



Measure & Reduce Your Growing Media Footprint

Growing Media Europe LCA Platform

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www.blonksustainability.nl

Welcome to the GME LCA Platform

Measuring your environmental footprint is a crucial first step in becoming a more sustainable business. It helps you identify areas for environmental impact reduction, make more futureproof choices, test new business opportunities and innovations, and showcase your efforts to produce sustainably. In the future there will be increasing legal and regulatory attention on environmental footprinting.

The **GME LCA Platform** is specifically designed to support you in preparing for this future. It will benefit your organization and products, customers and, most importantly, the planet.

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Creating a sustainable future together

Introducing GME and Blonk

Growing Media Europe (GME) is an international non-profit organization representing the producers of growing media and soil improvers at European level. Growing media, sometimes called potting soils or substrates, are materials other than soil in situ in which plants and mushrooms are grown. **Blonk** is an international expert in agri-food system sustainability and Lifecycle Assessment (LCA) which offers consulting, data and software development services.

In 2019, GME initiated a cooperation with Blonk to set standards and facilitate environmental footprinting for the European growing media industry. Together they developed the **GME LCA Platform**, which includes LCA guidelines and a web-based LCA tool.

The cooperation began with the development of **sector-specific LCA Guidelines (GMEF guidelines)**, aligning with the progress of international initiatives such as the **European Commission's PEF (Product Environmental Footprint)**. This groundwork paved the way for the creation of a specialized LCA Database, which contains environmental footprint data for the most commonly used growing media products. Blonk then used the guidelines and database to develop the user-friendly, web-based **GME LCA Tool**, empowering companies and growing media stakeholders to easily calculate their environmental footprint.



The GME LCA Platform

Guidelines and the Tool

Life Cycle Assessment (LCA) is a method to evaluate the environmental footprint of a product or process throughout its entire life, from raw material extraction to production, use, and disposal. To ensure that LCA results can be compared, it's essential to follow a standardized methodology.

The **Growing Media Environmental Footprint Guidelines (GMEF guidelines)** are based on the **European Commission's PEF Guidelines (Product Environmental Footprint)**, providing a set of standard LCA recommendations and best practices that allow you to calculate your environmental footprint in a consistent way. The GMEF guidelines also build upon the following guidelines:

- IPCC Guidance on National Greenhouse Gas Inventories 2006
- 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands
- PAS2050-1:2012
- PAS2050:2011

The GME LCA Tool practically applies the GMEF Guidelines and allows you to easily calculate the environmental footprint of your products, even if you are not an LCA expert.



The GME LCA Tool

Inputs

The tool allows you to create your own growing media mixes by inputting information on the resources, constituents and additives you use in your production. Within the tool, you can collaborate with your colleagues on growing media mixes and see each other's results.

You have the option to choose between 2 system boundaries as defined in the GMEF Guidelines:

1 From cradle to customer for intermediate products, including:

- Raw materials production
- Transport (to factory)
- Mixing
- Packaging
- Transport (to customer)

2 From cradle to end-of-life for final products, including:

- All stages included in the cradle to customer system boundary
- Use
- End-of-life

Use and End-of-Life emissions are, for example, related to peat carbon oxidation or to the nitrogen content of the growing media mix.

The screenshot shows the 'Include Use and End of Life' section of the GME LCA Tool. It features a sidebar with expandable sections: COMMENTS, FACTORY, RESOURCE USE, and CONSTITUENTS. The CONSTITUENTS section is expanded, displaying a table of input materials and their properties. A note indicates that constituents must sum to 100% of 1 m³ of growing medium mix after mixing losses. The table lists two constituents: 'Green compost in closed system' and 'Wood fiber (mechanical processing)'. Each entry includes fields for Quantity, Density, and Moisture content, along with a dropdown for Origin. An 'Inbound transport' section is also visible, with fields for Mode, Distance, and a checked 'Empty return' option. A button labeled 'Add inbound transport' is present below the transport fields.

| Constituent | Quantity | Density | Moisture content | Origin |
|------------------------------------|----------|---------|------------------|------------------|
| Green compost in closed system | 65 | 600 | 45 | European Average |
| Wood fiber (mechanical processing) | 35 | 120 | 45 | European Average |

FIGURE 1: AN OVERVIEW OF THE INPUT SECTION

The GME LCA Tool

Outputs

Once all details are filled in, you can view your environmental footprint calculation results. The outcomes are presented in diverse interactive formats, offering you valuable insights:

1. Per impact category in a contribution analysis (Figure 2)
2. In an interactive “star burst” format in which clicking into an impact area will reveal a further breakdown of impacts for that category
3. In a Single Score, following the PEF methodology (Figure 3)

The results can also be exported as an Excel file.

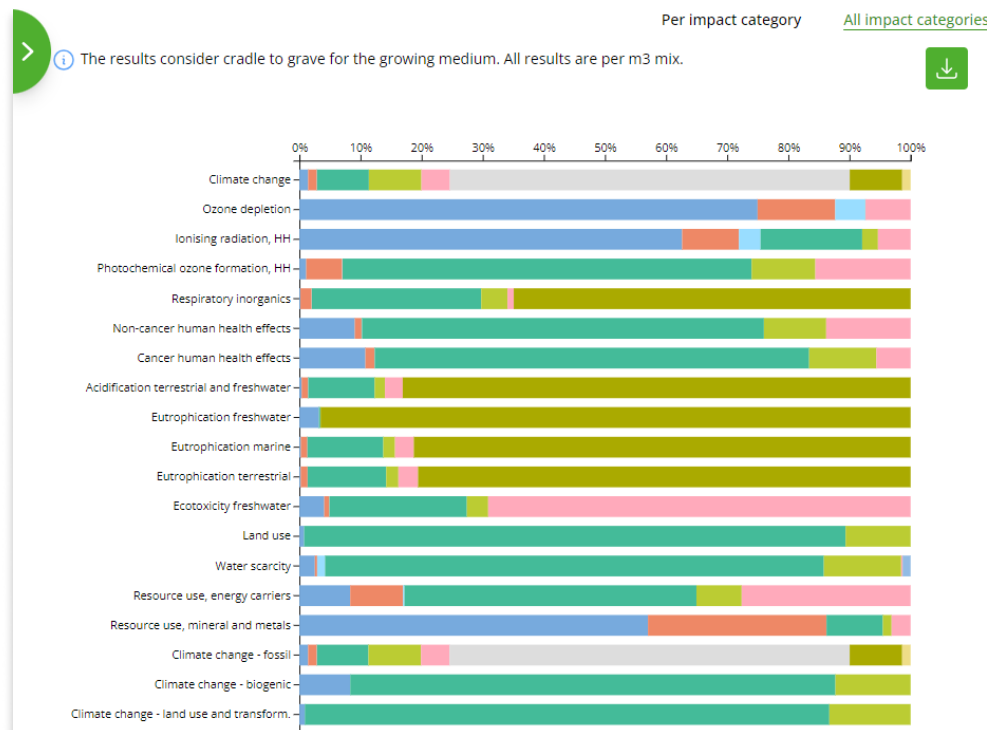


FIGURE 2. RESULTS "ALL IMPACT CATEGORIES"

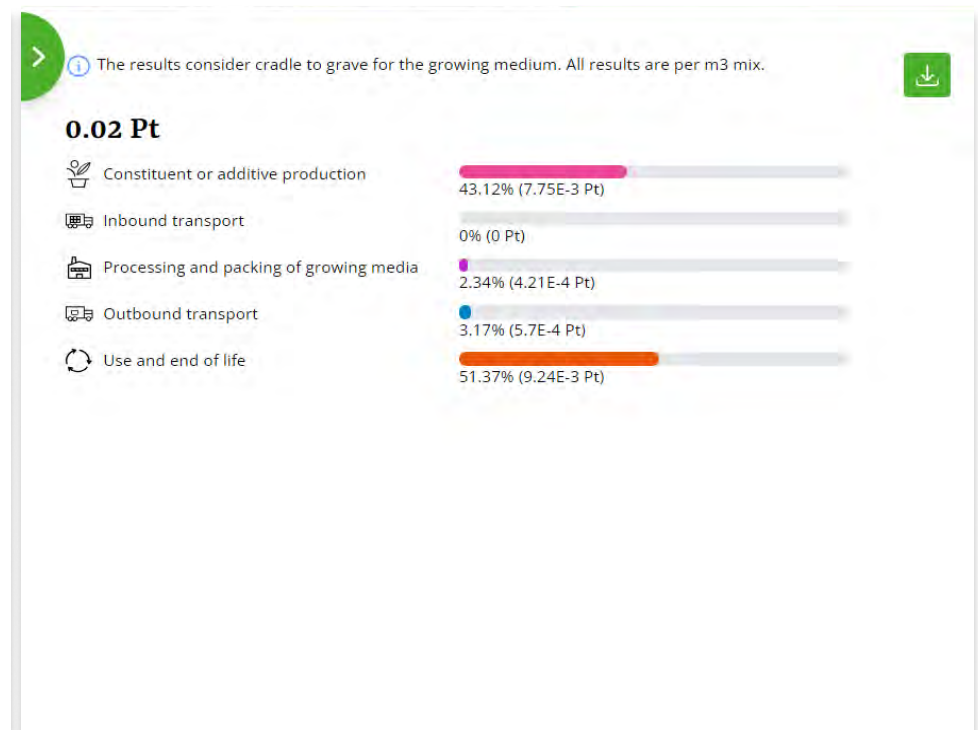


FIGURE 3. RESULTS "SINGLE SCORE"

License options and fees

There are various licensing options available, depending on your GME membership status and use case.

All licenses (excluding the demo licenses, more information on the next page) have a 2-year minimum commitment and include:

- Two hours (in total) of free support from Blonk's experts
- 15% discount on commercial fees for LCA consultancy by Blonk related to your growing media business

| License types | End user count | License length | Fee 1st year (excl. VAT) | Fee 2nd or 3rd year (excl. VAT) |
|--|---------------------|----------------|--------------------------|---------------------------------|
| GME Company member license | 2 users per license | 2 or 3 years | € 2,200 | € 1,500 |
| GME Associated member license | 2 users per license | 2 or 3 years | € 4,000 | € 2,200 |
| External company license | 2 users per license | 2 or 3 years | € 4,000 | € 4,000 |
| Demo license - GME Associated members * | 2 users per license | Annual | € 250 | N/A |
| Demo license - External company * | 2 users per license | Annual | € 500 | N/A |

• For details about demo and full licenses please see the next page

Comparison of full and demo licenses

A full license grants access to the full functionality of the GME LCA Platform, while a demo license provides limited functionality.

| | Full license | Demo license |
|---|--------------|--------------|
| License length | 2 or 3 years | Annual |
| Creating a growing medium | ✓ | ✓ |
| Copying a growing medium | ✓ | |
| Calculating environmental impact for a growing medium | ✓ | ✓ |
| Saving a growing medium | ✓ | |
| Sharing a growing medium with users from your own company | ✓ | |
| Comparing environmental performance of growing media | ✓ | |
| Exporting results (Excel file) | ✓ | |

Get in touch

In order to access the GME LCA Platform, a license is required. Licenses are managed by Blonk.

To inquire about licenses, or to get more information, please contact us at tools@blonksustainability.nl.

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