



FLORICULTURE SUSTAINABILITY INITIATIVE

FloriPEFCR BENCHMARKING

EXPLANATORY & GUIDANCE DOCUMENT

Understanding the Product Environmental Footprint in Floriculture

The Product Environmental Footprint (PEF) is a method by the European Commission to evaluate the environmental impact of products throughout their lifecycle, including climate change, resource use, and pollution. It standardizes measurements to help businesses improve sustainability and provide transparent information and the PEF and FloriPEFCR are also approved methods within the Corporate Sustainability Reporting Directive CSRD.

For floriculture, the FloriPEFCR offers specific guidelines for assessing cut flowers and potted plants. This simplifies the process, reduces costs, and enables meaningful comparisons. The Floriculture Sustainability Initiative (FSI) supports these efforts by promoting sustainable practices and developing tools for fact-based discussions and benchmarks.

This document verifies tools to ensure they comply with FloriPEFCR requirements, produce reliable results, and facilitate data exchange. By validating these tools, it helps the industry focus on reducing environmental impacts and preparing for future regulations. Tools that are independently verified as FloriPEFCR compliant are placed in the *FSI Basket of FloriPEFCR tools* and are a reference for all stakeholders when performing or evaluating PEF studies.

In summary, PEF, FloriPEFCR, and FSI aim to make floriculture more sustainable by stimulating standardized methods, improving environmental performance, and ensuring transparent communication. This document and the benchmarking protocol are key to supporting these goals.

1. Introduction to the PEF, FloriPEFCR and about FSI

Introduction PEF

A Product Environmental Footprint (PEF) is a comprehensive method developed by the European Commission to assess the environmental performance of products throughout their entire life cycle, from raw material extraction to end-of-life disposal. Using Life Cycle Assessment (LCA), PEF evaluates multiple environmental impact categories such as climate change, resource depletion, and pollution. It aims to standardize and improve the comparability of environmental performance measurements, facilitating transparent communication of results to stakeholders and supporting sustainability policies. By identifying key areas for improvement, PEF helps businesses enhance their products' environmental performance and encourages more sustainable consumption patterns.



FloriPEFCR

The Product Environmental Footprint Category Rules for Cut flowers and Potted plants (FloriPEFCR) aligns with the Product Environmental Footprint Guidance (PEF Guidance) provided by the European Commission. The FloriPEFCR serves as a guidance, to standardize the calculation of environmental impacts for cut flowers and potted plants, with the overarching goals of simplifying the process, enabling meaningful comparisons and ensuring compliance with established guidelines and standards.

The primary objective of the FloriPEFCR is to establish consistent and specific rules for calculating environmental information for two key products in the floriculture sector: Cut flowers and Potted plants. By doing so, it aims to simplify, expedite, and reduce the cost of conducting Product Environmental Footprint (PEF) studies. This focus on streamlining the process is crucial for making PEF studies more accessible and practical for practitioners in the horticultural industry.

Another important objective is to facilitate comparisons and comparative assertions between products within the same category. By establishing a standardized methodology through the FloriPEFCR, it becomes possible to make meaningful comparisons of environmental impacts across different products. This comparability is only achievable when PEF studies are conducted in accordance with the rules outlined in a Product Environmental Footprint Category Rules (PEFCR) document, such as the FloriPEFCR.

The FloriPEFCR aims to help practitioners monitor their environmental impact, identify lifecycle hotspots, and pinpoint areas for improvement in environmental performance. By acknowledging the tools that follow the guidelines, the FloriPEFCR can become the preferred methodology for global floriculture footprints, at first developed in the EU, and with global applicability and relevance.

About FSI

The Floriculture Sustainability Initiative (FSI) is a market-driven initiative that brings together members of the global floriculture sector. In 2013 FSI was founded by multiple stakeholders in the floriculture sector to create a pre-competitive initiative focusing on supporting and promoting sustainable development.

Since the start one of the goals of FSI has been to develop and/or support methodologies and practices that support fact-based discussions, stimulate a level playing field and can be benchmarked against good practice. One leading example is the FSI Basket of Standards with recognized producer schemes that meet good practice criteria. Currently the FSI Basket of Standards includes a set of benchmarked social and agricultural sustainability compliance standards. The Basket is used as an instrument to identify, measure and promote responsible sources of flowers & plants.

In line with these FSI Basket principles FSI aims to also guide methodologies and tooling concerning the upcoming footprint calculations, starting with the recently published FloriPEFCR. Tools that are successfully benchmarked will be published by FSI on its website as part of the *FSI Basket of footprinting tools*.



2. Benchmarking objectives

About benchmarking

The FloriPEFCR benchmarking is offered on a voluntary basis by FSI and aims at supporting users and organisations offering pre-defined footprint tooling. The objective of this benchmarking is to ensure that the tool complies with the PEFCR requirements and that it accurately and reliably produces PEF results and is open for data exchange.

The set of benchmarking criteria supports the mainstreaming of principles across different tools and aims to avoid duplication of costs and efforts. Through monitoring of environmental impacts, identifying lifecycle hotspots, and pinpointing areas for improvement in environmental performance the main sector focus should be on reducing emissions caused in the product life cycle. A uniform methodology will support these efforts to maximize reductions by sharing uniform data and addressing hotspots and best practices.

The further development of the methodology and tooling will continue the coming years, with the current version of the EU guidelines and mandatory database being valid until at least 31-12-2025. The methodology will be revised based on experience and feedback from users as it will not be a bulletproof methodology yet. Therefore, this benchmarking is seen as a first step in stimulating reduction efforts and sector alignment on methods and outcomes. The responsibility of the accuracy of calculations and outcomes remain with the companies offering the tooling.

With adopting the FloriPEFCR the various tooling offered will contribute to preparing the sector to new footprint requirements from governments and markets. It also offers the sector the fact-based insights that can be used in reduction efforts. It is therefore important that the sector can focus on data outcomes rather than challenging methodologies used. The benchmarking will assist stakeholders with:

- The FloriPEFCR methodology and guidelines are implemented correctly.
- Data is validated; complete and accurate.
- Enabling data exchange possibilities between supply chain actors.

3. Benchmarking Process

Organisations who have developed footprint tooling are invited for benchmarking and can apply by undersigning the provided document agreeing on the process and criteria for benchmarking.





The process starts with a self-assessment based on the documents provided after which the benchmarking process will take place.

The benchmarking will be performed by an independent 3rd party that is selected by FSI. The benchmarking process will include a self-assessment, review, consultation and will be finalized with an end report. The report will indicate where the tool meets the criteria, where differences are observed and if the tool meets the benchmark criteria. The report will be shared with the tool provider directly. Upon successful completion of the benchmark, the results can be shared with FSI for further recognition. After approval, FSI will then communicate the updated list of preferred FSI Basket of FloriPEFCR tools. The cost for the benchmarking process will be paid by the tool provider.

Criteria in scope

The criteria for benchmarking consist of 3 scopes: 1. FloriPEFCR methodology, 2. Data verification and 3. Data exchange. Each of the 3 scopes have separate subsections briefly outlined below. For the full list of criteria and the self-assessment form we refer to the Annex 1. to this document.

1. Methodology

- Confirmation of successful implementation of the FloriPEFCR methodology,
- Passing data set test. A specific data set will be provided, and the outcome should confirm within acceptable boundaries the right implementation of the FloriPEFCR methodology.

2. Data verification

- Adherence to the FloriPEFCR requirements for data,
 - Completeness and correctness of primary data used must be independently audited, with a paper trail to check,
 - Correct usage of additional secondary data based on the current (EF 3.1) database.

3. Data exchange

- Written confirmation of willingness to exchange data with other tools
- Ability to download and upload FloriPEFCR datapoints from subsequent supply chain actors.
- The use of the prescribed format for data exchange using the published Floricode format

FSI Basket of FloriPEFCR tools

This FSI benchmarking does not replace the EU criteria for a valid FloriPEFCR and does not aim to give 100% confirmation of results and claims made as a result of the outcomes. It mainly serves as guidance for sector alignment and guidance for stakeholders that want to use a tool and for tool builders to be sure that the offered services are in line with the guidance. The acceptance and communication by FSI through the *FSI Basket of FloriPEFCR tools* make these efforts visible for the floricultural stakeholders by means of the equivalency and recognition process.





Communicating the results

In a B2B context, PEF results are highly valuable for stimulating reductions in environmental impacts and minimizing resource inputs. Companies can use PEFs to benchmark their products against industry standards, identify areas for improvement, and drive innovation in sustainability. Additionally, the use of comparable and verified data through PEFs facilitates the sharing of best practices among businesses, promoting collective efforts in emission reductions and fostering a culture of continuous improvement in environmental performance. This not only supports compliance with the proposed EU Green Claims Directive but also encourages industry-wide improvements and sustainability.

However, we need to be cautious when commercially using the results as the current PEFs and FloriFEFCR are still under development. In the data input and calculation process there are still assumptions to be made that can lead to different outcomes.

Also, in a B2C context the use of PEF outcomes and comparative results are not always straightforward. And especially for products carrying emotional values like flowers and plants, as these products are often associated with wellbeing, personal and emotional experiences that cannot be fully rationalized through environmental data alone. Therefore, although it is essential to substantiate claims and mitigate negative impacts on the environment and people, companies should see the added value of creating compelling stories that highlight the wellbeing values of these products. This storytelling approach can enhance consumer engagement and trust without compromising the commitment to sustainability.

From a regulatory perspective, the **EU Green Claims Directive** is not to be overlooked. It aims to combat (un-)intentional greenwashing by requiring companies to provide clear, accurate, and verifiable evidence for any environmental claims about their products or services. This directive mandates third-party verification and ensures that detailed, transparent information is accessible to consumers, thereby enhancing trust and promoting sustainable business practices.

Role of Product Environmental Footprints (PEFs):

Product Environmental Footprints (PEFs) play a crucial role in the Green Claims Directive by offering a standardized method for assessing the environmental impacts of products throughout their life cycle. PEFs provide comprehensive, credible, and transparent data to substantiate environmental claims over time, ensuring regulatory compliance and building consumer trust.

In summary, the EU Green Claims Directive, supported by PEFs, ensures credible environmental claims and promotes sustainable practices in both B2B and B2C environments. In B2B, PEFs are tools for emission reduction, sharing best practices, and innovation, while in B2C, they should support narratives that resonate emotionally with consumers intentions to buy flowers and plants. We will work on embedding the GCD and possible classifications and EU labeling in future guidance to our members.



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Summarizing

The emphasis and purpose of this voluntary benchmarking is to stimulate progress on environmental footprinting, keeping our industry fit for the future. The use of tooling should be free of choice and non-binding, use audited data, and outcomes are not to be used in relation to FSI, but seen as the possibility to mainstream footprinting measurements with the aim to reduce emissions related to the 16 impact categories and 8 life cycle stages.

As further development, the use of footprint data is foreseen to play a pivotal role in supporting the industry with data driven, fact based and credible insights. In collaboration FSI sees its role in stimulating good environmental practice, the record keeping criteria will reflect progress on this topic in the coming years. The data driven insights can be used in newly developed data platforms to aggregate information supporting sector progress. Therefore, the unified methods, credible data and data exchange formats are crucial first steps.

Meanwhile, users of the various tools can start identifying and addressing hotspots and share best practices, as well as encouraging standards and growers to implement the new requirements.

References:

EU Green Business PEF https://green-business.ec.europa.eu/environmental-footprint-methods_en

EU supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards sustainability reporting standards https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202302772

Commission Recommendation (EU) 2021/2279 of 15 December 2021 on the use of the Environmental Footprint methods to measure and communicate the life cycle environmental performance of products and organisations <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021H2279>

EU Environmental footprints Methods: https://green-business.ec.europa.eu/environmental-footprint-methods_en#:~:text=The%20European%20Commission%20has%20proposed%20the%20Product%20Environmental,a%20range%20of%20choices%20of%20methods%20and%20initiatives.

WUR FloriPEFCR document: <https://research.wur.nl/en/publications/product-environmental-footprint-category-rules-for-cut-flowers-an>

European Platform on LCA | EPLCA <https://eplca.jrc.ec.europa.eu/EnvironmentalFootprint.html>

EU Green Claims Directive https://environment.ec.europa.eu/topics/circular-economy/green-claims_en