



NEW CARBON FOOTPRINT STUDIES, IN ACCORDANCE WITH ISO 14067

Frequently asked questions



What is the carbon footprint of a cork stopper?

The carbon footprint of a cork stopper refers to the total amount of greenhouse gas (GHG) emissions associated with its life cycle, from the extraction of the raw material to the finished product leaving the factory (cradle-to-gate), or to its end of life (cradle-to-grave).

What does ISO 14067 mean?

The ISO14067 standard focuses on assessing and communicating the amount of greenhouse gases released during a product's life cycle, providing a standardised framework for calculating a product's carbon footprint.

What are the advantages of ISO 14067?

ISO 14067 allows for the inclusion of soil-related carbon sequestration. It applies to all goods and services, including all stages of the product life cycle, and provides requirements for quantifying GHG emissions at product level.

Is ISO 14067 compulsory for companies that produce cork stoppers?

No. Adherence to the standard is voluntary, but many companies are carrying out carbon footprint studies of their products in order to demonstrate their commitment to sustainability and improve their transparency in environmental communication, making a positive contribution to taking measures to minimise the carbon footprint of their products.

How does Amorim Cork ensure transparency and rigour in communicating data on the carbon footprint of its products?

All carbon footprint studies are being subjected to external verification by a third party (APCER), in accordance with the international standard ISO14067, and include data on carbon sequestration and emissions at the various stages of the production cycle (from raw materials to finished products).

Why has soil been included in these new studies?

The previous studies were conducted according to ISO 14040/44 standards, which do not include carbon sequestered by the soil. In turn, the most recent studies, carried out on the basis of the ISO 14067:2018 standard, which defines criteria for estimating greenhouse gas emissions and the carbon footprint of products, establish that changes in carbon resulting from land use and changes in land use should be included in carbon footprint assessments.

What data was used to calculate land use?

Pereira and Tomé, in a 2014 study, present data on the amount of cork that can be removed from a cork oak.

Following an estimate provided by the Woodland Trust, which states that the diameter of the roots can be up to 12 times greater than the diameter of the trunk, and considering the average trunk diameter of 29.2 cm, according to IFN6, it was possible to estimate that a cork oak occupies around 10 m of soil with its root system.

Regarding carbon storage, the average value in the soil (between 0 and 40 cm depth) for Quercus Suber plantations is approximately 66 tonnes of carbon per hectare (Table 6-14, NIR, 2023), converted to CO₂ equivalent using the 44/12 factor, which considers the ratio between the molecular weight of carbon dioxide and the atomic weight of carbon.

Why were the new studies carried out in the cradle-to-gate context?

Complexity and Variability - The end-of-life phase can involve different treatment methods, such as recycling, incineration or landfill. The emissions associated with these options can vary significantly, making it difficult to quantify them accurately.

Data Availability - Obtaining reliable data on end-of-life emissions is a challenge. A lack of accurate information can jeopardise the robustness of carbon footprint calculations.

Focus on Immediate Impact - Amorim Cork decided to prioritise the stages of the life cycle where it has the greatest control and can implement immediate improvements, such as production and transport.

Standards and Reporting Requirements - Different standards and guidelines for calculating the carbon footprint have different requirements. Amorim Cork has opted for a strategy focussed on the "Cradle-to-Gate" approach, in line with regulatory and reporting requirements.

Do cork stoppers have a lower environmental impact than other closures?

Cork stoppers are made from a natural and renewable material, and their extraction does not involve cutting down trees. In addition, cork oak forests (from which cork is obtained), and in particular the soil, capture and store carbon, contributing to the reduction of net CO₂ emissions.

What factors can influence the carbon footprint of cork stoppers?

- Type of stopper (natural, colmated or micro-agglomerated);
- Origin of the raw material;
- Energy used in production and processing;
- Distance travelled in transport;
- Disposal and/or recycling options.

How can the ISO 14067 standard benefit wine producers?

Footprint studies under the ISO14067 standard make it possible to demonstrate the environmental impact associated with the choice of closure through transparent and credible data, which is a competitive differentiator in the market and helps to make more informed decisions not only when choosing a product but also when optimising production processes in order to reduce the carbon footprint. By carrying out complementary calculations, including transport from the factory to the customer and/or specific production processes, it is possible for customers to incorporate the value of the cork stopper's carbon footprint into their own calculations.

How can producers contribute to reducing the carbon footprint of cork stoppers?

- Opting for certified and sustainably sourced stoppers;
- Participating in cork recycling programmes in order to promote the extension of the product's life cycle;
- Giving preference to products that support the conservation and responsible management of cork oak forests.