.

The UBE Group is committed to extensively managing atmospheric and water emissions of pollutants and contaminants, and endeavors to comply with agreements and voluntary standards. We are endeavoring to lower our environmental impact, managing it by checking progress with reduction plans in Strategic Management Meeting and undertaking PDCA cycles. We will keep pursuing business activities that contribute to a circular economy by tackling environmental issues, lowering and using industrial waste, and constraining chemical substance emissions.

Environmental Accounting

Environmental Preservation Costs

(Hundred millions of yen)

	Category	Main Activity	(FY)	Capital Investment 2021	Capital Investment 2022	Capital Investment Difference	Costs 2021	Costs 2022	Costs Difference
Cost by business area	Pollution prevention	Investing in and maintaining air pollution prevention facilities and water pollution prevention facilities		13.6	9.6	(4.0)	44.2	36.2	(8.0)
	Global environment preservation	Investing in and maintaining energy-saving facilities		6.1	2.7	(3.4)	33.4	1.5	(31.9)
	Resource recycling	Recycling and reducing industrial waste		2.6	0.1	(2.5)	32.1	8.7	(23.4)
Upstream/downstream costs		Container/packaging recycling, green purchasing		0.0	0.0	0.0	9.0	5.4	(3.6)
Costs of management activities		Acquiring, running, and maintaining environmental management systems		0.0	0.0	0.0	5.1	3.1	(2.0)
Research and development costs		R&D of environmentally friendly products and technologies		0.0	0.0	0.0	1.7	0.8	(0.9)
Costs of social activities		Greening and beautifying offices/facilities and their surroundings		0.2	0.2	0.0	3.9	0.8	(3.1)
Costs of cleaning up environmental damage		Payment of environment-related levy		0.0	0.0	0.0	1.3	0.9	(0.4)
Total				22.5	12.6	(9.9)	130.7	57.4	(73.3)

Economic Effect

(Hundred millions of yen)

Category	Main Activity	(FY)	2021	2022	Difference
Income effect	Proceeds from sales of marketable waste products		42.1	6.7	(35.4)
Savings effect	Savings achieved through resource recycling and energy conservation		66.4	31.5	(34.9)

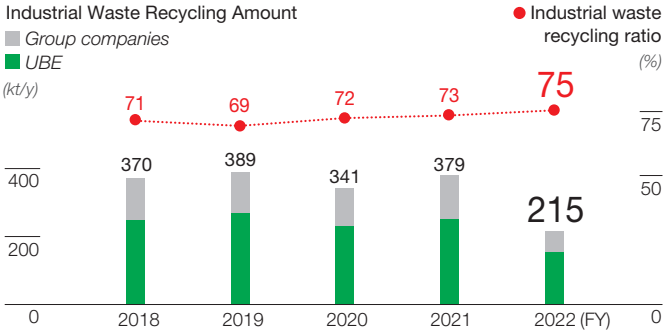
Glossary

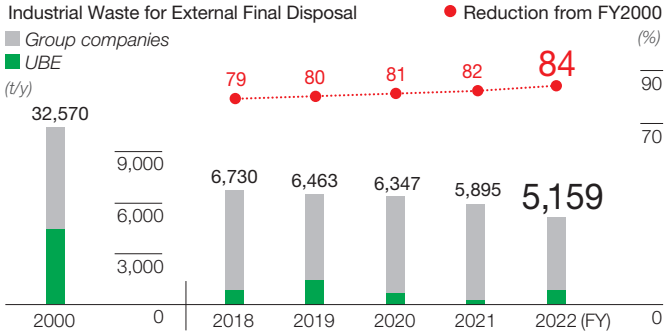
**1 Sulfur oxides (SOx) originate in the sulfur (S) component of fuels. Boilers are our main source of these oxides.*
**2 Nitrogen oxides (NOx) stem from fuel combustion, primarily from Group boilers.*
**3 PRTR (Pollutant Release and Transfer Register) Law: Please see the Glossary on page 2.*
**4 Chemical Oxygen Demand (COD): This is an indicator of water pollution by organic substances and represents the amount of oxygen consumed in the chemical oxidation of organic matter.*

Environmental Preservation: Industrial Waste and PCB Waste

Reducing Industrial Waste

Scope of coverage: UBE's domestic plants and laboratories and key domestic consolidated subsidiaries with plants (see page 16), representing 70% of such subsidiaries





Waste for External Final Disposal

Fiscal 2024 target: 87% reduction from fiscal 2000 level

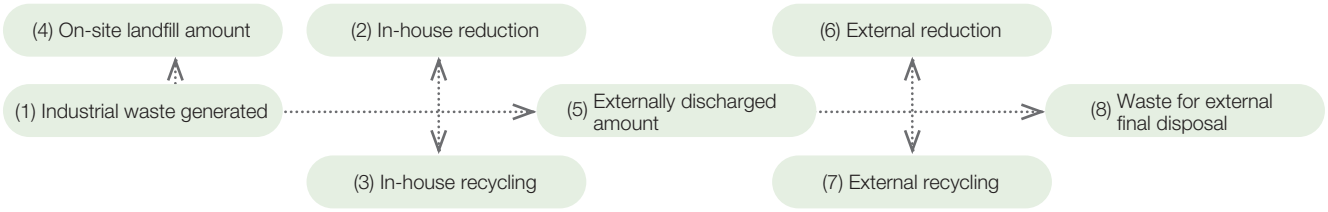
The UBE Group is reducing and recycling industrial waste to help create a circular economy. Our medium-term goal is to cut external final disposal by 87% from the fiscal 2000 level by fiscal 2024. We have taken steps to reach that target. In fiscal 2022, our external landfill disposal amount was 84% below that of fiscal 2000. We will keep striving to reduce industrial waste.

Overall Flow of Industrial Waste

(t)

(FY)		(1) Industrial waste generated	In-House (2) Reduction	In-House (3) Recycling	In-House (4) Final disposal	External (5) Discharged amount	External (6) Reduction	External (7) Recycling	External (8) Final disposal
2018		517,033	120,719	242,835	207	155,272	20,685	127,616	4,971
2019		561,591	145,425	247,568	263	168,335	20,440	141,432	6,463
2020		476,127	105,940	220,559	126	149,502	23,171	119,984	6,347
2021		522,644	114,866	233,175	127	174,476	22,732	145,849	5,895
2022	Chemicals Business	234,247	46,743	9,180	706	177,618†*	18,239	158,523	856
	Machinery Business	51,534	0	31,476	0	20,058	179	15,576	4,303
	Total	285,780	46,743	40,656	706	197,676	18,418	174,099	5,159

** The figure with "†" mark was assured by the third party assurance. Please see the assurance statement on page 14.*
Scope of coverage: UBE's domestic plants and laboratories and key domestic consolidated subsidiaries with plants. See page 16 for details.



Polychlorinated Biphenyl (PCB) Waste Disposal

We thoroughly audit stabilizers and other equipment using PCBs. In addition, we are endeavoring to complete PCB waste disposals by the deadline set under the amended Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes. We comply with storage and disposal laws and ordinances processing, and utilize Japan Environmental Storage & Safety Corporation (JESCO) and certified detoxification contractors to systematically dispose of PCB waste.

Number of Units of Equipment Incorporating PCB Stored (As of April 2023 for UBE Corporation)

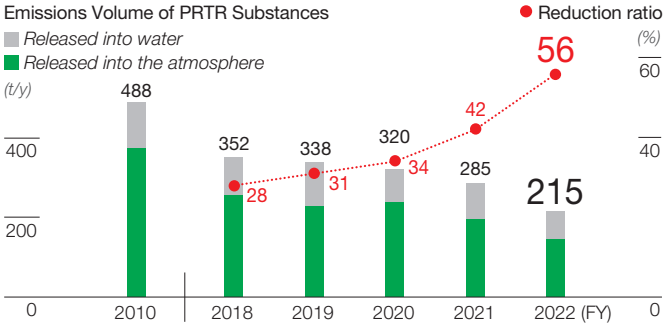
	In Use	In Storage	Total
High-concentration PCB	0	0	0
Low-concentration PCB	23	26	49

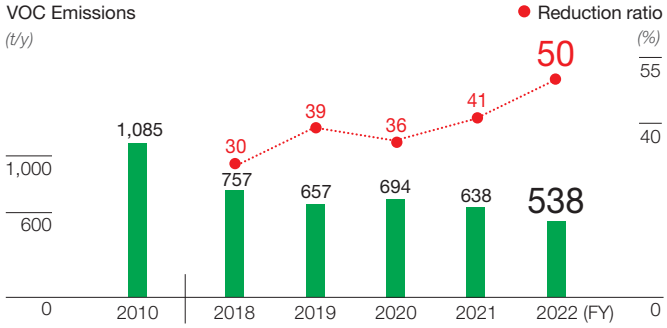
UBE Corporation completely disposed of high-concentration PCB waste in fiscal 2021. It is endeavoring to systematically collect and dispose of all low-concentration PCB waste by the deadline set under the amended Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes.

Environmental Preservation: Suppressing Chemical Substance Emissions and Emissions of Substances Covered by PRTR Law

Suppressing Chemical Substance Emissions

Scope of coverage: UBE's domestic plants and laboratories and key domestic consolidated subsidiaries with plants (see page 16), representing 70% of such subsidiaries





Total Emissions of 20 Chemical Substances

Fiscal 2024 Target: 32% reduction from fiscal 2010 level

The UBE Group accorded Companywide priority to 20 key chemical substances*3 with high emission volumes from among those subject to the PRTR Law*1 and VOCs*2, and endeavors to control their emissions. In fiscal 2022, we reduced the total emissions of 20 chemical substances by 38% from the fiscal 2010 level (in terms of PRTR substances and VOC emissions reductions, as shown above, down 56% and 50%, respectively, from fiscal 2010). The reduction target for fiscal 2024 is 32%. We will continue to cut our emissions.

Total Volume of PRTR Substances Emitted/Transferred in Fiscal 2022

	Handling Volume (t)	Emissions Volume (t)				Transfer Volume (t)	Number of PRTR Substances
		Atmosphere	Public Water	Soil	Total		
UBE	186,418	94.4	71.6	0.0	166.0	3,462	55
Other Group companies	107,397	49.0	0.0	0.0	49.0	262	13
Total (UBE Group)	293,816	143.4	71.6	0.0	215.0	3,724	68

Volumes of Individual PRTR Substances Emitted/Transferred in Fiscal 2022 (Substances emitted 1 ton or more per year and dioxins)

Ordinance Designation No.	Chemical Substance	Handling Volume (t)	Total Emissions Volume (t)				Transfer Volume (t)
			Atmosphere	Public Water	Soil	Total	
300	Toluene	835	55.4	13.9	0.0	69.3	203.3
76	Epsilon-caprolactam	97,916	0.0	49.9	0.0	49.9	251.3
104	Chlorodifluoromethane	20	20.3	0.0	0.0	20.3	0.0
400	Benzene	66	12.9	0.1	0.0	13.0	0.0
128	Chloromethane	12	12.3	0.0	0.0	12.3	0.0
80	Xylene	128	10.4	0.0	0.0	10.4	11.4
53	Ethylbenzene	23	9.4	0.0	0.0	9.4	10.7
213	N,N-dimethylacetamide	605	8.2	0.0	0.0	8.2	267.6
240	Styrene	186	4.9	0.0	0.0	4.9	0.6
405	Boron compound	27	0.1	4.3	0.0	4.4	6.2
374	Hydrogen fluoride and its water-soluble salts	5	0.0	2.6	0.0	2.6	0.4
349	Phenol	76,213	1.9	0.1	0.0	2.0	1,342.1
13	Acetonitrile	525	1.8	0.0	0.0	1.8	426.1
296	1,2,4-Trimethylbenzene	123	1.6	0.0	0.0	1.6	3.1
351	1,3-Butadiene	105,045	1.6	0.0	0.0	1.6	0.0
243	Dioxins (Note) mg-TEQ/year	—	83.3	2.5	0.0	85.8	0.0

Note: Contains various compounds

Scope of coverage: UBE's domestic plants and laboratories and key domestic consolidated subsidiaries with plants (see page 16), representing 70% of such subsidiaries

Glossary

**1 PRTR (Pollutant Release and Transfer Register) Law: Please see the Glossary on page 2.*
**2 Volatile organic compounds (VOCs): Please see the Glossary on page 2.*
**3 UBE's 20 voluntary selected chemical substances: Please see the Glossary on page 2.*

Environmental Preservation: Environmental Impact Data by Facility

Fiscal 2022 Environmental Impact Data by Facility

			Emissions into the Atmosphere *(t/y)*			Emissions into Water *(t/y)*		
			SOx*1	NOx*2	Dust	COD*3	Total Phosphorus	Total Nitrogen
In Japan								
Chemicals Business	UBE	Sakai Factory / Osaka Research & Development Center	0.0	1.4	0.0	0.7	0.0	0.7
		Ube Chemical Factory east and west area	17	59	2.1	398	5.5	352
		Ube Chemical Factory Fujimagari Area	530	333	2.5	203	5.0	50
		Power Management Dept. (private power generation)	532	2,755	100	713	6.4	48
		Ube Electronic and Industrial Materials Factory (Former Meiwa Plastic Industries, Ltd.)	—	—	—	0.0	0.0	0.0
		Ube Research Laboratory / Pharmaceutical Research Laboratory	—	—	—	0.2	0.0	0.2
		Future Tech Laboratory (Former Chiba Research Laboratory)*	—	—	—	0.0	0.0	0.0
		Subtotal	1,079	3,149	105	1,315	17	451
	API Corporation		2.6	5.9	0.1	12.6	0.3	10.2
	UBE Elastomer Co. Ltd.		0.6	31.7	0.2	11.5	0.1	3.3
	Ube Film, Ltd.		—	—	—	—	—	—
	UBE Hydrogen Peroxide, Ltd.*		0.0	0.0	0.0	0.4	0.0	0.3
	UBE EXSYMO CO., LTD.		0.0	0.6	0.1	3.7	0.0	0.0
	Total (Chemicals Business)		1,082	3,187	105	1,343	17	465
Machinery Business	UBE Machinery Corporation, Ltd.		0.1	—	—	1.1	0.2	1.4
	UBE Steel Co., Ltd.		13	88	9.4	2.6	—	—
	Fukushima Ltd.		—	—	—	—	—	—
	Total (Machinery Business)		13	88	9.4	3.7	0.2	1.4
Total (UBE Group)			1,095	3,275	115	1,347	18	466
Overseas								
Spain	UBE Corporation Europe, S.A. Unipersonal		8	442	5.5	130	1.0	58
Thailand	UBE Chemicals (Asia) Public Company Limited		3.5	20	4.7	29	0.7	1.9
	THAI SYNTHETIC RUBBERS COMPANY LIMITED		0.0	0.0	1.1	18	0.0	0.0
	UBE Fine Chemicals (Asia) Co., Ltd.		0.0	4.8	0.2	—	—	—
Total			11	468	11	177	2	60

** These sites reorganized or changed their names in fiscal 2023. See Reorganizations and Renamings on page 16 for details.*

Scope of coverage: UBE's domestic plants and laboratories and key domestic consolidated subsidiaries with plants (see page 16), representing 70% of such subsidiaries

Glossary

**1 Sulfur oxides (SOx): Please see the Glossary on page 10.*

**2 Nitrogen oxides (NOx): Please see the Glossary on page 10.*

**3 Chemical Oxygen Demand (COD): Please see the Glossary on page 10.*

SUSA
Sustainability Accounting Co.,Ltd.

Independent Assurance Statement

October 31, 2023

Mr. Masato Izumihara
President & Representative Director
UBE Corporation

1. Purpose

We, Sustainability Accounting Co., Ltd., have been engaged by UBE Corporation ("the Company") to provide limited assurance on the Company's following data for the year ended March 31, 2023: 3.40 Mt-CO_2e of greenhouse gas emission for Scope 1 and 423 kt-CO_2 for market-based Scope 2 in domestic and overseas chemical and machinery categories; 369 million m^3 of water withdrawal and 178 kt of waste emissions (2.41 kt of plastic waste) in domestic chemical category (collectively, "the Environmental performance data"). The purpose of this process is to express our conclusion on whether the Environmental performance data were calculated in accordance with the Company's standards. The Company's management is responsible for calculating the Environmental performance data. Our responsibility is to independently carry out a limited assurance engagement and to express our assurance conclusion.

2. Procedures Performed

We conducted our assurance engagement in accordance with International Standard on Assurance Engagement 3000 (ISAE 3000) and International Standard on Assurance Engagement 3410 (ISAE 3410). The key procedures we carried out included:

- Interviewing the Company's responsible personnel to understand the Company's standards and reviewing the Company's standards
- Visiting a factory
- Performing cross-checks on a sample basis and performing a recalculation to determine whether the Environmental performance data were calculated in accordance with the Company's standards.

3. Conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that the Environmental performance data have not been calculated in all material respects in accordance with the Company's standards.

We have no conflict of interest relationships with the Company.

Takashi Fukushima
Representative Director
Sustainability Accounting Co., Ltd.

Management System Acquisitions (For environment and occupational safety and health)

(As of May 2023)

ISO 14001 (Environment) and ISO 45001 (Occupational Safety and Health) Acquisitions

Company/Site		Registration Number		Registration Agencies
		ISO 14001	ISO 45001	
UBE Corporation				
	Ube Chemical Factory	ISO 14001-0077385	ISO 45001-0077387	LRQA Limited
	Ube Chemical Factory, Fujimagari Area	ISO 14001-0076815	ISO 45001-0076816	LRQA Limited
	Sakai Factory	ISO 14001-0077356	ISO 45001-0077357	LRQA Limited
	Ube Electronic and Industrial Materials Factory	02ER.236	20HR/009	ISO Inspection Center of The High Pressure Gas Safety Institute of Japan
	Power Management Dept.	JQA-EM7039	JQA-OH0099	Japan Quality Assurance Organization
	Ube Research Laboratory and Pharmaceutical Research Laboratory	ISO 14001-00032763	ISO 45001-00032764	LRQA Limited
	Future Tech Laboratory	JP28400-E-4	JP28400-S-4	GCC Japan
Ube Logistic Service, Ltd.				
	Ube Site*1	ISO 14001-0077385	ISO 45001-0077387	LRQA Limited
	Sakai Site*2	ISO 14001-0077356	ISO 45001-0077357	LRQA Limited
	Chiba Site*3	JCQA-E-0072	JCQA-O-0030	Japan Chemical Quality Assurance Ltd.
	Nagoya Site*2	ISO 14001-0077356	ISO 45001-0077357	LRQA Limited
Ube Film, Ltd.				
	Headquarters and Onoda Factory	C2021-01472-R1	C2021-01473-R1	Perry Johnson Registrars, Inc.
	Narita Factory	C2021-01472-R1	C2021-01473-R1	Perry Johnson Registrars, Inc.
	Sano Factory	C2021-01472-R1	C2021-01473-R1	Perry Johnson Registrars, Inc.
UBE Hydrogen Peroxide, Ltd.				
	Ube Factory	JCQA-E-0515	JCQA-O-0044	Japan Chemical Quality Assurance Ltd.
UBE EXSYMO CO., LTD.				
	Gifu Site	JQA-EM2069	JQA-OH0097	Japan Quality Assurance Organization
	Fukushima Site	JQA-EM2069	JQA-OH0097	Japan Quality Assurance Organization
UBE MAXELL CO., LTD.				
	Ube Site*1	ISO 14001-0077385	ISO 45001-0077387	LRQA Limited
	Sakai Site*2	ISO 14001-0077356	ISO 45001-0077357	LRQA Limited
UBE SCIENTIFIC ANALYSIS LABORATORY, INC.				
	Ube Area and Chiba Area	JQA-EM7781	JQA-OH0372	Japan Quality Assurance Organization
UBE Elastomer Co. Ltd.				
	Chiba Factory	JCQA-E-0072	JCQA-O-0030	Japan Chemical Quality Assurance Ltd.
UBE Machinery Corporation, Ltd.				
	Headquarters Factory and Nagoya Site	ISO 14001-0076688	ISO 45001-0076687	LRQA Limited
T&U Electronics, Co., Ltd.				
	Headquarters Factory	JP24476-E-2	JP24476-S-2	GCC Japan
UBE Steel Co., Ltd.				
	Headquarters Factory	ISO 14001-0077051	ISO 45001-0077052	LRQA Limited
Fukushima Ltd.				
	Headquarters Factory and Tokyo Office	JQA-EM7691	—	Japan Quality Assurance Organization
	Headquarters Factory	—	H004	JIC Quality Assurance Ltd.
Coverage (Note)		92%	90%	

Note: Percentage of domestic factories, laboratories, and other facilities of UBE Corporation and consolidated subsidiaries using relevant management systems

**1 Included in certification scope for UBE Corporation's Ube Chemical Factory*
**2 Included in certification scope for UBE Corporation's Sakai Factory*
**3 Included in certification scope for UBE Elastomer Co. Ltd.'s Chiba Factory*

Scope of This Report

Period Covered		From April 1, 2022 to March 31, 2023
Organizational scope of environmental performance reporting Note 1	UBE Corporation (9 operational sites)	Sakai Factory, Ube Chemical Factory east and west area, Ube Chemical Factory Fujimagari Area, Power Management Dept. (private power generation), Ube Research Laboratory, Future Tech Laboratory*1, Pharmaceutical Research Laboratory, Osaka Research & Development Center, Ube Electronic and Industrial Materials Factory
	Domestic Group companies (8)	Ube Film, Ltd., UBE Elastomer Co. Ltd., UBE-MARUZEN POLYETHYLENE Co., Ltd.*2, UBE Hydrogen Peroxide, Ltd.*3, UBE EXSYMO CO., LTD., UBE Machinery Corporation, Ltd., UBE Steel Co., Ltd., Fukushima Ltd.
	Overseas Group companies (4) Note 2	UBE Corporation Europe, S.A. Unipersonal (Spain), UBE Chemicals (Asia) Public Company Limited (Thailand), THAI SYNTHETIC RUBBERS COMPANY LIMITED (Thailand), UBE Fine Chemicals (Asia) Co., Ltd. (Thailand)
	Notes: 1. The reporting covers UBE's domestic plants and laboratories and key consolidated subsidiaries with plants. *2. Data for the four overseas Group companies is in Environmental Impact Data by Facility on page 14.*	
Definitions	UBE: Refers to UBE Corporation (unconsolidated) The UBE Group: Refers to the UBE Group companies, including UBE Corporation	

Reorganizations and Renamings

**1 On April 1, 2023, the Chiba Research Laboratory was renamed the Future Tech Laboratory.*

**2 UBE-MARUZEN POLYETHYLENE Co., Ltd., is included in data for UBE Elastomer Co. Ltd. because it is within the Chiba Plant of the latter company.*

**3 On April 1, 2023, UBE-MC Hydrogen Peroxide Limited was renamed UBE Hydrogen Peroxide, Ltd.*

Quality Assurance

Coexistence and mutual prosperity with customers based on quality underpinnings reinforced from lessons learned from improper quality practices

UBE made a new start as a chemicals company in 2022, undertaking quality management as an integrated Group under that new structure. We reinforced our quality underpinnings in view of previous quality inspection issues. In April 2022, we posted the UBE Group Approach to Recurrence Prevention Measures Relating to Improprieties in Quality Checks on our corporate website.

The UBE Group Quality Conference, which we first held in 2020 in response to inspection issues, gathered for a third year in 2022. Convened to push forward with quality management while remembering previous quality issues, this conference focused on the importance of upholding quality commitments Groupwide. At the conference, we shared UBE Group's quality management initiatives and reaffirmed our determination not to forget the quality inspection issues.

As well as maintaining quality assurance activities to uphold our commitments and retain customer trust, we will redouble quality management efforts in transitioning to a specialty business to maximize our corporate value based on quality (customer satisfaction) and accelerate our endeavors so quality becomes a prime perceived strength of UBE.

All employees will stay united in focusing on quality, keeping our promises to customers and retaining their trust. We will meet customer expectations by intensively managing quality to generate new value, pursuing coexistence and mutual prosperity with customers.

Product Safety

UBE Group Product Safety (Chemical Substance Management) Structure

We established a management structure to ensure that all business units manage chemical substances properly. In view of the regional nature of chemical substance control laws and regulations, UBE (in Japan) oversees operations across Asia, while UBE Corporation Europe (Spain), our European manufacturing site, looks after Europe and North America. In Japan, we will step up training and leverage information and communications technology (ICT) to reinforce mechanisms to prevent reporting issues and remain compliant with such regulatory requirements as the Act on the Regulation of Manufacture and Evaluation of Chemical Substances and the Industrial Safety and Health Act. Export volumes are increasing in China, Taiwan, and South Korea, so we work closely with specialists at each local subsidiary to ensure compliance with revisions to national laws and regulations.

Complying with Chemical Substance Management Laws and Regulations

Product safety is part of quality, and we work to manage this in line with our quality management system. We use our SDS*1 production support system, as well as UBE-CHemical Regulation Information Platform (U-CHRIP), a comprehensive database developed by UBE, for managing information about chemical substances, and other ICT to manage hazard information*2 of substances we use and the compliance status of substances we handle to ensure that we adhere to laws and regulations. Each year, we improve U-CHRIP by identifying issues and functional shortfalls while enhancing functions to reflect revisions to national chemical control laws and regulations.

Supply Chain Communication

We supply local-language versions of SDSs and product labels for all products, complying with regulations in each country to ensure the safe use of chemical products throughout the life cycle of products, and maintain websites for key product SDSs. To realize green procurement*3, we are identifying hazardous chemical substances in our products and informing customers.

In fiscal 2022, we deployed a 24/7 emergency contact service worldwide to address transportation incidents and logistics safety issues.

Supporting Long-Term Technical Research to Assess Chemicals Risks

The Japan Chemical Industry Association has launched a Long-Range Research Initiative*4, a research grant program that the International Council of Chemical Associations started as a worldwide voluntary initiative. UBE has supported long-term research into the human health and environmental impacts of chemical substances by investing in the research starting from fiscal 2011.

Glossary

*1 *Safety Data Sheet (SDS): Documentation containing hazard and toxicity information about chemical substances that manufacturers disclose when supplying chemical substances and products incorporating them*

*2 *Hazard information: Information on the inherent risks of chemical substances*

*3 *Green procurement: Corporate purchases of raw materials, parts, and manufacturing facilities with minimal environmental footprints*

*4 *An international initiative to provide long-term support for research into the human health and environmental impacts of chemical substances that the Japan Chemical Industry Association is promoting domestically*