

Product Environmental Footprint

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- **Life cycle thinking goes hand in hand with resource efficiency**
Resource efficiency requires an understanding of the full environmental impact of a product over its entire life cycle, from extraction of raw materials to final waste management. The Product Environmental Footprint (PEF) method has been developed for that purpose. Based on Life Cycle Assessments (LCAs) and harmonised information from relevant stakeholders, the overarching purpose of PEF is to consistently report on the environmental impact of products over their full life cycle. The progress made in terms of resource efficiency can then be made transparent throughout the value chain.
- **The plastics industry is a pioneer in the compilation of reliable data for LCAs**
PlasticsEurope is a frontrunner in this area and has been developing and providing environmental datasets (Life Cycle Inventories) for over 20 years. Their reliability is widely acknowledged: calculated by qualified and renowned consultants and independently reviewed, they are part of and the basis for many commercial databases as well as the International Life Cycle Database (ILCD). These environmental datasets form the input data needed to carry out LCAs of products containing plastics. The plastics industry and its downstream partners carry out full LCAs for numerous applications in order to evaluate their actual environmental performance and continuously enhance their sustainability.
- **PlasticsEurope actively participates in LCA developments and initiatives**
Beyond providing reliable environmental data on polymers, PlasticsEurope is engaged in supporting the dissemination of good practice in LCA and has joined the Life Cycle Initiative (hosted by United Nation Environment, <https://www.lifecycleinitiative.org>) and contributes to European projects such as the ILCD network and the PEF.
- **PEF should build on successful initiatives**
On top of PEF methodology, Product Category Rules (set of specific rules, requirements and guidelines) are required to further align PEF results and allow for the comparison of the environmental impacts of different products. Successful sectoral initiatives already exist, such as the Environmental Product Declaration programme of the Building and Construction sector. Existing Product Category Rules should be adopted with minimum possible changes to maintain the momentum of the actors in these sectors.

Key recommendations:

1. **Take a life cycle approach when dealing with resource efficiency of products**
When considering how to make a product more resource efficient, the impact over the whole life cycle of said product should be taken into account in order to have a true understanding of its actual impact on the environment. Extraction of raw materials, production, use, reuse, waste management: they all count. It would be counterproductive to focus on improving one impact point, e.g. the end-of-life, if doing so were detrimental to the benefits a product offers during the use phase, and this combination were to result in the product being less environmentally friendly over its whole life cycle.
2. **Product environmental footprint should remain voluntary**
The lack of harmonised data and Product Category Rules today hinders the use of LCA and PEF. EU guidelines provide a solid basis for this, but require pilot projects to test the effectiveness and cost of implementation. Once a common understanding and a reasonable level of cost to calculate PEF is reached, the competitive nature of the market will generate a voluntary stakeholder engagement without the need for regulation.