

Greenhouse Gas Emissions Inventory

According to The Greenhouse Gas Protocol A Corporate Accounting
and Reporting Standard REVISED EDITION

DONGGUAN KAYO BATTERY CO.,LTD.

2023

KAYO

Report edited by CIRS GROUP

Editor: Guangping Chen

Checker: Charles Chang

Date: 28/03/2024

REQUIRED INFORMATION

KAYO BATTERY INTRODUCTION

KAYO BATTERY Co., Ltd. was established in 1999 and specializes in the research, manufacture, and distribution of high-performance and environmentally friendly lithium-ion batteries. Their product line includes li-ion polymer batteries, li-ion cylindrical batteries, LiFePO4 batteries, and various kinds of battery packs.

DONGGUAN KAYO BATTERY Co.,LTD was established in 2017, with the main production area about 20000 m². We absorbed the advanced management experiences in R & D, Production and Quality control, due to our company's good business mentality and correct of marketing strategy, we have gained a stable and sustaining growing through these years.

We keep a good friendship with our supplier and have strategy cooperation in the special area, in order to demand the increasing of production capacity; we established Hunan Factory specialized in cells' manufacture in 2014.

We have strict and sophisticated quality guarantee system and passed the ISO 9001:2008 and ISO14000:2004 certifications. Most importantly, our battery products obtained UL, CB, KC, PSE, 3C, CE, FCC, UN38.3, RoHS and other international certificates.

Our marketplace has cover all over the world, including Europe, North America, South America, Southeast Asia, Taiwan, Korea and mainland China. We cooperated with some well-known companies, likes Honeywell, Philips, SAMSUNG, Toshiba, NTT, Huawei and Greatwall.

SCOPE OF THIS REPORT

KAYO's Greenhouse Gas Emissions Inventory Report in 2023 edited according to The Greenhouse Gas Protocol A Corporate Accounting and Reporting Standard REVISED EDITION.

The scope of data as presented in this report includes direct (Scope 1), indirect energy (Scope 2), and other indirect (Scope 3) emissions from DONGGUAN KAYO BATTERY CO.,LTD. for the period from 1/January/2023 to 31/December/2023.

Have any facilities, operations and/or emissions sources been excluded from this inventory? If yes, please specify.
No
Reporting period covered by this inventory
From 2023-01-01 to 2023-12-31

ORGANIZATIONAL BOUNDARIES

Which consolidation approach was chosen (check each consolidation approach for which your company is reporting emissions.) If your company is reporting according to more than one consolidation approach, please complete and attach an additional completed reporting template that provides your company's emissions data following the other consolidation approach(es).

Equity Share <input type="checkbox"/>	Financial Control <input type="checkbox"/>	Operational Control <input checked="" type="checkbox"/>
--	---	--

OPERATIONAL BOUNDARIES

Are Scope 3 emissions included in this inventory?
yes <input checked="" type="checkbox"/>
no <input type="checkbox"/>
If yes, which types of activities are included in Scope 3 emissions?
Category 1: Purchased goods and services

Category 4: Upstream transportation and distribution
 Category 5: Waste generated in operations
 Category 6: Business travel
 Category 7: Employee commuting
 Category 9: Downstream transportation and distribution

INFORMATION ON EMISSIONS

The table below refers to emissions independent of any GHG trades such as sales, purchases, transfers, or banking of allowances

EMISSIONS	TOTAL (mtCO ₂ e)	CO ₂ (mt)	CH ₄ (mt)	N ₂ O (mt)	HFCs (mt)	PFCs (mt)	SF ₆ (mt)	NF ₃ (mt)
Scope 1	172.3082	62.5510	39.6837	0.6835	69.3900	0.0000	0.0000	0.0000
Scope 2	608.1634	608.1634	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Scope 3 (OPTIONAL)	10071.6607	10071.6607	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Direct CO₂ emissions from Biogenic combustion (mtCO₂)

None

BASE YEAR

Year chosen as base year

2022

Clarification of company-determined policy for making base year emissions recalculations

None

Context for any significant emissions changes that trigger base year emissions recalculations

None

Base year emissions

EMISSIONS	TOTAL (mtCO ₂ e)	CO ₂ (mt)	CH ₄ (mt)	N ₂ O (mt)	HFCs (mt)	PFCs (mt)	SF ₆ (mt)
Scope 1	127.4907	79.5451	39.5156	0.7508	7.6792	0.0000	0.0000
Scope 2	434.6393	434.6393	0.0000	0.0000	0.0000	0.0000	0.0000
Scope 3 (OPTIONAL)	12025.1358	12025.1358	0.0000	0.0000	0.0000	0.0000	0.0000

METHODOLOGIES AND EMISSION FACTORS

Methodologies used to calculate or measure emissions other than those provided by the GHG Protocol. (Provide a reference or link to any non-GHG Protocol calculation tools used)

None

Optional Information

ORGANIZATIONAL BOUNDARIES

List of all legal entities or facilities over which reporting company has equity share, financial control or operational control	% equity share in legal entity	Does reporting company have financial control?(yes/no)	Does reporting company have operational control? (yes/no)
DONGGUAN KAYO BATTERY CO.,LTD.	100	yes	yes

If the reporting company's parent company does not report emissions, include an organizational diagram that clearly defines relationship of the reporting subsidiary as well as other subsidiaries
Not Applicable

INFORMATION ON EMISSIONS

Emissions disaggregated by source types	
Scope 1: Direct Emissions from Owned/Controlled Operations	mtCO2e
a. Direct Emissions from Stationary Combustion	41.4653
b. Direct Emissions from Mobile Combustion	21.9989
c. Direct Emissions from Process Sources	0.0000
d. Direct Emissions from Fugitive Sources	108.8440
e. Direct Emissions from Agricultural Sources	0.0000
Scope 2: Indirect Emissions from the Use of Purchased Electricity, Steam, Heating and Cooling	mtCO2e
a. Indirect Emissions from Purchased/Acquired Electricity	608.1634
b. Indirect Emissions from Purchased/Acquired Steam	0.0000
c. Indirect Emissions from Purchased/Acquired Heating	0.0000
d. Indirect Emissions from Purchased/Acquired Cooling	0.0000

Emissions disaggregated by facility (recommended for individual facilities with stationary combustion emissions over 10,000 mtCO2e)	
Facility	Scope 1 emissions mtCO2e
None	None

Emissions disaggregated by country/area	
Country/Area	Emissions (specify Scopes included) mtCO2e
Dongguan City, Guangdong Province, China	10852.132

Emissions attributable to own generation of electricity, heat, or steam that is sold or transferred to another organization
None

Emissions attributable to the generation of electricity, heat or steam that is purchased for re-sale to non-end users
None

Emissions from GHGs not covered by the Kyoto Protocol (e.g., CFCs, NOx,)
None

Information on the causes of emissions changes that did not trigger a base year emissions recalculation (e.g., process changes, efficiency improvements, plant closures)

None

GHG emissions data for all years between the base year and the reporting year (including details of and reasons for recalculations, if appropriate)

2022, 12587.266 mtCO₂e

2023, 10852.132 mtCO₂e

Relevant ratio performance indicators (e.g. emissions per kilowatt-hour generated, sales, etc.)

Floorspace Intensity (kgCO₂e/m²) : 1339.769 kgCO₂e/m²

Floorspace Reference (m²) : 8100 m²

An outline of any GHG management/reduction programs or strategies

1. From the base year of 2022, KAYO has adopted "CIRS Carbon Cloud" for its emission factors and activity data management.
2. KAYO has planned to start using renewable electricity starting in 2024.
3. KAYO planned to involve its supply chain in carbon reduction and aims to start using recycled and bio-based materials in 2024.

ADDITIONAL INFORMATION

Information on any contractual provisions addressing GHG-related risks and obligations

None

An outline of any external assurance provided and a copy of any verification statement, if applicable, of the reported emissions data.

None

Information on the quality of the inventory (e.g., information on the causes and magnitude of uncertainties in emission estimates) and an outline of policies in place to improve inventory quality

None

Information on any GHG sequestration

None

INFORMATION ON OFFSETS

Information on offsets that have been purchased or developed *outside* the inventory boundary

Quantity of GHGs (mtCO ₂ e)	Type of offset project	Were the offsets verified/certified and/or approved by an external GHG program (e.g., CDM)
None	None	None

Information on reductions *inside* the inventory boundary that have been sold/transferred as offsets to a third party.

Quantity of GHGs (mtCO ₂ e)	Type of offset project	Were the offsets verified/certified and/or approved by an external GHG program (e.g., CDM)
None	None	None