[Attachment 1]

Greenhouse Gas Report of Hyundai Motor Group and Kia Suppliers

KSH AUTOMOTIVE PVT LTD

2023

Maintenance Head	Plant Head	General Manager	Chief Operating officer	Managing Director

Site Information

(1)	(2)	(3)	(4)	(5)	(6)		
Site No.	Site name	Site representative	Site industry	Site location	Annual GHG Emissions (tCO2-eq) Excluding refrigerants		
					Direct emission (Scope1)	Indirect emission (Scope2)	Total amount
Site 01	Site A	Mr.Yeonsoo kim	KSH AUTOMOTIVE PVT LTD	PLOT NO 11C, INDUSTRIAL PARK,SITE A, AMMAVARIPALLI VILLAGE,PENUKONDA	471.358	10978.29	11449.6494
			(7)	Total	471.358	10978.29	11449.6494

2 Site Information

*** Complete for each site**

General Information about the Site

(1)	Site name	KSH AUTOMOTIVE PVT LTD	**(2)**	Representative	Mr.Yeonsoo kim	**(3)**	Site number (2p)	11C
(4)	Site location	PLOT NO 11C, INDUSTRIAL PARK,SITE A, AMMAVARIPALLI VILLAGE,PENUKONDA	**(5)**	Industry	KSH AUTOMOTIVE PVT LTD			
			(6)	Site phone number	95334 42003			

(7)	Site responsible department	HR & GA	**(8)**	Site contact person	Mr.P.Govindarajulu	**(9)**	Position	Dy.Manager
(10)	Contact person phone number	-	**(11)**	Contact person mobile phone	95334 42003	**(12)**	Contact person email	govind@saehani.com
(13)	Main products or processed materials	Automotive components	**(14)**	Annual production or processing volume	2374209	**(15)**	Regular employees	205
(16)	Current year sales revenue (in KRW Million)	1,52,857.90	**(17)**	Reporting year energy cost (in KRW Million)	2,185.54	(14)	Capital (in KRW Million)	47,198.68

Site Organizational Boundary (Photo)

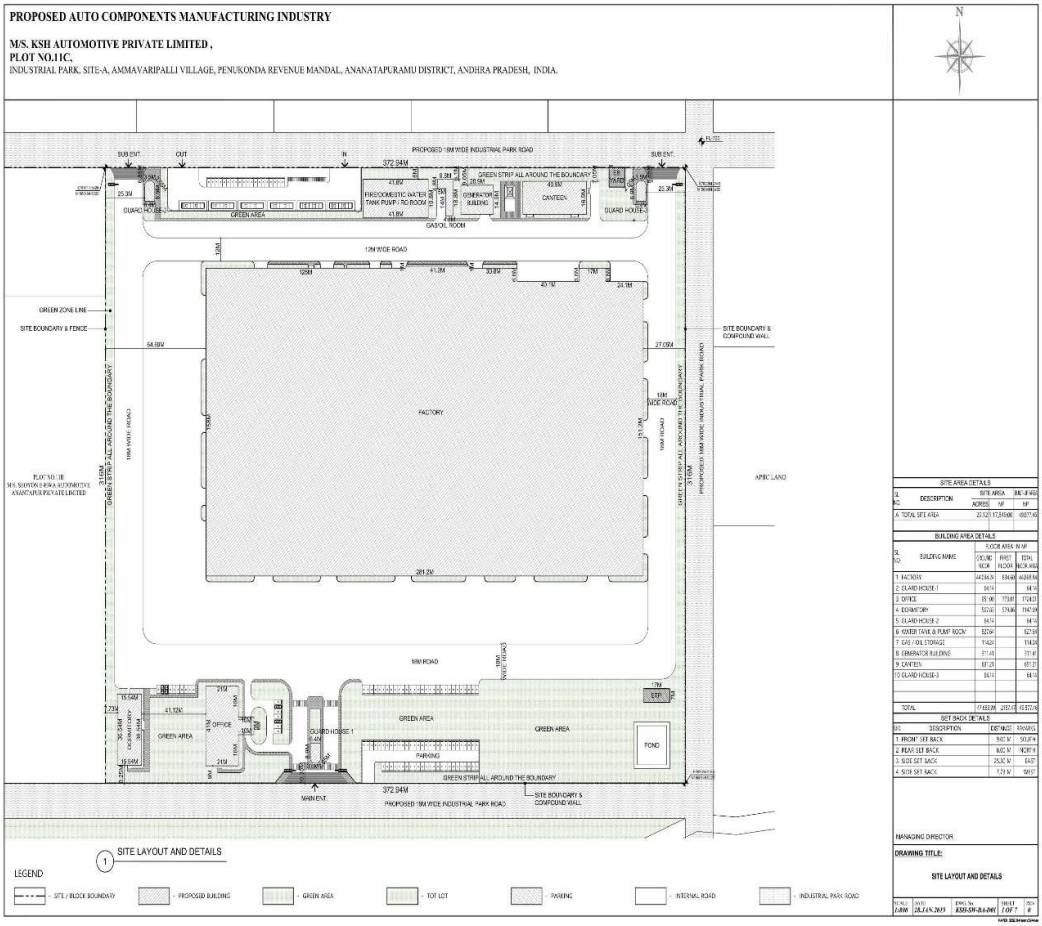
(1)	Classification of documents related to organizational boundaries	
		
(2)	Additional explanation of documents related to organizational boundaries	

Guidelines for Preparing the Site Organizational Boundary (Photo)

(1)	Classification of documents related to organizational boundaries	Provide aerial photos of the site to verify and substantiate the organizational boundary.
(2)	Additional explanation of documents related to organizational boundaries	If the attached site photo includes areas outside the organizational boundary, provide separate markings and additional explanations (If there are any specific details within the organizational boundary, include supplementary explanations).

Site Organizational Boundary (Facility Layout)

(1)	Classification of documents related to organizational boundaries	



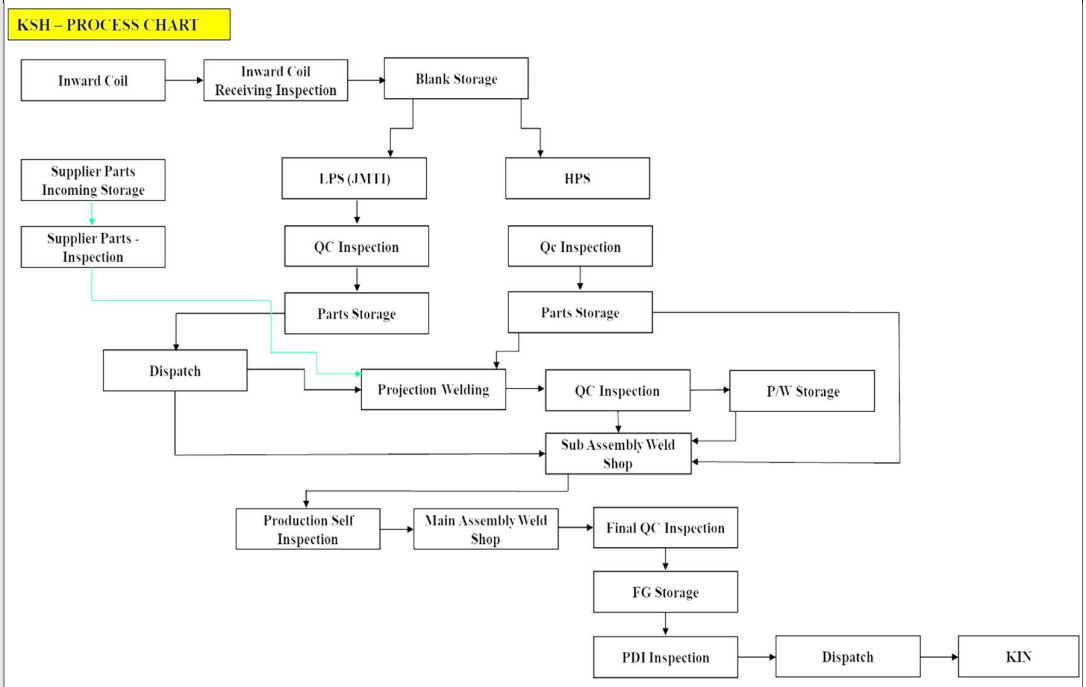
(2)	Additional explanation of documents related to organizational boundaries	

Guidelines for Preparing the Site Organizational Boundary (Facility Layout)

(1)	Classification of documents related to organizational boundaries	Provide an image file of the facility layout to verify and substantiate the site organizational boundary.
(2)	Additional explanation of documents related to organizational boundaries	If the attached site photo includes areas outside the organizational boundary, provide separate markings and additional explanations (If there are any specific details within the organizational boundary, include supplementary explanations).

Site Organizational Boundary (Process Diagram)

(1)	Classification of documents related to organizational boundaries	



(2)	Additional explanation of documents related to organizational boundaries	

Guidelines for Preparing the Site Organizational Boundary (Process Diagram)

(1)	Classification of documents related to organizational boundaries	Provide a process diagram (GHG flowchart) of the site to verify and substantiate the site organizational boundary.
(2)	Additional explanation of documents related to organizational boundaries	If the attached site photo includes areas outside the organizational boundary, provide separate markings and additional explanations (If there are any specific details within the organizational boundary, include supplementary explanations).

3 Basic Information

Organizational Boundary

Selected Organizational Boundary Setting Approach	
☐ Financial control approach	☐ **Operational control approach**
Inclusion of overseas sites	
☐ Yes (Country:)	
☐ No	
☐ **No overseas sites**	

Operational Boundary

Inclusion of Refrigerants for Calculation					
☐ Yes			☐ **No**		
Refrigerant Types and GWP					
Refrigerant	NA				
GWP	NA				

Emission Information

EMISSIONS	**TOTAL (tCO2e)**	CO2 (t)	CH4 (t)	N2O (t)	HFCs (t)	PFCs (t)	SF6 (t)
Scope 1	471.358						
Scope 2	10978.29						
Scope 3 (Optional)							

Methodology and Emission Factors

GHG Methodology and Emission Factors Used in Emissions Calculation	
Domestic	
activity data (AD) × emission factor (EF)	
Overseas	
Countries	Methodology and Emission Factors

4 Reduction Information

Baseline Year for Reduction

Baseline Year for Reduction	
☐ **2023**	☐ Other (Reason: 2024)

Reduction Status for Reporting Year

Baseline year Scope1 emission	Baseline year Scope2 emission	Baseline year total emission	Reduction rate compared to baseline year (%)	Target year emission	Target year Scope1 emission	Target year Scope2 emission	Achievement rate
471.358	10978.29	11449.6	1.5%	506.75	10571.89	11078.6	3.2%

Reduction Plan

Plan No.	Site No.	Emission Facility Name	Introduction Year	Completion Year	Activity Type	Reduction Effect (tCO_2e/year)	Investment Performance (₹)	Expected Lifespan (years)
1	**Ksh**	**LED Retrofit in Fabrication Area**	**2023**	**2023**	**Energy Efficiency**	**1.50%**	**₹ 2,50,000**	**15**
2	Ksh	Electric Forklifts (15 Nos)	2024	2024	Electrification	3.20%	₹ 60,00,000	10
3	Ksh	Press shop motors off during idle	2025	2025	Monitoring & Optimization	**1.50%**	₹ 0	25
4	Ksh	Welding Gun Tip Maintenance System	2026	2026	Process Optimization	**1.50%**	₹ 4,00,000	10
5	Ksh	Gas Flow Optimization (MIG Welding)	2027	2027	Process Optimization	**1.50%**	₹ 6,00,000	10
6	Ksh	VFD Installation for Motors	2028	2028	Energy Efficiency	**1.50%**	₹ 7,50,000	10
7	Ksh	Solar Rooftop	2029	2029	Renewable Energy	**1.50%**	₹ 32,00,000	25
8	Ksh	Transition of Diesel Cars to EV Cars	2030	2030	Energy Efficiency	**1.50%**	₹ 50,00,000	15

Reduction Performance

Plan No.	Site No.	(1p) Emission Facility Name	Reduction Performance	Reduction Effect (tCO_2e/year)	Investment Performance (₹)	Expected Lifespan (years)
1	Ksh	LED Retrofit in Fabrication Area	1.50%	1.50%	2,50,000	15
2	Ksh	Electric Forklifts (15 Nos)	3.20%	3.20%	60,00,000	10
3	Ksh	Press shop motors off during idle	**1.50%**	**1.50%**	0	25
4	Ksh	Welding Gun Tip Maintenance System	**1.50%**	**1.50%**	4,00,000	10
5	Ksh	Gas Flow Optimization (MIG Welding)	**1.50%**	**1.50%**	6,00,000	10
6	Ksh	VFD Installation for Motors	**1.50%**	**1.50%**	7,50,000	10
7	Ksh	Solar Rooftop	**1.50%**	**1.50%**	32,00,000	25
8	Ksh	Transition of Diesel Cars to EV Cars	**1.50%**	**1.50%**	50,00,000	15

Annual Reduction Plan and Performance

Year	Emissions of the Previous Year (tCO_2e)	Reduction Amount (tCO_2e)	Reduced Emissions (tCO_2e)	Reduction Rate (%)
2023	**11,624.90**	**175.3**	**11,449.60**	1.50%
2024	**11,449.60**	**371**	**11,078.60**	3.20%
2025	**11,078.60**	**166.2**	**10,912.40**	**1.50%**
2026	**10,912.40**	**163.7**	**10,748.70**	**1.50%**
2027	**10,748.70**	**161.2**	**10,587.50**	**1.50%**
2028	**10,587.50**	**158.8**	**10,428.70**	**1.50%**
2029	**10,428.70**	**156.4**	**10,272.30**	**1.50%**
2030	**10,272.30**	**154.1**	**10,118.20**	**1.50%**

Current Status and Plan for Renewable Energy Use

Current Status of Renewable Energy Use (Direct Use Only)						
No.	Year of establishment	Contract duration	Type	Installation location	Installed capacity	Renewable energy production (kwh/m^2·yr)
1	-	-	-	-O-O sit-e	-	-

Plan for Renewable Energy Use (Direct Use Only)						
No	Year of implementation	Contract duration	Type	Installation location	Installed capacity	Renewable energy production (kwh/m^2·yr)
1	2027	1 year	solar	Roof top		

4-1 Detailed Reduction Plan

*Complete for each reduction plan

Overview

Reduction plan No.	Objective and description of activity	Expected schedule	Performance
1	LED LIGHTING	JAN 2024	*1.5% REDUCTION RATE*

Details

Reduction facility and technology
1. Name of re ***Annual energy per LED*** *100W×12 hours/day×365=438,000 Wh/year=438 kWh/year100W \times 12 \, \text{hours/day} \times 365 = 438,000 \, \text{Wh/year} = 438 \, \text{kWh/year}100W×12hours/day×365=438,000Wh/year=438kWh/year* *2.* ***Annual CO_2e per LED*** *438 kWh×0.708 kg CO_2e/kWh=310.10 kg CO_2e/year438 \, \text{kWh} \times 0.708 \, \text{kg } CO_2\text{e/kWh} = 310.10 \, \text{kg } CO_2\text{e/year}438kWh×0.708kg CO_2e/kWh=310.10kg CO_2e/year* *3.* ***Target emission*** *= 175.3 tCO_2e = 175,300 kg CO_2e*

Process Diagram (Include a schematic for comparison and indicate the location of reduction facility)

Before implementation

1 Raw Materials
→ Glass, Sodium, Metal Parts

2 Manufacturing
→ Lamp assembly with ballast and ignitor

3 Transportation
→ Factory → Site (High CO_2 emissions)

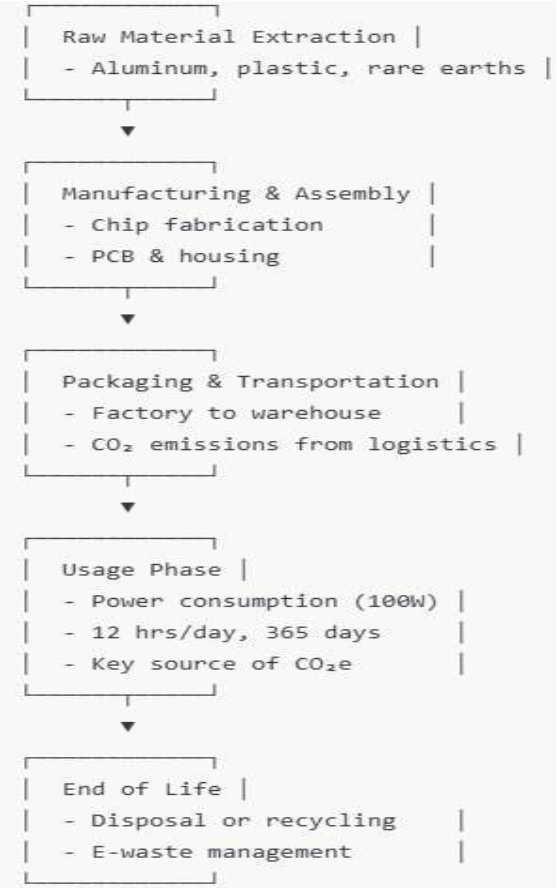
4 Installation
→ Fixed on poles/ceilings

5 Usage
→ High power (e.g., 250W), long hours
→ Generates heat, takes time to start

6 Maintenance
→ Frequent bulb failure, short life (~12,000 hrs)

7 Disposal
→ Hazardous waste (sodium content), complex handling

After implementation



Facility Installation Photos

Facility photos

GHG Emission Reduction Effects

No.	GHG emissions before improvement		GHG emissions after improvement (planned)		Expected effect
	GHG type	Annual CO_2 equivalent (tCO2e/yr)	GHG type	Annual CO_2 equivalent (tCO2e/yr)	GHG reduction amount
1	*CO2*	**11,624.90**	*CO2*	**11,449.90**	175.3
2	*CH4*		*CH4*		
3	*N2O*		*N2O*		

Calculation of GHG Reduction Amount and Payback Period

Calculation of emissions before reduction
Provide a detailed emissions calculation formula using activity data, variables, and emission factors. *Example) GHG emissions before reduction from heat (steam) recovery (tCO_2eq/day) = Recovered Heat [Gcal/day] * 4.1868 [GJ/Gcal] / 1,000 [GJ/TJ] * Heat (Steam emission factor) [tCO_2eq/TJ]*

Calculation of emissions after reduction
1. **Annual energy per LED** 100W×12 hours/day×365=438,000 Wh/year=438 kWh/year100W \times 12 \, \text{hours/day} \times 365 = 438,000 \, \text{Wh/year} = 438 \, \text{kWh/year}100W×12hours/day×365=438,000Wh/year=438kWh/year 2. **Annual CO_2e per LED** 438 kWh×0.708 kg CO_2e/kWh=310.10 kg CO_2e/year438 \, \text{kWh} \times 0.708 \, \text{kg } CO_2e/\text{kWh} = 310.10 \, \text{kg } CO_2e/\text{year}438kWh×0.708kg CO_2e/kWh=310.10kg CO_2e/year 3. **Target emission** = 175.3 tCO_2e = 175,300 kg CO_2e

Calculation of payback period
The unit price of electricity, energy, and fuel is applied based on the average price for the reporting year.

GHG emissions monitoring system (measurement)
Specify the types of measuring instruments required for GHG emissions measurement (e.g., power meters, flow meters), and clearly define the measurement frequency (e.g., continuous measurement, instantaneous measurement).

GHG emissions monitoring methods
Data collection methods required for calculating GHG reductions (e.g., automated data logging, manual recording, weekly photo documentation), and frequency of data management (e.g., converting real-time measurement data into weekly or monthly records) should be clearly specified.

Maintenance and management plan for installed facility

Operation plan for maintenance personnel

5 Optional Information

Organizational Boundary (Attach Ownership and Governance Structure Separately)

List of all entities or facilities in which the reporting company holds equity, financial control, or operational control.	Equity ownership of the entity	Does the reporting company have financial control?	Does the reporting company have operational control?
		(Yes/No)	(Yes/No)
		(Yes/No)	(Yes/No)
		(Yes/No)	(Yes/No)
		(Yes/No)	(Yes/No)

Emission Information

Emissions categorized by type	
Scope 1: Direct carbon emissions from owned/controlled operations	Scope 1 emissions
a. Direct emissions from stationary combustion	
b. Direct emissions from mobile combustion	YES
c. Direct emissions from processes	
d. Fugitive direct emissions (refrigerants)	
Scope 2: Indirect emissions from purchased electricity, steam, or heat	Scope 2 emissions
a. Indirect emissions from purchased/acquired electricity	YES
b. Indirect emissions from purchased/acquired steam	
c. Indirect emissions from purchased/acquired heat	

Emissions categorized by country	
Country	Emissions

GHG emissions not covered by the Kyoto Protocol (e.g., CFCs, NOx,)

Related ratio performance indicators (e.g., GHG emissions per revenue, reduction % compared to the previous year)

Information on excluded emissions from baseline year recalculation (e.g., process changes, efficiency improvements, plant closures, and acquisitions)

GHG emissions data for all years between the baseline year and reporting year (including detailed information and reasons for recalculation, if applicable)

Additional Information

Information on all internal documents addressing GHG-related responsibilities and roles

Details on inventory quality (e.g., causes and magnitude of uncertainties in emission estimates) and overview of internal documents implemented to improve inventory quality

Status of other environmental certifications (e.g., ISO 14001, etc.)

[Attachment 2] **Corporate Vehicle Summary**

No.	Vehicle number	Fuel type (gasoline, diesel)	Ownership type (rental, lease, purchase)	OO year Usage (liters)
1				