

# Product Carbon Footprint Verification Opinion

The Inventory of Product Carbon Footprint of  
**VIVE XR Elite**

which is calculated by

**HTC Corporation**

No. 23, Xinghua Rd., Taoyuan Dist.,  
Taoyuan City, Taiwan (R.O.C.)

Based on life cycle assessment verified in accordance  
with ISO 14064-3:2019 as meeting the requirements of

**ISO 14067:2018**

**Basis of Assessment**

Cradle-to-Grave

Authorized by

Stephen Pao

Knowledge Deputy General Manager

Version 1

Issue Date: 01 April 2024

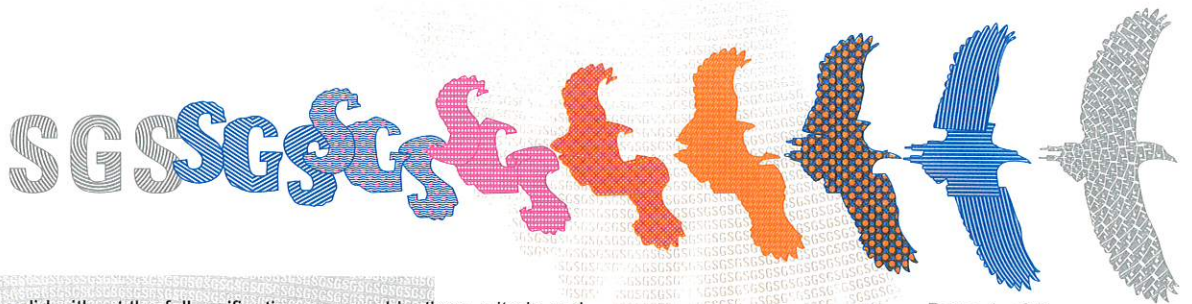
Valid Date: 31 March 2026

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SGS Taiwan Ltd.

No. 136-1, Wu Kung Road, New Taipei Industrial Park, Wu Ku District,  
New Taipei City 24803, Taiwan

t (02) 22993279 f (02)22999453 www.sgs.com



Opinion TW24/00118CFP, continued

Product Name	VIVE XR Elite (including headset, battery cradle, controllers, packaging materials)					
Functional Unit	per Set (including packaging materials)					
Life cycle GHG emissions						
Functional Unit emissions (Unit: kilograms of CO <sub>2</sub> e)						
Life Cycle Stage	Material	Manufacture	Distribution	Use	Disposal	Total
VIVE XR Elite	22.720	45.041	19.148	5.548	0.187	92.64

SGS has been commissioned by HTC Corporation (hereinafter referred to as “HTC”), No. 23, Xinghua Rd., Taoyuan Dist., Taoyuan City, Taiwan (R.O.C.) to conduct the life cycle Greenhouse Gas (hereinafter referred to as “GHG”) emissions verification of VIVE XR Elite in accordance with ISO 14064-3:2019 against the requirements of

## ISO 14067:2018

### Roles and responsibilities

- The management of HTC is 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 the life cycle GHG emissions for product information and the reported life cycle GHG emissions of the product.
- Contract Date: The verification was based on the verification scope, objectives and criteria as agreed between HTC and SGS on 15 August 2023.
- Verification Standard: ISO 14067:2018  
Greenhouse gases- Carbon footprint of products- Requirements and guidelines for quantification
- Verification Period: 26 February 2024 to 12 March 2024.

### Scope

- GHG information for the following production period was verified : 01 January 2023 to 31 December 2023.
- Title or description of activities : Product carbon footprint verification of the Cradle-to-Grave life cycle GHG emissions manufactured by HTC:
  - VIVE XR Elite
- Manufacturing location :
  - HTC Corporation, No. 23, Xinghua Rd., Taoyuan Dist., Taoyuan City, Taiwan (R.O.C.)
- Product Category Rule : Nil
- Functional unit : per Set (including packaging materials)
- Declared unit : Nil
- System boundary : Covers a Cradle-to-Grave assessment of the full life cycle emissions; the system boundary was clearly defined in accordance with ISO 14067:2018. All GHG’s enlisted on ISO 14067:2018.
- Data resources : The primary data collection is from manufacturing and operational control phases. The secondary data collection is from Carbon Footprint Information Platform, Ecoinvent 3.9.1 database.

- Life cycle assessment tool and index :
  - Life cycle emissions are calculated by Microsoft Cloud for Sustainability.
  - IPCC 2021 AR6 GWP values are applied in this inventory.
- Level of assurance: In accordance with verification criteria and the execution of verification procedures based on bilateral agreements, the process aligns with the materiality requirements and the reasonable assurance level recognized by authorities.
- Materiality : 5%.

### Objective

The purpose of this verification exercise is, by review of objective evidence, to independently review:

- Whether the life cycle GHG emissions of the product are as declared by the organization's GHG assertion.
- The data reported is accurate, complete, consistent, transparent and free of material error or omission.

### Conclusion

- SGS's approach is risk-based, drawing on an understanding of the risks associated with reporting the life cycle GHG emissions of product information and the controls in place to mitigate these risks. Our examination included assessment and a test of evidence relevant to the amounts and disclosures in relation to the reported life cycle GHG emissions of the product. We planned and performed our work to obtain the information, explanations and evidence that the life cycle GHG emissions are free from material misstatement.
- Verification Opinion: the opinion of SGS is modified in accordance with the following described circumstances.
  - The auditor has sufficient and appropriate evidence to support the material emissions, removals, or storage.
  - The auditor applies appropriate criteria for the material emissions, removals, or storage.
  - When the auditor intends to rely on relevant controls, the effectiveness of those controls has been assessed.
  - The auditor, applying the ISO 14067:2018 standard, presents the following findings. After adjustments and corrections, no material errors were identified.
    - The sensitivity analysis is not complete.
    - Some allocation principles are not appropriate.
    - Some activity data is incorrect.
    - Some emission factors are inappropriate.
- Retention Limitation: Nil



**Confidentiality**

The reports and attachments may contain relevantly confidential information of the clients. In addition to being submitted as governmental application or certification documents, the reports and attachments are not allowed to be edited, duplicated, or published without the clients' agreement in written form.

**Avoidance of Conflict of Interest**

The reports and attachments are completely complied with the standards and procedures that related-authorities established. The reports and attachments of auditing process are conduct with fairness and honesty. If not, the auditing institution not only has to bear the relevant compensation duties, but also to receive legal charge and punishment.

**Verifier Group**

Above opinions coincide with auditing process with fairness and impartiality, and aim at the emission of clients.

Lead Verifier: *Belinda Shih*

Verifier: *Kai ping Teh*

This opinion shall be interpreted with the GHG assertion of HTC as a whole. This result shall be valid for a maximum period of two years, after which the GHG emission shall be re-assessed.

Note: This Opinion is issued, on behalf of Client, by SGS Taiwan Ltd. ("SGS") under its General Conditions for Green Gas Verification Services available at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). The findings recorded hereon are based upon an audit performed by SGS. A full copy of this Opinion, the findings and the supporting Carbon Footprint Assertion may be consulted at HTC, No. 23, Xinghua Rd., Taoyuan Dist., Taoyuan City, Taiwan (R.O.C.). This Opinion does not relieve Client from compliance with any bylaws, federal, national or regional acts and regulations or with any guidelines issued pursuant to such regulations. Stipulations to the contrary are not binding on SGS and SGS shall have no responsibility vis-à-vis parties other than its Client.