

2020

Greenhouse Gas Inventory Report

June, 2021 | Kakaocommerce

Summary

kakao**commerce**

“This summary report shows Kakaocommerce’s greenhouse gas emissions for FY 2020 (Jan 2020 ~ Dec 2020). The GHG inventory 2020 includes scope 1, scope 2 and partial scope 3 sources, and was verified by the third-party organization, Korean Standards Association (KSA).”

Introduction

- **Reporting year : 01/Jan/2020 ~ 31/Dec/2020**
(Seoul office and Kakao Friends offline store - October 2020~ December 2020, after partial merger with Kakao IX)
- **Guidelines:**
 - ISO14064-1:2018, Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals, ISO
 - GHG Protocol, A Corporate Accounting and Reporting Standard, WBCSD/WRI
 - GHG Protocol, Scope 2 Guidance, WRI
 - GHG Protocol, Technical Guidance for Calculating Scope3 Emissions, WRI/WBCSD
 - GHG Protocol, Corporate Value Chain(Scope3) Accounting and Reporting Standard, WRI/WBCSD
 - 2006 IPCC Guidelines for National Greenhouse Gas Inventories, IPCC
- **Organizational Boundary : Pangyo office, Seoul office, Kakao Friends offline stores and Villa**
※ Operational control under the control approach
- **Operational Boundary : Scope1, Scope 2 and partial Scope 3 emissions**
- **Greenhouse Gases : CO₂, CH₄, N₂O**

2020 GHG Emissions – Summary

▫ Total emissions: 661tCO₂e

Scope	Pangyo office	Seoul office ¹	Kakao Friends offline stores ¹	Villa	Total (%)
Scope1	4.541	0	0	6.801	11.342 (2%)
Scope2 ²	292.554	21.507	135.852	2.330	452.243 (68%)
Subtotal (Scope1+Scope2)	297.095	21.507	135.852	9.131	463.585 (70%)
Scope3	133.507	3.459	62.250	0.847	200.063 (30%)
Total³	430	24	198	9	661

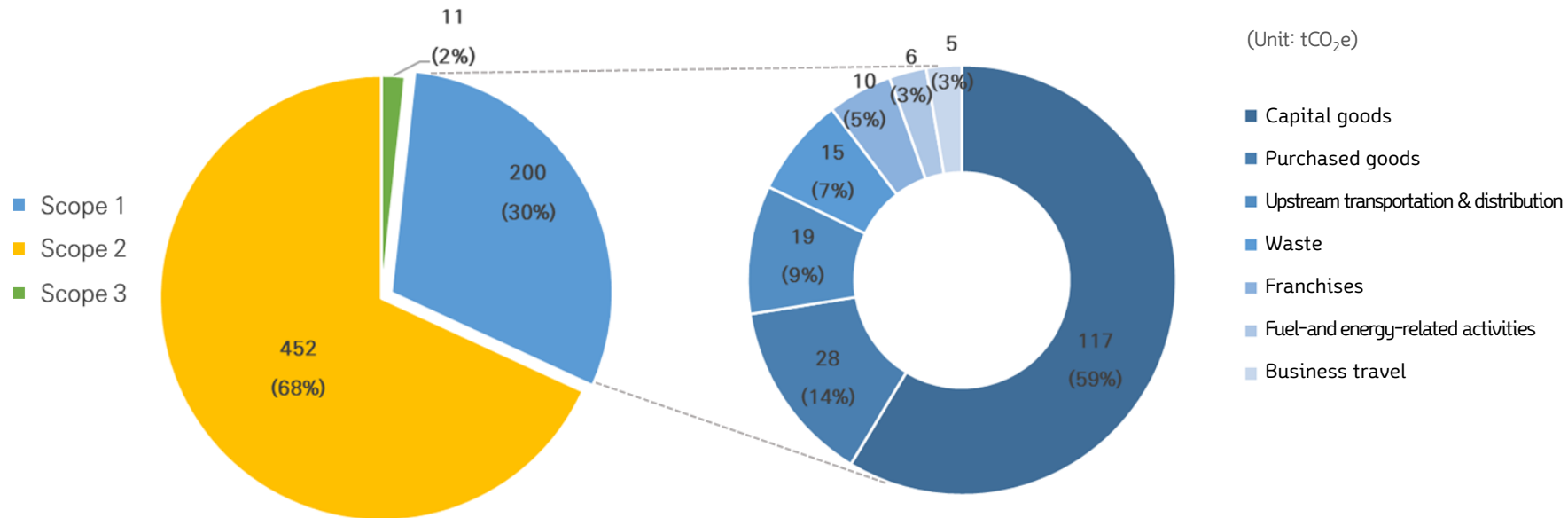
¹ For the Seoul office and Kakao Friends offline stores, their emissions from October 2020 to December 2020 were included since they have merged with Kakaocommerce in October 2020. It is estimated that the total emissions of Kakaocommerce would be about 1,327tCO₂e when the annual emissions of the Seoul office and the Kakao Friends offline stores are calculated based on the average of their emissions for 3 months.

² Location-based

³ The total emissions of each operational boundary were rounded down.

2020 GHG Emissions – Scope

- **Scope 2 (68%, 452tCO₂e)** > **Scope 3 (30%, 200tCO₂e)** > **Scope 1 (2%, 11tCO₂e)**
- Electricity indirect GHG emissions (Scope 2) accounted for 68% of total emissions.
- Other indirect GHG emissions (Scope 3) such as capital goods, purchased goods and upstream transport and distribution were followed.

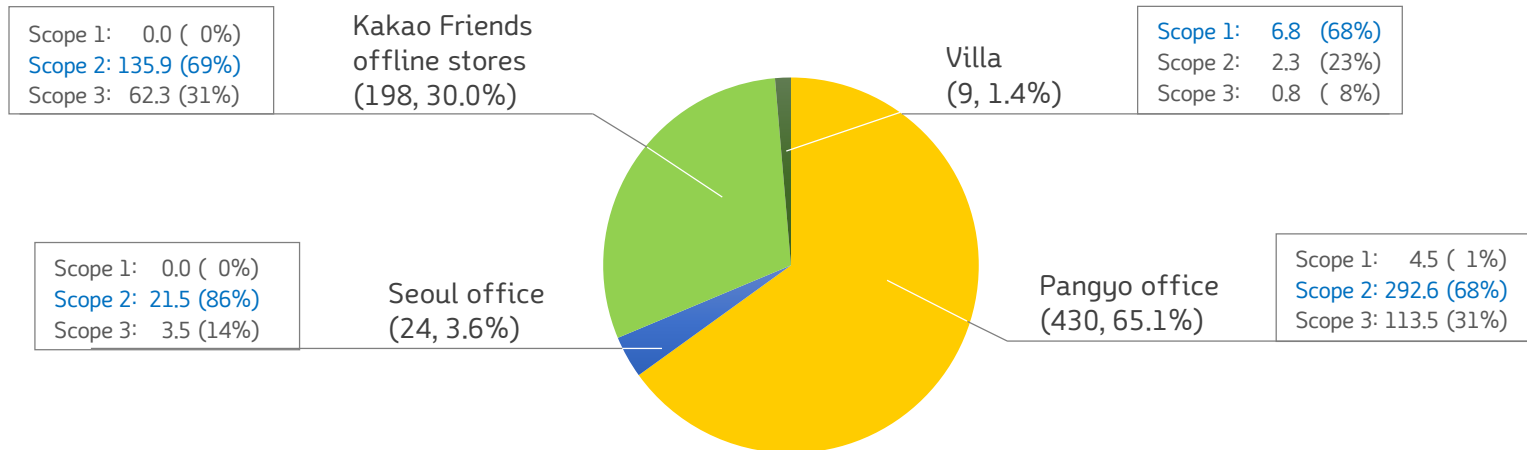


- ❖ Scope 1 (Direct GHG emissions): GHG emissions from sources the reporting company owns or controls
- ❖ Scope 2 (Electricity indirect GHG emissions): GHG emissions from the generation of purchased electricity that is consumed by the reporting company
- ❖ Scope 3 (Other indirect GHG emissions): GHG emissions from sources owned or controlled by other entities in the value chain

2020 GHG Emissions – Organizational boundary

- Pangyo office (65%, 430tCO₂e) > Kakao Friends offline Stores (30%, 198tCO₂e) > Seoul office (4%, 24tCO₂e) > Villa (1%, 9tCO₂e)
- The emissions of the Pangyo office accounted for 65% of total emissions in 2020.
- Since the Seoul office and Kakao Friends stores have merged with Kakaocommerce in October 2020, their emissions between October 2020 and December 2020 were included under the control approach. Thus, it is expected that the emissions of Kakao Friends offline stores will make up the biggest portion of the total emissions in 2021.

(Unit: tCO₂e)



2020 GHG Emissions - Details

Boundary	Scope	Category	Component	GHG missions (tCO ₂ e)
Pangyo office	Scope1	Mobile combustion	Gasoline vehicle	4.541
	Scope2	Electricity	Electricity use	292.554
		Purchased goods	Printing papers	0.462
	Scope3	Capital goods	Laptop	56.027
			PC	0.565
			Monitor	60.773
		Fuel-and energy-related activities (not included in scope 1 or 2)	Upstream emissions of purchased gasoline	0.127
			Transmission and distribution losses (electricity)	0.136
		Waste generated in operation	Waste	12.230
	Business travel	Transportation (flight and car)	3.187	
Seoul office	Scope2	Electricity	Electricity use	21.507
	Scope3	Purchased goods	Printing papers	0.070
		Fuel-and energy-related activities (not included in scope 1 or 2)	Transmission and distribution losses (electricity)	0.645
			Waste generated in operation	Waste
		Business travel	Transportation (flight and car)	2.163

2020 GHG Emissions – Details (Cont.)

Boundary	Scope	Category	Component	GHG missions (tCO ₂ e)
Kakao Friends offline stores	Scope2	Electricity	Electricity use	135.852
	Scope3	Purchased goods	Printing papers	0.027
			Shopping bag	27.076
		Fuel-and energy-related activities (not included in scope 1 or 2)	Transmission and distribution losses (electricity)	4.076
		Waste generated in operation	Waste	1.965
		Franchises	Scope 1 and 2 emissions from franchises	9.781
	Upstream transportation and distribution	Upstream transportation and distribution	19.325	
Villa	Scope1	Stationary combustion	Boiler (Kerosene)	6.801
	Scope2	Electricity	Electricity use	2.330
	Scope3	Waste generated in operation	Waste	0.220
			Upstream emissions of purchased kerosene	0.556
			Transmission and distribution losses (electricity)	0.070

GHG Verification Statement

kakaocommerce

GHG Verification Statement

kakaocommerce
660, Daewangpangyo-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

☑ **Verification Scope**
Korean Standards Association has conducted GHG inventory verification based on GHG report provided by kakaocommerce, which includes 2020's scope 1, scope 2, and scope 3 (domestic/overseas business trips for work, capital goods and upstream) emissions.

☑ **Verification Standards and Guidelines**
To conduct verification activities, verification team applied verification standards and guidelines. The standards and guidelines are as follows.
· GHG&Energy Target Scheme provided by Ministry of Environment, Republic of Korea
· KS Q ISO 14064-1,2,3 : 2006
· IPCC Guideline : 2006
· WRI GHG Protocol

☑ **Verification Conclusion**
As a result of verification activities, verification team has found no significant errors. Therefore, Korean Standards Association confirms that following emissions data are adequately quantified.

	Pangyo Office	Seoul Office	Kakao Friends Offline Store	Villa	Total
Scope 1 (Direct emissions)	4,541	0	0	6,801	11,342
Scope 2 (Indirect emissions)	292,554	21,507	135,852	2,330	452,243
Scope 3 (domestic/overseas business trips for work, capital goods and upstream)	133,507	3,459	62,250	0,847	200,063
Total GHG Emissions	430	24	198	9	661,000

May 25, 2021
Myungsoo Kang
KOREAN STANDARDS ASSOCIATION

<English>

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온실가스배출량 검증 성명서

카카오커머스
경기도 성남시 분당구 대왕판교로 660

☑ **검증 범위**
한국표준협회는 카카오커머스 사업장에서 작성한 온실가스 배출량 보고서를 바탕으로 2020년 카카오커머스의 Scope1, Scope2, Scope3(국내/국외 출장, 자본재, 업스트림 포함)에 대한 온실가스 배출량 검증을 실시하였습니다.

☑ **검증 기준 및 지침**
한국표준협회는 다음의 기준 및 지침에 따라 검증을 수행하였습니다.
· 온실가스-에너지 목표관리 운영 등에 관한 지침
· KS Q ISO 14064-1,2,3 : 2006
· IPCC Guideline : 2006
· WRI GHG Protocol

☑ **검증 결론**
귀 사업장에서 작성한 온실가스 배출량 보고서에 중대한 오류 사항이 발견되지 않았으며, 다음의 온실가스 배출량 데이터가 적절하게 산정되었음을 확인합니다.

	판교사업장	서울사업장	카카오프레즈 오프라인직영매장	휴양시설	합계
Scope 1 (직접배출)	4,541	0	0	6,801	11,342
Scope 2 (간접배출)	292,554	21,507	135,852	2,330	452,243
Scope 3 (국내/국외 출장 자본재, 업스트림 포함)	133,507	3,459	62,250	0,847	200,063
총 배출량	430	24	198	9	661,000

2021년 05월 25일
한국표준협회장

<Korean>

Thank you