



On The Road to Net Zero

EPDS AS BUILDING BLOCKS OF THE DECARBONIZATION STRATEGY

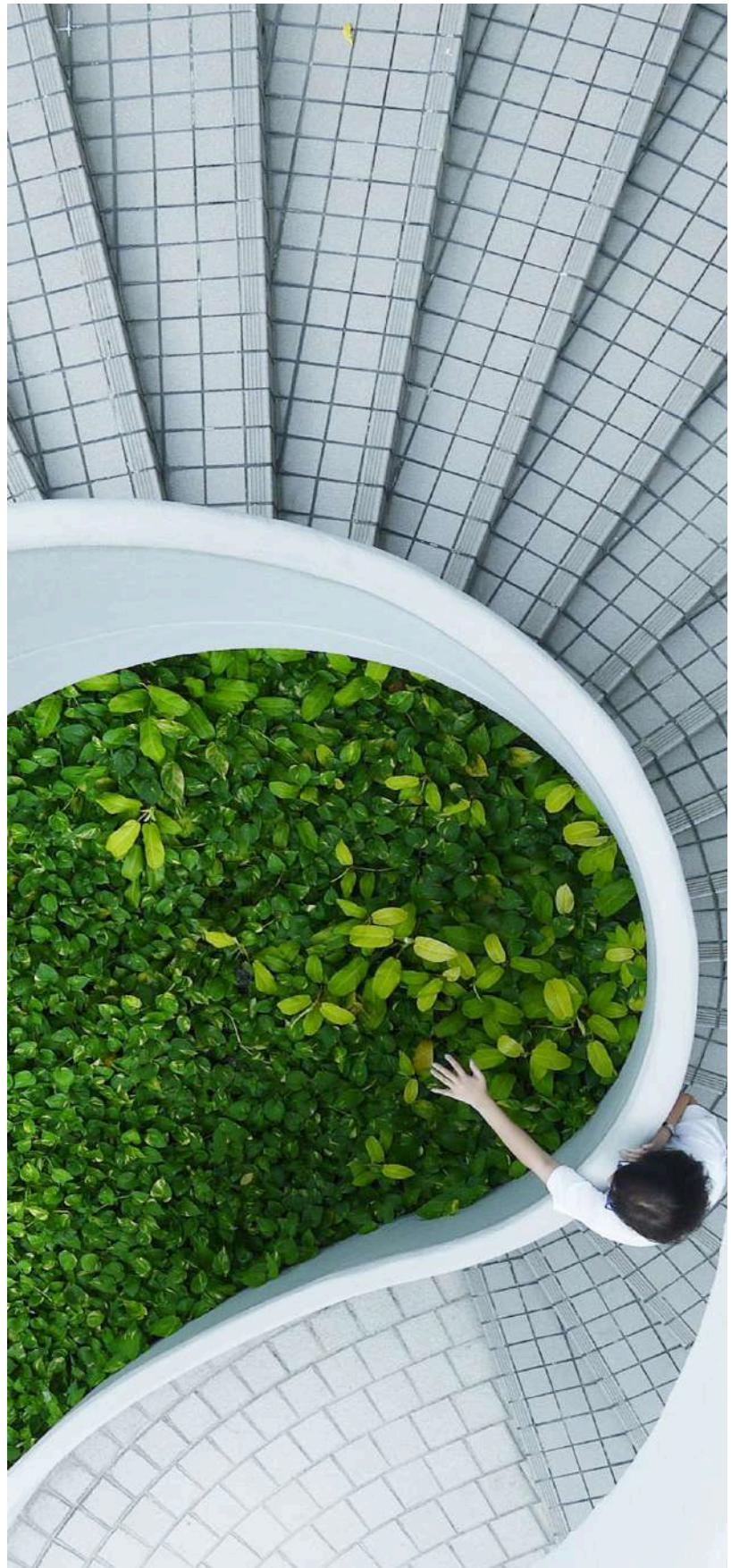
Introduction

As the race to net zero intensifies, businesses face growing pressure from investors, customers and policymakers to publicize environmental performance and reduce greenhouse gas (GHG) emissions. The journey begins with a well-defined emissions baseline — yet this foundational step can prove to be a challenge, particularly in sectors with significant value chain (Scope 3) emissions.

Environmental Product Declarations (EPDs) can play a key role in helping companies define their emissions baseline and pinpoint hotspots throughout the value chain. Read on to learn how EPDs can become building blocks of an actionable decarbonization strategy within the context of today's evolving financial and regulatory landscape.

Defining net zero

Net zero is the goal of reducing or removing all value-chain greenhouse gas emissions to help limit global warming to 1.5° C above pre-industrial temperatures, in accordance with the 2015 Paris Agreement. Scientists believe reaching this target by 2050 will prevent the most damaging effects of climate change.



Net Zero: Why It Matters

Environmental sustainability developments have rapidly accelerated in the years following the Paris Agreement on climate change. Global and regional regulations and guidance continue to evolve to push organizations to meet the goals of this agreement. In Europe, for example, the European Commission laid out policies in the European Green Deal to transition the continent to full climate neutrality by 2050. This was followed by the European Union Taxonomy for Sustainable Activities, a classification system designed to help guide green investments and support the Circular Economy Action Plan for sustainable resource management. Most recently, the EU launched a Zero Pollution Action Plan to create a toxic-free environment. A legal anchoring of net-zero targets in EU policies is expected in the near future, putting regulatory pressure on emission-intensive industrial sectors, like the construction sector.

At the same time, the financial sector is adding pressure to encourage sustainable economic transformation. The European Commission is rapidly rolling out the EU Action Plan on Sustainable Finance to redirect capital to sustainable investments, mainstream sustainability in risk management, and build transparency. Across the globe, the financial sector increasingly relies on ESG (Environmental, Social and Governance) measures to guide investment decisions.

Combined with consumer demand for more sustainable products and practices, these forces are pushing sustainability to the forefront of business. It's no longer optional, but essential for businesses to be able to communicate environmental performance in an efficient, reliable and comparable manner. Find out how EPDs can help with this process.

: The EPD: : An Instrument : to Communicate : Sustainability : Performance

An Environmental Product Declaration (EPD) is a document used to help companies communicate the environmental performance of products and can support environmental disclosure requirements under net zero. EPDs began as voluntary demonstrations of environmental impact. Today EPDs are regulated by internationally accepted standards and fit seamlessly into construction workflows, particularly sustainable building certifications like LEED, BREEAM and DGNB.

Based on Life Cycle Assessment (LCA), EPDs quantify the environmental impacts of products across their entire lifecycle, from “cradle to grave.”

Environmental Product Declarations offer buyers comprehensive insight into a product’s environmental impacts, such as its carbon footprint, and enable product selection based on environmental performance. As an independently verified document, EPDs can be helpful marketing communication instruments and can give companies a competitive edge in green public procurement. EPDs are increasingly relevant to building design and material selection in the construction sector – but EPDs can do more! They can also be the building blocks of corporate decarbonization strategy.





What is Life Cycle Assessment (LCA)?

LCA is the systematic analysis of the potential environmental impacts of products or services during their entire life cycle: production, distribution, use and end-of-life phases. This also includes the upstream (e.g., suppliers) and downstream (e.g., waste management) processes associated with the production (e.g., production of raw, auxiliary and operating materials), use phase, and disposal (e.g., waste incineration).

Environmental Product Declarations are:

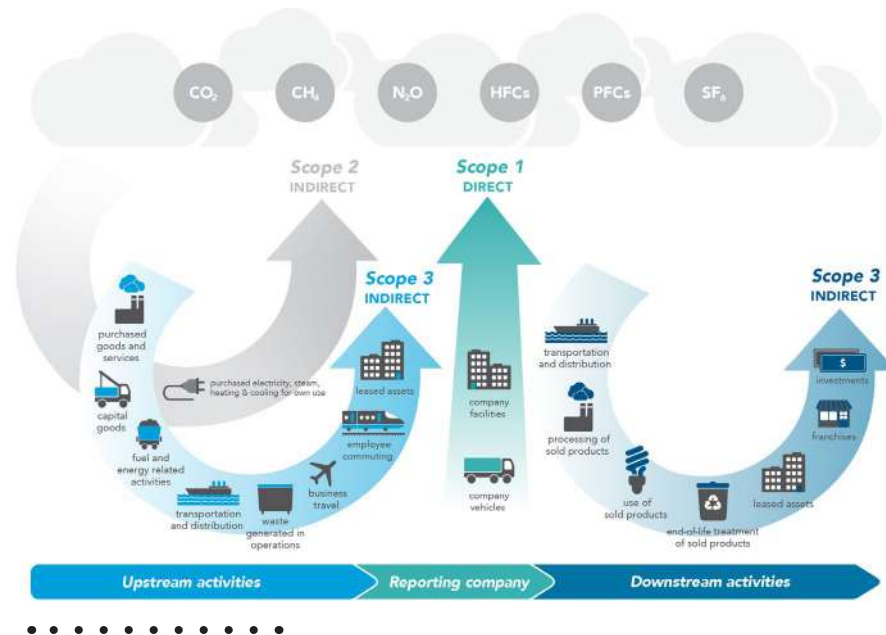
- *Independently verified*
- *Developed according to global standards (ISO 21930 and EN 15804+A2)*
- *“Cradle-to-grave” studies with information on environmental impact of a product throughout its life cycle stages*

How EPDs Contribute to Decarbonization Strategy



EPDs can be instrumental in helping companies achieve a clear view of their carbon footprint with more comprehensive carbon accounting and can therefore serve as an ideal starting point for a decarbonization strategy.

Carbon accounting (or GHG accounting) is the systematic process of gathering, quantifying and monitoring a company's direct and indirect greenhouse gas emissions. The Greenhouse Gas (GHG) Protocol categorized these emissions into three scopes. Scope 1 covers direct emissions from a company's owned sources. Scope 2 encompasses indirect emissions related to energy purchased to operate, including electricity, heating and cooling. Scope 3 accounts for all other indirect emissions from the value chain, upstream and downstream. Scope 3 includes everything from purchased goods and raw materials, to business travel and employee commuting, to operational waste and end-of-life treatment of products.



Because Scope 3 emissions are complex and include many factors outside an organization's direct control, they are difficult to assess and quantify. That is why they are often not consistently disclosed in sustainability and ESG reports. However, value chain emissions can account for up to nearly 80% of a company's overall environmental impact and are essential for a robust science-based decarbonization strategy towards net zero.

EPDs can help companies address the Scope 3 challenge and build a better foundation to achieve decarbonization targets. Looking at the environmental performance of the product through the LCA lens, EPDs cover greenhouse gas emissions of all Scopes (from 1 to 3) and display them by a product's lifecycle stage. This enables businesses to identify emissions hotspots within their value chain and organize them by the product life cycle stage, highlighting priorities for emissions improvement.



Creating a Roadmap Toward Net Zero

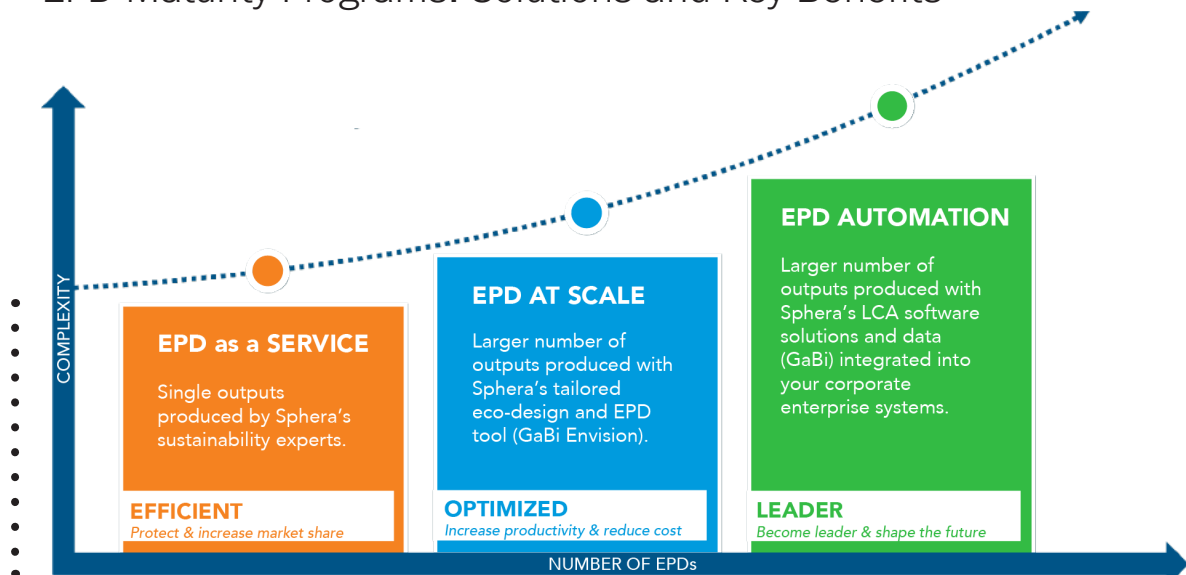


EPDs are an established tool, especially in the emissions-heavy building and construction industry, and can therefore serve as an ideal starting point to gain insights into emissions hotspots within the value chain of the products.

Based on the calculations used for product declarations, the corporate-level emissions baseline (corporate carbon footprint) can be assessed. From there, companies can set science-based emissions reduction targets towards net zero. When combined with an action plan and performance measurement, EPDs form the basis of an effective decarbonization strategy, helping businesses meet evolving net-zero requirements and respond to pressures from customers, investors and regulators.

Depending on the industry and sector, companies may have varying needs for EPD solutions. A partner like Sphera can help businesses identify those needs, unlock important environmental product data, meet the growing demand for products with EPDs, and grow credibility through enhanced transparency.

EPD Maturity Programs: Solutions and Key Benefits



Conclusion

EPDs can serve as the building blocks for corporate decarbonization strategy and help businesses develop better products and safer processes for the environment. Sphera's EPD software solutions and consulting services help businesses set their emissions baseline and identify opportunities for improvement to build a cleaner, more sustainable world.





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About Sphera

Sphera creates a safer, more sustainable and productive world. We are a leading global provider of Environmental, Social and Governance (ESG) performance and risk management software, data and consulting services with a focus on Environment, Health, Safety & Sustainability (EHS&S), Operational Risk Management and Product Stewardship.



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