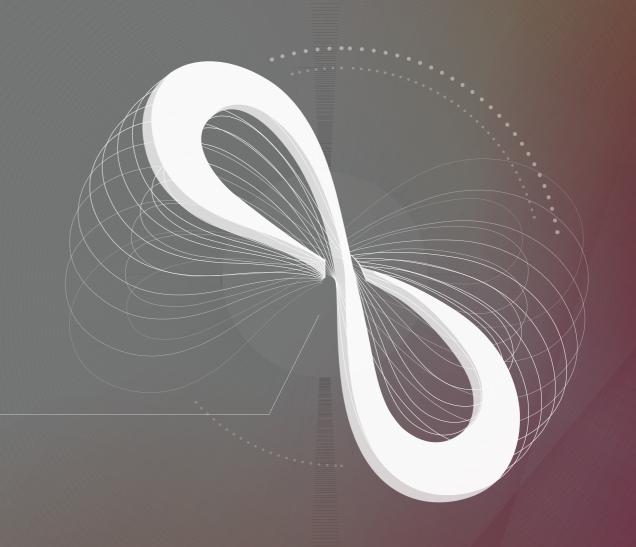
ESG DATA BOOK



ESG DATA BOOK

Main Category	Scope	Sub Category	Unit	2018	2019	2020
Energy use	Domestic	Fuel (LNG, etc.)	TJ	616	626	678
		Electricity	TJ	1,457	1,463	1,577
		Steam	TJ	13	1	21
		Subtotal	TJ	2,086	2,090	2,276
		Energy intensity	TJ/KRW 100 million	0.08	0.07	0.07
	Overseas	Fuel (LNG, etc.)	TJ	41	47	50
		Electricity	TJ	99	115	119
		Steam	TJ	13	1	21
		Subtotal	TJ	153	163	190
	Entire	Total	TJ	2,239	2,253	2,465
GHG emission	Domestic	Direct emission (Scope 1)	tCO ₂ eq	33,022	33,549	36,430
		Indirect emission (Scope 2)	tCO ₂ eq	70,821	71,082	77,429
		Total	tCO ₂ eq	103,843	104,631	113,859
		GHG emission intensity (Scope 1+2)	TJ/KRW 100 million	3.96	3.56	3.31
	Overseas	Direct emission (Scope 1)	tCO ₂ eq	2,373	2,701	2,863
		Indirect emission (Scope 2)	tCO ₂ eq	7,337	8,807	8,794
		Total	tCO₂eq	9,710	11,508	11,657

^{*} As the scope of water and waste data collection was extended to six plants including Sintanjin 2 Plant from existing five plants (Sintanjin, Yeongju, Gwangju, Cheonan, and Gimcheon) this year, it may be different from the data reported in the previous year.

Main Category	Scope	Sub Category	Unit	2018	2019	2020
GHG emission	Entire	Direct emission (Scope 1)	tCO ₂ eq	35,395	36,250	39,293
		Indirect emission (Scope 2)	tCO ₂ eq	78,158	79,889	86,223
		Total (Scope 1+2)	tCO ₂ eq	113,553	116,139	125,516
	Domestic	Other indirect emission (Scope 3)	tCO ₂ eq	79,040	85,199	76,967
		- Procured products and services	tCO ₂ eq	70,556	77,747	70,385
		- Capital goods	tCO ₂ eq	-	-	-
		- Fuel & energy related activities (excluding Scope 1 & 2)	tCO ₂ eq	-	-	-
		- Upstream transport & distribution	tCO ₂ eq	-	-	950
		- Waste from business sites	tCO ₂ eq	3,379	3,937	3,468
		- Business trip	tCO ₂ eq	2,040	1,890	314
		- Employee commuting	tCO ₂ eq	-	-	-
		- Upstream lease assets	tCO ₂ eq	-	-	-
		- Downstream transport & distribution	tCO ₂ eq	-	-	253
		- Processing of sold products	tCO ₂ eq	-	-	-
		- Usage of sold products	tCO ₂ eq	3,055	1,620	1,592
		- Disposal of sold products	tCO ₂ eq	10	5	5
		- Downstream lease assets	tCO ₂ eq	-	-	-
		- Franchise	tCO ₂ eq	-	-	-
		- Investment	tCO ₂ eq	_	_	-

^{*} Overseas business sites include manufacturing subsidiaires in Russia, Turkey, and Indonesia that have their own production facilities

^{*} Scope 3 emissions do not include emissions from overseas leaf tobacco cultivation and drying.

 $^{\circ}$ 2020 KT&G REPORT $^{\circ}$

Main Category	Scope	Sub Category	Unit	2018	2019	2020
Environmental investment	Entire	Environmental investment plan	KRW million	2,245	1,361	6,379
		Environmental investment practice	KRW million	1,956	1,718	6,615
		Execution rate	%	87%	126%	104%
Water	Domestic	Waterworks	ton	420,533	439,861	489,651
consumption		Underwater	ton	93,646	103,929	104,618
		Subtotal	ton	514,179	543,790	594,269
		Water use intensity	ton/KRW 100 million	19.59	18.48	17.30
	Overseas	Waterworks	ton	30,087	30,861	28,548
		Underwater	ton	162,404	167,741	143,134
		Subtotal	ton	192,491	198,602	171,682
	Entire	Total water consumption	ton	706,670	742,392	765,951
Waste emission	Domestic	Incineration	ton	1,133	1,557	3,652
and recycling		Landfill	ton	164	4	3
		Recycling	ton	5,887	6,602	5,351
		Others	ton	687	821	857
		Subtotal waste emitted	ton	7,870	8,983	9,863
		Waste recycling rate	ton	75%	73%	54%
		Waste emission intensity	ton/KRW 100 million	0.30	0.31	0.29
	Overseas	Incineration	ton	132	151	180
		Landfill	ton	24	77	375
		Recycling	ton	164	138	378
		Subtotal waste emitted	ton	320	367	932
		Waste recycling rate	%	51%	38%	40%
	Entire	Total waste emitted	ton/KRW 100 million	8,190	9,350	10,795

Main Category	Scope	Sub Category	Unit	2018	2019	2020
Air pollutant	Domestic	NOx	ton	8.84	16.76	9.18
emission		SOx	ton	0.00	1.71	0.05
		Dust (PM)	ton	0.29	4.31	2.43
		Subtotal	ton	9,13	22.78	11.67
Water pollutant	Domestic	BOD	ton	0.18	0.89	0.61
emission		COD	ton	0.61	3.56	2.21
		SS	ton	0.49	1.73	1.05
		T-N	ton	0.32	1.35	1.56
		T-P	ton	0.01	0.06	0.04
		Subtotal	ton	1,61	7.58	5.47
Green purchasing	Domestic	Green purchasing of materials	KRW 100 million	366	406	479
Cutomer information protection	Domestic	Information leakage	case	-	-	-
VOCs by channel	Domestic	Phone counseling	case	208,657	262,760	183,585
		ARS	case	19,082	19,372	26,402
		1:1 counseling	case	10,128	19,996	10,258
		Chatting counseling	case	-	-	1,185
			case	237,867	302,128	221,430
VOCs by type	Domestic	Inquiry of product purchasing and location	case	27,621	29,916	21,157
		Discout coupon and homepage	case	3,597	11,349	9,443
		Inquiry of A/S	case	184,726	237,383	174,380
		Claim on cigarettes	case	166	118	697
		Others (phone number, general)	case	21,757	23,362	15,753
		Total	case	237,867	302,128	221,430
CS center (call center)	Domestic	-	place	1	1	1

^{*} Green purchasing result may differ from previous reported data due to changes in the management scope driven by the application of the integrated purchasing system (KAPS).

Main Category	Scope	Sub Category	Unit	2018	2019	2020
Online channel	Domestic	Homepage	place	1	1	1
		Online customer center	place	_	-	1
		Kakao channel	place	-	_	1
		lil store	place	-	-	1
Offline channel	Domestic	lil minimulium	place	3	8	5
		A/S center	place	10	17	25
		lil station	place	31	40	100
		Visiting A/S	place	121	121	121
Customer communication channel	Domestic	Total	place	167	189	256
Employment	Domestic	Subtotal	persons	4,155	4,386	4,331
	Overseas*	Turkey	persons	78	78	79
		Indonesia	persons	2,573	3,052	3,191
		Russia	persons	130	131	139
		Others	persons	143	193	185
			persons	2,924	3,454	3,594
	Entire	Percentage of overseas employees	%	41.31	44.06	45.35
		Total	persons	7,079	7,840	7,925
Manager position**	Domestic	Male managers	persons	1,895	1,871	1,828
		Female managers	persons	186	183	179
Female	Domestic	Percentage of female employees	%	9.58	10.24	10.32
employees		Female employees at profiit creation departments	persons	151	151	151
			persons	14.01	12.76	13.59
	Overseas	Percentage of female employees	persons	23.26	21.25	18.48
	Entire	Percentage of female employees	persons	15.23	15.09	14.02
Average	Domestic	Male	years	17.9	17.1	17.3
service period		Female	years	18.0	15.3	14.6
Employment of	Domestic	Employees with disabilities	persons	147	140	126
the disabled		Disabled employment rate	%	3.54	3.19	2.91

^{*} Including Turkey, Russia, Indonesia, U.S., and China

Main Category	Scope	Sub Category	Unit	2018	2019	2020
Age	Domestic	Under 30	persons	204	433	457
		30 ~ 49	persons	2,109	2,207	2,260
		50 and older	persons	1,842	1,746	1,614
		Total	persons	4,155	4,386	4,331
New	Domestic	Male	persons	189	366	127
employment		Female	persons	24	60	75
		Under 30	persons	74	223	45
		30 ~ 49	persons	85	140	103
		50 and older	persons	54	63	54
		Total	persons	213	426	202
Turnover	Domestic	Male	persons	172	173	172
		Female	persons	24	29	49
		Total	persons	196	202	221
		Turnover rate	%	4.72	4.61	5.10
		Voluntary turnover rate	%	0.9	0.9	0.7
Childbirth leave	Domestic	Male childbirth leave users	persons	69	73	54
and childcare leave		Female childbirth leave users	persons	14	18	20
		Rate of return to work after childbirth leave (male)	%	100	100	100
		Rate of return to work after childbirth leave (female)	%	100	100	100
		Male childcare leave users	persons	24	18	7
		Female childcare leave users	persons	22	22	18
		Rate of return to work after childcare leave (male)	%	100	100	100
		Rate of return to work after childcare leave (female)	%	100	100	100
		Retirement rate within 12 months after return to work from childcare leave (male)	%	8	11	14
		Retirement rate within 12 months after return to work from childcare leave (female)	%	-	-	-

^{**} Including managers and higher positions engaging in general works, research, accounting, legal affairs, patent, professional, and directors (excluding registered directors)

^{***} Profit-creatable department: Sales, marketing, NGP, and global headquarters (including subsidiaries and institutions)

Main Category	Scope	Sub Category	Unit	2018	2019	2020
Union	Domestic	Employees eligible for membership	persons	4,009	4,024	4,128
membership		Union members	persons	3,596	3,596	3,679
		Union membership rate	%	89.7%	89.4%	89.1%
Employee	Domestic	Total number of trainees	persons	25,375	32,454	61,054
training		Annual average training expense per employee	KRW thousand	1,050	1,387	1,030
		Annual average time spent on training per employee	hours	115	124	172
Performance evaluation	Domestic	Employees eligible for evaluation	persons	3,707	3,796	3,782
		Percentage of employees evaluated	%	97.5	97	95.6
Human rights protection	Domestic	Sexual harassment prevention training	times	2	1	1
		Employees who completed sexual harassment prevention training	persons	3,945	3,950	3,977
Industrial	Domestic	Number of victims	persons	2	3	2
accident		Industrial accident rate	%	0.04	0.057	0.042
	Overseas	Number of victims	persons	5	11	16
		Industrial accident rate	%	0.171	0.318	0.445
	Entire	Number of victims	case	7	14	18
			hours	15,055,196	16,523,120	17,013,529
Work loss	Domestic	LTIFR	-	0.265	0.395	0.256
	Overseas	LTIFR	-	0.665	1.232	1.739
	Entire	Total	-	0.465	0.847	1.058
ISO certification	Domestic	ISO14001 certification				
		- Certification rate	%	66.7	66.7	66.7
		- Number of worksites that obtained the certification	places	4	4	4
		- Number fo worksites eligible for obtainment	places	6	6	6

^{*} Industrial accident: including daily workkers

Main Category	Scope	Sub Category	Unit	2018	2019	2020
		ISO9001 certification				
		- Certification rate	%	66.7	83.3	83.3
		- Number of worksites that obtained the certification	places	4	5	5
		- Number fo worksites eligible for obtainment	places	6	6	6
		ISO27001 certification				
		- Certification rate	%	83.3	83.3	83.3
		- Number of systems that obtained the certification	places	5	5	5
		- Number fo systems eligible for obtainment	places	6	6	6
Purchasing and use of raw materials	Domestic	Purchasing of raw materials (leaf tobacco, tobacco sheet, auxiliary material)*	KRW million	282,812	288,833	281,820
		Raw materials consumption	ton	37,405	38,095	41,665
Leaf tobacco	Domestic	Domestic partners (farmers)	persons	3,144	2,880	2,960
partner		Domestic purchasing	KRW 100 million	947	1,175	961
		Overseas partners	firms	17	19	19
		Overseas purchasing	KRW 100 million	1,881	1,713	1,858
		Total purchasing	KRW 100 million	2,828	2,888	2,819
Purchasing of	Domestic	Purchasing volume	ton	8,429	10,214	7,741
entire domestic leaf tobacco		Purchasing amount	KRW 100 million	800	965	745
NTM (Non-	Domestic	Domestic partners	firms	70	74	70
Tobacco Material) partners		Domestic purchasing	KRW 100 million	3,652	4,352	5,173
P 4. 11 101 0		Overseas partners	firms	9	12	10
		Overseas purchasing	KRW 100 million	294	440	445
		Total number of partners	firms	79	86	80
		Total amount of purchasing	KRW 100 million	3,946	4,792	5,618

^{*} Including purchasing of tobacco sheet from Tae-a Industrial

^{*} LTIFR (Lost Time Injuries Frequency Rate) = (Number of accidents / Total labor hours) \times 1,000,000, including daily workers

Main Category	Scope	Sub Category	Unit	2018	2019	2020
Support for partners	Domestic	Early payment of purchasing amount	KRW million	30,474	45,885	27,234
Haearin project	Domestic	Number of farmers	persons	21	20	22
		Purchasing of dried red pepper	kg	11,691	10,488	11,640
		Purchasing amount of dried red pepper	KRW 100 million	3.22	1.58	2.95
Social contribution	Domestic	Social responsibility (youth startup, SangSang Fund, CSR, sponsorship, etc.)	KRW 100 million	285	507	198
		Arts & culture (SangSang Madang, SangSang Univ., etc.)	KRW 100 million	227	343	297.7
		Scholarship foundation, welfare foundation, etc.	KRW 100 million	157	160	175.9
		Total	KRW 100 million	669	1,010	672
		Social contribution investment to sales	%	2.55	3.43	1.95
BOD	Domestic	Number of BOD meetings held	times	17	10	14
		Attendance rate of non-executive directors	%	97.1	98.3	100.0
Compensation	Domestic	Director compensation (all directors and auditors)	KRW million	4,099	2,403	2,330
		CEO salary	KRW million	2,479	1,177	1,173
		Average salary of employees	KRW million	83	80	88
		CEO salary compared with average employee salary	%	3.35	6.80	7.50
			times	29.87	14.71	13.33
ESG evaluation	Domestic	KCGS	rating	A+	A+	А
		MSCI	rating	BBB	BBB	А
		Sustinvest	rating			AA
Violation of laws	Domestic	Fair trade related legal sanctions	case	-	-	-
and regulations		Environment-related penalty	KRW thousand	480	2,800	8,400
		Violation of display advertising regulation	case		-	-
		Personal informaton leakage	case	-	-	-

Main Category	Scope	Sub Category	Unit	2018	2019	2020
Punishment	Domestic	Dismissal	case -		-	-
		Suspension	case	5	9	5
		Pay cut	case	4	7	6
		reprimand	case	5	9	12
		Total	case	15	25	23
R&D	Domestic	R&D investment	KRW million	17,898	23,401	26,317
		R&D performance	case	54	48	59
		Patents (owned)	case	222	200	211
NGP	Entire	Unit sales of devices	10 thousand units	149	105	188
		Unit sales of sticks	100 million sticks	12	24.6	28.5
		Market share in the stick market (domestic)	%	16.1	31.7	34.3
		NGP sales	KRW 100 million	1,763	2,265	2,792
		NGP sales growth (YoY)	%	2,131.6	28.5	23.3
		NGP's sales proportion in the tobacco business	%	6.8	8.2	9.5
		NGP sales markets	countries	1	1	4
		NGP patents applied	items	219	380	1,106
		- Domestic	items	178	188	349
		- Overseas	items	41	192	757
		NGP trademarks applied	items	365	1,536	248
		- Domestic	items	158	62	56
		- Overseas	items	207	1,474	192
		NGP design rights applied	items	355	279	63
		- Domestic	items	122	37	19
		- Overseas	items	233	242	44

Main Category	Scope	Sub Category	Unit	2018	2019	2020
Energy use	Domestic	Fuel (fixed combustion)	TJ	382.9	351.3	370.7
		Electricity (indirect emission)	TJ	420.3	395.3	410.9
		Others	TJ	0.3	0.3	0.3
		Total	TJ	803.5	746.9	781.9
		Energy intensity	TJ/KRW 100 million	0.06	0.05	0.06
GHG emission	Domestic	Direct emission (Scope 1)		19,474	17,863	18,855
		Indirect emission (Scope 2)	TJ	20,440	19,218	19,970
		Total		39,915	37,080	38,825
		GHG emission intensity (Scope 1+2)		3.01	2.64	2.91
Environmental investment	Domestic	Environmental investment plan	KRW million	5.9	2.5	19.2
		Environmental investment practice	KRW million	5.9	2.5	19.2
		Execution rate	%	100%	100%	100%
Water use	Domestic	Waterworks	ton	891,378	787,509	780,491
		Underwater	ton	3,623	2,309	658
		Total	ton	895,001	789,818	781,149
		Water recycling (Wonju)	ton	26,248	19,428	24,516
		Water use intensity	ton/KRW 100 million	67.38	56.27	58.58

Main Category	Scope	Sub Category	Unit	2018	2019	2020
Waste emission	Domestic	Total emissions	ton	1,830	3,988	4,778
and recycling		- Incineration	ton	109	6	20
		- Landfill	ton	415	231	298
		- Recycling	ton	1,306	3,751	4,460
		Waste recycling rate	%	71.36	94.06	93.34
		Waste emission intensity	ton/KRW 100 million	0.14	0.28	0.36
Air pollutant	Wonju Plant	NOx	ppm	비대상	비대상	32.8
emission		SOx	ppm	n/a	n/a	n/a
		Dust	mg/Sm3	미집계	미집계	2.9
		VOCs	ppm	n/a	n/a	n/a
	Buyeo Plant	NOx	ppm	34.00	40.80	46.00
		SOx	ppm	n/a	n/a	n/a
		Dust	mg/Sm3	5.4	5.3	7.9
		VOCs	ppm	n/a	n/a	n/a
Water pollutant emission	Wonju Plant	BOD	mg/L	n/a	n/a	n/a
emission		COD	mg/L	7.8	14	9.7
		T-N	mg/L	4.155	5.971	5.647
		T_P	mg/L	0.252	0.705	0.291
		SS	mg/L	3	3.5	1.7
	Buyeo Plant	COD	mg/L	26	20.5	20.1
		BOD	mg/L	7.6	7.6	7.3
		SS	mg/L	23.6	20.8	17.5

Main Category	Scope	Sub Category	Unit	2018	2019	2020
Employment*	Entire	Domestic	persons	1,579	1,671	1,642
		- Male	persons	824	887	885
		- Female	persons	755	784	757
		Overseas	persons	17	19	21
		- Male	persons	17	18	20
		- Female	persons		1	1
		Total	persons	1,596	1,690	1,663
Female employees	Domestic	Percentage of female employees	%	48	47	46
	Overseas	Percentage of female employees	%	0	5	5
	Entire	Percentage of female employees	%	47	46	46
Employment of the disabled	Entire	Number of employees with disabilities	persons	16	15	14
		Disabled employment rate	%	0.99	0.85	0.81

^{*} Full-time employees

Main Category	Scope	Sub Category	Unit	2018	2019	2020
Industrila accident*	Entire	Industrial accident victims in Korea	persons	1	1	2
		Industrial accident rate in Korea	%	0.048	0.047	0.103
		Industrial accident victims in overseas sites	persons	-	-	-
		Industrial accident rate in overseas sites	%	-	-	-
		Industrial accident rate in all sites	%	0.047	0.046	0.102
		Accident	cases	1	1	2
		Disease	cases		-	-
		Total labor hours	hours	3,421,600	3,594,240	3,521,440
BOD	Domestic	BOD meetings held	times	8	9	8
		Attendance rate of non-executive directors	%	1.00	89%	1.00
Violation of laws and regulations	Domestic	Fair trade related legal sanctions	cases	-	-	-
		Environment-related penalty	KRW	1	1	-
		Violation of display advertising regulation	cases		-	-
		Personal informaton leakage	cases	_	-	-
R&D	Domestic	R&D investment	KRW million	12,113	12,246	11,259
		R&D performance	cases	61	70	66
		Patents (owned)	cases	212	229	257

^{*} Including daily workers

Yungjin Pharm ESG Quantitative Data

Main Category	Sub Category	Unit	2018	2019	2020
Energy use	Fuel (LNG)		25.02	25.71	20.69
	Electricity		36.51	40.51	35.55
	Steam		0.00	0.00	0.00
	Total	TJ	61.54	66.22	56.24
	Energy intensity	TJ/KRW 100 million	0.03	0.03	0.03
GHG emission	Direct emission (Scope 1)	tCO ₂ eq	564.00	511.00	348.00
	Indirect emission (Scope 2)	tCO ₂ eq	2,302.47	2,515.35	2,015.08
	Total (Scope 1+2)	tCO ₂ eq	2,866.47	3,026.35	2,363.08
	GHG emission intensity (Scope 1+2)	tCO ₂ eq/KRW 100 million	1.54	1.37	1.13
Environmental	Environmental investment plan	KRW million	146	475	1,231
investment	Environmental investment practice	KRW million	146	339	1,247
	Execution rate	%	100.0	71.4	101.3
Water use	Waterworks	ton	113,456	124,121	105,257
	Underwater	ton	28,153	5,523	-
	Total	ton	141,609	129,644	105,257
	Water use intensity	ton/KRW 100 million	76	59	50
	Total emissions	ton	3,942	5,621	3,730
and recycling	- Incineration	ton	742	2,296	688
	- Landfill	ton	144	265	146
	- Recycling	ton	3,056	3,060	2,897
	Waste recycling rate	%	77.53	54.43	77.66
	Waste emission intensity	ton/KRW 100 million	0.48	1.16	0.40
Air pollutant	NOx	ppm	78.70	78.70	21.20
emission	SOx	ppm	0.00	0.00	4.55
	Dust	mg/Sm3	17.36	19.00	8.80
	VOCs	ppm	-	-	-
Water pollutant emission	COD	mg/L	74.00	143.98	96.89
	BOD	mg/L	62.30	87.20	60.00
	SS	mg/L	50.00	15.40	96.00

Main Category	Sub Category	Unit	2018	2019	2020
Employment	Domestic	persons	616	646	630
	- Male	persons	472	485	462
	- Female	persons	144	161	168
	Total	persons	616	646	630
	Percentage of female employees	%	23.38	24.92	26.67
Employment of the disabled	Number of employees with disabilities	persons	4	3	3
	Disabled employment rate	%	0.65	0.46	0.48
Industrial	Industrial accident victims in Korea	persons	_	-	-
accident	Industrial accident rate in Korea	%	-	-	-
	Industrial accident rate	%		-	-
	Accidents	cases	_	-	-
	Total labor hours	hours	1,583,493	1,678,204	1,613,965
ISO certification	ISO37001 certification	-	인증	재인증	재인증
	- Certification rate	%	100	100	100
	- Number of worksites that obtained the certification	places	1	1	1
	- Number of worksites eligible for obtainment	places	1	1	1
BOD	BOD meetings held	times	10.00	8.00	10.00
	Attendance rate of non-executive directors	%	97.5	100.0	93.9
ESG evaluation rating	KCGS	rating	В	В	В
Violation of laws	Fair trade related legal sanctions	cases	-	-	-
and regulations	Environment-related penalty	KRW	2,800,000	1,600,000	-
	Violation of display advertising regulation	cases	-	-	-
	Privacy leakage	cases	-	-	-
R&D	R&D investment	KRW 100 million	119.9	135.1	150.7
	R&D performance	cases	16	48	36
	Patents (owned)	cases	102	154	190