

# Carbon Footprint Calculation

## Company Carbon Footprint Calculation and Management Services

Applus+ conducts analyses of greenhouse gas (GHG) emission sources and calculates the organization's carbon footprint in accordance with international standards (ISO 14064, GHG Protocol). It includes GHG emissions from Scope 1 and Scope 2, as well as those associated with the organization's value chain (Scope 3), providing a comprehensive view of the company's operational and supply-chain impacts.

We also calculate the carbon footprint of products/services in accordance with ISO 14067, in line with [Life Cycle Assessment \(LCA\)](#) standards ISO 14040 and ISO 14044, ensuring consistent and comparable environmental performance indicators across product portfolios.

Furthermore, we implement solutions for the reduction and compensation of the carbon footprint, through specialized [environmental consulting services](#) covering the complete [carbon management process](#) within organizations: definition of science-based targets (SBTi), development of compliance scenarios based on emission reduction projections, definition of Net Zero strategies, specific mitigation and compensation plans, and monitoring and follow-up of the improvements achieved, supported by digital tools for data traceability and continuous performance monitoring.



THE Applus+ SOLUTION

## How Applus+ supports corporate decarbonization through Carbon Footprint Calculation



We have our **own web-based software** for calculating the **organizational carbon footprint** (Scopes 1 and 2 and all categories of Scope 3), allowing us to offer digital support for continuous monitoring and the traceability of emissions over time.

In addition, we provide our clients with **comprehensive [climate change services](#)**, offering tailored solutions to their carbon management needs. This includes not only carbon footprint calculation but also **supporting the full decarbonization process**, from diagnosis to implementation and performance follow-up. The Applus+ software enables creating KPIs, following the decarbonization roadmap, and checking for deviations, enabling corrective actions to ensure success with a traceable tool.

Thanks to our extensive knowledge in various areas of [environmental management](#) across multiple industry sectors and our high level of specialization in climate change-related services, we can offer complete, concrete, and operational solutions that help our clients reduce their carbon footprint, even when data availability or internal resources are limited.

## Carbon Footprint Assessment

As part of our carbon footprint assessment services, we cover organizational and product footprint calculation, decarbonization strategies, compliance, environmental assessments, and climate-related projects:

- **Design and calculation of carbon footprint** (organizational and product/service) according to recognized standards (ISO 14064, ISO 14067, GHG Protocol, TFS - chemical sector).
- **Design of Net Zero strategies**, decarbonization plans, and roadmaps for mitigation and compensation of emissions and adaptation to climate change impacts, aligned with science-based targets (SBTi).
  - Science-Based Targets: applicability analysis, definition of SBT, and support in submission and targets verification process.
- **Design and calculation of water footprint** (ISO 14046) and environmental footprint (EU Product/Organisation Environmental Footprint - PEF/OEF).
- **Life Cycle Assessment** (ISO 14040/44) of products and services, according to ISO 14040 and ISO 14044 specifications.
  - Life Cycle Assessment (LCA) and Life Cycle Cost (LCC) analysis in design and post-construction phases (One Click LCA software) to meet BREEAM and LEED requirements for buildings.
- **Technical assistance related to the European Emissions Trading System (EU-ETS)**: emission permits, free allocation requests, monitoring and reporting plans, periodic GHG reports, and audits.
  - Energy, climate change, and [air quality plans](#) for Public Administrations.
- **Flexible mechanisms of the Kyoto Protocol** based on projects (CDM, JI), Paris Agreement crediting mechanism, and voluntary reduction-compensation projects (VCS-VERRA, Gold Standard, etc.).
- **Calculation of emission baselines**, KPIs, and reductions associated with projects.



- **Analysis of compliance with sustainability criteria according to the EU taxonomy.**
- **Processing of projects related to GHG emissions under various government programs** (registration of carbon footprint in national and regional registries, Climate Projects - FES-CO2 program, Corporate Reduce Your Footprint program, etc.).
- Preparation of calculations and various technical reports on GHG emissions and climate change.

We can also conduct specialized [environmental training](#) on the topics described, facilitating internal capacity-building and long-term organizational autonomy.

The benefits that our clients value when working with Applus+ on their carbon management projects include:

- High specialization and customization in service delivery
- Global and integrated vision when proposing solutions
- Access to functional and precise calculation tools
- Guarantee of success in external verification processes, supported by internationally recognized methodologies and expert technical teams

## Our team, methodology, and recognized standards.

Our services are delivered by a **multidisciplinary team of specialists in carbon management, environmental engineering, and life cycle analysis**, with proven experience supporting organizations across **sectors such as oil and gas, power and renewables, infrastructure, and public administration**. We combine technical expertise with practical knowledge to ensure that carbon footprint calculations and decarbonization strategies are both accurate and operationally feasible.

**Our methodologies are based on internationally recognized standards, including ISO 14064, ISO 14067, ISO 14046, the GHG Protocol, and Life Cycle Assessment frameworks (ISO 14040/44).** Results are fully traceable, auditable, and verifiable by independent third parties. This ensures that our clients can rely on robust, consistent, and credible data to support regulatory compliance, external communication, and strategic decision-making.

## Target customers

## When companies need a corporate Carbon Footprint Calculation

This service is particularly relevant for organizations that need to quantify and manage Scope 3 emissions and engage suppliers in climate action initiatives.



In the current context, the risks and opportunities related to carbon management and climate change are becoming increasingly important in organizational management policies, as environmental performance emerges as a strategic factor in competitiveness and long-term resilience.

Taking action by measuring, evaluating, and implementing measures to reduce the carbon footprint is necessary for all companies. It is increasingly requested by different stakeholders to respond to the following needs:

**-Legal requirements arising from increasingly demanding climate change regulations,** including sector-specific reporting frameworks and national/regional carbon registries.

**-Meeting solvency criteria and improving positioning in public and private tenders** where having a carbon footprint calculation is valued, especially in supply chains with decarbonization commitments.

**-Climate-related specifications or emission inventory requirements from clients** to access or maintain supplier approval.

**-Reporting for sustainability programs** and indices in which organizations participate, including ESG disclosures and climate risk transparency expectations.

**-Improving credibility with financial institutions and rating agencies,** supporting access to sustainable finance instruments.

**-Access to incentives from clients who apply benefits to suppliers based on sustainability criteria,** reinforcing competitive differentiation in the market.

## Key customer benefits

### Key benefits of the company Carbon Footprint Calculation with Applus+

The consulting and technical assistance solutions provided in the field of GHG emissions quantification and decarbonization allow, beyond the well-known benefits related to cost savings and legal compliance, to improve the available information by incorporating the “carbon component” into business decision-making, supporting strategic planning, risk management, and sustainability reporting, facilitating:

- **Identifying the most relevant emission sources within the organization** to focus efforts on mitigation plans, corporate climate change strategies, carbon neutrality plans, etc., including alignment with science-based reduction pathways (SBTi) where applicable.
- **Analyzing the environmental benefits of implementing organizational measures such as teleworking, travel policies, or corporate mobility plans,** and promoting employee engagement in sustainability practices.



- **Assessing the impact in terms of emission reduction** of adopting operational improvements or changes in facilities, optimizing energy performance, and resource efficiency.
- **Evaluating the influence of procurement or [waste management](#)** on the organization's total emissions, in order to adopt environmental criteria in purchasing, strengthening supplier evaluation, and ESG compliance within the supply chain.
- **Analyzing emissions related to product logistics** and how different measures, such as route optimization, load optimization, or the incorporation of lower-emission vehicles into distribution fleets, affect them, helping reduce Scope 3 emissions, where most organizations concentrate the majority of their climate impact.
- **Evaluating the costs associated with improving product and/or service design**, incorporating carbon costs into the analysis, enhancing product differentiation, and access to markets with environmental performance requirements.

Our methodologies ensure traceable and verifiable results, supporting smooth external assurance and compliance with sustainability reporting frameworks.

## Carbon Footprint Calculation and Management Expertise

Applus+ has extensive experience in carbon footprint calculation and management, developed through **dozens of projects across organizations of varying complexity and sectors**. This includes both organizational and product carbon footprints, following international standards such as ISO 14064-1, the GHG Protocol, ISO 14040/44, and ISO 14067, and covering direct, indirect, and Scope 3 emissions, as well as life-cycle assessments.

Our work encompasses the development of calculation methodologies and manuals, identification of emission sources, quantification of greenhouse gases across all scopes, creation of tailored calculation tools, preparation of technical reports, and support for official carbon footprint registries. Many projects also include the design of emission-reduction plans and the evaluation of mitigation measures, including feasibility analyses and associated engineering.

**Experience spans high-emission sectors including energy and gas, renewable energy, chemical industry, transportation and logistics, construction, and telecommunications.** Key assets and activities analyzed include power generation facilities, electricity and gas distribution networks, industrial and chemical plants, renewable energy installations, corporate buildings, vehicle fleets, transportation networks, and port and airport infrastructure.