

## Methodology Validation Opinion

The methodology described in the document  
**CarbonCare Emission Calculation Methodology**

Prepared by:

**CarbonCare**

has been validated in accordance with ISO 14064-3:2019 as  
meeting the principles and rules laid down in

**ISO 14083:2023**

*For the quantification of transport and logistic CO<sub>2</sub> emissions*

Approved by:

M<sup>a</sup> Lourdes Martín Mangas

Technical Director of Sustainability and Climate Change

Date: 21<sup>th</sup> July 2023

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## **Methodology Validation Opinion**

CarbonCare, throughout the document CarbonCare Emission Calculation Methodology presents the methodology applied to calculate emissions generated in the global, holistic transport chains, using Transport Chain Elements (TCEs). CarbonCare calculates seven TCEs: road, air, sea (open sea), rail, IWW (inland waterways), ferry and hub. The methodology has been validated with data from 2022.

SGS has planned and performed the current work to obtain the information, explanations and evidence considered necessary to validate the methodology used.

### **Scope**

The methodology refers to the quantification of GHG emissions of transport chain including the following processes, which produce GHG by combustion or by leakage, regardless which organization operates them: vehicle operational processes, hub equipment operational processes, vehicle energy provision processes, hub equipment energy provision processes, loaded and empty trips made by vehicle, hence including diversionary and/or out-of-route distance, start-up and idling of vehicles, transshipment and (de)boarding equipment, combustion and/or leakage of energy carriers at vehicle or hub equipment level, leakage of refrigerants used by vehicles or hubs.

### **Level of Materiality**

The materiality required of the validation was considered by SGS to be below 5%.

### **Opinion**

Based on the process and procedures conducted, SGS concludes that the presented GHG statement:

- Is materially correct and is a fair representation of GHG data and information, and
- Has been prepared in accordance with the requirements of ISO 14083:2023, in relation to its quantification, control and notification.

This opinion shall be interpreted with CarbonCare Emission Calculation Methodology as a whole.

**Note:** This Opinion is issued, on behalf of Client, by SGS Tecnos S.A.U. ("SGS") under its General Conditions included in [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). A full copy of this opinion and the supporting GHG Statement may be consulted at CarbonCare. 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.

