



2022 Sustainability Report

DIGITAL LIFE SIMPLY CONNECTED



About this report

Report Overview

KAON Group published its first sustainability report to share our economic, social, and environmental performance with various stakeholders. In this report, KAON Group includes KAONMEDIA and its major subsidiary, KAON BROADBAND, as a whole. KAON Group plans to publish the report biennially.

Scope of Report and Reporting Period

The report presents performance highlights by domestic offices (headquarters) of KAONMEDIA and KAON BROADBAND between January and December 2021. The quantitative performance of KAONMEDIA was based on three-year data from 2019 and 2021, while KAON BROADBAND's referred to two-year data from 2020 and 2021, which is after the establishment, to help viewers identify the latest developments. However, KAON Group included 2022 activities as part of essential data.

Report-Making Guidelines

The report was written in conformity with the Core Options in the Global Reporting Initiative (GRI) Standards, an international standard for sustainability reporting. The financial data used in the report uses standards and definitions according to the Korean International Financial Reporting Standards (K-IFRS).

Report Verification

For the purpose of reliability of the data used in this report, we passed a verification process conducted by the Korea Management Registrar (KMR) based on the four major principles of the AA1000 Assurance Standard (AA1000 AS v3) of inclusivity, materiality, responsiveness, and impact.



Cover Story

The geometric pattern on the cover represents KAON Group's sustainability activities and accomplishments, as well as communication with its stakeholders across economic, social, and environmental sectors that are forging ahead into the future.

Other Information

This report was published as an interactive PDF that includes features such as go to links to desired pages of the report or relevant websites.

For Inquires

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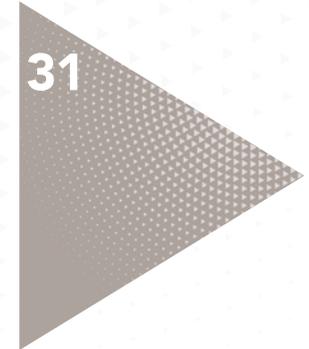
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CONTENTS



CORPORATE OVERVIEW

SOCIAL

ENVIRONMENTAL, SAFETY & HEALTH

GOVERNANCE

APPENDIX

CEO Message

04

Overview of KAON

06

Customers

15

Environment

23

Ethical Management

29

Stakeholder Participation

32

Company History

10

Our People

17

Safety & Health

26

Corporate Governance

30

Materiality Assessment

33

Global Network

11

Partners

20

Research & Development

12

Local Communities

21

Business Performance

13

Interactive PDF

This report was published as an interactive PDF that includes features such as go to links to desired pages of the report or relevant websites.

Navigator Button



CEO MESSAGE

Dear Valued Stakeholder,

I would like to take the opportunity with the group's first sustainability report to express my sincere gratitude to you on behalf of KAON Group.

We connect people and link them to the world.

KAON Group is a global corporation that supplies AI solutions, OTT media services, network devices and integrated solutions around the world. KAON Group has grown into a leading digital service provider and manufacturer, driven by its commitment to create new corporate value since 2001.

We are gearing up for sustainable growth.

The pillar of corporate value assessment is shifting from financial to non-financial factors such as the environment, social, and governance. These days, sustainability has become an imperative responsibility of all companies worldwide.

KAON Group is duly taking on our roles to examine our environmental and social impact and make the right improvements. We support the Ten Principles of UN Global Compact (UNGC) in the area of human rights, labor, the environment, and anti-corruption in compliance with international rules, while pursuing the sustainable development of the Group.

We have put in place our company-wide environmental management system to immediately adapt to environmental regulations, and continuously manage our manufacturing lines for low-carbon production. In addition, the management acts in earnest to achieve our social responsibilities by managing the Group to prioritize mutual growth with our partners and vendors through systematic cooperation.

KAON Group will stay dedicated to create a sustainable society through transparent communication with our customer and stakeholders. Thank you for your unwavering interest and support in KAON Group in our progress towards building the sustainable society.

Sincerely yours,

Dong-Yeon Lim
Chief Executive Officer
KAONMEDIA



CORPORATE OVERVIEW

KAON Group is committed to becoming a global leader that does not cease to rise to new challenges and innovate further based on our core technologies.



Overview of KAON



Meet KAONMEDIA

KAONMEDIA is a company that specializes in total AI solutions founded in 2001. Its business is centered around the production and sale of AI solutions, OTT¹⁾ media service, network devices and integrated solutions targeting both global and domestic broadcasting and communication service providers. KAONMEDIA holds the largest number of conditional access system (CAS) licenses, a technology barometer of OTT solution companies. It delivers a differentiated convergence service of digital broadcasting and communication by acquiring a leading middleware platform. Building on these technological capabilities, KAONMEDIA has built a full lineup of OTT solutions in the shortest period of time in the sector, charting the way forward for global leadership with its home gateway products. Based on internal AI and 5G technologies, KAONMEDIA is expanding its business to include eXtended Reality (XR). To that end, it has launched K-FutureTech, a subsidiary that completed development of next-generation XR Glasses, in 2021 to quickly secure competitiveness in the field.

1) OTT (over-the-top): An over-the-top media service refers to any streaming service that delivers content over the internet, such as TV shows, movies, and educational shows.

Company Profile

* As of end of March 2022

Company name	KAONMEDIA Co., Ltd.
CEO	Dong-Yeon Lim
Founded date	May 11, 2001
Listed on (KOSDAQ)	July 12, 2005
Headquarters	KAONMEDIA Building, 884-3, Seongnam-daero, Bundang-gu, Seongnam-si, Gyeonggi-do, 13517, Republic of Korea
Industry	Broadcast terminal equipment and AI/OTT devices & solutions
Revenues	KRW 533,119,000,000 (as of end of 2021)
Operating profit	KRW 28,381,000,000 (as of end of 2021)
No. of employees	298
Subsidiaries	Ten subsidiaries, including KAON BROADBAND and K-FutureTech

VISION

KAONMEDIA seeks to catapult itself as a global leader in OTT platform services by reinventing our corporate values in a fast-changing environment, led by the industry's best AI OTT solutions.

CORE VALUES



Know-how

As a professional in my field, I make decisions carefully & timely and stay apprised of matters.

Achievement

Once I begin a task, I complete it with a professional and positive mindset.

Ongoing Innovation

I drive change and pursue more ingenious ways to perform tasks.

Network

I communicate and cooperate proactively to double the value of the corporate.

Our Products and Services

KAONMEDIA is opening up a vast new horizon of a smart home network by applying AI technology in our daily lives through various products from KT GIGA Genie released in 2017 to Kakao AI Speaker as the first in the world to develop an AI device that combines IPTV and AI.



OTT device/middleware/management solutions

- Different OTT devices tailored to broadcasting & communications services offered by varying operators;
- End-to-end solutions from hardware to maintenance;
- Solutions aimed at improving quality of service.

AI-powered smart home platform

- Voice-activated home IoT platform technology;
- Offers entertainment such as linear TV & VODs;
- Home network management & customer care solutions.

Growth Strategy

KAONMEDIA is constantly upgrading its AI solutions and expanding its role as a multi-platform for homes in partnership with global content providers like Netflix, Disney+ and Amazon Prime. In parallel, KAONMEDIA is expanding its reach in the global market based on a major supply contract for AI devices with the largest telecommunications operator in the Middle East and African region in 2021.

AI device innovations (upgrade)



Capability to develop the newest AI solutions

- Non-stop innovations in OTT devices based on a successful track record of developing the world's first AI driven OTT device;
- Gained 85% market share in AI device market with KT GIGA Genie & SK NUGU backed by KAON's superior technology.

Targeting the global AI device market



Commercialization technology /know-how in Korea

- Entered the Middle East market with advanced technology & know-how gained by commercializing over 4 million AI devices in Korea;
- Expanding its global presence full scale through an international distribution network.

AI Platform

Enlarged role of the multi-platform

- More collaboration with global content providers (i.e. Netflix, Disney+ & Amazon Prime);
- Augmented role as a multi-platform in homes by enhancing the connected home feature.

AI Platform

- Building an advanced KAON AI Hub;
- Setting up a KAON Ecosystem with solutions that integrate with not only the KAON Group but also third party products.

Engaging major export deals

- Entered an AI device supply contract with the largest telecom company in the Middle East & African region in March 2021.

Expansion of global business

- Leveraging a network of 150 broadcasting & communications operators in 90 countries;
- Expanding the global market presence of KAON AI devices.

Accelerate entry into the global market

KAON BROADBAND

Introduction to KAON BROADBAND

KAON BROADBAND is a network solutions provider founded in July 2020, and provides the complete suite of Broadband CPE¹⁾ products that consist of AP routers²⁾, Wi-Fi repeaters³⁾, DOCSIS gateways⁴⁾, PON⁵⁾ and xDSL⁶⁾. It is a total solutions provider enabling users to effectively build and manage their network environment through its proprietary KRMS⁷⁾, a remote network management solution, and QUANTUM⁸⁾, an open standard platform, both of which are developed internally.

1) CPE (Customer premise equipment): Customer's home network device;

2) AP router (Access point router): A device that wirelessly sends ethernet connection;

3) Wi-Fi repeater: A communications device that transfers signals to areas with slow Wi-Fi connection and expands the wireless network coverage;

4) DOCSIS Gateway (Data over cable service interface specification): A communications device that follows a network standard using coaxial cables;

5) PON (Passive optical network): A communications device that follows a network standard using fiber-optic cables;

6) xDSL (Digital subscriber line): A communications device using data communications technology through copper telephone lines;

7) KRMS (Kaon Remote Management Solution): A defect monitoring and remote management solution for the entire network's devices from the vendor's server;

8) QUANTUM: An open-source operating platform solution that can be used on all network devices.

Company Profile

* As of end of March 2022

Company name	KAON BROADBAND Co., Ltd
CEO	Dae-Seok Jeon
Founded date	July 2020
Headquarters	KAONMEDIA Building, 884-3, Seongnam-daero, Bundang-gu, Seongnam-si, Gyeonggi-do, 13517, Republic of Korea
Industry	Network equipment and service solutions
Revenues	KRW 213,656,000,000 (as of end of 2021)
Operating profit	KRW 20,379,000,000 (as of end of 2021)
No. of employees	146

Our Products and Services

KAON BROADBAND is driving innovation in high-speed, high-quality network services with KAON Remote Management Solution (KRMS), a cloud-based remote network management solution, QUANTUM, an open standards platform connecting customers and consumers to businesses and services of their choice, and 5G hybrid gateways, a converged network service, thereby delivering different CPEs (customer's home devices, including xDSL, DOCSIS, PON, FWA, & AP routers) suitable for the global network environment.



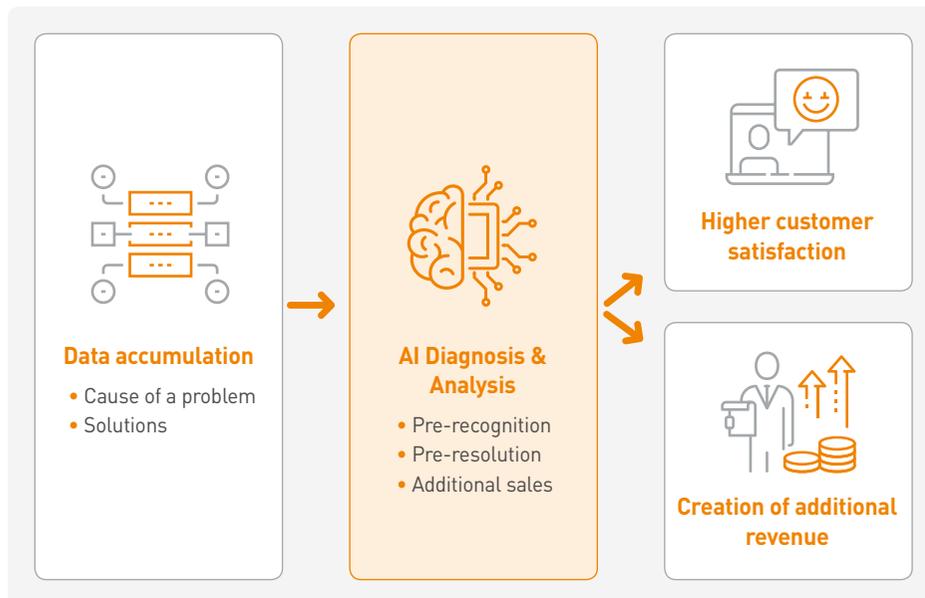
Gateways/service platforms/solutions

- Develops and supplies next-generation wired and wireless networks for connected homes;
- An open standards platform following unified standards;
- Remote network management;
- 5G convergence service (from 5G+WAN to Wi-Fi gateways)

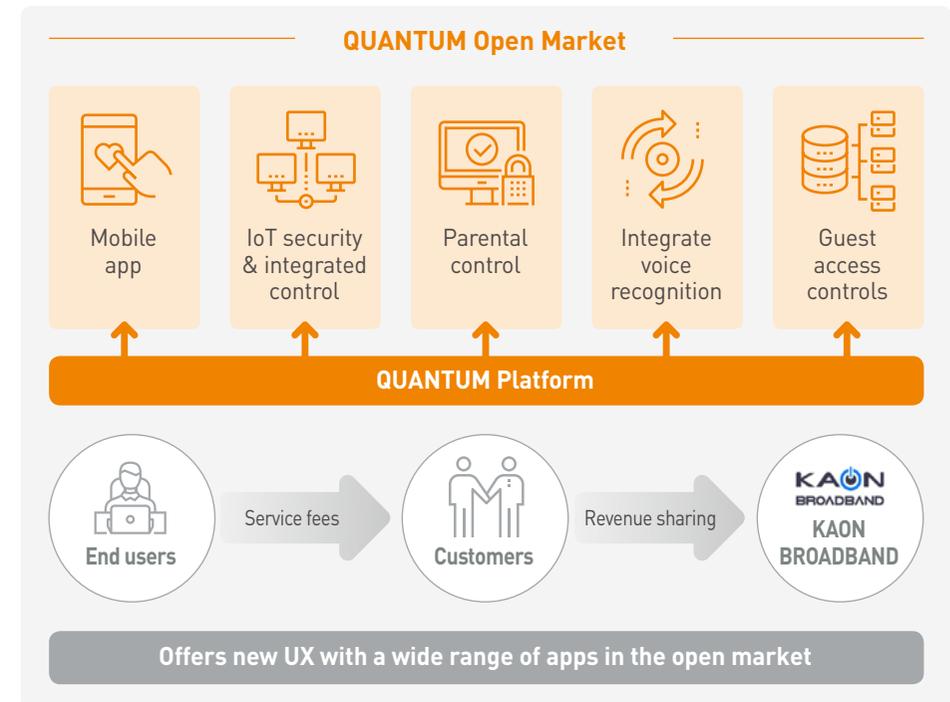
Growth Strategy

KAON BROADBAND is a leading business at the digital forefront by launching a new subscription-based business built on its AI technology and platform.

Application of KRMS-AI Technology



Development of QUANTUM-Network Open Market



Company History



Broadcasting Communications 2001~2012

Expansion of global and domestic market shares

- **2001**
KAONMEDIA Co., Ltd. established
- **2005**
Listed on (KOSDAQ)
- **2010**
Released the industry's first Android Set-top Box
- **2012**
Selected as a provider for SKBB, KT (Skylife) IPTV/Hybrid

AI, Network 2013~2019

Leading broadcasting communications and network market through the next generation technology

- **2014**
Launched the industry's first 4K IPTV
- **2016**
Won the Best Consumer Centric Wireless Service Innovation by KT Olleh TV air (4K Video Bridge)
- **2017**
Released the industry's first AI device (KT); Expanded portions in the domestic IPTV market (supplied to KT, SK, and LG)
- **2018**
Launched the industry's first Android TV Oreo version
- **2019**
Obtained Wi-Fi 6 and EasyMesh™ certifications from the Wi-Fi Alliance; Won a government project for development of 5G convergence devices

Solutions, Platforms, and XR 2020~

Establishment of three future business fields

- **2020**
KAON BROADBAND Co., Ltd. established
- **2021**
(KAON MEDIA)
 - First overseas export of the AI solution (Middle East)
 - Supplied OTT devices with Disney+ to LGU+
- **(KAON BROADBAND)**
 - Launched KRMS 3.0 & Quantum Platform
 - Won the government digital New Deal project 'Establishment of Public Wi-Fi for Schools'
- **(K-FutureTech)**
 - K-FutureTech established
 - Developed 5G XR glasses and supplied to the National Police Agency (National project by the Ministry of Science and ICT)
- **2022**
 - Applied for 'Autonomous Robot Technology' patent

Global Network

In 2007, KAON Group geared up for global expansion in full scale by establishing Overseas offices in Germany, the Middle East and India. Since then, we have delivered digital broadcasting and communications solutions to 150 broadcasting business operators in 90 countries worldwide.

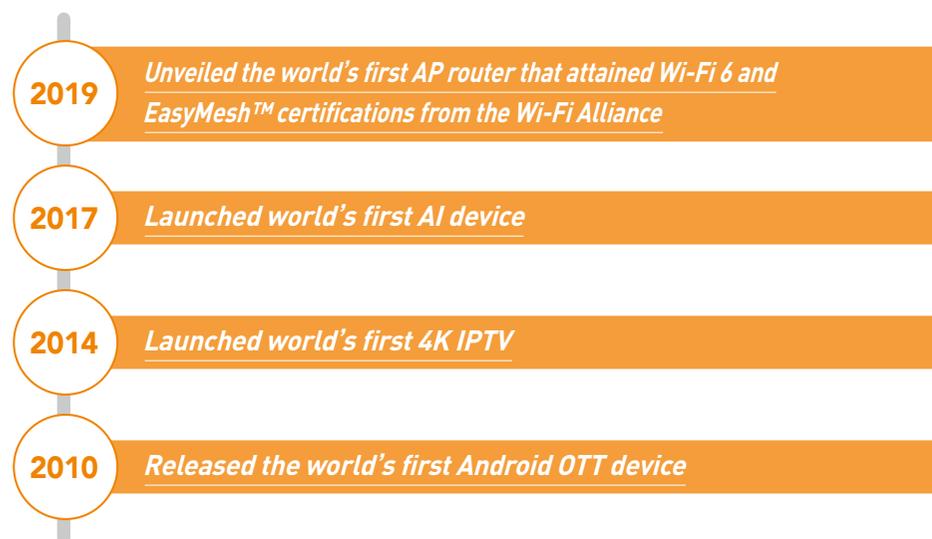


- **Headquarters** : Korea
- **Overseas offices** : Brazil, India, Japan, Mexico, UAE, USA
- **Overseas branches** : Argentina, Australia, Chile, China, Colombia, France, Germany, Guatemala, Malaysia, Singapore, Norway, Portugal, South Africa, Spain, Vietnam
- **R&D Centers** : Korea, USA, Hungary

Research & Development

Due to the fast-changing nature of the media and network market, it is imperative to engage in ongoing R&D, more so than other sectors. Thus, KAON Group has focused its capabilities on R&D activities to a level with more than 61% of all employees working in the R&D division. We have concentrated on developing broadcasting solutions that can receive different services like IPTV, satellite TVs and cable TVs, while establishing an unmatched position in the AI device field with products like KT GIGA Genie. In phase with the constantly evolving network technology, we have invested heavily in advancing communications equipment and solution technologies. As a result, we now boast differentiated technologies and a family of products, including Wi-Fi 6E, 5G hybrid and 10G. Above all, we went beyond simply reflecting market demands and engaged in R&D to unlock new market demands with our breakthrough technologies. As a result, we have rightly earned a reputation for delivering the world's first products and services.

Milestones & Achievements

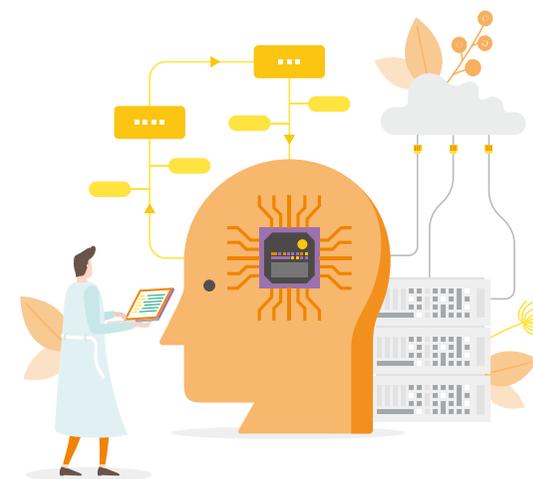


Intellectual Property Rights

KAON Group is filing and registering our domestic and international intellectual property rights (IPRs) related to our business through ceaseless R&D activities. As of end of March 2022, we hold the following rights.

KAON Group's IPR Status

Category	No. of registered IPRs
Patents	75
Trademarks	35
Design rights	14



Business Performance

In 2021, KAONMEDIA reported consolidated sales of KRW 533,119,000,000 and an operating profit of KRW 28,381,000,000. The OTT business accounted for the largest share of net sales at 59.5%, followed by network business at 40.3%, and other businesses at 0.2%. As a global corporation with a vast network of 150 broadcasting and communications business operators in 90 countries worldwide, export accounts for approximately 60% of the total sales.

Business Overview

*As of end of 2021

Business Division	Purpose	Sales Revenue (KRW million)	Ratio (%)
OTT	AI and digital signal reception service	317,352	59.5
Network	Broadband service	214,531	40.3
Others	Others	1,236	0.2
Total		533,119	100.0

Summary of Consolidated Financial Statements

(Unit: KRW million)

Category	End of December 2019	End of December 2020	End of December 2021
Liquid assets	276,600	291,630	341,179
Non-liquid assets	31,030	38,906	42,226
Total assets	307,630	330,536	383,405
Current liabilities	113,294	150,017	199,325
Non-current liabilities	38,423	22,095	1,357
Total liabilities	151,717	172,112	200,682
Paid-in capital	64,479	64,624	68,707
Other assets	(192)	(479)	(1,226)
Retained earnings	93,599	94,934	115,423
Non-controlling interest	(1,973)	(653)	(181)
Total capital	155,913	158,424	182,723

Summary of Consolidated Statement of Comprehensive Income (Unit: KRW million)

Category	2019	2020	2021
Revenues	601,042	483,136	533,119
Sales cost	504,451	413,710	427,934
Gross margin	96,591	69,426	105,184
Selling & administrative expenses	67,499	60,163	76,803
Operating Profits	29,093	9,263	28,381
Financial income	20,313	23,397	20,084
Financial expenses	24,615	29,248	23,351
Other income	674	1,441	5,919
Other expenses	1,940	3,729	5,144
Net income before deducting corporate tax	23,524	1,124	25,889
Corporate tax (income)	(5,727)	(873)	7,083
Current net income	17,798	1,997	18,806
Other comprehensive income	(64)	1,987	(702)
Total comprehensive income	17,733	3,983	18,103

Consolidated Subsidiaries

*As of end of 2021

Company name	Main sales activities	Basis of corporate governance
Kaon Middle East FZE	Sale of OTT media service & network solutions	A subsidiary company (investment)
KAON India PVT Ltd	Sale of OTT media service & network solutions	
KAON Do Brasil Industria Electronica LTDA	Sale of OTT media service & network solutions	
KAON Japan KK.	Sale of OTT media service & network solutions	
KAONMEDIA de Mexico	Sale of OTT media service & network solutions	
Next solutions Inc.	Sale of OTT media service & network solutions	
KNL International B.V.	Sale of OTT media service & network solutions	
KAONMEDIA Singapore Pte. Ltd.	Sale of OTT media service & network solutions	
Mobee-K Co., Ltd.	Development and sale of mobile accessories	
KAON BROADBAND Co., Ltd.	Manufacture of network communications equipment & supply of solutions	
KAON SOLVE Co., Ltd.	Solution development & supply	
New Star KAON CHEIL CARS Co., Ltd.	Financial	
K-FutureTech Co., Ltd.	Software development & supply	

SOCIAL

As a responsible global enterprise engaged in the broadcasting and communications business, KAON Group has its sights set on instating full-scale sustainable management with various stakeholders.



Customers

APPROACH

KAON Group creates customer value with our innovative products and services. In order to deliver the highest customer satisfaction, we emphasize quality stabilization with the aim for 100% satisfaction in product acceptance testing performed by customers. In addition, we make sure to fully abide by and protect their privacy rights.



Quality Management

Quality Management Policy

We offer the finest products and services to customers by achieving customer satisfaction and loyalty with our company-wide activities to proactively improve quality in a constant and systematic way.

Quality Management System

KAON Group manages TL9000 (a global ICT quality management system) and ISO9001 (ISO's quality management system) after obtaining first certification in 2014. TL9000 standard is a quality management system for the entire process in the IT industry and includes design, development, production, establishment and maintenance of IT products and services. We adopt toll processing for most of our products except for a small portion manufactured at our KAON Brazil production plant. Our product quality meets customer demand through inspections of imported components, quality control measures in the production process and during shipment, and reliability tests. We are also undertaking quality assurance activities to prevent defects and guarantee the reliability, safety, and effectiveness of our products. Our products and services meet all stringent quality standards of the EU, our key market. To make this possible, we operate under an optimum system designed to fully meet customer demand through our independent organizations responsible for internal quality assessment, quality supervision, and examination backed by the Group's quality teams.

Customer Communication

KAON Group announces IR and management status and major group events on the company website, and sends out newsletters to our business partners. Every year, we participate in exhibitions in Korea and overseas to gain market insights and meet customers. In October 2021, we exhibited at the Broadband World Forum held in the Netherlands, where we interacted with our customers and partners in Europe. We are actively participating at various global events, while running online and offline booths. This September, we plan to exhibit at the **International Broadcasting Convention (IBC)** for promoting our new video/OTT offerings, interacting with our existing customers, and attracting new customers.



Broadband World Forum 2021



Korea Police World Expo 2021

Customer Satisfaction Survey

KAONMEDIA conducts the customer satisfaction survey every year to listen to the voices of customers and reflect them in our business activities.

Customer Satisfaction Survey

* KAONMEDIA

Year	Target customer	Score (out of 100)	Notes
2019	Millicom	100	Ranked 1st in the SCM Assessment
	KT	98	Won the Grand Supplier Award
2020	Millicom	100	Ranked 1st in the SCM Assessment
	KT	85	Won the Grand Supplier Award
2021	Millicom	100	Ranked 1st in the SCM Assessment
	KT	98	Won the Grand Supplier Award

Privacy

Privacy System

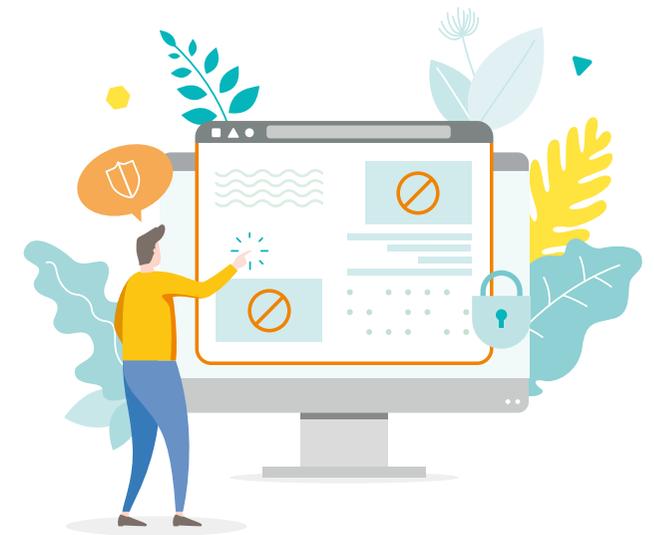
KAON Group has devised and implemented an internal management plan for safely handling personal data according to the internal security policy, and is checking the management status on a regular basis. We examine whether privacy measures have been taken and whether the competent person in charge has met all relevant requirements. If an issue is detected, we immediately take action to resolve it. Personal data of users are protected with a pass code, while being stored and managed by encrypting or locking files and transferred data. In particular, important data are safeguarded using separate means. Programs and databases are maintained in the best condition to ensure normal operations of all information systems with backing up, recording, and managing data periodically. As a result, KAON Group has not experienced any personal data breaches in the past three years.

Privacy Organization

The Data Security Committee is comprised of the chief security officer (CSO/head of the Management Support Division), the security officer (head of the Computation Division), divisional security managers and team security managers. They are carrying out efficient and diligent security duties according to their roles and responsibilities as specified in the internal corporate security policy.

Information Protection Training and Awareness Enhancement

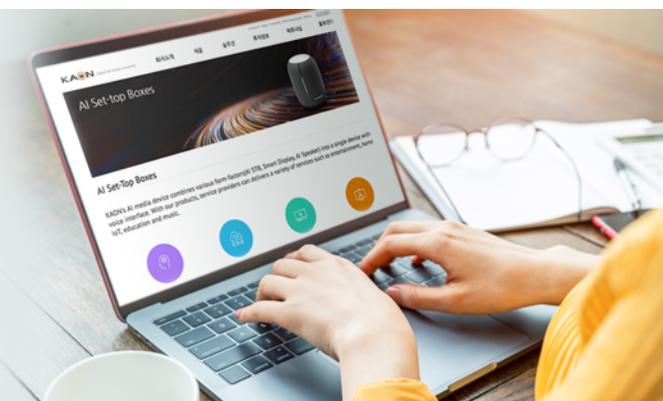
KAON Group conducts online training sessions on privacy for all employees besides intermittent training programs. Privacy training is also offered for security purposes to new hires and employees about to take a leave of absence or retire. During the onboarding or resignation process, employees are asked to sign a non-disclosure agreement (NDA). Full-time outsourced employees at the headquarter office also sign a respective NDA to ensure their awareness of security.



Our People

APPROACH

KAON Group strives to develop top-talent person with expertise and passion in the face of a fast-changing business climate in the global arena, as well as technological innovations, and to diversify customer demands. Accordingly, we are building a systematic training system while promoting a positive, ethical corporate culture.



Employment & Diversity

KAON Group makes earnest efforts to employ a diverse workforce and increasing the ratio of female workers and people with disabilities. Women account for 16% of our entire personnel as of end of 2021, and we comply with the mandatory recruitment policy of hiring those with disabilities.

Workforce Composition

* KAONMEDIA

Category		Unit	2019	2020	2021
Total employees	All employees	persons	385	298	281
By type of employment	Executives		20	27	19
	Permanent workers		340	252	243
	Temporary workers		25	19	19
Ratio of permanent workers	All employees	%	88.3	84.6	86.5
Gender	Male	persons	342	260	237
	Female		43	38	44
By age group	30 years old or under		22	17	26
	30-50 years old	334	250	224	
	50 years old or above	29	31	31	
Management-level (section leader or higher)	Male	persons	100	71	52
	Female		7	4	4
Status of those with disabilities	No. of workers	persons	11	10	7
	Hire ratio	%	2.9	3.4	2.5

Recruitment and Turnover Status

* KAON Group

Category		Unit	2019	2020	2021
New hires	Korea	persons	76	70	149
	Overseas		0	0	0
Turnover status (voluntary)	No. of resigned employees	persons	88	96	87
	Turnover	%	23	32	31
Average retention time in years	Total	year	4.8	4.7	4.1

Employee Competency Development

KAON Group establishes the foundation to train all employees to be highly skilled experts in their fields and learn leadership skills. We are increasing the number and type of training programs such as competency training for multiple roles and leadership training, as well as promoting e-Learning and online training programs.

Training Status

* KAONMEDIA

Category		Unit	2019	2020	2021
Total trainees	Total	persons	375	272	265
Training hours	Total training hours	hours	1,125	1,088	1,060
	Training hours per person	hours/person	3	4	4
Training cost	Total training cost	KRW 1,000	22,670	10,510	12,547
	Training cost per person	KRW 1,000/person	60	39	47

Performance Appraisals and Compensation

KAON Group assesses the performance of R&D groups and other job groups separately by taking into account the different nature of tasks they perform. Notably, we will secure reliability and objectivity of our performance appraisal system in 2022 and introduce a multi-faceted appraisal system to diversify the evaluator group's composition to ensure that employees receive impartial performance assessments and compensation.

Respect for Human Rights

KAON Group has enacted the Human Rights Management Declaration that specifies our human rights management philosophy and principles for all stakeholders such as our customers, employees, and affiliates. The declaration consists of eight items including prohibition of discrimination, voluntary labor, and child labor. It supports international principles on human rights and complies with relevant laws in Korea.

When human rights issues or ethical problems arise, employees are to report the issue to the Cyber Complaint Center on our website. On receipt of a complaint, we take the prescribed measures accordingly.

[▶ Human Rights Management Declaration](#)

[▶ The Cyber Complaint Center](#)

Labor-Management Culture

KAON Group operates the Labor-Management Council to build sound labor-management relations and promote communication between workers and management. The Labor-Management Council holds a regular meeting and an ad hoc meeting every quarter to discuss important agendas such as corporate systems and employee welfare. They also set up the Complaint Handling Committee to handle grievances related to work and personal matters. Employees can get consultation and tackle issues through an internal groupware system.

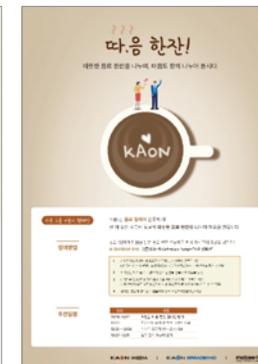
Corporate Culture

Communication and Mutual Respect

To speed up optimal workflow processes and improve efficiency, we instated a single position system where all existing positions are standardized into managers to encourage open, creative communication among employees. In an effort to promote a positive, ethical corporate culture based on mutual respect, we launch various campaigns every quarter.



'Love The Colleague' Campaign



Hot Drink Relay Campaign



KAON employee family events

Flexible Work Hours

KAON Group offers flexible work hours to enable workers to adjust their work hours based on their circumstances and sound judgment. Due to COVID-19, we are further extending staggered work hours and the work from home system to provide a safe and efficient work system for our employees. As for R&D personnel, we offer flexible work hours to boost worker efficiency and productivity to allow for doing work without time and location constraints.

Benefits for Female Employees

KAON Group is making work less stressful for our female employees by reducing or adjusting their work hours during pregnancy. We will increase their usage rate of parental leave and introduce more systems designed with female workers as a priority.

Usage Status of Maternity and Parental Leave

*KAONMEDIA

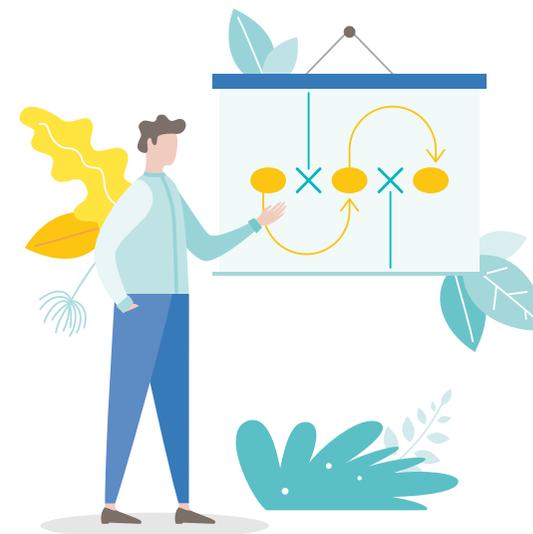
Category		Unit	2019	2020	2021
No. of workers taking maternity leave		persons	1	3	1
No. of workers taking parental leave		persons	2	2	2
No. of workers returning after parental leave	No. of workers working for 1 year and longer	persons	2	1	0
	Ratio of workers working for 1 year and longer	%	100	50	0

Employee Benefits

KAON Group offers a range of employee benefits to support a better work-life balance for employees. Foremost, we provide low interest loans in connection with commercial banks to help employees buy their own homes.

KAON Group Employee Benefits

Major benefits	Notes
Company-sponsored financing	Low interest loans provided in connection with the company's primary bank; Offers housing loans and emergency livelihood loans
Commendations & bereavement	Provides stipends given by employee associations
Workplace social activity clubs	Supports social activity club expenses
Child tuition system	Provides tuition support (kindergarten, high school, college)
Resorts	Accommodations at Daemyung resort hotels across the country
Health checkup	Employee health checkups conducted biannually
Housing	Offers gender-designated housing
Family events	Birthday cake gift certificates (twice a year)



Partners

APPROACH

Recognizing our vendors as our crucial business partners, KAON Group has emphasized a culture of cooperation for mutual development. Based on the philosophy of proper management, we are achieving synergy with our vendors, while fully abiding by fair trade laws and regulations.

Supply Chain Management

KAONMEDIA is working with a total of 20 major vendors (recorded sales of over KRW 2 billion as of 2021), while KAON BROADBAND is partnering with 16 vendors (recorded sales of over KRW 1 billion as of 2021). Main components (raw materials) of our products include main chips, flash memories, SDRAMs, PCBs, and SMPS. They are affected by the business climate in the semiconductor and overall electronics industry. As for essential components, we minimize supply chain disruptions by signing long term deals and diversifying sources.

KAON Group has advanced our supply chain management (SCM) system to ensure we can supply products as requested by customers. We also aim to achieve zero-defective products made during the production.

We operate an optimum production system customized to customer specifications with our world-class manufacturing capabilities in terms of quality, delivery time, and cost. In addition, we have a timely response system based on our mass-production capability and efficient on-time delivery.

Supplier Assessment and Management

KAON Group has developed a code of conduct for sustainable management for our vendors. We check whether vendors have complied with the code of conduct and reflect the result in the assessment. We also included technology development, labor status, environment management, safety, and health items in the vendor assessment.

Fair Trade

KAON Group strictly avoids using unfair trade practices in pursuit of mutual development with our vendors. We select vendors and sign contracts with them transparently and fairly without the occurrence of any cases of fair trade violations in the past three years. To continue our successful track record, we notify the code of ethics and procurement rules to our vendors.



Local Communities

APPROACH

KAON Group is undertaking different social contribution activities to realize the social value of mutual development with local communities. To that end, we are making social contributions through social welfare programs of non-profit organizations in support of our neighbors in need.



Social Contribution Activities in Korea

In 2021, KAON Group joined the **COVID-19 LOVE for Kimchi** project by the Korean Red Cross and delivered 1,400 kg of kimchi to 175 low-income families. We donated 1,000 transparent umbrellas to better prevent traffic or safety accidents among children from low-income families in Incheon and Seongnam through the Child Fund Korea. We also donated laptop computers to support the children for a better education atmosphere. Moreover, we donated air purifiers to Rainbow Hill, a facility for adults with intellectual disabilities, in Seongnam.



Donation of transparent umbrellas

Social Contribution Activities Overseas

KAON Group also undertakes social contribution activities overseas to help the respective countries' low-income groups. We have built schools to offer better educational opportunities to vulnerable children in Southeast Asia and support the clean water program to help them drink clean, healthy water. The program has been put on hold due to the pandemic, but we will resume the program when the situation improves.

Amount of Donations from KAON Group

Category	Unit	2019	2020	2021
Social contribution fund	KRW million	82	65	69



ENVIRONMENTAL, SAFETY & HEALTH

KAON Group is actively managing greenhouse gas emissions, energy use, and the amount of waste discarded to fulfill our responsibility as an eco-friendly company and follow the best environmental and energy management practices. Moreover, we encourage active participation of all employees in our training programs and campaigns to prevent accidents and internalize a culture of safe environment through safety and health controls.



Environment

APPROACH

We follow sustainable management practices and proactively support government projects that tackle climate change issues. At the same time, we are minimizing impact of shifts in energy policies in Korea and Overseas. We enthusiastically respond to environmental regulations and are making constant efforts to improve.



Environmental Management System (EMS)

KAON Group is working hard to examine how our business activities are affecting the environment and make improvements as best as we can. We have a keen interest in environmental initiatives and contribute continuous efforts to support sustainable development. For example, KAON Group has instated a company-wide environmental management system (EMS) to immediately respond to environmental regulations, restrict the use of hazardous materials, and manage our production lines so as to reduce carbon emissions. In addition, we work close with our vendors to seek the path for common prosperity.

KAON Group Environmental Policy

1. We continue to carry out preventive measures and enhance existing ones to reduce the risk of accidents, preserve nature, and protect the ecosystem and environment.
2. We abide by Korean and international environment and safety regulations, and management standards specified in these regulations.
3. We continue to make improvements to minimize accidents and our impact on the environment.
4. We are to receive appropriate training and perform activities to enhance their capabilities and practice them daily, so that they can enthusiastically conduct environmental and safety-gearred activities.
5. We disclose our environmental and safety policies to our stakeholders to guarantee voluntary transparency.

Environmental Policy

KAON Group has instated an ISO14001 environmental management system and devised an action plan for the management of product life cycles from production to field deployment and disposal, together with environmental protection activities. In addition, we are constantly implementing activities aimed at improving our environmental performance. Based on our understanding of environmental laws and obligations, stakeholder requirements and significant environmental impact, we developed a set of environmental policies and goals to avoid inefficient use of resources and prevent climate change as well as destruction of eco systems & biodiversity.



Managing Environmental Impact

Managing GHG emissions and energy

KAON Group is not subject to the carbon emission trading system, a government scheme that induces companies to reduce GHG emissions and energy use, and the GHG-Energy Target Management System (GETMS), but we are voluntarily measuring the amount of energy use and GHG emissions every year to be verified in accordance with ISO 14064-1 standards by third-party institutions for reasonable assurance. GHG emissions by KAON Group are primarily generated from LNG, an indirect source of emissions, which we use for electricity and heating. To reduce GHG emissions, KAON employees act in earnest to reduce energy use by adhering to an optimal temperature inside buildings and taking the stairs when going to lower floors.

Amount of GHG Emissions

* KAONMEDIA

Category	Unit	2019	2020	2021
Scope 1 emissions	tCO ₂ eq	91.94	82.42	51.75
Scope 2 emissions		6,498.86	5,880.22	5,521.89
Total GHG emissions		6,590.80	5,962.64	5,573.64
GHG emissions in KRW	tCO ₂ eq/KRW 100 million	1.10	1.09	1.16

Energy Use

* KAONMEDIA

Category	Unit	2019	2020	2021
Electricity	TJ	15.58	15.24	14.15
LNG		62.00	53.30	31.11
Gasoline		0.11	0.13	0.12
Diesel		0.06	0.07	0.05
Steam		0.04	0.04	0.03
Total energy use	TJ	77.79	68.78	45.45

Water Management

Every year, KAON Group sets up plans to practice water conservation and avoid excessive use by recycling water. As an example, such activities entail installation of water-saving toilets and reusing water for plants.

Water Use

* KAONMEDIA

Category	Unit	2019	2020	2021
Water intake_water supply	ton	6,445.00	5,582.85	4,508.36
Amount of wastewater discharge		6,445.00	5,582.85	4,508.36
Amount of wastewater generated		6.40	5.55	4.43

Reducing waste

Most of the waste generated by KAON Group are general waste from buildings. We discard waste separately to recycle more waste, and have replaced old batteries in our buildings with UPS batteries with longer lifetimes to reduce battery waste.

Amount of Waste and Recycled Waste

* KAONMEDIA

Category	Unit	2019	2020	2021
General waste	ton	35.2	26.8	25.1
Amount recycled	ton	22.9	18.0	17.2
Recycle ratio	%	65.2	67.3	68.5

Response to Environmental Regulations

Environmental Regulation Management System

Environmental regulations in Korea and abroad such as EU RoHS (directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment), and REACH (a new EU regulation on chemicals and their safe use) are getting stricter than ever, while customers in general are demanding us to provide more environmental information on products that are at a level exceeding relevant laws and regulations.

KAON Group is running a dedicated environment portal system, KAONMEDIA Green Portal (KGP) system to better manage environment information and take the optimal measures as needed in response to government regulations. The KGP system was developed to comply with various environmental requirements and regulations regarding EU's RoHS and REACH. This is a highly reliable system built by environmental system professionals, with which we can respond well to any enactment of stringent environmental rules.

Managing Hazardous Chemicals

We are checking whether our products contain harmful substances through our hazardous chemicals management system. When developing new products, we review whether products contain hazardous substances from the development phase to block the use of toxic materials in advance.

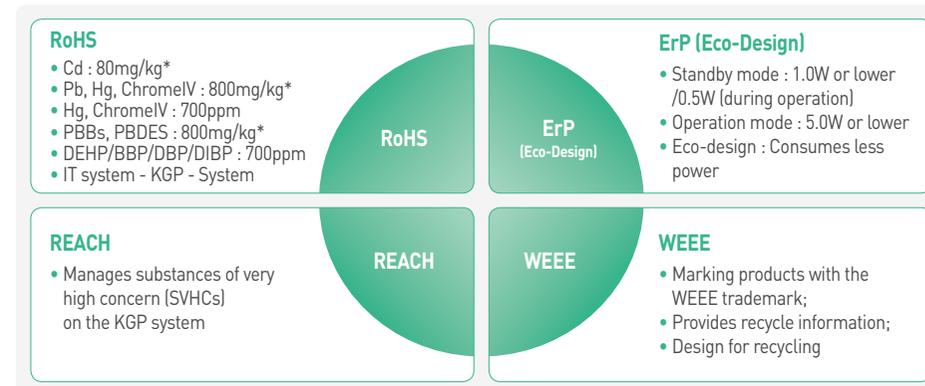
As mandated, we monitor for leaks of harmful substances like four types of phthalates (BBP, DBP, DEHP, DIBP) subject to RoHS regulations beginning in July 2019, as well as other phthalates, but we also voluntarily monitor the use of phthalates not subject to regulations, beryllium & its compounds, and antimony & its compounds.

WEEE

The Waste Electrical and Electronic Equipment Directive (WEEE Directive) is a legal framework on waste electrical and electronic equipment (WEEE) which mandates electronics manufacturers to collect and reuse a specific percentage of WEEE that have not been incinerated or landfilled, setting recovery, reuse, and recycling targets for all types of electrical goods.

KAON Group complies with the EU's WEEE Directive and is committed to meet its stipulations by signing consignment contracts with waste management companies in six countries (Czech Republic, Greece, Poland, Slovakia, Germany, Croatia).

KAON Group Approach to Managing Environmental Regulations



Life Cycle Assessment (LCA)

KAON Group is carrying out the life cycle assessment (LCA) on major products from production to field deployment, and disposal, which we plan to expand to cover more products. We conducted LCA on the entire production process of our flagship products (KAONMEDIA: KSTB6130_ORANGE SPAIN_PVR Hybrid, KAON BROADBAND: AR1344E_TELNOR DENMARK_Repeater) in response to customer feedback to provide environmental data and enhance the eco-friendly aspect of our products. As a result, we obtained ISO 14044 and ISO14021 certificates in May 2022.

Eco-Design

KAON Group is designing products with recycling in mind from the product development stage. We avoid using screws to enhance productivity and recyclability, and refrain from using electrical tools to reduce CO₂ emissions. Moreover, we seek to use recyclable materials without plating as much as possible. As for packaging, we use recycled paper, soy or vegetable ink, and avoid from papers with polypropylene (OPP) lamination films. For recycled paper, we use water-based coating to reduce negative impacts on environment. We are also striving to reduce CO₂ emissions by using more recycled paper, printing less, and using less boxes for packing.

Environmental Law Violations

* KAONMEDIA

Category	Unit	2019	2020	2021
No. of environmental law violations	cases	0	0	0

Safety & Health

APPROACH

KAON Group strives in earnest to eradicate any cases of negligence and industrial accidents, while creating a COVID-19 safe workplace through the integrated policy of control over safety, health, and risks.



Safety and Health Management System

There are increasing demands from the public for companies to assume more responsibility and accountability for industrial safety and health in light of accidents making headlines and enacting the Serious Accidents Punishment Act (SAPA). In response, the management needs to proactively set up and implement a safety and health management system for improved performance, and all workers should abide by safety and health practices.

KAON Group has obtained an occupational health and safety management systems certificate (ISO 45001) in April 2022 and continues to improve its safety culture by analyzing safety and health risks & opportunities, devising & implementing strategies, and periodic monitoring.

Health and Safety Management Goals and Policies



Occupational Safety and Health Committee

We organized the Occupational Safety and Health Committee (OSHC) comprised of four members from senior management and four members from the labor side. The committee discusses important safety and health activities directly related to all employees, including accident prevention plans, development & revision of safety & health management policies, safety & health training, health checkups, and work environment measurement. Every quarter, the committee holds a meeting to discuss agenda items to seek ways to create a safe and clean workplace and improve employee health.

Major OSHC Activities

Composition	Meeting interval	Important developments in 2021	
4 persons from senior management + 4 persons from the labor side	Once a quarter (4 times a year)	1Q	Response to onsite safety inspection of the R&D Center; development of a health checkup plan.
		2Q	Report on the status of health checkups and onsite inspections
		3Q	Precision inspection of the R&D Center; report on status of implementation of quarantine rules.
		4Q	Report on health checkup results; meeting on preparation for SAPA.

Risk Assessment

We conduct a risk assessment once year to prevent accidents by identifying and evaluating risk factors per process and potential risks during production. Then we reflect the assessment results in our safety and health activity plans to improve our equipment, workflow, and process methods. We check for substances and materials used in our R&D centers to identify risk factors and conduct risk assessments by delegating the work into different processes and breaking them down into work details, certain hazardous substances, machines, equipment, and facilities used. In our 2021 assessment, we discovered only minor risks.

Safety and Health Management

KAON Group provides mandatory safety and health training to all employees to raise awareness and improve their mental and physical wellbeing. Such training includes regular safety and health training sessions (all employees, 3 hours per quarter), manager and supervisor training (16 hours a year), onboarding (8 hours) which all employees are required to undergo.

To promote the mental and physical wellbeing of employees, we offer diverse health checkup programs, including routine and comprehensive checkups. Employees get a medical diagnosis once a month from a designated doctor, along with follow-up and preventive care.

Safety and Health Management Status

*KAONMEDIA

Category		Unit	2019	2020	2021
Industrial accident rate		%	0	0	0
Safety & health training	Training hours	hours	8,610	7,428	6,372
	No. of trainees	persons	1,435	1,238	1,062
	Training hours per person	hours/person	6	6	6
Comprehensive health checkup cost		KRW million	77	29	85
No. of violations of relevant laws		cases	0	0	0

Managing COVID-19

As COVID-19 persists worldwide, companies are faced with an inherent threat to business continuity posed by new COVID-19 cases that may emerge in the workplace. KAON Group has prepared a constant response and management system and notified related matters to all employees. We are checking the body temperature of all workers and visitors who access our buildings at the entrance. We use contactless thermometers inside the office to prevent and manage those with a high fever of 37.5°C in advance.

In case workers come in contact with someone with COVID-19, we cover the expenses for taking a COVID-19 test. Those confirmed as a positive case or coming in close contact with a confirmed case, are provided the option to work from home. We provide paid leaves to employees who cannot work due to developing symptoms or being hospitalized.



GOVERNANCE

KAON Group is committed to building a sound and transparent corporate governance based on our trust with stakeholders achieved through our ethical management.



Ethical Management

APPROACH

KAON Group establishes an ethical corporate culture by strictly following the best ethical management practices with not just our employees but also our vendors and business partners.



Ethical Management Policy

KAON Group has created and complied with the internal Code of Ethics that serves as the standard for making prudent decisions and set principle values underlying their actions, as well as the Charter of Ethics for governing the Code of Ethics so as to promote a transparent and ethical corporate culture.

The Code of Ethics

1. We perform our tasks with integrity and fairness, and endeavor to deter corruption and promote an ethical corporate culture.
2. We strive to satisfy our customers and put them first by respecting the voices of customers and offering the best possible services.
3. As a member of society, we proactively take part in social contribution activities and continue to create new values to contribute to the development of the country and society.
4. We maintain our dignity as KAON Group employees and uphold the company's reputation. We cooperate with our stakeholders in pursuit of mutual prosperity.
5. With respect to each employee's character, we ensure they receive fair opportunities and impartial assessments. In addition, we aim to better the wellbeing and quality of life of our employees.

[▶ Full text of the Code of Ethics](#)

Ethics Training

Every year, we provide ethics training to all employees online. In 2021, we augmented the program on eradication of unfair trade practices and bullying, and plan to disclose cases of violations by item in the future to raise awareness on these issues continuously.

Cyber Complaint Center

The Cyber Complaint Center is a channel for collecting complaints on our company website aimed at practicing fair and transparent ethical management. We receive reports on any malfeasance or misconduct related to employee's duties and work, such as improper coercion or solicitation, entertainment, and bribery.

2021 Status of the Cyber Complaint Center

Category	No. of reported cases
KAONMEDIA	0
KAON BROADBAND	0

[▶ The Cyber Complaint Center](#)

Corporate Governance

APPROACH

KAON Group has a corporate governance system centered around the Board of Directors (BOD) designed to enhance transparency of our corporate governance. KAONMEDIA will strive in earnest to grow overall shareholder value in the long term as a KOSDAQ-listed company.

BOD Composition

KAONMEDIA BOD is comprised of three internal directors and one external director as of end of March 2022. For efficient convening and progress of BOD meetings, the CEO was appointed as the chairperson of the BOD pursuant to Article 39 of the Articles of Association. BOD directors are elected at the general meeting of shareholders (GMS), and director candidates are selected by the BOD and confirmed in the GMS after being submitted as an agenda item.

Status of BOD Composition

* As of end of March 2022

Category	Name	Gender	Term of office	Professional background	Appointment reasons	Notes
Internal Directors	Dong-Yeon Lim	Male	March 25, 2022 ~ March 25, 2025	<ul style="list-style-type: none"> Management Support Division, KAONMEDIA Current CEO of KAONMEDIA 	Expansion of planning & management duties, and supervision over new global projects	CEO BOD Chairperson
	Won-Yong Chung	Male	March 26, 2020 ~ March 26, 2023	<ul style="list-style-type: none"> Shinhan Bank Current Managing Director of KAONMEDIA 	Supervision of management support division	Managing Director
	Dong-Bum Suh	Male	March 25, 2022 ~ March 25, 2025	<ul style="list-style-type: none"> Head of R&D/New Business Team, Sony Korea Head of Domestic Sales, KAONMEDIA Current Head of Sales of KAONMEDIA 	Supervision of domestic sales	Managing Director
External Director	Soon-sun Shim	Male	March 26, 2021 ~ March 26, 2024	<ul style="list-style-type: none"> General Manager of Quality and Services, head of Global CS Center, Samsung Electronics 	Advice & supervision of overall management	-

Audit System

We do not have a separate audit committee as of end of 2021 and a full-time auditor appointed through a GMS resolution carries out the audit. The auditor may participate in the BOD and independently oversee director's duties. He/she may request divisions to submit relevant books and evidential documents when performing the audit work.

Shareholders

We have introduced and implemented an electronic voting system and electronic power of attorney system to facilitate the exercise of voting rights at a GMS through a BOD resolution. Accordingly, shareholders can exercise their voting rights on the electronic voting system starting 10 days before a GMS until the day before.

Shareholder Status

* As of end of March 2022

Category	No. of shares held	Stake (%)
Hwa-Seop Lim and two other shareholders	2,310,515	14.30
Treasury stocks	677,491	4.19
Others	13,167,555	81.50
Total	16,155,561	100.00

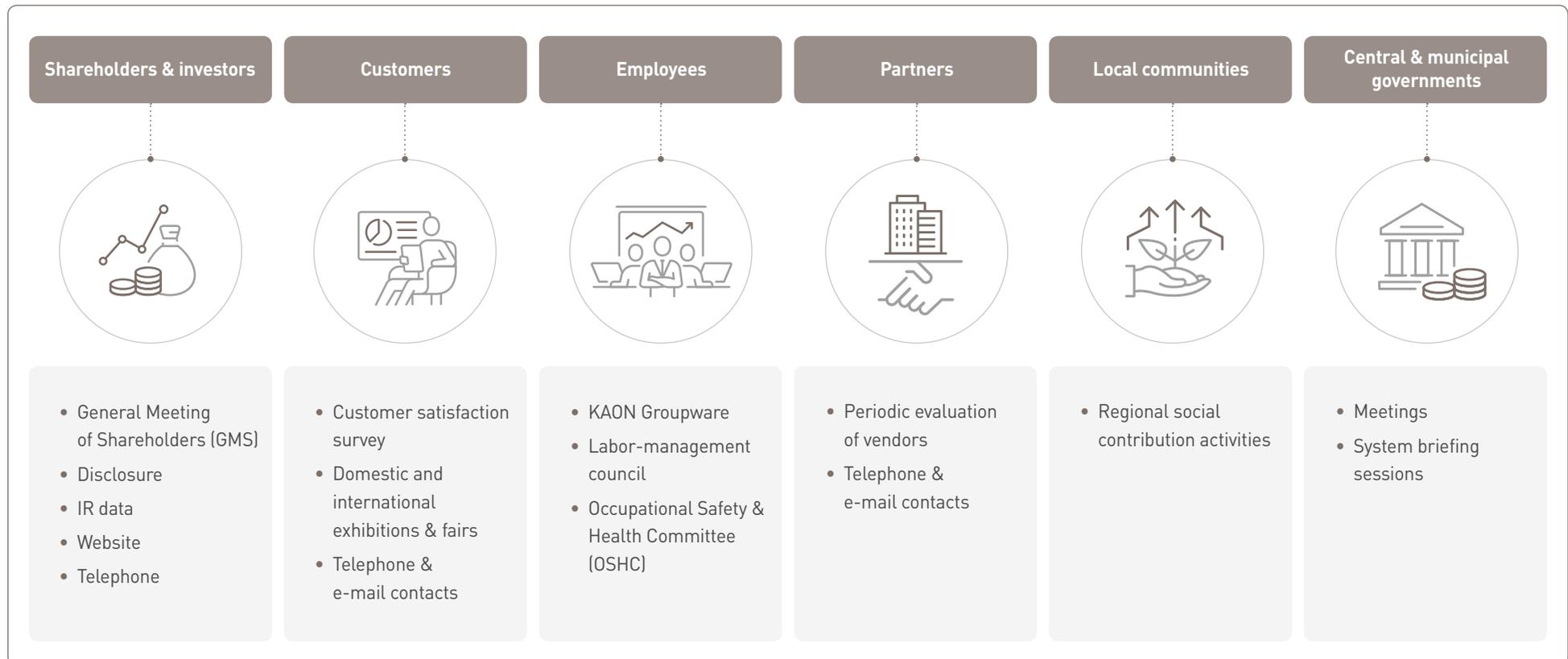
APPENDIX

Stakeholder Participation	32
Materiality Assessment	33
KAON BROADBAND ESG Data	34
GRI Content Index	37
UN SDGs	39
Third-Party Evaluations	40
Awards and Association Membership Status	42

Stakeholder Participation

KAON Group acts in earnest to actively communicate with various stakeholders involved in our business. We designated shareholders, investors, employees, business partners, local communities, and the central and municipal governments as our primary stakeholders given the level of impact and importance in our business activities. We communicate with them through various communication channels to identify their major areas of interest and needs.

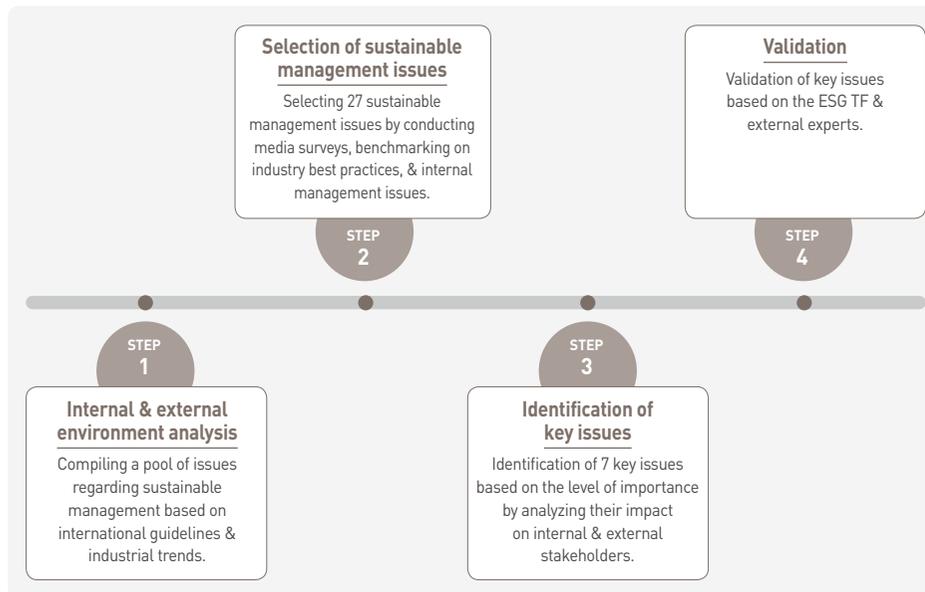
Stakeholders By Group and Communication Channels



Materiality Assessment

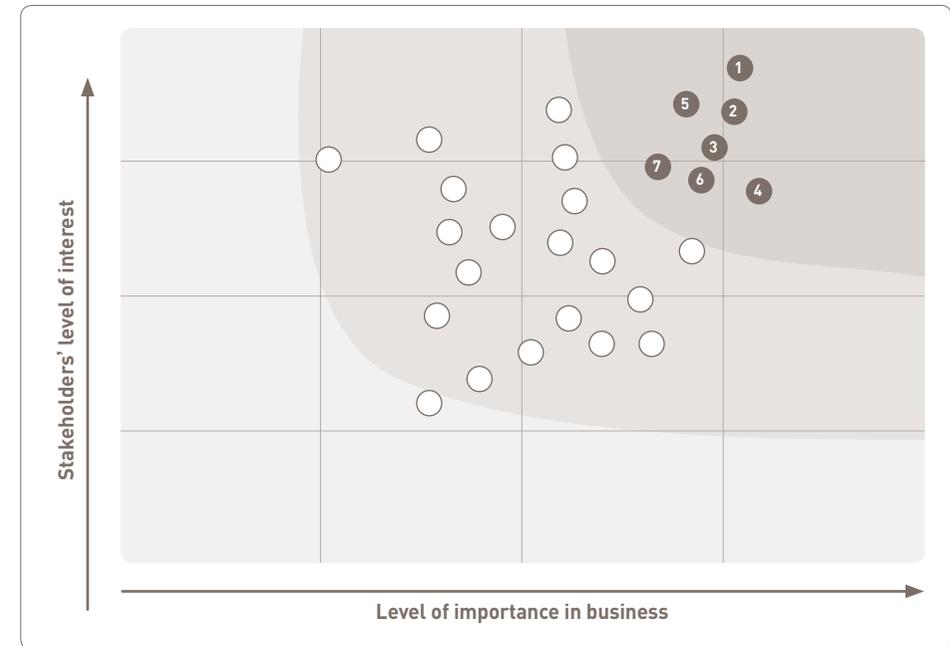
KAONMEDIA has conducted the materiality assessment to select important issues based on the importance in terms of business and level of interest of stakeholders for sustainable management of the company.

The materiality assessment was performed under a process of compiling a pool of issues, media research, and stakeholder surveys, based on an analysis on internal and external business environment. The stakeholder survey was carried out between February 22 and March 2, 2022 targeting internal and external stakeholders to identify key issues and communicate with stakeholders. Then we assigned weighted value of the survey to validate key issues.



We developed a materiality matrix on 27 issues from the pool of sustainability issues. As a result, we ascertained R&D, ethical management, securing of product quality as key issues mentioned by order of importance. We explained the seven key issues in detail in our respective reports.

Materiality Assessment Matrix



Materiality Assessment Rankings

Rank	Key issues	Page No. in this report
1	R&D	12
2	Ethical management	29
3	Securing product quality	15
4	Privacy protection & data security	16
5	Expansion into the global market	7~9, 11
6	Increasing customer satisfaction	16
7	Recruiting & training new hires	17

KAON BROADBAND ESG Data

Financing and Corporate Governance

Summary of Consolidated Statement of Financial Position

(Unit: KRW million)

Category	As of end of December 2020	As of end of December 2021
Liquid assets	77,958	123,720
Non-liquid assets	4,568	5,237
Total assets	82,527	128,957
Current liabilities	32,555	57,713
Non-current liabilities	273	327
Total liabilities	32,828	58,040
Paid-in capital	51,385	54,291
Other assets	0	4
Retained earnings	(1,687)	16,527
Non-controlling interest	0	0
Total capital	49,699	70,917

Summary of Consolidated Statement of Comprehensive Income

(Unit: KRW million)

Category	Fiscal year 2020	Fiscal year 2021
Revenues	62,411	213,656
Sales cost	55,977	175,841
Gross margin	6,434	37,815
Selling & administrative expenses	6,231	17,436
Operating profits	203	20,379
Financial income	1,815	7,363
Financial expenses	4,477	5,290
Other income	32	288
Other expenses	3	6
Net income before tax (loss)	(2,430)	22,734
Corporate tax (income)	(743)	4,520
Net income (loss)	(1,687)	18,214
Other comprehensive income	0	4
Total comprehensive income	(1,687)	18,218

Consolidated Subsidiaries

*As of end of 2021

Company name	Main sales activities	Basis of corporate governance
KAON JAPAN KK.	Sales of broadcasting & wireless communication equipment	A subsidiary company (investment)

Financing and Corporate Governance

Status of BOD Composition

* As of end of March 2022

Category	Name	Gender	Term of office	Professional background	Appointment reasons	Notes
Internal Directors	Dae-Seok Jeon	Male	July 3, 2020 ~ July 3, 2023	<ul style="list-style-type: none"> Managing Director of KAONMEDIA Current CEO of KAON BROADBAND 	Reinforcement of expertise in the network business sector & independent management	CEO BOD Chairperson
	Yong-Hyuk Lim	Male	July 3, 2020 ~ July 3, 2023	<ul style="list-style-type: none"> Managing Director (Assistant) of KAONMEDIA Current Head of Management Support Division at KAON BROADBAND 	Supervision of management support division	-
	Young-Ho Kang	Male	August 31, 2021 ~ August 31, 2024	<ul style="list-style-type: none"> KAONMEDIA Current Head of Sales 1 Team at KAON BROADBAND 	Increase in sales capacity	-
External Director	Ho-Won Moon	Male	August 18, 2021 ~ August 18, 2024	<ul style="list-style-type: none"> CEO of KT Powertel Current External Director at KAON BROADBAND 	Advice & supervision of overall management	Chairman of the Insider Trading Committee
	Ki-Joon Yoon	Male	August 18, 2021 ~ August 18, 2024	<ul style="list-style-type: none"> Head of KOSDAQ Market Division at Korea Exchange Current Vice President of the Corporate Governance Service Current External Director at KAON BROADBAND 	Advice & supervision of overall management	-

Shareholder Status

* As of end of March 2022

Category	No. of shares held	Ownership stake (%)
KAONMEDIA	8,000,000	97.71
Mirae Asset Securities	187,500	2.29
Total	8,187,500	100.00

Society

Workforce Composition

Category		Unit	2020	2021
Total employees	Total	persons	95	146
Type of employment	Executives	persons	3	7
	Permanent workers		90	137
	Temporary workers		2	2
Ratio of permanent workers	Total	%	94.7	93.8
Gender	Male	persons	89	136
	Female		6	10
Age group	Younger than 30	persons	10	11
	30-50		83	127
	50 or older		2	8
Management-level (Part leader or above)	Male	persons	21	45
	Female		2	2
Status of disabled employees	No. of workers	persons	-	2

Training Status

Category		Unit	2020	2021
Total trainees	Total	persons	87	141
Training hours	Total training hours	hours	348	564
	Training hours per person	hours/person	4	4
Training cost	Total training cost	KRW 1,000	520	3,969
	Training cost per person	KRW 1,000/person	6	28

Environment

Amount of GHG Emissions

Category	Unit	2020	2021
Scope 1 emissions	tCO ₂ eq	8.15	8.91
Scope 2 emissions		581.56	1,216.89
Total GHG emissions		589.71	1,225.80
GHG emissions in KRW	tCO ₂ eq/KRW 100 million	0.11	0.57

Energy Use

Category	Unit	2020	2021
Electricity	TJ	1.51	3.11
LNG		5.27	6.83
Steam		0.0035	-
Total energy use	TJ	6.80	9.94

Water Use

Category	Unit	2020	2021
Water intake_water supply	ton	552.15	494.82
Amount of wastewater discharge		552.15	494.82
Amount of wastewater generated		-	-

Amount of Waste and Recycled Waste

Category	Unit	2020	2021
General waste	ton	7.9	13.0
Amount recycled	ton	5.3	19.0
Recycle ratio	%	67.3	68.5

Environmental Law Violations

Category	Unit	2020	2021
No. of environmental law violations	cases	0	0

Safety and Health Management Status

Category	Unit	2020	2021
Industrial accident rate	%	0	0
Safety & health training	Training hours	1,068	2,802
	No. of trainees	178	467
	Training hours per person	6	6
Comprehensive health checkup cost	KRW million	-	235
No. of violations of relevant laws	cases	0	0

GRI Content Index

Topic	Index	Description	Page
Organizational profile	102-1	Name of the organization	6, 8
	102-2	Activities, brands, products, and services	7, 8
	102-3	Location of headquarters	6, 8
	102-4	Location of operations	6, 8
	102-5	Ownership and legal form	13, 30, 34, 35
	102-6	Markets served	6~9, 11
	102-7	Scale of the organization	6, 8
	102-8	Information on employees and other workers	17, 35
	102-9	Supply chain	20
	102-10	Significant changes to the organization and its supply chain	No significant changes
	102-11	Precautionary Principle or approach	23, 27, 30
	102-12	External initiatives	39
	102-13	Membership of associations	42
Strategy	102-14	Statement from senior decision maker	4
	102-15	Key impacts, risks, and opportunities	7, 9
Ethics and integrity	102-16	Values, principles, and norms of behavior	29
	102-17	Mechanisms for advice and concerns about ethics	29
Governance	102-18	Governance structure	30, 35
	102-22	Composition of the highest governance body and its committees	30, 35
	102-23	Chair of the highest governance body	30, 35
	102-24	Nominating and selecting the highest governance body	30
Stakeholder engagement	102-40	List of stakeholder groups	32
	102-41	Collective bargaining agreements	18
	102-42	Identifying and selecting stakeholders	32
	102-43	Approach to stakeholder engagement	32
	102-44	Key topics and concerns raised	33

Topic	Index	Description	Page
Report briefing	102-45	Entities included in the consolidated financial statements	13, 34
	102-46	Defining report content and topic boundaries	2
	102-47	List of material topics	33
	102-48	Restatements of information	First publication
	102-49	Changes in reporting	First publication
	102-50	Reporting period	2
	102-51	Date of most recent report	First publication
	102-52	Reporting cycle	2
	102-53	Contact point for questions regarding the report	2
	102-54	Claims of reporting in accordance with the GRI Standards	2
	102-55	GRI Content Index	37~38
	102-56	External assurance	40
Management approach	103-1	Explanation of the material topic and its boundary	15, 17, 20, 21, 23, 26, 29, 30
	103-2	The management approach and its components	
	103-3	Evaluation of the management approach	
Indirect economic impacts	203-1	Infrastructure investments and services supported	21
Anti-corruption	205-2	Communication and training about anti-corruption policies and procedures	29
	205-3	Confirmed incidents of corruption and resultant actions taken	29
Anti-competitive behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	20
Energy	302-1	Energy consumption within the organization	24, 36
	302-3	Energy intensity	24, 36

GRI Content Index

Topic	Index	Description	Page
Water and effluents	303-3	Water withdrawal	24, 36
	303-4	Water discharge	24, 36
Emissions	305-1	Direct (Scope 1) GHG emissions	24, 36
	305-2	Energy indirect (Scope 2) GHG emissions	24, 36
	305-4	GHG emissions intensity	24, 36
	305-6	Emissions of ozone-depleting substances (ODS)	No emissions
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	No emissions
Waste	306-1	Waste generation and significant waste-related impacts	24
	306-3	Waste generated	24, 36
	306-4	Waste diverted from disposal	24, 36
Environmental compliance	307-1	Non-compliance with environmental laws and regulations	25
Employment	401-1	New employee hires and employee turnover	17
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	19
	401-3	Childcare leave	19
Occupational health and safety	403-1	Occupational health and safety management system	26
	403-2	Hazard identification, risk assessment, and incident investigation	27
	403-3	Occupational health services	27
	403-4	Worker participation, consultation, and communication on occupational health and safety	26
	403-5	Worker training on occupational health and safety	27, 36
	403-6	Promotion of worker health	27
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	26

Topic	Index	Description	Page
Occupational health and safety	403-8	Workers covered by an occupational health and safety management system	27
	403-9	Work-related injuries	27, 36
Training and education	404-1	Average hours of training per year per employee	17, 35
Diversity and equal opportunity	405-1	Diversity of governance bodies and employees	17, 35
Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	No applicable cases
Local communities	413-1	Operations with local community engagement, impact assessments, and development programs	21
	413-2	Operations with significant actual and potential negative impacts on local communities	No such places of business found
Public policy	415-1	Political contributions	No political contributions
Customer health and safety	416-1	Assessment of the health and safety impacts of product and service categories	25
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	No violations
Marketing and labeling	417-1	Requirements for product and service information and labeling	25
	417-2	Incidents of non-compliance concerning product and service information and labeling	No violations
	417-3	Incidents of non-compliance concerning marketing communications	No violations
Customer privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	16
Compliance	419-1	Non-compliance with social and economic laws and regulations	No violations

UN SDGs

KAON Group supports the UN Sustainable Development Goals (SDGs). The SDGs present 17 goals to achieve a sustainable future for humanity categorized into the five areas of people, planet, prosperity, peace, and partnership. At KAON, we are conducting sustainable activities to help achieve SDGs as follows.

SDGs	Activity	Page No. in this report	SDGs	Activity	Page No. in this report
	Support for low-income families in Seongnam & Incheon area; Support for low-income groups in Southeast Asia.	21		Support for underprivileged groups	21
	Employee health checkups; Preventive measures for COVID-19	27		Eco-design of products	25
	Overseas drinking water supply project	21		Reduction of GHG emissions	24
	Eradication of forced labor & child labor	18, 20			

Third-Party Evaluations

To readers of KAON Sustainability Report 2022

Introduction

Korea Management Registrar (KMR) was commissioned by KAON to conduct an independent assurance of its Sustainability Report 2022 (the “Report”). The data and its presentation in the Report is the sole responsibility of the management of KAON. KMR’s responsibility is to perform an assurance engagement as agreed upon in our agreement with KAON and issue an assurance statement.

Scope and Standards

KAON described its sustainability performance and activities in the Report. Our Assurance Team carried out an assurance engagement in accordance with the AA1000AS v3 and KMR’s assurance standard SRV1000. We are providing a Type 2, moderate level assurance. We evaluated the adherence to the AA1000AP (2018) principles of inclusivity, materiality, responsiveness and impact, and the reliability of the information and data provided using the Global Reporting Initiative (GRI) Index provided below. The opinion expressed in the Assurance Statement has been formed at the materiality of the professional judgment of our Assurance Team.

Confirmation that the Report was prepared in accordance with the Core Options of the GRI standards was included in the scope of the assurance. We have reviewed the topic-specific disclosures of standards which were identified in the materiality assessment process.

- GRI Sustainability Reporting Standards
- Universal standards
- Topic specific standards
 - Management approach of Topic Specific Standards
 - GRI 205: Anti-Corruption
 - GRI 401: Employment

- GRI 404: Training and Education
- GRI 418: Customer Privacy

As for the reporting boundary, the engagement excludes the data and information of KAON’s 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 engagement:

- reviewed the overall Report;
- reviewed materiality assessment methodology and the assessment report;
- evaluated sustainability strategies, performance data management system, and processes;
- interviewed people in charge of preparing the Report;
- reviewed the reliability of the Report’s performance data and conducted data sampling;
- assessed the reliability of information using independent external sources such as Financial Supervisory Service’s DART and public databases.

Limitations and Recommendations

KMR’s assurance engagement is based on the assumption that the data and information provided by KAON to us as part of our review are provided in good faith. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied. To address this, we referred to independent external sources such as DART and National Greenhouse Gas Management System (NGMS) and public databases to challenge the quality and reliability of the information provided.

Third-Party Evaluations

Conclusion and Opinion

Based on the document reviews and interviews, we had several discussions with KAON 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, it is our opinion that the Report applied the Core Option of the GRI Standards. Nothing comes to our attention to suggest that the Report was not prepared in accordance with the AA1000AP (2018) principles.

Inclusivity

KAON has developed and maintained different stakeholder communication channels at all levels to announce and fulfill its responsibilities to the stakeholders. Nothing comes to our attention to suggest that there is a key stakeholder group left out in the process. The organization makes efforts to properly reflect opinions and expectations into its strategies.

Materiality

KAON has a unique materiality assessment process to decide the impact of issues identified on its sustainability performance. We have not found any material topics left out in the process.

Responsiveness

KAON prioritized material issues to provide a comprehensive, balanced report of performance, responses, and future plans regarding them. We did not find anything to suggest that data and information disclosed in the Report do not give a fair representation of KAON's actions.

Impact

KAON identifies and monitors the direct and indirect impacts of material topics found through the materiality assessment, and quantifies such impacts as much as possible.

Reliability of Specific Sustainability Performance Information

In addition to the adherence to AA1000AP (2018) principles, we have assessed the reliability of economic, environmental, and social performance data related to sustainability performance. We interviewed the in-charge persons and reviewed information on a sampling basis and supporting documents as well as external sources and public databases to confirm that the disclosed data is reliable. Any intentional error or misstatement is not noted from the data and information disclosed in the Report.

Competence and Independence

KMR maintains a comprehensive system of quality control including documented policies and procedures in accordance with ISO/IEC 17021:2015 - Requirements for bodies providing audit and certification of management systems. This engagement was carried out by an independent team of sustainability assurance professionals. KMR has no other contract with KAON and did not provide any services to KAON that could compromise the independence of our work.

April 2022 Seoul, Korea

CEO *E. J. Hwang*

Awards and Association Membership Status

Awards and Recognitions

Awards	Organized by	Date
Designated as a producer of world-class products	The Ministry of Trade, Industry, & Energy	April 2002
The Export Award, Gyeonggi SME Award	Ministry of SMEs & Startups (MSS)	August 2002
Designated as a Success Design product in 2003	Korea Institute of Design Promotion (KIDP)	April 2003
Selected as a Product with Outstanding Industrial Design	The Ministry of Trade, Industry, & Energy	July 2003
Export-driven SME Award	MSS	September 2003
Chairman's Award from the Special Committee of SMEs provided to venture companies	Special Committee of SMEs	October 2003
The Venture Company Award	Special Committee of SMEs	October 2003
KSII Best Paper Award	Korean Society for Internet Information (KSII)	November 2003
Industrial packaging on Trade Day, Presidential Commendation	Korea International Trade Association (KITA)	November 2003
The ICT SME of the Year	Ministry of Science and ICT	February 2004
The Grand Prize, Electronic Information & Communication Category, 4th Maekyung Outstanding Venture Company Awards	Maeil Business Newspaper	April 2004
The Grand Prize, 4th Industry-Academia Industrial Technology Exhibition Prime Minister's Commendation	Tech University of Korea	September 2004
Selected as a Product with Outstanding Industrial Design	The Ministry of Trade, Industry, & Energy	September 2004
The Silver Prize, Korea Technology Fast 50 2005	Digital Times, Deloitte Anjin Accounting Firm, Korea Credit Information Services (KCIS)	July 2005

Awards	Organized by	Date
The Achievement Award for tallying KRW 100 million in electronics export	The Ministry of Trade, Industry, & Energy	February 2006
The Encouragement Award, 1st Seongnam SME Award	Seongnam	October 2006
Won the Silver Tower Order of Industrial Service Merit on the 5th IT Electronics Day	Korea Electronics Association (KEA)	October 2010
Electronic Times President's Commendation at the Electronic IT Industry Patent Management Award 2012	Electronic Times	November 2011
Listed as one of the World Class 300 firms	Korea World Class Enterprise Association (KWCA)	May 2013
Selected as an Outstanding Affiliate at KT Best Partner 2014	KT	January 2014
Selected as an Outstanding Affiliate at KT Best Partner 2015	KT	January 2015
The Outstanding Award, Technology Category, KT Partner Award	KT	May 2016
Appreciation Plaque, Selected as an Excellent Partner	SKB	July 2016
Received a commendation from Seongnam Mayor for ongoing donations & social contribution activities in Seongnam City	Seongnam	November 2016
The Grand Prize, Technology Category, KT Partner Award	KT	November 2017
The KT Appreciation Plaque in 2018 (related to GIGA Genie AI)	KT	February 2018
The Outstanding Award, Technology Category, KT Partner Award	KT	November 2018
The Grand Prize, Mutual Development Category, KT Partner Award	KT	October 2019

Awards and Association Membership Status

Awards and Recognitions

Awards	Organized by	Date
Selected as an Outstanding Affiliate at KT Best Partner 2020	KT	February 2020
The Excellence Award for changing the lives of customers, KT Partner Award	KT	November 2020
Selected as an Excellent Partner for KT Commerce	KT Commerce	March 2021
Selected as an Outstanding Affiliate at KT Best Partner 2021	KT	April 2021
The Appreciation Plaque for Mutual Growth	LG U+	February 2021
The KCCP Appreciation Plaque	Korea Commission for Corporate Partnership	February 2021
The Grand Prize, Major Business Category, KT Partner Award	KT	January 2022

Association Membership Status

Name of organizations and institutions	
Korea Electronics Association (KEA)	WiFi Alliance
Korea Intellectual Property Protection Association	Z-wave Alliance
Korea Association of Network Industries	VCCI council
KOTRA	Broadband Forum
Korea International Trade Association (KITA)	Korea Future Cable Forum (KFCF)
Seongnam Chamber of Commerce & Industry	Prpl Foundation
Institute for Advancement of Technology (KIAT)	Distribution and Logistics Agency
Federation of Middle Market Enterprises of Korea	ICT Convergence Korea Forum
Korea Digital Convergence Association (KODiCA)	National Radio Research Agency
Korea Industrial Technology Association (KOITA)	Korea Energy Agency
KOSDAQ Listed Companies Association	Korea Metaverse Industry Association



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