



Independent Greenhouse Gas Verification Statement according to ISO 14064-3

To Amkor Technology Board of Directors,

Introduction

- EnviEstudos, S.A. has been contracted by ATEP - Amkor Technology Portugal, S.A. for the Independent Verification of the Greenhouse Gases (GHG) Emissions from Scope 1 and Scope 2, according to ISO 14064-3 and the GHG Protocol.
- The responsibility for providing the GHG information required for the verification is from the Environmental Manager of ATEP, that is the person in the organization responsible for the GHG information system, development and maintenance of records and reporting procedures.
- Its EnviEstudos, S.A. responsibility to carry an independent verification for the period of one year, 01/01/2018 to 31/12/2018, regarding the GHG Emissions from Scope 1 and Scope 2.

Scope of application

- The verification was carried out according to the principles of ISO 14064-3 and the GHG Protocol, with the principal objective to express an independent opinion about the statements done by ATEP regarding GHG emissions of Scope 1 and 2 in ATEP Greenhouse Gas Inventory Record 2018 (version 1.0) dated March, 15th 2019.
- Verification included the emissions of anthropogenic sources of GHG within the organization's boundary:
 - Organizational boundary was established using the control approach;
 - Operational boundaries are the total of activities, technologies and processes inside the organizational boundary;
 - The activities carried out by the organization are semiconductor packaging, assembly and test, engineering and manufacturing services;
 - Facilities are located in Avenida Primeiro de Maio, 801 Mindelo, Portugal;
 - GHG sources, sinks and/or reservoirs included:
 - Scope 1 - Stationary Combustion (LNG Boilers, Diesel Generator and Emergency Pumps) and Process Emissions (bottles of CO₂, CF₄ and CHF₃ for water parameter adjustment);
 - Scope 2 - Emissions from purchased electricity.
 - Types of GHG included: CO₂, CH₄, N₂O, HFCs, CF₄ and CHF₃.
 - Period of verification: January 1 through December 31 of 2018.

Conclusions

- The intended use of the verification statement includes the provision of information for Corporate reporting on GHG emissions within 2018 Corporate Sustainability Report;
- The materiality required of the verification was considered by EnviEstudos, S.A. based on user needs;

- The work was done to provide a reasonable level of assurance regarding the GHG emissions for the period 01/01/2018 to 31/12/2018, including evidence-based analysis of relevant evidences for the quantities and disclosures of GHG emissions reported by ATEP;
- For the above mentioned, the verification included:
 - o Original data verification (diesel and natural gas invoices);
 - o Calculation methods applied according to the excel spreadsheet base for ATEP Greenhouse Gas Inventory Record 2018 (version 1.0) dated March, 15th 2019 (emission factors used, information sources, among others);
 - o Recalculation of GHG Emissions from Scope 1 and Scope 2;
 - o Previous reports and declarations;
 - o On site verification of emission sources and collecting data procedures.
- EnviEstudos, S.A. holds a ISO 14065:2014 accreditation for the verification of reports on greenhouse gas emissions and tonne-kilometers, as well as a accreditation as verifier in accordance with Directive 2003/87/EC of the European Parliament and of the Council;
- EnviEstudos, S.A. holds a ISO 9001:2015 certificate under which maintains a quality management system, including policies and documented procedures, regarding ethic requirements, professional standards e legal and regulatory requirements;
- For the purpose of improvement, a more detailed verification report has been prepared and provided to ATEP, listing good practices and opportunities for improvement;
- According to the above, it is our opinion that the information provided is materially correct and is a faithful representation of the information and data relating to the GHG emissions within the scope of this verification.

Emissions:

Scope 1 (ton CO ₂ eq)	Scope 2 (ton CO ₂ eq)	Total emissions (ton CO ₂ eq)
2.324,997	11.486,464	13 811,460

Almada, April, 30th 2019

Vitor Simões

Vitor Simões (Lead Verifier)

Pedro Ferreira

Pedro Ferreira (Verifier)

Célia Fonseca

Célia Fonseca (Technical Reviewer - CELE Auditor)