

ecoPLM

Design for sustainability



Watch ecoPLM demo

_Embrace sustainability metrics first



80% of environmental impact can be determined in design phase.



50% of global green house gases are caused by **extracting** and **processing** primary raw materials.



30% of CO₂ emission reduction is expected to come from the design stage.

_Sustainability and manufacturing challenges

Environmental impact is a pivotal KPI in the pursuit of product design for sustainability, with most parameters being established during the design stage. Early assessment by stakeholders is crucial to preliminarily predict the outcomes of decisions made in the realm of sustainable product design.



Measuring environmental impact of product, CO₂ reporting and CSRD (Scope 1, 2, 3).

Ensuring regulatory compliance and staying up-to-date with evolving environmental regulations (ESPR).

Meeting changing customer demands for sustainable products (including ecodesign).

Reducing energy and resource consumption while maintaining production efficiency. Adopting new technologies and processes that align with sustainability goals.

Currently environmental footprint of products is determined at late stage of their lifecycle therefore product engineering has limited or no ability to determine environmental performance of products during the design phase.

Benefits of ecoPLM

ecoPLM help to meet the growing demand for sustainable products by allowing to evaluate the environmental impact of a product at early stage of its life cycle and to incorporate eco-design principles into product design process.

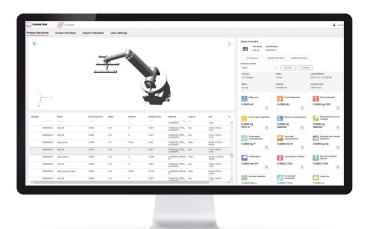
- Facilitates
 carbon footprint
 calculation for
 simplified CSRD
 reporting.
- Accelerates transition to net zero from an early conceptual stage of a product.
- Scope 3
 emissions across
 manufacturing
 value chains.
- by incorporating eco-design principles into product development processes.
- Empowers
 sustainable
 product design
 across Product
 Lifecycle
 Management.

Features

Power of ecoPLM:

A Deep Dive into Its
Innovative Functionalities
and Architecture





Functional

- Define sustainability targets for the product.
- Find **environmental hotspots** in product structure.
- Evaluate environmental impact of product's design choices.
- Compare **sustainability impact** between different product versions or design alternatives.

Architectural

- Use **existing product data** from your PLM system for environmental footprint assessment.
- Build on existing infrastructure and data with brownfield approach.
- Leverage role-based apps for collaborative space between departments.
- Connect with other systems using OSLC to get comprehensive sustainability information.

_TT PSC's boosters for sustainable development

Leverage experience through AI

Increase level of maturity in the early phases by predicting sustainability impact through artificial intelligence.

Utilize all available material information

Enhance footprint precision by integration to material management systems.

Enhance toward the supply chain

Improve coverage of the entire product eco-system through integration with supply chain systems across enterprises.

Consider product recyclability

Take into consideration the recyclability of the product during the design process.

_Why us

TT PSC, a member of the Transition Technologies Group, is an advanced software and IT services provider in Poland. With 17 years of experience and the title of Global Premium IT Solution Integrator, our priority is to exceed customer expectations with the right team and proven processes. Our in-depth PLM expertise and commitment to sustainability ensure exceptional results for every project. **Your vision is our mission!**

Meet our expert

Rafał Witkowski
PLM Portfolio Director

rafal.witkowski@ttpsc.pl +48 693 883 567



contact@ttpsc.com www.ttpsc.com

