

Responsible Party	Companhia de Electricidade de Macau – CEM, S.A.	
Verification Criteria	ISO 14064-1:2018	
Reporting Period	1 st January 2025 to 31 st December 2025	
GHG Emission Results from Responsible Party's GHG Statement	Direct GHG Emissions	327,539.20 tonnes of CO ₂ e
	Indirect GHG Emissions from Imported Energy	57,557.96 tonnes of CO ₂ e
	Indirect GHG Emissions from Transportation	451.29 tonnes of CO ₂ e
	Indirect GHG Emissions from Products used by the Responsible Party	2,530,008.50 tonnes of CO ₂ e
	Indirect GHG Emissions Associated with the used of Products from the Responsible Party	Not quantified
	Indirect GHG Emissions from Other Sources	Not quantified
	Total Direct and Indirect GHG Emissions	2,915,556.95 tonnes of CO₂e
	CO ₂ Emissions from Combustion of Biomass	0 tonnes of CO ₂ e
	GHG Removals	-0.02 tonnes of CO ₂ e
Verification Date(s):	24 – 27 March 2026	
SGS Delivering Office:	SGS Hong Kong Limited – Energy and Carbon Services	
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Verification Team Leader:	Conan Lee 	
Other Accompanying Person (Names & Roles)	N/A	

SGS has been contracted by Companhia de Electricidade de Macau – CEM, S.A. (hereinafter referred to as “CLIENT”), Estrada de D. Maria II, numeros 32 a 36, Edificio CEM, em Macau, for the Greenhouse Gas (GHG) verification in accordance with ISO 14064-3:2019 as provided by Companhia de Electricidade de Macau – CEM, S.A. (hereinafter referred to as “RESPONSIBLE PARTY”), Estrada de D. Maria II, numeros 32 a 36 Edificio CEM, em Macau, in the GHG Statement in the form of *Greenhouse Gas Inventory Report 2025 (Date: 16th March 2026)* covering GHG emissions and removals of the period 1st January 2025 to 31st December 2025.

1. VERIFICATION OBJECTIVES

The purposes of this verification exercise were, by review of objective evidence, to independently review:

- Conformance with agreed verification criteria, including the principles and requirements of relevant standards or GHG programmes, if applicable, within the scope of the verification;
- Whether the GHG emissions and removals were as declared by the organization's GHG Statement.

2. VERIFICATION CRITERIA AND REFERENCE

Criteria against which the verification assessment undertaken were the requirement of:

- ISO 14064-1:2018

Other references which the verification assessment considered were:

- N/A

3. VERIFICATION SCOPE

This engagement covered verification of emissions and removals from anthropogenic sources and sinks of GHGs included within the scope outlined below.

- The organization boundary was established following operation control approach
- Location/boundary of the activities:
 - o CEM Main Building
 - Estrada de D. Maria II, numeros 32 a 36, Edificio CEM, em Macau
 - o Power Generation Stations
 - Coloane Power Stations, Ka-Ho, Coloane, Macau
 - o Substations
 - 29 Primary Substations
 - Areia Preta (AP)
 - Coloane B (CB)
 - COTAI (CI)
 - Coloane (CL)
 - Concordia (CO)
 - Canal dos Patos (CP)
 - CIRS Incineration Plant (CS)
 - Dona Maria (DM)

- Ka-Ho (KH)
- Lotus (LT)
- Lisboa (LX)
- Macau Norte (MN)
- NAPE (NA)
- Nova Taipa (NT)
- Porto Exterior (PE)
- Penha (PN)
- Sao Paulo (SP)
- Taipa (TP)
- University of Macau (UM)
- Venetian (VN)
- DEPOT (DP)
- Ilha Verde (VD)
- Ocean Garden (OG)
- Hospital Conde S. Januário (HJ)
- Bridge Landing Point (BD)
- Hospital Cotai (HC)
- Pac On (PO)
- Nova CIRS (NS)
- Oriental Pearl (OP)

1,823 Customer Substations

- Refer to Appendix
 - Power Network Dispatch Centre
 - Avenida do Dr. Rodrigo Rodrigues, Tunel da Guia, S/N, Subestacao Porto Exterior, Macau
 - Customer Centre
 - Taipa Customer Centre, Rua de Braganca, S/N, Supreme Flower City, Edf. Lai Chun Kok, R/C Aa, Taipa, Macau
 - Store
 - CEM Store Department, Est. Governador Nobre de Carvalho, Taipa, Macau
 - CEM Apartments
 - Rua de Cantão, n°361B-361K, Edifício Yee On Court, 18-G
 - Avenida da Amizade, n°469, Edifício Jubilee Court, 12-C
 - Avenida da Amizade n°405, Edifício Seng Vo, 10-A
 - EV Charging Stations
- 1,530 EV Charging Stations
- 125 E-bike Charging Installations

- Refer to Appendix
 - Other metered facilities under CEM
- Physical infrastructure, activities, technologies and processes of the organization:

Generation, importation, transmission, distribution and sale of electric energy at high, medium and low voltage in Macau SAR
- GHG sources, sinks and/or reservoirs included: GHG sources and sinks as presented in the *Greenhouse Gas Inventory Report 2025 (Date: 16th March 2026)* of the RESPONSIBLE PARTY, which comprises the following emission categories:
 - Direct GHG emissions
 - Indirect GHG emissions from imported energy
 - Indirect GHG emissions from transportation
 - Staff commuting
 - Business travel
 - Indirect GHG emissions from product used by an organization
 - Purchased fresh water from Macao Water Supply Company
 - Purchased electricity from mainland China (CSG) that resale to end-user
 - Purchased electricity from refuse incineration plant (CIRS) that resale to end-user
- Types of GHGs included: CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, R-22, NOVEC 1230 and HFOs
- GWP adopted: IPCC Sixth Assessment Report (AR6)
- GHG information for the following period was verified: 1st January 2025 to 31st December 2025
- Level of assurance: Reasonable assurance
- Materiality thresholds: without major non-conformance to the agreed criteria in GHG quantification and reporting, and less than 5% error in misclassified GHG emissions of misapplication of calculations

4. ROLES AND RESPONSIBILITY

The management of the RESPONSIBLE PARTY was responsible for the organization's GHG information system, the development and maintenance of records and reporting procedures in accordance with that system, including the calculation and determination of GHG information and the reported GHG emissions and removals. This responsibility includes designing, implementing and maintaining a data management system relevant to the preparation and fair presentation of a GHG Statement in accordance with ISO 14064-1:2018.

It was SGS's responsibility to express a third party GHG verification opinion on the GHG Statement as provided by the RESPONSIBLE PARTY for the period 1st January 2025 to 31st December 2025 against the principles and requirements of ISO 14064-3:2019.

5. SUMMARY OF THE GHG STATEMENT

The GHG emission results presented in 2025 GHG Statement in the form of *Greenhouse Gas Inventory Report 2025 (Date: 16th March 2026)* of the RESPONSIBLE PARTY were listed below.

- Direct GHG emissions: 327,539.20 tonnes of CO₂e
- Indirect GHG emissions from imported energy: 57,557.96 tonnes of CO₂e

- Indirect GHG emissions from transportation: 451.29 tonnes of CO₂e
- Indirect GHG emissions from products used by the RESPONSIBLE PARTY: 2,530,008.50 tonnes of CO₂e
- CO₂ emissions from combustion of biomass: 0 tonnes of CO₂e
- GHG removals: -0.02 tonnes of CO₂e

6. EVIDENCE GATHERING ACTIVITIES

SGS planned and performed works to obtain the information, explanations and evidence which SGS considered necessary to provide a reasonable level of assurance that the GHG emissions and removals for the period 1st January 2025 to 31st December 2025 were fairly stated. The verification was mainly conducted through site visit, interview, document review and data verification in sampling. The evidence gathering procedures included but not limited to:

- Review and assessment of the RESPONSIBLE PARTY's GHG information management system and its control;
- Inspect the completeness of the RESPONSIBLE PARTY's inventory;
- Sampling of GHG emissions related activity data record to confirm accuracy of source data into calculations;
- Recalculation of emissions;
- Assessment against verification criteria, as well as evaluation of the GHG statement of the RESPONSIBLE PARTY

The data and information examined during the verification were historical and hypothetical in nature.

7. VERIFICATION OPINION

In SGS's opinion the presented GHG Statement by the RESPONSIBLE PARTY

- is materially correct and is a fair representation of the GHG data and information, and
- is prepared in accordance with the agreed criteria on GHG quantification and reporting.

Please refer to SGS Verification Opinion HK26/00000074 for the details of verification opinion.