



## SUMMARY

### Organizational Environmental Footprint (OEF) & Sustainability Reporting

The **Organizational Environmental Footprint (OEF)** is a life cycle–based methodology used to measure the overall environmental impact of an organization across its entire value chain. It quantifies emissions (in tCO<sub>2</sub>e) and other environmental impacts, helping companies identify hotspots, set reduction targets, and develop effective decarbonization strategies. This is particularly relevant in complex industries like automotive, where most emissions occur upstream in supply chains.

The OEF framework is defined in the **Commission Recommendation (EU) 2021/2279**, which establishes a harmonized approach based on five principles: relevance, completeness, consistency, accuracy, and transparency. The methodology follows six steps: goal definition, scope definition, life cycle inventory (LCI), life cycle impact assessment (LCIA), interpretation, and reporting. Sector-specific guidance is provided through OEFSRs, although these are not yet available for the automotive sector.

Alongside OEF, the **GHG Protocol** provides a globally recognized framework focused specifically on greenhouse gas emissions. It classifies emissions into Scope 1 (direct), Scope 2 (purchased energy), and Scope 3 (value chain emissions), ensuring comprehensive carbon accounting and transparency.

Building on this, the **Science Based Targets** initiative enables companies to set emission reduction targets aligned with climate science and the Paris Agreement. It defines near-term (5–10 years) and long-term (net-zero by 2050) targets, emphasizing real emissions reductions over offsets.

**Environmental footprint** assessments feed directly into sustainability reporting under the **Corporate Sustainability Reporting Directive (CSRD)**, which requires companies to disclose ESG information based on double materiality (both financial and environmental/social impact). Reporting must follow the European Sustainability Reporting Standards (ESRS), particularly ESRS E1 on climate change, which requires disclosure of emissions (Scopes 1–3), targets, risks, and transition plans aligned with a 1.5°C pathway.

The **ESRS** framework is interoperable with the **Global Reporting Initiative**, especially GRI 305 (Emissions), allowing companies to streamline reporting processes and avoid duplication.

Two complementary methodologies underpin environmental assessment:

- **Product Environmental Footprint (PEF)**: evaluates impacts at product level (used for eco-design and product comparison)



- OEF: evaluates impacts at organizational level (used for strategy and ESG reporting)

Both are based on **Life Cycle Assessment (LCA)** but offer greater standardization and comparability.

For the automotive industry, these frameworks create significant challenges due to complex, global supply chains and data collection difficulties. However, they also drive transformation toward:

- greater supply chain transparency
- integration of ESG data across all tiers
- investment in digital and data systems
- adoption of circular economy and eco-design principles

Ultimately, while compliance requires substantial effort, companies that effectively implement OEF, ESG reporting, and science-based strategies can gain competitive advantage through improved resilience, regulatory alignment, and stronger stakeholder trust.