

THINK THE

GREEN



KC GreenHoldings
2023 Sustainability Report



THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

About This Report

The Sustainability Report of KC GreenHoldings presents a comprehensive overview of the collective impact of our affiliates' interactions with various stakeholders and our notable accomplishments in fostering a more sustainable Earth. In 2023, we have published our twelfth report.

Reporting Standards	GRI Standards 2021
Reporting Target	KC GreenHoldings and its subsidiaries
Reporting Cycle	Yearly
Reporting Period	January - December 2022 (including part of the performance in 2023, providing recent data of three years (from 2020 to 2022) if needed)
Distribution	Available on the KC GreenHoldings website and electronic disclosure system at all times
Inquiries Related to the Report	KC GreenHoldings Sustainable Management Team Tel 02-320-6351 E-mail Sustainability@green-kc.com

* In 2022, KC GreenHoldings sold a 50% stake in Clestra Hauserman SAS, a French subsidiary that was previously included as a subsidiary with a 67% stake since 2018. As a result, Clestra Hauserman SAS is no longer part of the consolidated subsidiaries. This change has led to modifications in the financial statements for 2021 and 2022. Therefore, the financial statements in the 2023 sustainability report may differ from those in the 2021 and 2022 sustainability reports.



CONTENTS

03	THINK THE GREEN
04	ENVIRONMENT
06	PEOPLE
08	OVERVIEW
09	CEO's Message
10	Overview of KC GreenHoldings
11	Governance
12	Global KC Network
13	Communication with Stakeholders
14	Materiality Assessment
17	SUSTAINABLE KC
18	Economic Performance
21	Environmental Performance
24	Social Impact
29	Business Introduction
30	APPENDIX
31	Financial Information
39	Sustainable Management Data
44	GRI Content Index
47	External Assurance
49	Affiliated Associations





THINK THE GREEN

ENVIRONMENT

PEOPLE

OVERVIEW

SUSTAINABLE KC

APPENDIX



THINK THE GREEN



KC GreenHoldings prepared a special page, 'Think the Green []' to commemorate the 50th anniversary in 2023. This event aims to explore the evolving perceptions and policies concerning the environment and people over the past five decades, which KC GreenHoldings regards as paramount, while showcasing the proactive measures undertaken in response to these transformations.

1963 Enactment of the Pollution Prevention Act, Korea's first environmental law

DEC. 1977 Enactment of the Environmental Preservation Act

1960

NOV. 27, 1973 KC GreenHoldings (formerly Korea Cottrell Industrial) founded

AUG. 1992 Established KC GreenHoldings' affiliated technology research institute

MAY 1997 Launched the office environment business

FEB. 1991 Enactment of the Framework Act on Environmental Policy

DEC. 1993 Korea signs the Climate Change Convention

2005 Implementation of the 1st Basic Plan for Air Quality Control in the Metropolitan Area Jan.

1990

JUL. 2000 Launched the environmental service business

JUN. 2002 Expanded the environmental engineering business to the global market

NOV. 2005 Launched the energy business

SEP. 2007 Launched the circular economy business

JAN. 2010 Enactment of the Framework Act on Low Carbon, Green Growth

SEP. 2017 Establishment of measures for fine dust control

MAY 2018 Announcement of comprehensive measures for recycling waste management

SEP. 2021 Enactment of the Framework Act on Carbon Neutrality

2010

JAN. 2010 Transitioned into a holding company system

DEC. 2019 The environmental service business entered the global market

* Source: Ministry of Environment website

AIR POLLUTION

During the 1960s, Korea's industry witnessed significant growth, with a primary focus on manufacturing. This led to the establishment of factories across the country. To address the environmental consequences of industrialization, the Korean government took a proactive step by enacting the first-ever environmental law in Korea, the Pollution Prevention Act, in 1963. The law was to mitigate health and sanitation hazards arising from air pollution, noise, and vibrations resulting from factory operations and machinery. Emphasizing air pollution, the act aimed to regulate and control its detrimental effects. In the 1970s, rapid economic growth led to an increase in the use of fossil fuels in industry and transportation, which contributed to an increase in atmospheric nitrogen and sulfur oxides. Additionally, the quantity of industrial and domestic wastewater increased. The government enacted the Environmental Conservation Act in 1977 to establish air and water pollution regulatory standards. Later, as Korea's industry developed, a variety of environmental issues besides air pollution began to emerge. The government enacted the Framework Act on Environmental Policy in 1991, which included countermeasures for specific environmental issues.

CLIMATE CHANGE

Environmental pollution has never been a problem unique to Korea. The United Nations Framework Convention on Climate Change, an international environmental treaty to stabilize greenhouse gas concentrations internationally, was adopted in 1992, and Korea also signed the Convention in 1993, the following year. In addition, smog and yellow dust caused by the economic development of neighboring countries such as Japan and China also affected Korea. To improve the atmospheric environment in the Seoul metropolitan area, which bears the brunt of these challenges, the Ministry of Environment, Seoul Metropolitan City, Incheon Metropolitan City, and Gyeonggi Province jointly established and implemented the 1st Metropolitan Air Quality Control Basic Plan in 2005. As international attention towards climate change and energy intensified, Korea responded by adopting low-carbon green growth as a new national growth strategy in 2010. This strategic shift prompted the enactment of the Framework Act on Low-Carbon Green Growth, which served as a pivotal measure to tackle the climate change crisis while simultaneously promoting environmental preservation and economic development.

NET ZERO & RESOURCE

As environmental issues arise and public interest in the environment grows, policies and environmental regulations have become more specific. The 2015 implementation of the 2nd Basic Plan for Air Quality Control in the Seoul Metropolitan Area introduced stricter measures for fine dust control, including ultrafine dust control. In 2018, Korea faced a crisis with apartment waste plastic collection, prompting the government to announce comprehensive measures for recycling waste management. These measures address all stages of the product cycle, from production to waste recycling. In 2021, Korea enacted the Framework Act on Carbon Neutrality, paving the way for economic and social transformation toward carbon neutrality by 2050. This legislation positions Korea as the 14th country to legislate a carbon-neutral vision.

During the early stages, environmental laws and policies in Korea primarily addressed atmospheric issues. However, as more comprehensive environmental challenges emerged, such as climate change, resource depletion, and waste generation, the Korean government responded by enacting relevant legislation. KC GreenHoldings, established in 1973 as an environmental facility manufacturer specializing in electric dust collectors to combat air pollution, recognized the gravity of diverse environmental problems. Consequently, the company expanded its scope of operations, venturing into the office environment business in 1997, the environmental service business for industrial waste treatment in 2000, the energy business for sustainable energy production in 2005, and the circular economy business to generate value from waste resources in 2007. Looking ahead, KC GreenHoldings remains committed to fostering a sustainable environment, tackling a broader spectrum of environmental pollution, and contributing to the global mission of achieving carbon neutrality.





THINK THE GREEN

[PEOPLE]

THINK THE GREEN

ENVIRONMENT

PEOPLE

OVERVIEW

SUSTAINABLE KC

APPENDIX

< 6 >



1980

- Dec. 1981**
Enactment of the Occupational Safety and Health Act

1990

- Mar. 1997**
Enactment of the Labor Standards Act

2000

- Jul. 2004**
Introduction of the five-day work week system
- Sep. 2008**
Launch of the KC Safety and Health Council
- Sep. 2009**
Launch of the First issue of the KC Newsletter

2010

- Jul. 2011**
Introduction of the Code of Ethics
- Jul. 2012**
Introduction of the K-ONE system
- Jul. 2016**
Acquisition of KC Safety&Technologies
- Apr. 2018**
Launch of the integrated on-line system
- Oct. 2019**
Establishment of the KC CSR initiative

2020

- Sep. 2020**
Organization of the KC Ethics Investigation Committee

2022

- Jan. 2022**
Introduction of the Serious Disaster Punishment Act



SAFETY

The Occupational Safety and Health Act of Korea was enacted in 1981 to ensure worker safety and health in the workplace and to promote a pleasant working environment. This act works in tandem with the Serious Disaster Punishment Act, which came into effect in January 2022.

In September 2008, KC GreenHoldings launched the KC Safety and Health Council. The council is responsible for managing employees' safety and health within KC Network by sharing safety and health-related issues and cases every quarter. In 2016, KC GreenHoldings acquired KC Safety&Technologies, a company that diagnoses safety issues at industrial sites and provides consulting. The safety experts at KC Safety&Technologies will further improve the KC Network's safety management level.

WORKPLACE CULTURE

The Labor Standards Act, enacted in 1997, safeguards and improves workers' livelihood by establishing essential labor standards. This legislation significantly improved various aspects of working conditions, such as working hours, annual leave, and paid leave. Since July 2004, Korea has also implemented the five-day workweek system, fostering a healthier work-life balance for employees. In 2018, amendments to the law, including the 52-hour workweek system, further prioritized the well-being of workers. In addition to standardization of total working hours, laws related to improving the working environment have also been enacted. The Anti-Workplace Bullying Act, introduced in July 2019, enables the punishment of individuals who abuse their position or authority to cause physical or mental harm or create a hostile work environment.

KC GreenHoldings and its affiliates adhere to the labor standards outlined in the Labor Standards Act, incorporating them into their company policies and ensuring compliance. The KC Code of Ethics, implemented by KC GreenHoldings in 2011, prohibits sexual harassment and workplace discrimination, fostering a positive corporate culture. To reinforce ethical awareness of its employees, KC GreenHoldings established the KC Ethics Investigation Committee in September 2020. Both internal and external stakeholders can report ethical violations, harassment, and cases of sexual harassment within KC GreenHoldings and its affiliates through the company's website or groupware. The Ethics Investigation Committee conducts thorough investigations, deliberations, and outcome reports, ensuring transparency in disclosing the results. KC GreenHoldings remains committed to cultivating a healthy and ethical organizational culture.

COMMUNICATION

KC GreenHoldings has taken proactive measures to foster collaboration and harmony among its affiliates following its transition to a holding company system. In September 2009, we published the first issue of the KC Newsletter, aimed at enhancing communication and information sharing among affiliates. To further streamline business collaboration, we introduced the K-ONE system in 2012 and implemented an integrated online system in 2018, promoting efficiency across affiliate operations. Additionally, we have prioritized networking through initiatives such as the "Team Unity" project, fostering face-to-face exchanges among affiliates since 2018. Furthermore, we established the KC CSR initiative in 2019, driving ongoing corporate social responsibility activities in collaboration with our affiliates.

We at KC GreenHoldings believe that all our business activities are for people and powered by people. KC GreenHoldings remains unwavering in its commitment to the happiness of its stakeholders and the pursuit of a sustainable environment.



THINK THE GREEN

OVERVIEW

CEO's Message

Overview of KC GreenHoldings

Governance

Global KC Network

Communication with Stakeholders

Materiality Assessment

SUSTAINABLE KC

APPENDIX

< 8 >



OVER ————— VIEW

09 CEO's Message

10 Overview of KC GreenHoldings

11 Governance

12 Global KC Network

13 Communication with Stakeholders

14 Materiality Assessment



CEO's Message

THINK THE GREEN

OVERVIEW

CEO's Message

Overview of KC GreenHoldings

Governance

Global KC Network

Communication with Stakeholders

Materiality Assessment

SUSTAINABLE KC

APPENDIX

< 9 >



Greetings esteemed stakeholders,

KC GreenHoldings celebrates its 50th anniversary this year.

Over the past 50 years, KC GreenHoldings and its subsidiaries have steadfastly pursued the vision of creating a clean planet for future generations.

We have consistently supported and encouraged the growth and development of our employees in order to achieve the vision.

In commemoration of our 50th anniversary, we are pleased to present the 2023 Sustainability Report. This report highlights the efforts and progress we have made to uphold the values of the environment and people, which are of utmost importance to KC GreenHoldings. It also shares our activities and achievements from the past year, as we strive to grow as a sustainable company.

The 50th anniversary represents not only a momentous milestone for a company that has spanned half a century but also a crucial year in which we must adapt to a rapidly changing world following the challenges posed by the COVID-19 pandemic and the tumultuous global landscape. KC GreenHoldings takes this important year of 2023 as a turning point to contribute to minimizing environmental impact across various sectors and, ultimately, to achieving carbon neutrality.



We sincerely ask for your continued support and interest in KC Green Holdings. Lastly, on behalf of the company, I extend my deepest gratitude to all past and present employees who have dedicated their efforts to KC over the past 50 years.

Thank you.

July 2023,

Taeyoung Lee

CEO and Chairman, KC Green Holdings



Overview of KC GreenHoldings

THINK THE GREEN

OVERVIEW

CEO's Message

Overview of KC GreenHoldings

Governance

Global KC Network

Communication with Stakeholders

Materiality Assessment

SUSTAINABLE KC

APPENDIX

< 10 >



In 2010, KC GreenHoldings converted to a holding company system by separating its manufacturing business in order to increase management efficiency and establish transparent governance.

Name of the Organization	KC GreenHoldings Co., Ltd.		
Location of Headquarters	11th Floor, 34, Sangamsan-ro, Mapo-gu, Seoul, Korea		
CEO	Taeyoung Lee	Date of Establishment	November 27, 1973
No. of Employees	24	Shareholding Structure	Taeyoung Lee 31.95%
Business	Holding business, including management consulting and investment, etc		Sanyeon Co., Ltd. 7.09%
Credit Rating	A0 (NICE D&B Co., Ltd., as of April 19, 2022)		Jaeyoung Lee 6.95%
ESG Rating	B (Sustainvest, 2022) D (Korea Institute of Corporate Governance and Sustainability, 2022)		
Website	www.kcgreenholdings.com		





Governance

THINK THE GREEN

OVERVIEW

CEO's Message

Overview of KC GreenHoldings

Governance

Global KC Network

Communication with Stakeholders

Materiality Assessment

SUSTAINABLE KC

APPENDIX

< 11 >



Board of Directors

The Board of Directors (BOD) is a decision-making body responsible for crucial decisions regarding the company's business operations, matters outlined in the law and the company's articles of association, delegated matters from the general shareholders' meeting, and basic policies for company management. The BOD agenda and the attendance of non-executive directors are disclosed on the electronic disclosure system. In 2022, the BOD convened 14 times, addressing 20 agenda items for resolution and two items for reporting. The average attendance rate for non-executive directors is 83%, and the auditor was 100%.

Directors and Auditors in 2023 (as of April 2023)

Type	Name	Curriculum Vitae	Appointment	Gender
Executive Directors	Taeyoung Lee (Chairman)	Current Chairman (CEO) of KC GreenHoldings Current Chairman of KC Cottrell Current Director of Ecomom Korea Current Director of Korea Academy of Environmental Science MBA, Simon Fraser University MBA, Simon Fraser University B.A. in Business Administration, Seoul National University	Mar. 2021	Male
	Jongkyoo Kim	Current President (COO) of KC GreenHoldings B.A. in Business Administration, Seoul National University	Mar. 2021	Male
Non-executive Director	Hankyung Lee	Current CEO of Eco&Partners Inc. Current ESG member of the Korea Credit Guarantee Fund Current advisory board member for the 5th council, the National Institute of Ecology (ESG sector), Ministry of Environment, Member of the Environmental Education and Training Council, National Institute of Environmental Human Resources Development, Ministry of Environment M.A., Sogang University Business School B.S. in Industrial Chemistry, Konkuk University	Mar. 2023	Female
Auditor	Haengmin Kwon	Former CEO of KT Powertel Former CEO of KTF M.A., Business Administration, KAIST B.A. Business Administration, Seoul National University	Mar. 2023	Male

Assessment and Remuneration

The remuneration of the directors and auditor was determined based on a combination of basic salaries and performance bonuses, considering the financial and non-financial performance of the organization, and within the approved annual remuneration limit set at the general shareholders' meeting in March 2022. The upper limit for the total remuneration of the four directors and auditor, approved by the Board of Directors in 2022, was 3,551 thousand dollar, and the actual amount paid in 2022 was 581 thousand dollar.

(unit: thousand dollar)

Type	No. of Persons	Upper Limit of Total remuneration	Amount Paid
Directors	Executive	2	3,156
	Non-executive	1	35
Auditor	Auditor	1	395

Strengthening Transparency in Governance

In 2021, KC GreenHoldings established the Corporate Governance Charter as a foundation for sustainable management and to build trust with stakeholders. The charter, which emphasizes transparency and professionalism in the governance structure, has been disclosed on the KC GreenHoldings website. The Board of Directors is committed to adhering to the principles outlined in the charter and ensuring fair and transparent management practices, further enhancing the transparency of the governance structure.



Global KC Network

THINK THE GREEN

OVERVIEW

CEO's Message

Overview of KC GreenHoldings

Governance

Global KC Network

Communication with Stakeholders

Materiality Assessment

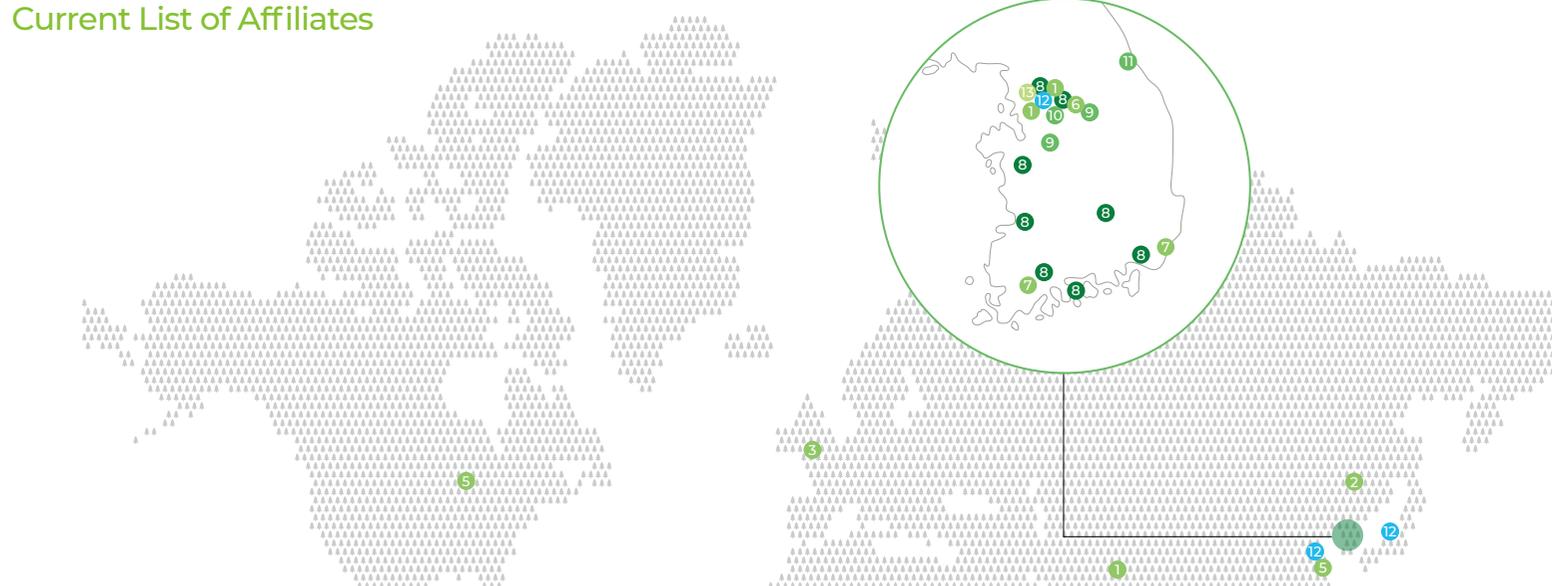
SUSTAINABLE KC

APPENDIX

< 12 >



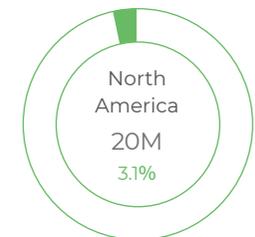
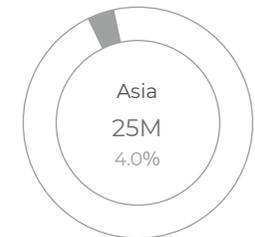
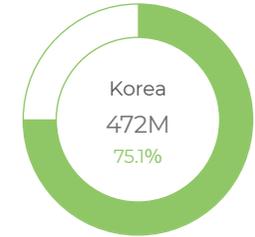
Current List of Affiliates



Environmental Engineering	Environmental Service	Office Environment
<ul style="list-style-type: none"> 1 KC Cottrell 1-1. KC Air Filtertech 1-2. KCVCS 1-3. KC Cottrell Taiwan 1-4. KC Cottrell India 1-5. KC Cottrell Engineering Service 	<ul style="list-style-type: none"> 8 KC EnviroServices 8-1. KC Bio Resources 8-2. Lilama EME 8-3. Tae Kyung ENG 8-4. KC Environmental Measurement & Analysis 	<ul style="list-style-type: none"> 12 Clestra Hauserman 12-1. Clestra HongKong 12-2. Clestra K.K 12-3. Clestra Hauserman Taicang Architecture Product
<ul style="list-style-type: none"> 2 Changchun KC Envirotech 3 Lodge Cottrell 4 KC Cottrell Vietnam 5 Nol-Tec Systems 5-1. Nol-Tec Systems Shanghai 6 NWL-Pacific 7 KC Safety&Technologies 7-1. KC Inspection Technologies 7-2. Tae Sung Plant Inspection 	<ul style="list-style-type: none"> 9 KC Landfill Service 	<ul style="list-style-type: none"> Energy 13 KC Solar&Energy
	<ul style="list-style-type: none"> Circular Economy 8 KC EnviroServices 8-5. KC EcoCycle 10 KC Glass & Materials 10-1. KC Glass Resources 11 KC GreenMaterials 	

Sales by Continent

(Unit: USD)



* The current list of affiliates includes KC GreenHoldings' subsidiaries and sub-subsidiaries only

Communication with Stakeholders

THINK THE GREEN

OVERVIEW

CEO's Message

Overview of KC GreenHoldings

Governance

Global KC Network

Communication with Stakeholders

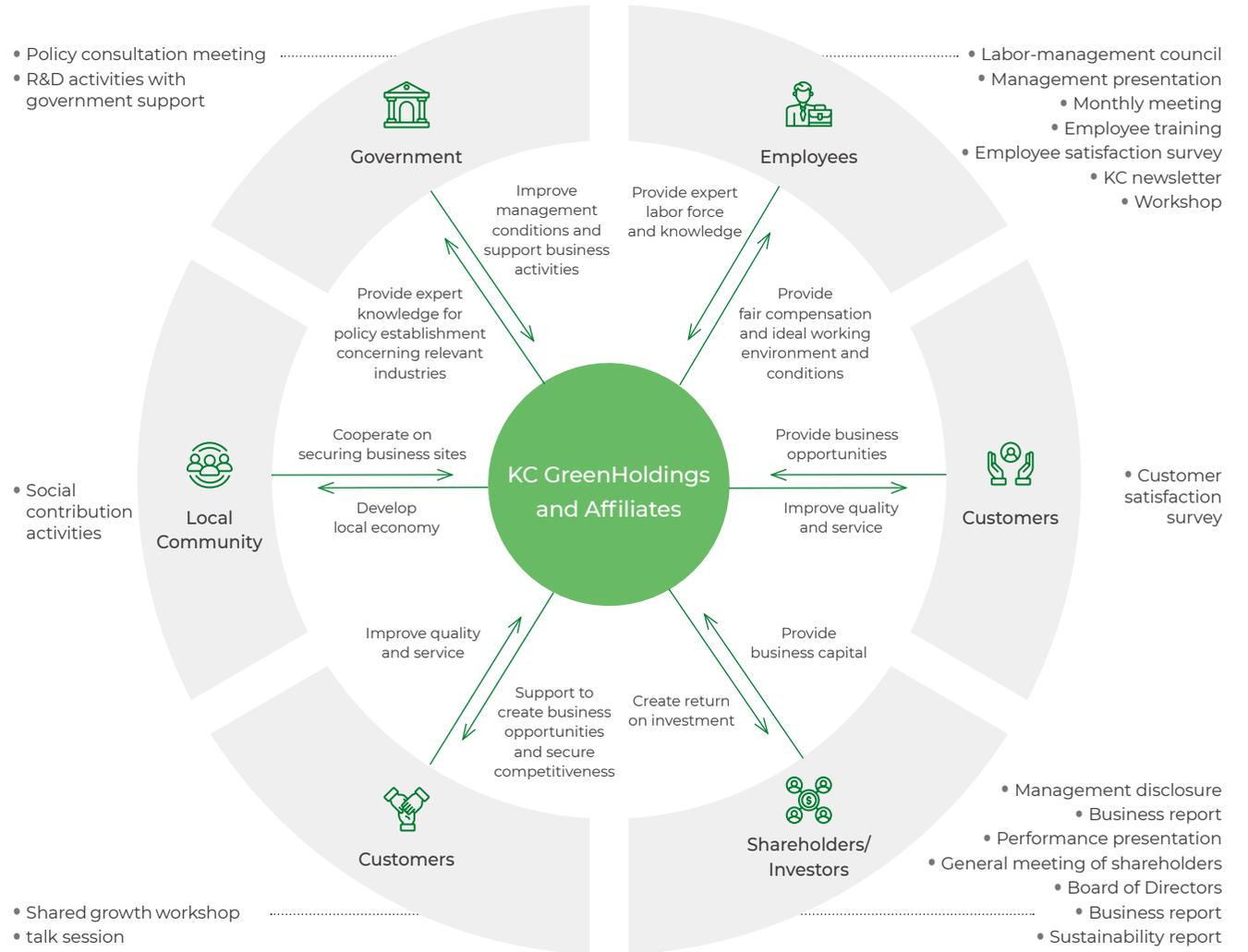
Materiality Assessment

SUSTAINABLE KC

APPENDIX

Stakeholders of KC GreenHoldings and Affiliates

We categorize the groups influenced by the management activities of KC GreenHoldings and its affiliates, as well as those that impact our management activities. Customers, employees, local communities, suppliers, shareholders/investors, and government agencies are identified as core stakeholders of KC. We strive to meet the needs of all stakeholders.



Stakeholder Communication Channels

In addition to communication activities for each stakeholder, we use our website and social media channels to share KC Network's news and increase the frequency of communication to a broader audience.

Website www.kcgreenholdings.com
 Instagram [@kcgreenholdings](https://www.instagram.com/kcgreenholdings)



Materiality Assessment

THINK THE GREEN

OVERVIEW

CEO's Message

Overview of KC GreenHoldings

Governance

Global KC Network

Communication with Stakeholders

Materiality Assessment

SUSTAINABLE KC

APPENDIX

< 14 >



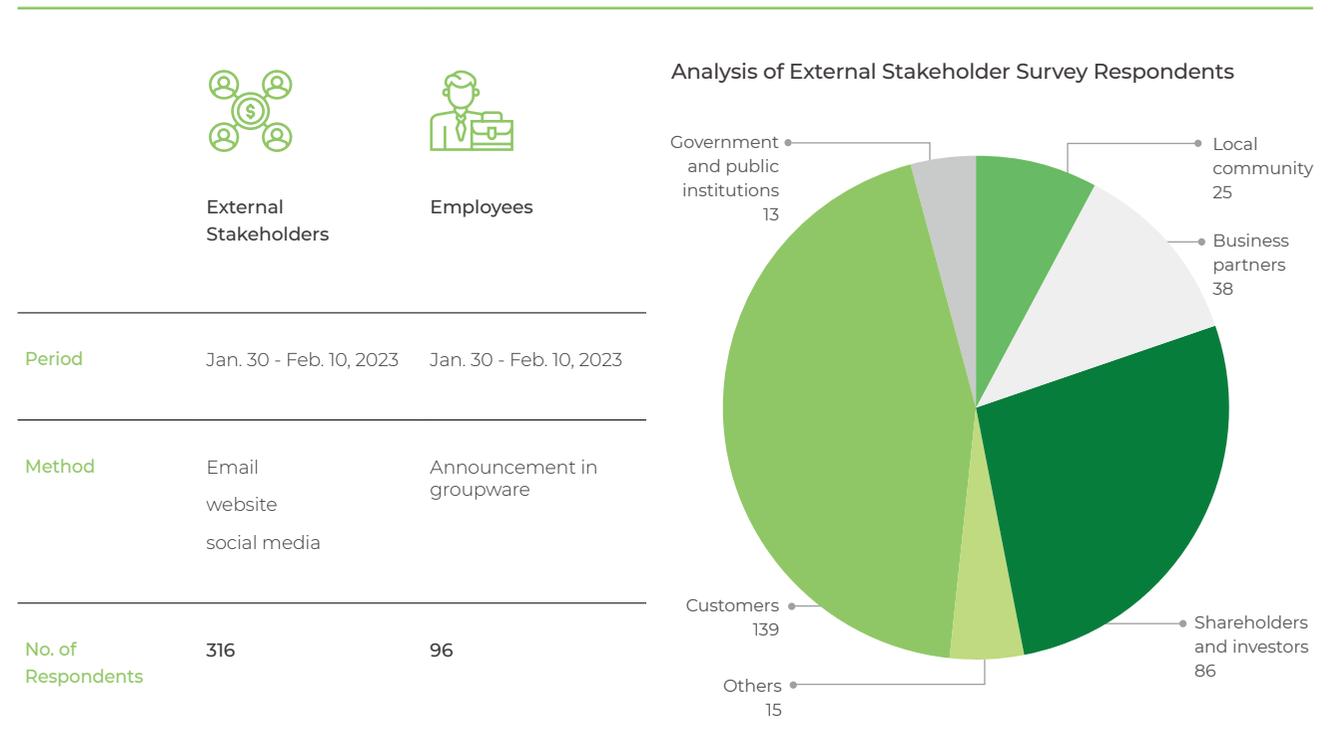
We conducted a materiality assessment to identify and report sustainability management topics that are deemed important by KC GreenHoldings and its stakeholders.

STEP 1. Issue Pooling

We conducted a comprehensive review of GRI Standards, ISO26000, and KC GreenHoldings' business plan for 2023 to identify and prioritize 94 key issues relevant to KC GreenHoldings and its affiliates.

STEP 2. Materiality Questionnaire Survey

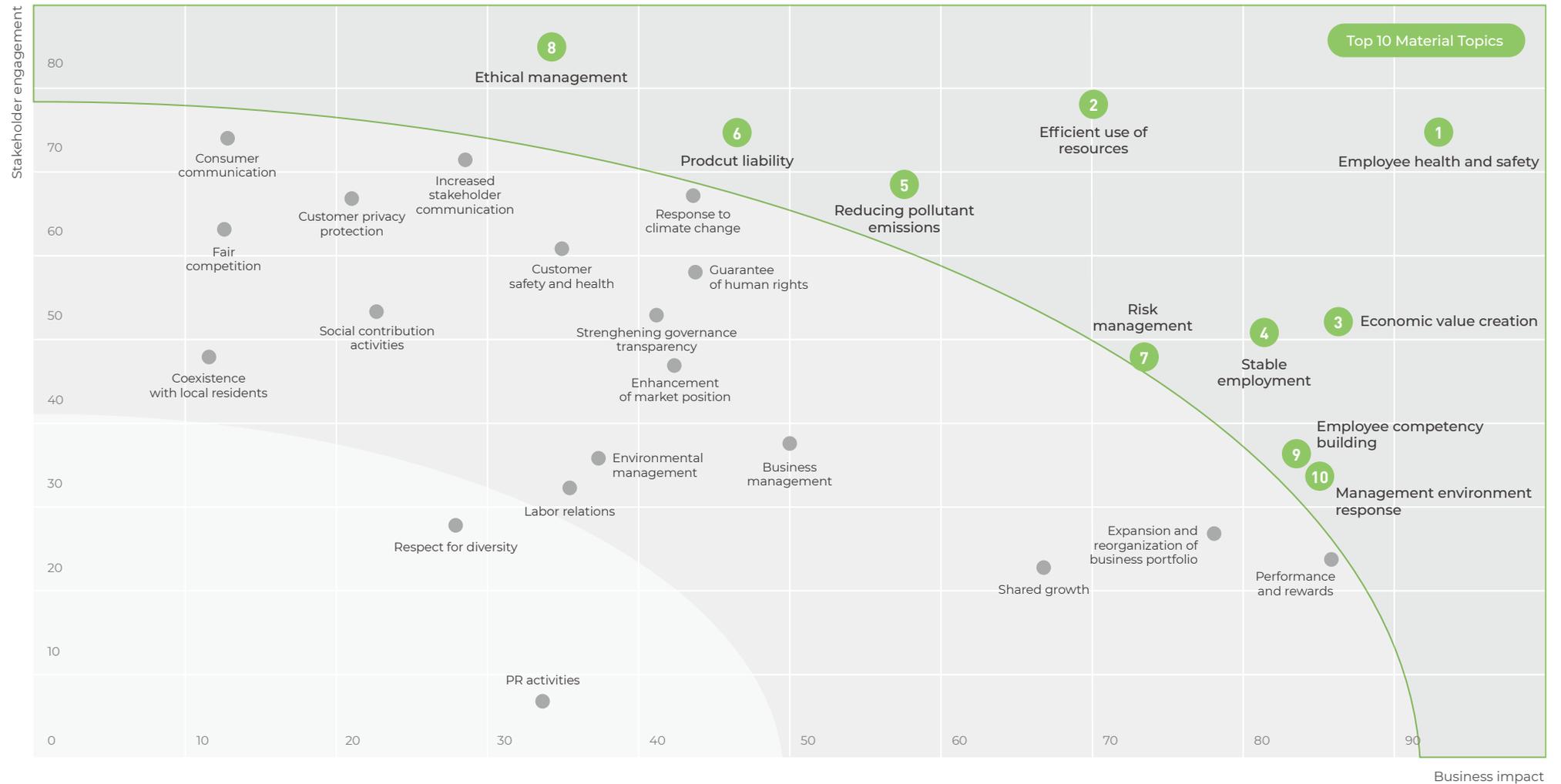
We administered a materiality questionnaire survey to external stakeholders and employees, focusing on 29 items categorized into three areas (economy, environment, society) from the identified pool of 94 issues.





STEP 3. Material Topic Selection

We set the Y-axis as the degree of stakeholder engagement, determined through a questionnaire that assessed topics considered important by external stakeholders and in line with GRI Standards and ISO 26000. The X-axis represents the business impact analysis of KC GreenHoldings' internal strategy and a survey targeting executives and employees regarding significant topics affecting KC. By combining these factors, we selected ten material topics.



THINK THE GREEN

OVERVIEW

CEO's Message

Overview of KC GreenHoldings

Governance

Global KC Network

Communication with Stakeholders

Materiality Assessment

SUSTAINABLE KC

APPENDIX

< 15 >





THINK THE GREEN

OVERVIEW

CEO's Message

Overview of KC GreenHoldings

Governance

Global KC Network

Communication with Stakeholders

Materiality Assessment

SUSTAINABLE KC

APPENDIX

< 16 >



Top 10 Material Topics

1	Employee health and safety	Compared to Previous Year	▲ 1
		Topic Area	Social
		Business Impact	1
		Stakeholder Engagement	5
		Reporting Page	26, 27
	GRI disclosures	403	
2	Efficient use of resources	Compared to Previous Year	▼ 1
		Topic Area	Environment
		Business Impact	9
		Stakeholder Engagement	2
		Reporting Page	22
	GRI disclosures	301	
3	Economic value creation	Compared to Previous Year	▲ 1
		Topic Area	Economy
		Business Impact	4
		Stakeholder Engagement	15
		Reporting Page	19
	GRI disclosures	201-1	
4	Stable employment	Compared to Previous Year	NEW
		Topic Area	Social
		Business Impact	6
		Stakeholder Engagement	16
		Reporting Page	25
	GRI disclosures	401	
5	Reducing pollutant emissions	Compared to Previous Year	-
		Topic Area	Environment
		Business Impact	11
		Stakeholder Engagement	7
		Reporting Page	22
	GRI disclosures	305	
6	Product liability	Compared to Previous Year	NEW
		Topic Area	Social
		Business Impact	13
		Stakeholder Engagement	3
		Reporting Page	28
	GRI disclosures	416	
7	Risk management	Compared to Previous Year	▲ 3
		Topic Area	Economy
		Business Impact	8
		Stakeholder Engagement	18
		Reporting Page	20
	GRI disclosures	201-2	
8	Ethical management	Compared to Previous Year	NEW
		Topic Area	Social
		Business Impact	21
		Stakeholder Engagement	1
		Reporting Page	25, 26
	GRI disclosures	Non GRI	
9	Employee competency building	Compared to Previous Year	-
		Topic Area	Social
		Business Impact	5
		Stakeholder Engagement	21
		Reporting Page	26
	GRI disclosures	404	
10	Management environment response	Compared to Previous Year	▼ 4
		Topic Area	Economy
		Business Impact	3
		Stakeholder Engagement	22
		Reporting Page	20
	GRI disclosures	Non GRI	

STEP 4 .
Material Topic Analysis

In the 2023 materiality assessment, employee safety and health emerged as the most material and influential topic. It received the highest score for business impact, largely attributed to the implementation of the Serious Accident Punishment Act and a series of industrial accidents. Other topics identified were consistent with the previous year, with the addition of job security as a new material issue due to the ongoing global economic recession. Furthermore, product liability and ethical management were identified as new material topics in 2023, reflecting the growing demand for corporate social responsibility.

STEP 5 .
Material Assessment Report

The materiality assessment results have been reviewed by the management of KC GreenHoldings.



THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

Economic
Performance

Environmental
Performance

Social Impact

Business Introduction

APPENDIX

SUSTAINABLE ——— KC

18 Economic Performance

21 Environmental Performance

24 Social Impact

29 Business Introduction

< 17 >





THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

Economic Performance

Environmental Performance

Social Impact

Business Introduction

APPENDIX

< 18 >

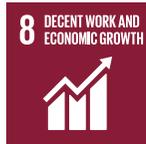


Economic Performance

MANAGEMENT APPROACH

The traditional duty and fundamental responsibility of a business are to generate profits ethically and consistently, and transparently distribute them to stakeholders. In addition to its existing operations, KC GreenHoldings continues to evaluate and invest in the green industry to fulfill its sustainable economic responsibility in addressing the environmental challenges of each era.

Related SDGs

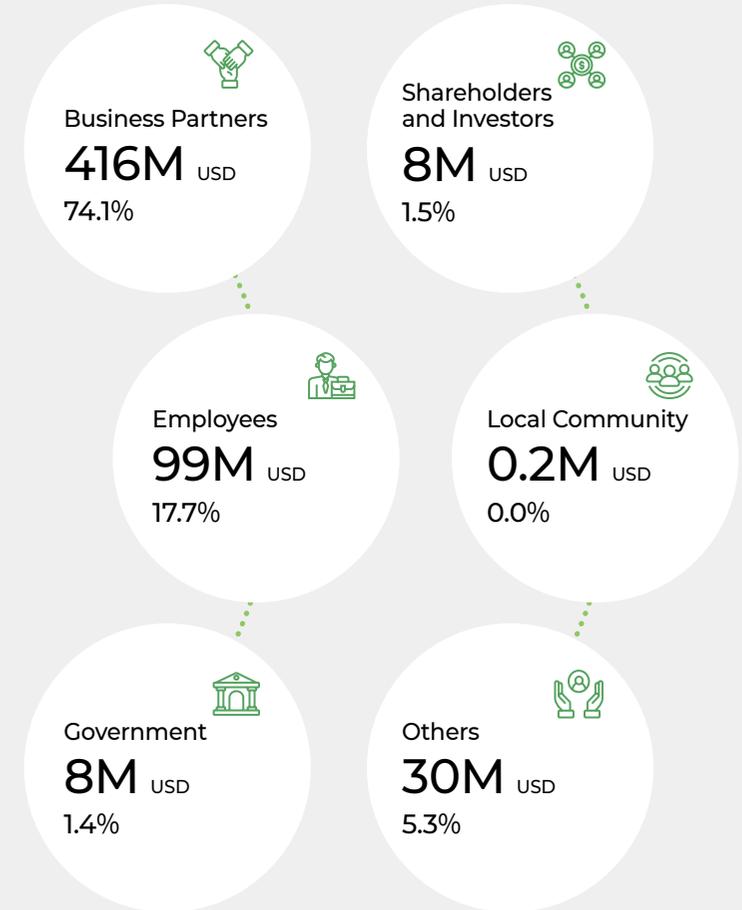


KEY FIGURES

Economic Value Creation in 2022



Value Redistribution in 2022





THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

- Economic Performance
- Environmental Performance
- Social Impact

Business Introduction

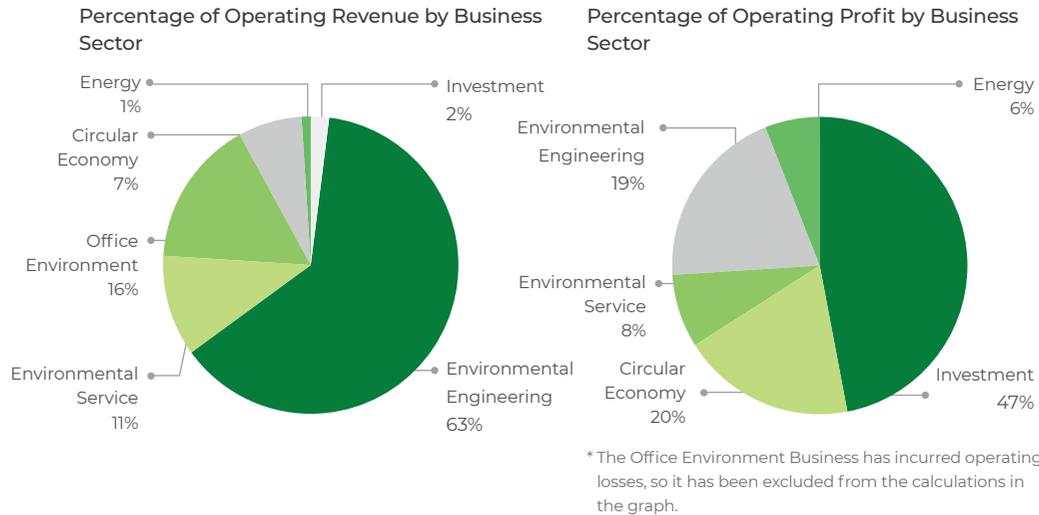
APPENDIX

< 19 >



Economic Value Creation

In 2022, KC GreenHoldings achieved operating revenue of 561 million dollar and an operating profit of 11 million dollar on a consolidated basis. When examining the operating revenue and the operating profit by business sector, the investment business recorded revenue of 11 million dollar and an operating profit of 7 million dollar, the environmental engineering business recorded revenue of 434 million dollar and an operating profit of 3 million dollar, the environmental service business recorded revenue of USD 77 million and an operating profit of 1 million dollar, the office environment business recorded revenue of 109 million dollar and an operating loss of 6 million dollar, the circular economy business recorded revenue of 45 million dollar and a profit of 3 million dollar, and the energy business recorded revenue of 7 million dollar and an operating profit of 1 million dollar, respectively. The operating revenue and operating profit (loss) by business sector include internal revenues and expenses between the sectors. Therefore, the total amounts may differ from the consolidated revenue and profit (loss).

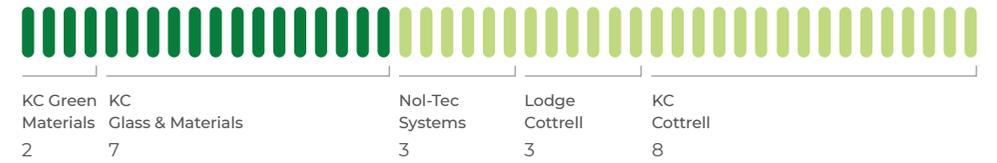


New Technology Development

In 1992, KC GreenHoldings established a technology research institute to attain technological independence. Since then, KC GreenHoldings and its affiliates have

been consistently advancing its technologies and engaging in collaborative research with external organizations and other companies to address the growing range of environmental issues. As of 2022, KC GreenHoldings affiliates had 23 R&D personnel, with a total R&D investment of one million dollar and a financial assistance for investment and R&D from government of 5 thousand dollar.

R&D Personnel by Affiliate



New Patents Acquired in 2022

Patent Name	Patent Right Holder	Registered Date	Registration Number
Exhaust gas purifier for all-in-one fully automatic cooking room hood ¹⁾	KC Cottrell	04. 07. 2022	1023859360000
High-flow filling material composition for backfilling structures using industrial by-products	Daewoo E&C WithMTech KC GreenMaterials	12. 13. 2022	1024782410000
Harmful gas treatment device ²⁾	KCVCS	01. 25. 2022	1023573590000

1) KC Cottrell's exhaust gas purifier for the all-in-one fully automatic cooking room hood removes and purifies fine dust, oil, and odor from exhaust gas generated during cooking in kitchens, restaurants, and workplaces that use charcoal kilns. Additionally, this device can effectively clean the electrostatic precipitator daily, increasing the dust collection effect and while simultaneously removing odor components. As it operates completely automatically, it increases user convenience and effectiveness, and because it is modular, it is easy to install and can be used in a small space.

2) The patent right for the harmful gas treatment device acquired by KCVCS is a harmful gas treatment device for the semiconductor (RTO) etching process. This technology can effectively remove air pollutants such as ammonia and isopropyl alcohol produced during the semiconductor etching process using RTO facilities.



THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

Economic Performance
Environmental Performance

Social Impact

Business Introduction

APPENDIX

< 20 >



Management Environment Response

Environmental Engineering

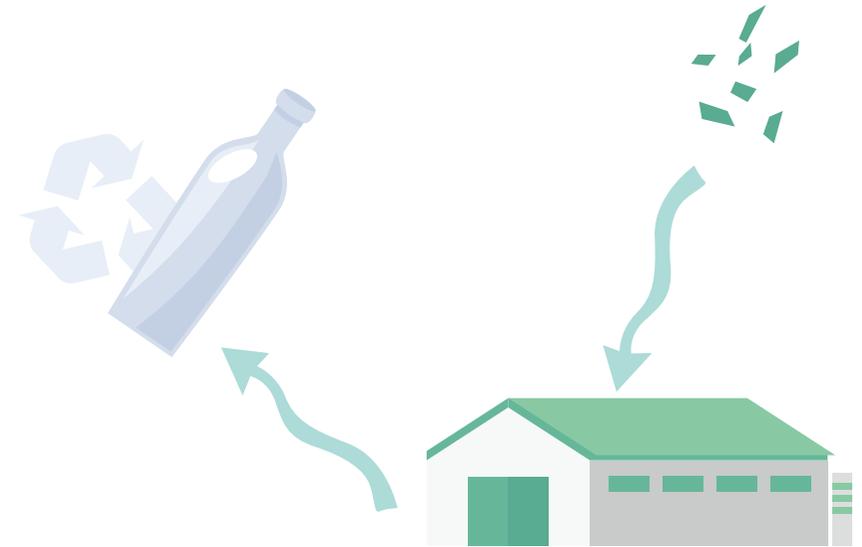
KC Safety&Technologies, a subsidiary of KC GreenHoldings, specializes in diagnosing safety in the industrial field, with a primary focus on facility and high-pressure gas safety management. In 2022, the Ministry of Science and ICT designated the company as a "laboratory safety and precision safety inspection agency", and it can now perform additional diagnostics in eight areas, including general safety, mechanical, electrical, and firefighting, as well as laboratory leak status checks. KC Safety&Technologies aims to expand its operations and become a comprehensive safety consulting company by actively recruiting skilled technical personnel in industrial safety and providing a systematic training for experts in the field.

Environmental Service

KC Environmental Measurement & Analysis, which was acquired by KC EnviroServices in August 2021, specializes in environmental measurement and management. The company primarily focuses on analyzing air, water, and complex odor pollutants emitted by various industries. In September 2022, KC Environmental Measurement & Analysis was registered as a measurement agency for an additional 23 items, including beryllium, in addition to the existing item measurement. With this expansion, the company can measure a total of 44 atmospheric items, ensuring the competitiveness of KC Network's pollutant management business.

Risk Management

The internal accounting control system enhances the transparency of accounting data by executing tasks in accordance with the company's predetermined procedures and methods. This system offers the benefit of improving the reliability of financial statements by ensuring consistency in work procedures and outcomes. In 2022, KC GreenHoldings implemented an internal accounting control system, leading the board of directors to revise their own regulations. This was done to ensure the dependability of accounting information and strengthen risk management. As a result, the board of directors can also propose the enactment of regulations of the internal accounting control system and receive regular reports on its operation.





Environmental Performance

MANAGEMENT APPROACH

In today's society, reducing a company's environmental impact is considered as an additional responsibility. KC GreenHoldings and its affiliates are committed to practicing environmental management, aiming to reduce its environmental footprint through its business processes while promoting efficient resource utilization.

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

Economic Performance

E Environmental Performance

Social Impact

Business Introduction

APPENDIX

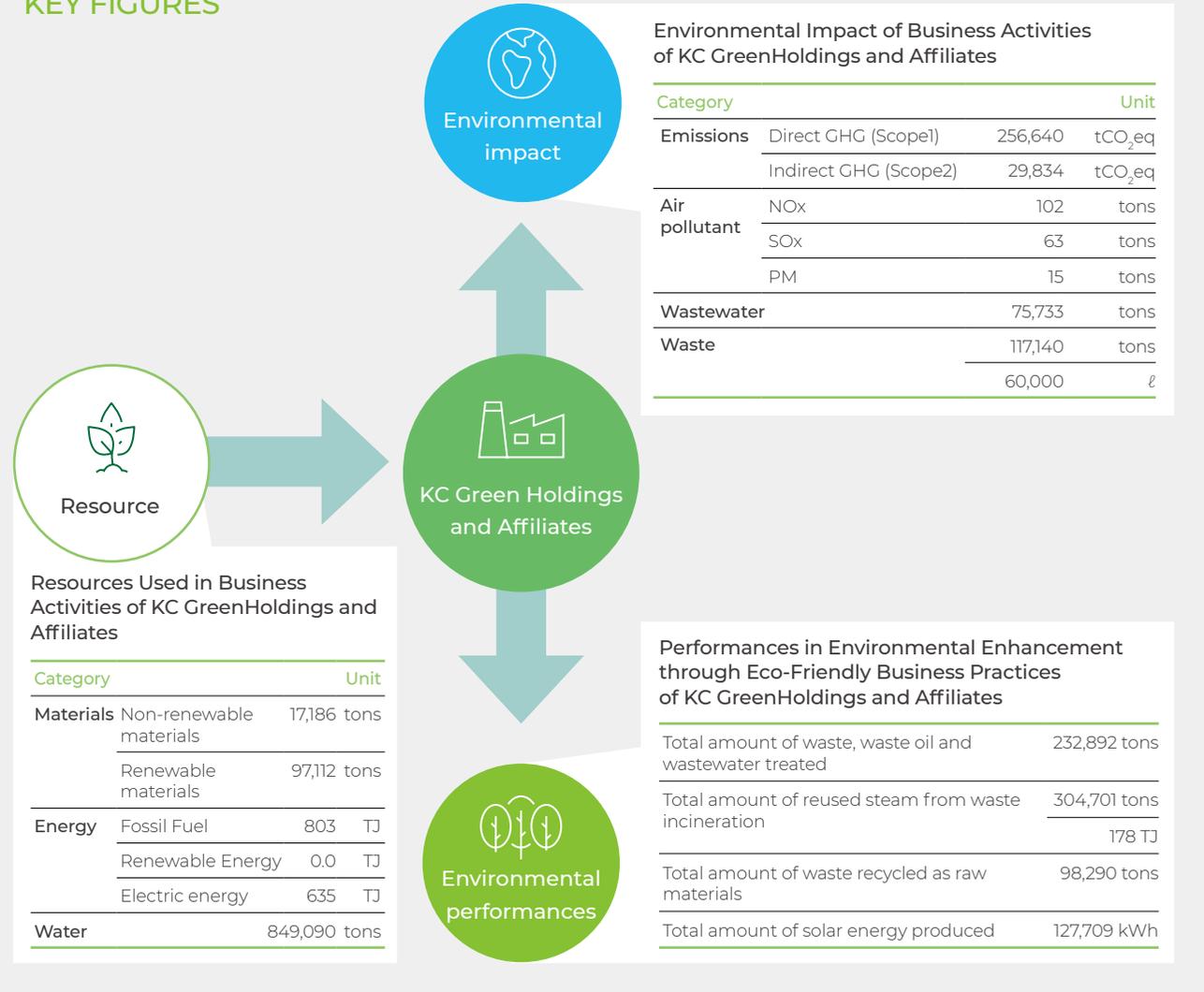
< 21 >



Related SDGs



KEY FIGURES





THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

Economic Performance

Environmental Performance

Social Impact

Business Introduction

APPENDIX

< 22 >



Environmental Management

KC GreenHoldings and its affiliates are dedicated to minimizing air pollutants resulting from fossil fuel combustion, reducing pollution associated with various human activities such as industrial and general waste, recycling waste resources for the production of new goods, creating eco-friendly office spaces, and generating energy with minimal environmental impact. While striving to minimize their environmental footprint, KC GreenHoldings and its affiliates also take into account potential environmental impacts that may arise from our business processes. To ensure comprehensive pollutant management and environmental responsibility, five affiliates of KC GreenHoldings have obtained ISO14001 certification, which signifies its commitment to rigorous environmental management practices.

Environmental Management Certification in 2022

ISO14001

KC Cottrell, Lodge Cottrell, KC EnviroServices, KC Glass & Materials, Clestra Hauserman

Violation of Environmental Laws

In 2022, KC EnviroServices paid fines for breaching two environmental laws and regulations: the Wastes Control Act and the Environmental Pollution Facility Act. The company reported errors in violations of the Wastes Control Act and submitted an internal improvement plan for violations of the Environmental Pollution Facility Act to take corrective action. No other affiliates paid fines or received non-monetary sanctions for violating environmental laws and regulations.

Environmental Impact Assessment

KC EnviroServices and KC Glass & Materials perform annual evaluations to assess the environmental impact of each product and service. In 2022, based on these evaluations, there were no products or services that KC EnviroServices and KC Glass & Materials determined to have environmental impacts.

Assessment in 2022

Assessment target	Assessment items
KC EnviroServices	TMS, all items of air pollutants except TMS, water quality, VOC, ammonia, odor, soil pollution, environmental impact on surroundings, dust
KC Glass & Materials	Water, air, waste, soil, aversion

Pollutant Emission

Pollutants emitted by KC GreenHoldings and affiliates primarily consist of greenhouse gases and air pollutants produced when waste is incinerated or raw materials are recycled, as well as residues left after waste treatment. In 2022, KC GreenHoldings and its affiliates emitted 286,474 tCO₂eq of greenhouse gases, 180 tons of air pollutants, and 117,140 tons of waste.

Use of Resources

In 2022, KC GreenHoldings affiliates utilized a total of 114,298 tons of raw materials, with recyclable raw materials accounting for approximately 85% (97,112 tons) of the total. KC Glass & Materials and KC GreenMaterials utilized 45,586 tons and 51,326 tons of recyclable raw materials, respectively, contributing to resource circulation through processes such as glass bottle production using cullet and manufacturing building materials from recycled coal ash from coal-fired power plants.



Responding to Climate Change

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

Economic Performance

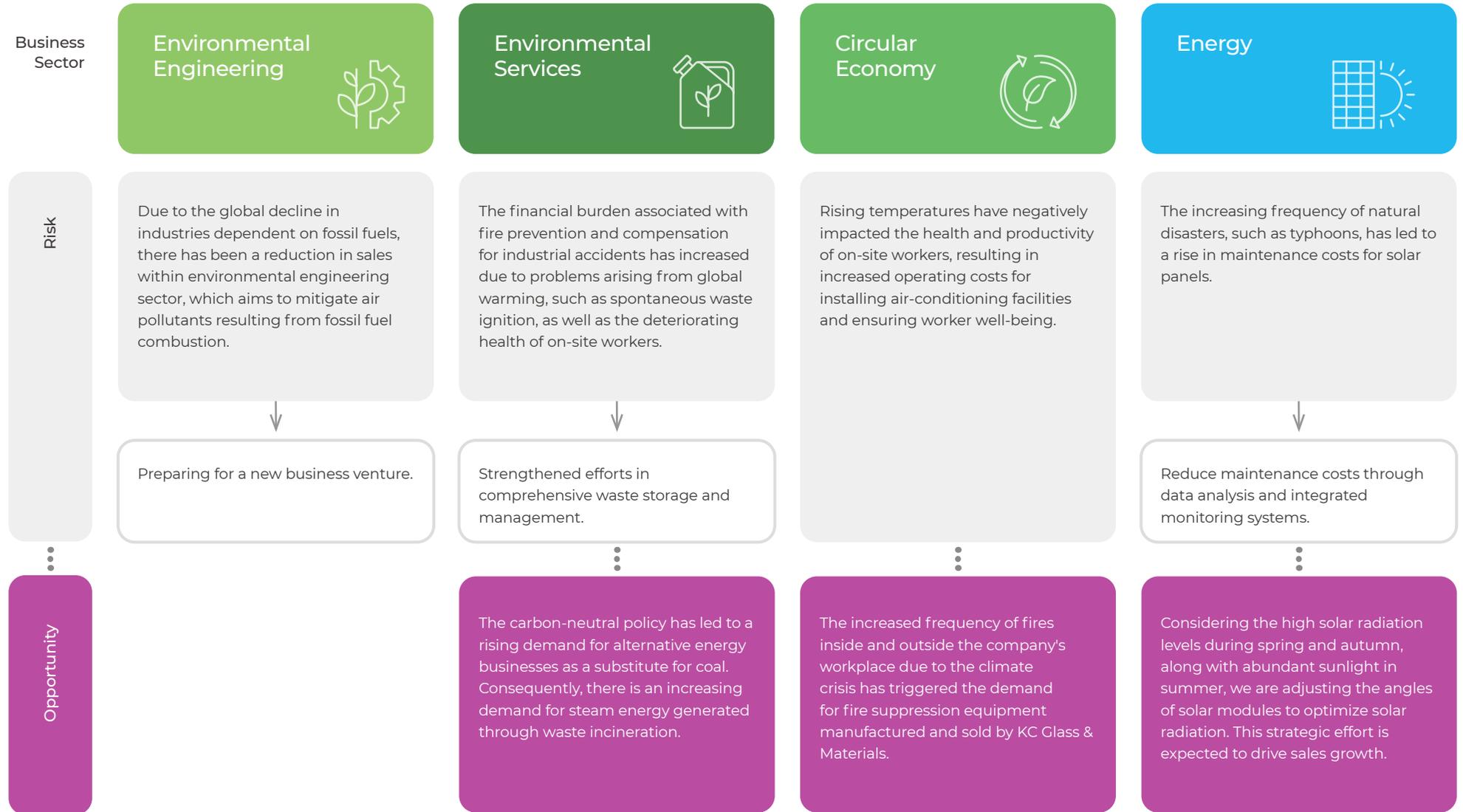
Environmental Performance

Social Impact

Business Introduction

APPENDIX

< 23 >





THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

Economic Performance

Environmental Performance

Social Impact

Business Introduction

APPENDIX

< 24 >

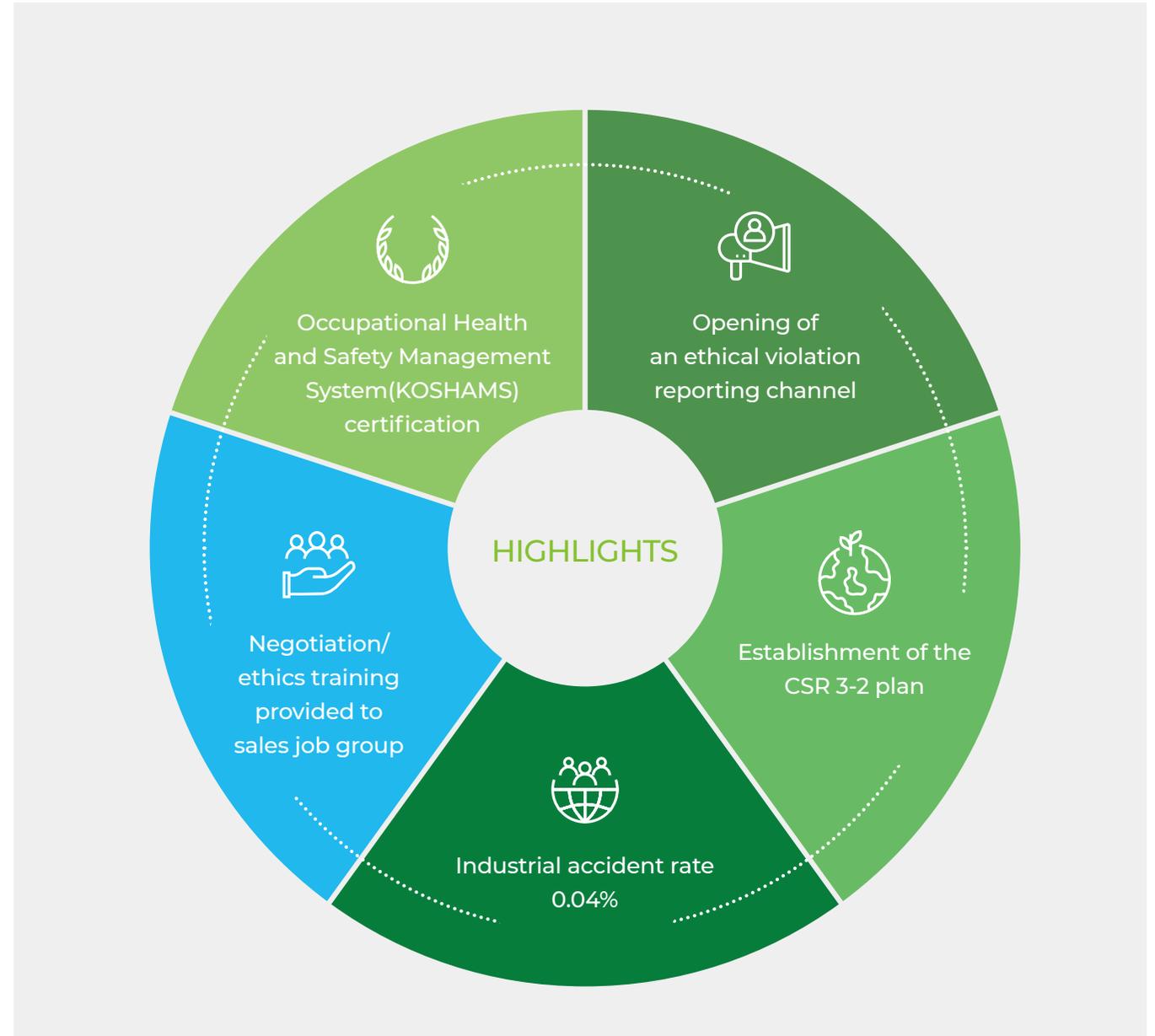


Social Impact

MANAGEMENT APPROACH

In today's business environment, there is an increasing expectation for companies to extend their influence beyond economic value creation and environmental impact reduction, positively impacting various stakeholders. KC GreenHoldings and its affiliates recognize employees, local communities, customers, and business partners as key stakeholders and actively engage in communication to identify and address relevant issues in collaboration with each stakeholder.

Related SDGs





THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

Economic Performance

Environmental Performance

Social Impact

Business Introduction

APPENDIX

< 25 >



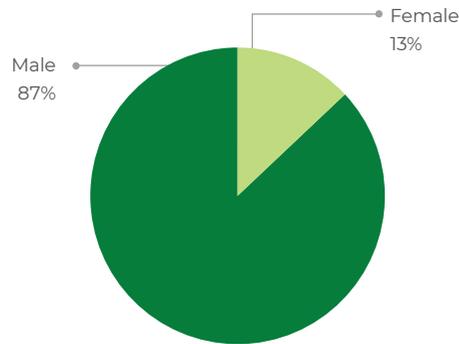
Employment Stability

Creating high-quality jobs and ensuring employment stability are essential social responsibilities for companies. KC GreenHoldings and its affiliates uphold a fair hiring process that does not discriminate based on gender, religion, or nationality. Moreover, all KC affiliates comply with the working conditions mandated by the Labor Standards Act, including the minimum wage system and the 52-hour workweek system.

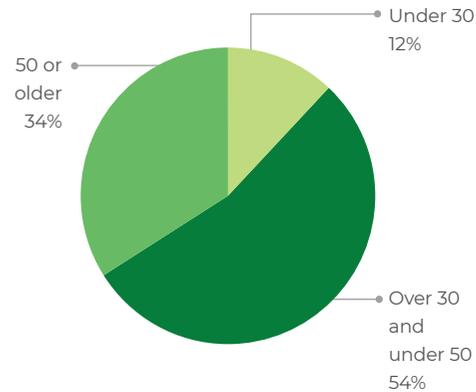
Employees in 2022

As of December 31, 2022, the total number of employees of KC GreenHoldings and affiliates is 1,083. The employee composition includes 943 males and 140 females. In terms of age, there are 128 employees aged 30 or younger, 588 employees between the ages of 30 and 50, and 367 employees aged 50 or older. Furthermore, in 2022, the company hired 190 new employees while 233 employees resigned or retired.

By Gender



By Age Group

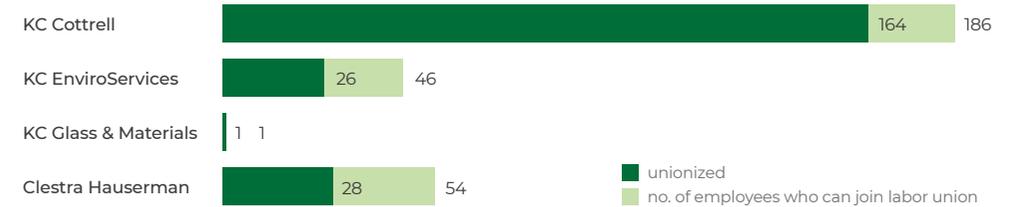


Fair Performance-based Compensation

KC GreenHoldings and affiliates conduct performance and work attitude assessments for employees over a one-year period, excluding those who have been employed for less than one year. The frequency of and criteria for assessment may vary among the affiliates, and the assessment results are reflected in the bonus payments.

Labor Union

A labor union is an organization that aims to safeguard or enhance the working conditions of employees, and employees of KC GreenHoldings and its affiliates have the right to form a labor union at the workplace freely. Among the affiliates of KC GreenHoldings, four affiliates, namely KC Cottrell, KC EnviroServices, KC Glass & Materials, and Clestra Hauserman, have labor unions, and 76% (219 out of 287) of employees are unionized.



Ethical Management

Ensuring compliance with laws and regulations is paramount for companies when conducting their business activities, as it helps safeguard both their financial performance and reputation. KC GreenHoldings places a strong emphasis on the significance of business ethics and actively promotes ethical conduct through various means. These include its code of ethics pledge, ethics training, and established channels for reporting any violations of ethical standards.

KC GreenHoldings Code of Ethics

The KC Code of Ethics consists of five chapters: Basic Attitude of Employees, Fair Trade and Fair Competition, Responsibility to Customers and Shareholders, Responsibility to Society, and Application of the Code of Ethics. To reinforce their commitment to upholding the code, executives and employees of KC GreenHoldings annually sign a pledge to adhere to the KC Code of Ethics. This serves to establish a firm resolve in fulfilling ethical responsibilities as members of KC GreenHoldings.

Ethics Violation Report

To address ethical violations within KC GreenHoldings and its affiliates, the KC Ethics Investigation Committee was established in 2020 to identify ethical violations within KC GreenHoldings and affiliates, solve problems, and devise countermeasures.



THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

- Economic Performance
- Environmental Performance

Social Impact

Business Introduction

APPENDIX

< 26 >



Furthermore, in July 2022, an ethical violation reporting channel was launched on the KC GreenHoldings website's ethical management page. This platform allows stakeholders to report ethical violations involving all workers within the KC Group, covering a range of concerns such as sexual rights, workplace harassment, and unfair trade practices.

Negotiation & Ethics Training

In November 2022, a Negotiation & Ethics Training program was conducted specifically for sales employees across KC GreenHoldings' affiliates. The training aimed to instill the concept and role of salespersons as experts and business partners who provide solutions to key customers and to cultivate an understanding of the essential ethical standards required for their positions.

Employee Competency Building

KC GreenHoldings Training System

Position	Common Training	Training by Position	Legally Required Training
Executive	Newcomer training	KC Team Unity Project	Sexual harassment prevention training
Team Leader		Leadership training	Personal information protection training
Chief		Training for persons promoted to manager/chief	Training to improve awareness of people with disabilities
Manager		Training for persons promoted to senior staff/assistant manager	Retirement pension training
Assistant Manager			
Staff		Growth Mindset	

Common and Position-specific Training in 2022

KC GreenHoldings places great importance on providing comprehensive training programs to ensure that newcomers and employees in various positions can effectively fulfill their roles within the organization and develop a strong sense of belonging as members of KC. In 2022, 36 out of 51 employees participated in the Team Unity Project, 14 out of 20 employees in training for persons promoted to senior staff/assistant

manager, 18 out of 30 employees in training for persons promoted to manager/chief, and 17 out of 29 employees in senior leadership training.

Program	Training in 2022	Participation
Common Training Team Unity Project	May 23-24	71%
Training by Position	Training for persons promoted to senior staff/assistant manager	April 21-22 70%
	Training for persons promoted to manager/chief	April 25-26 60%
	Senior Leadership Training	November 10 59%

Humanities Lecture

Since 2022, KC GreenHoldings has been providing humanities and cultural lectures to employees, aiming to broaden their understanding of the rapidly changing world and cultivate interest in diverse fields related to their roles and responsibilities. In 2022, two special lectures were conducted. The first lecture, titled "ESG, A New Management Paradigm," took place in May, while the second lecture, focused on "Mind Care for Office Workers," was held in November. These lectures provided valuable insights and knowledge, contributing to the personal growth and development of employees.

Employee Health and Safety

At KC GreenHoldings and its affiliates, employee safety is of paramount importance due to the inherent risks associated with its business operations. To ensure the systematic management of employee safety and health, it has established the Safety Technology Department at KC Safety&Technologies. This department is responsible for conducting regular inspections and implementing improvements related to safety and health measures across our affiliates. By taking a proactive approach to address safety concerns, we are committed to creating a secure and healthy working environment for employees.

Safety Level Diagnosis & Evaluation of KC Affiliates

KC GreenHoldings ensures the safety of its affiliates through the evaluation conducted by its subsidiary, KC Safety&Technologies. Each year, the safety level of affiliates is



THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

Economic Performance
Environmental Performance

Social Impact

Business Introduction

APPENDIX

< 27 >



assessed in two key areas: the safety and health management system and safety and health management activities. Based on the evaluation results, KC GreenHoldings recognizes and awards affiliates that achieve the highest and second-highest ratings. In 2022, KC Safety&Technologies and KC Cottrell were honored with the grand prize and excellence award, respectively, in the safety and health sector. In addition, KC Safety&Technologies, responsible for safety and health consulting for affiliates, not only evaluates the level of safety and health management of affiliates but also periodically checks and provides feedback to improve their safety and health activities.

Safety and Health Council

The Safety and Health Council, comprised of safety and health managers of KC GreenHoldings and affiliates, shares issues and cases related to safety and health each quarter. In 2022, the council held three safety meetings in March, July, and November. Notably, during the July meeting, the council participated in the International Safety and Health Exhibition to gain insights into new products and technologies in the occupational safety and health field. This proactive engagement enables the council to stay informed and enhance their approach to safety and health management.

Health and Safety Certifications in 2022

Ensuring the safety and health of our employees is the highest priority for KC GreenHoldings. We strongly recommend that all affiliates maintain and acquire safety-related certifications, such as ISO45001. These certifications enable a systematic approach to managing employee safety and provide a framework for identifying and mitigating potential risks.

List of Health and Safety Management Certifications in 2022

ISO45001 KC Cottrell, KC Safety&Technologies, Lodge Cottrell, KC EnviroServices	KOSHAMS KC EnviroServices
KOSHA 18001 KC Cottrell, KC Glass & Materials, Clestra Hauserman	Risk Assessment Certificate KC Cottrell

Health and Safety Accidents and Compliance

In 2022, there were a total of three injury accidents reported at KC Cottrell and two at KC EnviroServices. While these incidents occurred, it is worth noting that they were not categorized as serious accidents. Moreover, there were no other safety accidents in any other affiliates. In relation to occupational safety and health, KC EnviroServices paid fines for violating the Occupational Safety and Health Act in 2022. However, the company addressed this issue implementing facility improvements and adopting additional safety measures. No other affiliates violated other occupational safety and health laws and regulations.



Corporate Social Responsibility Activities

KC GreenHoldings established the KC CSR Initiative in 2019 as our standard for CSR activities. Over the past three years (2020-2022), we implemented Phase 1 of our CSR activities. In 2022, we conducted an evaluation of employee awareness and satisfaction regarding Phase 1 activities. Employees provided feedback, highlighting the need to improve the frequency and awareness of CSR initiatives. To address this, we proactively shared our CSR activity plan through our internal groupware bulletin board and implemented promotional activities. Moving forward, we are dedicated to continuing our Phase 2 CSR activities, aiming to increase employee interest and awareness.

KC CSR Phase 2





THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

Economic Performance

Environmental Performance

Social Impact

Business Introduction

APPENDIX

< 28 >



Implementation of CSR Activities Compared to the Plans in 2022

Goal	Plan	Implementation Details			
Resolve environmental issues	Environmental training	Introduce environment-related issues in KC newsletter	O	1Q Small action for environment	2Q Recycling, the most eco-friendly thing we can do
				3Q Things we should never put down the drain	4Q Safety and tidiness
		Produce educational videos related to environment	X		
	Environmental campaign	Environmental campaign	O	April October	Walk event Recycling Campaign
Cooperate with local community	Environmental improvement activity	Beachcombing	O	October	Yeosu black sand beach beachcombing

Job Creation

Every year, KC GreenHoldings conducts a winter internship program designed for university students, aimed at deepening their understanding of the environmental industry and providing valuable work experience. The 2022 winter internship program spanned a period of two months, from January 03 to February 25, and welcomed a total of five participants.

Donations and Sponsorships in 2022

In response to the frequent occurrence of significant forest fires in the Gangwon region in recent years, KC GreenMaterials made a valuable contribution by donating firefighting equipment to Samcheok Fire Station. This donation aims to aid in the prevention and mitigation of future forest fire damage. Furthermore, in 2022, the amount KC GreenHoldings and its affiliates donated to local communities was 175 thousand dollar.

Communication with Local Community

KC Bio Resources, a subsidiary of KC EnviroServices acquired in 2019, specializes in

food waste recycling. Due to the inherent nature of food waste, fermenting food odors were a recurring concern, leading to frequent complaints from residents. To address this issue and better serve the local community, KC Bio Resources transitioned from the fermentation method to the drying method for waste treatment. They also implemented separate odor treatment systems for high-concentration and low-concentration odors, focusing all efforts on odor reduction. These initiatives yielded positive results in 2022, as KC Bio Resources received a plaque of appreciation from relevant organizations in Iksan City, where the company is based. This recognition acknowledges their contribution to resolving residents' complaints and mitigating odor issues. KC GreenHoldings and its affiliates remain committed to actively engaging with and coexisting harmoniously with the local community.



Product Liability

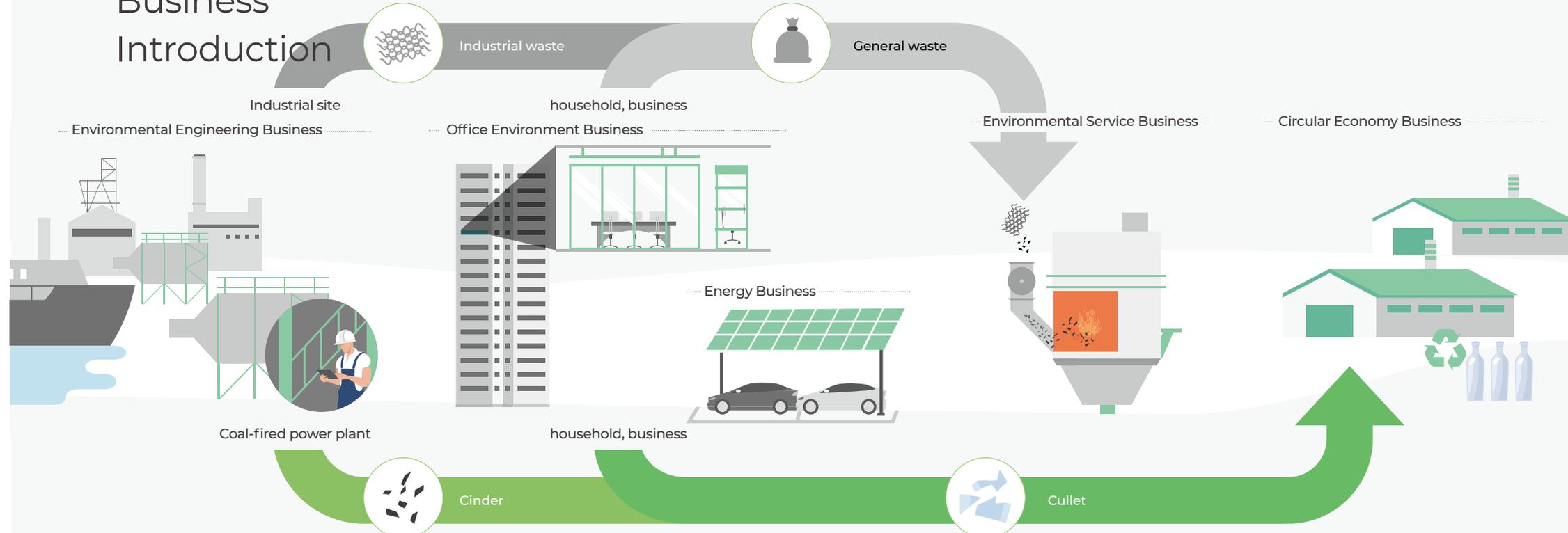
Companies have legal and ethical responsibilities in ensuring the safety and quality of their products and services. Within KC GreenHoldings, 11 affiliates hold ISO9001 certification, ensuring consistent quality throughout the production and sales process. KC Cottrell actively engages in regular meetings with business partners to foster cooperation and growth. KC EnviroServices and KC Glass & Materials prioritize the evaluation of safety and health impacts. KC Glass & Materials has specifically obtained FSSC22000 certification for its main product, beverage glass bottles, guaranteeing customer safety. In the 2022 assessment, neither KC EnviroServices nor KC Glass & Materials violated laws or internal regulations, and no other affiliates assessed the safety and health impact of their products and services.

Quality Management Certification in 2022

ISO9001

KC Cottrell, KC Safety&Technologies, Changchun KC Envirotech, KC Cottrell Vietnam, Lodge Cottrell, NWL-Pacific, KC EnviroServices, KC Glass & Materials, KC GreenMaterials, Clestra Hauserman, KC Solar&Energy

Business Introduction



THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

Economic Performance

Environmental Performance

Social Impact

Business Introduction

APPENDIX

Preventing Air Pollution

Environmental Engineering Business

Gases emitted from burning fossil fuels in industrial facilities like steel mills, power plants, and means of transportation such as ships and subways contain air pollutants. Our Environmental Engineering business unit is responsible for designing, fabricating, installing, and operating/managing facilities that mitigate air pollution by minimizing these pollutants.

Treatment of Waste to Minimize Its Impact on the Environment

Environmental Service Business

Due to the varying materials and properties of waste, it is crucial to ensure appropriate treatment to minimize the environmental impact of waste disposal. Our Environmental Service business unit specializes in the intermediate and final treatment of diverse types of waste, including both business and household waste, based on their specific characteristics.

Creating Environment-Friendly and Healthy Spaces

Office Environment Business

Because a significant portion of our waking hours is spent at work, our Office Environment business unit focuses on constructing office spaces that prioritize environmental friendliness and the well-being of occupants.

Generating Added Values from Waste Resources

Circular Economy Business

Given the limited resources available on Earth, we need to generate added value from waste resources and utilize limited resources efficiently. Our Resource Circulation business unit plays a vital role in promoting resource circulation by transforming waste resources into raw materials for the production of new products.

Minimizing Damage to the Environment

Energy Business

All human activities require energy, yet the resources necessary for energy generation are finite, and the process often entails significant environmental impacts. In response, our Energy business strives to generate energy without damaging the environment.

Showings in 2022

Operating Revenue	Operating Profit	No. of Employees
434M USD	3M USD	573

Operating Revenue	Operating Profit	No. of Employees
77M USD	1M USD	250

Operating Revenue	Operating Profit	No. of Employees
109M USD	-6M USD	148

Operating Revenue	Operating Profit	No. of Employees
45M USD	3M USD	64

Operating Revenue	Operating Profit	No. of Employees
7M USD	1M USD	24



THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management
Data

GRI Content index

External Assurance

Affiliated Associations

APPENDIX

31 Financial Information

39 Sustainable Management Data

44 GRI Content index

47 External Assurance

49 Affiliated Associations

< 30 >





Financial Information

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations

Independent Auditors' Report

To the Shareholders and the Board of Directors
of KC GreenHoldings Co., Ltd:

accordance with the ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

1) Basis for Key Audit Matter

As noted in Note 13 to the financial statements, as of December 31, 2022, the Group has a total of 46,552 million Korean Won in goodwill arising from the business combination of subsidiaries. The Group conducted an impairment test for goodwill using the value-in-use calculation based on the discounted cash flow method.

As value in use entails significant judgments and estimates by the Group's management, such as discount rate, growth rate and future cash flow forecast, we judged impairment of goodwill as a key audit item.

2) Procedures for Key Audit Matter

Our procedure for the audit of the estimate of impairment of goodwill includes, among other procedures, the following:

- Consideration of the overall market environment in which signs of impairment can be considered
- Evaluation of the competence and independence of external experts used by the Group to evaluate the value in use of the cash-generating unit

Opinion

We have audited the accompanying consolidated financial statements of KC GreenHoldings Co., Ltd. And its subsidiaries (the "Group"), which comprise the consolidated statements of financial position as at December 31, 2022 and 2021, and the consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years the ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial positions of the Group as at December 31, 2022 and 2021 and its consolidated financial performances and tis consolidated cash flows for the years then ended in accordance with Korean International Financial Reporting Standards("K-IFRS").

Basis for Opinion

We conducted our audit in accordance with Korean Standards on Auditing (KSAs). Our responsibilities under those standards are further described in the Auditors'Responsibilitiesfor theAudit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the ethical requirements of the Republic of Korea that are relevant to our audit of the consolidated financial statements, and we have fulfilled our other ethical responsibilities in





THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations

< 32 >



- Determination of cash-generating units of the Group and review of the adequacy of net assets allocated to each cash-generating unit

- Sales estimate through review of internal data such as business plans and available external data and validation of key input variables such as permanent growth rate

- Review the appropriateness of value in use by verifying the accuracy of the evaluation amount calculation

Emphasis of Matter

As noted in Note 23 to the financial statements, the Group won a contract for thermal power plant construction in Long Phu, Vietnam (main contractor, Vietnamese state-owned company, "PVN") from the Russian company PJSC POWER MACHINES ("PM"), and subsequently in progress of construction of dust collection and desulfurization facilities. As of the end of January 2018, PM was included in the list of economic sanctions by the U.S. Treasury Department, and the Company's construction has currently suspended as the fund transaction has frozen. There is no significant progress in construction works during the current period, and as of the end of the current year, the progress rate of the construction is about 71.93% for dust collection facilities and about 55.24% for desulfurization facilities. As of the end of the current year, PVN, the main contractor of construction, is planning the resumption of construction through a contract with the Group after the termination of contract with PM, and most of the dust collection facilities are waiting for delivery. Considering these factors, it is expected that the construction will resume in 4th quarter 2023 or 1st quarter 2024, but the results of future construction are not predictable. As of the end of the current year, the contract amount for this construction (dust collection and desulfurization facility) is USD 71,371,600, and the contract amount not in progress is USD 27,675,357.72. As of the end of the current year, the ultimate impact of this situation on the Group's financial statements is currently unpredictable.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with K-IFRS, and for such internal control as management determines is necessary to enable the preparation of

consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditors' Responsibility for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with KSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with KSAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.



THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations



- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the

adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Jeongwook Kim, Certified Public Accountant.

Seoul, Korea
March 21, 2023

This report is effective as of March 21, 2023, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statement and notes thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.



Consolidated Statement of Financial Position

FY 2022 12/31/2022 Current
 FY 2021 12/31/2021 Current
 FY 2020 12/31/2020 Current
 (Unit : KRW)

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations

< 34 >



	FY 2022	FY 2021	FY 2020
Assets			
Non-current assets	395,003,707,794	407,716,253,734	412,620,571,259
Property, plant and equipment	253,574,427,660	261,780,587,267	282,556,260,844
Investment property	11,612,899,668	11,706,875,196	11,800,850,724
Long-term trade receivables, gross	14,271,523,328	16,647,364,561	18,153,991,275
Investments for related company	12,456,211,699	17,863,894,511	10,983,387,441
Goodwill, gross	46,551,600,928	49,108,725,279	52,687,153,978
Intangible assets other than goodwill	5,741,496,830	7,226,144,550	6,977,320,937
Deferred tax assets	3,950,246,117	0	0
Non-current derivative assets	0	60,401,838	0
Other non-current financial assets	40,613,197,293	40,005,713,637	28,104,744,814
Other non-current assets	6,232,104,271	3,316,546,895	1,356,861,246
Current assets	397,856,970,676	498,889,364,693	363,513,113,921
Assets to be sold	4,615,456,975	5,610,112,720	0
Inventories	45,610,664,138	37,838,732,910	37,239,284,384
Short-term trade Receivable	112,866,777,637	113,985,189,106	108,567,465,674
Due from customers for contract work	99,356,849,986	94,283,219,901	60,402,315,243
Other current receivables	9,002,582,778	28,512,734,631	21,061,395,323
Current derivative asset	218,642,897	786,590,755	352,238,674
Current tax assets	898,139,911	1,497,872,336	2,486,298,454
Other current non-financial assets	42,405,991,319	48,781,461,600	43,299,265,261



Consolidated Statement of Financial Position

FY 2022 12/31/2022 Current
 FY 2021 12/31/2021 Current
 FY 2020 12/31/2020 Current
 (Unit : KRW)

	FY 2022	FY 2021	FY 2020
Other current financial assets	16,589,868,581	8,207,920,456	9,938,594,319
Cash and cash equivalents	66,291,996,454	159,385,530,278	80,166,256,589
Total assets	792,860,678,470	906,605,618,427	776,133,685,180
Equity			
Equity attributable to owners of parent	165,122,892,158	160,553,743,362	153,213,373,906
Issued capital	11,217,490,000	11,217,490,000	11,217,490,000
Elements of other stockholder's equity	52,520,520,044	50,873,717,212	48,592,952,680
Other Comprehensive income/loss accumulated amount	18,482,636,754	17,904,728,601	14,173,312,531
Retained earnings	82,902,245,360	80,557,807,549	79,229,618,695
Non-controlling interests	92,864,943,476	99,412,716,250	76,836,018,917
Total equity	257,987,835,634	259,966,459,612	230,049,392,823
Liabilities			
Non-current liabilities	104,674,811,666	181,434,124,155	204,999,437,648
Other non-current provisions	19,740,339,189	26,093,945,928	46,059,388,238
Long-Term trade Payables, gross	16,615,875,586	18,778,638,972	21,042,451,934
Long-term borrowings, gross	33,531,935,524	79,681,181,248	75,930,853,587
Debentures	0	20,348,697,414	9,980,485,973
Post-employment benefit obligations	4,293,419,555	8,330,993,370	10,168,915,595
Non-current derivative liabilities	7,702,900,170	3,665,298,994	6,293,976,000
Other non-current financial liabilities	12,518,906,862	19,861,915,364	34,618,008,335
Other non-current non-financial liabilities	1,513,076,641	1,280,820,196	0

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations

< 35 >





Consolidated Statement of Financial Position

FY 2022 12/31/2022 Current
 FY 2021 12/31/2021 Current
 FY 2020 12/31/2020 Current
 (Unit : KRW)

	FY 2022	FY 2021	FY 2020
Deferred tax liabilities	8,758,358,139	3,392,632,669	905,357,986
Current liabilities	430,198,031,170	465,205,034,660	341,084,854,709
Other current provisions	1,408,883,667	714,469,761	1,573,513,586
Short-term borrowings	105,719,851,806	80,265,322,976	99,255,374,016
Debentures	32,932,518,411	0	0
Trade payables	93,223,270,802	113,486,448,963	77,662,883,934
Other current liabilities	46,158,374,792	62,514,280,693	54,883,896,400
Advance from customers	60,585,043,295	143,514,230,293	74,578,804,797
Current tax liabilities	2,567,020,222	4,416,639,358	1,172,547,765
Current derivative liabilities	22,061,621,408	10,483,557,618	0
Current portion of long-term borrowings	42,659,551,274	19,246,936,689	13,186,588,743
Other current financial liabilities	2,248,959,018	5,608,761,137	5,307,287,379
Other current non-financial liabilities	20,632,936,475	24,954,387,172	13,463,958,089
Total liabilities	534,872,842,836	646,639,158,815	546,084,292,357
Total equity and liabilities	792,860,678,470	906,605,618,427	776,133,685,180

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations





Consolidated Statement of Comprehensive Income

FY 2022 From 01/01/2022 To 12/31/2022
 FY 2021 From 01/01/2021 To 12/31/2021
 FY 2020 From 01/01/2020 To 12/31/2020
 (Unit : KRW)

	FY 2022	FY 2021	FY 2020
Revenue	711,208,261,184	612,676,622,271	566,023,096,725
Sales	708,044,591,898	603,964,125,539	561,887,908,034
Revenue from valuation of associates	1,968,571,037	7,116,143,314	3,104,920,598
Revenue from rendering of services rental	1,195,098,249	1,596,353,418	1,030,268,093
Operating expense	697,641,746,068	585,322,883,961	607,712,999,698
Cost of sales	622,026,575,519	522,410,337,952	540,885,456,977
Loss from valuation of associates	6,020,059,261	0	560,656,274
Selling general administrative expenses	69,595,111,288	62,912,546,009	66,266,886,447
Operating income(loss)	13,566,515,116	27,353,738,310	(41,689,902,973)
Other gains	21,544,166,407	22,008,208,960	20,446,847,052
Other losses	9,953,407,917	15,179,031,089	35,730,439,280
Finance income	47,006,569,368	17,634,113,771	1,180,534,996
Finance costs	75,719,211,351	27,173,296,892	4,982,444,281
Profit (loss) before tax	(3,555,368,377)	24,643,733,060	(60,775,404,486)
Income tax expense	4,746,126,422	6,105,505,734	9,397,466,028
Profit (loss) from continuing operations	(8,301,494,799)	18,538,227,326	(70,172,870,514)
Profit (loss) from discontinued operations	(8,735,037,481)	(8,744,606,251)	(8,745,298,255)
Profit (loss)	(17,036,532,280)	9,793,621,075	(78,918,168,769)
Other comprehensive income	3,520,823,777	6,703,922,959	1,965,293,293
Other comprehensive income that will not be reclassified to profit or loss, net of tax	2,867,416,137	5,795,649,321	1,079,589,433
Land revaluation surplus	298,693,817	4,341,921,031	0

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations

< 37 >





Consolidated Statement of Comprehensive Income

FY 2022 From 01/01/2022 To 12/31/2022
 FY 2021 From 01/01/2021 To 12/31/2021
 FY 2020 From 01/01/2020 To 12/31/2020
 (Unit : KRW)

	FY 2022	FY 2021	FY 2020
Other comprehensive income, net of tax, gains (losses) on remeasurements of defined benefit plans	2,837,999,864	1,488,765,443	947,574,593
Profit and loss on valuation of available-for-sale financial assets	(261,654,984)	(35,037,153)	132,014,840
Gains and loss on Disposition of Available-for-Sale Financial Assets	(7,622,560)	0	0
Other comprehensive income that will be reclassified to profit or loss, net of tax	653,407,640	908,273,638	885,703,860
Gains (losses) on exchange differences on translation, net of tax	637,495,808	532,419,908	900,048,625
Share of other comprehensive income of associates and joint ventures accounted for using equity method that will be reclassified to profit or loss, net of tax	15,911,832	375,853,730	(14,344,765)
Total comprehensive income	(13,515,708,503)	16,497,544,034	(76,952,875,476)
Profit (loss), attributable to			
Profit (loss), attributable to owners of parent	(3,031,937,069)	2,707,505,745	(36,987,172,751)
Profit (loss), attributable to non-controlling interests	(14,004,595,211)	7,086,115,330	(41,930,996,018)
Comprehensive income attributable to			
Comprehensive income, attributable to owners of parent	1,955,334,329	7,197,817,755	(35,447,366,118)
Comprehensive income, attributable to non-controlling interests	(15,471,042,832)	9,299,726,279	(41,505,509,358)
Earnings per share			
Basic earnings (loss) per share (Unit : KRW)	(137)	122	(1,672)
Basic earnings (loss) per share from continuing operations (Unit : KRW)	290	606	(1,487)
Basic earnings (loss) per share from discontinued operations (Unit : KRW)	(427)	(484)	(185)
Diluted earnings (loss) per share (Unit : KRW)	(137)	122	(1,672)
Diluted earnings (loss) per share from continuing operations (Unit : KRW)	290	606	(1,487)
Diluted earnings (loss) per share from discontinued operations (Unit : KRW)	(427)	(484)	(185)

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations

< 38 >





Sustainable Management Data

Environmental Data

		Environmental Engineering						Environmental Service		Circular Economy		Office Environment	Total		
		Unit	KC Cottrell	KC Safety & Technologies	KC Cottrell Vietnam	Lodge Cottrell	Nol-Tec Systems	NWL-Pacific	KC Enviro Services	KC Landfill Service	KC Glass & Materials	KC Green Materials	Clestra Hauserman	Total	
Materials	Non-renewable materials used	Ton	9,840	-	-	50	-	-	-	-	7,296	-	-	17,186	
	Renewable materials used	Ton	-	-	-	200	-	-	-	-	45,586	51,326	-	97,112	
Energy	Fossil fuel	Gasoline	TJ	1	-	-	0.4	-	0.1	68	-	-	-	69	
		Diesel	TJ	0.2	-	-	0.2	-	0.0	383	-	1	-	385	
		LNG	TJ	-	-	-	-	1	-	110	-	40	-	7	158
		LPG	TJ	-	-	-	-	-	-	-	-	191	-	-	191
	Renewable	Wind	TJ	-	-	0.0	-	-	-	-	-	-	-	0.0	
	Biomass	TJ	-	-	0.0	-	-	-	-	-	-	-	0.0		
	Electricity	TJ	13	30	0.2	-	1	1	288	6	294	1	2	635	
Reduction of energy consumption	conversion and retrofitting of equipment	TJ	-	-	-	-	-	0.1	-	-	-	-	-	0.1	
Water	Water withdrawal	Surface water	Ton	-	-	-	-	-	-	8,844	-	-	-	8,844	
		Ground water	Ton	1,743	-	-	-	-	-	-	-	69,711	-	-	71,454
	Produced water	Ton	-	-	-	-	-	-	385,665	-	23,155	-	-	408,820	
	Third-party water	Ton	-	769	-	486	-	-	353,966	1,510	-	555	2,686	359,972	
	Water discharge	Ton	-	-	-	390	-	-	58,956	-	16,387	-	-	75,733	

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations

< 39 >





Environmental Data

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations

		Unit	Environmental Engineering					Environmental Service		Circular Economy		Office Environment	Total	
			KC Cottrell	KC Safety & Technologies	KC Cottrell Vietnam	Lodge Cottrell	Nol-Tec Systems	NWL-Pacific	KC Enviro Services	KC Landfill Service	KC Glass & Materials	KC Green Materials		Clestra Hauserman
GHG emissions	Direct GHG emissions (Scope 1)	tCO ₂ eq	-	-	-	64	-	-	237,345	-	18,877	-	354	256,640
	Indirect GHG emissions (Scope 2)	tCO ₂ eq	-	-	-	22	-	-	15,504	-	14,051	-	257	29,834
Air pollutant emissions	NOx	Ton	-	-	-	3.2	-	-	79.1	-	20.0	-	-	102.3
	SOx	Ton	-	-	-	-	-	-	18.3	-	45.0	-	-	63.3
	PM(dust)	Ton	-	-	-	3.4	-	-	9.2	-	2.0	-	0.0	14.6
Waste	Recycling	Non-hazardous	Ton	-	-	-	-	-	17,193	-	26	-	-	17,219
		Hazardous	Ton	-	-	-	-	-	-	-	-	-	14	14
	Energy recovery	Non-hazardous	Ton	-	-	-	10	-	-	-	-	-	-	10
Composting	Non-hazardous	Ton	-	-	-	2	-	-	68,018	-	-	-	-	68,020
		Ton	-	-	-	-	-	-	-	-	27	-	15	42
	Hazardous	Ton	-	-	-	-	-	-	31,369	173	173	-	-	31,715
		ℓ							60,000					60,000
	Hazardous	Ton	-	-	-	-	-	-	-	100	-	-	-	100
Other	Non-hazardous ¹⁾	Ton	-	-	-	-	-	-	20	-	-	-	-	20

¹⁾ Non-hazardous waste is generated by KC EnviroServices as industrial by-products. These by-products are sent to intermediate processing facilities for stabilization, and their final treatment method, either landfilling or recycling, is determined by the intermediate processing company's assessment.





Social Data

			HOLDING		Environmental Engineering					Environmental Service		Circular Economy		Office Environment	Energy	Total	
			KC Green Holdings	KC Cottrell	KC Safety & Technologies	Changchun KC Envirotech	KC Cottrell Vietnam	Lodge Cottrell	NoI-Tec Systems	NWL-Pacific	KC Enviro Services	KC Landfill Service	KC Glass & Materials	KC Green Materials	Clestra Hauserman	KC Solar & energy	Total
Total no. of employees	By gender	Female	5	44	7	13	4	3	10	4	15	0	19	3	8	5	140
		Male	19	231	117	24	12	26	57	21	229	6	95	31	56	19	943
Total			24	275	124	37	16	29	67	25	244	6	114	34	64	24	1083
By age group	Under 30 years old		3	30	23	1	1	3	11	2	29	1	9	4	8	3	128
		30-50 years old	15	150	75	30	15	9	19	19	141	2	46	17	32	18	588
		over 50 years old	6	95	26	6	0	17	37	4	74	3	59	13	24	3	367
Total			24	275	124	37	16	29	67	25	244	6	114	34	64	24	1083
Total no. of new employees	By gender	Female	1	9	4	0	0	0	1	1	4	0	7	0		2	29
		Male	3	19	29	0	1	1	11	1	66	0	13	3	3	11	161
Total			4	28	33	0	1	1	12	2	70	0	20	3	3	13	190
By age group	Under 30 years old		1	12	12	0	0	1	5	1	13	0	3	2	2	1	53
		30-50 years old	3	8	17	0	1	0	3	1	32	0	14	0	1	9	89
		Over 50 years old	0	8	4	0	0	0	4	0	25	0	3	1		3	48
Total			4	28	33	0	1	1	12	2	70	0	20	3	3	13	190

Total no. of employees by country	South Korea	China	Vietnam	UK	USA	Total
	934	37	16	29	67	1083

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations

< 41 >





Social Data

		HOLDING		Environmental Engineering							Environmental Service		Circular Economy		Office Environment	Energy	Total
		KC Green Holdings	KC Cottrell	KC Safety & Technologies	Changchun KC Envirotech	KC Cottrell Vietnam	Lodge Cottrell	NoI-Tec Systems	NWL-Pacific	KC Enviro Services	KC Landfill Service	KC Glass & Materials	KC Green Materials	Clestra Hauserman	KC Solar & energy		
Total no. of employees turnover	By gender	Female	3	7	3	1	0	0	1	0	3	0	7	0	1	4	30
		Male	1	37	22	9	1	4	1	2	68	1	14	6	6	4	176
Parental leave - Total no. of employees ¹⁾	Entitled to	Female	0	2	0					2	0	0	0	0	0	3	7
		Male	0	1	24					4	0	0	0	0	0	2	31
	Took	Female	0	2	0					1	0	0	0	0	0	1	4
		Male	0	1	5					0	0	0	0	0	0	0	6
	Returned to work	Female	0	1	0					0	0	0	0	0	0	1	2
		Male	0	0	5					0	0	0	0	0	0	0	5
	Still employed after return	Female	0	2	0					1	0	0	0	0	0	2	5
		Male	0	1	5					0	0	0	0	0	0	2	8
Average hours of training per employees	Female	26	16	18.1	1	1	2	33	38	38.18	0	52.6	57	26.5	28.4	-	
	Male	11	16	30.5	1	1	1	28	38	11.41	15	27.4	49	20.9	29.5	-	
Compulsory education ²⁾	Sexual harassment prevention	Y	Y	Y	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	Y	-
	Private information security	Y	Y	Y	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	Y	-
	Industrial safety	N/A	Y	Y	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	Y	-
	Retirement pension	Y	Y	Y	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	Y	-

1) The overseas subsidiaries, which have different standards for parental leave, have been excluded from the data concerning parental leave.

2) The overseas subsidiaries with different training and performance management systems from Korea were excluded from the relevant data.

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations





THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations

Social Data

	HOLDING	Environmental Engineering							Environmental Service		Circular Economy		Office Environment	Energy	Total
		KC Green Holdings	KC Cottrell	KC Safety & Technologies	Changchun KC Envirotech	KC Cottrell Vietnam	Lodge Cottrell	NoI-Tec Systems	NWL-Pacific	KC Enviro Services	KC Landfill Service	KC Glass & Materials	KC Green Materials	Clestra Hauserman	
Employees receiving regular performance and career development reviews ¹⁾	Female	5	0	0				4	15	0	0	1	0	5	30
	Male	10	0	0				21	229	0	0	5	0	13	278

¹⁾ The overseas subsidiaries with different training and performance management systems from Korea were excluded from the relevant data.

Economic Data

	HOLDING	Environmental Engineering							Environmental Service		Circular Economy		Office Environment	Energy	Total
		KC Green Holdings	KC Cottrell	KC Safety & Technologies	Changchun KC Envirotech	KC Cottrell Vietnam	Lodge Cottrell	NoI-Tec Systems	NWL-Pacific	KC Enviro Services	KC Landfill Service	KC Glass & Materials	KC Green Materials	Clestra Hauserman	
Retirement plans		DB	DB+DC	DC				DB	DB	DB	DB+DC	DB+DC	DB+DC	DB	-





GRI Content index

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management
Data

GRI Content index

External Assurance

Affiliated Associations

Topic	Standard	Indicators	Pages
General Disclosure	2-1	Organizational details	10
	2-2	Entities included in the organization's sustainability reporting	2
	2-3	Reporting period, frequency and contact point	2
	2-4	Restatements of information	None
Financial Information	2-5	External assurance	47-48
	2-6	Activities, value chain and other business relationships	29
Sustainable Management Data	2-7	Employees	41-42
	2-9	Governance structure and composition	11
External Assurance	2-10	Nomination and selection of the highest governance body	11
	2-11	Chair of the highest governance body	11
Affiliated Associations	2-12	Role of highest governance body in overseeing the management of impacts	11
	2-14	Role of the highest governance body in sustainability reporting	16
	2-19	Remuneration policies	11
	2-20	Process for determine remuneration	11
	2-21	Annual total compensation ratio	11
	2-22	Statement on sustainable development strategy	9
	2-27	Compliance with laws and regulations	22, 27, 28
GRI Content index	2-28	Membership associations	49
	2-29	Approach to stakeholder engagement	13





THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations

< 45 >



Topic	Standard	Indicators	Pages
Material Topics	3-1	Process to determine material topics	14-16
	3-2	List of material topics	14-16
Economic Performance	201-1	Direct economic value generated and distributed	18
	201-2	Financial implications and other risks and opportunities due to climate change	23
	201-3	Defined benefit plan obligations and other retirement plans	43
	201-4	Financial assistance received from government	19
Indirect Economic Impacts	203-2	Significant indirect economic impacts	18
Materials	301-1	Materials used by weight or volume	21, 39
	301-2	Recycled input materials used	21, 39
	301-3	Reclaimed products and their packaging materials	ND
Energy	302-1	Energy consumption within the organization	21, 39
	302-4	Reduction of energy consumption	39
Water and Effluents	303-3	Water withdrawal	21, 39
	303-4	Water discharge	21, 39
	303-5	Water consumption	21, 39
Emissions	305-1	Direct (Scope 1) GHG emissions	21, 39
	305-2	Energy indirect (Scope 2) GHG emissions	21, 39
	305-3	Other indirect (Scope 3) GHG emissions	ND
	305-4	GHG emissions intensity	ND
	305-5	Reduction of GHG emissions	ND
	305-6	Emissions of ozone-depleting substances (ODS)	ND
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	21, 39



THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations

< 46 >



Topic	Standard	Indicators	Pages
Waste	306-1	Waste generation and significant waste-related impacts	22
	306-4	Waste diverted from disposal	40
Employment	401-1	New employee hires and employee turnover	41
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	ND
	401-3	Parental leave	42
Occupational Health and Safety	403-1	Occupational health and safety management system	26-27
	403-2	Hazard identification, risk assessment, and incident investigation	26-27
	403-3	Occupational health services	ND
	403-4	Worker participation, consultation, and communication on occupational health and safety	27
	403-5	Worker training on occupational health and safety	42
	403-6	Promotion of worker health	ND
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	26-27
	403-8	Workers covered by an occupational health and safety management system	26-27
	403-9	Work-related injuries	27
	403-10	Work-related ill health	ND
Training and Education	404-1	Average hours of training per year per employee	42
	404-2	Programs for upgrading employee skills and transition assistance programs	ND
	404-3	Percentage of employees receiving regular performance and career development reviews	43
Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	25, 41
Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories	N/A
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	28



External Assurance

Independent Assurance Statement

To readers of KC GreenHoldings Sustainability Report 2023

Introduction

Korea Management Registrar (KMR) was commissioned by KC GreenHoldings to conduct an independent assurance of its Sustainability Report 2023 (the "Report"). The preparation of the Report is the sole responsibility of the management of KC GreenHoldings. KMR's responsibility is to issue an assurance statement over the limited scope of data and information specified below.

Scope and Standards

KC GreenHoldings described its sustainability performance and activities in the Report. Our Assurance Team carried out an assurance engagement in accordance with the assurance standard SRV100 of KMR's Global Management Committee to provide a limited assurance. We evaluated the adherence to the principles of materiality and understandability and the reliability of the information and data provided using the Global Reporting Initiative (GRI) Index specified below

Confirmation that the Report was prepared in accordance with the GRI standards 2021 was included in the scope of the assurance. We have reviewed the disclosures below for the confirmation.

- GRI Standards Reporting Principles
- Universal Standards
- Topic Specific Standards
 - GRI 201 : Economic Performance
 - GRI 301 : Materials
 - GRI 305 : Emissions
 - GRI 401 : Employment

- GRI 403 : Occupational Health and Safety
- GRI 404 : Training and Education
- GRI 416 : Customer Health and Safety

As for the reporting boundary, the engagement excludes the data and information of KC GreenHoldings' partners, suppliers and any third parties.

KMR's approach

To perform an assurance engagement within an agreed scope of assessment using the standards outlined above, our Assurance Team undertook the following activities as part of the assurance engagement:

- Reviewing the overall Report;
- Reviewing the procedure and methods of materiality assessment;
- Reviewing the strategies and objectives of sustainable management;
- Reviewing the activities engaging stakeholders; and
- Interviewing people in charge of preparing the Report.

Conclusion and Opinion

Based on the document reviews and interviews, we had several discussions with KC GreenHoldings on the revision of the Report. We reviewed the Report's final version in order to make sure that our recommendations for improvement and revision have been reflected. Based on the work performed, nothing has come to our attention to suggest that the Report was not prepared in accordance with the principles described below. We did not find any evidence that the data included in the scope defined above is not properly described.

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations





THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations

< 48 >



- Materiality
- The reporting boundaries of the KC GreenHoldings' Report include all of its operating sites. The Report provides detailed long-term sustainability strategies and targets. KC GreenHoldings relies on its own materiality assessment process to decide the materiality of issues identified by stakeholder communication channels. We could not find any material issue or stakeholder group that was not covered in the process.

- Understandability
- The Report was prepared in the context of sustainability to provide targets for sustainability issues identified by the materiality assessment and the background of the selection and the management approach. It is our opinion that the metrics are specific and easy to compare.

- Reliability
- The Assurance Team identified errors in the data and information provided, which KC GreenHoldings subsequently corrected before issuing the final version of the Report. We believe the data and information included in the Report are accurate and reliable. Nothing has come to our attention to imply that the Report does not provide a fair representation of KC GreenHoldings' responses to material stakeholder issues.

We did not find any evidence to suggest that the Report was not prepared in accordance with the GRI standards 2021.

Recommendations

We expect that the KC GreenHoldings' Report can be utilized as a means of communications with stakeholders. The following recommendations are provided for further improvements:

- KC GreenHoldings transparently disclosed both financial and non-financial performance and prepared the report in an easy-to-understand format for its stakeholders. It also provided the year-on-year changes of material topics and ESG data by affiliate. We recommend that to the extent possible, the company include in the report three-year data for all quantitative performances to improve comparability.

Independence

KMR has no other contract with KC GreenHoldings and did not provide any services to KC GreenHoldings that could compromise the independence of our work.

August 2nd, 2023

CEO *E. J. Huang*



SRV1000
Sustainability Committee Assurance



Affiliated associations

THINK THE GREEN

OVERVIEW

SUSTAINABLE KC

APPENDIX

Financial Information

Sustainable Management Data

GRI Content index

External Assurance

Affiliated Associations

< 49 >



KC GreenHoldings	Korea International Trade Association, Korea Association for Chief Financial Officers, Seoul Chamber of Commerce and Industry, Korea Listed Companies Association, National Academy of Engineering of Korea, Korean Academy of Environmental Science
KC Cottrell	The Korea Chamber of Commerce and Industry, Environment and Climate Committee, Construction Association of Korea, Korea Mech. Const. Contractors Association, Korea Electric Association, Korea Electric Engineers Association, Korea Construction Engineers Association, Korea Association of Machinery Industry, Korea International Trade Association, Korea Fire Facility Association, Korean Council on Systems Engineering, Korea Engineering & Consulting Association, Korea Electrical Contractors Association, Federation of Middle Market Enterprises of Korea, Korea Plant Industries Association, Korea Environmental Industry Association, International Contractors Association of Korea, Korea Environmental Preservation Association, Hyundai E&C H-Leaders, Hyundai Steel ECO Partnership, SK Ecoplant ECO Partners
KC Safety & Technologies	Special Facility Inspection Agency Association , Korea Gas Inspection Association, Association of Professional Inspection Agencies, Korea Mech. Const. Contractors Association, Korea Engineering & Consulting Association, Gwangyang Chamber of Commerce and Industry
Lodge Cottrell	SUSTAINABILITY WEST MIDLANDS
NOL-Tec Systems	WPCA
KC EnviroServices	Yeosu Industry Environment Association, Korea Resource Recycling Energy Mutual Aid Association, Yeosu Industrial Complex Management Council , Korea Specialty Contractor Financial Cooperative, Construction Association of Korea , Yeosu Chamber of Commerce and Industry, Yeosu Industrial Complex Plant Managers Council , Korea Resource Recycling Energy Mutual Aid Association, Korea Industrial Water Treatment Association, Association of Enterprises in MFTZ, Changwon Chamber of Commerce and Industry, Gyeongnam Environmental Engineers Association, Korea Fire Safety Association, Korea Electric Engineers Association, Korea Heat Energy Engineers Association, Community Chest of Korea, Jeonbuk Environmental Preservation Association, Jeonbuk Environmental Engineers Association, Korea Resource Recycling Energy Mutual Aid Association, Korea Electric Engineers Association, Korea Heat Energy Engineers Association, Jeonju Chamber of Commerce and Industry, Jeonju Wanju Industrial Complex Fire Safety Council, National Forestry Cooperative Federation, Korea Construction Equipment Association
Clestra Hauserman	Chamber of Commerce and Industry, Korea International Trade Association, Korea Specialty Contractors Association, Korea Specialty Contractor Financial Cooperative
KC Glass & Materials	North Chungnam Chamber of Commerce and Industry, Korean Red Cross, Korea International Trade Association, Korea Industrial Safety Association, Korea Environmental Preservation Association, Korea Fire Safety Institute, Korea Electric Engineers Association, Korean Autonomous Weapons Systems Association , Korea Industrial Technology Association, Korea Institute of Ceramic Engineering and Technology, Korea Core Industrial Technology Investment Association, Korea Glass Industry Cooperative, KOTRA, buyKorea
KC GreenMaterials	Korea Power Plant Byproduct Recycling Association
KC Solar&Energy	KOPIA, Korea Electrical Contractors Association, Korea New and Renewable Energy Association, International Contractors Association of Korea

