

S&P Global Sustainable1

Environmental Profile Calculation Engine V3 (Python)

Notice of Methodology Enhancements

April 2024

The S&P Global Sustainable1 Environmental Profile Calculation Engine V3 is a package developed in Python which enables the creation of the environmental profiles of the S&P Global Sustainable1 Environmental dataset (TRAX), integrating geographic specificities, expanded list of activities, and production-based modelling. The model is updated annually as part of its use in the S&P Global Sustainable1 Environmental Profiling Model, the update includes the calculations of the latest year environmental profiles and underlying methodologies as applicable. This notice describes the methodology enhancements that are currently under review and that S&P Global Sustainable1 intends to incorporate in the S&P Global Sustainable1 Environmental Dataset V3 update which we expect to release in Q4 2024. The methodology updates contained in this notice are under currently review and may be subject to change. The purpose of this notification is to ensure we maintain transparency in our methodological process and decisions with the market. The full release will be accompanied by a detailed methodology report describing the data sources, methods and assumptions used in the analysis, and a release note describing the impact of the methodology changes on the dataset.

Methodology Enhancements under Review

The following table describes the methodology enhancements that are under review and being considered for the Q4 S&P Global Sustainable1 Environmental Dataset V3 release, the expected impact on the dataset, and the intended benefit of these enhancements for clients. The enhancements described below may be subject to change and the related expected impact may also differ from what has been described below as these updates are yet to be implemented and are under review.

Enhancement Name	Enhancement Description	Client Benefit	Expected Impact on Environmental Dataset V3
Shift to Python Code Language	The calculations of the environmental profiles are performed using Python as a coding language, instead of C#	Improved customer experience as Python language enables Research & Methodology team to easily access and update the code modules (e.g. adding production-based calculations) emerging from client needs, without being limited by technology resources on the development side.	New pipeline for environmental model calculations as part of research cycle data collection process for S&P Global Environmental dataset.
Research & Methodology Package Creation	R&M S1 team performing the model logic implementation and technology teams focus shift from model logic implementation to production environment deployment only.	Ease of understanding and deployment of the model due to accessible coding language. Every component of the model and calculations from data collection to feeds is understood, traceable and explainable to clients by Research & Methodology team	New pipeline for environmental model calculations as part of research cycle data collection process for S&P Global Environmental dataset.

<p>The integration of production-based life cycle assessment (LCA) dataset</p>	<p>Exploring the benefits of incorporating life cycle assessment (LCA) inventory data into the S&P Global Environmental Dataset (V3). Our goal is to improve the way we estimate the environmental impact of companies, especially where detailed disclosure is lacking. Specifically, we are developing a dataset that offers environmental intensity factors (such as CO₂ emissions or land occupation) per unit of physical production (e.g., tonnes of cement manufactured or gigawatt-hours of electricity generated).</p> <p>The bottom-up LCA approach used in building this dataset allows us to overcome common challenges associated with revenue-based environmental intensity factors, particularly those related to year-on-year price fluctuations.</p>	<p>The adoption of a bottom-up Life Cycle Assessment (LCA) approach, grounded in a science-based and widely accepted methodology, allows us to better estimate the environmental burden of companies. By leveraging production-LCA data, we can also generate insights in the most granular details, including separate breakdowns for greenhouse gas emissions across Scope 1, Scope 2, and Scope 3.</p>	<p>Better estimate of environmental profiles in the absence of disclosure.</p>
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