The background features a complex, abstract graphic design. It consists of multiple layers of semi-transparent, 3D-style rectangular blocks in shades of blue and green, arranged in a perspective that creates a sense of depth and movement. The blocks are connected by thin, dashed lines in orange and blue, suggesting a network or a process flow. The overall aesthetic is modern and technological.

# FROM ASPIRATION TO ACTION

2023 KT&G STRATEGIC REPORT

# ABOUT THIS REPORT

## REPORT OVERVIEW

KT&G publishes the KT&G Report every year, which contains activities, achievements, and future plans for the company's sustainable growth and social value creation, as a way of communicating extensively with stakeholders and listening to their opinions. Always striving for harmonious development in environmental and social aspects, we at KT&G have carefully reviewed recommendations for the disclosure of ESG-related global initiatives and reflected these suggestions in the 2023 KT&G Report. Moving ahead, we plan to transparently disclose major sustainability management issues, activities, and achievements through the KT&G Report.

## REPORTING PERIOD

This report covers sustainability business activities and performances for the fiscal year from January 1 through December 31, 2023. In addition, the quantitative data covers three-year data from 2022 to 2023 to show yearly trends and includes some activities for four-year data from 2019 to 2022. It may include significant sustainability business activities and performances in the first half of 2024 to provide timely information.

## REPORTING SCOPE

The financial information in this report is based on the K-IFRS. The scope of social and environmental information spans some overseas manufacturing sites (Russia, Türkiye, and Indonesia) and domestic worksites, including the Head Office, R&D HQ, Daejeon Plant, Gwangju Plant, Yeongju Plant, Cheonan Plant, Gimcheon Plant, and sales sites across the country. In addition, we disclose the sustainability management performance and plan of **Korea Ginseng Corporation (KGC)**, and **ESG data of the Group subsidiaries**, including Yungjin Pharm, COSMOCOS, TAE-A Industrial, and KGCYebon, are included in the reporting scope. Different reporting scopes and changes in reported data are marked separately with footnotes.

## REPORTING STANDARDS

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards 2021, a set of international reporting guidelines for sustainability management. To accurately represent significant industry-related concerns, we have incorporated the Sustainability Accounting Standards Board (SASB) indicators. In addition, we have considered global sustainability management standards and initiatives such as the Sustainable Development Goals (UN SDGs) and Task Force on Nature-related Financial Disclosures (TNFD). In this report, we also have disclosed the **governance, strategy, risk management, and metrics and targets related to climate change** response among KT&G's key sustainability management issues, with reference to the standards of the International Sustainability Standards Board (ISSB).

## THIRD-PARTY ASSURANCE

To ensure the quality of reporting content and reliability of data, third-party assurance was conducted, thereby securing open data, authenticity of content, and fairness. The assurance statement is included in the 2023 Factbook.

## CONTACT

ESG Management Office of Strategy HQ, KT&G  
KT&G Tower, 416, Yeongdong-daero, Gangnam-gu, Seoul, Korea  
· Tel. +82-2-3484-5023  
· E-mail sustainability@ktng.com

### Cautionary Statement regarding Forward-looking Statements

This report contains not only information about the current or past activities and achievements of KT&G aimed at sustainable growth and social value creation, but also forecasts, prospects, and estimates about the future. Terms such as "prospect," "expectation," "estimate," "anticipation," "plan," "goal," "scheduled," and similar expressions in this report denote these forward-looking statements. These are based on reasonable assumptions and expectations as of the date of this report's preparation and involve known and unknown risks and uncertainties. Consequently, the actual outcomes of the forecasts, prospects, and estimates may differ from those originally predicted. While KT&G believes the expectations reflected in these forward-looking statements are reasonable, it cannot assure that these expectations will prove to be correct. Such statements are intended to assist stakeholders in understanding our approach, strategy, and initiatives regarding key ESG areas, and under no circumstances should this report be used as evidence of legal responsibility for investors' outcomes.

## INTERACTIVE PDF

This report has been published as an interactive PDF, allowing readers to move to pages in the report, and including shortcuts to related web pages and video clips.

-  Contents
-  Previous page
-  Related webpage
-  Related page in this report



This report is available for download in PDF format at the KT&G Website.



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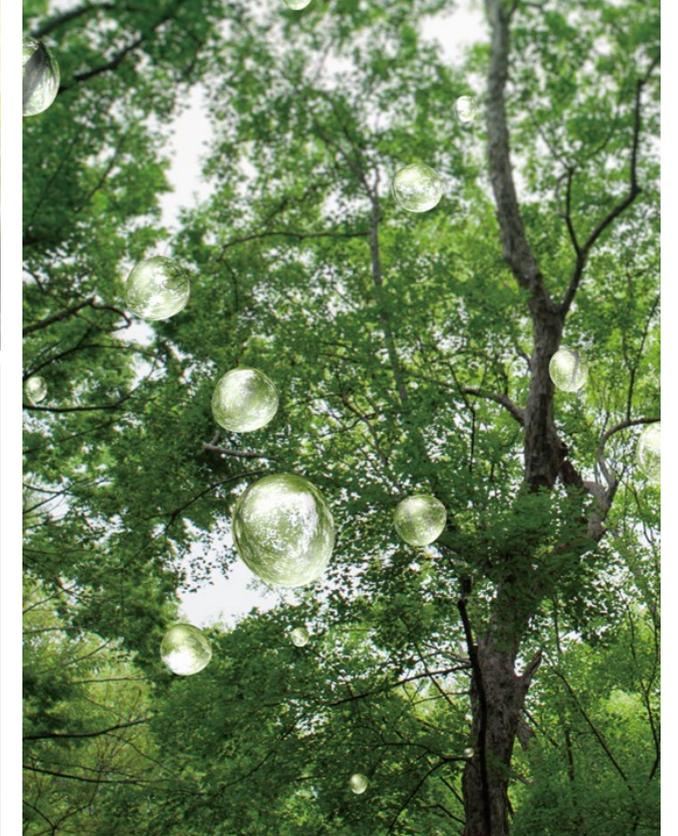
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# I. LETTER TO STAKEHOLDERS

## Dear stakeholders, I am Bang Kyung-man, President & CEO of KT&G.

In the post-pandemic era, prolonged uncertainties are anticipated due to climate crises and conflicts. This period is marked by dynamic changes, including heightened demands for ESG management and an accelerated digital transformation. Under our newly established vision “Global Top-tier Player” in 2023, KT&G Group is keenly aware of the evolving requirements of the market and stakeholders. We view this era of ESG as an opportunity for sustainable growth to enhance our competitiveness.

In 2024, KT&G Group is focusing on structural innovations to drive breakthrough growth in our 3 core businesses – NGP (Next Generation Products), health functional foods, and global conventional cigarettes. To sharpen our global competitive edge and meet increasing demands, we are securing overseas production bases to gain a market advantage. We also have implemented organizational restructuring, including introducing regional CICs and production headquarters, to solidify a foundation for performance-based responsible management.

Furthermore, with profitability enhancement, asset efficiency, and advancement of capital policy at the core, we are initiating a company-wide project to innovate our management structure, ultimately aimed at increasing corporate value. Based on these structural innovations, KT&G Group will actively communicate with stakeholders about the concrete steps toward the realization of true “value-up” beyond merely declaring our vision.

Our ESG capabilities serve as a catalyst on this journey of structural transformation and new challenges, fostering global growth and instilling the DNA of innovation. Over the past year, KT&G Group has made significant progress in its ESG initiatives. First of all, recognizing that strong governance and ethical leadership are foundation of sustainable growth, we enhanced the independence and expertise of our board composition, increased transparency in all relevant processes, upgraded the director selection process and BSM, and refined top management compensation policy. In 2023, KT&G received the Grand Prize in the Corporate Governance category from the Korea Institute of Corporate Governance and Sustainability (KCGS) and achieved 100% compliance rate with core indicators proposed by the Financial Services Commission, marking significant milestones in enhancing governance.

KT&G Group also believes that a diverse and inclusive human capital plays a crucial role in driving innovation and achieving sustainable growth. Regardless of gender or age, we prioritize expertise in human capital management to accelerate performance creation. In 2023, following the establishment of our 2030 DEI (Diversity, Equity, Inclusion) goals, we significantly increased diverse representation, including roles for global local hires and female staff. Our DEI goals and commitments are not just a moral obligation but a business strategy that enhances creativity and drives performance.

To strengthen the Group-wide initiative for carbon neutrality by expanding the scope of greenhouse gas (GHG) reduction and to meet the international community’s demands with more ambitious goals, we have re-established our net-zero target year for our value chain by moving it forward by five years. Through the establishment of challenging goals and company-wide implementation efforts, our domestic and overseas operations in 2023 achieved a 9% reduction in GHG compared to the baseline year of 2020 and a 19% in renewable energy consumption.

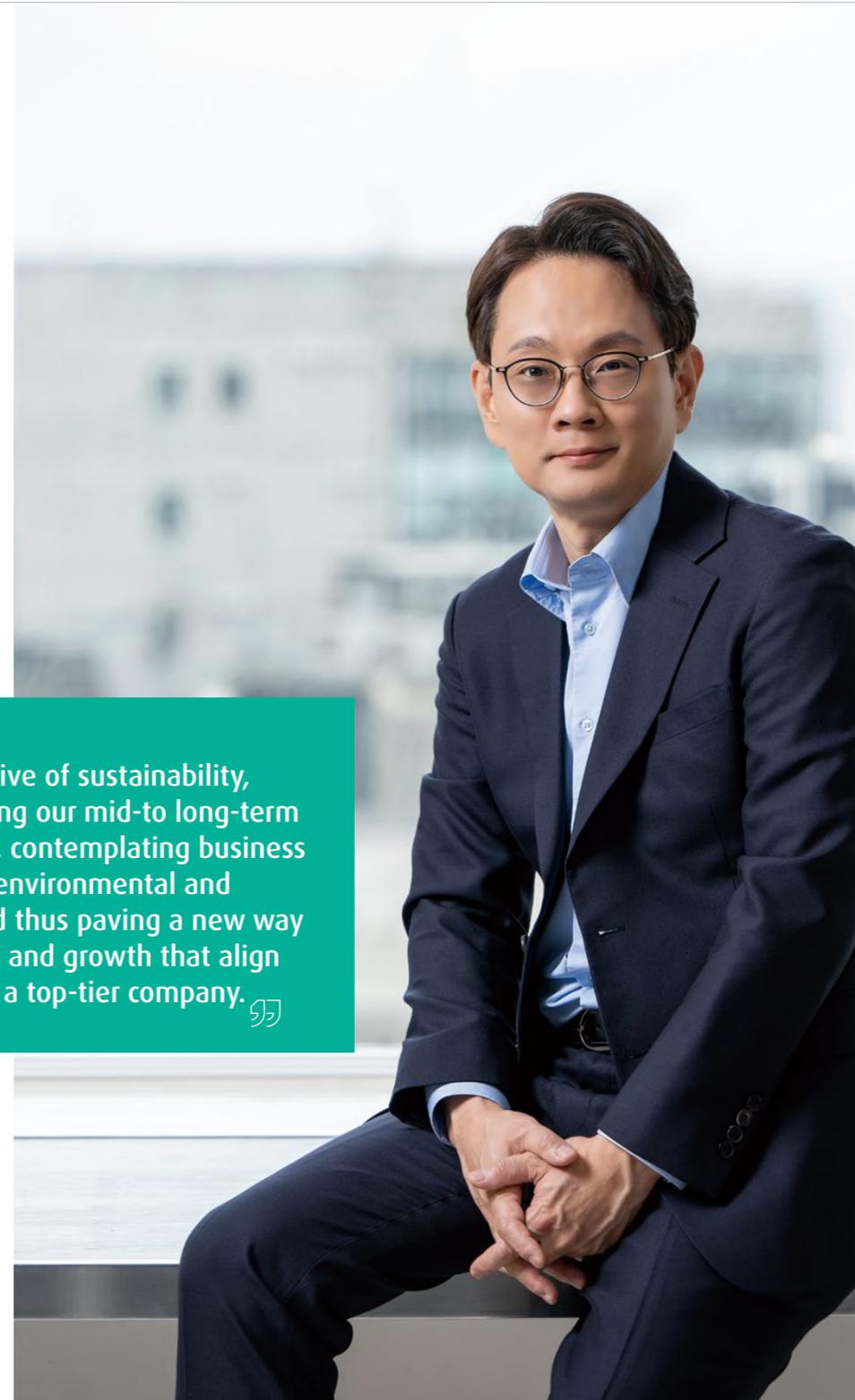
### To all stakeholders supporting KT&G’s journey,

Competition in global markets is increasingly fierce, and the international community is demanding not only stronger ESG management and its active implementation but also obligatory disclosure of corporate sustainability and performance transparency. KT&G views these changes as opportunities to secure differentiated global competitiveness and aims to integrate ESG capabilities into our business strategy from a long-term perspective to achieve sustainable growth. We invite you to witness the innovations and sound management practices KT&G is creating through this report and kindly ask for your continued encouragement and support for KT&G’s new challenges and future endeavors. Thank you.



From the perspective of sustainability, we are transforming our mid-to long-term business portfolio, contemplating business innovations from environmental and social aspects, and thus paving a new way through challenge and growth that align with our status as a top-tier company.

**Bang, Kyung-man**  
President & CEO



# I. KT&G AT A GLANCE

## II. CORPORATE PROFILE

Under our corporate philosophy of being “Exemplary,” “Progressive,” and “Inclusive,” KT&G imagines together with our customers as we strive to create a better life. We are generating performance in various business areas such as the health/functional food, pharmaceutical, bio, and real estate business as well as the next-generation tobacco business, which will be the engine of future growth. While evolving into a globally outstanding company through change and innovation, we continue to create social value and expanding sustainability management activities.

COMPANY NAME

**KT&G Corporation**



ESTABLISHMENT

**April 1, 1987**



CEO

**Bang, Kyung-man**



HEADQUARTERS

**71, Beotkkot-gil, Daedeok-gu, Daejeon, Republic of Korea**



NO. OF EMPLOYEE

**4,378**

(As of December 31, 2023; and based on direct employment)



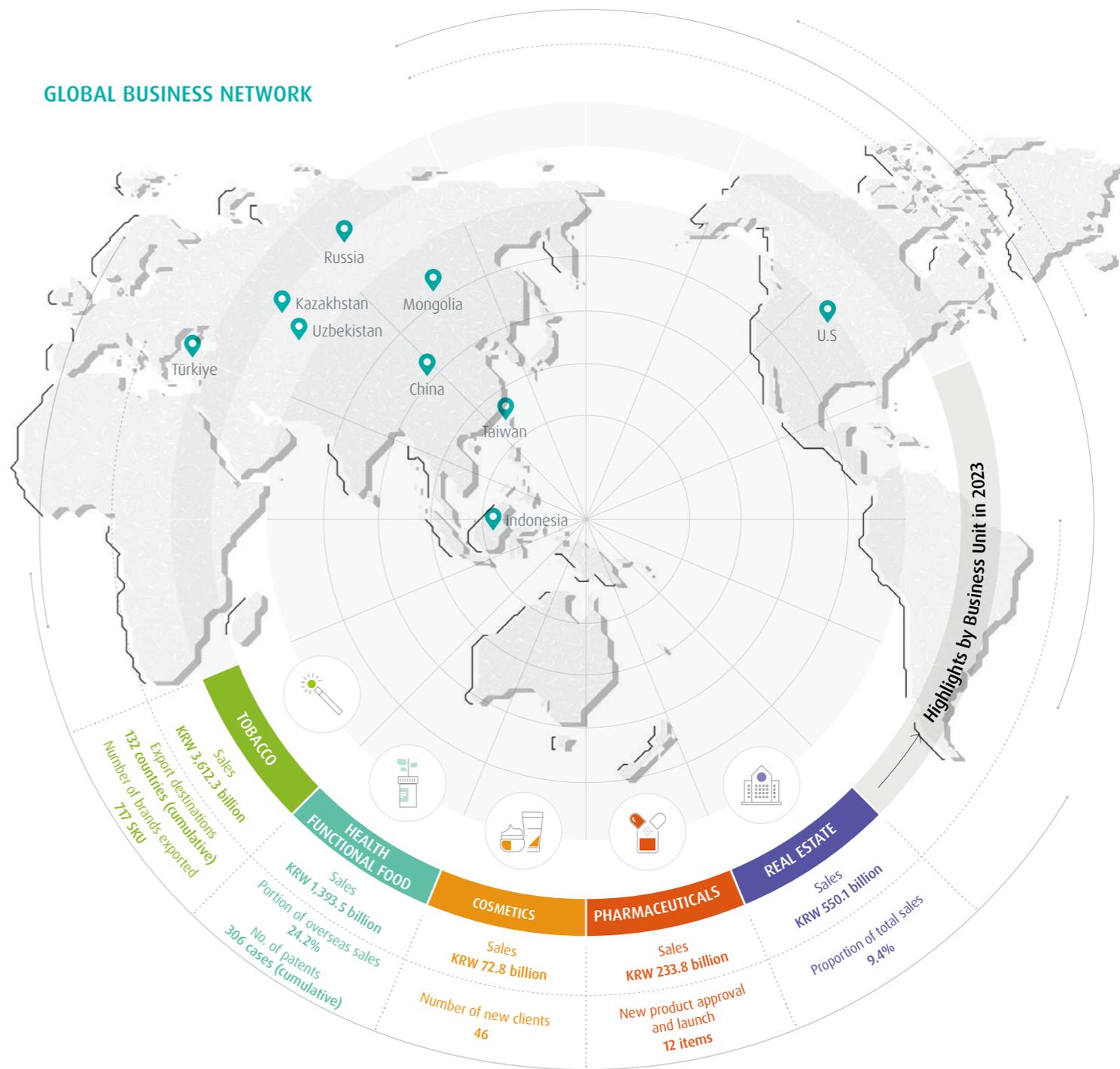
## GLOBAL COE

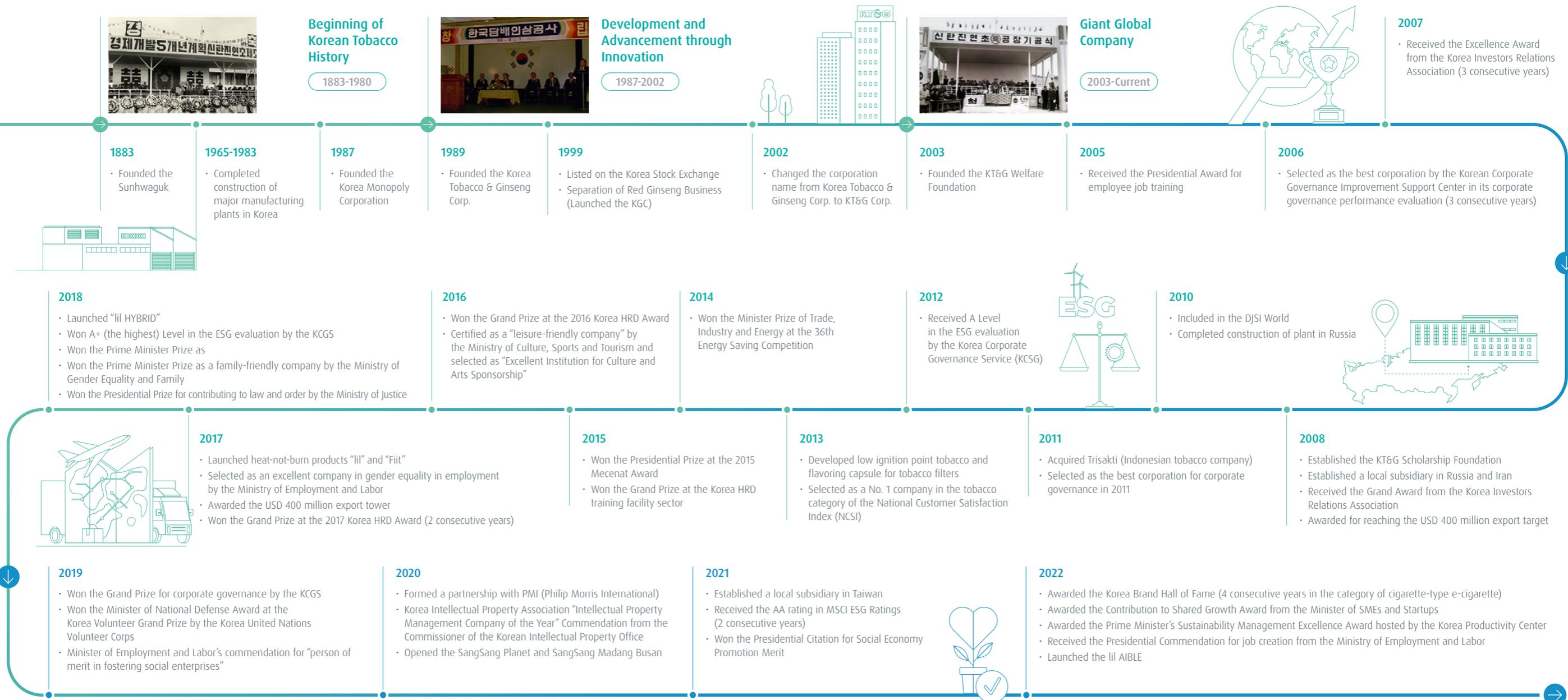
2023 was a year in which the CoE (Center of Excellence) collaboration system was fully activated. Each specialized group (CoE) at our headquarters was deeply engaged in global operations, supporting overseas subsidiaries, offices, and other international organizations. In particular, the CoE led initiatives such as establishing the ERP system for our Indonesia Corporation and restructuring export processes for Türkiye Corporation to enhance its operations. Additionally, the CoE played a central role in establishing new offices in Kazakhstan, Mongolia, and Uzbekistan.

In 2024, work is underway to enhance the CoE system further. We have defined detailed business processes aimed at global operations, including regulatory compliance tasks and the establishment of a global HR policy, and clearly classified roles and responsibilities (R&R) between relevant departments, thereby strengthening governance for each specific task and improving operational efficiency.

With the launch of the overseas CIC (company-in-company) in 2024, the CoE paradigm has reached a turning point. Accelerated support from each functional CoE at headquarters is being provided for the early autonomous operation of each management function within the CIC, and the CoE is identifying and supporting tasks that are difficult for the CIC to complete on its own through close communication and consultation. Going forward, the CoE will continue to contribute to performance creation by completing the enhancement of each value chain in global business.

## GLOBAL BUSINESS NETWORK



**KT&G AT A GLANCE****MILESTONES**

# I. KT&G AT A GLANCE

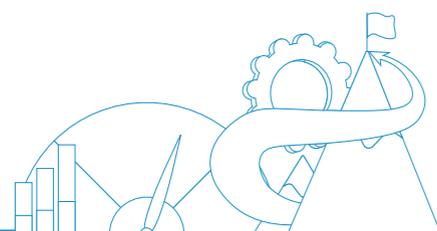
## II. NEW CHALLENGE TOWARDS GLOBAL TOP-TIER PLAYER

2023-



**2023**

- Established a local subsidiary in Kazakhstan
- Established an office in Uzbekistan
- Received the Prime Minister's Commendation on the 6th Accounting Day from the Financial Services Commission
- Won the Presidential Prize at the 2023 Mecenat Award
- Received the Grand Prize in the Corporate Governance category from the Korea Institute of Corporate Governance and Sustainability (KCGS)



### EXTERNAL EVALUATION

#### GLOBAL ESG RATINGS

**MSCI**  **AA**  
(Highest rating in the sector)

**ISS ESG**  **Prime**  
(Highest rating in the sector)

Member of **Dow Jones Sustainability Indices**  
Powered by the S&P Global CSA **78**  
(Included in the Korea Index)

**CDP**  **A-**  
CLIMATE CHANGE  
(Leadership level achieved)

**CDP** **A**  
WATER  
(Leadership level achieved)

**CDP** **A**  
SUPPLIER ENGAGEMENT RATING  
(Leadership level included)

#### ESG RATINGS IN KOREA

**KCGS**  **A+**  
(Highest grade)

**SUSTINVEST** **A**  
(Size grade criteria)

**KR-ESG**  **A+**  
(Highest level: S)

#### CREDIT RATINGS

(As of June 2024)

**NICE** Information Service  **AAA**

**Korea Investors Service**  **AAA**  
AN AFFILIATE OF MOODY'S INVESTORS SERVICE

**KR**  **AAA**  
한국기업평가 KOREA RATINGS

### EXTERNAL AWARDS

(2023-April 2024)

 Korea Institute of Corporate Governance and Sustainability (KCGS)  
**Grand Prize in the Corporate Governance category**

 Leadership Ratings for Climate Change and Water Security Sectors  
**Korea Awards**

 Climate Change Response and Greenhouse Gas Reduction Excellence Awards  
**Minister of Trade, Industry and Energy Commendation**

 LACP Spotlight Awards  
**Platinum Award**

 Mecenat Award  
**Presidential Prize**

# I. FINANCIAL HIGHLIGHTS

## STATEMENT OF INCOME

Category	Unit	Consolidated			Separate		
		2021	2022	2023	2021	2022	2023
Sales	KRW billion	5,228.4	5,851.4	5,862.6	3,490.5	3,694.4	3,586.7
Operating profit	KRW billion	1,338.4	1,267.7	1,167.3	1,083.4	1,120.3	931.7
Net profit	KRW billion	971.8	1,005.3	922.4	852.9	958.0	804.9
Comprehensive income	KRW billion	1,061.2	1,082.6	900.8	890.1	9,86.3	802.1
Earnings per share	KRW	7,898	8,489	7,843	6,894	8,007	6,993

## SUMMARIZED FINANCIAL POSITION

Category	Unit	Consolidated			Separate		
		2021	2022	2023	2021	2022	2023
Current assets	KRW billion	6,255.9	6,509.6	6,418.4	4,009.0	4,096.5	3,554.3
Non-current assets	KRW billion	5,381.4	5,792.1	6,354.1	5,772.7	6,060.4	6,819.6
Total assets	KRW billion	11,637.3	12,301.7	12,772.5	9,781.7	10,156.9	10,373.9
Current liabilities	KRW billion	2,063.9	2,527.3	2,672.4	1,715.4	2,037.7	2,164.2
Non-current liabilities	KRW billion	364.5	415.8	805.1	66.1	65.6	377.1
Total liabilities	KRW billion	2,428.4	2,943.1	3,477.5	1,781.5	2,103.3	2,541.4
Total shareholders' equity	KRW billion	9,208.9	9,358.6	9,294.9	8,000.1	8,053.6	7,832.5

## KEY FINANCIAL RATIOS

Category	Unit	Consolidated			Separate		
		2021	2022	2023	2021	2022	2023
ROA	%	8.4	8.2	7.2	8.7	9.4	7.8
ROE	%	10.6	10.7	9.9	10.7	11.9	10.3
Operating profit margin	%	25.6	21.7	19.9	30.7	30.3	26.0
Current ratio	%	303.1	257.6	240.2	233.7	201.0	164.2
Debt-to-equity ratio	%	26.4	31.4	37.4	22.3	26.1	32.4

## VOTING RIGHTS STATUS

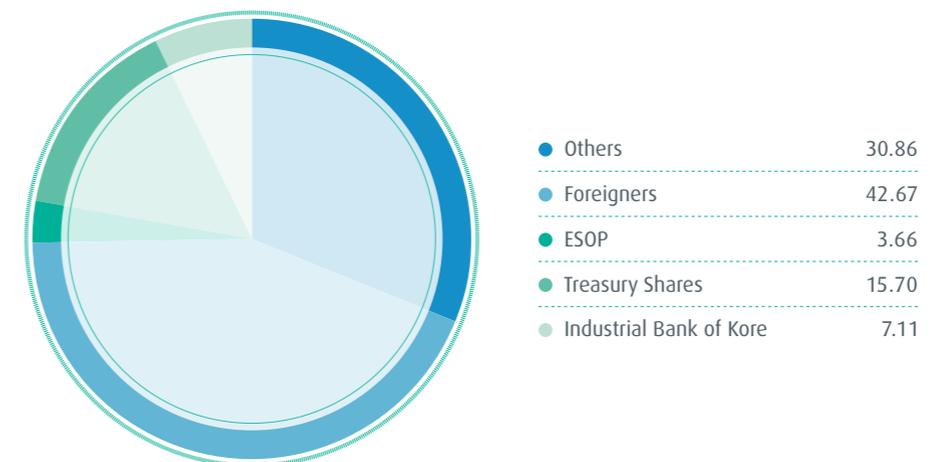
Category	Type	2023
Number of shares issued	Common share	133,822,497
Number of shares without voting rights	Common share	21,012,574
Number of shares with voting rights	Common share	112,809,923

## DIVIDEND PAYMENT

Category	Unit	2020	2021	2022	2023
Total dividend paid	KRW million	595,584	575,904	581,400	590,776
Dividend payout ratio (consolidate basis)	%	51	59	57	65
Cash dividend yield ratio	%	6	6	5	6
Dividend per share	KRW	4,800	4,800	5,000	5,200

## SHAREHOLDER COMPOSITION

(Unit : %)



\* As of the end of December 2023

# ESG HIGHLIGHTS

## Performing environmental responsibility across the value chain



CLIMATE CHANGE RESPONSE	CIRCULAR ECONOMY
<p>GHG Emissions Generated at Business Sites</p> <p>KT&amp;G 9.0% ↓<sup>1)</sup></p> <p>Group Subsidiaries 5.8% ↓<sup>2)</sup></p> <hr/> <p>Renewable Energy Consumption at Business Sites</p> <p>Percentage of renewable energy consumption 19.0%<sup>1)</sup></p> <p>Group Subsidiaries 13.5%<sup>2)</sup></p>	<p>Water Withdrawal and Waste Recycling Rate</p> <p>Water withdrawal 8.7% ↓<sup>1)</sup></p> <p>Waste recycling rate 83.9%<sup>1)</sup></p> <hr/> <p>Wasted Device Material Recycling</p> <p>Approximately 7,196kg</p>

### NATURAL CAPITAL

Soil & Forest

Halting deforestation and land conversion in protected areas by 2030

## Deforestation & Conversion Free<sup>3)</sup>

<sup>1)</sup> Based on all domestic business sites and overseas manufacturing sites of KT&G, compared to the 2020 baseline  
<sup>2)</sup> Based on all domestic business sites of KT&G and manufacturing sites of overseas corporations and the Group subsidiaries, compared to the 2020 baseline  
<sup>3)</sup> Targeting the Group subsidiaries and supply chain of KT&G and KGC

## Building a sustainable business ecosystem



EMPLOYEE DEI	SUPPLY CHAIN
<p>Diversity Target Progress<sup>4)</sup></p> <p>Percentage of female managers 13.4% (0.2%p↑)</p> <hr/> <p>Percentage of locally-hired employees among the management and persons in duty 26.0% (2.5%p↑)</p>	<p>Sustainable Tobacco Program</p> <p>Sustainability assessment of domestic farms 680 farms</p> <p>Support for energy-saving tobacco leaf drying machine 100 farms</p> <hr/> <p>Significant Suppliers</p> <p>Win-win support KRW 2.8 billion</p> <p>Quality/productivity improvement, strengthening ESG capabilities</p>

### LOCAL COMMUNITIES

Value Chain-related Social Responsibility Project<sup>5)</sup>

KRW 2.3 billion

Creation of SangSang Forests at home and abroad and wetland restoration: 10.8ha

Creating a space aimed for improving smoking environments

<sup>4)</sup> Based on domestic business sites and overseas subsidiaries of KT&G, the figures in parentheses indicate the year-on-year change.  
<sup>5)</sup> Smoking environment improvement and environmental CSR activities

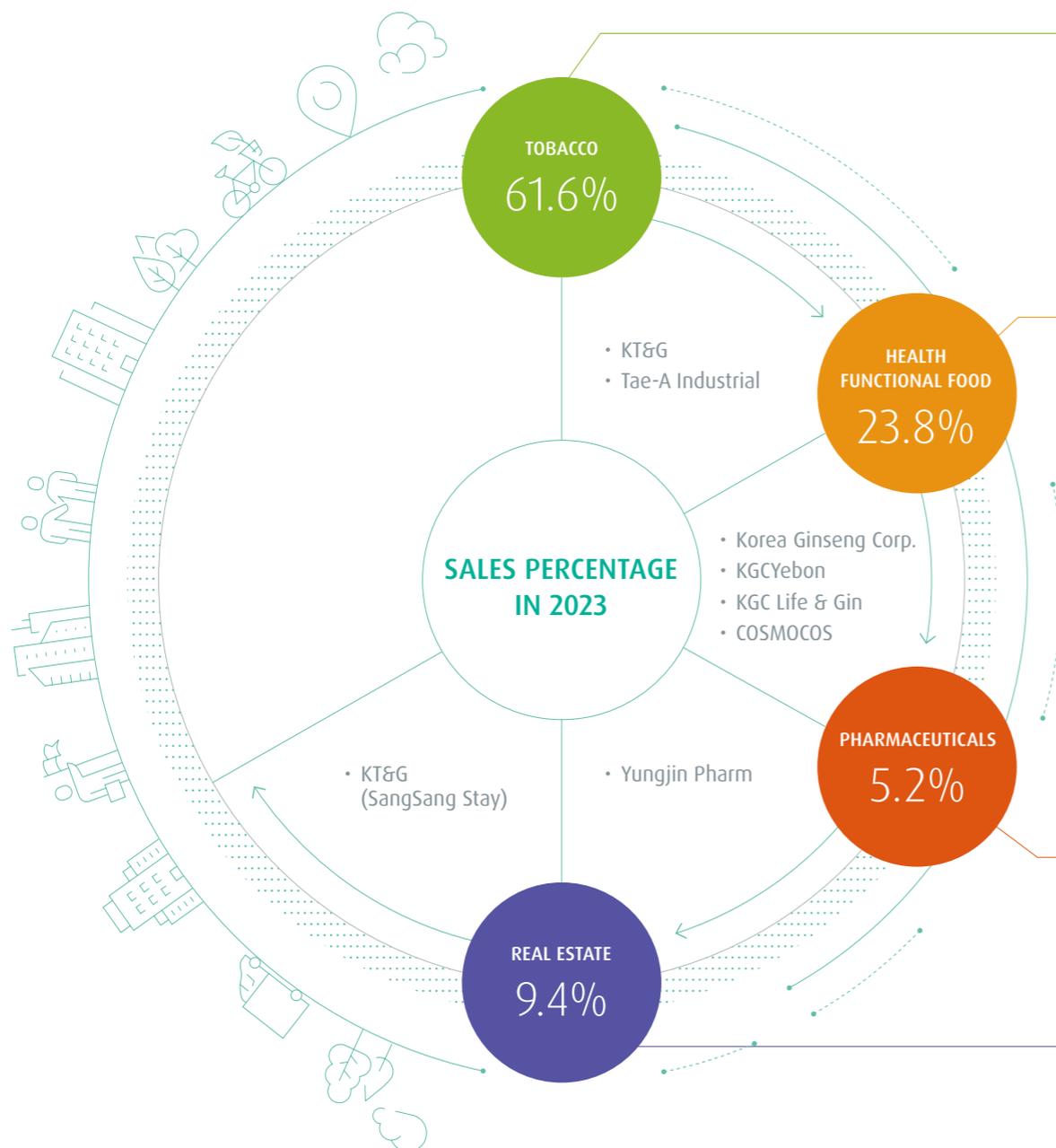
## Advancing governance and strengthening execution capability



GOVERNANCE	PROCESS TRANSPARENCY
<p>Compliance rate with core indicators of FSC<sup>6)</sup> 100%</p>	<p>Strengthening the director appointment process</p> <p>CEO/Independent Director Nomination Committee composed entirely of independent directors</p> <p>Adoption of the external selection advisory panel system</p>
BOARD EXPERTISE	MANAGEMENT EVALUATION AND COMPENSATION
<p>Advancement of Board Skills Matrix</p>	<p>Proportion of stock compensation for management<sup>7)</sup> 60% for aligning shareholder value with a long-term perspective</p> <p>Restricted stock unit (RSU)<sup>8)</sup> scheme introduced</p>
PROTECTING SHAREHOLDER RIGHT	
<p>Concentrated Voting System adopted</p>	

<sup>6)</sup> 15 Indicators recommended by the Financial Services Commission (FSC) to enhance corporate governance transparency  
<sup>7)</sup> CEO long-term performance incentive  
<sup>8)</sup> Targeting executive directors

# I. OUR BUSINESS



## TOBACCO

- **KT&G: Manufacturing and sales of tobacco**  
By enhancing corporate value through a balanced business portfolio in the tobacco industry and sustainable management to global standards, we are strengthening our expertise and innovation to realize our vision of becoming a "Global Top-tier" company.
- **Tae-A Industrial: Manufacturing of reconstituted tobacco sheet**  
As the only reconstituted tobacco leaf manufacturer in Korea, Tae-A Industrial is expanding its business territory to overseas markets.

## HEALTH FUNCTIONAL FOOD

- **Korea Ginseng Corp.: Manufacturing and sales of health functional foods**  
As a leading manufacturer of red ginseng products that have inherited the proud tradition of Korean Ginseng for more than 120 years, KGC is taking a leap forward as a "global comprehensive health company" that aims to create a healthier, happier tomorrow.
- **KGCYebon: Material processing of medicinal herbs**  
As a healthcare company focused on natural products, KGCYebon is contributing to the life and health of humanity by offering safe and reliable natural materials and products of high quality.
- **KGC Life & Gin: Manufacturing and sales of health functional foods, cosmetics, and related products**  
As a beauty and health distribution company specializing in digital and door-to-door sales of health functional foods and cosmetics, B2B corporate special sales, and online distribution, we are opening up a prosperous tomorrow based on tradition, trust, and technology.
- **COSMOCOS: Manufacturing and sales of cosmetics and related products**  
Based on our advanced technology, continuous R&D, and more than 30 years of expertise, we aim to provide the best solutions and the most fashionable products as a global beauty company that creates new values of beauty.

## PHARMACEUTICALS

- **Yungjin Pharm: Manufacturing and sales of pharmaceuticals**  
With the goal of providing excellent "medicines for life" that improve the lives of our customers and patients, we are taking a leap forward a global company by manufacturing and exporting high-quality antibiotic drugs based on our domestic ETC and OTC businesses.

## REAL ESTATE

- **KT&G (SangSang Stay): Real estate development and operation and hotel business**  
KT&G promotes real estate development and operation business, SangSang Stay Hotel business, etc. using the land it owns, generating profits for corporate growth and the construction of better infrastructure for the development of society.



### CC BUSINESS (DOMESTIC AND OVERSEAS CC BUSINESS)

In 2023, KT&G continued its stable growth in the conventional cigarette (CC) business sector. The domestic CC business achieved a market share of 66.0%, an increase of 0.6%p from the previous year, based on continuous growth in products with reduced smell, low irritation, and super-slim designs, selling a total of 40.7 billion sticks. The global CC business reached a record high revenue of over KRW 1.1 trillion, driven by exploring new markets and expanding sales in overseas subsidiaries. As of 2023, KT&G exported 32.3 billion sticks<sup>1)</sup> to 132 countries, and its overseas subsidiaries achieved record sales of 20.9 billion sticks by accumulating capabilities suitable for each subsidiary's business structure, enhancing distribution structures, and establishing a basis for significant advancements. Consequently, the global CC business saw an increase of 3.8 billion sticks from the previous year, with total sales of 53.2 billion sticks.

In 2024, KT&G aims to lead the domestic CC market, which is evolving towards "less needs" with reduced smell and irritation. We plan to enhance our product lines in the extremely low-irritation and smell reduction categories and focus on the high-end market to boost profitability. In the global CC business, we will concentrate on profitable, sustainable, and stable growth. To improve growth, regional CICs (company-in-company) will be established, and direct operations will be strengthened to secure global competitiveness.

<sup>1)</sup> Excluding internal transactions  
<sup>2)</sup> Domestic Tobacco Business  
<sup>3)</sup> Entire CC sales volume in 2023 (Consolidated basis for domestic and overseas tobacco business)  
<sup>4)</sup> Cumulative figure as of 2023

Sales Percentage

\* Consolidated basis

61.6 %

Market share<sup>2)</sup>

66.0 %

Sales volume<sup>3)</sup>

93.9 billion sticks

Export destinations<sup>4)</sup>

132 countries



### NGP BUSINESS

KT&G entered into the NGP (Next Generation Products) business with the launch of the heat-not-burn product "lil SOLID" in the domestic NGP market in 2017, followed by the launch of KT&G's proprietary platforms - "lil HYBRID" in 2018 and "lil ABLE" in 2022. In 2023, lil HYBRID evolved into its third generation, and the nationwide launch of lil ABLE expanded consumer choices, while the lil SOLID Ez (entry-level) was released in 23 countries, and the stick SKU was expanded to achieve visible results globally. As of 2023, KT&G recorded a market share of 46.6% in the domestic NGP market, continuing quantitative and qualitative growth. After forming a strategic alliance with Philip Morris International (PMI) in 2020, a 15-year long-term partnership was signed in 2023.

With active market entry by global tobacco companies and increasing needs for "less smell & modified risk" products among smokers, the NGP market is expected to continue its high growth rate of 15% annually. In the NGP market, which is the core of the future tobacco industry, KT&G will maintain solid growth momentum through continuous platform improvement, enhanced scientific development capabilities, and securing proprietary technologies.

Sales Percentage

\* Consolidated basis

21.5 %

Market share<sup>1)</sup>

46.6 %

Unit sales of sticks<sup>2)</sup>

13.9 billion

NGP SKU<sup>3)</sup>

28 brands



<sup>1)</sup> Based on domestic market share  
<sup>2)</sup> As of 2023 year-end  
<sup>3)</sup> Based on figures compiled in April 2024

I. INTRODUCTION

LETTER TO STAKEHOLDERS   OUR COMPANY   **OUR BUSINESS**

**HEALTH FUNCTIONAL FOOD BUSINESS**

KGC, centered around the “Jung Kwan Jang” brand, is focusing on expanding from the domestic market to global markets. The domestic business sector is leading market growth by responding to increased demand in the health functional market, utilizing materials other than red ginseng, launching high-value new products based on diverse efficacy, and enhancing competitiveness in on/offline channels. The global business sector established customer-centric strategies by region and achieved overseas sales of KRW 337.3 billion<sup>1)</sup> in 2023, an increase of 18.4% from the previous year, thanks to localized promotions and marketing activities to expand awareness of ginseng and red ginseng. In particular, the sales in the Chinese market grew by more than 48% year-on-year, driving the growth of the overseas business.

KGC aims to achieve overwhelming growth in the global market as a “Global Top-tier Health-Care” company. It plans to focus on nurturing key strategic brands, particularly in the Chinese and American markets, continue expanding market demand through new product launches and localization, and expand its business domains and business models into efficacy-based dietary supplements (DS) and food and beverage (F&B) sectors to establish a long-term growth foundation.

<sup>1)</sup> Consolidated basis as of 2023  
<sup>2)</sup> Cumulative basis intellectual property  
<sup>3)</sup> As of 2023 year-end. Based on contract for fresh ginseng cultivation

Sales Percentage

\* Consolidated basis

23.8 %

Patent rights<sup>2)</sup>

306 cases

Trademark<sup>2)</sup>

7,677 cases

No. of growers<sup>3)</sup>

1,604



**COSMETICS BUSINESS**

The cosmetics industry, characterized by strong preferences and trends and low barriers to entry, is highly competitive. As purchasing channels have shifted to H&B (Health & Beauty) stores and online platforms, the original equipment manufacturer (OEM) and original design manufacturer (ODM) markets are expanding. COSMOCOS has focused on diversifying its product portfolio and expanding clientele, achieving qualitative and quantitative growth in the ODM business by securing 46 new clients in 2023. The overseas business achieved a 31.8% increase in sales compared to the previous year on the back of diversification strategy by country, and the company reorganized its channel portfolio to strengthen capabilities in key domestic distribution channels. Through a strategic approach centered on core businesses and restructuring the business portfolio, COSMOCOS turned a profit in 2023.

COSMOCOS plans to focus on diversifying its client portfolio and expanding presence through global inventory expansion to strengthen its ODM business foundation. The brand business will adapt to changes in consumer behavior by repositioning its brands to secure sustainability and competitive distribution. By creating new references in non-China markets, COSMOCOS aims to build continuous growth momentum. Furthermore, it will enhance production efficiency and quality competitiveness to lay the groundwork for a sustainable corporate foundation.

<sup>1)</sup> Consolidated basis as of 2023

Sales Percentage

\* Consolidated basis

1.2 %

Sales<sup>1)</sup>

KRW 72.8 billion

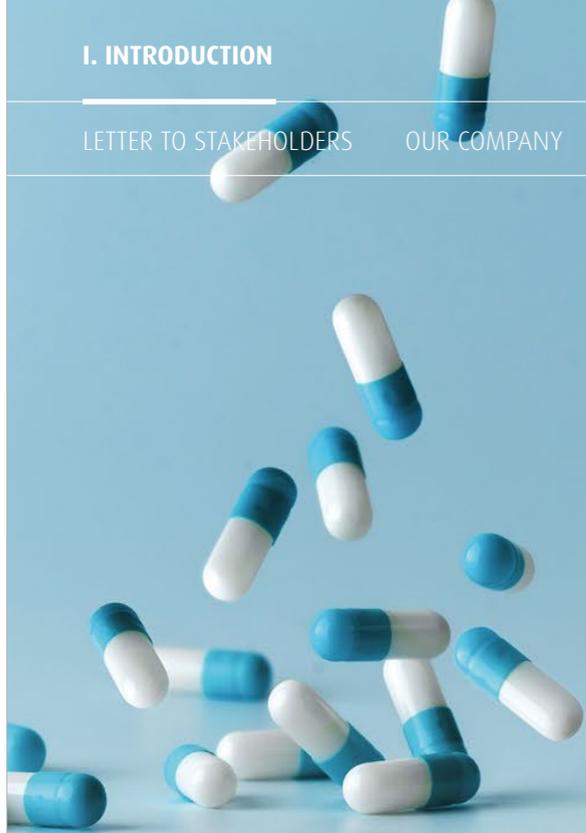
Number of new clients

46

Major certification

ISO 9001





## PHARMACEUTICAL BUSINESS

Yungjin Pharm has been focusing on enhancing competitiveness in the domestic market and expanding its global reach to countries such as Japan and China, as well as expanding business areas such as injectable CMO (Contract Manufacturing Organization), to create new opportunities in the steadily growing pharmaceutical industry. In 2023, the company achieved highest ever sales due to steady growth in domestic sales and contract services as well as improved profitability in global operations, turning an operating profit. Yungjin Pharm continues its aggressive R&D investment for sustainable growth, while also practicing ethical management by implementing internal compliance program operations and obtaining the ISO 37001 (anti-bribery management systems) certification. As a result, it received an overall grade A for two consecutive years in the Sustainvest ESG evaluation and a grade B+ from the Korea Institute of Corporate Governance and Sustainability (KCGS).

Yungjin Pharm aims to increase the scale of operating profits and pursue business internalization centered on profitability. In the domestic sales sector, the company plans to concentrate capabilities on its products and develop treatments for chronic diseases as major items. Global sales will aim for business normalization through expansion of existing and new business sales and securing new clients. R&D will strengthen the chronic disease portfolio to establish a mid-to long-term growth foundation, and the production sector will secure production competitiveness through additional investment in antibiotic facilities.

<sup>1)</sup> Consolidated basis as of 2023



## REAL ESTATE BUSINESS

KT&G is actively seeking growth opportunities in the real estate sector, leveraging idled land resulting from enhanced production and sales efficiencies to generate sustained profits. We are demonstrating stable growth by using our inherent professional capabilities as part of a strategic approach to establish a balanced mid-to long-term growth engine. This strategy includes operating a sustainable business through diversification of our business structure and securing a growth foundation by stabilizing rental assets. In 2023, our real estate business advanced the development of owned assets, including completion of Prugio Briseiel at Hwaseo Station in Suwon, and commencement of construction for e-Pyunhansesang Daejeon Station Centum Vista. It also efficiently managed 12 major assets nationwide, generating revenues of KRW 550.1 billion.

The real estate business is enhancing its ESG management in line with global ESG trends and relevant regulations. Moving forward, we will do our utmost to establish and implement strategies for energy saving, carbon emission reduction, compliance with the Occupational Safety and Health Act, and the expansion of renewable energy, with an aim to fulfill corporate social responsibilities and achieve sustainable growth.

<sup>1)</sup> Consolidated basis as of 2023





# FROM VISION TO PRACTICE.

ESG has established itself as a measure for evaluating corporate sustainability, and thus, the era of mandatory ESG disclosure is on the horizon. Companies that fail to properly read and swiftly respond to this trend will face limitations in their growth. Guided by the clear vision of becoming a “Global Top-tier” player, KT&G is doing its utmost to ensure that its vision does not remain just a declaration but is realized as “true value-up.” From an ESG perspective, we are driving our business with a long-term view, implementing economically, socially, and environmentally sustainable innovations.

# OUR GOAL FROM VISION TO VALUE-UP

## 2027 New Vision

KT&G is preparing for new growth, aiming to become a “Global Top-tier Player” under the “2027 KT&G Vision,” which was newly established in 2023. The strategy to achieve the vision consists of three core growth businesses – NGP (Next Generation Products), health functional food (HFF), and global conventional cigarettes (CC) – and three keywords – Trust, Origin, and Professional – that will guide the Group as it transitions to a future-oriented and sustainable business structure. KT&G has set “50% of revenue from overseas business” and “60% of revenue from non-CC business” as key business KPIs for 2027, and to this end, we have been focusing on implementing company-wide projects to improve the Group business structure since the appointment of the new CEO.

Moving forward, we will achieve the goal of becoming a Global Top-tier by strengthening our core competitiveness and structural innovation centered on our three core growth businesses – NGP, HFF, and global CC. In the process of executing the goals, KT&G Group will focus on fostering businesses that create positive impacts by using “Global, ESG, and Core expansion” as keywords to enhance corporate sustainable value.



<sup>1)</sup> Conventional cigarettes

<sup>2)</sup> Excluding real estate business

# OUR GOAL FROM VISION TO VALUE-UP

## New Vision, New Leadership, New Direction

In 2024, KT&G is accelerating the realization of its new vision under a new leadership centered on a new CEO. In particular, in the era of global hypercompetition, with intensifying competition and accelerating change, KT&G believes that the surest way to prepare for an uncertain future is to create the future itself, and has set a new direction for sustainable growth with “Trust, Origin, and Professional” as keywords to become a “TOP” company.

We will seek new opportunities for growth by striking a better balance between financial and non-financial performance under the keywords of “Trust” which means enhancing stakeholder trust through active communication; “Origin” which intends to take on new challenges from a new perspective to secure unparalleled competitiveness; and “Professional” aims for global expertise brought about by a performance-based culture fostered by employees’ professional competence and organizational commitment.

Since the appointment of the new CEO, KT&G has been promoting organizational structure innovation by establishing a global region CIC (company-in-company), a responsible management system through an autonomous decision-making structure, and deploying key group leaders globally. In addition, we are implementing structural changes for sustainable growth by focusing on a younger, competency-oriented organization, a reward system, and global mobility, as well as “organizational operation innovation” to improve group management efficiency, and “business management structure innovation” to accelerate substantial change and progress.

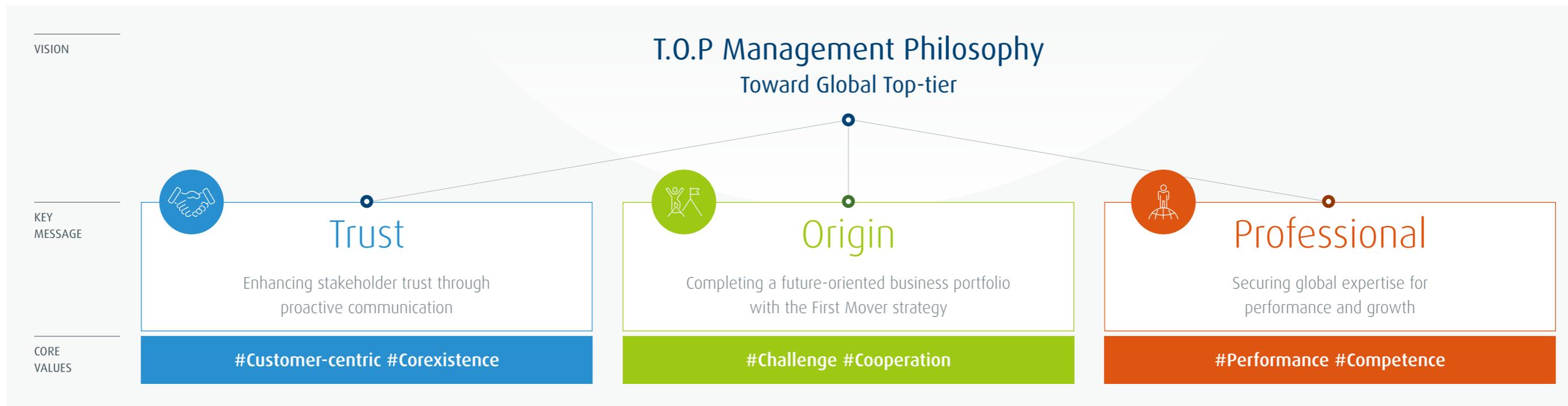


**Lee, Sang-hak**  
Senior Executive Vice President & Chief Strategy Officer, KT&G



KT&G Group aims to become a “Global Top-tier” company that can maximize both employee and shareholder value by making bold investments in its 3 core businesses – NGP, HFF, global CC – and creating performance in global markets.

Amidst the rapid paradigm shift in the tobacco industry and the growth opportunities in the global health functional food market, KT&G is transforming beyond the concept of separating domestic and international businesses into a single global company. We are also focusing our capabilities on discovering new businesses and exploring new markets. Moving forward, we will continue our global growth momentum while accelerating the establishment of a future-oriented business portfolio, paving the way for sustainable growth.



# OUR PROGRESS AND PROSPECTS

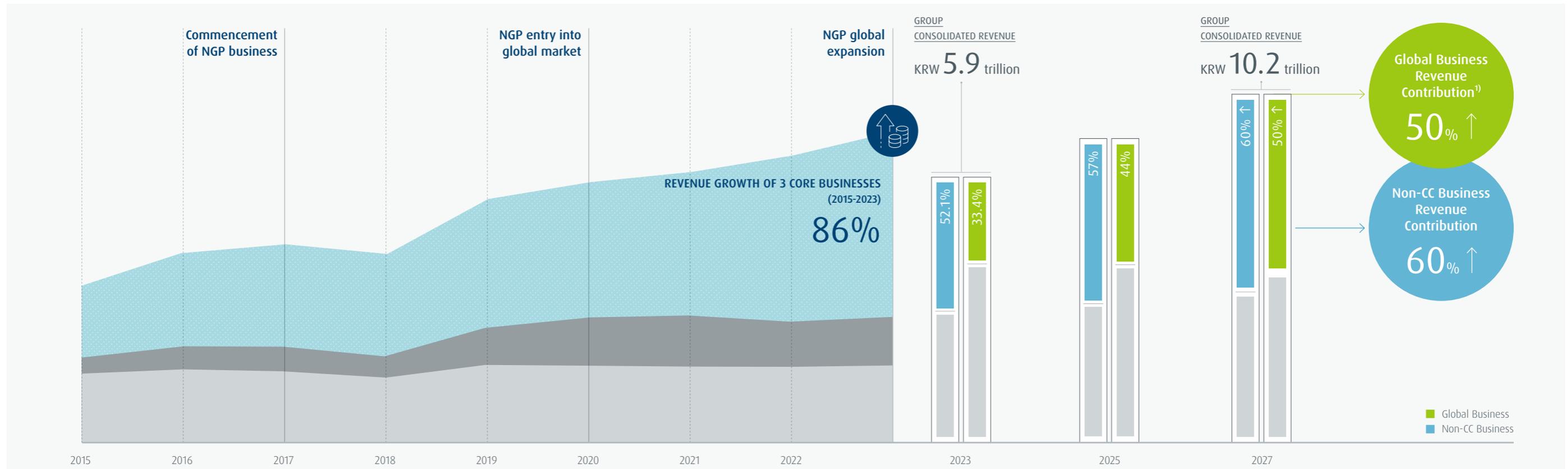
## KT&G Business Transformation

KT&G Group has been strongly promoting global growth of its core businesses and achieving both quantitative and qualitative growth. From 2015 to 2023, the global sales growth rate of the 3 core businesses – NGP, HHF, global CC –reached 86%, and NGP in particular has been growing strongly, with a CAGR of 115% through 2023 since its launch in 2017.

However, KT&G Group is not resting on its laurels, and is promoting a structural transformation centered on 3 core businesses to unleash higher future growth potential. Based on future growth investments of KRW 3.5 trillion in core businesses, we will achieve KRW 10 trillion in revenue by 2027, generate more than 60% of revenue from businesses other than conventional cigarettes through qualitative growth, and increase the proportion of sales from global businesses to 50% to become a truly global top-tier company.

As part of its growth investments centered on 3 core businesses, KT&G began the construction of the Indonesia Plant 2 and 3, aiming for the first operation in 2026. We intend to build Indonesia into an overseas production base with an annual production capacity of about 35 billion sticks, which will accelerate our global market expansion. In October 2023, we also started construction of a new factory in Kazakhstan to establish a production base in Eurasia. The new factory, which is being built on a site of about 200,000 square meters, is expected to serve as a hybrid production base for NGP and global CC businesses in the Eurasian region, and will serve as a global core production hub covering the Eurasian market.

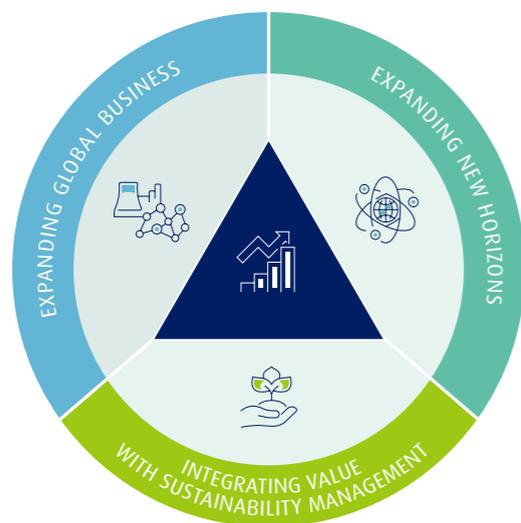
KT&G Group Revenue Growth and Goal



<sup>1)</sup> Excluding real estate business

## GROWTH INVESTMENT

In January 2023, KT&G held a future vision declaration ceremony and unveiled its goals and blueprint to become a “Global Top-tier” company. In particular, we revealed our ambitions for large-scale long-term investment and global market expansion, and communicated with stakeholders about the direction and expected effects of growth investments through the KT&G Value Day 2023 held in November. As announced publicly, we plan to execute growth investments of approximately KRW 3.5 trillion in our core business areas over the next five years to achieve the goal of KRW 10 trillion in revenue by 2027.



### Expanding Global Business

**NGP**

Becoming an “NGP Global Top-tier Player” by investing in nurturing and growing global mega brands

**Health Functional Food**

Pursuing aggressive international expansion with a focus on localization to become a global health functional food solutions brand

**Global CC**

Building a solid foundation for business transformation by strengthening capabilities with profitability, growth, and stability as core values

### Expanding New Horizons

**NGP**

“Beyond Cigarette” to continue to drive technological innovation to expand business within the tobacco industry

**Health Functional Food**

Securing evidence of efficacy through clinical studies at the level of botanical drugs

### Integrating Value with Sustainability Management

An integrated approach that considers sustainable value creation in driving the new vision

# TRANSITION TO A GLOBAL TOP-TIER PLAYER THROUGH FUTURE GROWTH INVESTMENT



# Expanding Global Presence

KT&G has achieved sustained growth through a balanced business portfolio, and has solidified the No. 1 position in the domestic market for its NGP (Next Generation Products), health functional food (HFF), and conventional cigarettes (CC) businesses. To achieve our goal of becoming a "Global Top-tier" company, we are accelerating our global growth in three key growth area - NGP, HFF, and global CC. In 2023, we shared the progress of mid-to long-term growth investments to accelerate growth with stakeholders, signaling that KT&G's efforts to achieve our vision are materializing into tangible results.

## NGP Business Investment Plan

KT&G is investing in securing overseas production bases to expand its own production capacity in order to gain a competitive edge in the global NGP market. The growth investments planned for 2023 to 2027 are expected to improve production capacity to meet the ever-expanding demand and diversify global production bases.



## HFF Business Investment Plan

KGC is promoting the global expansion of its health functional food business through a customized strategy for each region based on its globally competitive ginseng products and in-depth understanding of local markets.



### KOREA

#### Profitability-driven

- Drive profitability-driven operational transformation for stable cash generation
- Fund overseas operations, export raw materials, and support R&D

#### Expected Outcomes of Investment (2023-2027)

Domestic operating profit CAGR: 10%

### CHINA

#### Short-term growth

- Drive growth-driven localization
- Expand local value chain base, explore collaborations with local players

#### Expected Outcomes of Investment (2023-2027)

Revenue growth in China: 150%

### U.S.

#### Mid-to long-term growth drivers

- Pursue investment for entering mass channels after confirming the likelihood of success
- Expand customer experience and awareness, secure online-centric track records

#### Expected Outcomes of Investment (2023-2027)

Non-Korean consumer ratio in the US market: 60%

## Global CC Business Investment Plan

KT&G's global CC business is focusing on investments to build a global production system and expand the proportion of overseas production to secure differentiated capabilities in overseas markets.

### Expected Outcomes of Investment (2023-2027)

<p>MANUFACTURING CAPACITY</p> <p>1.3 times ↑</p>	<p>PROPORTION OF OVERSEAS PRODUCTION</p> <p>50% ↑</p>	<p>MANUFACTURING COST PER UNIT</p> <p>20% ↓</p> <p>When manufactured in Indonesia vs. Korea</p>
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In the continuously growing global NGP market, KT&G is pursuing a leap to become the “NGP Global Top-tier.”

KT&G is currently focusing on fostering brands that will lead the global market and developing innovative platforms to enhance future value.

We are also considering various alternatives such as expanding overseas production bases to meet future demand. KT&G will accelerate the realization of a global top-tier NGP player by strengthening our global competitiveness through fostering global mega brands and related growth investments.



**Lim Wang-seop**  
Chief of NGP Business HQ, KT&G

## Expansion of Visible Achievements in Overseas Operations

KT&G's global NGP business is growing rapidly. From 560 million sticks sold in 2020, its first year of global entry, to 8.2 billion sticks sold in 2023, the business has grown more than 15 times. This is not just an increase in sales volume, but also in profitability, with KT&G's global NGP business turning profitable in its second year of overseas expansion and expanding its operating profitability. A key driver of this global growth is our innovative platform. In 2020, KT&G targeted overseas markets with lil SOLID 1.0 and lil HYBRID 2.0, and is currently transitioning to the Ez model, following the lil SOLID 2.0. In 2024, we plan to accelerate our performance in global markets by transitioning to the lil SOLID 3.0 and lil HYBRID 3.0.

Aiming to become an “NGP Global Top-tier Player,” KT&G is focusing on fostering mega brands that will lead the global market, just as lil hybrid is leading the market as a representative NGP brand in the domestic market. Currently, we have completed the selection of platforms to be nurtured as global mega brands and are accelerating the development of innovative devices.

KGC is recognized as the “World’s No. 1 Ginseng Brand” and is leading the globalization of red ginseng. As of the end of 2023, KGC sold more than 250 types of products in more than 40 countries around the world, and its flagship red ginseng brand, Jung Kwan Jang, has firmly maintained its number one position for 10 consecutive years according to the sales<sup>1)</sup> records of the global ginseng market compiled by Euromonitor International.

KGC has been growing steadily in overseas markets, leveraging its over 120 years of values of striving for the best and on the back of localized growth strategies that read global market changes. In 2023, KGC's overseas sales reached KRW 337.3 billion, an 18.4% year-on-year growth, the highest ever. In particular, even in a difficult business environment due to the global economic downturn, KGC actively promoted product awareness and distribution channel expansion based on localization strategies, resulting in a 78.5% increase in sales in 2023 compared to 2019, the year before the pandemic. In particular, in China, a major market for KGC's overseas business, we focused our marketing efforts on online channels during the Singles' Day (Guanggun Jie), a large-scale online shopping festival, and as a result, sales in the Chinese market grew by 47.6% year-on-year to KRW 165.5 billion in 2023, driving the expansion of overseas sales.

<sup>1)</sup> Based on retail



KGC is accelerating its global business growth with the mid-to long-term goal of reaching KRW 2.1 trillion in sales by 2027. To aggressively expand its overseas business, KGC will pursue a country-specific growth strategy with its five overseas subsidiaries playing a central role, while also focusing on exploring emerging markets. In addition to launching new products in various flavors and formulations that meet local consumer needs, KGC will focus on expanding local production, distribution channels, and customer acquisition based on strengthening the value chain by connecting with strong partners in each country. KGC has also changed the English name of “Cheong Kwan Jang” to “Jung Kwan Jang” to secure a more differentiated global brand, and is making concentrated efforts to position itself as a “global HFF solution brand” from “Korea’s leading red ginseng brand.”

### 2023 Performance of Global HFF Business

Overseas Business Sales



KRW **337.3** billion

(YoY Growth of 18.4% ↑)

Major Markets Sales



CHINA: KRW **165.5** billion

u.s: **40.6** billion

Global Ginseng Market Share



**46.6**%

\* Based on Euromonitor International



**We will strengthen our business competitiveness in the global market and continue to grow steadily, thereby playing a key role in achieving the Group's vision.**

KT&G is maintaining robust growth in overseas markets beyond Korea. In 2023, we achieved our highest ever performance, and in 2024, we established CICs in two regions, Asia-Pacific and Eurasia, to promote business strategies optimized for local markets. In addition, we are diversifying our production bases to Indonesia and Kazakhstan, thereby responding to growing global demand. Going forward, we will achieve mid-to long-term growth of global CC by enhancing business competitiveness in direct business countries and pioneering countries, expanding talented human resources, and strengthening data-based management capabilities.



**Do Hak-Young**  
Executive Vice President &  
Chief Marketing Officer, KT&G

**KT&G's global CC business** continued to grow in overseas markets, posting a compound annual growth rate (CAGR) of 3.7% from 2019 to 2022, even as the global conventional cigarettes (CC) market has been declining. In 2023, we achieved our highest-ever sales of 53.2 billion sticks, with a total increase of 3.8 billion sticks from exports and direct overseas business year-on-year. In particular, we pioneered the ultra-slim category with ESSE in Mongolia, a market dominated by high-tar and regular products, and maintained our leadership position with 45.1% market share in 2022 and 50.3%<sup>1)</sup> in 2023. We are focusing on building a dominant market share in Mongolia by targeting more than 70% market share in 2025 through new brand development, sales and marketing expansion. In addition, in 2023, we sold a record-breaking 9.6 billion sticks in Indonesia, with a market share of 3%<sup>2)</sup>, and the ESSE brand has been recognized as the world's best-selling ultra-slim brand by global research firm Euromonitor International every year since 2014.

KT&G aims to strengthen its business, management, and control capabilities with profitability, growth, and stability as core values in its global CC business. To strengthen its business capabilities, KT&G is focusing on expanding its overseas direct business and pioneering business, and striving to strengthen its management capabilities such as execution process and human infrastructure management, and control capabilities such as data-based monitoring.



**Expansion of the Global Network for Overseas Business Growth**

**KT&G's global NGP business** first entered three countries in 2020 – Russia, Japan, and Ukraine – and has been expanding its presence ever since. As of 2023, we are meeting overseas consumers in 32 countries (including Korea), and we aim to enter more than 50 countries in the mid-to-long-term. In addition, we plan to secure overseas production bases through growth investments to gain an edge in the global market, and in October 2023, we broke ground on a new plant in Kazakhstan to establish a production innovation base in Eurasia. The new plant in Kazakhstan, which is being built on a site of about 200,000 square meters, is expected to serve as a production base for overseas businesses in the Eurasian region and serve as a global core production hub covering the Eurasian market.

**KT&G's global CC business** is aiming for aggressive global market expansion by increasing local market distribution coverage and strengthening marketing activities. To this end, in 2023, we established subsidiaries and offices in Kazakhstan, Mongolia, and Ukraine, and in 2024, we introduced a company-in-company (CIC) system for each overseas region and established CICs in the Eurasia and Asia-Pacific regions through a major organizational reorganization to enable localized responsible management. In addition, as part of our growth investments, in April 2024, we began construction of Plant 2 and 3 in Indonesia, aiming for the first operation in 2026. KT&G aims to build Indonesia into an overseas production base with an annual production capacity of approximately 35 billion sticks, which will accelerate its global market expansion.

<sup>1)</sup> Based on Y&R, Ulaanbaatar

<sup>2)</sup> Based on Nielsen

## II. OUR SUSTAINABILITY PERSPECTIVE

KT&G VISION   OUR SUSTAINABILITY APPROACH   OUR MATERIALITY PROGRESS



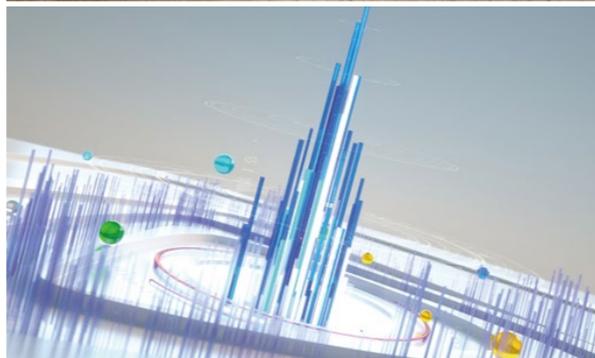
**“Tomorrow of healthier and happier people around the world” is KGC’s highest value.**

Anticipating continuous growth in the global health functional food market, KGC leverages its strong foundation in Asia, particularly in China, and thus aggressively expands its business into Japan, North America, and Europe. We plan to enhance localization through efficacy-based research, innovative brand portfolio development, and expanded partnerships with local entities.

By employing a brand channel mix strategy grounded in market and customer data, KGC aims to scale up its business and accelerate growth, ultimately positioning itself as a top-tier global comprehensive health enterprise, surpassing its current position as the number one player in the domestic market.



**An, Bin**  
CEO, KGC



### Global Presence of Global HFF Business

#### Overseas Subsidiary

5

(China Subsidiary, Jilin Hanzheng Ginseng Co., Ltd., U.S. Subsidiary, Japan Subsidiary, Taiwan Subsidiary)



#### Overseas R&D Center

2

(Shanghai in China, LA in the U.S.)



#### Export Destination

About 40 countries

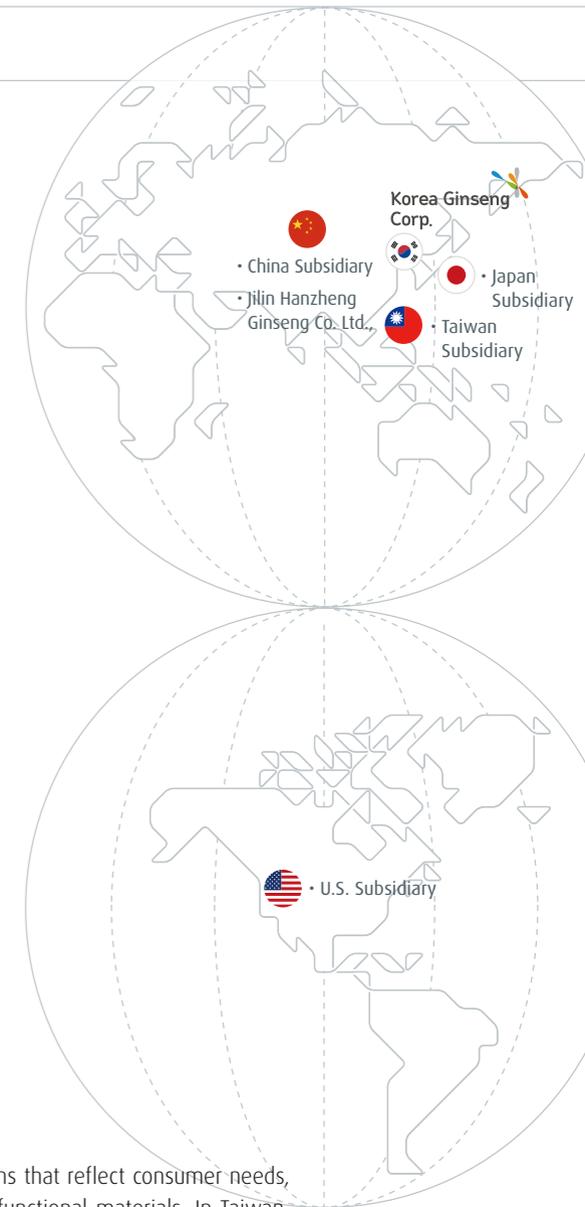


#### Products for Overseas Sales

About 250 products



\* As of 2023 year-end



KGC has established five local subsidiaries in the U.S., China, Japan, and Taiwan, and handles more than 250 types of products in about 40 countries around the world, promoting the excellence of Korean ginseng and Jung Kwan Jang products. We operate Jung Kwan Jang brand stores in major cities around the world, including Beijing, Shanghai, New York, LA, and Tokyo, to promote the value of Jung Kwan Jang and spread the culture of ginseng consumption, and meet local consumers through offline stores such as Jung Kwan Jang brand stores and hypermarkets, as well as online channels.

In the Chinese market, we are focusing on online channel marketing to target the 20-40 age group, and will expand online sales by focusing on locally sourced products, while also strengthening offline distribution networks such as over-the-counter drug channels through expanded partnerships with leading local companies. In the U.S. market, we plan to increase customer acquisition through online channels and expand offline distribution by focusing on premium supermarkets.

We will also diversify our brand portfolio by adding formulations that reflect consumer needs, such as capsules and jelly, and developing products utilizing functional materials. In Taiwan, we aim to maintain growth by expanding our presence in franchise stores and nationwide supermarket chains, and by focusing on digital marketing leveraging K-culture. In Japan, we plan to strengthen our business by localizing product formulations and concentrating on online and supermarket channels. In the European market, we have established a step-by-step entry strategy and are selling products through Amazon in Germany, and in Southeast Asia, we have selected five countries, including Singapore, Vietnam, and Malaysia, as strategic regions to expand our business. We will continue to expand our presence in global duty-free shops to respond to the recovery of global travel demand. At the same time, we will use this as a bridgehead for expanding our business in Asia and entering the Middle East and Europe, thereby discovering new business opportunities.

# I. FROM INTERNATIONAL TO GLOBAL, II. AND LOCAL.

With a clear goal of becoming a “Global Top-tier” company, KT&G is increasing its dominance in overseas markets through aggressive investment, bold innovation, and strategic localization.



## KOREA Expansion of the Daejeon NGP Plant

In November 2023, the expansion of the Daejeon NGP Plant, which KT&G promoted to build a production innovation base, was successfully completed. As a result, the Daejeon NGP Plant now has a total of eight facilities, including three additional NGP stick production facilities introduced in 2022, and an automated warehouse that can store up to 360,000 boxes, laying the foundation for the leap forward of the NGP business. KT&G plans to expand its production innovation base centered on domestic manufacturing plants to smoothly respond to the demand of the rapidly growing NGP business based on its innovation platform and global partnerships.



## KAZAKHSTAN Commencement of the Construction of a Global Production Hub

KT&G is positioning Kazakhstan as a cornerstone for the growth of its Eurasian business, aiming to enhance its global export competitiveness. In January 2023, KT&G established a subsidiary in Kazakhstan to establish a local business base. In October of the same year, marking the groundbreaking ceremony, KT&G initiated the construction of a new plant in Almaty, Kazakhstan, dedicated to producing cigarettes for export to the Eurasian region. Moving forward, we plan to strengthen our global business capabilities by establishing a complete local value chain, enabling direct management from production to marketing and sales.



## CHINA Enhancement of Local Value Chain

With China as a key base for overseas entry, KGC established a Chinese subsidiary in 2009, followed by an R&D center in 2013, completing the localization of the entire value chain from product development to sales. Based on the local value chain, KGC is introducing various local products utilizing traditional Chinese ingredients such as *Ejiao* and swiftlet nest, in addition to red ginseng, and plans to further strengthen the value chain by strengthening collaboration with local companies. In addition, we are continuously raising awareness of the Jung Kwan Jang brand by operating Jung Kwan Jang brand stores in the center of Beijing, China, and thanks to these efforts, the Jung Kwan Jang brand has been registered as an eminent trademark<sup>1)</sup> and recognized for its value.

<sup>1)</sup> A trademark system that guarantees widespread public recognition, high reputation, and credibility, and receives special protection from the Chinese government. As of 2021, out of approximately 37 million registered trademarks in China, only some 10 Korean brands, including Jung Kwan Jang, have been recognized as eminent trademarks.



## INDONESIA Commencement of the Establishment of the Largest Overseas Production Hub

In April 2024, KT&G accelerated its efforts to secure a global production hub by commencing the construction of Plant 2 and 3 in Indonesia. Located in East Java Province, these facilities will collectively have an annual production capacity of 21 billion sticks. Upon completion, KT&G will establish its largest overseas production hub in Indonesia. This production hub in Indonesia will serve as a key export hub targeting the Asia-Pacific and Middle Eastern markets for KT&G, becoming a pivotal growth driver in achieving our mid-to long-term vision.

# Expanding New Horizons

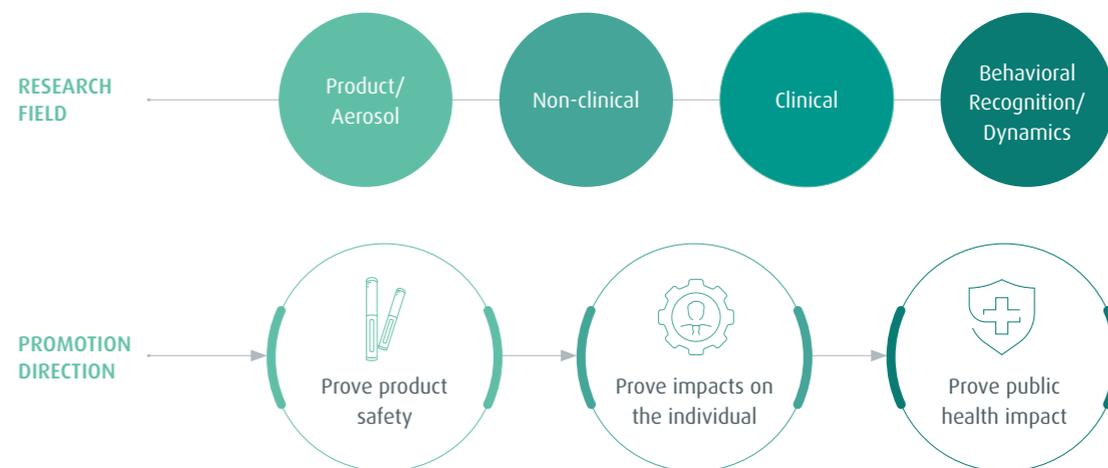
In order for KT&G to realize higher future growth potential, we need to quickly seize opportunities in the global market and realize them through aggressive investment and innovation. With a new perspective, we are focusing on securing advanced innovative technology capabilities and unparalleled competitiveness as a first mover that boldly takes on challenges. Based on the science and technology and expertise accumulated by leading the domestic market, we are exploring values beyond conventional cigarettes and health functional food businesses, and introducing an enterprise resource planning (ERP) system as an integrated management tool to strengthen competitiveness and promote sustainable growth.

## NGP

### BEYOND CIGARETTE

Along with the establishment of K-Science, KT&G's unique tobacco science research system, we are focusing on expanding the scope of the tobacco industry through technological innovation to create new added value and lay the foundation for sustainable growth. In particular, we will secure long-term business growth engines by continuing R&D in new growth areas and implementing and validating technologies to the level of commercialization.

### K-Science Implementation Strategy by Phase



## HFF

### BEYOND NUTRITIONAL VALUE

KGC is focusing on strengthening its R&D capabilities to provide differentiated value at the pharmaceutical level, beyond the value of traditional health functional foods (HFF). In particular, we are securing evidence of efficacy through clinical research at the botanical drug level, and based on this, we will seek new growth opportunities by branding ginseng ingredients and creating new markets.

## New System

### BEYOND CONVENTIONAL

In order to meet the diversified business needs of the Group's global expansion, KT&G established an ERP system and established standard policies for global company rules and manuals, which improved the flow of information at the Group level and laid the foundation for consistent and sustainable operations of overseas subsidiaries.

#### VALIDATION



- Scientific and objective validation of the efficacy and safety of ginseng/red ginseng
- Preliminary safety validation of products and raw materials

#### DIFFERENTIATION RESEARCH



- Provide scientific evidence for the need for a balanced intake of saponins and non-saponins
- Demonstrate differentiation and superiority from other ingredients
- Provide accurate information about ginseng/red ginseng to domestic and international organizations and consumers

#### MATERIAL DEVELOPMENT, EFFICACY RESEARCH



- Recognition of the functionality of ginseng/red ginseng through the technological capabilities of the Korea Ginseng Research Institute
- Pursuit of individual recognition for new functional ingredients



**To create a sustainable future for KT&G, we are strengthening our technological competitiveness based on the innovative DNA of our employees.**

As an “innovation engine” to realize KT&G’s mid-to long-term goals, R&D HQ is focusing on laying the foundation for the company’s sustainable future by diversifying its product portfolio based on technological competitiveness and discovering new research areas to expand its business. To this end, R&D HQ is striving to redefine the organization’s mission and instill a clear sense of purpose and innovation DNA for taking on new challenges by changing the mindset of employees.



**Jo, Seong-Moon**  
Chief of R&D HQ, KT&G

## NGP

### Beyond Cigarette

KT&G has been establishing “K-Science” based on internal and external collaboration systems centered around the R&D HQ. The proprietary tobacco science research system of KT&G, K-Science, aims to systematically and scientifically prove the excellence and safety of its products while securing internal and external reliability through transparent information sharing and external verification for consumers. To this end, in 2023, KT&G recruited overseas experts to establish the PMTA Program Center and built experimental infrastructure that meets regulatory requirements. This initiative aims to obtain PMTA (Pre-market Tobacco Product Applications) approval from the U.S. Food and Drug Administration (FDA). In addition, KT&G has strengthened its quality verification capabilities by expanding the scope of new recognitions from international accredited testing laboratories. Moving forward, we plan to focus on early establishment of K-Science by enhancing our integrated modified risk assessment capabilities.

KT&G is also continuously promoting technological innovation to expand its business in the tobacco industry. Based on our accumulated science and expertise, we have completed the establishment of research infrastructure in new business areas such as functional inhalants and green biomaterials, and are conducting advanced research to internalize core technologies. In particular, we are developing smoking habit improvement supplements and functional substance delivery systems using our expertise and capabilities in the tobacco industry to create new markets based on inhalation science.



## HFF

### Beyond Nutritional Value

KGC is focusing on strengthening its R&D infrastructure and capabilities to secure evidence of efficacy through botanical drug-level clinical research. In 2023, KGC relocated its R&D center from Daejeon to Gwacheon Knowledge Information Town in Gyeonggi-do to expand its R&D infrastructure, and built a differentiated infrastructure by introducing new state-of-the-art equipment in a space 1.7 times larger than the previous one. KGC aims to expand overseas clinical and efficacy research in connection with local R&D centers in the U.S. and China, centered on the Gwacheon R&D Center, and to strengthen marketing effectiveness in markets with low awareness of ginseng by utilizing clear evidence of efficacy. As part of this, KGC is activating efficacy research in collaboration with leading overseas universities to secure advanced technologies from world-class scholars and raise our R&D capabilities to the highest global level.

Moreover, KGC will develop international standard data on the efficacy, safety, and standardization of ginseng raw materials, with an aim to register ginseng as a natural medicine with the U.S. FDA. In 2023, after five years of research, KGC’s red ginseng oil was officially recognized as an individually approved functional ingredient by the Ministry of Food and Drug Safety (MFDS), leading to the successful launch of the new product “Red Ginseng Oil RXGIN CLEAN.” Moving forward, we will secure additional individually recognized ingredients and differentiated formulations to develop innovative products, thereby leading the global market beyond Korea.



## New System Beyond Conventional

KT&G Group is building the systems required for more systematic and efficient operations and strengthening the competitiveness needed to leap into the global top tier, in line with its global business expansion strategy. An enterprise resource planning (ERP) system supports processes across the business, including key value chains, and provides a variety of benefits, including improving operational efficiency, managing data integration, providing flexibility during scale-up, and supporting legal and regulatory compliance. KT&G Group recognized the need to secure an infrastructure for execution and management while promoting innovation to achieve its vision, and embarked on building a data-based business management infrastructure to proactively and effectively respond to changes in the business environment. In addition, the ERP system was introduced to strengthen the Group's governance in the process of promoting sustainable management, while adding functions to support compliance with various laws and regulations to minimize compliance risks and respond quickly.

Starting with the establishment of the Group's standard "Global Template" at KT&G and KGC's domestic business sites in September 2020, we have been expanding the scope of ERP system implementation to subsidiaries and overseas business sites, and as of February 2024, a total of 18 entities have completed ERP system implementation. In the process of implementing the ERP system, we defined regulations, policies, and standard processes for the Group and the tobacco, HFF, and pharmaceutical industries, established a standardized information management system, and overhauled company-wide and operational reference data. Based on standardized regulations, policies, processes, and reference information, we were able to strengthen the Group's management capabilities and governance, and significantly improve operational efficiency. In addition, we have been able to maintain the consistency and accuracy of data by providing real-time information, which contributes to efficient and rational decision-making based on data. Furthermore, we have enhanced our compliance responsiveness by securing the integrity of financial and non-financial data and reflecting the requirements of the internal accounting management system.

In the future, we plan to expand the ERP system to newly established subsidiaries and major bases, which will allow us to maintain consistent management visibility of our global operations. In doing so, we will enhance our core business competitiveness based on streamlining global operations internally while also strengthening our credibility with domestic and international stakeholders and the capital market externally.

As KT&G's global business expands, the number and scale of overseas business sites, including overseas subsidiaries, is increasing, requiring the strengthening of the overseas workplace management system and the advancement of operating policies.

### Current Status of ERP System Implementation



\* Based on system opening

KT&G is therefore reviewing company rules and manuals for each overseas subsidiary, led by the Global Policy Team, to ensure that the policies promoted at the KT&G Group level are shared across all business sites around the world. This also aims to ensure that each overseas organization operates in accordance with systematic and clearly defined standards and procedures. In 2023, we established standard company rules reflecting KT&G's standard policies in each major field, based on which, we established company rules for newly established overseas organizations and overhauled the company rules of existing organizations to ensure consistency in global business operations. In 2024, we plan to make continuous efforts to improve consistency through the application of standard company rules and maintenance of old company rules, while establishing a global company rules and manual standard policy to support the establishment of a consistent and sustainable company rules operation system and effective organizational management of overseas subsidiaries.

# New Vision KPIs

## Integrating Value with Sustainability Management

KT&G is preparing to leap into the “Global Top-tier” with “Trust, Origin, and Professional” as the keywords of KT&G’s management philosophy to achieve its new vision. To solidify “trust” with stakeholders and enhance corporate value, we are continuously promoting ESG management, and in particular, we are making company-wide efforts to respond to climate change and accelerate the circular economy by reducing greenhouse gas emissions with the goal of achieving carbon neutrality by 2045. In addition, we respect the value of DEI (Diversity, Equity, and Inclusion) and foster “professional” talents with HR policies that do not restrict or discriminate based on nationality, age, gender, etc.

Sustainable growth is possible when it is supported by core competencies – “origin” to the company. KT&G therefore aims to generate stable profits based on its unique, future-oriented portfolio, which will enhance the company’s sustainability.

<sup>1)</sup> Excluding real estate business

<sup>2)</sup> Domestic sales volume + Overseas export volume + Overseas PMI shipment

<sup>3)</sup> Korea Laboratory Accreditation Scheme (under the Korean Agency for Technology and Standards)

<sup>4)</sup> CAPEX is the cumulative amount, the corresponding year’s NGP-related SG&A expense, etc. were reflected.

<sup>5)</sup> Due to the advancement of emission factors, there are some discrepancies with the data disclosed last year.

<sup>6)</sup> Due to the expansion of the calculation scope, there are discrepancies with the data disclosed last year.

<sup>7)</sup> Based on domestic and overseas manufacturing sites of KT&G and KGC

<sup>8)</sup> Due to changes in the aggregation method, there are discrepancies with the data disclosed last year.

<sup>9)</sup> For KT&G’s domestic operations, 100% of the assessments have been completed. For overseas operations, the number of subjects for the human rights impact assessment has increased due to the expansion of new hires.

<sup>10)</sup> Based on domestic business sites and overseas subsidiaries of KT&G, and direct employment basis

## Key Performance Indicators for New Vision Execution

### Global Business Revenue Contribution<sup>1)</sup>

2021	29.5%
2022	32.9%
2023	33.4%
<b>2027</b>	<b>50%</b>



### Non-CC Business Revenue Contribution

2021	52.6%
2022	54.5%
2023	52.1%
<b>2027</b>	<b>60%</b>

		BUSINESS AREA						
Category	Management Metric	Unit	2021	2022	2023	YoY	2025 Moon Shot Goal	
NGP	Business expansion	Unit sales of sticks <sup>2)</sup>	100 million sticks	71.8	107.0	139.5	30.4%	
		NGP sales	KRW billion	504.0	876.3	779.4	-11.1%	
		NGP sales contribution in the tobacco business	%	18.3	24.5	21.6	-2.9%p	
	Consumer accessibility	Consumer purchase market share (based on Korea)	%	40.4	47.5	47.6	0.1%p	M/S 60% ↑ by 2025
		Markets where NGP entered	Countries	24	32	32	-	50 countries by 2025
		NGP platforms launched	Device platforms	2	3	3	-	5 device platforms ↑ by 2025
Capability and infrastructure	NGP patent applications	Cases	1,010	1,339	2,025	51.2%		
	KOLAS <sup>3)</sup> -certified items	Cases	156	156	306	96.2%		
	NGP-related investment amount <sup>4)</sup>	KRW billion	228.0	337.8	530.6	57.1%		
HHF	Global growth	Global business sales	KRW billion	249.5	285.0	337.3	18.4%	
		Global business sales contribution	%	18.1	20.5	24.2	3.7%p	
	China/US sales growth rate	%	21.6	5.1	35.9	30.8%p		
Capability and infrastructure	No. of items of overseas product registration (cumulative)	Cases	348	383	398	3.9%		
	KGC patent granted (cumulative)	Cases	265	289	306	5.9%		
		ESG AREA (ALL GROUP SUBSIDIARIES)						
Category	Management Metric	Unit	2021	2022	2023	YoY	2030 Moon Shot Goal	
Environmental	Respond to climate change	GHG emissions at business sites <sup>5)</sup>	tCO <sub>2</sub> eq	192,403	191,418	185,672	-3.0%	42% reduction by 2030
		Renewable energy consumption rate	%	0.1	10.8 <sup>6)</sup>	13.5	2.7%p	80% by 2030
	Accelerate the circular economy	Water withdrawal <sup>7)</sup>	Tons	1,521,798	1,491,902	1,374,296	-7.9%	20% reduction by 2030
		Zero Waste To Landfill-certified sites	%	-	-	25	25%p	100% by 2030
Social	Human rights protection	Percentage of business sites that have conducted human rights impact assessment	%	39.4	36.7	35.6 <sup>8)</sup>	-1.1%p <sup>9)</sup>	100% by 2030
		Percentage of female employees	%	13.5	13.4	13.6	0.2%p	20% by 2030
	Diversity and inclusion <sup>10)</sup>	Percentage of female managers	%	10.4	11.4	13.4	2.0%p	15% by 2030
		Percentage of locally hired persons among management and managers in charge	%	20.8	23.5	26.0	2.5%p	30% by 2030

# OUR SUSTAINABILITY APPROACH

- **OUR SUSTAINABILITY APPROACH**
  - Sustainability Fundamentals
  - Double Materiality Analysis
  - Voice of Stakeholders



# SUSTAINABILITY FUNDAMENTALS

## Sustainability Management Framework

### KT&G Group's Mid-to Long-Term Sustainability Management Direction

KT&G is striving to mitigate negative impacts and create positive impacts on various stakeholders in order to increase corporate value in consideration of the company's long-term sustainability. In particular, we have selected NGP (Next Generation Products) and health functional food (HFF) as our sustainable business segments and are strengthening our business growth momentum by aligning these businesses with ESG values. In addition, we are enhancing corporate value by identifying and reviewing new sustainable businesses that can create synergies with the Group's businesses.

In addition, to respond to the key agendas required by global ESG international standards, such as climate change, circular economy, and biodiversity protection, we have established mid-to long-term goals for the Group in each of the priority areas. In addition, we assigned tasks to all Group subsidiaries to improve implementation, and are strengthening execution through collaboration centered on the KT&G company-wide task force and the task force including ESG personnel of each subsidiary.

### Sustainability Management Implementation Strategy

#### Progress of Implementing the Sustainability Management Strategy

KT&G is expanding its sustainability management promotion system to include the businesses of the Group subsidiaries in order to enhance ESG competitiveness. We are selecting and improving key initiatives in each company's major areas and actively managing ESG risks by establishing and implementing common standards across the value chain beyond company boundaries.

In 2023, we launched lil HYBRID 3.0 as part of the diversification of our NGP portfolio, and expanded the participation of the Group subsidiaries to respond to climate change and accelerate the circular economy. We also have established natural capital management strategies to protect biodiversity, and are gradually expanding the scope of human rights impact assessments and sustainability programs for domestic and overseas business sites, farms, and materials suppliers.

### Sustainability Management Strategy System



### Mid-to Long-term Sustainability Management Direction

#### Strengthen business growth momentum

- Focus on new future growth engine of tobacco business
- Strengthen the competitiveness of health and consumer-friendly products
- Create sustainable business growth opportunities



#### Manage global major ESG agenda

- Perform environmental responsibility across the value chain
- Build a sustainable business ecosystem

# I. SUSTAINABILITY FUNDAMENTALS

## II. Sustainability Management Governance

KT&G operates relevant committees within the BOD to enhance ESG implementation from an integrated perspective at the company level. In 2023, the ESG Committee was renamed to the Sustainability Committee to clarify its roles and duties, and the ESG Management Office is strengthening the sustainability management system as a control tower under the Strategy HQ. The task force, which is composed of working-level councils across the company, holds meetings for each major agenda under the leadership of the ESG Management Office to establish detailed strategic tasks according to the goals and check the implementation status.

KT&G is also strengthening company-wide response capabilities by clearly setting the responsibilities of the executives for ESG management practices and linking them to the top management and each C-level performance compensation system. Each organization and group company also assigns ESG-related targets such as greenhouse gas emission reduction to management evaluation indicators to clearly assign responsibilities and enhance execution.

### Sustainability Committee



- KT&G has been discussing ESG issues at the BOD since September 2020, and in February 2022, the ESG Committee was established within the BOD for more in-depth discussions. In December 2023, the Committee was renamed to the Sustainability Committee to clarify its mission. The Sustainability Committee manages and supervises the annual review of mid- and long-term strategic directions, approval of major tasks, and execution of major projects in accordance with the direction of promoting sustainability improvement in the company-wide environmental and social fields.

### ESG Management Council



- This is a top management decision-making support council composed of executives from relevant business divisions across the company to discuss ESG issues and continuously communicate on issues arising in the course of business implementation. Based on the discussions held through the Sustainability Management Committee, the top management makes decisions on ESG issues from an integrated company-wide perspective.

### ESG Management Office

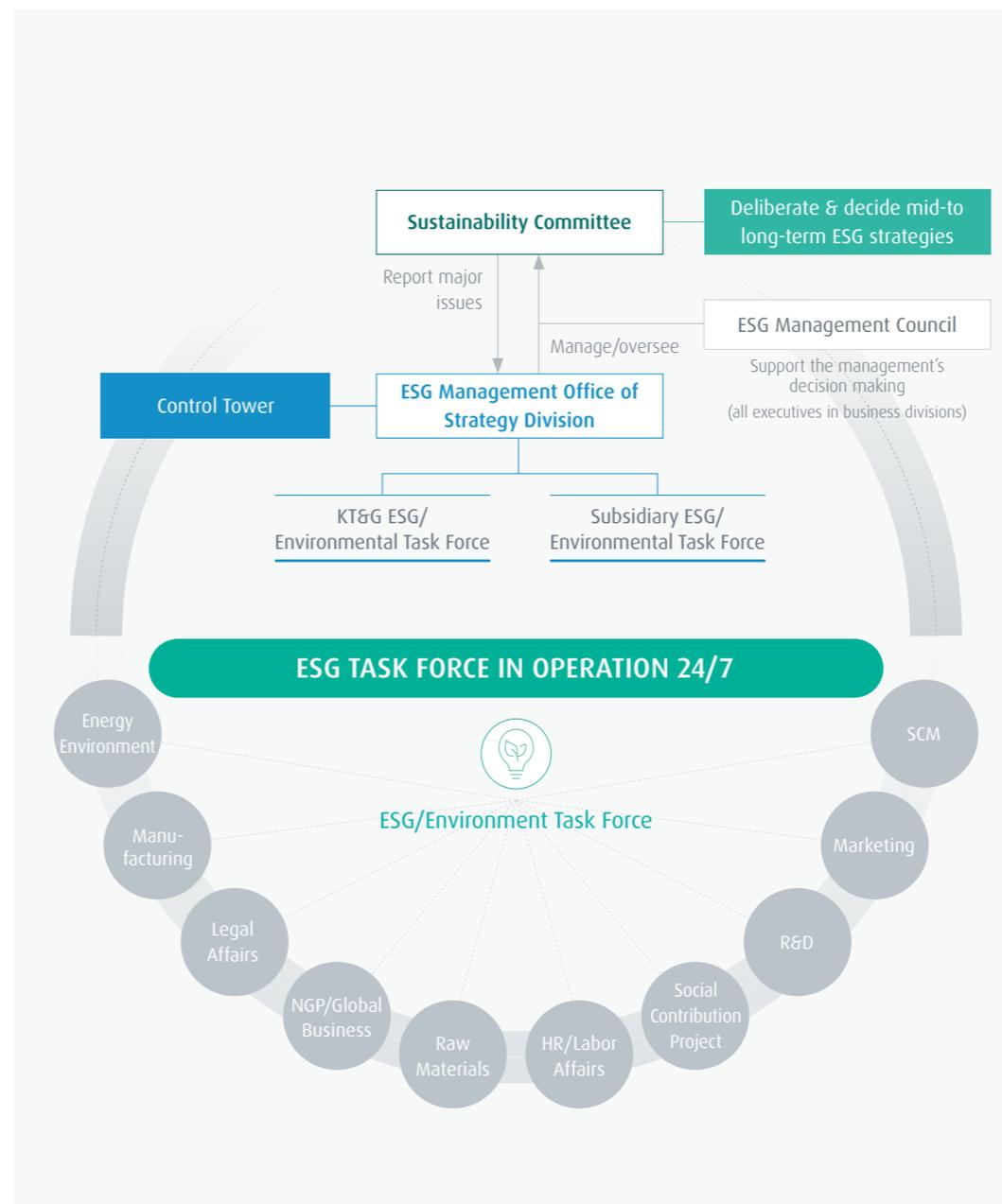


- This is the ESG control tower under the Sustainability Management HQ of the Strategy Division, which plays a key role in establishing an ESG and environmental management system that meets global standards.

### KT&G ESG/Environmental Task Force



- Composed of working-level councils across all business areas, it holds meetings for each major ESG issue to discuss the status of implementation of detailed strategic tasks and future plans.



**KT&G is focusing on ESG management as a sustainable growth strategy to transform the challenges of the times and market demands into new growth opportunities.**

KT&G is promoting ESG management in line with its value chain, based on a strategy that goes beyond declarations to bring about real change. We strengthened our ESG and compliance risk management system through organizational restructuring, advanced the Group's net-zero strategy to enhance the company-wide response to the climate crisis, and increased the completeness of the environmental management vision system by declaring the goal of "deforestation and conversion-free" in protected areas by 2030 as a starting point for natural capital management. Moving forward, KT&G will strengthen our business engine through ESG-based innovation, systematically respond to sustainability disclosures required by global society, and actively communicate with stakeholders.



**Kim, Seung-Taek**  
Chief of Sustainability Management HQ (CSO), KT&G

# SUSTAINABILITY FUNDAMENTALS

## Group's Mid-to Long-term Sustainability Management Goals

Since 2021, KT&G has established mid-to long-term goals targeting 2025 and 2030 to accelerate the execution of strategic tasks in priority areas. Each year, ESG KPIs related to the priority areas are assigned as performance evaluation targets for the executives, officers, and organizations to enhance internal execution.

In 2023, we established the Group-wide sustainability goals in consideration of global sustainability disclosure trends and topics, analyzed the areas for improvement in each division and subsidiary, and checked the cost-effectiveness and feasibility of the implementation process. KT&G will make continuous efforts to enhance the authenticity of sustainability management by setting specific goals and checking their implementation.

KT&G Group Sustainability Management Goals and Progress

STRATEGIC PILLAR	KPI	TARGET	GOAL FOR 2030	2023 PERFORMANCE	PROGRESS	
Perform environmental responsibility across the value chain	Respond to climate change <sup>1)</sup>	GHG reduction rate	All Group subsidiaries	42% * Net zero by 2045	5.8%	<div style="width: 5.8%;"></div>
	Accelerate the circular economy	Renewable energy consumption rate	All Group subsidiaries	80%	13.5%	<div style="width: 13.5%;"></div>
		Water withdrawal volume and reduction rate <sup>2)</sup>	KT&G, KGC	20%	KT&G 8.7% KGC 11%	<div style="width: 8.7%;"></div> <div style="width: 11%;"></div>
		Acquisition of global waste management certification	All Group subsidiaries	100%	15.8% <sup>6)</sup>	<div style="width: 15.8%;"></div>
Build a sustainable business ecosystem	Human rights protection	Execution rate of human rights impact assessment <sup>3)</sup>	All Group subsidiaries	100%	35.6%	<div style="width: 35.6%;"></div>
	Supply chain sustainability	Execution rate of ESG assessment of significant suppliers <sup>4)</sup>	KT&G, KGC, Yungjin Pharm	100%	28.6%	<div style="width: 28.6%;"></div>
		Ratio of farms participating in sustainability program <sup>5)</sup>	KT&G, KGC	100%	16.7%	<div style="width: 16.7%;"></div>

<sup>1)</sup> Based on all domestic business sites of KT&G and overseas manufacturing sites of subsidiaries, compared to the 2020 baseline  
<sup>2)</sup> Water withdrawal of domestic and overseas manufacturing sites of KT&G, reduction of KGC's water withdrawal intensity of domestic and overseas manufacturing sites  
<sup>3)</sup> Based on the number of directly employed employees (full-time and part-time)

<sup>4)</sup> Definition of significant supplier: Domestic and overseas manufacturing sites of KT&G, KGC, Yungjin Pharm  
<sup>5)</sup> Based on direct contract farms, and including comprehensive management of farms' participation in ESG diagnosis, assessment, and improvement programs  
<sup>6)</sup> Based on domestic and overseas manufacturing sites of KT&G and the Group subsidiaries

# SUSTAINABILITY FUNDAMENTALS

## Progress in Implementing the KT&G Mid-to Long-term Sustainability Management Goals

Strategic Pillar	Key Agenda	KPI	Scope	Performance			Progress		Mid-to Long-term Goal (Baseline: 2020)
				2021	2022	2023	Compared to a previous year	Compared to the baseline	
Perform environmental responsibility across the value chain	Respond to climate change	GHG emissions (Scope 1+2, tons)	Domestic + Overseas	120,516	114,595	112,787	1.6%↓		• 42% of reduction by 2030
		GHG emissions (Scope 3, tons) <sup>1)</sup>	Domestic + Overseas	421,864	697,091	326,621 <sup>2)</sup>	53.1%↓		• 25% of reduction by 2030 (Targets: Category 1, 3, 11)
	Accelerate the circular economy	Water withdrawal (tons)	Domestic + Overseas	743,323	733,014	699,228	4.6%↓		• 20% reduction by 2030
		Waste recycling rate (%)	Domestic + Overseas	71.5%	81.4%	83.9%	2.5%p↑		• Achieve 90% by 2030
		Consumption rate of recyclable packaging materials (by weight, %)	Domestic	93.5%	95.9%	96.3%	0.4%p↑		• Use 100% by 2025
Build a sustainable business ecosystem	Practice responsible marketing	Rate of compliance with the Responsible Marketing Policy (%)	Domestic + Overseas	100%	100%	100%	-		• 100% compliance with the Responsible Marketing Policy
	Strengthen human rights protection	Percentage of business sites that have conducted a human rights impact assessment (%) <sup>3)</sup>	Domestic + Overseas	52.6%	47.3%	45.8% <sup>5)</sup>	1.5%p↓		• Implement 100% by 2025
		Percentage of female employees (%)	Domestic + Overseas	13.5%	13.4%	13.6%	0.2%p↑		• Achieve 20% by 2030
	Manage human capital diversity	Percentage of female managers (senior manager-executive director) (%)	Domestic + Overseas	10.4%	11.4%	13.4%	2.0%p↑		• Achieve 15% by 2030
		Percentage of locally hired persons among management and managers in charge <sup>4)</sup> (%)	Domestic + Overseas	20.8%	23.5%	26.0%	2.5%p↑		• Achieve 30% by 2030
	Improve supply chain sustainability	Percentage of significant suppliers that conduct regular ESG evaluations (%)	Domestic + Overseas	25.0%	25.0%	25.0% <sup>6)</sup>	-		• Implement 100% by 2025
		Amount of social and environmental contributions to leaf tobacco farms (including the cumulative amount of Tobacco Production Stabilizing Fund, KRW billion)	Domestic	501.0	503.3	509.0	1.1%↑		• Achieve KRW 520 billion by 2025
		Amount of social contribution projects in value chain contributions <sup>7)</sup> (KRW billion)	Domestic	1.5	3.0	2.3	24.4%↓		• Achieve a cumulative (2022-2025) KRW 10 billion by 2025

<sup>1)</sup> 2022 as a baseline year, Due to the advancement of emission factors, there are some discrepancies with the data disclosed last year  
<sup>2)</sup> Due to the reduction in emissions from the real estate business, which has high volatility in GHG emissions, the Scope 3 emissions for 2023 have changed significantly.  
<sup>3)</sup> Based on the number of directly employed employees (full-time and part-time)  
<sup>4)</sup> Domestic: Executive directors and managers in charge, overseas: G1/M1-G2/M2

<sup>5)</sup> For domestic business sites, 100% of the assessment have been completed. For overseas operations, the number of subjects for the human rights impact assessment has increased due to the expansion of new hires.  
<sup>6)</sup> For domestic business sites, 100% of the evaluation have been completed with the plan to expand to overseas business sites  
<sup>7)</sup> Improving smoking environment and environmental social contribution project

# DOUBLE MATERIALITY ANALYSIS

## Stakeholder Engagement

KT&G actively communicates with stakeholders and encourages their participation in the pursuit of sustainable growth. We listen to the voices of our stakeholders through various communication channels, respect the opinions of all stakeholders, carefully evaluate and manage the impact of our decisions and management activities on them, and promote corporate growth from a long-term perspective.

### Stakeholders Communication Channels

Stakeholders	 Shareholders/Investors	 Government	 Communities/NGOs	 Employees	 Partners	 Customers	 Media
<b>Major Issues</b>	<ul style="list-style-type: none"> <li>Maximizing shareholder value</li> <li>Ensuring governance transparency</li> <li>Stable mid-to long-term growth</li> <li>Managing ESG risks</li> <li>Enhancing capital market predictability</li> </ul>	<ul style="list-style-type: none"> <li>Complying with legal and social responsibilities</li> <li>Job creation</li> <li>Tax payment</li> </ul>	<ul style="list-style-type: none"> <li>Social responsibility for communities and the environment</li> <li>Collaborating to address community issues</li> <li>Shared growth through community development</li> <li>Strategic social contribution activities</li> <li>Biodiversity and forest conservation activities</li> </ul>	<ul style="list-style-type: none"> <li>Creating a great place to work</li> <li>Labor-management win-win</li> <li>Protecting employee human rights and handling grievances</li> </ul>	<ul style="list-style-type: none"> <li>Growing together through collaboration</li> <li>Supporting partner sustainability</li> </ul>	<ul style="list-style-type: none"> <li>Product and service development to meet various needs</li> <li>Enhancing customer satisfaction</li> <li>Protecting customer information</li> </ul>	<ul style="list-style-type: none"> <li>Disclosing information transparently and quickly</li> </ul>
<b>Communication Channels</b>	<ul style="list-style-type: none"> <li>Annual general meeting (AGM) of shareholders, Conference call for quarterly earnings release</li> <li>Non-Deal-Roadshow (NDR)</li> <li>Investor/Analyst Day</li> <li>Management disclosure (electronic disclosure system)</li> <li>Business report, Operation report</li> <li>Sustainability management report</li> </ul>	<ul style="list-style-type: none"> <li>Policy roundtables and seminars</li> <li>Feedback system</li> <li>Public hearings/advisory meetings</li> </ul>	<ul style="list-style-type: none"> <li>SangSang Planet</li> <li>SangSang Madang</li> <li>SangSang Univ.</li> <li>SangSang Fund</li> <li>Welfare Foundation, Scholarship Foundation</li> <li>Support for leaf tobacco farms</li> </ul>	<ul style="list-style-type: none"> <li>Labor-management council</li> <li>Grievance handling system</li> <li>Channel for reporting unethical behavior</li> <li>Executive town hall meetings</li> <li>Organizational culture assessment</li> <li>Internal broadcasting (Seed on News, etc.)</li> <li>SangSang Global Jr. Committee</li> </ul>	<ul style="list-style-type: none"> <li>Integrated purchasing system (KAPS)</li> <li>Data/document standardization system (EDI)</li> <li>Supplier support programs</li> <li>Sustainable Tobacco Program for leaf tobacco farms</li> <li>Partner workshops</li> <li>Grievance handling process</li> </ul>	<ul style="list-style-type: none"> <li>Corporate website and social media, lil website</li> <li>MINIMULIUM, A/S Center</li> <li>CS Center, Customer inquiry</li> <li>Channel for reporting unethical behavior</li> </ul>	<ul style="list-style-type: none"> <li>Investor relations activities</li> <li>Press releases</li> <li>Corporate website and social media, lil website</li> <li>Sustainability management report</li> </ul>

# I. DOUBLE MATERIALITY ANALYSIS

## II. Double Materiality Assessment

KT&G conducts a double materiality assessment every year, which considers both social and environmental impacts as well as financial risks and opportunities to select and respond to issues deemed material to the company in terms of sustainability disclosure. Double materiality is the concept that not only the impact of corporate activities on the external environment and society should be considered, but also the financial impact of external sustainability factors on corporate value, including growth, performance, and risk. KT&G applied the EU European Sustainability Reporting Standards (ESRS) methodology to proactively respond to the international trend of mandatory sustainability information disclosure.

To identify material issues from the Group-level perspective, KT&G expanded the scope of the assessment to include its tobacco and health functional food businesses, which account for approximately 85% of its sales in 2023, and value chain, including manufacturing, agriculture, transportation, sales, and distribution. Based on our understanding of the business model, we selected issues that are highly relevant to KT&G’s sustainability and identified the impact of the company’s activities and external factors on social/environmental impacts and financial risks/opportunities, respectively. We then conducted an impact assessment with internal and external stakeholders who have a good understanding of the company and industry ESG, and thus identified four material issues through the approval of the Sustainability Committee under the BOD.

KT&G’s double materiality assessment is reviewed from a comprehensive risk perspective in conjunction with the company-wide risk management process and is continuously monitored according to risks, opportunities, and impacts of material issues. The results of the materiality assessment are also verified by an independent third-party organization. KT&G will continue to enhance the double materiality assessment methodology to derive more reliable results and actively communicate them to stakeholders.



# I. DOUBLE MATERIALITY ANALYSIS

## II. Double Materiality Review and Results

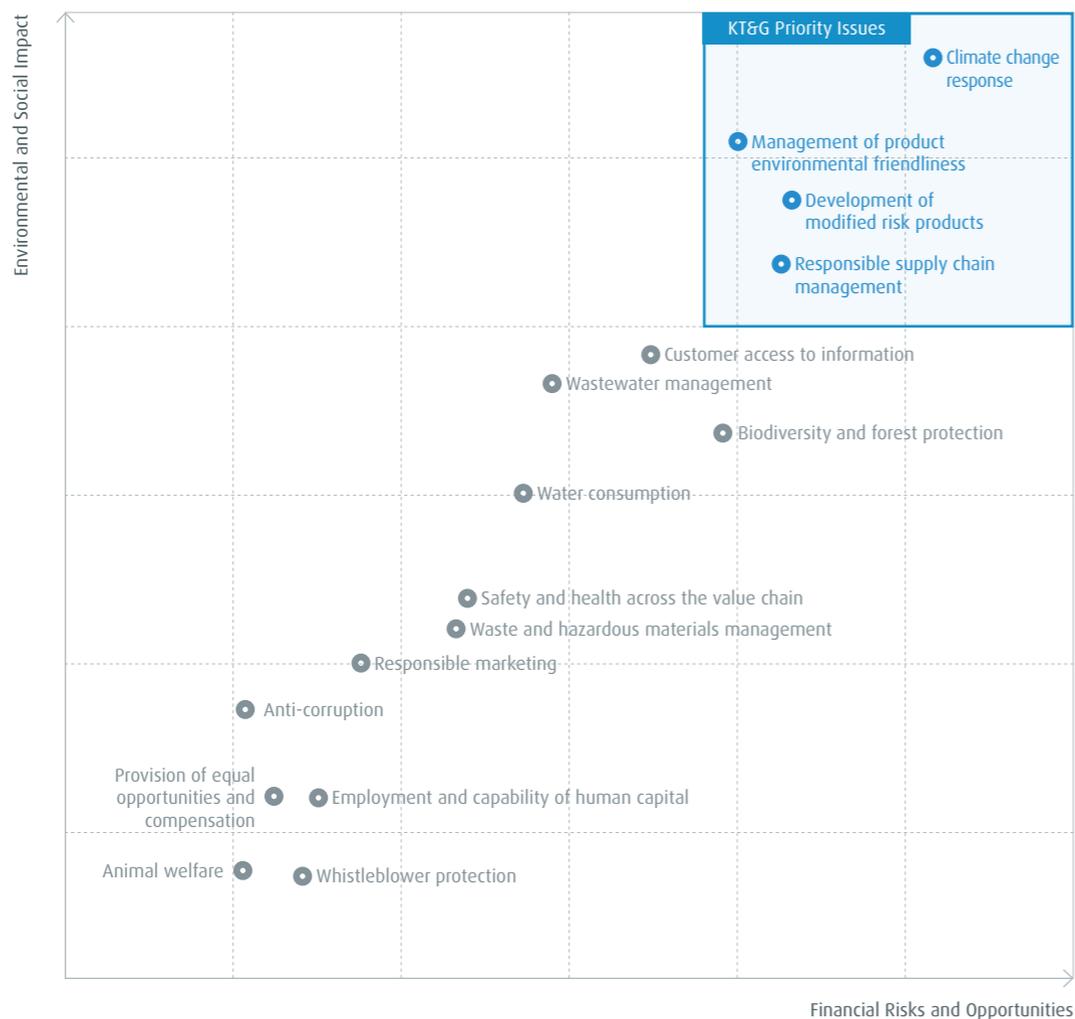
PROCESS		REVIEW POINTS		RESULTS			
<p><b>STEP 1</b> Deriving sustainability issue pool</p>	<ul style="list-style-type: none"> <li>Understanding business models, value chains, and sustainability contexts to derive a sustainability issues pool based on them</li> </ul>	<ul style="list-style-type: none"> <li>Business model: Business model/strategy, products and services, location, types of labor, etc.</li> <li>Value chain: Upstream and downstream business activities, products and services, etc.</li> <li>Sustainability context: Economic, environmental, social issues related to industries, activities, locations, and legal regulations, etc.                             <ul style="list-style-type: none"> <li>- 22023 company ESG-related activity data</li> <li>- Issues identified through the company's overall risk management process</li> <li>- ESG disclosure and assessment initiatives (GRI, SASB, MSCI, DJSI, etc.)</li> <li>- Important ESG issues in the same industry</li> </ul> </li> </ul>		<p><b>Derivation of 16 relevant issues</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Environmental 6 issues</p> </div> <div style="text-align: center;"> <p>Social 7 issues</p> </div> <div style="text-align: center;"> <p>Governance 3 issues</p> </div> </div>			
	<p><b>STEP 2</b> Identifying the impact, risks, and opportunities of sustainability issues</p>	<p>Identifying effects based on criteria for impacts, risks, and opportunities</p>	<p><b>Social and Environmental Impact</b></p> <ul style="list-style-type: none"> <li>Analyzing company business and value chain characteristics to define activities related to each issue</li> <li>Identifying social and environmental impacts according to classification criteria                             <ul style="list-style-type: none"> <li>- Positive/Negative</li> <li>- Actual/Potential</li> <li>- Short-term/Long-term</li> <li>- Impact on human rights</li> </ul> </li> </ul>		<p><b>Financial Risks and Opportunities</b></p> <ul style="list-style-type: none"> <li>Analyzing financial effects induced by social and environmental impacts of each issue (ESG-related regulations, etc.), and dependency on resources acquired from natural environment and value chain</li> <li>Identifying financial risks and opportunities based on classification criteria                             <ul style="list-style-type: none"> <li>- Risk/Opportunity</li> <li>- Short-term/Long-term</li> </ul> </li> </ul>	<p><b>Identification of 78 activities across the issues</b></p> <ul style="list-style-type: none"> <li>Impact identification results: 39 activities identified</li> <li>Risk and opportunity identification results: 40 activities identified</li> </ul>	
	<p><b>STEP 3</b> Conducting assessment on the impact, risks, and opportunities of sustainability issues</p>	<p>Highly knowledgeable personnel on company and industry ESG selected for assessment (survey, interviews, workshops, etc.)</p>	<p><b>Social and Environmental Impact (out of 3 points)</b></p> <ul style="list-style-type: none"> <li>Severity assessment (magnitude + scope + correctability) X Likelihood assessment                             <ul style="list-style-type: none"> <li>- Positive impacts exclude likelihood assessment</li> <li>- Real impacts exclude likelihood assessment</li> </ul> </li> </ul>		<p><b>Financial Risk and Opportunity Factors out of 3 points)</b></p> <ul style="list-style-type: none"> <li>Financial impact assessment (quantitative + qualitative evaluation) X Likelihood assessment                             <ul style="list-style-type: none"> <li>- Quantitative evaluation: Sales, net profit</li> <li>- Qualitative evaluation: Short, medium, and long-term outlook on the integration of mid-to long-term management strategies</li> </ul> </li> </ul>		<p><b>Prioritization of the issues</b></p> <ul style="list-style-type: none"> <li>Setting issue prioritization thresholds: Based on the average values of impact, risk, and opportunity assessment scores exceeding 15% for each issue</li> <li>Stakeholder involvement: KT&amp;G employees, shareholders and investors, partners, industry initiative representatives, etc.</li> </ul>
	<p><b>STEP 4</b> Selecting material issues</p>	<p>Prioritizing through approval by the Sustainability Committee within the BOD</p>	<ul style="list-style-type: none"> <li>Quantitative analysis conducted on the impact of social, environmental, and business factors (risks and opportunities) identified through assessment</li> <li>Approval of issue prioritization by the executive management and the Sustainability Committee within the BOD</li> <li>Third-party verification of the process and results of materiality assessment</li> </ul>		<p><b>Finalization of 2024 reporting topics</b></p> <div style="display: flex;"> <div style="flex: 1;"> <ul style="list-style-type: none"> <li>Impact Issues                                     <ul style="list-style-type: none"> <li>- Environmental: Climate change response</li> <li>- Social: Development of modified risk products</li> <li>- Social: Management of product environmental friendliness</li> <li>- Social: Responsible supply chain management</li> </ul> </li> </ul> </div> <div style="flex: 1;"> <ul style="list-style-type: none"> <li>Risk and Opportunity Issues                                     <ul style="list-style-type: none"> <li>- Environmental: Climate change response</li> <li>- Social: Development of modified risk products</li> <li>- Social: Responsible supply chain management</li> </ul> </li> </ul> </div> </div>		

# I. DOUBLE MATERIALITY ANALYSIS

## II. Analysis of KT&G's 2023 Material Issues

In 2023, we conducted key stakeholder surveys, focus interviews, and analysis of environmental, social, and financial impacts to derive a total of 16 key sustainability issues, and four issues were selected as "KT&G Priority Issues" - Climate change response, Development of modified risk products, Management of product environmental friendliness, and Responsible supply chain management. In particular, Climate change response, Development of modified risk products, and Management of product environmental friendliness were assessed as material in terms of both social and environmental impacts and financial risks and opportunities. Biodiversity and forest protection was selected as an emerging issue where impacts are expected to increase in the future. KT&G will continue to improve its double materiality assessment methodology to produce more reliable results and actively communicate them to stakeholders.

### Material Issue Identification Matrix



	Topic	Impact		Risk/Opportunity		Scope of assessment within the value chain	Page
		Identification	Assessment	Identification	Assessment		
KT&G Priority Issues	Climate change response	Actual	●	Risk	●	◀-◆-▶	50-76
	Development of modified risk products	Potential	●	Opportunity	●	◀-◆-▶	78-88, 91-95
	Management of product environmental friendliness	Actual	●	Opportunity	●	◀-◆-▶	102-106
	Responsible supply chain management	Potential	●	Risk	●	◀-◆-▶	122-135
Emerging Issue	Biodiversity and forest protection	Actual	●	Risk	●	◀-◆-▶	112-121
E	Wastewater management	Potential	●	Risk	●	◀-◆-▶	107-110
	Water consumption	Potential	●	Risk	●	◀-◆-▶	107-110
	Waste and hazardous materials management	Potential	●	Risk	●	◀-◆-▶	111, 91
	Safety and health across the value chain	Potential	●	Risk	●	◀-◆-▶	151-156
S	Customer access to information	Potential	●	Risk	●	◀-◆-▶	166-168
	Responsible marketing	Potential	●	Risk	●	◀-◆-▶	89-90
	Employment and capability of human capital	Actual	●	Opportunity	○	◀-◆-▶	148-150
	Provision of equal opportunities and compensation	Potential	○	Risk	○	◀-◆-▶	142-147
G	Whistleblower protection	Actual	●	Risk	○	◀-◆-▶	181
	Anti-corruption	Potential	○	Risk	●	◀-◆-▶	182-185
	Animal welfare	Potential	○	Risk	○	◀-◆-▶	92

# I. DOUBLE MATERIALITY ANALYSIS

## Reporting on KT&G's Sustainability Material Issues

KT&G will actively respond to the KT&G Priority Issues identified to realize the 2025 Empowering Sustainability for Growth vision. Each sustainability issue can act as a risk and opportunity across the value chain. We have therefore identified the positive or negative impacts of KT&G Priority Issues at the Group level and establish a systematic management plan for each sustainability issue, and disclose them. In addition, we operate a performance evaluation system in conjunction with compensation for the management to improve execution capability of the Priority Issues.

### Analysis of Material Issues for Corporate Value Creation Based on Risks and Opportunities

Issue	Category	Business example		Business impact	Period	KT&G's approach to risks and opportunities			
		External factors that drive risks and opportunities	Key financial risks and opportunities			Business strategy	Mid-to long-term goals	2023 performance	Compensation for executives (tied to KPIs)
Climate change response	Risk	Acute and chronic physical risks caused by climate change	<b>[Common]</b> Increased cost of goods sold due to reduced supply of leaf tobacco and ginseng and decreased revenue due to lower quality	Revenue Cost	Short-, mid-, long-term	<ul style="list-style-type: none"> <li>Establish and operate an environmental management vision system to minimize negative environmental impacts across the value chain</li> <li>Establish and implement mid-to long-term GHG reduction and renewable energy expansion goals</li> <li>Establish environmental management governance system (Sustainability Committee, ESG Management Council, ESG Management Office, and Energy Environment Department)</li> <li>Identify climate change risks/opportunities, establish strategic response plans, and continue to enhance climate disclosure</li> </ul>	<ul style="list-style-type: none"> <li>42% reduction in Scope 1+2 emissions by 2030</li> <li>Scope 1+2+3 carbon neutral by 2045</li> <li>Transition to at least 80% renewable energy use across all domestic and overseas sites by 2030</li> </ul>	<ul style="list-style-type: none"> <li>Scope 1+2 emissions in 2023: 112,787 tons</li> <li>- 9.0% reduction from 2020</li> <li>Renewable energy consumption rate at all domestic and overseas sites: 19.0 %</li> <li>(Domestic) 7.9%</li> <li>(Overseas) 100.0 %</li> </ul>	<ul style="list-style-type: none"> <li>Total GHG emissions (Scope 1+2)</li> <li>Renewable energy adoption ratio</li> <li>Cumulative conversion rate of corporate vehicles to electric vehicles</li> <li>Implementation of improvement projects linked to energy audit results</li> <li>Purchase and use of renewable electricity for leased buildings</li> </ul>
	Risk	Increased legislation and regulation to reduce GHG emissions and stakeholder demand for GHG reduction	<b>[Common]</b> Increase in cost of goods sold due to the rise in GHG emissions reduction costs for upstream suppliers and their investments in emission reduction equipment  <b>[Common]</b> Increased costs to reduce GHG emissions, such as purchasing carbon credits and investing in renewables						
Development of modified risk products	Risk	Rapidly changing consumer needs and scientific evidence	<b>[Tobacco Category]</b> Failure to diversify the portfolio in a timely manner around future innovation platforms that align with market and consumer needs, resulting in lost consumer choice and poor sales	Revenue Cost	Short-, mid-, long-term	<ul style="list-style-type: none"> <li>Strengthen portfolio competitiveness based on an innovation platform</li> <li>Accelerate the NGP business through advanced PMI partnerships to secure a globally successful business model</li> <li>Secure world-class scientific R&amp;D capabilities</li> </ul>	<ul style="list-style-type: none"> <li>Global presence across 50 countries by 2025</li> <li>60% domestic market share by 2025</li> <li>5 NGP platforms by 2025</li> </ul>	<ul style="list-style-type: none"> <li>NGP sales in 2023: KRW 779.4 billion</li> <li>Global presence as of 2023: 32 countries (including Korea)</li> <li>Domestic stick market share in 2023: 46.6%</li> </ul>	<ul style="list-style-type: none"> <li>Expansion of NGP product sales and countries of entry</li> <li>Development and launch of market-leading NGP platforms</li> <li>Enhancement of scientific R&amp;D capabilities</li> </ul>
	Opportunity	Expansion of sales markets	<b>[Tobacco Category]</b> Growing need for less smell & modified risk products, leading to the expansion of the size of this market within the tobacco industry						
Management of product environmental friendliness	Opportunity	Consumer demand and over-packaging regulations are driving the need to minimize packaging and replace it with lower environmental impact packaging	<b>[Common]</b> Increased internal resources and R&D costs to replace difficult-to-recycle materials such as aluminum laminates and plastic materials	Revenue Cost	Short-, mid-, long-term	<ul style="list-style-type: none"> <li>Identify and implement short-term actionable tasks by 2025 to accelerate the improvement of product eco-friendliness</li> <li>Conduct life cycle assessments (LCA) for key products to ensure systematic environmental management at the product level</li> </ul>	<ul style="list-style-type: none"> <li>100% use of packaging made from recyclable sources by 2025</li> </ul>	<ul style="list-style-type: none"> <li>Proportion of recyclable packaging usage as of 2023: 96.3% (by weigh)</li> </ul>	<ul style="list-style-type: none"> <li>Conversion rate to recyclable packaging materials</li> <li>Recycling performance of waste device materials and partner participation</li> <li>Establishing a direction for "Eco-Design" of devices</li> </ul>

# I. DOUBLE MATERIALITY ANALYSIS

## II. Impact Assessment and Analysis of Key Issues for External Stakeholders

Issue	Category	Relevance and significance of external stakeholders				KT&G's assessment of impact			
		Impact area	Value chain position	Company activities causing the impact	Key environmental and social impacts	Impact type	Output indicators	Impact assessment	Impact indicators
<b>Climate change response</b>	Climate transition & physical risks	Environment	Across the value chain	<ul style="list-style-type: none"> <li>Use chemical fertilizers and crop protection agents in the cultivation of raw materials such as leaf tobacco and ginseng</li> <li>Use non-renewable energy in manufacturing activities for general materials and products</li> <li>Use non-renewable energy to operate offline retail stores</li> <li>Use non-renewable energy for air and cargo transportation of raw materials, products, etc.</li> </ul>	<p><b>[Common]</b> GHG emissions cause climate change, including extreme weather events, changes in precipitation, sea level rise, desertification, water scarcity, spread of tropical diseases, and loss of biodiversity</p>	Positive/ Negative	<p><b>[Reduce GHG emissions and increase renewable energy use]</b></p> <ul style="list-style-type: none"> <li>Scope 1+2 reductions (tCO<sub>2</sub>eq)</li> <li>Scope 3 reductions (tCO<sub>2</sub>eq)</li> <li>Renewable energy use (MWh)</li> </ul>	<ul style="list-style-type: none"> <li>Calculate savings by utilizing KPMG TrueValue methodology to estimate the social cost<sup>1)</sup> of GHG emissions avoided and carbon saved, based on GHG reductions and renewable energy use.</li> </ul>	<p><b>[Social cost of GHG (carbon) emissions]</b></p> <ul style="list-style-type: none"> <li>Reduced social cost from reducing Scope 1+2 GHG emissions</li> <li>Scope 1+2 GHG reductions: 11,121 tCO<sub>2</sub>eq</li> <li>Social cost savings: About KRW 821.04 million</li> <li>GHG reductions and social cost savings from using renewable energy</li> <li>Renewable energy consumption: 37,103 MWh</li> <li>Social cost savings: About KRW 1,258.41 million</li> </ul>
<b>Develop modified risk products</b>	Product and service quality & safety	Consumers	Downstream	<ul style="list-style-type: none"> <li>Diversify innovation platforms based on scientific capabilities and strengthen related R&amp;D capabilities</li> <li>Conduct a thorough raw material verification process to ensure product safety and source government-certified ingredients from domestic contract manufacturers</li> </ul>	<p><b>[Tobacco Category]</b> Providing better choices to consumers through the continuous enhancement of the product evaluation system</p> <p><b>[HFF Category]</b> Improving consumer health and product safety, thereby reducing the likelihood of product safety incidents and harm to consumers</p>	Positive/ Negative	<ul style="list-style-type: none"> <li>NGP sales performance (KRW 100 million)</li> <li>Share of NGP sales in the tobacco business (%)</li> <li>Number of KOLAS certified items (cases)</li> <li>Number of NGP patent applications (cases)</li> </ul>	<ul style="list-style-type: none"> <li>Social impact</li> </ul>	<p><b>[Improving consumer accessibility to NGP]</b></p> <ul style="list-style-type: none"> <li>Number of sales markets: 32 countries (as of 2023)</li> <li>Market share of consumer purchases: 46.6% (based on domestic CVS Pos data)</li> <li>Number of NGP platforms: 3 (as of 2023)</li> </ul>
<b>Product eco-friendliness management</b>	Sustainable products & services	Society	Upstream	<ul style="list-style-type: none"> <li>Produce and sell products with packaging or plastic materials that are not recyclable in some cases</li> <li>NGP devices contain a variety of materials, including batteries and metals, and are not easily recycled as small appliances.</li> </ul>	<p><b>[Common]</b> Materials such as polypropylene and aluminum laminate, which are difficult to biodegrade, have a negative impact on the environment</p>	Positive/ Negative	<ul style="list-style-type: none"> <li>LCA-based environmental impact assessment results</li> <li>Recycled or renewable packaging materials used (%)</li> <li>Plastic packaging materials used (tons)</li> <li>Purchases of eco-friendly packaging materials under the Sustainable Product Policy (KRW 100 million)</li> </ul>	<ul style="list-style-type: none"> <li>Calculate the reduction in social costs<sup>2)</sup> associated with the disposal of materials that are difficult to recycle by using recyclable and renewable materials</li> </ul>	<p><b>[Social costs associated with managing product eco-friendliness]</b></p> <ul style="list-style-type: none"> <li>Reduced social costs from using recyclable packaging</li> <li>Recyclable packaging used: 40,923 tons</li> <li>Social cost savings from recycling: About KRW 69.59 million</li> <li>Reducing the social cost from recycling device materials</li> <li>Materials recycled: 7,196 kg</li> <li>Social cost savings from recycling: approx. KRW 10,000</li> </ul>

<sup>1)</sup> Sources of social costs associated with GHG emissions: EPA, Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990 (2021)

<sup>2)</sup> Sources of social costs related to the environmental impact of waste: A. Rabl, J. V. Spadaro and A. Zoughaib, Environmental impacts and costs of solid waste: a comparison of landfill and incineration (2009)

# VOICE OF STAKEHOLDERS

KT&G strives to clearly understand and address the awareness and interest of stakeholders related to business sustainability issues and incorporate these into its management activities. To understand stakeholders' interests in promoting sustainability management and to identify social/environmental impacts and financial risks/opportunities, we conducted surveys and interviews with KT&G employees, shareholders and investors, industry experts, and ESG experts, and reflected them in the double materiality assessment process. KT&G will continue to expand exchanges with stakeholders and communicate with them transparently.

## Supply chain sustainability



**Q.** What do you think are the most important contemporary ESG issues related to tobacco leaf farmers?

**A.** We work with our contracted growers to educate them on environmental and social topics as well as good governance practices. While each of these topics are important, we see a continued focus around climate change and an increasing emphasis on the related response and mitigation activities, such as the adoption of climate-smart agricultural practices and the reduction of greenhouse gas emissions and deforestation. There is also a strong focus on improved farmer livelihoods – promoting a sustainable standard of living within our contracted farmer base through crop diversification opportunities and implementation of good agricultural practices – and other human rights-related areas and due diligence requirements.

**Q.** How do you think KT&G should approach the sustainability of tobacco leaf farmers?

**A.** It is important to adopt a multi-faceted approach to sustainability that prioritizes engagement, alignment and partnership with the supplier base. By working together, we can increase tobacco leaf farmers' adoption of good agricultural practices, foster economic diversification, improve the communities in which we source tobacco and drive a more sustainable, responsible industry overall.



**Hélio Moura**  
Vice President, AOI Crop Science & Value Chain (CSVC)

**Q.** To ensure responsible supply chain management (upstream), what activities is KT&G undertaking?

**A.** KT&G purchases all tobacco leaves grown domestically and additionally sources tobacco leaves from overseas. In Korea, the number of foreign workers is increasing due to the aging population of leaf tobacco farms, while overseas, many of the countries that produce tobacco leaves are developing countries, so it is necessary to manage the both domestic and overseas supply chain with the potential for human rights issues, including child labor, in mind. KT&G conducts direct visits (monitoring) and immediate on-site feedback to domestic leaf tobacco farms during the entire growing season, and plans to expand the scale and scope of monitoring. For overseas leaf tobacco suppliers and farms, supply chain assessments and farm monitoring are conducted through the Sustainable Tobacco Program (STP), a global ESG program in the leaf tobacco sector. In addition, based on on-site inspections by third-party organizations and action plans for each supplier, we conduct our own human rights-related on-site training and support after-school education programs to prevent child labor. Going forward, we will implement responsible supply chain management by continuously identifying issues and conducting improvement activities.



**Cho, Chong-hoon**  
Head of G-STP Leaf Tobacco Team, KT&G

## Response to climate crisis



**Q.** Please introduce details of the GHG-related projects that Green Asia Network and KT&G are collaborating with.

**A.** As the only Korean participant in the pilot test of the global GHG Protocol "Land Sector and Removal Guidance," Green Asia Network is collaborating with KT&G to examine the GHG emissions of leaf tobacco farms and measures to reduce them. KT&G and Green Asia Network have initiated a pilot project to estimate GHG emissions generated from land-use changes and land management processes at home and abroad. The project aims to develop methods to reduce and remove emissions by utilizing biochar and other techniques in tobacco leaf farming. Through this project, we plan to actively discuss ways to analyze the reduction effects of biochar application and establish a farm management system to prevent land-use changes during the cultivation of tobacco leaves and ginseng. I hope that KT&G will establish and operate a monitoring system using remote sensing and other technologies for domestic and international farm management, thereby becoming a global company leading GHG emissions reduction.



**Kim, Yong-bum**  
Principal Adviser of Decarbonization Strategy Team, Green Asia Network

# I. VOICE OF STAKEHOLDERS

## II.

### Response to climate crisis



**Q.** Can you please explain KGC's response to climate change (upstream)?

**A.** Ginseng is a semi-shade plant that thrives in cooler climates, but global warming is pushing its growing areas further north. If global warming continues to progress and extreme weather conditions such as heavy rainfall persist, problems such as decreased production may occur. KGC is doing its utmost to strengthen the competitiveness of the ginseng industry by researching, developing, and disseminating new cultivation methods to respond to climate change. For example, we are conducting research on sunshade facilities, which are essential for ginseng cultivation, to develop small tunnel sunshade facilities that are more resistant to high temperatures.



**Yang, Bo-sun**

Manager of Material Business Office, KGC

### Accelerating the circular economy



**Q.** What are the background and future expectations for the resource circulation project being implemented in collaboration with KT&G?

**A.** Currently, small electronic devices such as e-cigarette devices are not subject to mandatory recycling in Korea, so it is difficult to create a virtuous cycle of resources from proper separation to recycling without voluntary efforts from businesses. TerraCycle Korea is working with KT&G to establish and operate a recycling platform so that various materials such as plastics and metals that make up the devices can be used as resources again rather than being discarded once they are used. On the back of KT&G's continuous efforts and support for the environmental protection, we have been able to create a positive example of a virtuous cycle of resources. Based on this, I hope that not only KT&G, but also other companies that produce small electronic devices will join our efforts to recycle materials, and together we will lead a culture of resource recycling in Korea.



**Lee, Yu-jeong**

Korea Team Lead, TerraCycle Korea

**Q.** How is KT&G responding to the development of product eco-friendliness?

**A.** In 2024, the fifth meeting of the Intergovernmental Negotiating Committee (INC) to develop an international legally binding instrument on plastic pollution will take place Korea, and the related agreement is expected to impact various industries where plastics are used. KT&G has been conducting research in collaboration with KOLON Industries since 2013, to develop cigarette filters utilizing lyocell tow, a non-plastic eco-friendly material. This is expected to accelerate the transition to non-plastic/biodegradable materials for core material products.



**Yang, Jin-chul**

Team Leader of Advanced Material Development Team, KT&G



I.

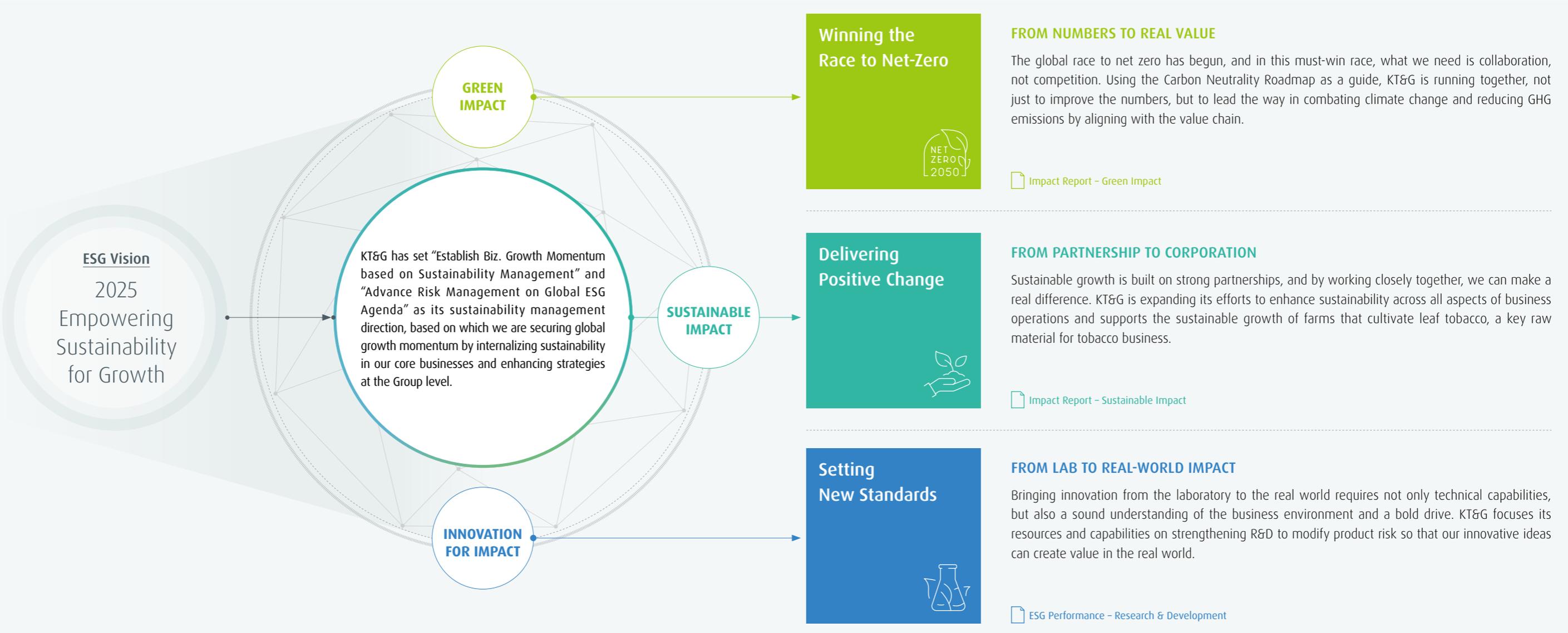
II.

# OUR MATERIALITY PROGRESS

- **MATERIAL ISSUES & IMPACT REPORT**
  - 1. Green Impact
  - 2. Sustainable Impact
- **KT&G SUSTAINABILITY DISCLOSURE**

# I. MATERIAL ISSUES & IMPACT REPORT

KT&G systematically develops and responds to key sustainability issues that have significant social and environmental impacts, and include both financial risks and opportunities, such as climate change response, development of modified risk products, and responsible supply chain management. In this process, we efficiently allocate resources and actively communicate with stakeholders. By proactively responding to material issues and managing them appropriately, KT&G is firmly establishing itself as a resilient company and spreading economically, socially, and environmentally positive impacts.



II. OUR SUSTAINABILITY PERSPECTIVE

KT&G VISION

OUR SUSTAINABILITY APPROACH

OUR MATERIALITY PROGRESS



IMPACT REPORT 01.

Responding to climate change is both a collective human challenge and a strategy for sustainable growth for businesses. As the Intergovernmental Panel on Climate Change (IPCC) has pointed out, it is unequivocal that human activities have caused climate change, and we must expedite the transition to a decarbonized society to prevent the climate crisis from reaching an irreversible tipping point. KT&G participates in the race that the world has begun to run to survive and prosper. In the process, we will strengthen the Group-wide initiatives to address climate change and protect the global environment through sustainable management of natural resources, and align them with our value chain to accelerate the pace of innovation toward the essential goal of carbon neutrality.

# GREEN IMPACT

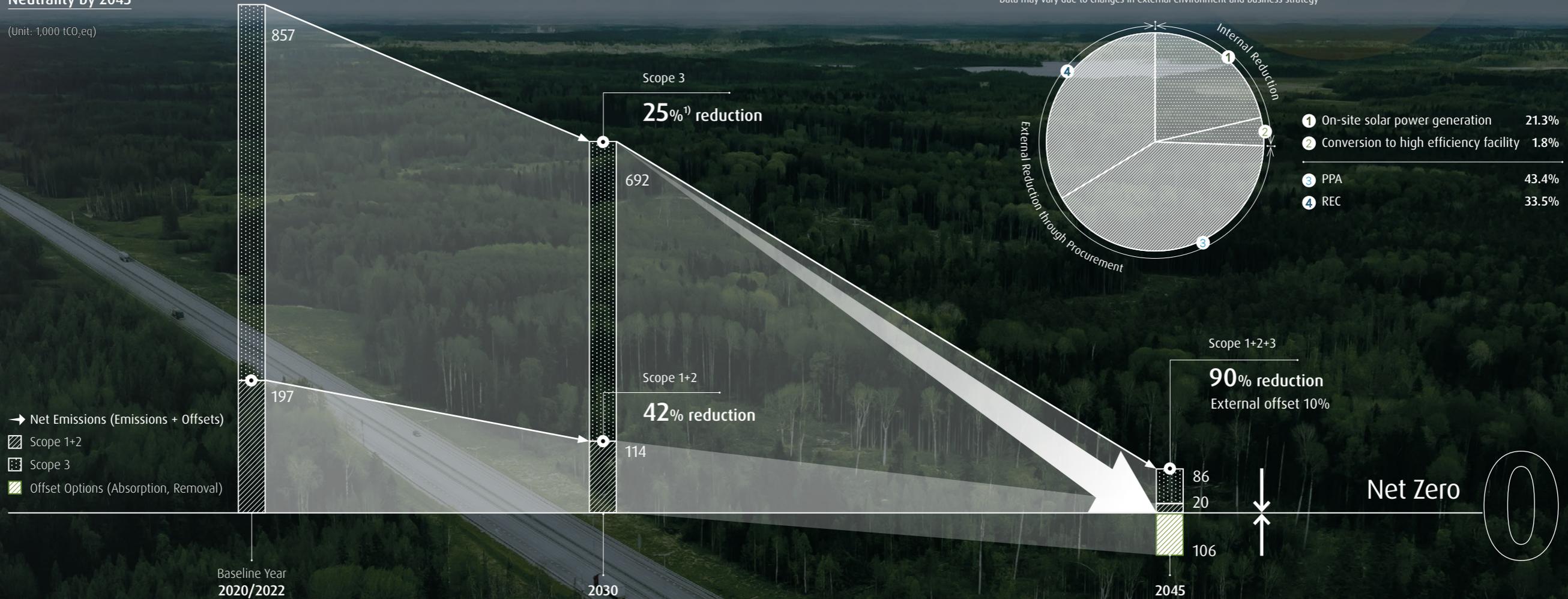


# I. KT&G NET-ZERO JOURNEY

II. KT&G is making unified efforts at the Group level to strengthen its capabilities to respond to climate change. In particular, we have established a carbon neutrality strategy that meets international standards, and are enhancing the strategy, accelerating its implementation, and realizing sustainable management in consideration of economics, global trends toward carbon neutrality, and changes in the corporate business environment. In doing so, we are playing a leading role in responding to global climate change and laying a solid groundwork for sustainable growth.

## GHG Reduction Pathway to Achieve Carbon Neutrality by 2045

(Unit: 1,000 tCO<sub>2</sub>e)



<sup>1)</sup> Targets: Category 1, 3, 11

# Responding to Climate Change

With the goal of achieving carbon neutrality by 2045, KT&G has established a Group-wide carbon neutrality strategy, expanding its scope to include subsidiaries and developing Group-wide collaboration to reduce GHG emissions. This is an integrated approach that goes beyond KT&G's company-wide reduction efforts to include all companies that make up KT&G Group and is expected to result in broader and more effective emissions reductions.



KT&G has established a more comprehensive and challenging "2045 Net Zero Strategy" that extends to the Group level to realize carbon neutrality for a sustainable future.

KT&G Group's direction to carbon neutrality is clear. We will lead environmental management by reducing energy consumption as much as possible through energy efficiency and converting existing fossil fuels to renewable energy. In particular, we will disseminate examples of technological reduction practices in the manufacturing sector not only within our own facilities but also throughout the entire value chain, leading environmental management together. In addition, we will make continuous efforts to minimize environmental impacts by focusing on various tasks such as expanding water reuse, Zero Waste to Landfill (ZWTL), and switching to eco-friendly materials, thereby accelerating the Group's pace towards carbon neutrality.



**Oh, Chi-bum**  
Chief of Manufacturing Division (Executive Vice President), KT&G

KT&G has established mid-to long-term GHG reduction targets in accordance with the Science Based Targets Initiative (SBTi) guidelines, and has been evolving its strategy in light of major environmental changes, such as the trend toward mandatory non-financial disclosure and the targets and pathways of global leading companies. In 2023, KT&G revised its previously established 2050 carbon neutrality target to 2045, ahead of schedule, to play a leading role in the global race to overcome the climate crisis. Accordingly, we aim to reduce our Scope 1 & 2 emissions by 42% (compared to 2020) and Scope 3 emissions by 25%<sup>1)</sup> (compared to 2022) by 2030.

Recognizing the seriousness of the climate change problem and the need for a faster and more effective response, KT&G has set more ambitious goals on its path to carbon neutrality and is actively utilizing various reduction measures to realize them, including expanding its own solar power generation facilities, switching to high-efficiency equipment, utilizing power purchase agreements (PPAs), and introducing i-RECs. In 2023, we focused on introducing renewable energy and improving energy efficiency, resulting in a reduction of 2,112 tons of GHG emissions.

As of 2023, KT&G Group's total emissions were approximately 190,000 tons, and in 2024, we plan to implement new renewable energy projects and improve the efficiency of existing facilities aimed at reducing emissions even further compared to 2023. KT&G Group's renewable energy consumption rate increased significantly from 0.1% in 2020 to 13.5% in 2023. With the goal of achieving 80% renewable energy consumption rate at its plants by 2030, KT&G aims to further increase this ratio to 20.0% in 2024 by increasing the capacity of its own solar power generation facilities and signing additional PPAs. To this end, in 2024, we plan to build our own solar power generation facilities of 2.2 MWp at Daejeon Plant, 2.5 MWp at Yeongju Plant, and 0.3 MWp at Gimcheon Plant, totaling 5.0 MWp, and from 2023, we are actively utilizing PPAs to expand procurement of renewable energy.

<sup>1)</sup> Targets: Category 1, 3, 11

As such, KT&G Group is moving toward the bold goal of carbon neutrality, with all Group subsidiaries working together to realize sustainable growth by taking the lead in the net-zero race with an integrated, systematic, and strategic approach.

## Renewable Energy Performance and Outlook for KT&G's Domestic and Overseas Business Sites

Category	Performance			Outlook	
	2020	2022	2023	2027	2030
Domestic	0.1%	8.9%	7.9%	35.0%	72.0%
Overseas	0.0%	71.7%	100%	100%	100%
<b>Total</b>	<b>0.1%</b>	<b>15.6%</b>	<b>19.0%</b>	<b>50.0%</b>	<b>80.0%</b>

\* Scope of coverage: All domestic business sites (138), overseas manufacturing sites (3)  
\*\* May be subject to change based on future external environmental changes and variations in business operations

## Performance and Goal of KT&G Group's Renewable Energy Consumption Ratio



\* Based on all domestic business sites and overseas manufacturing sites of KT&G and manufacturing sites of subsidiaries



KT&G Group Natural Capital Management Roadmap



Halting deforestation and land conversion\* in protected areas by 2030

\* Deforestation & Conversion Free



# Enhancing Ecosystem Sustainability

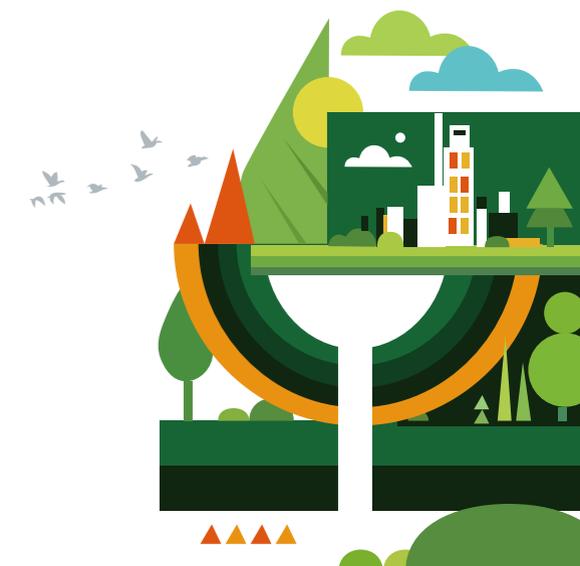
Natural capital, such as forests, soil, and water, is a resource that is available to all, but it is finite and must be used responsibly and distributed fairly. In addition, recent social interest in and demands on businesses to manage natural capital have increased, prompting corporate efforts around the world to disclose and manage related information.

KT&G's main business is in the agriculture-based food and beverage industry, which is highly dependent on natural capital. This means that we need to systematically and strategically manage natural capital for stable and sustainable growth, but it also means that we can contribute to preventing biodiversity loss and ecosystem collapse, and explore new growth opportunities by positively impacting the natural environment and industrial development. KT&G therefore joined the TNFD (Taskforce on Nature-related Financial Disclosures) Forum Membership in December 2022, and announced that it will adhere to global standards for natural capital management and transparently disclose risks and opportunities related to natural capital.

Then, in 2023, KT&G established the Biodiversity & No Deforestation Policy and set a goal to halt deforestation and land conversion in protected areas<sup>1)</sup> by 2030. In the process of setting this goal, KT&G assessed how its operations and assets impact natural capital, and found that most of the Group's operations do not have a significant negative impact on protected areas. For the major material supply chain, we have identified some implementation tasks and are taking measures for improvement. To achieve the goals, we will establish a natural capital management roadmap at the Group level and focus on solidifying the implementation foundation.

Moving forward, KT&G will integrate its established environmental management system with its natural capital response strategy to realize carbon neutrality by responsibly using natural capital to enhance the sustainability of ecosystems. A series of these efforts will enable us to go beyond zeroing out negative impacts on nature and create a net positive impact, leaping into a true top-tier player.

Please refer to the "Performing Environmental Responsibility across the Value Chain: Management of Natural Capital and Biodiversity" part of this report to find detailed information.



<sup>1)</sup> Natural forests, including protected/primary forests designated by the International Union for Conservation of Nature (IUCN) and Science-Based Targets for Nature (SBTN), and areas identified as having high nature conservation needs.

II. OUR SUSTAINABILITY PERSPECTIVE

KT&G VISION   OUR SUSTAINABILITY APPROACH   OUR MATERIALITY PROGRESS



IMPACT REPORT 02.

Building a sustainable industrial ecosystem is a concept that encompasses economic, environmental, and social values and must be considered for long-term corporate growth and social responsibility. For KT&G, where cultivation and growing of raw materials in the supply chain is important, it is crucial to secure a sustainable production base for farmers who are an important pillar of our value chain. KT&G is therefore participating in the global Sustainable Tobacco Program (STP) initiative, an ESG program for leaf tobacco cultivation, to ensure that leaf tobacco is grown in sustainable farming environments and sourced sustainably.



# SUSTAINABLE IMPACT

# I. KT&G LEAF ESG APPROACH

II. KT&G is committed to building a sustainable industrial ecosystem by sharing and communicating the importance of ESG management with all partners in the supply chain through various methods and channels, including the STP initiative. In addition, as the importance of disclosing corporate activities related to supply chain sustainability is increasing, we aim to systematically manage ESG in the supply chain based on effective action programs.

## Status of the Domestic STP Initiative and the Implementation Plan

2023

Conduct monitoring of 340 items in four areas – Crop, Environment, and People (Labor, Human Rights)

### Major Implementation Items



#### CROP

- Growing only distributed varieties, using designated crop protection products, using designated fertilizers, avoiding self-composting, and applying lime
- Analyzing soil and recommending fertilization, securing appropriate dryers, removing tobacco plant residues, recording the use of crop protection products, etc.



#### ENVIRONMENT

- Prevention of NTRM<sup>1)</sup>, and collection, disposal, and recycling of plastic agricultural materials (mulching film, etc.)
- GHG emissions reduction (by expanding exhaust heat, etc.), safe handling of crop protection agents (establishing buffer zones near waterways), etc.



#### HUMAN & LABOR RIGHTS

- Working hours, labor contracts, prohibition of child labor, prohibition of unlawful confinement, and guarantee of minimum wages
- Installation of crop protection agent storage (worker safety), etc.



#### GOVERNANCE

- Establishment of related manuals and STP evaluation indicators, revision of standard tillage methods, etc.

<sup>1)</sup> Non Tobacco Related Material

# Creating a Sustainable Agricultural Ecosystem

Supply chain sustainability management is a key issue for KT&G's pursuit of creating an industrial ecosystem and an essential item in the implementation of our mid- to long-term business strategy. KT&G is therefore making various efforts to strengthen the sustainable competitiveness of our partners in the supply chain of the global tobacco industry. In particular, we are promoting the introduction of the Sustainable Tobacco Program (STP) for overseas leaf tobacco suppliers and domestic leaf tobacco farmers to support the sustainable agricultural operations of farmers who supply leaf tobacco, a core raw material for our tobacco business.



Based on KT&G's long-standing philosophy of being a "Inclusive Company," we are engaging with our stakeholders to create a new future for sustainable agriculture.

KT&G is closely connected to the agriculture-based primary industry, including the purchase of leaf tobacco, and its dependence on natural capital is higher than other industries, making supply chain sustainability management crucial. Accordingly, KT&G has been striving to achieve a global top-tier level of "leaf ESG" practices, starting with joining the global Sustainable Tobacco Program (STP) in 2022. In addition, we are creating value of "growing together" by focusing on supply chain sustainability management, including contributing to the realization of sustainable agriculture and improving the quality of life of domestic leaf tobacco farms.



Kim, Jung-ho  
Chief of SCM HQ, KT&G

STP is a platform jointly developed by global tobacco manufacturers and third-party consulting agencies to assure standards in environmental and social responsibility, promote sustainable tobacco production, and minimize negative impacts during the cultivation process. KT&G purchases all domestically produced tobacco leaves, and in terms of sourcing foreign tobacco leaves, we began to fully implement the STP by starting to purchase tobacco leaves from farms certified by the GAPC (Good Agricultural Practices Connection program)<sup>1)</sup> in 2022. As of 2023, we purchase approximately 99.4% of foreign tobacco leaves from suppliers who have joined the STP.

Although domestic tobacco leaf farms do not account for a large proportion of KT&G's total tobacco leaf purchases, we are actively promoting the adoption of STP for the sustainable development of domestic tobacco leaf farms. KT&G created the Domestic Leaf Tobacco Production STP Guidelines, a self-management program, to inform farmers about STP through monitoring and education, and in 2023, we created the Domestic Leaf Tobacco Production STP Monitoring Index Handbook and conducted monitoring on 340 items across four areas - Crop, Environment, and People (Labor, Human Rights). In 2024, we plan to expand the number of farms subject to monitoring and conduct intensive training on areas identified for improvement based on evaluation results. In the mid- to long-term, KT&G aims to enhance cultivation methods for sustainable tobacco leaf production through R&D and consulting.

In addition to the leaf tobacco farms who have already been monitored, we will expand the scale of monitoring by selecting new farmers, and provide intensive training (KT&G regular training, collective training targeting farmers in Korea Tobacco Growers Organization, etc.) to focus on areas that were not met in the previous year's assessment.

In the mid- to long-term, in collaboration with R&D HQ, we will also provide professional consulting advice and improvement activities, including upgrading the standard farming methods of our direct contract farms through strategic projects such as domestic farming management and raw material improvement research for sustainable raw leaf tobacco production.

KT&G aims to ensure that 100% of the leaf tobacco farms we do business with participate in the STP by 2030, and through these efforts, we expect all raw material producers and partners involved in the process to manage their social and environmental impacts, fulfill their ethical responsibilities, and contribute to creating a sustainable industrial ecosystem together with KT&G.

 Please refer to the "Building a Sustainable Business Ecosystem: Sustainable Agriculture" of this report to find detailed information.



<sup>1)</sup> A Tennessee-based service company that conducts a third-party audit on the cultivation, environmental, and labor of U.S. growers.

# KT&G Sustainability Disclosure

## CLIMATE

### GOVERNANCE

#### 1. Decision-making Body

- (1) Decision-making Body and Responsibility Policy
- (2) Determining and Developing Competencies for Management/Supervision
- (3) Method and Frequency of Acquiring Information Related to Risks and Opportunities
- (4) Method of Considering Climate-related Risks and Opportunities in the Major Decision-making Process
- (5) Management/Supervision of Goal-Setting and Progress

#### 2. Top Management

- (1) Delegation of Climate-related Management/Supervision Roles
- (2) Top Management's Use of Control and Procedure

### STRATEGY

#### 1. Climate-related Risks and Opportunities and Types

- (1) Estimating Risk and Opportunity Impact Based on Time Horizon
- (2) Time Horizon of Impact of Identified Risks and Opportunities
- (3) Connection between Strategic Decision-making Plan Periods

#### 2. Business Model and Value Chain

- (1) Current and Anticipated Impact on the Business Models and Value Chain
- (2) Areas Where Risks and Opportunities are Concentrated

#### 3. Strategy and Decision-making

- (1) Response to Risks and Opportunities, and Plan
- (2) Resource Procurement Plan
- (3) Quantitative and Qualitative Information on the Progress of Plans Disclosed in Past Reporting Periods

#### 4. Financial Position and Financial Performance Impact

- (1) Carbon Pricing System's Impact on Financial Statements
- (2) Impact of Consumer Preference for Eco-friendly Low-carbon Products on Financial Statements

#### 5. Climate Resilience

- (1) Implications of Company Assessment on Strategy and Business Model
- (2) Climate-related Scenario Analysis Method

### RISK MANAGEMENT

#### 1. Climate-related Risk and Opportunity Management Process (identify, assess, prioritize, and monitor)

- (1) Inputs and Parameters
- (2) Identification of Climate-related Risks and Opportunities
- (3) Climate-related Risk and Opportunity Assessment Method
- (4) Level of Priority of Climate-related Risks and Opportunities When Compared to Other Sustainability Risks
- (5) Monitoring of Climate-related Risks and Opportunities
- (6) Changes in the Risk Management Process

#### 2. Integration with the Company-wide Risk Management System

### METRICS AND TARGETS

#### 1. Climate-related Metrics

- (1) Greenhouse Gas
- (2) Assets or Business Activities Vulnerable to Climate-related Transition Risks
- (3) Assets or Business Activities Vulnerable to Climate-related Physical Risks
- (4) Assets or Business Activities Aligned with Climate-related Opportunities
- (5) Capital Deployment
- (6) Internal Carbon Price
- (7) Compensation (Management)
- (8) Industry-based Metrics

#### 2. Climate-related Targets

- (1) Information Related to Metrics Used to Set the Targets (Target Metric, Objective, Application Scope, etc.)
- (2) Method of Monitoring Progress towards the Target
- (3) Analysis of Performance against Target
- (4) Information on GHG Emissions Reduction Target



I.

II.

# KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## CLIMATE-RELATED FINANCIAL DISCLOSURE

· The reporting period of this report is based on Jan 1, 2023 to Dec 31, 2023. In case of some activities, including the status of the BOD and Sustainability Committee, information through June 2024 was reflected to provide timely information.

· In writing this report, KT&G uses judgments, estimates, and assumptions that impact the identification of sustainability-related risks and opportunities, evaluation, etc. This is based on KT&G's reasonable assumptions, estimations, and expectations based on the report creation date, and thus accompanies known or unknown material risks and uncertainties. The actual results of predictions, forecasts, and estimates may be different from what was originally estimated in important matters. KT&G believes that the anticipations reflected in future forecast statements are reasonable but cannot guarantee that they are completely right. We ask for your understanding that this report cannot be used as evidence, etc. for legal responsibility in relation to investors' investment results under any circumstances.

### Governance

#### 1. Decision-making Body

##### (1) Decision-making Body and Responsibility Policy

The Sustainability Committee<sup>1)</sup> under the BOD is a decision-making body in relation to sustainability, including climate change. It establishes execution strategies for sustainability management of KT&G and subsidiaries that are subject to consolidation and has the authority to manage/supervise approval and implementation of policies.

Before the establishment of the Sustainability Committee, the overall BOD reviewed the establishment of mid- to long-term environmental management strategies (April 2021). The Sustainability Committee under the BOD reviewed climate change scenario-based risks and opportunities in April 2023, and decided on mid- to long-term goals on responding to climate change at the Group level in August 2023. Through the Audit Committee, which consists only of independent directors, KT&G examines the status of company-wide risk management. The audit planning team, which is an independent organization under the Audit Committee, examined the status of ESG management implementation, including climate change issues, in 2022 and reported the results to the Audit Committee.

By doing so, we are striving to have ESG issues, including climate-related issues, be essentially reflected in KT&G's establishment of strategies, governance, and overall corporate responsibility. Please refer to the "Metrics and Targets: (7) Compensation (Management)" for information on the compensation policy for top management, which is responsible for supervising climate-related risks and opportunities.

##### (A) Management/Supervision roles and mandates

Category	Sustainability Committee Operation Regulations	KT&G Environmental Management Policy
Scope of authority and responsibility	<p><u>Article 4 (Committee Authority)</u></p> <p>① Matters that shall be deliberated/decided by the Committee are as follows:</p> <ol style="list-style-type: none"> <li>1. Establish basic policies and strategies on sustainability management</li> <li>2. Set mid- to long-term goals of sustainability management</li> </ol>	<p><u>Scope of responsibilities</u></p> <p>At KT&amp;G, the Sustainability Committee, which is a board committee, reviews execution strategies in the environmental area and the direction of response to major issues, and manages and supervises execution outcomes.</p>

<sup>1)</sup> The name of the "ESG Committee" was changed to the "Sustainability Committee" as of December 7, 2023

##### (B) Management and supervision system of the BOD

To take responsible responses to climate change, KT&G established the Sustainability Committee under the BOD and strengthened its governance system. The Sustainability Committee supervises ESG and climate change-related issues and risks, reviews the company's response strategies and policies, and monitors operational outcomes and progress. We are actually implementing climate change response strategies by operating the ESG Management Office within the Strategy Division and company-wide ESG taskforce. Each subsidiary runs an ESG Taskforce Council by company, thereby taking part in responding to climate change.



##### (C) Composition of the Sustainability Committee (as of April 2024)

Category	Name	Position	Director appointment date <sup>1)</sup>	Gender
Independent Director	Lee, Jee-hee	Chairperson	Mar. 30, 2022	Female
Independent Director	Shon, Dong-hwan	Member	Mar. 29, 2024	Male
Executive Director	Bang, Kyung-man	Member	Mar. 20, 2021	Male

<sup>1)</sup> Served as an executive director from the following day of the 34<sup>th</sup> annual general meeting (Mar 19, 2021) to the 37<sup>th</sup> annual general meeting (Mar 28, 2024). He was appointed as the new CEO at the 37<sup>th</sup> annual general meeting (Mar 28, 2024).

##### (D) Criteria for convening the Sustainability Committee

Category	Content
Operation cycle	At least twice a year (the chairperson convenes the Committee whenever necessary based on the chairperson's authority or the working-level organization directly introduces agenda)

# KT&G SUSTAINABILITY DISCLOSURE - [CLIMATE]

## (2) Determining and Developing Competencies for Management/Supervision

KT&G determines that it has the appropriate competencies necessary to supervise strategies that are aimed at responding to climate-related risks and opportunities based on an understanding of environmental management and leadership as well as sufficient understanding of climate-related international community demands and laws/regulations related to energy/GHG. As a process to determine whether these criteria are met, we use the "KT&G Board Skills Matrix," which is a BOD evaluation matrix, when choosing a new director candidate. Of the eight evaluation indexes of BSM, sustainability skill is defined as "helping the company achieve sustainable growth and contributing to the management and supervision of ESG-related risks and opportunities." By reflecting this in director candidate evaluation, we are judging whether a director has appropriate sustainability management-related experience and expertise.

### (A) KT&G Board Skills Matrix

Independent director Lee, Jee-hee is a consumer goods industry expert who accumulated diverse experiences at international organizations and groups related to sustainability management, including the Women Corporate Directors (2022-2023). She has been a member of the Sustainability Committee since 2022 and has been the chairperson since May 2024. Executive Director Bang, Kyung-man established the ESG Committee within the BOD at the time he served as the Chief of Strategy Division (2020-2022). By creating and operating an organization dedicated to ESG under direct control of the Chief of Strategy Division, he directed ESG management and managed and supervised risks and opportunities related to sustainability, including climate change.

Experiences & Expertise	Shon, Kwan-soo	Kim, Myung-chul	Koh, Yun-sung	Lee, Jee-hee	Kwak, Sang-wook	Shon, Dong-hwan	Bang, Kyung-man (CEO)
Senior Executive Leadership (6/7)	●	●		●	●	●	●
Manufacturing/Supply chain (1/7)	●						
Finance/Accounting (3/7)		●	●				●
Risk Management (3/7)	●	●					●
Global Business (4/7)	●	●		●			●
Sustainability (2/7)				●			●
Consumer Industries (3/7)	●			●			●
Legal Regulatory (3/7)			●		●	●	
Tenure	Mar. 30, '22 - '25 AGM	Mar. 29, '23 - '26 AGM	Mar. 29, '23 - '26 AGM	Mar. 30, '22 - '25 AGM	Mar. 29, '24 - '27 AGM	Mar. 29, '24 - '27 AGM	Mar. 29, '24 - '27 AGM
Independence (86%)	●	●	●	●	●	●	
Committee	Governance, Management, Audit	Evaluation and Compensation, Audit	Evaluation and Compensation, Audit	Governance, Sustainability	Governance, Audit	Evaluation and Compensation, Sustainability	Management, Sustainability
Gender (Female ratio: 14%)	Male	Male	Male	Female	Male	Male	Male

### (B) Measures to strengthen competencies

To improve directors' management/supervision competencies KT&G provides relevant training. We determine the level at which competencies were strengthened by performing a BOD evaluation every year. Director Lee, Jee-hee, who is the chairperson of the Sustainability Committee, is taking relevant courses at Seoul National University to strengthen her competencies in responding to ESG issues, including climate change.

Date	Trainee	Content
Apr. 09, 2024 - Nov. 26, 2024	Lee, Jee-hee	Seoul National University ESG Management Executive Leadership Program

### (3) Method and Frequency of Acquiring Information Related to Risks and Opportunities

The Sustainability Committee receives mainly from the ESG Management Office in the Strategy Division information that is required to manage/supervise climate-related risks and opportunities. When a Sustainability Committee meeting is held, the ESG Management Office provides reports and various materials beforehand so that committee members can sufficiently understand agenda content and make decisions. The Sustainability Committee can receive outside expert advice, if needed, with company funds.

### (A) Method and frequency of reporting to the decision-making body

KT&G reports agenda on climate-related risks and opportunities to the BOD or Sustainability Committee in accordance with the Board of Directors Regulations. Matters decided on by the Committee are notified to each director within three days from the resolution date.

Target	Sustainability Committee	BOD
Main agent	Head of ESG Management Office	Chairperson of the BOD Committee
Frequency and timing	<ul style="list-style-type: none"> <li>At least twice a year</li> <li>When a Sustainability Committee meeting is held, each member expresses his/her opinion and makes a resolution on discussed agenda</li> </ul>	<ul style="list-style-type: none"> <li>At least twice a year</li> <li>Make a notice to each director rather than the Committee within three days from the Sustainability Committee resolution date</li> </ul>
Main content	<ul style="list-style-type: none"> <li>Agenda related to sustainability, including climate-related risks and opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Deliberation/resolution results of agenda related to sustainability, including climate-related risks and opportunities</li> </ul>

# I. KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## II. (B) Major status on acquisition of relevant information during the reporting period

Date	Agenda content	Relevant information
Jan. 13, 2023	2023 ESG management implementation plan	<ul style="list-style-type: none"> <li>Global ESG trends and outlook, including climate crisis response disclosures</li> <li>Disclosure of information related to reducing carbon emissions and shareholder engagement trends in relation to climate change response strategies</li> <li>Status of internal execution system activities in relation to climate change response, and quantitative performance of climate-related indexes</li> <li>2023 climate-related goals and key execution plan</li> </ul>
	Plan to advance climate change response disclosures	<ul style="list-style-type: none"> <li>Global disclosure changes, such as disclosure of information related to climate change response and compliance with regulations</li> <li>Company's progress with responding to climate change</li> <li>Climate change scenario-based risk evaluation results and future direction of advancement</li> </ul>
Aug. 03, 2023	ESG materiality assessment and establishment of mid- to long-term ESG goals of the Group (draft)	<ul style="list-style-type: none"> <li>2023 materiality assessment plan and results (identify material issues including climate change)</li> <li>Establish the Group's mid- to long-term climate change response goals (GHG reduction rate, renewable energy usage rate)</li> <li>Major global initiatives related to responding to climate change</li> </ul>
	Establishment of an ESG policy (draft)	<ul style="list-style-type: none"> <li>Major policy content related to climate change response that is in line with global standards</li> </ul>
May 09, 2024	2024 ESG management implementation plan (draft)	<ul style="list-style-type: none"> <li>Global ESG trends, including the climate crisis and financial impact disclosures</li> <li>Major performance in 2023, including progress with implementing the Group's ESG goals (including climate change response)</li> <li>2024 climate-related goals and key execution plan, including advancement of net-zero strategy</li> <li>2024 materiality assessment plan and results (identify material issues including climate change)</li> </ul>

## (4) Method of Considering Climate-related Risks and Opportunities in the Major Decision-making Process

### (A) How climate-related risks and opportunities are considered

Monitoring of climate-related risks and opportunities of KT&G and its subsidiaries that are subject to consolidation takes place through regular holding of the Sustainability Committee. The BOD deliberates/decides on matters that accompany large-scale facility investments, etc.

### (B) Major agenda that considered the climate-related risk and opportunity aspect during the reporting period

Category	Date	Approval status	Major agenda content	Considerations for climate-related risks and opportunities
BOD	Jan. 18, 2023	Approval	Approval for investment in KT&G's Kazakhstan Manufacturing Cooperation (draft)	Establish production execution systems, such as the Manufacturing Execution System (MES), and energy management system
	Mar. 16, 2023	Report	Change the budget for the new printing factory construction project	(Build an ESG infrastructure) Establish photovoltaic power generation, secure water augmentation facility, and apply an energy management system, etc. to realize the environmental management vision
Sustainability Committee	Apr. 13, 2023	Report	2023 ESG management implementation plan	Company-wide ESG management implementation plan, action plan to respond to climate disclosures and alleviate/adapt to climate change, outcome
		Report	Plan to advance climate change response disclosures	Setting of KT&G's climate change scenario, results of scenario-based risk evaluation, and future advancement task
	Aug. 03, 2023	Approval	ESG materiality assessment and establishment of mid-to long-term Group ESG goals (draft)	Establish Group-level mid- to long-term climate change response goals (GHG reduction rate, renewable energy usage rate)
		Approval	Establishment of an ESG policy (draft)	Discuss major climate change response policies that are in line with global standards
	May 09, 2024	Approval	2024 ESG management implementation plan (draft)	Company-wide ESG management implementation plan, action plan to respond to climate disclosures and alleviate/adapt to climate change, outcome

# KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## (5) Management/Supervision of Goal-Setting and Progress

Through the Sustainability Committee, KT&G manages and supervises the setting of goals to respond to climate-related risks and opportunities and the progress. In August 2023, the Sustainability Committee reviewed and decided on Group-level mid- to long-term goals based on Science Based Targets initiative (SBTi) guidelines. Please refer to “Metrics and Targets: 2. Climate-related Targets” to find detailed information about each target. In addition, the Sustainability Committee manages progress and performance through regular monitoring of the established goals.

To clarify the top management’s responsibilities regarding climate change response, KT&G connects sustainability performance that includes climate-related response with executive director’s compensation based on KT&G’s Executive Director’s Compensation Policy. Based on the results of evaluating the top management’s performance through the Evaluation and Compensation Committee, which is a board committee, we reflect in the executive director’s bonus the level of performance compared to the pre-established goals every year.

### (A) Results of managing/supervising goal-setting and progress

Category	Date	Content
Manage/supervise progress	Apr. 13, 2023	• Performance in reducing the Group’s GHG emissions in 2022 compared to 2020, status of achieving renewable energy goals, etc.
Goal-setting	Aug. 03, 2023	• Group’s climate change response goal for Year 2030 - GHG reduction rate from 2020: 42% - Renewable energy usage rate: 80% • Achieve the Group’s Scope 1, 2, and 3 net-zero by 2050 <sup>1)</sup>
Manage/supervise progress	May 09, 2024	• Performance in reducing the Group’s GHG emissions in 2023 compared to 2020, status of achieving renewable energy goals, etc.
Goal-setting	May 09, 2024	• Achieve the Group’s Scope 1, 2, and 3 net-zero by 2045

<sup>1)</sup> The target year was changed from 2050 to 2045 on May 9, 2024

### (B) Compensation regulations and target

The KT&G executive director’s compensation (short-term and long-term incentives) is determined based on comprehensive evaluation results that include the outcomes of advancing ESG management and practicing ESG management. This compensation system provides strong motivation to the executive director to achieve ESG goals, which include responding to climate change. In April 2024, we raised the ESG index weight from 5% to 10% when setting short-term management goals for the executive director. In particular, an index on reducing GHG emissions to implement the Group’s low-carbon transition strategy was more directly reflected in long-term management goals, thus reorganizing the compensation system so that actual climate change response outcomes can be generated. In addition, the short-term management goals reflect major global ESG evaluation organizations’ evaluation results, including the Carbon Disclosure Project (CDP), to enhance the ability to execute climate change response that meets global standards.

Furthermore, KT&G operates a stock compensation system linked with performance for the top management, including the executive director, and executives. Some of the incentives are paid in stocks. The value of the top management’s compensation changes according to the stock price at the time of stock payment. In case of long-term incentives for the executive director, we apply a method of stock payment on the condition of restricted transfer, through which a certain settlement of a right period is assigned and a three-year deferred payment method is applied so that shareholder value and the compensation system are connected from a long-term perspective.

This approach encourages the top management, including the executive director, to more actively implement management policies that enhance the company’s mid-to long-term value by strengthening response to climate change and sustainability issues and performs the role of enhancing their commitment towards responsible management. In addition, an incentive redemption clause regarding intentional fraudulent accounting and distortion of evaluation materials is included in the Executive Director’s Compensation Policy, thereby enhancing soundness of executive director performance compensation.

Category	Content			
Compensation rule	<ul style="list-style-type: none"> <li>• Salary: A basic annual income is determined through a BOD resolution in consideration of position and responsibilities/roles of entrusted work, etc. in accordance with the Executive Director’s Compensation Policy. It can be adjusted by a BOD resolution if such is determined as needed in accordance with management conditions and changes.</li> <li>• Incentives: A short-term incentive is provided every year and a long-term incentive is provided every three years based on management performance evaluation results according to the Executive Director’s Compensation Policy.               <ul style="list-style-type: none"> <li>– Short-term incentive: This incentive is paid after a BOD resolution by reflecting target evaluation results every year. By putting together quantified indexes and non-quantified indexes for major matters of the corresponding year, this incentive is paid within the base pay’s 0-280% (president) and 0-165% (executive director) range.</li> <li>– Long-term incentive: This incentive is paid after a BOD resolution by reflecting the results of a comprehensive evaluation on long-term management performance (3 years). By putting together quantified indexes for major management matters, this incentive is paid within the base pay’s 0-600% (president) and 0-300% (executive director) range. We operate a stock compensation system linked with performance to promote top management’s responsible management and maximize shareholder value. Of the long-term incentives of executive directors, including the CEO, stock compensation is paid as stocks with limited transfer conditions.</li> </ul> </li> <li>• Benefits: Medical examination expenses, accident insurance, etc. are covered in accordance with the Executive Director’s Compensation Policy.</li> </ul>			
	• Executive Director (as of April 2024)			
Corresponding personnel	Name	Position	Type of compensation	Measurement standard and method
	Bang, Kyung-man	CEO (BOD, Management Committee, Sustainability Committee)	Earned income (bonus)	<ul style="list-style-type: none"> <li>– Short-term incentive: A comprehensive evaluation is performed on quantified indexes that include revenues, operating profit, and ESG evaluation results, and non-quantified indexes that include advancement of ESG management, strengthening of key growth businesses, advancement of business foundation, and expansion of business portfolio. In particular, in the ESG management advancement items, an evaluation is carried out on execution performance in responding to climate change at the company-wide level, establishment of the Group’s mid- to long-term net-zero strategies, establishment of a response system, etc.</li> <li>– Long-term incentive: An objective evaluation is carried out on quantified indexes that include revenues, operating profit, ROE, ESG task results, TSR, etc. In particular, the GHG reduction rate is chosen as one of the ESG task results to assess execution of climate change management.</li> </ul> <p>The company assigns to the top management climate change response responsibilities in short- and long-term performance indexes.</p>



# I. KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## II. 2. Top Management

### (1) Delegation of Climate-related Management/Supervision Roles

The Sustainability Committee entrusted top management with the responsibility to manage/supervise climate-related risks and opportunities. KT&G's CEO manages/supervises execution of climate change strategies, and oversees the company's climate change-related management activities.

#### (A) ESG Management Council

This Council consists of C-level executives of all business divisions and supports top management's decision-making. It holds discussions to strengthen climate change response and continually communicates about issues that arise in the business execution process. Based on what was discussed at the ESG Management Council, the top management makes decisions on ESG issues from an integrated company-wide perspective.

#### (B) Strategy Division

The Chief of Strategy Division, who is KT&G's CSO and CFO, performs the role of reviewing and managing KT&G's ESG issues, including climate-related issues, major financial plans, investments, and budgets. By simultaneously fulfilling two important responsibilities, the Strategy Division Officer performs reviews so that ESG issues and financial issues are interconnected for discussions. The Chief of Strategy Division also receives reports on major climate-related strategies and performance from the ESG Management Office, which is the ESG management control tower, and examines the progress of executing detailed tasks.

#### (C) Execution organization

KT&G's top management operates the Energy Environment Department under Manufacturing HQ to support the supervision of climate-related risks and opportunities. The Energy Environment Department tallies and manages the company's climate performance based on the mid-to long-term environmental management goals. It implements activities to minimize climate impact through the establishment and implementation of detailed strategies such as switching to renewable energy, improving energy efficiency, expanding water reuse, and minimizing waste to landfills. We also designate an environmental performance officer in each organization (HQs in head office, plants, regional sales offices, etc.) to implement tasks through organic collaboration with the Energy Environment Department.

KT&G has been operating the Industrial Regulation Compliance Operating System to systematically manage environmental regulations and compliance. The system consists of a total of 23 laws across four key areas encompassing safety, material management, environment, and energy related to plant operations; monitoring and updating laws and regulations on 130 items; self-audit for regulatory compliance; and reminder of implementation at the end of the implementation cycle.

#### (D) Outside advisory group

The Energy Environment Working Group, which is a working-level council, uses an outside advisory group that consists of consultants, investment analysts, professors, and others to monitor climate-related risks and opportunities to support the top management's supervision of climate-related risks and opportunities. Through a climate scenario analysis, the outside advisory group reviewed factors related to transition and physical risks.

### (2) Top Management's Use of Control and Procedure

KT&G examines the status of company-wide risk management through the Audit Committee, which consists of non-executive directors. The audit planning team under the Audit Committee performs independent internal audits on ESG management implementation matters. Internal audit results are reported to the Audit Committee and top management. Within a month after a notice is sent on audit results, the relevant field department submits to the audit planning team an improvement plan for matters that were pointed out after the audit. The audit planning team periodically examines if measures were executed for the matters and reports the results to the Audit Committee once a year. Selection of an internal audit topic is based on the audit planning team's own risk evaluation when an annual audit plan is established.

When risks are evaluated, we comprehensively consider opportunities, risks, regulation changes, and others. In 2022, we reviewed appropriateness of the overall ESG management system and reviewed the execution status of short- and mid- to long-term ESG-related tasks, such as response to climate change and ways to achieve mid- to long-term environmental goals. In 2023, we performed a focused review of whether efforts are being made to implement environmental management by reducing wastes in relation to achieving our environmental vision – KT&G Green Impact. Moving forward, we will make continuous efforts to examine company-wide ESG management implementation levels and the progress of mid- to long-term ESG-related tasks, and also examine roles and responsibilities that were assigned to major organizations.

# I. KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## II. Strategy

### 1. Climate-related Risks and Opportunities and Types

KT&G and its subsidiaries that are subject to consolidation referred to SASB disclosure topics in the step of identifying climate-related risks and opportunities that can be reasonably estimated to have an impact on the company’s outlook. For the business model, we referred to the disclosure topics such as “tobacco” and “processed foods” in the food and beverage category. For the value chain, we referred to such disclosure topics as “agricultural products” in the food and beverage category, and “containers packaging” in the resource transformation category, and “chemicals.”

#### (1) Estimating Risk and Opportunity Impact Based on Time Horizon

KT&G performed a materiality assessment on climate change risks and set priority in consideration of the possibility of occurrence and size of impact for all climate change risks. Of the total 21 climate change risks, we described eight climate change risks and three climate change opportunities that recorded a relatively high ranking by major area.

Category	Risk and opportunity categorization	Description	Short-term	Mid-term	Long-term	
Transition	Policy and legal	Carbon pricing system	The government or an international organization charges a price for carbon emissions to facilitate GHG reduction. This raises the cost of carbon emissions that arise in KT&G’s tobacco manufacturing process and raw material supply process, and can lead to an increase in production costs and weakened product price competitiveness. In addition, additional costs may arise to reduce carbon emissions in the raw material procurement and processing process for manufacturing health functional food.	Medium	High	High
	Markets	Rise in raw material costs	Due to climate change response policies and regulations, raw material supply and demand may become unstable for tobacco leaves and health functional food, which are our main raw materials, which may in turn lead to a rise in procurement costs. This can have a direct impact on KT&G’s product manufacturing costs, causing weakening of price competitiveness.	High	High	High
	Reputation	Prejudice against the business area	Negative social perception of the tobacco industry may be combined with climate change issues to have a negative impact on KT&G’s reputation.	Medium	Medium	Medium
Rise in stakeholder concerns or negative views		Insufficient measures taken to respond to climate change may decrease the sense of stakeholder trust, including investors, customers, and government officials, which can have a negative impact on KT&G’s business continuity. This can especially have an adverse impact on company evaluations and investment attraction in the global market.	Medium	Medium	Medium	
Physical	Acute	Cyclone, hurricane	Extreme weather that accompanies strong winds and heavy rainfall may cause damage to KT&G’s domestic and overseas manufacturing plants and logistics facilities, and may increase the risk of stoppage of production and supply chain. In case of tobacco products, significant damage may be caused to leaf tobacco-producing areas. Also, there may be setbacks in the supply of raw materials for health functional food.	Medium	Medium	Medium
		Heavy rainfall and flood	Localized heavy rain and flood increase the risk of business site flooding and operation stoppage as well as damage to major infrastructure. This can have an impact on KT&G’s continuous production and product supply. In particular, damage to a raw material storage facility or logistics center can trigger supply setbacks.	High	High	High
	Chronic	Temperature change	A rise in average temperatures reduces agricultural productivity of tobacco plantations and leads to changes in energy consumption patterns. This has an impact on KT&G’s raw material supply and operational costs. Changes in the yield and cultivation regions, etc. of plants and agricultural products, which are raw materials of health functional food, may lead to instability in supply and demand as well as lower quality.	Medium	Medium	High
Opportunities	Products and services	Water shortage	If availability of water resources goes down owing to changes in rainfall patterns and an increase in drought that are caused by climate change, this directly impacts KT&G’s production activities. In particular, restricted use of water in the raw material processing and manufacturing process may lower production efficiency.	Medium	Medium	High
		Consumer preference for eco-friendly, low-carbon products	New market opportunities can be seized ahead of others and corporate competitiveness can be enhanced by expanding low-carbon and eco-friendly product development and sales. By launching products that applied eco-friendly packaging and non-plastic cigarette filters, sustainability can be developed into key competitiveness. This creates the company’s growth engine by discovering new business opportunities while actively responding to a rise in consumer demand for eco-friendly products.	Medium	High	High
	Resilience	Secure key competitiveness by strengthening the ability to respond to climate change risks	Strengthened ability to respond to climate change is expected to lead to a rise in corporate value over the long term as a result of enhanced sustainability and key competitiveness of KT&G. In particular, we can expect stable business operations by establishing a sustainable raw material supply chain and overhauling a disaster response manual to respond to climate risks.	Medium	Medium	High
	Resource efficiency	Reduce operational costs by expanding low-carbon facilities and renewable energy facilities	By improving energy efficiency and increasing use of renewable energy, KT&G can reduce operational costs while fulfilling environmental responsibilities. For example, installation of photovoltaic panels can curtail energy costs and reduce GHG emissions.	Medium	Medium	Medium

# I. KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## II. (2) Time Horizon of Impact of Identified Risks and Opportunities

KT&G defines the time horizon in which it expects climate-related risks and opportunities to arise as follows.

Time horizon	Target period	Target period based on current term
Short-term	1 year	- 2024
Mid-term	More than 1 year and no more than 5 years	2025 - 2028
Long-term	More than 5 years	2029 -

## (3) Connection between Strategic Decision-making Plan Periods

KT&G’s strategic decision-making takes place through establishment of a business plan (3 years) and establishment and review of a mid- to long-term vision (5 years). This is in consideration of the major Group business portfolio’s market change cycle, new product R&D period, etc. Climate-related risks and opportunities are considered in overseas trend analysis and internal status diagnosis in the plan-establishing process.

## 2. Business Model and Value Chain

### (1) Current and Anticipated Impact on the Business Models and Value Chain

According to the nature of the business that KT&G and its subsidiaries that are subject to consolidation engage in, KT&G categorizes its business models into the “tobacco area” that runs the business of manufacturing and selling cigarette products and the next-generation e-cigarette HNB, etc., the “health functional area” that runs the business of manufacturing and selling red ginseng and non-red ginseng health functional food, etc., the “real estate area” that runs the business of real estate development and lease, and the “other area” that runs the business of R&D, manufacturing, sales, etc. of drugs/cosmetics. Each business model’s value chain includes used and dependent interactions, resources, and relationships for KT&G to produce the company’s products or services, ranging from product planning to shipment, consumption, and end of life.

In relation to the expected strategy-1-(1) time horizon-based risk and opportunity impact, KT&G identified sustainability-related risks and opportunities in the “tobacco area” and “health and function area.” The “tobacco area” and “health functional area” business model is ① product and technology R&D, ② production and manufacturing of outputs, and ③ sales and marketing, and value chain activities are ① purchase of inputs, including raw materials/materials, in the upstream, ② distribution and transport of inputs and outputs, and ③ use and disposal of sold products in the downstream.

### (A) Transition risk: Carbon pricing system

If carbon prices surge or stricter and enhanced carbon pricing regulations are implemented, it could lead to a significant risk of increased operating costs based on greenhouse gas (GHG) emissions. In addition, there may be indirect increases in carbon costs across the entire value chain, including partners, supply networks, and distribution networks. The carbon pricing system transition risk mainly impacts purchase of inputs, including raw materials/materials, and production and manufacturing from among KT&G’s business models and value chain.

Activity	Current	Anticipated
Purchase of inputs, including raw materials/materials	Farms, which are a major raw material supply chain, are not directly subject to regulations. Also, a low percentage of materials suppliers, which are mostly located in Korea, are directly subject to regulations.	Expansion of carbon emissions regulations is expected to result in the inclusion of carbon emissions costs throughout all value chain processes, including raw materials, production, and distribution, including raw material suppliers. We expect indirect carbon cost increases in the overall value chain, including partner companies, supply chain, and distribution network.
Production and manufacturing	KT&G is subject to allocation of GHG emissions allowances and is subject to the emissions trading system’s emissions regulations. As such, low-carbon facilities and renewable energy facilities continue to be expanded with a focus on KT&G.	There is a higher possibility of an increase in allowance and carbon prices as a result of each country’s strengthened GHG reduction policy on manufacturing business sites and facilitation/adoption of the carbon credit trading market. There will likely be an increase in corporate input of resources to transition to a low-carbon production system.

### (B) Transition opportunity: Consumer preference for eco-friendly, low-carbon products

A change in consumer preference toward eco-friendly, low-carbon products can become a risk to KT&G product demand but can also become an opportunity to enhance the company’s reputation and increase market share by developing alternatives. We can strengthen our technological competitiveness by carrying out R&D on materials that can reduce carbon and securing patents, and generate additional profits through new product launch and licensing.

The adoption of such materials creates new business opportunities, gives concrete shape to sustainable growth strategies, and can strengthen competitiveness in the global market. In detail, we can continually launch innovative products and lead the market based on technology patents and the ability to manufacture carbon reduction products. Accordingly, increased consumer preference for eco-friendly, low-carbon products mainly impacts product and technology R&D from among KT&G’s business models and value chain.

Activity	Current	Anticipated
Product and technology R&D	We have been carrying out R&D since 2013 to develop eco-friendly materials, including non-plastic and biodegradable materials	Amid an expansion of the eco-friendly, low-carbon product market, products’ eco-friendliness is forecast to act as a factor that impacts the company’s brand image. As the importance of developing products and technologies that apply environmental factors gains more emphasis, relevant R&D costs are expected to rise.

# I. KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## II.

### (C) Physical risk

Climate change is associated with changes in weather patterns and crop cultivation seasons, which can impact the production and cost of crop raw materials, such as leaf tobacco. Furthermore, it may result in reduced quality or quantity of tobacco leaves and intensified competition for resources, leading to higher costs. If these factors cumulatively lead to an unstable supply situation for raw materials, it can escalate production costs, negatively affecting KT&G’s profitability and overall financial performance. Physical risk mainly impacts purchase of inputs, including raw materials/materials, and production and manufacturing from among KT&G’s business models and value chain.

Segmentation	Current	Anticipated
Procurement of inputs, including raw materials/materials	The supply chain of major raw materials, which are tobacco leaves, ginseng, and crops, is currently stable. However, ginseng is a half-shade plant that grows well in cool weather, and its cultivation areas are steadily moving north due to climate change which may lead to relocation of farmlands and changes in yield. Accordingly, we are carrying out climate response activities, such as researching new varieties to respond to the climate disaster and developing sun shading facilities.	Temperature changes impact tobacco plant growth and can potentially lead to a decrease in yield or changes in geographical locations that are suitable for cultivation. This may cause setbacks in procuring high-quality raw materials.
Production and manufacturing	There are no cases where water accessibility led to a setback in production activities. However, as a result of water risk analysis of WRI, the Daejeon Plant and Türkiye Plant were categorized as relatively high water stress risk regions. Accordingly, we are increasing investments in the water reuse process in preparation for water stress risk and acute drought.	Water is a resource used in several processes within production facilities, such as cooling and cleaning. It is a main ingredient of some products. If water availability deteriorates, there will be setbacks in these processes, leading to a slowdown or stoppage of production.

### (2) Areas Where Risks and Opportunities are Concentrated

Areas where climate-related risks and opportunities of KT&G and its subsidiaries are focused are purchase of inputs, including raw materials/materials, production and manufacturing, and product and technology R&D.

## 3. Strategy and Decision-making

### (1) Response to Risks and Opportunities, and Plan

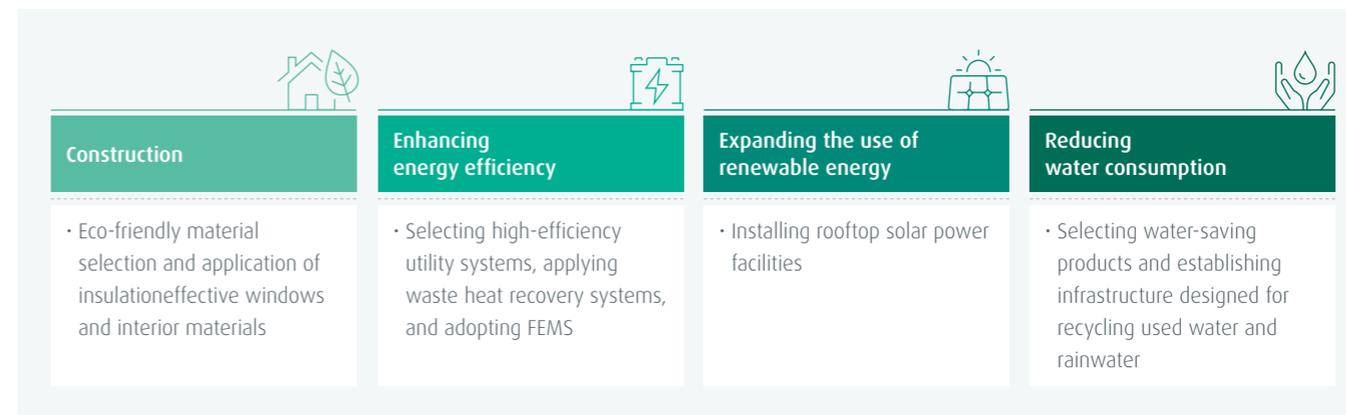
#### (A) Changes in resource allocation for business models

KT&G has no direct climate-related resource allocation changes for business models in 2023. We establish and execute resource allocation plans to adopt renewable energy and expand high-efficiency facilities, including the establishment of eco-friendly printing plants, to build eco-friendly facilities and processes.

#### Establishment of the Sejong Business Site, an eco-friendly printing factory

KT&G is building a printing factory by investing around KRW 180 billion in a 48,583m<sup>2</sup> site in the Mirae Industrial Complex located in Sejong Special Self-Governing City, and the factory is planned for completion in 2025. The newly established printing factory will produce packaging materials such as cigarette packaging and paper boxes for KT&G’s tobacco products. It will incorporate state-of-the-art logistics automation and smart printing processes to significantly enhance operational efficiency. The construction of this future-oriented factory emphasizes environmental friendliness from design and utility selection to operation. It aims to incorporate eco-friendly elements throughout all aspects, ensuring environmental sustainability. After completion, we aim to have the printing factory become the first manufacturing facility in Korea to achieve LEED<sup>1)</sup> GOLD certification.

#### Eco-friendly Technology Applied to Sejong Business Site



<sup>1)</sup> Leadership in Energy & Environmental Design: Green building certification program developed by the U.S. Green Building Council (USGBC). It is a globally recognized green building rating system that provides guidelines for environmentally friendly design and construction, taking into account aspects such as water efficiency, energy efficiency, and resource reuse. There are four certification levels based on the evaluation criteria.

# KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## (B) Direct mitigation and adaptation efforts

Category	Content	Mitigation	Adaptation	Current	Anticipated
<b>1</b> Product material change	<ul style="list-style-type: none"> <li>R&amp;D of alternative materials, including non-plastic and biodegradable materials                             <ul style="list-style-type: none"> <li>Development of cigarette filters with lyocell fibers that can reduce carbon compared to cellulose acetate (CA) material</li> <li>Working on paper filter technology development and review in parallel</li> </ul> </li> </ul>	●		●	●
	<ul style="list-style-type: none"> <li>Establishing an “Eco-Design” process and guidelines to consider life cycle carbon footprint when developing new products based on LCA execution results</li> </ul>	●		●	●
<b>2</b> Expansion of renewable energy production and procurement	<ul style="list-style-type: none"> <li>Installation of photovoltaic power generation facilities on the roof of manufacturing plants</li> </ul>	●		●	●
	<ul style="list-style-type: none"> <li>Renewable Energy Certificate (REC) and I-REC spot purchasing</li> </ul>	●		●	●
	<ul style="list-style-type: none"> <li>Power Purchase Agreement (PPA)</li> </ul>	●		●	●
<b>3</b> Adopt high-efficiency facilities and transition to electric vehicles	<ul style="list-style-type: none"> <li>Participate in the K-EV100 initiative and change company vehicles to electric vehicles</li> </ul>	●		●	●
	<ul style="list-style-type: none"> <li>Improve energy efficiency of internal processes                             <ul style="list-style-type: none"> <li>Improve steam boiler operation</li> <li>Apply inverter control to air compressors</li> <li>Make a replacement to high-efficiency utility facilities</li> <li>Adopt Factory Energy Management System (FEMS)</li> <li>Transition to energy-saving compressed air dryers</li> </ul> </li> </ul>	●		●	●
	<ul style="list-style-type: none"> <li>Reusing heat                             <ul style="list-style-type: none"> <li>Directly reuse hot water generated during the cooling process of drying equipment for the equipment component cleaning plant</li> <li>In the boiler system, KT&amp;G has installed air preheaters to increase the temperature of incoming air and improve boiler combustion efficiency.</li> <li>Utilize high-temperature condensate from the process for reusing in the hot water production process</li> </ul> </li> </ul>	●		●	●
	<ul style="list-style-type: none"> <li>Reduce use of oil-based fuel and transition to/procure renewable energy</li> </ul>	●		●	●
	<ul style="list-style-type: none"> <li>Adopt LED at major plants</li> </ul>	●		●	●

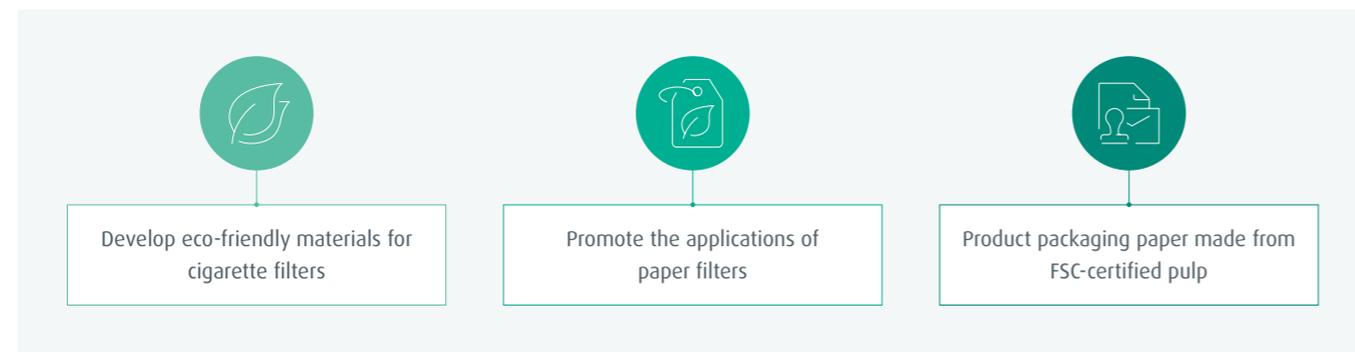
Category	Content	Mitigation	Adaptation	Current	Anticipated
<b>4</b> Internal policy	<ul style="list-style-type: none"> <li>Reflect potential carbon prices in long-term business plans and financial risk evaluations through internal carbon pricing</li> </ul>	●			●
	<ul style="list-style-type: none"> <li>Implement the company-wide energy costs settlement system</li> </ul>	●			●
	<ul style="list-style-type: none"> <li>Publish the “Best Practice Casebook for GHG Reduction and Water Reduction,” which summarizes the best practices for energy reduction that have been proven at domestic plants and induces voluntary benchmarking for domestic and overseas plants and the Group subsidiaries</li> </ul>	●	●	●	●
<b>5</b> Personnel adjustment	<ul style="list-style-type: none"> <li>To advance our environmental management, we promoted the Energy Environment Technology Team under the Manufacturing HQ to the Energy Environment Department and strengthened its roles</li> </ul>	●		●	
	<ul style="list-style-type: none"> <li>Designate an environmental performance officer in each organization (HQs in head office, plants, regional sales offices, etc.) to implement tasks through organic collaboration with the Energy Environment Department</li> </ul>	●		●	
	<ul style="list-style-type: none"> <li>Provided a total of 14 environmental training sessions through outsourcing to employees in charge of ESG at plants and head office</li> </ul>	●		●	
<b>6</b> Physical risk	<ul style="list-style-type: none"> <li>Develop and implement a disaster management standard manual, which includes guidelines for disaster recovery in the event of natural disasters like cyclones and floods</li> </ul>		●	●	●
	<ul style="list-style-type: none"> <li>Regular risk assessments are conducted to identify, evaluate, and mitigate risk factors at each business site, enhancing safety and health management to prevent major disasters</li> </ul>		●	●	●
	<ul style="list-style-type: none"> <li>Establish emergency response manuals tailored to specific locations and situations</li> </ul>		●	●	●
	<ul style="list-style-type: none"> <li>Periodically checking drainage to prevent flood damage</li> </ul>		●	●	●
	<ul style="list-style-type: none"> <li>Managing an emergency network to communicate the situation in the event of a natural disaster</li> </ul>		●	●	●

# KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## 1 Product material change

Since 2013, KT&G has been conducting research and development of alternative materials such as non-plastic and biodegradable materials. Among alternative materials, lyocell tow is a material known for its excellent biodegradability after being discarded for it uses a method of converting natural pulp extracted from trees into fibers by simply dissolving it into fibers without chemical modification. Having confirmed the applicability of cigarette filters using lyocell fibers, KT&G signed an agreement with KOLON Industries in February of 2023 to jointly develop cigarette filters with eco-friendly lyocell fibers. In addition, we have secured intellectual property rights by receiving the patent grant for related technologies while continuing our research and development for realization and commercialization of products with quality similar to that of existing filters.

### Develop Eco-friendly Materials and Use Eco-friendly Certified Materials



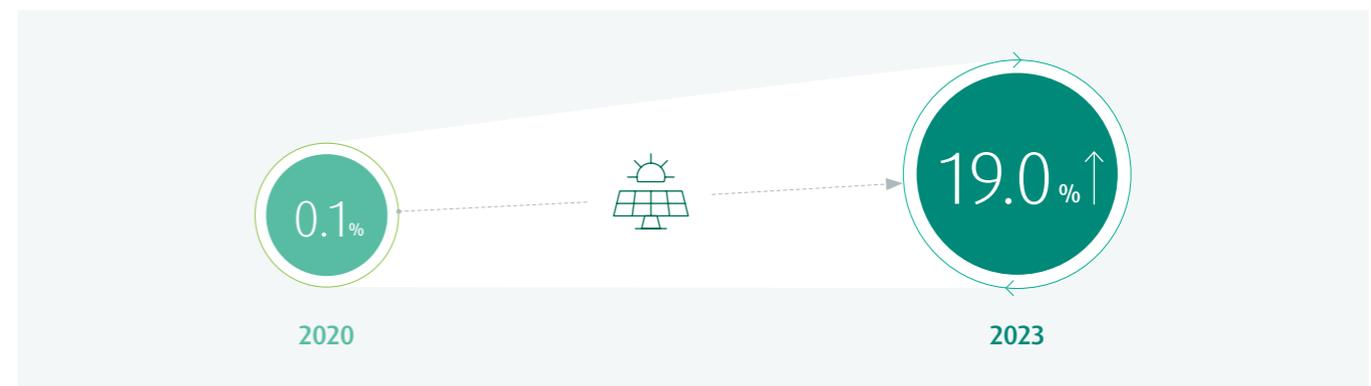
## 2 Expansion of renewable energy production and procurement

KT&G is striving to transition to renewable energy over the mid-to long-term to achieve its 80% renewable energy goal by 2030 and reduce GHG emissions. We are moving forward with the adoption of solar power generation facilities on the rooftops or roofs of domestic factories and SangSang Madang Nonsan. We have been operating a 3.1 MWp solar power generation system on the roof of the Gwangju Plant since June 2023. This marks the beginning of our plan to install around 26.2 MWp solar power generation systems at five domestic factories by 2026. In doing so, we aim to achieve our goal of reducing an annual 15,377 tCO<sub>2</sub>eq tons of GHG emissions.

We are also reviewing and implementing other forms of renewable energy adoption. We purchased Renewable Energy Certificates (RECs) in consideration of continued reduction based on our mid- to long-term GHG reduction roadmap, and completed a 15,126MWh International Renewable Energy Certificate (I-REC) purchase for the Indonesia Plant and 3,018MWh I-REC purchase for the Türkiye Plant as well as a 5,350MWh Green Energy purchase for the Russia Plant in 2023. In addition, we signed a 12MWp-level (7.5% of company-wide electric power amount) power purchase agreement (PPA) to stably secure renewable energy. Supply was commenced in December 2023 and 17 business sites are using renewable electricity, including KT&G's Seoul Office Building.

As a result of these efforts, KT&G Group's<sup>1)</sup> renewable energy consumption rate increased from 0.1% in 2020 to 13.5% in 2023. It has grown to 19.0% in 2023 based on domestic and overseas business sites<sup>2)</sup> of KT&G. In 2024, we aim to further enhance the renewable energy rate to reach approximately 20% through the introduction of PPA and other initiatives. We also plan to accelerate the adoption of renewable energy by facilitating discussions by Group subsidiary councils.

### Percentage of renewable energy consumption at domestic and overseas business sites of KT&G



<sup>1)</sup> Based on all domestic business sites of KT&G and manufacturing sites of KT&G Group

<sup>2)</sup> Based on all domestic business sites of KT&G and manufacturing sites of KT&G overseas subsidiaries

# KT&G SUSTAINABILITY DISCLOSURE - [CLIMATE]

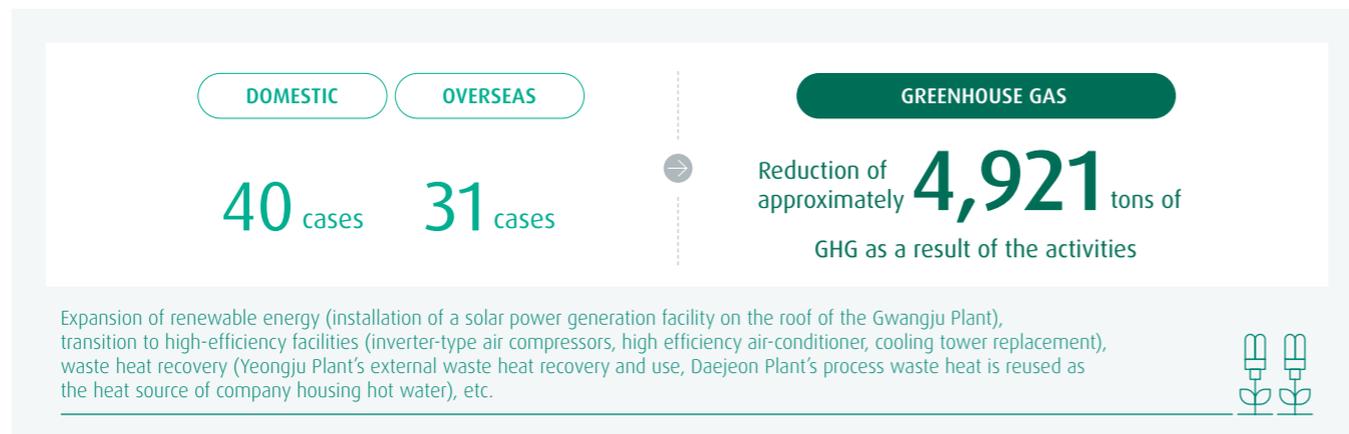
## ③ Change in process and facilities

In 2021, KT&G established a mid-to long-term environmental management vision, and actively manages manufacturing factory ESG tasks to reduce Scope 1 and 2 GHG emissions by 42%, reduce water withdrawal by 20%, and achieve a recycling rate of 90% compared to 2020 by 2030. To identify key tasks for achieving mid-to long-term environmental targets, the Energy Environment Department has been using internal experts every year since 2022 to conduct on-site assessments for nine plants in Korea and abroad (six in Korea, three overseas), and derives and implements improvement tasks based on assessment results.

For domestic plants, we seek to further rationalize energy use in business sites, going beyond execution of direct energy-saving tasks, such as a transition to high-efficiency facilities and waste heat recovery. To efficiently manage and optimize energy use, we adopted the Factory Energy Management System (FEMS) at the Daejeon Plant in 2023, and plan to actively expand FEMS application at domestic and overseas plants in 2024 based on Daejeon Factory operations. In addition, we will maximize use of renewable energy by building solar power generation facilities by using unused sites, such as factory roofs. As a result of these efforts, Yeongju Plant received the Minister of Trade, Industry and Energy Commendation at the Climate Change Response and Greenhouse Gas Reduction Excellence Awards that was held in November 2023, in recognition of reducing GHG emissions by making continued facility investments and manufacturing process improvements since 2020. The Cheonan Plant received the Minister of Trade, Industry and Energy Commendation at the 10th Korea Energy Engineer Award that was held in March 2024, gaining recognition for its efforts to enhance energy usage efficiency and prevent safety accidents.

The results of an assessment of overseas plants showed that the management levels varied depending on the country's environmental regulations, utility status, and operational methods at each plant. In addition, environmental issues such as water resource management and ease of renewable energy supply differed based on the location of the plants. To enhance the ESG management level of overseas plants, we are prioritizing the establishment of measurement infrastructure by installing meters on major energy and water-consuming equipment and/or locations, such as air conditioners and dryers, based on which we strive to strengthen our analysis-based reduction activities. Moreover, we are implementing a total of 87 key tasks related to GHG, water, and waste for each plant (39 tasks in 2023 and 48 tasks in 2024). To reinforce management capabilities for overseas plants, the company plans to continue implementing ESG KPI goal management, sharing case studies of greenhouse gas/water usage reduction at domestic plants, and promoting energy environment guideline revisions.

### Performance of Key Improvement Tasks in 2023



### Strengthening management of overseas plants

To advance ESG management of overseas plants, KT&G establishes 3 major KPI (GHG emissions intensity, water withdrawal intensity, and waste recycling rate) targets per factory every year and holds a monthly ESG video conference to review performance and discuss issues. In addition, non-metric targets are assigned, such as increase in renewable energy ratio and acquisition of global ESG certifications, to reflect ESG performance-based incentives.

We created the Energy Environment Guideline, a work manual for overseas plants, in the first half of 2024 and provided it to the Indonesia and Türkiye Plants, and established support facility operation standards and the water leak/air leak inspection system. As a result of strengthening overseas plants' ESG management, we made the achievement of reducing GHG emissions (29.5%<sup>1)</sup>) despite increased production in 2023 compared to the previous year.

### Transition of business fleets to electric vehicles

KT&G participates in the K-EV100 initiative organized by the Ministry of Environment in 2021, actively promoting the transition of its business fleets to electric vehicles (EVs). We aim to achieve our mid- to long-term GHG reduction target by converting 100% of our business fleets to EVs by 2030. (GHG emissions from business fleets are included in Scope 1 and 2 emissions.)

Starting with the introduction of six EVs at the Yeongdeungpo Integrated Logistics Center in 2021, we converted approximately 5.8% of KT&G's vehicles to EVs as of the end of 2023. Once the release of various EV models is in full swing, we plan to accelerate the transition to EVs and implement it more vigorously.

### Status of Electric Vehicle Adoption

Category	Unit	2022	2023
Electric Vehicles	Vehicle	19	63
Proportion of Electric Vehicles	%	1.7	5.8

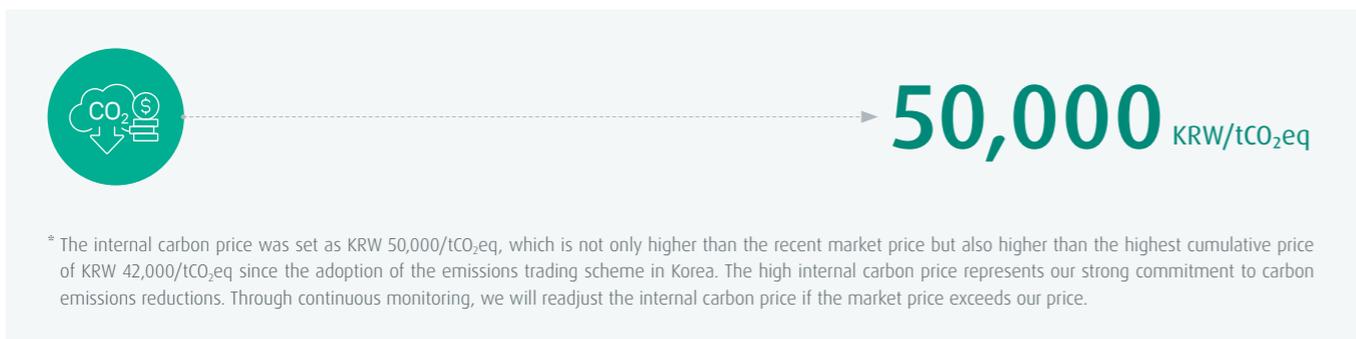
<sup>1)</sup> Based on Scope 1 and 2 emissions of KT&G's overseas manufacturing sites

# KT&G SUSTAINABILITY DISCLOSURE - [CLIMATE]

## 4 Internal policy (Operation of internal carbon pricing)

In order to respond to climate change proactively, KT&G introduced guidelines for economic analysis of new investments in 2022 and implemented an internal carbon pricing system as a way to encourage decision-making that considers potential carbon costs. Currently, the internal carbon pricing system is used to assess the payback period in manufacturing facilities where greenhouse gas emissions are high and most reduction activities take place. As a result, the GHG reduction from energy saving improvements increased in 2022 compared to 2021. In 2023, we are accelerating GHG emissions reduction by expanding the scope of the internal carbon pricing system to include overseas factories where securing economic feasibility for investments has been relatively challenging due to lower energy costs.

### KT&G's internal carbon pricing in 2023



## (C) Indirect mitigation and adaptation efforts

Category	Content	Mitigation	Adaptation	Current	Anticipated
Cooperation with outside organizations	• Participates in the Sustainable Tobacco Program (STP), an evaluation platform to assess and survey the social/environmental impact of the leaf tobacco supply chain jointly with major global tobacco manufacturers	●	●	●	●
	• Supplying fuel reduction devices for driers to farms to improve energy efficiency during leaf tobacco drying - Supplied 84 devices in 2022 and 100 devices in 2023	●		●	
Supply chain support	• Build Green Impact Alliance with significant materials partner companies - Establish joint GHG targets with significant materials partner companies - Provide training support in relation to responding to climate change by holding a regular ESG workshop and consulting to build a GHG reduction foundation * 2023 target: 16 partner companies (approximately 85-90% of the annual purchase volume) - Other training and consulting on ISO certification, etc.	●		●	●
	• Provide programs that facilitate carbon emissions reduction among logistics partner companies - Provide our company's products to drivers who have eco-friendly driving habits (ECO mileage: participated in by a total 64 vehicles of five partner companies) - Provide support to replace old vehicles (ECO Change: Partner companies with which we have a trade history of 7 years or more, supported replacement of 4 vehicles in 2022)	●		●	●
	• Diagnosis of large energy-consuming utility-specializing companies and establishment of improvement plans	●	●	●	●

## (D) Climate-related transition plan

KT&G set targets that are connected to the Paris Agreement, which aims to limit the global temperature rise to below 2°C compared to pre-industrial levels, and established mid- to long-term reduction targets in accordance with the Science Based Targets Initiative (SBTi) guidelines to strengthen responsibility over GHG emissions that is in line with global standards. We aim to receive SBTi certification. In 2022, we raised our reduction targets for 2023 from SBTi's well-below 2°C (Scope 1+2) and 2°C (Scope 3) scenarios to 1.5°C (Scope 1+2) and well-below 2°C (Scope 3) scenarios. In May 2024, we advanced our 2050 net-zero target to 2045 to take a leading role in global climate change and achieve sustainable growth. Ultimately, KT&G seeks to realize net zero across the entire business value chain by 2045.

In particular, we support the global campaign RE100 (Renewable Electricity 100%), which aims to cover 100% of electricity usage with renewable energy. To systematically implement RE100, we have set a target to achieve over 80% renewable energy usage of our total electricity consumption by 2030."

# I. KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## II.

In addition, we are continuously advancing Scope 3 emissions measurements in accordance with SBTi recommendations for objective verification of the mid-to long-term GHG reduction targets. We identified that Scope 3 emissions from KT&G’s upstream and downstream account for more than around 73% of the overall value chain as of the end of 2023. In collaboration with leaf tobacco farms, we are striving to improve energy efficiency in the leaf tobacco drying process. By helping materials partner companies reduce GHG emissions, we aim to reduce Scope 3 emissions by 25%<sup>1)</sup> compared to 2022 by 2030.

### MAJOR TRANSITION PLAN

#### 1. Establish SBTi-based GHG reduction targets

- 2030 emissions target
  - Scope 1+2 emissions: 42% reduction compared to 2020
  - Scope 3 emissions: 25%<sup>1)</sup> reduction compared to 2020
- Aiming to achieve net zero of Scope 1+2+3 emissions by 2045

#### 2. Setting renewable energy procurement targets that exceed RE100 guidelines

- 2030 renewable energy procurement target: 80%
- Diversify renewable energy procurement
  - Expand internal photovoltaic power generation facilities
  - Long-term, stable renewable energy procurement by using PPA
  - Strategic adoption of i-REC in connection with overseas business site management plans

#### 3 Raise energy consumption efficiency and improve energy efficiency of internal processes

- Diagnose efficiency of considerable energy-consuming facilities and processes and make improvements
- Improving steam boiler operation, applying an inverter control to air compressors, replacing with high-efficiency utility facilities, introducing FEMS, etc.

#### 4. Refinement of value chain GHG emissions inventory and support for reduction

- Establish reduction partnerships with partner companies in the value chain
- Reduce energy consumption by restoring and reusing the heat generated from drying leaf tobacco

#### 5. Convert business fleet to electric vehicles

- Convert all business fleets to EVs by participating in the K-EV100 (the project of supporting Korean Zero Emission Vehicle) project and expand the charging infrastructure

### MAJOR ASSUMPTIONS

1. Assumed conditions for calculating estimated GHG emissions: Product manufacturing and business site operations are expected to be based on the mid- to long-term production plans of KT&G and the Group subsidiaries
2. Outlook on carbon credit price: Price based on IEA 2022 GECC Model STEPS
3. Inflation rate by country and annual electricity price increase rate
4. Execution of external renewable energy procurement, including PPA and i-REC

### DEPENDENT FACTORS

1. Availability of material and human resources to implement the transition plan
2. Domestic and overseas economic conditions that can impact the financial validity of the assumed conditions, including the inflation rate and electricity price increase rate
3. Regulations on emissions trading that may impact a rise in carbon credits
4. Installation of photovoltaic facilities at the Group subsidiaries and PPA contract conditions

<sup>1)</sup> Targets: Category 1, 3, 11

### (E) Plan on achieving climate-related targets (including GHG emissions target)

#### 1. GHG emissions target

KT&G Group set a goal of reducing Scope 1+2 emissions by 42% (compared to 2020) and reducing Scope 3 emissions by 25%<sup>1)</sup> (compared to 2022) by 2030. We plan to realize net zero across the entire business value chain by 2045.

#### 2. Major reduction measures and implementation plan

Category	Achievement plan
Expand internal solar power generation facilities	• Operate photovoltaic facilities at major business sites starting in 2023 and achieve 21% of the reduction portfolio by 2030
Switch to high-efficiency facilities	• Diagnose and improve efficiency of considerable energy-consuming facilities and processes and achieve cumulative reduction of 145,000 tCO <sub>2</sub> eq by 2030
PPA and i-REC purchasing	• Adopt PPA: Aiming at cumulative emissions reduction of around 157.3 thousand tCO <sub>2</sub> eq by 2030 by expanding renewable energy procurement by actively using PPA starting in 2023 • i-REC purchasing: Target overseas business sites since it is easy to procure external renewable energy credits
Reduction activities in the supply chain	• Cooperation with farms: Collaborate with leaf tobacco farms to improve energy efficiency in the leaf tobacco drying process • Support partner companies: Establish support measures and build a cooperation system to help materials partner companies reduce GHG emissions

### (2) Resource Procurement Plan

KT&G issued green bonds worth KRW 100 billion in April 2024 and the funds that were raised will be invested in such projects as renewable energy (photovoltaic facility) and eco-friendly building construction projects. In addition, we adopted internal carbon pricing to promote decision-making that considers potential carbon costs when making investment decisions and to use it as guidelines for facilitating investment activities for climate change response, leading to the effect of reducing the payback period of climate change response activities that is internally estimated when conducting economic analysis of investments. In addition, we analyzed economic feasibility of each reduction measure and considered the timing of adoption to establish a reduction plan per year. By analyzing the marginal abatement cost curve (MACC) we first adopt cost-effective reduction measures and consecutively apply measures with high reduction potential over the mid- to long term. Furthermore, we additionally hired relevant personnel (4 people) after 2023 to operate a professional climate change organization, and plan to assign them to relevant departments to handle such tasks as establishing GHG reduction plans and reducing and monitoring GHG emissions.

### (3) Quantitative and Qualitative Information on the Progress of Plans Disclosed in Past Reporting Periods

Please refer to the “Metrics and Targets: [\(3\) Analysis of Performance Against Target](#)”

# I. KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## II. 4. Financial Position and Financial Performance Impact

- KT&G internally defined as follows climate-related activities that can have an important impact on financial position and financial performance, and analyzed financial impact pathways for each activity.
- As of the reporting date, KT&G is advancing the Group-level climate-related financial impact calculation system, including detailed establishment of climate change response activities and appropriateness of the classification system of each strategic task (definition of “high-efficiency facilities,” etc.). We will further enhance data integrity and accuracy and disclose quantitative information.

### (1) Carbon Pricing System’s Impact on Financial Statements

#### (A) Purchase and Use of RECs and Carbon Credits

KT&G is a company subject to the Korea Emissions Trading Scheme (K-ETS), a GHG emissions trading system in Korea. As a participant in this scheme, KT&G is required to annually calculate its greenhouse gas emissions. Companies operating within the emissions trading scheme receive a portion of emission allowances without charge. Should they surpass their assigned emission quotas, they must purchase extra emission allowances in the trade market. KT&G purchases Renewable Energy Certificates (RECs) and emission allowances to fulfill its obligations toward emissions that surpass the allowances allocated for the corresponding year. Relevant expenditures are reflected in cost of sales and sales, general and administrative expenses as utilities expenses in the income statement. In addition, we recognize GHG liabilities provisions by reasonably estimating purchase costs for the estimated amount of allowances purchase that surpasses the free allocated amount for the year in relation to GHG emissions. In the event of an increase in allowances-related costs as a result of a rise in allowance prices and charged allowance allocation rate, this may be reflected as an increase in liabilities in future statement of financial position, a rise in the cost of sales and costs in the income statement, and cash outflow from operating activities in the statement of cash flow.

#### (B) Investment in Low-carbon, High-efficiency Facilities

KT&G is increasing investments in GHG emission reduction facilities as a strategy to respond to transition risks that result from climate change. To transition to a low-carbon system, we are making process improvements, such as replacing facilities and adopting new facilities to raise energy efficiency including air conditioning equipment and ventilation systems. Relevant expenditures are reflected as acquisition of tangible assets or repair and maintenance expenses, etc. depending on the expenditure characteristic. In case of acquisition of tangible assets, it is reflected in financial information as an increase in tangible assets and a decrease in assets, such as cash and cash equivalents, or an increase in liabilities, such as accounts payable, in the statement of financial position. The acquired tangible assets are reflected in the cost of sales and sales, general and administrative expenses as depreciation costs until depreciation is complete according to durable years. Repair and maintenance expenses, etc. are reflected as a decrease in assets, such as cash and cash equivalents, or a rise in liabilities, such as accounts payable, in the statement of financial position, and a rise in cost of sales and sales, general and administrative expenses in the income statement. Reduced energy costs from energy efficiency improvements, etc. may impact cost of sales reduction and operating profit improvements, etc. in the income statement.

#### (C) Investment in Renewable Energy Facilities

KT&G is increasing investments in renewable energy facilities as a strategy to respond to transition risks stemming from climate change. KT&G is expanding photovoltaic facilities to transition to a low-carbon system, and relevant expenditures are reflected as acquisition of tangible assets, etc. KT&G installed photovoltaic facilities at the KT&G Gwangju Plant, KGC Buyeo Plant, etc. in the current term, and recognized this as tangible assets in the statement of financial position. In case of acquisition of tangible assets, it is reflected as an increase in tangible assets and a decrease in assets, such as cash and cash equivalents, or an increase in liabilities, such as accounts payable, in the statement of financial position. The acquired tangible assets are reflected in the cost of sales and sales, general and administrative expenses as depreciation costs in the income statement until depreciation is complete. Reduced energy costs from increased adoption of renewable energy may impact cost of sales reduction and operating profit improvements, etc. in the income statement.

#### (D) Introduction of low-carbon transportation and infrastructure

KT&G is transitioning its business fleets to EVs and expanding EV charging facilities as a strategy to respond to transition risks stemming from climate change. Acquisition of charging facilities may be reflected as an increase in tangible assets and a decrease in assets, such as cash and cash equivalents, or an increase in liabilities, such as accounts payable, in the statement of financial position. The acquired tangible assets are reflected in the cost of sales and sales, general and administrative expenses as depreciation costs in the income statement until depreciation is complete. EV lease is reflected as an increase in right-of-use assets and an increase in lease liabilities in the statement of financial position, and reflected as the cost of sales and depreciation costs in the income statement across the usage period of the relevant right-of-use assets. There is also cash outflow and a decrease in lease liabilities according to the contract. There are also costs that are generated such as insurance premium. EV lease replaces the previous internal combustion engine vehicle lease. Depending on the difference in lease costs, this may be reflected as an increase or decrease in assets and costs in the financial statements.

### (2) Impact of Consumer Preference for Eco-friendly Low-carbon Products on Financial Statements

#### (A) R&D of new materials capable of reducing carbon emissions

KT&G views changes in consumer preference toward eco-friendly, low-carbon products as an opportunity and carries out R&D for development of eco-friendly materials, such as non-plastic and biodegradable materials. We acquired tangible assets, such as eco-friendly material R&D facilities, in the R&D process, and relevant R&D costs are reflected as costs of the current term. Eco-friendliness certification and legal costs, etc. also arose, which are reflected in sales, general and administrative expenses as general fees in the income statement.

In case of reflection as acquisition of tangible assets, it can result in an increase in tangible assets and a decrease in assets, such as cash and cash equivalents, or an increase in liabilities, such as accounts payable, in the statement of financial position. The acquired tangible assets lead to cost of sales and sales, general and administrative expenses as depreciation costs in the income statement every term until depreciation is complete.

# KT&G SUSTAINABILITY DISCLOSURE - [CLIMATE]

## 5. Climate Resilience

### (1) Implications of Company Assessment on Strategy and Business Model

KT&G performed a scenario analysis by reflecting valid scenario context, including physical climate environment change, policy change, socio-economic change, and market and technology change, based on open, usable climate change scenarios presented by the Intergovernmental Panel on Climate Change (IPCC) and International Energy Agency (IEA).

#### (A) Implications of company assessment on strategy and business model

Category	Transition risk	Physical risk																																						
<b>Impact evaluation based on scenario analysis</b>	<ul style="list-style-type: none"> <li>In the 1.5°C scenario, where low-carbon transition policies are considerably implemented, there is a higher possibility of increase in the price of carbon, new regulations related to greenhouse gas emissions, and risks associated with market and reputation. In particular, under the 2.0°C scenario, risk related to increased raw material costs is observed to be high in some areas. While technology and litigation-related risks are relatively low in terms of likelihood, they have the potential to have a certain level of impact if they occur.</li> </ul>	<ul style="list-style-type: none"> <li>KT&amp;G assessed the physical risks of climate change by evaluating acute risks such as cyclones, hurricanes, heavy rainfall, and wildfires, as well as chronic risks such as change in precipitation patterns, temperature variations, and rising sea levels. Unlike transition risks, the physical risks were found to be more significant in the 2.0°C or higher scenarios, and the timing of these impacts was observed to be earlier compared to the 1.5°C scenario.</li> <li>Under the more extreme 4.0°C scenario, the physical risks increased dramatically, posing higher probabilities and larger impacts on operations, supply chains, and business continuity.</li> <li>Although the physical risks decreased in the 1.5°C scenario compared to the more severe warming scenarios, they were still observed to have notable effects.</li> </ul>																																						
<b>Scope of analysis</b>	<ul style="list-style-type: none"> <li>KT&amp;G and Group subsidiaries (KGC, Yungjin Pharm, Tae-A Industrial, COSMOCOS, KGCYebon)</li> </ul>	<ul style="list-style-type: none"> <li>19 major business sites in Korea and abroad of KT&amp;G and the Group subsidiaries</li> </ul>																																						
<b>Financial impact</b>	<ul style="list-style-type: none"> <li>Financial impact of the carbon pricing system in consideration of climate-related targets and capabilities</li> </ul> <p style="text-align: right;">(Cumulative per period, Unit: KRW billion)*</p> <table border="1"> <thead> <tr> <th rowspan="2">Scenario</th> <th colspan="3">Time horizon</th> </tr> <tr> <th>Short ('25)</th> <th>Mid ('26-'28)</th> <th>Long ('29-'30)</th> </tr> </thead> <tbody> <tr> <td>NZE</td> <td>Less than 20 billion</td> <td>Less than 30 billion</td> <td>Less than 40 billion</td> </tr> <tr> <td>APS</td> <td>Less than 10 billion</td> <td>Less than 20 billion</td> <td>Less than 30 billion</td> </tr> <tr> <td>STEPS</td> <td>Less than 10 billion</td> <td>Less than 20 billion</td> <td>Less than 30 billion</td> </tr> </tbody> </table>	Scenario	Time horizon			Short ('25)	Mid ('26-'28)	Long ('29-'30)	NZE	Less than 20 billion	Less than 30 billion	Less than 40 billion	APS	Less than 10 billion	Less than 20 billion	Less than 30 billion	STEPS	Less than 10 billion	Less than 20 billion	Less than 30 billion	<ul style="list-style-type: none"> <li>Financial impact of physical risk</li> </ul> <p style="text-align: right;">(Modelled Average Annual Loss (%))**</p> <table border="1"> <thead> <tr> <th rowspan="2">Scenario</th> <th colspan="3">Time horizon</th> </tr> <tr> <th>2020s</th> <th>2030s</th> <th>2040s</th> </tr> </thead> <tbody> <tr> <td>SSP1-2.6</td> <td>1.3</td> <td>1.8</td> <td>2.2</td> </tr> <tr> <td>SSP2-4.5</td> <td>1.2</td> <td>1.8</td> <td>2.1</td> </tr> <tr> <td>SSP5-8.5</td> <td>1.3</td> <td>2.0</td> <td>2.7</td> </tr> </tbody> </table>	Scenario	Time horizon			2020s	2030s	2040s	SSP1-2.6	1.3	1.8	2.2	SSP2-4.5	1.2	1.8	2.1	SSP5-8.5	1.3	2.0	2.7
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<b>Implications of company assessment for its strategy and business model</b>	<ol style="list-style-type: none"> <li><b>Responding to carbon costs and regulations</b> <ul style="list-style-type: none"> <li>Carbon cost management: As policies become stronger for the transition to low carbon, there is a need for a strategy that prepares for increased costs, resulting from carbon price increases and strengthening of relevant regulations. The company should curtail costs through efficient carbon management strategy and achieve carbon emission reduction targets.</li> <li>Respond to regulation change: There is a need to establish a system that enables prompt responses to new regulations related to GHG emissions. To this end, there is a need for continued monitoring of policy changes and the establishment of a response plan.</li> </ul> </li> <li><b>Market and reputation management</b> <ul style="list-style-type: none"> <li>Reputation risk: Insufficient responses to climate change may lead to loss of market and consumer trust. As such, the company must transparently disclose sustainability-related activities and carry out active climate change response activities to maintain a positive corporate image.</li> <li>Respond to market change: There is a high possibility that the market environment will change as the transition to a low-carbon economy gains speed. The company must establish a business model that can flexibly respond to this change.</li> </ul> </li> <li><b>Raw material cost management</b> <ul style="list-style-type: none"> <li>Raw material cost fluctuation: There is a need to strengthen supply chain management strategy in preparation for raw material cost increases with the transition to low carbon. There is a need to establish strategies that can respond to cost increases by diversifying raw materials and establishing efficient usage measures.</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li><b>Disaster response and recovery plan:</b> <ul style="list-style-type: none"> <li>Disaster response: There is a need for a prompt response and recovery plan in preparation for acute disasters such as cyclone and flood caused by climate change. There is a need to secure employee and business site safety through alternative production plans, emergency response training, etc.</li> <li>Emergency response system: There is a need to establish an emergency response system that enables prompt responses in the event of a disaster and to strengthen preparedness through regular training and simulations.</li> </ul> </li> <li><b>Facility and infrastructure investment:</b> <ul style="list-style-type: none"> <li>Flood prevention facilities: To protect production facilities from heavy rain and floods, there is a need to invest in infrastructure, such as the installation of flood prevention facilities and berms and enhancement of drainage systems. Physical risk must be minimized through these investments.</li> <li>Reinforce facilities: There is a need to strengthen the infrastructure of major business sites to reduce physical risk and reinforce facilities that can minimize damage in the event of a disaster.</li> </ul> </li> <li><b>Continuous monitoring and prevention:</b> <ul style="list-style-type: none"> <li>Climate change monitoring: There is a need to identify and respond to potential risks in advance through continued, periodic monitoring of progressive physical risks such as temperature change and water resource stress.</li> <li>Preventive measures: There is a need to establish preemptive measures to prevent physical risks and continually develop measures that can minimize impact from climate change.</li> </ul> </li> </ol>																																						

\* KT&G understands the uncertainties caused by various variables that impact carbon prices and measured the carbon pricing system's financial impact by applying the global carbon price per scenario that is provided by the IEA to control broad assumptions. This is an estimated value that is based on scenario analysis and may be different from the actual price.

\*\* KT&G estimated financial impact of climate change by using S&P's Climanimics® analysis tool. S&P's Climanimics® calculates the sum of estimated financial loss that may arise from climate change through Modelled Average Annual Loss (MAAL) which is indicated in a relative percentage of asset value.

# KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## (A) Implications of corporate evaluation on strategy and business model

Category	Transition risk	Physical risk
Company's response	<b>Policy and regulation</b> <ul style="list-style-type: none"> <li>KT&amp;G is designated as a company subject to the emissions trading scheme and is obligated to implement policy responses in connection to the national carbon neutrality roadmap policy. Investments are being made in such areas as improving energy efficiency and increasing renewable energy use in preparation for potential financial risk increases as a result of a rise in allowance prices stemming from reduced allowances.</li> <li>Discussions are being held on GHG reduction through cooperation with partner companies in the supply chain.</li> </ul>	<b>Heavy rain</b> <ul style="list-style-type: none"> <li>Invest in the installation of flood prevention facilities and berms and enhancement of drainage systems to protect production facilities in the event of heavy rain and flooding near business sites.</li> <li>Secure employee safety and business sites' operational continuity through an emergency measure plan that includes a prompt evacuation plan in the event of a disaster, alternative production plan, and emergency response training.</li> </ul>
	<b>Markets</b> <ul style="list-style-type: none"> <li>Expand sustainable management practices, such as improving facility efficiency during procurement, reducing carbon footprint, and improving water efficiency, through close cooperation with farms and suppliers</li> <li>Establish a cooperation system with significant materials partner companies and participate in and use the Sustainable Tobacco Program (STP), which is a tobacco industry initiative</li> </ul>	<b>Temperature change</b> <ul style="list-style-type: none"> <li>Perform continued, periodic monitoring of business sites' energy usage patterns, etc. resulting from temperature changes and changes in water resource stress levels of major business sites.</li> </ul>
	<b>Energy source</b> <ul style="list-style-type: none"> <li>Expand renewable energy procurement through various methods, including expanding photovoltaic power generation facilities in business sites, signing PPAs, and purchasing REC.</li> </ul>	<b>Water shortage</b> <ul style="list-style-type: none"> <li>To preemptively respond to water shortage issues, secure sustainability from a mid- to long-term perspective by participating in major initiatives that promote a virtuous cycle of sustainable practices, continued monitoring, and improvement activities.</li> </ul>
<b>Evaluate climate resilience</b>	If KT&G and its consolidated entities implement mitigation measures according to SBTi guidelines and achieve net zero by 2045, financial impact related to the carbon pricing system, which is a transition risk, is expected to significantly alleviate. In particular, KT&G and consolidated companies are judged to have flexible climate resilience, such as reduced electricity costs and decreased allowance purchase costs, through economic feasibility analysis per renewable energy procurement option to adapt to climate-related changes, developments, or uncertainties and execution of transition to renewable energy using diverse means of implementation.	

### 1) Financial impact of the carbon pricing system (details)

KT&G chose risks caused by the carbon pricing system in consideration of calculability of financial impact and materiality of climate change risks from among various transition risks stemming from climate change, and estimated relevant financial impact. Results of evaluating risks through a climate change scenario analysis indicate that risk levels from the carbon pricing system are the highest in 2030 in the 1.5°C scenario (IEA NZE 2050) and that they alleviate by a certain level according to emissions reduction from long-term perspective by 2050. In addition, risks from the carbon pricing system are shown to have the highest risk level from among the chosen 13 transition risks.

Emissions trading prices indicate a high fluctuation rate in Korea, signifying high price uncertainty. Due to the national carbon neutrality roadmap and carbon neutrality policy stance, the total emissions allowances are being reduced, which in turn will increase carbon credits, thereby expanding potential financial risks. In particular, in the IEA NZE 2050 scenario that assumes significant transition risks, carbon prices are forecast to be set at around USD 140 in 2030, reflecting the possibility of further expansion of financial impact from carbon prices.

The tobacco industry uses energy in the manufacturing and distribution process. In particular, carbon prices from considerable energy consumption in the logistics and shipping processes owing to a global supply chain may transfer to the unit cost of shipping. The carbon pricing system may increase such potential and indirect operational costs, thus bringing about financial risks.

With an understanding of uncertainties caused by various variables that impact carbon prices and to control extensive assumptions, KT&G conducted calculations based on global carbon prices presented by scenarios as well as its GHG reduction target emissions.

### 2) Financial impact of physical risk (details)

For a more accurate and detailed evaluation of physical risk's financial impact, KT&G used S&P's Climonomics® analysis tool. For this analysis, we evaluated the potential impact of physical risk for each facility based on KT&G's major production facilities' and supply chain's location information, according to diverse climate change scenarios. In case of physical risk, we performed a 10-year unit scenario analysis through the 2040s in consideration of the characteristics of long-term climate data that is forecast based on a 10-year unit, which is the basis of climate modeling.

S&P's Climonomics® estimates financial losses from climate change through MAAL. MAAL is an index that covers diverse financial losses, such as an increase in operation costs, expansion of capital expenditures, and reduction in profits, that are expected to arise during a designated period. The physical risk that was subject to analysis consisted of 8 items, including cyclone, flood, temperature change, and wildfire.

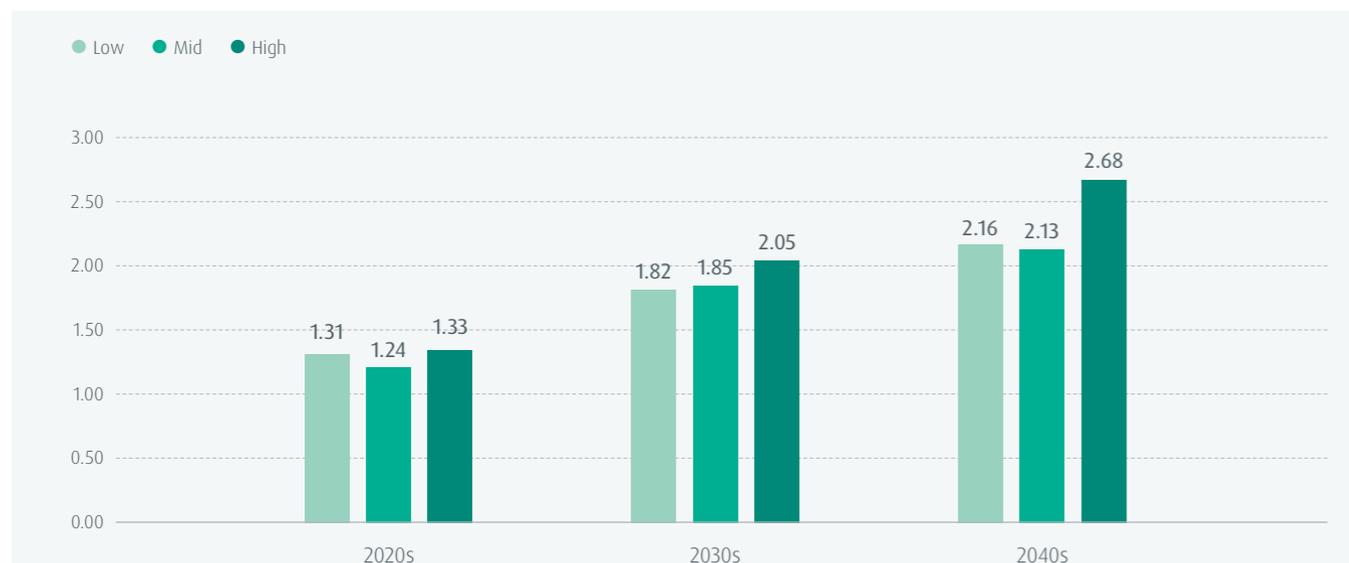
We analyzed physical risk's financial impact for three climate change scenarios (SSP1-2.6, SSP2-4.5, SSP5-8.5) from the 2020s to 2040s (2020-2049). Analysis results show that KT&G's ratio of annual average loss against asset value will increase from 1.3% in the 2020s to 2.2% in the 2040s in the SSP1-2.6 scenario. In contrast, in the most negative climate change scenario, which is SSP5-8.5, the loss ratio is shown to increase from 1.3% in the 2020s to 2.7% in the 2040s. This implies that as the severity of climate change grows, the level of physical risks that KT&G faces may also increase.



# KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

From among physical risks, the extreme temperature risk was confirmed as a major risk factor that can have the greatest impact on KT&G’s financial loss across all scenarios and periods. In addition, flood that is caused by heavy rainfall and water resource shortage risks were confirmed as risk factors that have a mid-level impact.

Modelled Average Annual Loss due to Physical Risks by Scenario (%)



- The MAAL ratio indicates an upward trend in all scenarios as time passes.
- The low GHG emissions scenario and the mid GHG emissions scenario do not show a big difference in the time horizon of the analysis. At some points in time, the low emission scenario is observed to be slightly larger but this is interpreted as an impact from the reflection of general climate scenario characteristics and uncertainty.
- This relative book value-based asset loss was calculated using the S&P Climanomics® analysis tool and may be different from the actual impact on asset value.

## (B) Areas of Significant Uncertainty Considered in the Assessment of Climate Resilience

Category	Definition	Uncertainty
Carbon cost	• Future carbon price announced by the IEA scenario	• Each country’s carbon-related price volatility
Electric charge	• Industrial electric charge	• Possibility of an increase in electric charge
Charged allocation ratio	• National allowance allocation plan for plan period	• Possibility of a decrease in the free allocation ratio
Price of energy sources	• Price of electricity for industrial use, LPG, LNG, etc.	• Price volatility of major energy sources attributable to increased practicality of electric charges and emergence of disputes and wars caused by global geopolitical risks
Climate model	• IPCC’s climate change forecast model	• Climate system complexity and limitations in forecasts result in inherent uncertainty with regard to climate change’s pathway and impact
Financial loss model	• Relationship model between financial losses of physical risks	• There is a possibility of a gap with the actual financial impact owing to simplification and assumptions in the financial modeling application process

## (C) Company’s Ability to Adjust or Adapt Strategies and Business Models over the Short, Mid, and Long Term for Climate Change

Category	Definition
Establish net-zero strategies of Group subsidiaries	• We established and are implementing GHG emissions reduction plans for the overall company to achieve net-zero goals. To this end, we are executing comprehensive strategies that include increased use of renewable energy, development and adoption of low-carbon technologies, and reduction of carbon emissions of the supply chain. These efforts are expected to contribute to enhancing the company’s sustainability and minimizing climate change risks over the long term.
Identify and evaluate climate risks by climate change scenario	• We are evaluating each scenario’s impact on the company’s operational and financial performance by analyzing diverse climate change scenarios. By doing so, we are identifying climate risks and opportunities that we estimate in the short, mid, and long term, and establishing relevant strategies, thereby strengthening the company’s climate change response capabilities. This analysis provides important information for the company’s strategic decision-making and helps to raise adaptability to climate change and secure resilience.
Availability and flexibility of financial resources	• We issued green bonds worth KRW 100 billion in April 2024 and plan to distribute the funds for such projects as renewable energy and eco-friendly building projects. KT&G’s fund support areas for the green sector include diverse areas such as renewable energy, energy efficiency, clean shipping, adaptation to climate change, and preservation of land and aquatic creature diversity. Funds that are raised through green bonds will be used in diverse areas and are expected to contribute to responding to climate change.
Availability and flexibility of human resources and material resources	<ul style="list-style-type: none"> <li>• Strengthen expertise to forecast changes in the carbon credit market and to carry out efficient trading</li> <li>• Closely monitor domestic and overseas policies/regulations related to climate change, and establish a response system in preparation</li> <li>• Raise the energy efficiency of production facilities and maintain indoor temperatures at appropriate levels</li> <li>• Install some uninterruptible power supplies to prepare for electric power risks, and adopt a central monitoring system to identify electric power consumption in real time</li> <li>• Operate an energy-saving taskforce to continually carry out energy-saving activities and measure performance</li> <li>• Analyze the economic feasibility of each renewable energy procurement option with the goal of 80% renewable energy by 2030 and use diverse means of implementation to execute the transition to renewable energy</li> <li>• Develop new high-efficiency technologies through R&amp;D innovation and contribute to GHG reduction</li> </ul>

# KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## (2) Climate-related Scenario Analysis Method

### (A) Information on the inputs used by the company

Scenario	Definition	Reason for decision	Time frame	Source	Business scope
Transition	NZE	• Scenario for the global energy sector to achieve zero net CO <sub>2</sub> emissions by 2050	-2050	IEA World Energy Outlook	KT&G and Group subsidiaries (KGC, Yungjin Pharm, Tae-A Industrial, COSMOCOS, KGCYebon)
	APS	• Scenario that assumes that all climate promises made by governments across the globe, including the Nationally Determined Contribution (NDC) and long-term net-zero goals, will be met completely and in a timely manner			
	STEPS	• Scenario that reflects current policy setting based on an evaluation by area of specific policies that are currently being implemented and policies that were announced by governments			
Physical	SSP1-2.6	• Assumes GHG reduction through strong climate policies and extensive adoption of renewable energy. Scenario in which the global community cooperates to actively respond to climate change and the temperature increase is restrained to 2°C or less by 2100	-2050	IPCC	19 major business sites and 11 major supply chain sites in Korea and abroad
	SSP2-4.5	• The current policy direction is maintained and mid-level GHG reduction efforts are reflected. Some renewable energy is used, but fossil fuels are also continually used. Accordingly, in this scenario, the rise in the earth's temperature exceeds 2°C.			
	SSP5-8.5	• Scenario in which GHG emissions sharply increase, and continued use of fossil fuels and low-level climate change responses lead to a more than 4°C rise in the earth's temperature			

### (B) Major assumptions used for analysis

Major assumptions that were used in the climate change scenario analysis process were applied to various areas, including policy, energy, legal issues, technology, market, and reputation, and carbon price, energy intensity per GDP, the level of technological development of CCUS and ESS, unit price of renewable energy sources, and EV and hydrogen economy technology costs, etc. were used as major parameters.

Detailed assumptions of each scenario are as follows:

#### 1) 1.5°C scenario

This scenario assumes an immediate global transition to a carbon-neutral economy and limits global warming to 1.5°C in accordance with the Paris Agreement. Cooperative efforts and action take place to reduce emissions, and global cooperation for net zero leads to execution of key measures. The carbon price was set as USD 50 for 2025, USD 140 for 2030, and USD 250 for 2050.

#### 2) 2.0°C scenario

In this scenario, policies are executed to achieve the emissions reduction target of each country that was declared. However, more advanced policies are not implemented and therefore a temperature increase of more than 2.0°C is applied. Although relatively gradual and continued policy execution takes place, physical risk's occurrence frequency and impact are shown somewhat clearly. The carbon price was set as USD 45 for 2025, USD 135 for 2030, and USD 200 for 2050.

#### 3) 4.0°C scenario

This scenario's premise is a temperature increase of more than 4.0°C by considering only the effects of current policies and action. Policy measures that can trigger transition risk are not implemented, resulting in a relatively low transition risk. However, physical risk stemming from climate change frequently occurs and becomes more extreme. The carbon price was set as USD 31 for 2025, USD 42 for 2030, and USD 89 for 2050.

### (C) Analysis period

KT&G performed a climate-related scenario analysis within the reporting period.

# I. KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## II. Risk Management

### 1. Climate-related Risk and Opportunity Management Process (identify, assess, prioritize, and monitor)

#### (1) Inputs and Parameters

Inputs and parameters	Data source
Policy execution level	Ministry of Environment and Ministry of Trade, Industry and Energy
GHG emissions trend	Company data
Emissions allowance price	Guidance for reporting and verification of GHG emissions trading scheme, provided by Ministry of Environment

#### (2) Identification of Climate-related Risks and Opportunities

KT&G identifies the impact of potential risks and opportunities that climate change can cause to the company through climate scenario analysis, and uses this to strengthen climate change response activities and the risk/opportunity management system.

#### (3) Climate-related Risk and Opportunity Assessment Method

KT&G identifies and assesses climate-related risks and opportunities by using climate change scenario analysis. Climate change scenario analysis is conducted through a comprehensive analysis, including identifying and defining climate change risks, assessing relevance, and selecting appropriate scenarios. In addition, the analysis is enhanced by incorporating the insights of external expert panels comprising investment analysts, professors, and consultants, and internal evaluations from company members. Additionally, to identify more precise and detailed physical risk impact, we used S&P’s Climonomics® tool to advance climate change physical risk evaluation. By following this process, we measure the likelihood of climate change risks and their potential impacts under each scenario. We also identify key climate change risks and assess response strategies to mitigate impact and enhance resilience.

Assessment method	Details
Qualitative assessment	<ul style="list-style-type: none"> <li>Evaluate climate change risks’ sensitivity and exposure regarding KT&amp;G’s business and management activities based on the climate change scenarios presented by IEA and IPCC</li> </ul>
Quantitative assessment	<ul style="list-style-type: none"> <li>Establish quantitative judgment criteria that can categorize low/mid/high for climate change risk’s likelihood and impact criteria                             <ul style="list-style-type: none"> <li>Likelihood: Calculate the likelihood of risk occurrence based on climate change scenario as a percentage and categorize it into low (less than 30%), mid (30-70%) and high (more than 70%)</li> <li>Level of impact: Categorize into low, mid, or high by comprehensively considering financial impact (sales decrease, cost increase, etc.) and operational impact (decrease in production, supply chain setback, etc.)</li> </ul> </li> <li>Measure the financial impact of climate-related physical risk by using the S&amp;P Climonomics® analysis technique</li> </ul>

#### (4) Level of Priority of Climate-related Risks and Opportunities When Compared to Other Sustainability Risks

KT&G recognizes the significance of climate change’s impact on business, and integrates climate-related risks into the company-wide risk management system for management. In particular, when we evaluate identified risks of various types, we mainly categorize them into financial impact and non-financial impact, and apply risk evaluation criteria that comprehensively consider each risk’s likelihood and impact level. In addition, we recognize that climate risk has distinctive characteristics from other risks, such as long-term impact, possibility of regulation change, and impact on reputation, and we conduct an additional analysis during the double materiality assessment to identify and evaluate non-financial material issues. Internally, we evaluate climate risk’s financial impact and likelihood through climate scenario analysis. Externally, we identify climate issues’ social/environmental impact and level of stakeholder interest through stakeholder surveys. We combine these to calculate the materiality score of each sustainability issue, including climate risk, and determine priority.

As a result of a double materiality assessment, climate risk was identified as KT&G’s priority sustainability management issue. We accordingly established and are executing detailed risk reduction strategies. Leading mitigation measures that are being implemented are investments in preparation for natural disasters for major facilities and business continuity plan (BCP) as well as disaster recovery (DR) system inspections for short-term physical risks, and GHG reduction and energy transition investments for long-term transition risks. Climate risk index response activities are periodically reported to top management and the Sustainability Committee. We are transparently disclosing relevant information by participating in external initiatives, such as CDP.

#### (5) Monitoring of Climate-related Risks and Opportunities

KT&G monitors major parameters, including policy implementation level, GHG emissions trend, and carbon price, and updates climate change scenario analysis in the event of a major change or deviation to these metrics. There is a higher possibility of greater intensity of physical risks owing to high uncertainty over the level of GHG emissions reduction across the globe. Accordingly, we updated the climate change scenario analysis in 2023 including an analysis on the 4.0°C scenario with a high physical risk. The Sustainability Committee is supervising ESG/climate-related issues and risks while reviewing the company’s response strategies and policies and monitoring the operational performance and progress. In 2022, the audit planning team, which is an independent organization under the Audit Committee, inspected the ESG management execution status, including climate change issues, and reported the results to the Audit Committee.

#### (6) Changes in the Risk Management Process

Changes in the risk management process in KT&G’s reporting period are as follows:

Change	Content
Complemented the identification process	During the 2023 climate change risk and opportunity evaluation, we additionally formed and operated an internal working-level team of the ESG Working Group and outside advisory team
Change in identification and evaluation method	Made an update from physical risk scenario RCP to SSP

# I. KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## II. 2. Integration with the Company-wide Risk Management System

KT&G established a climate change risk management process to preemptively respond to climate change and integrated it to the company-wide risk management system to advance the risk management process. For climate-related risks, the ESG Management Office in the Strategy Division performs control tower roles to oversee the identification of risks and opportunities and reports relevant content to the Sustainability Committee under the BOD. In addition, we inspect ESG issues including climate change response and environment-related risks through the Audit Committee, which is the final company-wide risk-supervising organization, and the audit planning team under the Committee and make a report to the Audit Committee. We review risk factors at least twice a year to identify and prevent risk factors that may arise in overall management, and integrate climate-related risks and opportunities as sub items of the non-financial risk area for management. We categorize and identify physical/transition risks stemming from climate change into short, mid, and long term according to materiality of the impact on business, and quantitatively analyze likelihood and financial impact through scenario analysis.

## Metrics and Targets

### 1. Climate-related Metrics

#### (1) Greenhouse Gas

##### (A) Absolute total emissions (Market-based)

Category	(Unit: tCO <sub>2</sub> eq)	
	2022	2023
Scope 1 <sup>1)</sup>	74,258	72,087
Scope 2 <sup>1)</sup>	117,160	113,585
Scope 3 <sup>2)</sup>	857,279	516,237
C1 Purchased goods and services	240,323	224,444
C2 Capital goods	45,281	103,537
C3 Fuel- and energy-related activities	23,508	23,423
C4 Upstream transportation and distribution	31,571	19,190
C5 Waste generated in operations	4,596	4,602
C6 Business travel	2,548	3,453
C7 Employee commuting	11,883	11,822
C8 Upstream leased assets	654	696
C9 Downstream transportation and distribution	14,744	10,903
C10 Processing of sold products	703	1,069
C11 Use of sold products	398,866	57,830
C12 End-of-life treatment of sold products	66,399	40,275
C13 Downstream leased assets	2,457	1,347
C14 Franchises	3,670	3,687
C15 Investments	10,077	9,961
<b>Total</b>	<b>1,048,697</b>	<b>701,909</b>

\* Verification status: Third-party verification completed within the scope (based on GHG data management and collection, emissions calculation, and reporting processes)

\*\* Verification principle: ISO 14064-1:2018(WRI/WBCSD GHG Protocol:2004, Corporate Value Chain (Scope3) Accounting and Reporting Standard

<sup>1)</sup> Scope of aggregation: All domestic business sites (138 buildings including manufacturing sites (Daejeon Plant 1 and 2, Yeongju Plant, Gwangju Plant, etc.), leased buildings, branches, offices, etc.) and overseas manufacturing sites of KT&G; and domestic and overseas manufacturing sites of subsidiaries.

<sup>2)</sup> Scope of aggregation: KT&G and its subsidiaries (KGC, Yungjin Pharm, Tae-A Industrial, COSMOCOS, KGCYebon)

# KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## (B) Approach for emissions measurement

Guidelines that KT&G applied for measurement of GHG emissions are as follows.

### Guidelines for Emissions Calculation

Category	Guidelines
Scope 1, 2	<ul style="list-style-type: none"> <li>Guidelines on the operation of the target management of greenhouse gases in Korea</li> <li>Greenhouse Gas Protocol(GHG): A Corporate Accounting and Reporting Standard (Revised Edition)</li> <li>IPCC Guidelines for National Greenhouse Gas Protocol and Accounting Tool</li> </ul>
Scope 3	<ul style="list-style-type: none"> <li>ISO 14064-1:2018</li> <li>Greenhouse Gas Protocol: Scope 3 Guidance</li> <li>Corporate Value Chain(Scope 3) Accounting and Reporting Standard</li> <li>Methodology for External Projects by the Ministry of Environment</li> </ul>

KT&G is a company subject to K-ETS to which applies the Act on the Allocation and Trading of Greenhouse-Gas Emission Permits. In case of Korea, we applied the “Guidance for reporting and verification of GHG emissions trading scheme” and “ISO 14064-1 (2018)” when measuring Scope 1 and 2 emissions pursuant to the aforementioned law. We applied the GHG protocol for Scopes 1 and 2 and Scope 3 when measuring emissions for overseas business sites.

We applied [Appendix 4] Method for determining organizational boundary of the “Guidance for reporting and verification of GHG emissions trading scheme” and used the business site-level operational control method as our measurement approach. Accordingly, we did not disclose emissions of associates and joint ventures excluding subsidiaries.

In the reporting year, we recalculated Scope 3 emissions based on the year 2020. We adjusted the Scope 3 emissions category through discussions in the SBTi verification process. For more accurate calculation, we readjusted IPCC emissions factors as well and reflected additional emissions from overseas sales. In addition, we recalculated emissions in consideration of expansion of asset equipment scope and updated emissions factors to reflect the environmental impact of various kinds of tobaccos. Based on these changes, we recalculated base year data of 2020 and 2021. There are no other changes in the measurement approach, inputs, and assumptions in the reporting period.

## Inputs and Major Assumptions

Category	Inputs				Major assumptions
	Activity data		Emission factor		
	Content	Type*	Content	Source	
Scope 1	Fuel usage	1 <sup>st</sup>	Emission factor by GHG type	(Electric power) IEA (Other than electric power) IPCC	-
Scope 2	Electric power or heat (steam) usage	1 <sup>st</sup>	Article 15 of the Guidance for reporting and verification of GHG emissions trading scheme	(Electric power) IEA (Other than electric power) IPCC	-
Scope 3					
	Service	2 <sup>nd</sup>	Emission factor by industry	WRI and Korea Energy Agency	Estimate emissions based on details of execution as intangible assets in CAPEX
	Partner companies’ fuel usage and KT&G proportion	1 <sup>st</sup>	Emission factor by fuel	Guidelines on the operation of the target management of greenhouse gases in Korea	Estimate emissions by reflecting proportion of delivery to our company from among major partner companies’ GHG emissions
C1 Purchased goods and services (KT&G)	(Domestic) Leaf tobacco farm land area	1 <sup>st</sup>	Emission factor when cultivating leaf tobacco	Common guidelines on measuring agricultural product GHG	Calculate emissions based on domestic leaf tobacco farms’ fertilizer, crop protection material, and energy usage
	(Domestic) Leaf tobacco farm land area	1 <sup>st</sup>	Emission factor when drying leaf tobacco	Directly measure emission coefficient when cultivating and drying leaf tobacco in Korea	Calculate emissions based on energy usage for drying leaf tobacco in Korea
	(Overseas) Leaf tobacco purchase amount	1 <sup>st</sup>	Emission factor of imported leaf tobacco	Directly measure emission coefficient when cultivating and drying overseas leaf tobacco	Estimate emissions based on cultivation and drying LCA per overseas leaf tobacco purchase amount
	6-year fresh ginseng purchase amount	1 <sup>st</sup>	Emission factor of 6-year fresh ginseng	Ecoinvent and Ministry of Environment LCI DB	Estimate emissions by performing LCA for cultivating 6-year fresh ginseng
	Herbal medicine purchase amount	2 <sup>nd</sup>	Emission factor by industry	WRI	Estimate emissions by applying the emission coefficient per industry based on herbal medicine purchase amount
C1 Purchased goods and services (K&G)	Materials and additives purchase amount	2 <sup>nd</sup>	Emission factor by industry	Korea Energy Agency	Estimate emissions by applying the emission coefficient per industry based on each partner company’s materials and additives purchase amount
	OEM company fuel usage	1 <sup>st</sup>	Emission factor by fuel	Guidelines on the operation of the target management of greenhouse gases in Korea	Estimate our company’s allocation from among OEM companies’ emissions based on major OEM companies’ fuel usage and ratio of delivery to our company

\* Completed external verification by a third party for Scope 1, 2, and 3 data



I.

II.

# KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## Inputs and Major Assumptions

Category	Inputs				Major assumptions
	Activity data		Emission factor		
	Content	Type*	Content	Source	
C1 Purchased goods and services (Subsidiaries other than KGC)	Product and service purchase amount	2 <sup>nd</sup>	Emission factor by industry	WRI and Korea Energy Agency	Estimate emissions by applying the emission coefficient per industry based on the purchased product and service amount
C2 Capital goods (KT&G and its subsidiaries)	(KT&G) Capital budget investment performance (Subsidiary) Capital goods purchase amount	2 <sup>nd</sup>	Emission factor by industry	WRI and Korea Energy Agency	Estimate emissions by applying the emission coefficient per industry based on the executed capital budget
C3 Fuel- and energy-related activities (KT&G and its subsidiaries)	Fuel usage	1 <sup>st</sup>	Emission factor by fuel	(Domestic) Ministry of Environment LCI DB (Overseas) UK GOV conversion factor	Complement the electric power upstream emission coefficient by considering the emission coefficient of domestic electric power upstream and power generation step and power transmission and distribution loss rate
C4 Upstream transportation and distribution (KT&G and its subsidiaries)	Transportation method, distance, no. of times of transportation	1 <sup>st</sup>	Emission factor by means of transportation	Ministry of Environment LCI DB and WRI Emission Factor	If it is difficult to secure data on the shipping method, shipping distance, and no. of times of shipping, calculate emissions based on shipping cost
	Transportation costs	2 <sup>nd</sup>			
C5 Waste generated in operations (KT&G and its subsidiaries)	Waste treatment method and amount	1 <sup>st</sup>	Emission factor by waste type and treatment method	Ministry of Environment LCI DB	Calculate emissions through the emission coefficient per waste type and treatment method
C6 Business travel (KT&G and its subsidiaries)	Types and distance of means of transportation	1 <sup>st</sup>	Emission factor by means of transportation	Ministry of Environment's Guidelines for Low-Carbon Green Events	Calculate emissions by considering travel distance for business trip, means of transportation, and no. of people
C7 Employee commuting (KT&G and its subsidiaries)	No. of employees	1 <sup>st</sup>	Emission factor by means of transportation	(Domestic) National transportation database, Korea Energy Agency's report on GHG emissions in the transportation sector, Ministry of Environment's Guidelines for Low-Carbon Green Events (Overseas) UNESCAP, Statista, Ministry of Environment's Guidelines for Low-Carbon Green Events	Estimate the distance per means of transportation in consideration of KT&G's no. of employees and annual no. of work days based on statistical data on the average commute distance and ratio of each means of transportation
	Average travel distance for daily commute	2 <sup>nd</sup>			
	Ratio per means of transportation used by employees	2 <sup>nd</sup>			
	Annual no. of days of work	1 <sup>st</sup>			

Category	Inputs				Major assumptions
	Activity data		Emission factor		
	Content	Type*	Content	Source	
C8 Upstream leased assets (Subsidiaries)	Usage amount by fuel from leased assets	1 <sup>st</sup>	Emission factor by fuel	Guidelines on the operation of the target management of greenhouse gases in Korea	Calculate emissions based on usage amount per fuel source of leased assets
C9 Downstream transportation and distribution (KT&G and its subsidiaries)	Transportation method, distance, no. of times of transportation	1 <sup>st</sup>	Emission factor by means of transportation	Ministry of Environment's LCI DB and WRI Emission Factor	If it is difficult to secure data on the shipping method, shipping distance, and no. of times of shipping, calculate emissions based on shipping cost
	Transportation costs	2 <sup>nd</sup>			
C10 Processing of sold products (Subsidiaries)	Customer sales and cost of sales	2 <sup>nd</sup>	Emission factor by industry	Korea Energy Agency	Apply the industry's average sales if it is difficult to identify sales. Calculate the average ratio of cost of sales through the cost of sales in the same industry in case it is difficult to identify the cost of sales.
C11 Use of sold products (KT&G)	(Device charging) Average use when a device product is charged once	1 <sup>st</sup>	Emission factor of domestic electric power	Guidelines on the operation of the target management of greenhouse gases in Korea	Estimate the total no. of times of charging by dividing the NGP stick sales volume by average use when the device is charged once
	(Device charging) NGP stick sales volume	1 <sup>st</sup>			
	(Lighter combustion) Average no. of times of use per one lighter and volume of Butane	2 <sup>nd</sup>			
C11 Use of sold products (KT&G)	(Cigarette combustion) Cigarette sales volume	1 <sup>st</sup>	Emission factor by fuel	Guidelines on the operation of the target management of greenhouse gases in Korea	Estimate the total amount of Butane used by dividing total cigarette sales by average no. of times of use per lighter
	(Cigarette combustion) Data on cigarette sales volume and use of cigarette rod part raw material	1 <sup>st</sup>			
	(Real estate) Year and total floor area of new real estate assets' completion of construction and sales in lots based on completed sales in lots/sales	1 <sup>st</sup>			
			Emission factor during combustion by ingredient	Guidelines on the operation of the target management of greenhouse gases in Korea and Ministry of Environment's LCI DB	Calculate emissions by assuming combustion of the entire cigarette except the cigarette butt
			Emission factor based on total floor area by building use	Forecasting and characteristics of GHG emissions in the construction area based on the national energy statistics of the Architectural Institute of Korea	Estimate emissions that are generated during the period of life of the real estate that completed sales in lots

# KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## Inputs and Major Assumptions

Category	Inputs				Major assumptions
	Activity data		Emission factor		
	Content	Type*	Content	Source	
C12 End-of-life treatment of sold products (KT&G)	(Cigarette) Annual sales volume, average length of cigarette butts	2 <sup>nd</sup>	Emission factor by waste type and treatment method	Ministry of Environment's LCI DB	(Cigarette) Estimate the weight of cigarette wastes using sold tobacco weight * cigarette butts' average length ratio
	(Cigarette) Weight of filters and tobacco parts	1 <sup>st</sup>			
	(NGP) Annual sales volume	1 <sup>st</sup>			
	(NGP) Products' standard weight	1 <sup>st</sup>			
	(Real estate) Amount of input per construction material of sold (sales in lots/sales) real estate	2 <sup>nd</sup>			
C12 End-of-life treatment of sold products (Subsidiaries)	Materials and weight of sold products	1 <sup>st</sup>	Emission factor by waste type and treatment method	Ministry of Environment's LCI DB	Apply the average ratio of each material and treatment method based on the national waste generation and treatment status
C13 Downstream leased assets (KT&G and its subsidiaries)	Usage amount by fuel from leased assets	1 <sup>st</sup>	Emission factor by fuel	Guidelines on the operation of the target management of greenhouse gases in Korea	Calculate emissions based on the amount of fuel used by leased assets
C13 Downstream leased assets (KGC)	Costs of using fuel that was used by leased assets	2 <sup>nd</sup>			
C14 Franchise (KT&G and its subsidiaries)	Total floor area per distribution channel	2 <sup>nd</sup>	Emission factor based on total floor area per building use	Construction Technology Digital Library system	Comprehensive application of guideline areas because it is difficult to identify individual store's area information
C15 Investments (KT&G)	(Subsidiaries) Owned share and total floor area (Associates and joint ventures) Owned share and sales	2 <sup>nd</sup>	Emission factor based on total floor area per building use and emission coefficient per industry	Forecasting and characteristics of GHG emissions in the construction area based on the national energy statistics of the Architectural Institute of Korea, WRI Emission factor	Estimate emissions by identifying annual emissions per area of subsidiaries and associates and reflecting the share ratio. In other cases, emissions were estimated by applying the emission coefficient per industry based on sales.

\* 1<sup>st</sup> data is data that was provided by suppliers or other companies that are related to specific activities in the value chain (data from meter checks, utility bills, or other methods that represent specific activities in the value chain) while 2<sup>nd</sup> data refers to industry average data provided by a third-party data supplier (disclosed database, government statistics, literature research, and industrial association data)

## (C) Information on Contractual Instruments Related to Scope 2 Greenhouse Gas Emissions

The contractual instruments related to Scope 2 are as follows, and KT&G's market-based emissions for 2023 are 113,585 tCO<sub>2</sub>eq.

Means of contract	Energy source	Consumption (Mwh)	Contract period
REC purchase (Gyeongcheon Energy and 23 other companies)	Solar Power	3,204	Jan. 1, 2022 - Dec. 31, 2022
REC purchase (Jeju Energy Corporation and 1 other company)	Wind Power	2,649	Jan. 1, 2022 ~ Dec. 31, 2022
REC purchase (Korea South-East Power)	Bioenergy	8,393	Jan. 1, 2022 ~ Dec. 31, 2022
i-REC purchase (Indonesia)	Hydropower	12,300	Jan. 1, 2022 ~ Dec. 31, 2022
i-REC purchase (Türkiye)	Geothermal	2,518	Jan. 1, 2022 ~ Dec. 31, 2022
REC purchase (Dawon Energy and 26 other companies)	Solar Power	7,974	Jan. 1, 2023 ~ Dec. 31, 2023
REC purchase (Korea South-East Power)	Bioenergy	3,628	Jan. 1, 2023 ~ Dec. 31, 2023
i-REC purchase (Indonesia)	Hydropower	14,948	Jan. 1, 2023 ~ Dec. 31, 2023
i-REC purchase (Türkiye)	Geothermal	3,019	Jan. 1, 2023 ~ Dec. 31, 2023
Green energy (Russia)	Hydropower	5,350	Jan. 1, 2023 ~ Dec. 31, 2023
Direct PPA (SK E&S)	Hydropower	6 <sup>1)</sup>	Dec. 31, 2023 ~ Dec. 30, 2024

<sup>1)</sup> Amount of consumed during the contract period in 2023

# KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## (2) Assets or Business Activities Vulnerable to Climate-related Transition Risks

KT&G’s carbon emission intensity is not high compared to other industries owing to business characteristics, but the domestic tobacco business area’s business sites are subject to K-ETS. As such, there is a possibility of exposure to risks stemming from changes in policies and regulations related to K-ETS. Considering the government’s policy direction of strengthening regulations, such as its raising of the 2030 national GHG reduction target, we expect potential cost increase risks stemming from allowance price increases in the mid- to long-term future.

Accordingly, we are making diverse efforts to enhance energy efficiency and reduce GHG of overall business sites. We are increasing investments in energy-saving facilities and reducing GHG emissions intensity by raising process efficiency. Our mid- to long-term plan is to raise the proportion of electric power use in production processes and increase the ratio of renewable energy power generation. These efforts will respond to potential regulation changes and contribute to establishing a foundation for sustainability management.

Assets or business activities	2023 sales (KRW million)
Sales of business sites subject to K-ETS	3,586,696

## (3) Assets or Business Activities Vulnerable to Climate-related Physical Risks

KT&G used S&P’s Climonomics® analysis tool to analyze the level of physical risk from climate change, targeting major business sites. Analysis results indicate that Türkiye, from among overseas business sites, has a relatively high physical risk compared to other business sites of KT&G. In detail, the respective region is analyzed to experience a rise in physical risk levels after the 2030s due to extreme temperatures caused by climate change and increased water stress from water resource shortage. Until now, there is no history of direct damage caused to the Türkiye business site by abnormal climate.

Assets or business activities	2023 sales (KRW million)
Sales of KT&G Türkiye Corporation	36,238

## (4) Assets or Business Activities Aligned with Climate-related Opportunities

KT&G categorized business activities classified as appropriate economic activities and suitable economic activities according to EU Taxonomy as assets and business activities aligned with climate-related opportunities.

Assets or business activities	2023 (KRW million)	
	Sales	Capital expenditure
Power generation using photovoltaic technology	369	-
Installation, maintenance, and repair of renewable energy technology	-	5,295

## (5) Capital Deployment

Category	2023 (KRW million)	Details
Installation, maintenance, and repair of renewable energy technology	5,295	Transition to renewable energy by installing a photovoltaic power generation facility at the KT&G Gwangju Plant, etc.
Installation, maintenance, and repair of energy efficiency devices	13,978	Replace and adopt new facilities to raise energy efficiency, such as air conditioners and ventilation facilities
R&D of new biodegradable, low-carbon materials	1,413	Adopt new material R&D facilities and experiment equipment
<b>Total</b>	<b>20,686</b>	-

## (6) Internal Carbon Price

KT&G’s internal carbon price was set as KRW 50,000/tCO<sub>2</sub>e. The calculation method and methods applied to major assumptions and decision-making are as follows:

Category	KT&G status
Whether applied to decision-making and method	<ul style="list-style-type: none"> <li>Investment decision-making: When a GHG reduction investment is needed, the internal carbon price-based payback period is calculated and used to determine the investment’s appropriateness and timing of adoption</li> <li>Other: Identify the investment’s potential vulnerability (stress test)</li> </ul>
Detailed application scope	<ul style="list-style-type: none"> <li>All business sites (including overseas)</li> </ul>
Major assumptions and calculation methodology	<ul style="list-style-type: none"> <li>We estimated a reduction in free allocated allowances and the resulting rise in allowance prices and set KRW 50,000 per CO<sub>2</sub> ton for consideration of potential carbon cost in investment decision (Indonesia: 5,726,800 rupiah, Russia: 2,508 rouble, Türkiye: 693 lira)</li> </ul>
Way of encouraging climate-related policy and target execution	<ul style="list-style-type: none"> <li>The internal carbon price is used as a guideline for economic analysis and improves and promotes validity of investment activities that respond to climate change while considering potential carbon costs during investment decision. The internal carbon price is included in the calculation of the payback period of estimated cost reduction and emission reduction activities in climate-related investment activities. When we developed a plan to install a photovoltaic power generation facility on the rooftop of manufacturing facilities in Korea in 2022, internal carbon price was applied to calculate profit and alternative effects to encourage the investment of reduced costs in renewable energy facilities. In detail, we assumed an annual reduction of around 1,690 tons of emissions as a result of photovoltaic facility installation and applied internal carbon price, resulting in an estimation of around KRW 85 million in annual economic profit.</li> <li>In addition, since the internal carbon price is in operation, we changed the investment payback period calculation method from the previous “investment cost/energy-saving cost” to “investment cost/(energy-saving cost + internal carbon price)” to result in a shortened payback period for investments in climate change response activities. As reflected above, internal carbon price helps to make positive decisions in the internal investment policy and decision-making process of various emission reduction activities. It also performs roles as a major guideline for deciding the priority of reduction activities by comparing the financial impact of potential reduction effects.</li> </ul>

# KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## (7) Compensation (Management)

KT&G operates performance evaluation indexes by reflecting the performance of implementing ESG tasks, including climate change, in the remuneration of C-level management of each sector/HQ, including top management. In April 2024, we raised the ESG index weight from 5% to 10% when setting the CEO’s short-term management goals. In particular, we more directly incorporated the performance of implementing GHG reduction goals to execute the Group’s low-carbon transition strategy in the long-term management goals, thus reorganizing the compensation system to generate practical climate change response outcomes. Major climate-related KPIs that were reflected in the performance evaluation of the CEO and relevant headquarters’ top management and organization in 2023 are as follows.

Category	Major KPI	Percentage of compensation connected to climate-related matters in top management’s compensation in 2023
CEO	<ul style="list-style-type: none"> <li>Development of distinctive competitiveness in business-specialized areas and ratio of ESG target execution</li> <li>Results of evaluated grade of three organizations - CDP climate/water, MSCI, KCGS</li> </ul>	5%
Top management, managers in charge, and employees	<ul style="list-style-type: none"> <li>Total Scope 1+2 GHG emissions</li> <li>Renewable energy adoption ratio</li> <li>Cumulative EV transition rate</li> <li>Execution of improvement tasks connected to energy diagnosis results</li> <li>Leased buildings’ purchase and use of renewable electric power</li> </ul>	5%

## (8) Industry-based Metrics

KT&G referred to the processed food and tobacco sectors from among Sustainable Industry Classification System (SICS) areas and industry classifications in the Industry-based Guidance on Implementing IFRS S2 to reflect the characteristics of the industry that KT&G belongs to.

## 2. Climate-related Targets

### (1) Information Related to Metrics Used to Set the Targets (Target Metric, Objective, Application Scope, etc.)

KT&G established targets of 42% Scope 1+2 reduction by 2030 and net zero by 2045 in accordance with SBTi guidelines. This surpasses the reduction target of the 2030 NDC industry area of Korea, which is the region with jurisdiction of KT&G.

Target metric	Objective	Scope	Target type	Base year	Mid-year	Final year
					2030	2045
Total Scope 1, 2 emissions	Climate mitigation	Company-wide	Absolute quantity target	(2020) 197,028	114,240 (42% reduction)	0 <sup>2)</sup> (100% reduction)
Scope 3 emissions	Climate mitigation	Company-wide	Absolute quantity target	(2022) 857,279	691,605 (25% reduction <sup>1)</sup> )	
Renewable energy usage rate	Establish an eco-friendly energy system	Company-wide	Absolute quantity target	0.1%	80%	100%

<sup>1)</sup> Scope 3 mid-term reduction targets: Category 1, 3, 11

<sup>2)</sup> In accordance with the SBTi guidelines, achieve net zero through 90% absolute reduction of GHG emissions and 10% offset

### (2) Method of Monitoring Progress towards the Target

#### (A) Whether the set target was validated by a third party

To reduce GHG emissions, KT&G established mid- to long-term reduction targets according to the guidelines of SBTi, which is a global science-based reduction target initiative. We aim to complete SBTi validation in the future.

#### (B) Target review process

KT&G introduced and is implementing company-wide energy costs settlement system starting in 2022 to monitor energy emissions and water usage across all business sites. Under this system, each unit business site enters energy and water consumption in a computational system based on documentary evidence (utility bills). This has enabled us to check the implementation status of reduction targets for each business site and to forecast annual emissions by taking seasonal fluctuations into consideration. In January 2023, KT&G has expanded the implementation scope of the company-wide energy settlement system to include overseas manufacturing facilities (Indonesia, Türkiye, and Russia). In addition, the headquarters and domestic and overseas manufacturing sites are taking part in regular monthly video conferences (ESG Monthly).

# KT&G SUSTAINABILITY DISCLOSURE – [CLIMATE]

## (C) Monitoring metric for progress in achieving the target

KT&G monitors the following metrics in relation to the progress in achieving climate-related targets.

Target metric	Progress monitoring metric	Mid-to long-term target	Year of achievement	Target	Target year
Scope 1, 2 emissions	Scope 1, 2 emissions reduction rate	42%	2030	100%	2045
Scope 3 emissions	Scope 3 emissions reduction rate	25%	2030	100%	2045
Renewable energy consumption	Renewable energy conversion rate	80%	2030	100%	2045

## (D) Target revision and explanation

To prepare for future risks stemming from GHG emission-related regulations and carbon price increases that may arise in the future through our internal carbon pricing system and active investments in renewable energy facilities, we raised our mid- to long-term GHG reduction target for 2030 from the SBTi's well-below 2°C (Scope 1+2) and 2°C (Scope 3) scenarios to 1.5°C (Scope 1+2) and well-below 2°C(Scope 3) scenarios in 2022.

Target metric	Progress monitoring metric	Year of achievement	Before change	After change
Scope 1&2 emissions	Scope 1&2 emissions reduction rate	2030	42%	42%
Scope 3 emissions	Scope 3 emissions reduction rate	2030	25%	25% (Targeting categories 1, 3, 11)

## (3) Analysis of Performance against Target

KT&G's performance against its mid- to long-term climate-related targets is as follows. KT&G aims to reduce Scope 1 and 2 emissions by 42% from 2020 levels and reduce Scope 3 emissions by 25% by 2030, and achieve net zero by 2045.

### [Reduce direct emissions (Scope 1)]

GHG directly emitted by KT&G arises from process gas and LNG fuel, etc. that are used mainly in manufacturing processes. To reduce direct emissions, we are switching utility facilities to high-efficiency facilities and recovering waste heat that is generated during processes to reduce fuel consumption. In addition, sales organizations with considerable gasoline and diesel mobile combustion emissions changed 6% of business fleets to EVs as of 2023 and plan to complete 100% transition to EVs by 2030.

### [Reduce indirect emissions (Scope 2)]

KT&G supports the global initiative RE100 and seeks to achieve a business site renewable electricity usage rate of 80% by 2030. To this end, we built a 3.1 MWp-level photovoltaic power generation facility on the rooftop of the Gwangju Plant in 2023 and plan to build 26.2 MWp-level photovoltaic power generation facilities on the rooftop of manufacturing plants and unused sites by 2026. In 2023, we signed 12 MWp-level PPAs at 17 business sites in Korea and are being supplied with renewable energy which we plan to expand further. Starting in 2022, we have been purchasing domestic and overseas RECs, thus increasing Scope 2 reduction and renewable energy ratio.

Indicators for monitoring goals and progress	2022 Performance	2023 Performance	Mid-to long-term target (2030)		Final target (2045)	
			Target	Achievement rate for the reporting year	Target	Achievement rate for the reporting year
Scope 1, 2 (market-based)	Emissions	191,418	185,672	114,276		0
	Reductio rate compare to the base year	7.52%	9.0%	42%	13.7%	100%
Scope 3	Emissions	857,279	516,237	691,605		0
	Reductio rate compare to the base year	-%	39.8%	25%	205.9% <sup>1)</sup>	100%
Renewable energy conversion rate	10.8%	13.5%	80%	16.9%	100%	13.5%

<sup>1)</sup> Due to the significant reduction in emissions from the real estate division, which has high volatility in greenhouse gas emissions, Scope 3 emissions for 2023 have changed significantly.

## (4) Information on GHG Emissions Reduction Target

### (A) Type of greenhouse gases included in the GHG emissions reduction target, scope, and whether it is total emissions

KT&G set a reduction target for Scope 1 and 2 emissions. The Scope 1 emissions that we consider include six GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>), and Scope 1 emissions include three GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O). On a separate basis of KT&G, a total of three GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O) were identified for Scope 1 and 2 emissions.

Category	GHG type					
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>
Scope 1	○	○	○	X	X	X
Scope 2	○	○	○	X	X	X

### (B) Whether the sectoral decarbonization approach was used

KT&G does not use the sectoral decarbonization approach for the GHG emissions reduction target as of the end of the reporting period but is considering its use for effective emissions reduction.

