

Life Cycle Assessments for a Market Leader in EPD Generation

OVERVIEW

Saint-Gobain has been a pioneer in Life Cycle Assessments (LCA), performing its first LCA in 1990 to quantify the impacts of an insulation product.

Initially, Saint-Gobain was utilizing various LCA tools across their different teams. Since 2013, they've worked to scale their LCA solutions and harmonize the tools and practices across all departments.



Founded in 1665



Manufacturing



Courbevoie, France

€51.2 billion
Revenue

170,000
Employees

CHALLENGES



They were seeking a robust LCA tool with access to complete and regularly updated databases, adapted for experts and non-experts alike.



They needed a solution rooted in eco-innovation to identify their products' primary sources of impact and compare various solutions while simultaneously developing new products.



They were required to provide their clients with Environmental Product Declarations (EPD) based on LCA results.



An integrated solution was vital to help them reach their carbon reduction target, one that could monitor their Scopes 1, 2 and 3 emissions and drive their CO₂ roadmap.

SOLUTION

Since 2015, Saint-Gobain has utilized Sphera's GaBi software for experts and the GaBi Envision interface for non-experts. Today, these tools are under Sphera's umbrella, branded as LCA for Experts and LCA Calculator. The LCA for Experts tool has enabled them to develop LCA models for multiple product families and use the results for publication of EPDs and eco-innovation. However, LCA experts had plenty of complex tasks on their plate, so empowering their non-expert stakeholders to calculate and run their own LCAs and EPDs was the next step in driving sustainability efforts forward. The LCA Calculator interface for non-experts, a snapshot version of the LCA for Experts tool, allows experts to share those LCA models and facilitates the use of LCAs across the organization.

"There is no magic formula to become a market leader in EPD generation, but we are fortunate to have very experienced people on board. We are continuously looking to progress and scale so our biggest challenge right now is automating data collection and LCA calculations.

Internally, we will need to work on big data projects to consolidate product data that is scattered across multiple tools. Then with Sphera's help, we look forward to exploring the automation of LCA calculations across our portfolio."

— *Charlotte Petiot*, Products Sustainability Senior Manager,
Saint Gobain

Together, Sphera's LCA for Experts and LCA Calculator provide companies with:

- Access to 15,000 annually updated datasets, packaged in several topical databases to provide a reliable foundation for life-cycle-based decisions.
- The ability to evaluate and assess everything from a matchstick to an airport.
- The insight to identify environmental hot spots and evaluate "what if" scenarios.
- Time and money saved through automated LCA calculations and circularity add-ons.
- Support in reaching their LCA goals, regardless of their skill level.
- The capacity to communicate and collaborate with stakeholders and internal partners on environmental performance reports using customizable report templates.
- A better understanding of the cost triggers and cost factors throughout a product's life cycle, helping to deliver more sustainable products and reduce operational costs.
- The data to meet regulatory requirements and customer demands with Environmental Product Declarations (EPDs).

RESULTS

Sphera's LCA for Experts and LCA Calculator tools have made Saint-Gobain's publication of EPDs more efficient. In addition, Saint-Gobain has developed an internal database of emission factors from Sphera and other sources. This database is the single source of truth for the CO² emissions within the Group. This database is used as a reference for all its LCA models and is connected to its internal tools for Scope 1, 2 and 3 calculations. This combination of tools gives Saint-Gobain consistency across all calculations at product or corporate level.



Automated reporting

for interpreting, using and sharing results and environmental insights across the value chain.



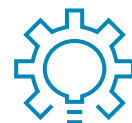
Increased transparency

into each product's environmental impact.



Repeatable, scalable & highly reliable results

at a reduced cost.



Improved decision-making & synergy

throughout the organization