## Sustainability Agenda

"Growing Media Europe AISBL is a non-profit industry association representing the producers of growing media and soil improvers at European level. We promote optimum legislation for our sector and act as focal point for political decision makers and stakeholders."

### **Growing Media** EUrope Growing your food & Greening your life

# Feed the world and maintain the quality of life

Growing media help to feed the world and make our lives greener in a sustainable way. Growing media are the tool needed to come to better horticultural produce and to grow more with less.

Growing media - also known as substrates or potting soil - are materials in which plants and mushrooms are grown. Growing media are mixes composed of organic and/or mineral materials (see table on page 3) and are used for professional horticulture, landscaping and hobby gardening. By providing an ideal environment for roots, the growing medium enables the healthy development of fruits, vegetables, trees or ornamentals. Growing media are essential in today's society, as they contribute considerably to growing our food and greening up our living spaces.

Horticulture is defined as the cultivation of plants for food, comfort and beauty both in a professional context and a home setting. Horticulture includes cultivation and processing of soft fruits, vegetables, mushrooms, ornamental plants and trees. Related activities are roof gardening, vertical farming and landscaping.

### Horticulture depends on quality growing media

The increasing demand for growing media is directly linked to the need for efficiently produced protein and nutrientrich plant-based food for a growing world population. The crop yield per hectare must rise if the world's food supply is to be secured, putting enormous pressure on agricultural land. With ongoing urbanization, the objective to maintain a certain quality of life and clean air in the mega cities becomes

more pressing. This is reached by planting more trees and flowers, creating parks and green recreation areas. This again highers the demand for growing media. Adapting to this upsurge, the horticultural sector is currently undergoing a transformation and quality growing media will prove an absolute necessity in it.

Research from Wageningen University & Research predicts that the global demand for growing media will increase by more than 400% between now and 2050:

Raw material	2017	2050	Increase
Peat	40 Mm³/yr	80 Mm³/yr	250%
Соіг	5 Mm³/yr	35 Mm³/yr	700%
Wood fibre	2 Mm³/yr	25 Mm³/yr	1,250%
Bark	1 Mm³/yr	10 Mm³/yr	1,000%
Compost	1 Mm³/yr	5 Mm³/yr	500%
Perlite	1.5 Mm³/yr	10 Mm³/yr	667%
Stone wool	0.9 Mm³/yr	4 Mm³/yr	433%
Soils / tuffs	8 Mm³/yr	33 Mm³/yr	413%
Other/new		43 Mm³/уг	
Global volume	59 Mm³/yr	244 Mm³/yr	415%

Source: Chris Blok, Wageningen University & Research

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## Growing media help solving challenges

To secure the future of their businesses, growers face three major challenges today: unpredictable weather conditions, limitation of resources like fertilisers, plant protection products and water as well as lack of labour. Fortunately, all three challenges can be addressed by using growing media.

Benefits of growing media versus soil-bound cultivation:

- Weather has less impact
- Less fertilisers, plant protection products and water needed
- More resilient plant
- Reduced land-use footprint
- Less labour required

When growing media are used in protected cultivation systems, weather conditions have less impact. The necessary input of fertilisers, plant protection products and water per amount of harvested produce is much lower than in open field agriculture. Growing media can often circumvent the perils of many soil-borne diseases typically developing under high pressure growing methods in the open field. The reduced land-use footprint is yet another advantage of soilless growing. And while the working conditions are more favourable, less labour is required compared to growing the same crops in the ground. Use of growing media enables horticulture in areas where conventional open field growing is climate-wise impossible or economically not viable. It becomes obvious that growing food, trees and flowers in growing media is the future.

## European growing media industry is front-runner

Europe is the global leader in growing media production (40 Mm<sup>3</sup>/yr) and therefore in the pole position to answer the drastic increase in demand. As European growing media industry, we are enthusiastic about the predicted development. However, we are very much aware of our responsibility. We – like any other industry – need to operate in a way that respects our environment as well as our people. We have made it our mission to promote and accompany the described global shift in horticultural production in the most sustainable way possible.

With this Sustainability Agenda, Growing Media Europe commits to answer the increasing worldwide demand for growing media in the most sustainable way possible. The European growing media producers are aware of the environmental, social and economic impacts linked to the manufacturing of growing media. We will keep addressing these challenges and develop even more responsible industry practices. With the sectoral approach, Growing Media Europe will focus on the sustainability of the growing medium as an end product and its aptness for being used in a more sustainable manner. All industrial processes and all raw materials used have an impact. We are assessing their individual footprints in our recently launched LCA-project (see chapter 3) and are developing a Code of Practice (see chapter 4) describing the behaviour that GME expects of its members with regards to social, environment and economic aspects.



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## Growing media and Sustainable Development Goals

The growing media industry contributes to a healthier planet. Let's explain how.

## Only "fit for purpose" can be resource-efficient

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An important part of sustainability is the production of growing media that are "fit for purpose". By using growing media that are perfectly adapted to the crop, the growing circumstances and the growers' preferences, we contribute to a resource-efficient and economically viable horticulture. It would be a waste of resources, energy and labour to produce crops on growing media that do not support plant growth. Therefore, we strongly support the wise use of growing media that are "fit for purpose". Our products are perfectly compatible with all modern and high-tech low-impact techniques. In this way, we minimise our environmental impact while maximising the resource efficiency of crop production.

Cultivating crops in growing media reduces leaching of nutrients to ground and surface waters and contributes to the local production of crops with a minimal impact on the environment. Growing media have a positive impact on the achievement of the following SDGs.

- Zero hunger (SDG2)
- Clean Water and Sanitation (SDG6)
- Responsible consumption and
- Climate action (SDG13)

### **Renewability and circularity**

A share of our products is produced by using renewable raw materials and we also prefer to work with fertilisers that do not leach nutrients to the environment. Many of our growing media can be re-used in other areas as e.g. brick production, as a high-quality soil improver or as input for compost. This way, we contribute to a more circular economy.



## Life Cycle Analysis standard a top priority

Growing Media Europe, through its members, commits to a sustainable development of raw materials and products, production, transport and sales, use and after use of natural resources used by the horticultural industry. GME has recently kicked-off a project on developing an environmental footprint methodology for growing media to further increase transparency of the impact of substrates on the environment.

### Environmental footprint for growing media

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Improving sustainability in horticulture requires detailed insight into sustainability aspects of growing media. GME therefore initiated the development of a standard methodology for calculating the environmental footprint of growing media.

The project aims to deliver an LCA standard for the growing media industry. With this standardised methodology the environmental impact of various growing media can be calculated in a consistent way, producing comparable data. The methodology is being developed in accordance with the Product Environmental Footprint Category Rules (PEFCR) system and aims to be adopted as the PEFCR for horticulture and potential other initiatives.

A database with standard LCA data of growing media will be created and made available to the horticultural sector, as it is currently not available in the European Commission (EC) background database. In addition, companies can provide tailor-made solutions by calculating the impact of individual mixtures using a calculation tool. Insight into the impact of the various raw materials and additives can improve environmental performance while maintaining the efficacy and safety of growing media.

The LCA-project started in April 2019 and has a lead-time of 1.5 years.

It is important to note that growing media play a small role in the total environmental impact of the plant's life cycle from propagation and growing to retail, logistics, end-use and end-of-life solutions.

### The standardized sector LCA toolbox will consist of three main elements

In an expert task force, we will develop a standardized sector LCA toolbox, in line with the European Product Environmental Footprint (PEF) guideline.

- 1. Development of an LCA calculation standard for the growing media industry (in line with Product Environmental Footprint (PEF)).
- 2. Compiling and elaborating the background data LCA database necessary for members to perform calculations based on the developed standard.
- 3. Online application (sector LCA tool), allowing members to make LCA calculations according to the developed standard.

# Sustainability objectives

GME and its members are committed to improve the environmental, economic and social performance of growing media. GME promotes sustainability through developing an LCA standard, as described in the previous chapter, through transparency, accuracy and open dialogue, through the development of a Code of Practice and through promoting acknowledged certification schemes.

### Transparency and accuracy

Growing Media Europe encourages its member to strengthen and maintain dialogue with the public as well as to embrace transparency. To foster accuracy, GME will commission a study on the growing media sector in Europe. It will focus on raw materials used for growing media production and insight on what purposes growing media are used for.

### Development of own Code of Practice

GME is preparing a Code of Practice for the growing media industry. This guideline describes the behavior that GME expects of its members with regards to social and environment aspects as well as economic viability. The GME Code of Practice is expected to be launched towards the end of 2020.

### **Environmental pillar**

The responsible sourcing of raw materials and additives is a key-element in the Code of Practice. GME intends to make the sustainability performance of the industry more measurable. The LCAproject and calculation-tool are needed to assess the impact of constituents and source of origin.

When the measuring of sustainability performance is established, it will enable the industry to set the necessary sustainability criteria for every raw material used. The criteria set by other certification organizations such as FSC, PEFC and RPP\* will be included. GME encourages its members to only source from peat bogs that hold an RPP (responsibly produced peat) certificate.

GME strives for more effective logistics solutions through the entire chain, encouraging its members to seek dialogue with relevant politicians, automotive producers and forwarders. GME also, via its members, supports energy saving measures and production efficiency.

#### \* Responsibly Produced Peat

Ensuring that peatland will be used, managed and restored in a responsibly way *www.responsiblyproducedpeat.org* 

### Social pillar

An important element of the Code of Practise will be guidelines on how the members act on social matters.

Our members often operate production sites located in regions with high unemployment rates. The presence of the growing media industry is instrumental to local economic development of these areas, creating secure and well-paid jobs. As the industry shifts to using raw materials sourced from outside of Europe, the impact on the rural development and employment needs to be taken into consideration.

A key tool will be to create Sustainable Procurement Guidelines, obliging suppliers to operate in accordance with ILO Conventions and Recommendations, human rights and environmental standards, business ethics code and compliance.

### Economic pillar

GME aims to balance all the environmental and social initiatives with the economic development of the industry. In the Code of Practice GME encourages every member to focus on profitable growth through projects where environmental and social responsibility is at the core to ensure a sustainable future.



### Promoting certification schemes and quality marks

Growing Media Europe encourages all its members to comply, where possible, with acknowledged certification systems and standards, like for example:

### → ISO 14001

Environmental management

- → ISO 26000, ISO 45001, BSCI, SMETA Social compliance schemes for people, society and workers
- → **RPP**

Responsibly Produced Peat, ensuring peatlands are managed and restored in a responsible way

→ EU Ecolabel

Environmental standards throughout the life cycle

### → FSC, PEFC

Ensuring wood chips used in the wood fibre production process is obtained from certified sources

GME recognises quality as an essential part of a sustainable industry, encouraging its members to bring waste to a minimum and to comply with relevant quality marks.

### **Growing Media** Europe

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