

# CARBON FOOTPRINT METHODOLOGY

In line with their commitment to combat climate change, Cisco set an ambitious goal in 2022 to achieve net zero greenhouse gas emissions by 2040, aligning with the objectives of the Paris Agreement to limit global warming to 1.5°C. By gaining a deeper understanding of the environmental impact of their products, Cisco can align their supply chain with their sustainability strategy and enhance stakeholder communication to foster trust.

The carbon footprint study, conducted by DNV, focuses on Cisco collaboration products, specifically designed to enhance video conference experiences. These products enable remote working while maintaining high-quality meeting capabilities, reducing the need for employees to travel to physical offices. This shift toward remote collaboration options offers opportunities to minimize greenhouse gas emissions, thereby further contributing to Cisco's sustainability targets.

DNV, in collaboration with Cisco, has performed a cradle-to-gate Product Carbon Footprint study for video collaboration products. The study relies on product information provided by Cisco, and the results are based entirely on Cisco's declarations. DNV's role in this study is to act as an advisory body, facilitating the process. Both DNV and Cisco will jointly communicate the Carbon Footprint results and the methodology employed.

The results of the product carbon footprint study of Cisco products provide high-level estimates for particular products and points in time. Estimates are uncertain and likely to change overtime as assessment methodologies and processes continue to be refined. They are not intended to be compared against other Cisco or third-party products.

## CISCO PRODUCT CARBON FOOTPRINT PROJECT

This document expresses the methodological selections for the product carbon footprint study of Cisco products. The calculations are conducted based on the related standards (ISO 14040:2006 Environmental management – Life cycle assessment – Principles and framework, ISO 14044:2006 Environmental management – Life cycle assessment – Requirements and guidelines, ISO 14067:2018 Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification). The results display the calculation of DNV, based on the data provided by Cisco. Therefore, no external review nor verification processes are conducted. They do not declare a third-party opinion of DNV.



## METHODOLOGICAL BACKGROUND

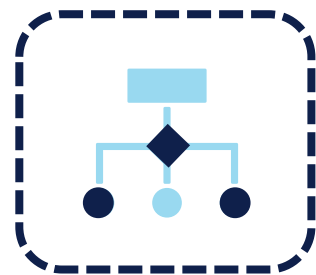


### GOAL & SCOPE DEFINITION

The goal of this study is to calculate the product carbon footprint of Cisco collaboration products and identify key environmental hotspots, aiming to contribute to Cisco's sustainability roadmap. The comprehensive assessment provides a holistic view of the impacts across the entire value chain, enabling targeted improvement measures for enhanced environmental performance. In addition to gaining environmental insights, the study results are intended for stakeholder communication, informing them about the overall carbon footprint of the products. There is a possibility of publishing the results to facilitate external communication with NGOs, customers, and industry partners.

### SYSTEM BOUNDARIES

The functional unit of the study is "one product assembled at the Cisco plant". The system boundaries are defined as "cradle-to-gate", which means they include activities from raw material extraction to the assembly at suppliers' plants. However, they do not include transportation of goods to distributors and users, nor the use and end-of-life phases. The study accounts for assembly line energy demand and packaging material contributions at the product level. The infrastructure, capital goods, factory implementation, and transportation fleet procurement are not included in the scope of this project.



### INVENTORY ANALYSIS & IMPACT ASSESSMENT

A computational modelling structure is established using SimaPro LCA software, which is based on the bill of materials. The model is then constructed using the Ecoinvent database and industry datasets where applicable. The ReCiPe methodology is utilized to calculate the product carbon footprint. Direct emissions from production or assembly processes are not directly collected; however, secondary data is used to estimate the energy consumption of the assembly line.

### VISUALISATION & COMMUNICATION OF RESULTS

The results communicate the product carbon footprint of Cisco video collaboration products in kg CO<sub>2</sub>-eq units. These results are obtained through quantitative assessments conducted for each product, utilizing relevant standards, state-of-the-art software, and database solutions. It's important to note that DNV's responsibility is advisory in nature within the scope of projects, and DNV assumes no liability for the accuracy of the input data.

