

LCA Food 2020  
October 2020

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HortiFootprint Category  
Rules: harmonizing  
environmental footprinting  
of horticultural products

# Demand for environmental information of horticulture products is rising



GARDENING HOMES & TECH

NOT PRETTY: THE ENVIRONMENTAL  
IMPACT OF FLOWERS

**Diet High in Fruit and Vegetables Helps  
the Environment**

Feb 12, 2018 | Original Story from Frontiers.

**The hidden environmental cost of Valentine's Day  
roses**

It all comes down to shipping.

By Gaby Del Valle | @gabydj | gaby.delvalle@voxmedia.com | Feb 12, 2019, 11:00am EST

**Are pot plants more eco friendly than  
cut flowers?**

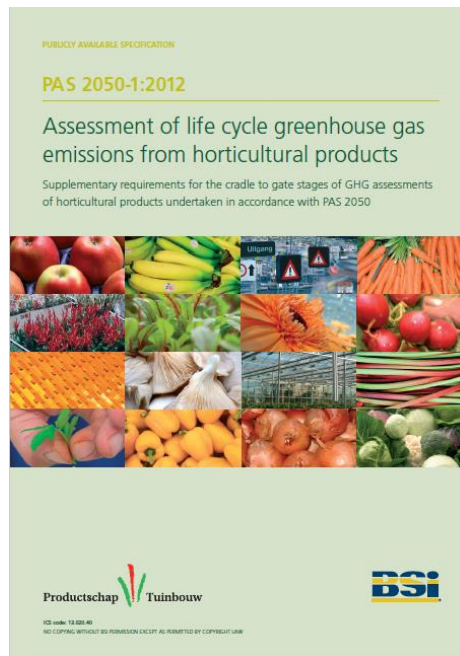
The global cut-flower industry is a behemoth to be reckoned with - but it's not straightforward with pot plants either

# Outdated and incomplete environmental standards for horticultural products



A standard for assessing the greenhouse gas emissions from horticultural products already exists BUT:

- It only covers climate change impacts
- It becomes outdated and not aligned with recent developments in the field



# PPS HortiFootprint project



Initiated by



With co-financing from



Advisory by





The development of an environmental footprint methodology for horticultural products helps the sector to **materialise the current effort it puts in to sustainability**. It helps a grower to identify - within its supply chain - how **to improve its environmental impact** and, doing so, to learn more about its own impact.



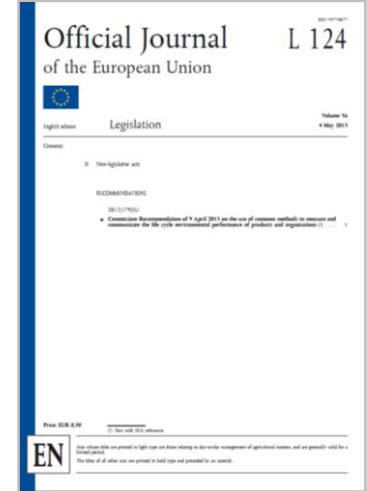
Daan van Empel & Albert Haasnoot



# Why a PEFCR?



- It provides **specific rules per product group** for environmental footprinting
- It focuses on the **most important parameters** in determining the environmental performance of a product
- It includes a **big array of environmental impacts**
- It allows between PEF calculations of **comparability** the same product category



According to European Commission standards

# Development of the HortiFootprint Category Rules



# Hortifootprint category rules



- Fresh out the press – published on July 2020
- It sets the rules to calculate the environmental footprint of horticultural products
- It is based on the European PEF method and PEF category rules

 <https://edepot.wur.nl/526452>





# Studies for six representative products to cover the high variability of the sector



Apples



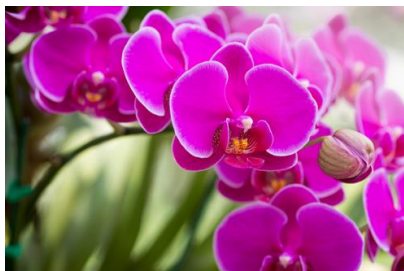
Bananas



Tomatoes



Tulip bulbs



Phalaenopsis



Roses

# Hortifootprint category rules



It includes 4 memos on specific aspects:

- Transfer fractions of **plant protection products**
- **Capital goods** modelling
- Modelling of **nitrogen and phosphorus** emissions
- Handling multi-functionality of **combined heat and power systems**



# RP-studies highlight the need for a comprehensive assessment



## Most relevant impact categories

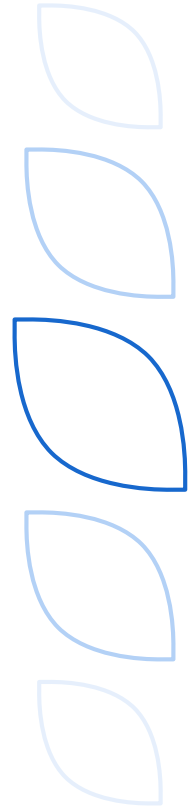
- Acidification
- Climate change
- Land use
- Particulate matter
- Photochemical ozone formation
- Terrestrial eutrophication
- Resource use, energy carriers
- Resource use, minerals and metals

## Most relevant life cycle stages

- Cultivation
- Post-harvest handling
- Packaging
- Distribution
- Storage
- Use stage
- End of life

# Next steps

- We invite everyone to adopt the HFCR in calculating the environmental footprint of horticultural products and share your feedback with us.
- Members of our consortium will become involved in the EF's agricultural modeling working group and contribute with the work done during the project.
- Now, we are developing an official PEFCR for cut flowers and potted plants in the Environmental Footprint transition phase and we have the ambition to do the same for fruits and vegetables.



# HFCR versus Flori PEFCR



The **HortiFootprint Category Rules (HFCR)** already follows the European Product Environmental Footprint Category Rules (PEFCR) in the following relevant aspects:

- It establishes one unified methodology for environmental footprint of horticultural products.
- It allows for identifying hotspots and improvement opportunities and for monitoring progress over time.

Now, the sector is working towards a **Flori PEFCR**. The main difference is:

- The HFCR was not 'signed off' by the European Commission but the Flori PEFCR will be.
- The Flori PEFCR will list the EF-compliant secondary datasets to be used. The use of the same secondary data, mandatory in official PEFCRs endorsed by the EC, ensures that differences between assessments are due to company-specific data only.

# Lessons learned



- Sustainable horticulture products can only be achieved with **engagement from the whole value chain**
- **Be aware of trade-offs between impacts:** Climate change is an important impact but surely not the only one to assess and focus on
- There might be **other options to benchmark results** than real and virtual products
- **Rules for agriculture modeling need further development** in the PEF and OEF methods

# To stay informed



- We can invite you for the public consultation of new versions of the HFCR and draft Flori PEFCR
- You can play a role in testing the HFCR or draft Flori PEFCR
- If you are interested, please inform our project manager Irina Verweij-Novikova ([irina.verweij-novikova@wur.nl](mailto:irina.verweij-novikova@wur.nl))

# Looking forward to your questions and comments



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(on behalf of the PPS HortiFootprint project team)