

SCOPE 1 AND SCOPE 2 GHG EMISSIONS

We report our greenhouse gas (GHG) emissions according to the GHG Protocol developed by the World Resources Institute (WRI) and the World Business Council on Sustainable Development (WBCSD).

Emissions reported are all from entities over which Logoplaste has operational control.

Global warming potential (GWP) values for a 100-year time horizon are from 4th assessment report (AR4).

Scope 1 and 2 GHG emissions are calculated based on the Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard (Revised Edition). Carbon dioxide (CO₂) is the predominant gas included in the calculation of Scope 1 and 2 emissions, but emissions factors may also include small amounts of methane (CH₄) and nitrous oxide (N₂O). Sulfur hexafluoride SF₆, used in the electrical industry as a gaseous dielectric medium for high-voltage circuit breakers, switchgear, and other electrical equipment, is also considered. As Logoplaste uses refrigerants, HFC's are also included.

Emissions factors for Scope 1 are from Greenhouse gas reporting: conversion factors 2019 to 2023 (Department for Energy Security & Net Zero – UK GOV).

Emission factors provided by the electricity suppliers are used for the calculation of market-based Scope 2 GHG Emissions, when available. Otherwise, the following sources described in the below table are used:

Electricity emission factor sources for scope 2 location-based and scope 2 market-based GHG emissions calculations:

COUNTRY	ELECTRICITY EMISSION FACTOR SOURCES (LOCATION-BASED)	ELECTRICITY EMISSION FACTOR SOURCES (MARKET-BASED)
Belgium, Czech Republic, Spain, France, Italy, Netherlands, Portugal, Poland	European Production Mix Reports - AIB (Association of Issuing Bodies)	European Residual Mix Reports - AIB (Association of Issuing Bodies)
United Kingdom	Greenhouse gas reporting: conversion factors - Department for Energy Security & Net Zero (UK GOV)	
Brazil	Fatores de Emissão de CO ₂ pela geração de energia elétrica no Sistema Interligado Nacional do Brasil, Inventário Corporativo - Ministério da Ciência, Tecnologia e Inovação	Fatores de Emissão de CO ₂ pela geração de energia elétrica no Sistema Interligado Nacional do Brasil, Inventário Corporativo - Ministério da Ciência, Tecnologia e Inovação
Canada	National Inventory Report (NIR) 1990-2020, Part 3, Annex 13 (published 2022) - Environment and Climate Change Canada	National Inventory Report (NIR) 1990-2020, Part 3, Annex 13 (published 2022) - Environment and Climate Change Canada
Mexico	Factores de Emisión del Sistema Eléctrico Nacional - CRE (Comisión Reguladora de Energía)	Factores de Emisión del Sistema Eléctrico Nacional - CRE (Comisión Reguladora de Energía)
United States	GRID – U.S. Environmental Protection Agency US EPA	eGRID – U.S. Environmental Protection Agency US EPA
Russia, Ukraine, Vietnam	Emissions Factors - International Energy Agency IEA	Emissions Factors - International Energy Agency IEA

Note: For Canada and US, regional emissions factors are used, when specific emission factors provided by the electricity suppliers are not available.

SCOPE 3 GHG EMISSIONS

Logoplaste's Scope 3 GHG emissions are calculated according to the Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard. Carbon dioxide (CO₂) is the predominant gas included in the calculation of Scope 3 emissions, but emissions factors may also include small amounts of methane (CH₄) and nitrous oxide (N₂O).

Majority of emissions factors for Scope 3 are from Greenhouse gas reporting: conversion factors 2019 to 2023 (Department for Energy Security & Net Zero – UK GOV). To calculate GHG emissions associated with raw materials, we used the latest eco-profiles published by Plastics Europe and WARM.

Our GHG inventory for previous years is recalculated if it impacts more than 5% of the overall scope.