



JRC TECHNICAL REPORTS

DG

Assessment of the EU Ecolabel criteria for growing media, soil improvers and mulch

*Document prepared for
the EU Ecolabelling Board
(EUEB)*

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Background information

Scope of the product group: The Commission Decision (EU) 2015/2099 that establishes the EU Ecolabel criteria for *growing media, organic soil improvers and organic mulch* defines the scope of the product group.

EU Ecolabel criteria history: Original criteria were developed and adopted in the early 2000s under Commission Decision 2001/688/EC establishing ecological criteria for the award of the Community eco-label to soil improvers and growing media. The original criteria were revised and product group was split into soil improvers product group and growing media product group. Consequently, the separated sets of criteria for the two were adopted as Commission Decision 2006/799/EC establishing EU Ecolabel criteria for soil improvers, and Commission Decision 2007/64/EC establishing EU Ecolabel criteria for growing media.

The currently valid criteria as laid down in the [Commission Decision \(EU\) 2015/2099](#) again merged both product groups, distinguishing between technical characteristics of products addressed by the scope, where necessary. Last but not least, the former revision broadened the scope to the product mulch, as it was identified as a potentially differentiated product. 'Mulch' means a type of soil improver used as protective covering placed around plants on the topsoil whose specific functions are to prevent the loss of moisture, control weed growth, and reduce soil erosion.

Table 1. Applicability of the different criteria to each type of product covered by the scope

Criterion	Growing media	Soil improvers	Mulch
Criterion 1 - Constituents	x	x	x
Criterion 2 - Organic constituents	x	x	x
Criterion 3.1. - Mineral growing media and mineral constituents: Energy consumption and CO₂ emissions	x		
Criterion 3.2 - Mineral growing media and mineral constituents: Sources of mineral extraction	x	x	x
Criterion 3.3 - Mineral growing media and mineral constituents: Mineral growing media use and after use	x		
Criterion 4 - Recycled/recovered materials and renewable materials in growing media	x		
Criterion 5 - Limitation of hazardous substances			
Criterion 5.1 - Heavy metals	x	x	x
Criterion 5.2 - Persistent Organic Pollutants	x	x	x
Criterion 5.3 - Hazardous substances and mixtures	x	x	x
Criterion 5.4 - Substances listed in accordance with Article 59(1) of Regulation (EC) No 1907/2006	x	x	x
Criterion 5.5 - Pathogens	x	x	x
Criterion 6 - Stability	x	x	x
Criterion 7 - Physical contaminants	x	x	x

Criterion 8 - Organic matter and dry matter		x	x
Criterion 9 - Viable weed seeds and plant propagules	x	x	
Criterion 10 - Plant response	x	x	
Criterion 11 - Growing media features	x		
Criterion 12 - Provision of information	x	x	x
Criterion 13 - Information appearing on the EU Ecolabel	x	x	x

History of uptake: Overall, since 2014, a quite stable evolution of the number of EU Ecolabel licenses and products has been registered for this product group, (as of September 2020: 18 licenses are awarded for 162 products). Member States with higher numbers of awarded products are: FR(114), NL(32), DK(8), ES(4), BE(3), GR(1). These numbers need to be improved. Between 2016 and 2017, some EU Ecolabel licenses, awarded by IT and HU, were not renewed, as the new criteria were considered too stringent to meet by former license holders.

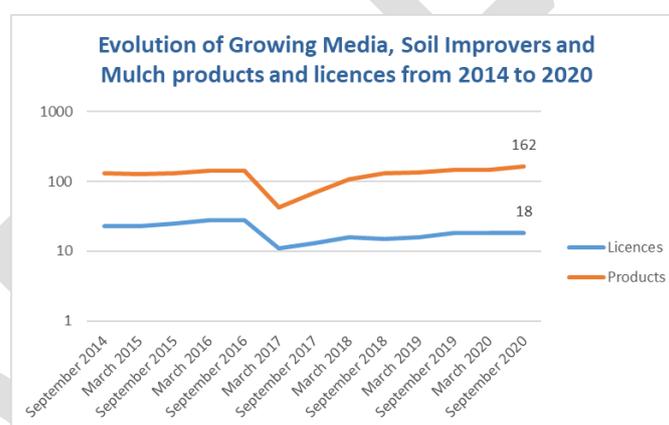


Figure 1 Evolution of Growing media, Soil improvers, and mulch products and licences from 2014 to 2020

At the time of the positive voting of the current EU Ecolabel criteria for soil improvers, growing media and mulch the representatives of the EU Member States gave a positive opinion, in accordance with the regulatory procedure with scrutiny. The following points listed below were requested to be further investigated in the occasion of the next revision processes:

- to lower the limits for heavy metals;
- to make use of the guidelines established under the Bern Convention in relation to extraction of minerals from non-EU Member States parties to the Convention;
- to include responsible produced peat in the scope as organic constituent, taking into account the limitations of ex-ante verification of restoration plans.

Consideration for the revision planning: The EU Ecolabel criteria development process is formally defined by Regulation (EC) No 66/2010. The EU Ecolabel is a voluntary policy instrument and must be implemented in the same way in all EU Member States. As part

of the process, the EU Ecolabelling Board (EUEB) meets two or three times each year to discuss ongoing issues. The criteria are officially voted at the end of the revision process. The current EU Ecolabel criteria for growing media, soil improvers and mulch are valid until 30 June 2022.

Generally, the overall revision process typically takes around two and a half years although this can vary significantly depending on the complexity of the criteria and unforeseen developments that may delay the process.

In line with Art 7 (4) of the [EU Ecolabel Regulation \(EC\) No 66/2010](#) the shortened criteria development procedure may apply for the existent criteria as long as it is provided that the criteria set does not require a substantial revision. In this case, the shortened revision procedure shall meet requirements laid down in Part C of Annex I to EU Ecolabel Regulation.

Assessment of EU Ecolabel criteria for growing media, soil improvers and mulch

In order to understand the validity of the criteria for growing media, soil improvers and mulch, and to get an overview of the market and position of the EU Ecolabel, contact via specific survey was made with Competent Bodies, EU Ecolabel license holders, other manufacturers of products addressed by the scope but without licences, industry associations, consumer associations and NGOs. A list of over 150 stakeholders were contacted and informed about the online questionnaire that was available and accessible under: <https://ec.europa.eu/eusurvey/runner/dc055c67-1287-9dd8-a70c-fc60f0a2ec54>

The survey period ran for 6 weeks between September and October 2020. A blank copy of the questionnaire can be found in [Annex I](#) to this document.

Desk research included a review of the previous work establishing the EU Ecolabel criteria for the product group.

All the data inquired via survey was divided into sections, as follows:

- General Environmental Concerns related to the product group;
- Opinion about the validity of the Scope and Definition;
- Opinion about the validity of existing EU Ecolabel criteria for growing media, soil improvers and mulch.
 - ✓ Opinion about Assessment and Verification in the preamble.
 - ✓ Opinion about each criterion.

In total, 40 responses were received, with more than 77% (31 respondents) representing industry. Around 20% of all respondents (8 respondents) obtained EU Ecolabel licenses for the product group, whereas 27% (11 respondents) potentially considers applying for an EU Ecolabel license for the product group, and 5% (2 responses) is in the process of applying for an EU Ecolabel license for this product group.

An overall participants' profile was as follows:

Stakeholder's profile	No of responses	% of participation
Buyer / Consumer interests	2	5.00 %
EUEB Member / Competent Body	4	10.00%
Government (local, regional or national)	1	2.50 %
Industry	31	77.50 %
Non-Governmental Organisation (NGO)	2	5.00 %

The vast representation of industry stakeholders proves the existence of interest in the EU Ecolabel certification for soil improvers, growing media, and mulch among the targeted business group. Stakeholders indicated that the key reason for having/applying for the EU Ecolabel license is to increase product visibility, stimulate product sale, demonstrate to customers the environmental excellence of the company, as well as boost the public procurement contracts.

For the reason of the further analysis, the document was split in three sections:

Section A of the present document covers general environmental issues related to the product group.

Section B of this document covers analysis of the currently valid scope and definition of the product group

Section C of this document analyses the currently valid EU Ecolabel criteria and summarises the opinion on the expected revision intensity for each criterion.

Possible methodological limitations include a small sample size of responses that are focused on a specific stakeholder profile.

To alleviate possible erroneous generalisations, the results of the questionnaire will be contrasted with the opinion of the EUEB during the EUEB Meeting in November 2021.

Assessment of the general environmental concerns and proposed changes to the currently valid criteria,

Following opinions collected from industry the EU Ecolabel can be used as a sign of quality and environmental performance, which can be judicial in an increasingly competitive market.

Table 2 summarises information obtained from stakeholders on the key environmental concerns related to the product group and contrast them with the existing EU Ecolabel criteria. It shows that the currently valid EU Ecolabel criteria address environmental issues that have been raised by stakeholders. The further criteria analysis is needed to better reflect the innovation of the last years and the state of the art of the market and technical changes for the product group.

Table 3 summarises information on the main changes on the environmental front that have occurred in the past 5 years. This should be further analysed during the criteria revision process.

It is acknowledged that the key market changes indicated by stakeholders derive from the increase of the environmental awareness of a consumer and therefore the growing interest in purchasing "greener" products. This is likely to further stimulate the uptake of the product certification. As the key change that have occurred during the last 5 years majority of stakeholders mentioned legal and policy changes that alter/influence the currently valid criteria. Indeed, the upcoming revision should consider strategic objectives and be aligned with legal requirements i.e. (FPR, Fertilising Products Regulation (EU) 2019/1009), strategic objectives (e.g. those indicated in the: "Green Deal", "Circular Economy Action Plan", "Biodiversity Strategy 2030", "Zero Pollution Ambition for a toxic free environment" etc). Stakeholders also mentioned circular economy aspects and use of appropriate constituents as key environmental issues to be analysed.

Table 2. Summarised stakeholders' opinion on the key environmental aspects of the product group compared with the existing EU Ecolabel criteria

Key environmental issues and claims related to the product group	Corresponding EU Ecolabel criterion (Commission Decision (EU) 2015/2099)
<p>Constituents (i.e., peat-free, or compost-based growing media or soil improver);</p> <p>Sustainable constituents i.e. min 50%</p> <p>Origin of all materials used and associated impact</p> <p>Safe constituent which have positive properties for good growth</p> <p>Cleanliness of GM constituents</p> <p>Non-synthetic product, such as rock wool</p> <p>No (or less) chemical fertilizers</p> <p>Using organic wastes to make new products, while protecting soils.</p>	<p><i>Criterion 1 – Constituents</i></p> <p><i>Criterion 2 – Organic Constituents</i></p> <p><i>Criterion 3 – Mineral growing media and mineral constituents</i></p>
<p>Energy consumption</p> <p>Lower carbon emission (i.e. lower CO2 emission by protecting peatlands)</p> <p>Carbon footprint LCA/net impact of GM, soil improvers & mulch,</p>	<p><i>Criterion 3.1 – Energy consumption and CO2 emissions</i></p>
<p>Biodiversity and land use</p>	<p><i>Criterion 3.2 – Sources of mineral extraction</i></p>
<p>Renewability;</p> <p>Product circularity and use of circular materials,</p>	<p><i>Criterion 3.3 – Mineral growing media use and after use</i></p> <p><i>Criterion 4 – Recycled/recovered and organic materials in growing media</i></p>
<p>Toxicology of the product;</p> <p>Risk free products i.e. contaminants</p> <p>Free of harmful organisms</p> <p>Food safety</p> <p>Safe use of "waste products" materials due to strict chemicals requirements.</p>	<p><i>Criterion 5 – Limitation of hazardous substances</i></p> <p><i>Criterion 5.1 – Heavy metals</i></p> <p><i>Criterion 5.2 – Polycyclic Aromatic Hydrocarbons</i></p> <p><i>Criterion 5.3 – Hazardous substances and mixtures</i></p> <p><i>Criterion 5.4 – Substances listed in accordance with Article 59(1) of Regulation (EC) No 1907/2006 of the European Parliament and of the Council (1)</i></p> <p><i>Criterion 5.5 – Limits for E. coli and Salmonella spp.</i></p>
<p>Fit for purpose</p> <p>Appropriate quality products to prevent bad growth and failures;</p>	<p><i>Criterion 6 – Stability</i></p> <p><i>Criterion 7 – Physical contaminants</i></p> <p><i>Criterion 8 – Organic matter and dry matter</i></p> <p><i>Criterion 9 – Viable weed seeds and plant propagules</i></p> <p><i>Criterion 10 – Plant response</i></p> <p><i>Criterion 11 – Growing media features</i></p>
<p>Pollution of water.</p>	<p><i>Criterion 11 – Growing media features</i></p> <p><i>Criterion 5.1 - Heavy metals</i></p>
<p>Organic labelling,</p>	
<p>Locally produced</p>	<p><i>1) EU Ecolabel is neutral when it refers to technology or place of manufacturing</i></p>

¹⁾Out of the scope of the EU Ecolabel criteria

Table 3 Information collected on the main changes on the environmental front that have occurred in the past 5 years.

Indicated area of changes	The major changes on the environmental front that have occurred in the past 5 years
Market changes:	Customers are looking for and ask for greener products Initiatives on reducing the use of peat, Using peat -free growing media in hobby gardening and landscaping Offering recycling solutions Lower the transport distance (local sourcing) Growing media with more renewable & sustainable constituents; mineral mulches Internal philosophy shifts
Policy and Legal changes	The FPR has come into force. The EU Green Deal with a role for horticulture and growing media Climate targets in general, Climate change and objectives 2030/2050 Circular economy needs Responsible sourcing of all constituents, Peat reduction strategies in various countries due to the impact on biodiversity Sustainability requirements

Stakeholders were also inquired about the most relevant changes that should be considered during the upcoming revision (Figure 2) In total, 51 answers were collected under the multiple choice question. The complexity and stringency of the currently valid criteria along with the number of existent requirements were mentioned, in total, by 25, 18, and 10% of participants, respectively. 1 participant indicated the need to develop additional criterion (that refers to the inclusion of responsible produced peat as an input material)

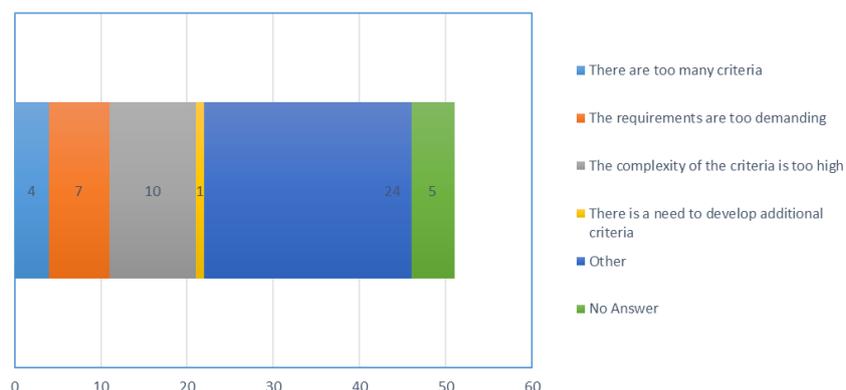


Figure 2 General assessment of changes that should be targeted by the criteria revision

The majority of stakeholder (60%) listed particular changes (“other”) that should be considered during the revision, these could be summarised, as follows:

- ✓ Reduce the cost;
- ✓ Encourage entry for SME's to the market;

- ✓ Extension of the scope to all fertilizers products and biostimulants, inclusion of responsibly produced peat (RPP) and paludicultural biomass;
- ✓ Mineral growing media have no place in an Ecolabel;
- ✓ Harmonisation with other Quality Assessment System and Ecolabels;
- ✓ Human pathogens are mentioned in too general form;
- ✓ Contribution to a circular and carbon neutral economy, by using organic wastes to make new products, while protecting soils;
- ✓ Energy consumption/CO₂ for growing media.

Identification of the main costs linked to the product certification

The vast majority of stakeholders (18 out of 38 respondents) identified complexity of requested laboratory testing as the key economical constrains of a product labelling. Some stakeholders highlighted difficulties and monetary costs that might be encountered with the criteria that trigger the supply chain control and auditing. This could be managed by requiring supplier(s) to adhere to certain environmental principle. While this is possible for large companies, SMEs might encounter problems. In fact stakeholders indicated that the cost prevents entry to the market for SME's. Administrative aspects and stringency of the criteria were also mentioned as a possible burden.

The cost of the main constrains to EU Ecolabel criteria should be reworked to minimise bureaucratic difficulties and to match market practices more closely.

A. Analysis of the validity of the current scope and definitions

Vast majority of stakeholders (75%) indicated that the currently valid scope and definition are adequate and well-founded for the product group. Majority of stakeholders that indicated the need to change/revise the scope and definition did not indicate the actual change off the scope but rather an update of the definitions in line with FPR Regulation. One stakeholders asked for the scope extension and one for the exclusion of mineral growing media, as follows:

- *Definition of 'Bio-waste' needs to be separated into Garden and Park waste due to their different nature;*
- *Consistency with the [Fertilising Products Regulation](#)¹(FPR) should be ensured. Growing media also include casing soils and mushroom compost. The scope is limited to growing plants and mushrooms are not plants;*
- *The term constituent does not appear in the FPR. Other definitions developed/being developed by CENTC 223 need to be consulted."*
- *Extension of the scope to the rest of fertilizers products : organic and organo-mineral fertilizers, and biostimulants;*
- *Mineral growing media should be excluded, as there are many unsolved risks and environmental disadvantages:*

[Regulation \(EU\) 2019/1009](#) of the European Parliament and of the Council² lays down rules on making available on the market of EU fertilising products, and repeals

¹ OJ L 170, 25.6.2019, p. 1–114

² Regulation (EU) 2019/1009 of the European Parliament and of the Council of 5 June 2019 laying down rules on the making available on the market of EU fertilising products and amending Regulations (EC) No 1069/2009 and (EC) No 1107/2009 and repealing Regulation (EC) No 2003/2003 (OJ L 170, 25.6.2019, p. 1).

Regulation (EC) No 2003/2003 of the European Parliament and the Council³. Regulation (EU) 2019/1009 aligns the existing harmonisation rules to the new legislative framework and introduces major changes with regard to harmonisation rules for products covered by Regulation (EC) No 2003/2003. It also sets harmonisation rules for other products intended to provide plants with nutrients, such as organic fertilisers, or products intended to improve plants' nutrition efficiency. The Regulations establishes definitions for the products addressed by the currently valid scope of the EU Ecolabel for the product group: soil improvers, growing media, and mulch. Indeed, The EU Ecolabel revision shall consider harmonising the definitions with FPR Regulation, in order to ensure consistency among different European product policies:

- A growing medium shall be an EU fertilising product other than soil in situ, the function of which is for plants or mushrooms to grow in.
- A soil improver shall be an EU fertilising product the function of which is to maintain, improve or protect the physical or chemical properties, the structure or the biological activity of the soil to which it is added.
 - ✓ An organic soil improver shall consist of material 95 % of which is of solely biological origin. An organic soil improver may contain peat, leonardite and lignite, but no other material which is fossilized or embedded in geological formations.
 - ✓ An inorganic soil improver shall be a soil improver other than an organic soil improver.

The FPR Regulation also specifies the maximum allowed content of contaminants (i.e. heavy metals) in a growing medium.

The European standardisation organisations (CEN) is developing harmonised standards for testing methods to accompany FPR implementation and CE-Mark validation. The work is on-going but the adoption of those standards by CEN should be set whenever it is technically feasible before the date of the adoption of the Regulation. Otherwise, if for technical reasons it is not deemed feasible to develop a harmonised standard before 16 July 2022, CEN will adopt technical specifications in the form of European standardisation deliverables as a first step. These specifications could help manufacturers to prove conformity of their products with requirements of the Regulation until harmonised Standards can be developed.

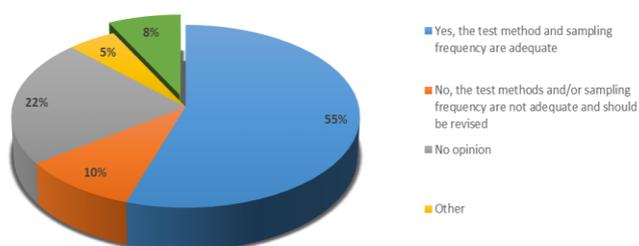
The alignment with (FPR) Fertilising Products Regulation (EU) 2019/1009, applying as of 16/07/2022, including ongoing amendments is one of the key intentions of the planned revision. The timeline of the revision of EU Ecolabel criteria needs to be harmonised with the development of harmonised EN Standards.

B. Analysis of the validity of EU Ecolabel criteria for Growing media, soil improvers, and mulch

While the core technology behind the product type has not significantly changed, certain criteria are outdated in light of the best practices as well as legislative and policy changes observed in Europe. New data (post 2015) should be available to review the appropriateness of the criteria and the threshold hurdles proposed.

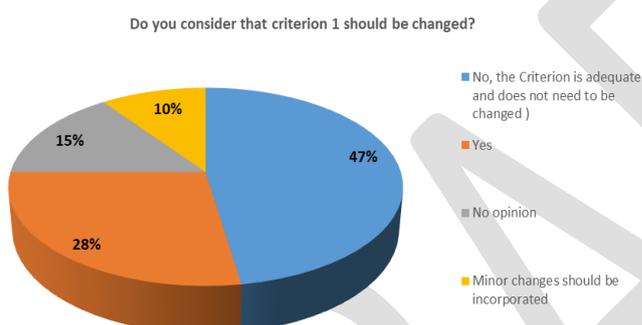
³ Regulation (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003 relating to fertilisers (OJ L 304 , 21.11.2003, p. 1).

Assessment and Verification



The majority of stakeholders (55%) agrees that the test methods and sampling frequency indicated in the preamble of the Commission Decision (EU) 2015/2099 are adequate and does not need to be changed. The 10% of responders considers the need for changes. It was mentioned that all EN Standards for GM and SI are currently being revised and should be used as a reference once finalised (harmonized standards are being developed under Regulation 2019/1009).

Criterion 1 – Constituents



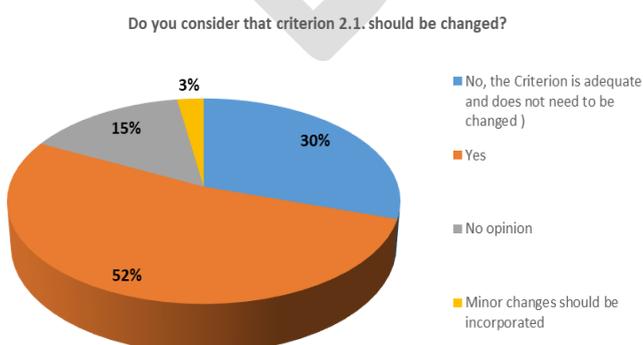
The 47 % of stakeholders consider that the criterion is adequate and does not need any change, whereas the 28% and 10% indicated the need for deep or light revision, respectively.

14 stakeholders that indicated that the criterion needs to be revised pointed out following aspects to be considered:

- *The criterion should not exclude the use of any materials, it might be adequate but the exclusion of materials indicates a need for a revision;*
- *The total exclusion of some constituents hinders the increased use of Circular Economy-based GM (e.g. GM with compost or digestive as a constituent) in a world with an increasing demand for GM;*
- *A list of intended added constituents should be provided;*
- *The criterion should be revised and acceptable raw materials should be evaluate again in line with FPR Regulation 2019/1009.*

Criterion 2. - Organic constituents

Criterion 2.1.



52% of stakeholders indicated the need to change the criterion 2.1., 38% out of them requested incorporation of a new requirement or withdrawal of the existent requirement. These stakeholders requested the inclusion of responsible produced peat (RPP) under the scheme. Stakeholders provided additional arguments, as follows:

- *Since 2015 responsible peat production (RPP) offers also responsible sourcing, If peat from already degraded peat*

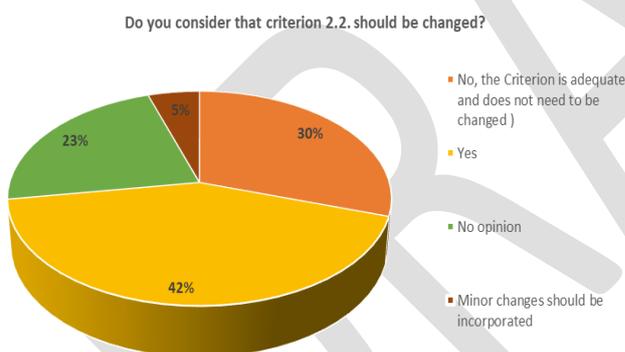
bogs is used (RPP peat), there is no impact on the C balance;

- *Peat is an organic constituent that offers a stable basis to growing media and should be included therefore addition of certain % of peat (i.e. 20-25%) i.e. in composting process should be allowed; Using a reasonable percentage of peat (RPP certified) would provide better technical quality of GM;*
- *Peat substrate does not become waste after use but could serve as a soil improver, it is also easy to recycle;*
- *Peat will remain most important constituent in GM, it compensates negative properties of other constituents and is necessary in mixes, the growing tests provide good results when peat is present as constituent;. It can absorb water and nutrients and is free of harmful organisms; it's very difficult to fulfill some of the other criteria e.g. E. coli etc. without the use of peat;*
- *Inclusion of peat could stimulate the EU Ecolabel market for the product;*
- *Peat extracted in the European Union according to European guidelines should not be penalized;*

Stakeholders that supported the validity of Criterion 2.1. (peat exclusion) emphasised that the constituent is not sustainable and therefore should not be considered under EU Ecolabel, mainly due to environmental degradation and GHG production.

Indeed, peat extraction that destroys peatlands should not be allowed as it impacts biodiversity including pollinator populations. Including peat in the scope of the EU Ecolabel product group would go against the Green Deal Communication, particularly, against the Biodiversity Strategy for 2030 which aims to protect and restore carbon-rich ecosystems and peatlands and the 2030 Climate Target Plan which sets the way for the EU to achieve climate neutrality by 2050 and the need for a growing sink. This includes as well improved soil management including through the restoration of wetlands, peatlands and degraded land in line with the above mentioned Biodiversity Strategy.

Criterion 2.2.



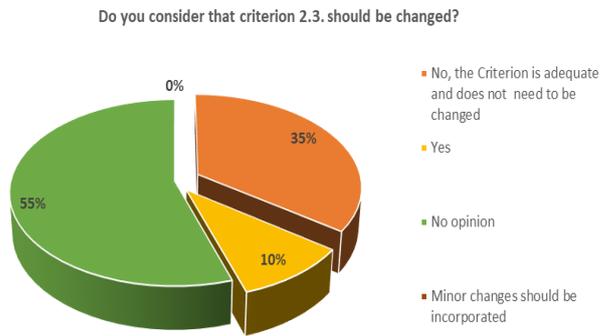
The 30% of stakeholders considered that the criterion is adequate and does not need any change, whereas the 42% and 5% indicated the need for deep or light revision, respectively.

In general, stakeholders requested harmonisation with the Component Material Categories format (CMCs) placed in the FPR Regulations.

- *Use the definitions provided by the FPR UE 1009/19 for Component Material Categories (CMCs); The CMCs could be well used to describe materials allowed;*
- *The organic constituents should be extended with sustainable raw materials e.g. RPP-peat;*
- *To use constituents from paludiculture and/or short rotation plantations;*
- *With regard to the constituents, the field of review and use needs to be defined;*
- *Sludges from paper industry needs to be re-evaluated (eg. additive in composting process);*
- *What about other organic materials like woodfibres, Sphagnum moss? Do you really only want waste?*
- *Domestic sludges can be used depending on their composition and treatment;*
- *New codes can be considered.*

The alignment with (FPR) Fertilising Products Regulation (EU) 2019/1009, applying as of 16/07/2022, including ongoing amendments is one of the key intentions of the planned revision.

Criterion 2.3.



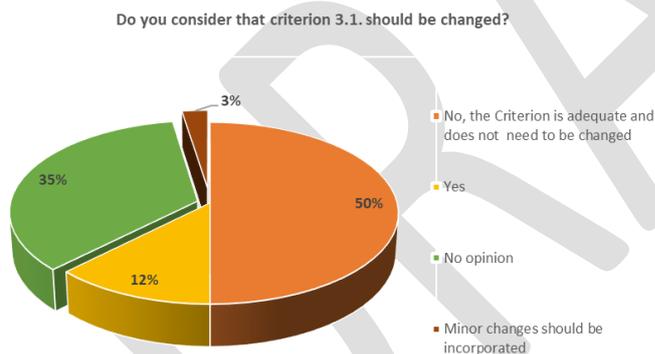
The majority of stakeholder (55%) did not expressed any opinion in respect to the possible revision of the criterion, whereas 35% confirmed adequateness of the currently valid requirement. The 10% of respondents indicated the need to revise the criterion. The additional comments provided indicate the need to harmonise the criterion with FPR Regulation, as follows.

- *Sludge is not used in GM (plant growth risks) but can be used as SI if safe;*
- *Use the definitions provided by the FPR UE 1009/19 for Component Material Categories (CMCs).*

The alignment with (FPR) Fertilising Products Regulation (EU) 2019/1009, applying as of 16/07/2022, including ongoing amendments is one of the key intentions of the planned revision.

Criterion 3 – Mineral growing media and mineral constituents

Criterion 3.1. - Energy consumption and CO2 emissions

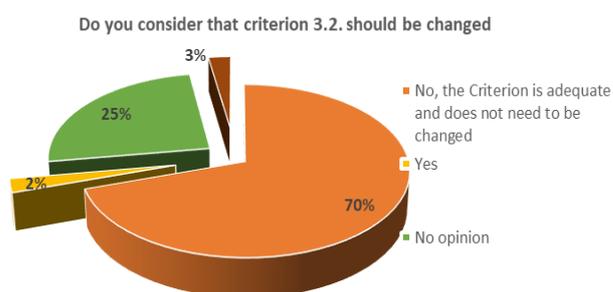


The 50% of stakeholders considered that the criterion is adequate and does not need to be changed, whereas the 12% and 3% indicated the need for deep or light revision, respectively.

Stakeholders in additional comments asked for the clarification if manufacturers of expanded clay, perlite, vermiculite etc agreed on the requirement. Additional comments were, as follows:

- *The criterion should be simplified; the calculation and data are too difficult to provide;*
- *To decreased volume of emissions from production of mineral wool and incorporate after-use requirements;*
- *We oppose the inclusion of mineral growing media. Energy consumption is high;*
- *A former EEL holder cannot provide 5 years energy data, while operating longer: there is no legal obligation;*
- *The limits should be re-evaluated.*

Criterion 3.2. - Sources of mineral extraction



The 70% of stakeholders considered that the criterion is adequate and does not need to be changed, whereas the 2% and 3% indicated the need for deep or light revision, respectively.

Stakeholders pointed out that the criterion might be complex to read, and explain i.e. circularity extraction of raw materials.

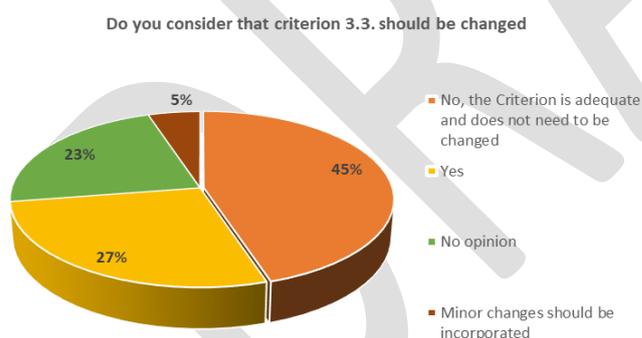
Stakeholders also indicated that in Natura 2000 sites, the extraction of minerals is mostly prohibited, and

that the criterion does not provide sufficient protection.

Natura 2000 is the centrepiece of EU nature and biodiversity policy. It is an EU-wide ecological network of nearly 26000 sites in the 27 EU countries, established under the 1992 Habitats Directive and covering almost 18% of the EU's land area. The European Commission's [Guidance on Non-energy mineral extraction and Natura 2000](#) (EC 2010) and [Guidance on undertaking non-energy extractive activities in accordance with Natura 2000](#) (EC, 2012) provide guidance on how best to ensure that Non-Energy Extractive Industry (NEEI) developments are compatible with the provisions of the two EU Directives.

The intention of the revision is to assess the appropriateness of the requirements on Natura 2000 network areas and special protection areas as well as the impacts on important pollinator habitats.

Criterion 3.3. - Mineral growing media use and after use

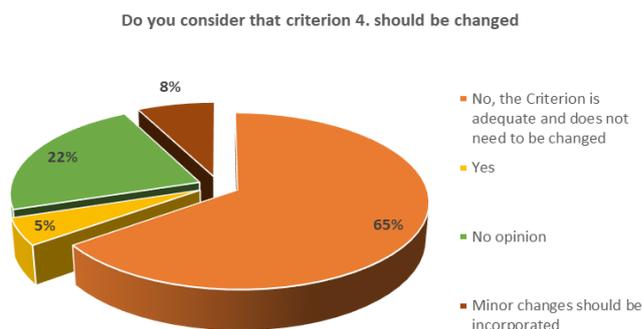


The 45% of stakeholders considered that the criterion is adequate and does not need to be changed, whereas the 27% and 5% indicated the need for deep or light revision, respectively.

The additional comments mainly questioned the scope of the criterion that refers to professional use only, as follows:

- *Not only for professional usage; why not used for hobby producers?; it should not exclude hobby or amateur use where mineral products are widely requested by non-professional users i.e. for green roofs;*
- *In my opinion one should be to at least mix with other raw materials;*
- *Mineral growing media should not be able to receive Ecolabel;*
- *Should be harmonised with the Component Material Categories (CMCs) (FPR UE 1009/19);*
- *Appropriate collection and recycling of mineral wool is possible only in case of professional use;*
- *Environmental protection is insufficient. Up to 30% GM escapes organised collection & recycling;*
- *This requirement is important in respect to CE.*

Criterion 4. - Recycled/recovered and organic materials in growing media



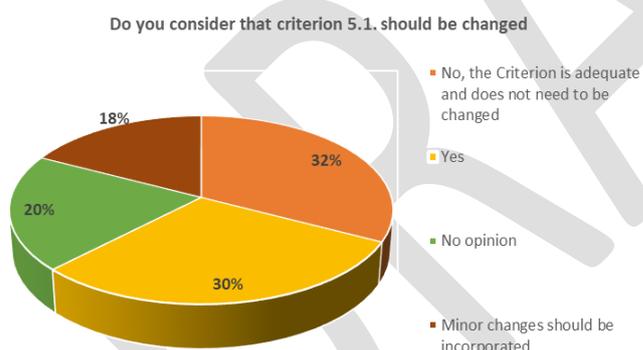
The 65% of stakeholders considered that the criterion is adequate and does not need to be changed, whereas the 5% and 8% indicated the need for deep or light revision, respectively.

The additional comments mainly debated the scope of the criterion, which addresses the type and definition of the recycled materials allowed, as follows:

- *I think only a 30% of organic constituent isn't enough to consider any growing media to label as Eco label;*
- *Does "at least 30 % of recycled materials" automatically exclude materials other than mineral wool?;*
- *Some GM constituents does not increase the volume, content should be expressed in percentage;*
- *Define the 'recycled' materials better, include the expression on volume basis;*
- *Please clarify that the recycled material is NOT internal waste material of production;*
- *The percentages should be re-evaluated, and, if possible, more recycled material should be incorporated.*

Criterion 5.— Limitation of hazardous substances

Criterion 5.1. — Limits for heavy metals



The 32% of stakeholders considered that the criterion is adequate and does not need to be changed, whereas the 30% and 18% indicated the need for deep or light revision, respectively.

The aggregated opinion of stakeholders in reference to changes requested is stated below. 8 stakeholders indicated the appropriateness to revise the limits for heavy metals content for soil improvers, mulch and organic

constituents of growing media, and 9 stakeholders pointed out the need to incorporate a new requirement or to withdraw the existent requirements.

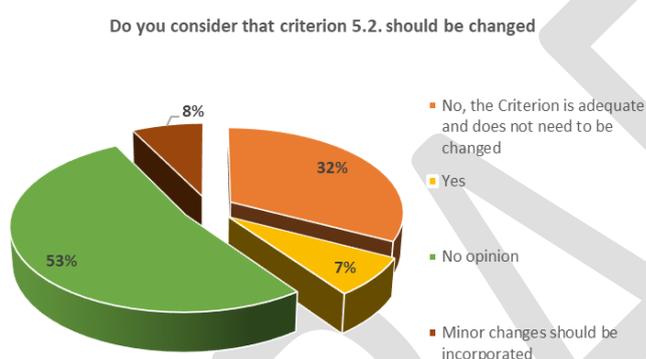
Action	Number of respondents	%
Deep revision of the Criterion	2	5.0 %
Incorporation of a new requirement or withdrawal of the existent requirements	9	22.5%
Other	1	2.5%
Change of the structure of the Criterion	1	2.5%
Revision of the limits for heavy metals content for soil improvers, mulch and organic constituents of growing media	8	20.00%
Revision of the standard test methods of extraction and/or measurement of heavy metals	2	5.0%
No Answer	17	42.5%

Additional comments collected show that the revision of criterion 5.1. should focus on harmonising the allowed thresholds with legal requirements as laid down in [FPR Regulation](#), as follows:

- *Harmonise and adjust limit values for heavy metals with the EU Fertilising Product Regulation;*
- *To revised EN test methods and open the possibility to include more methods;*
- *Ni max level authorized in mineral constituents (clay, volcanic minerals, ...) is problematic;*
- *In the Spanish Regulation the limits are more demanding;*
- *Bark heavy metal levels need revision;*
- *The limit for certain heavy metals is very strict;*
- *Extraction method for mineral GM vastly underestimates heavy metal content'.*

Annex I Part 2 to the Regulation specifies the maximum allowed limit values for contaminants in soil improvers and growing media. Indeed, the validity of reference values and test methods for heavy metals required by the currently valid criterion 5.1. needs to be analysed and adapted to the best practice approach.

Criterion 5.2. – Limits for Polycyclic Aromatic Hydrocarbons (PAH)



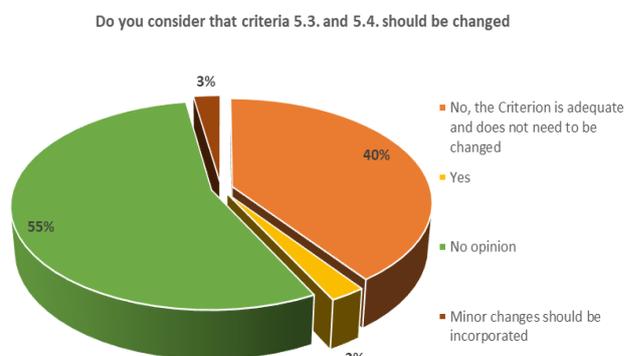
Approximately one-half of participants (53%) did not express any particular opinion in reference to the criterion's revision. 32% of stakeholders considered that the criterion is adequate and does not need to be changed, whereas the 7% and 8% indicated the need to perform deep or light revision, respectively.

The additional comments mainly indicated the urgency to harmonise requirement with FPR Regulation, but also argued the necessity to retain the criterion for all constituents, as follows:

- *We are not aware of the possible risks of PAH and the practical use of this criterion;*
- *Depends on constituent, not needed for eg 100 % sphagnum moss. The limit should apply for products containing ashes and/or bio-charcoal;*
- *We are not aware of the possible risk of PAH and the practical use of the criterion;*
- *Guidance for the criterion should be the FPR 2019/1009 Regulation;*
- *Peat substrates does not contain PAH;*
- *Testing frequency can be changed;*
- *Assurance of input material quality should be preferred to end-testing to avoid PAH in products;*
- *The inclusion of more PAH's should be considered.*

Criterion 5.3. – Hazardous substances and mixtures

Criterion 5.4. – Substances listed in accordance with Article 59(1) of Regulation (EC) No 1907/2006

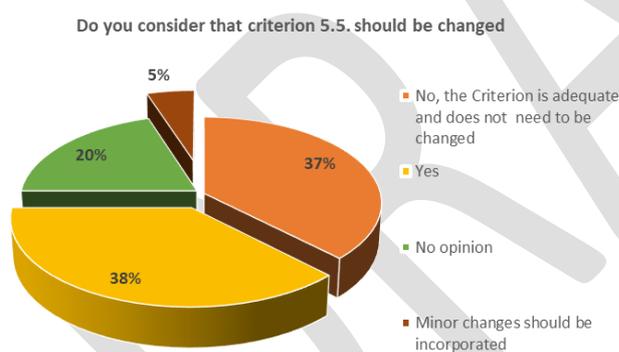


Approximately one-half of participants (55%) did not express any particular opinion in reference to the criterion's revision. The 40% of stakeholders considered that the criterion is adequate and does not need to be changed, whereas the 2% and 3% indicated the need to deep or light revision, respectively.

Additional comments provided can be summarised as follows:

- *Causes serious eye irritation, Causes skin irritation should still be permissible as a warning;*
- *Check the criterion validity and relationship to FPR Regulation;*
- *Allow certain % of environmentally hazardous fertilizer to be added (eg to sphagnum moss);*
- *GM should not contain any toxic or hazardous substances;*
- *Important that the requirement is focusing on added substances - this is easy to verify and document.*

Criterion 5.5. – Limits for E. coli and Salmonella spp.



The split view was observed among stakeholders in reference to the the revision of criterion 5.5.: 37% responses indicated the soundness of the criterion, whereas 38% - the need for a thorough revision. Additional 5% of participants favoured incorporation of minor changes into the criterion. The aggregated opinion of stakeholders in reference to changes requested is stated below:

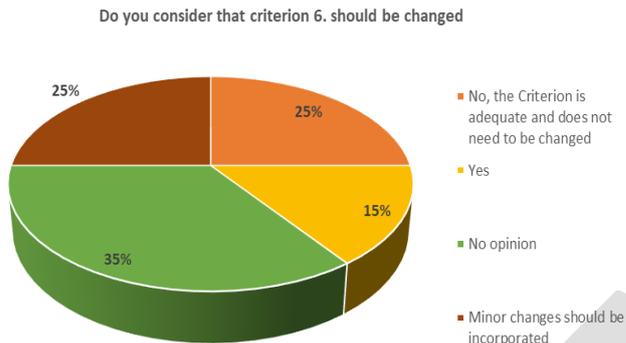
Action	Number of respondents	%
Deep revision of the Criterion	5	12.5%
Incorporation of a new requirement or withdrawal of the existent requirements	8	20.00%
Other	0	0.0%
Change of the structure of the Criterion	0	0.0%
Revision of the limit value, please specify	1	2.5%
Revision of the referenced test method, please specify	2	5.0%
No Answer	24	60.0%

Additional comments collected reveal that the revision of criterion 5.5. should focus on monitoring's rules and harmonisation with developed/being developed CEN TC Standards linked to FPR Regulation, as follows:

- *Only human pathogenic strains should be considered for E. coli, such as EHEC, E.coli is everywhere, is an ubiquitous organism, only some strains (f.e. EHEC) are pathogenic;*

- *E. coli* <1000 is an almost impossible limit when recycled constituents are used. Circular products have more human pathogens;
- The criterion should be applied only to materials at production phase and should be determined at point of production;
- Methods just copy/pasted; not tested for GM, SI, M. CEN TC currently developing methods based on FPR;
- This methods works, but it should analysed if these are the most relevant.

Criterion 6 – Stability



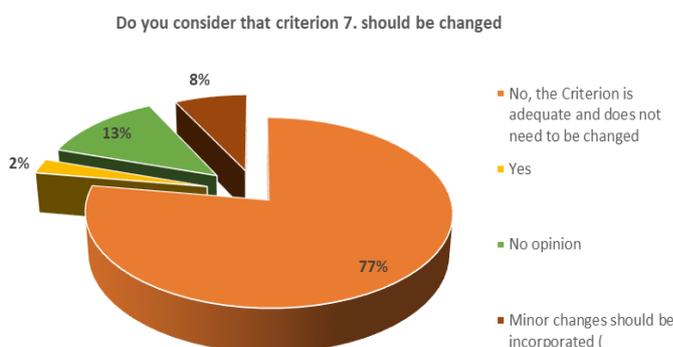
The 25% of stakeholders considered that the criterion is adequate and does not need to be changed, whereas the 15% and 25% indicated the need to deep or light revision, respectively. 35% of participant did not express any particular opinion on the criterion's revision. The 8 stakeholders indicated the need to revise the reference values. The aggregated opinion of stakeholders in reference to changes that should be considered is stated below.

Action	Number of respondents	%
Deep revision of the Criterion	3	7.50%
Incorporation of a new requirement or withdrawal of the existent requirements	0	0.0%
Other	3	7.50%
Change of the structure of the Criterion	0	0.0%
Revision of the limit value, please specify	8	20.0%
Revision of the referenced test method, please specify	2	5.0%
No Answer	24	60.0

Additional comments collected reveal that the revision of criterion 6. should re-assess the best practice (current data and experience) along with alignment with FPR Regulation, as follows:

- Follow-up for current data and experiences, this may be basis for some adjustments, i.e. check with the European Compost Network and others if applicable and valid;
- Check with new constituent such as wood fibre;
- Harmonising the limits for non-professional and professional use. Which is the definition of professional use?;
- This is of no importance for Growing media;
- Harmonise with FPR Regulation 2019/1009 requirements, at least.

Criterion 7 – Physical Contaminants

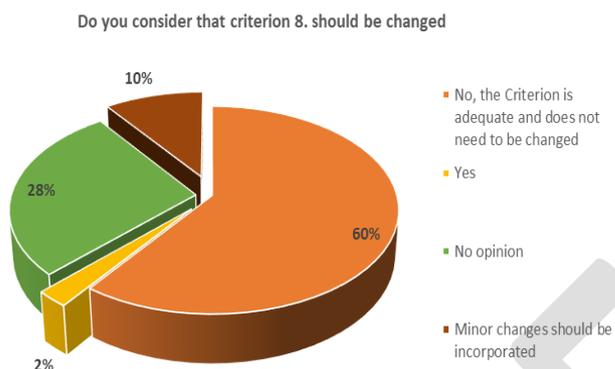


The vast majority of stakeholders (77%) considered that the criterion is adequate and does not need to be changed, whereas the 2% and 8% indicated the need for a deep or light revision, respectively. The 13% of participant did not express any particular opinion.

Additional comments collected reveal that the revision of criterion 7 should focus on:

- *Making reference to the upcoming EN Standards (being developed);*
- *The contamination level can be lowered to get a better acceptance for the product;*
- *Must be linked with FPR Regulation 2019/1009 requirements at least;*
- *Does the criterion sufficiently exclude microplastics?;*
- *Assurance of input material quality should be preferred to end-testing.*

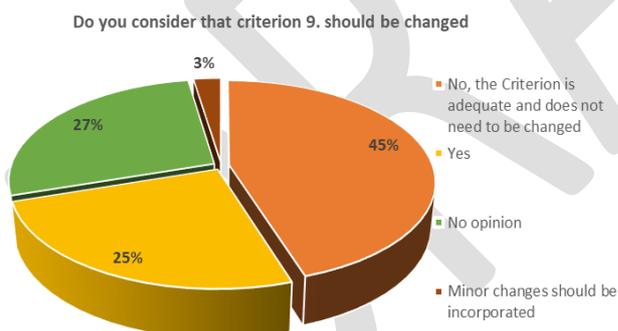
Criterion 8 – Organic matter and dry matter



The majority of stakeholders (60%) considered that the criterion is adequate and does not need to be changed, whereas the 2% and 10% indicated the need for a thorough or light revision, respectively. 28% of participant did not express any particular opinion. Additional comments collected reveal that the revision of criterion 8 should focus on the revision of test methods and requested thresholds:

- *Referring to the upcoming EN Standards (being developed) and align with EU Fertilising Product Regulation;*
- *These tests are easy to make but the relevant levels might be discussed, check for the actual data;*
- *The threshold in point (1) is under-regulated;*
- *15% of dry weight is too low for organic matter content*

Criterion 9 – Viable weed seeds and plant propagules

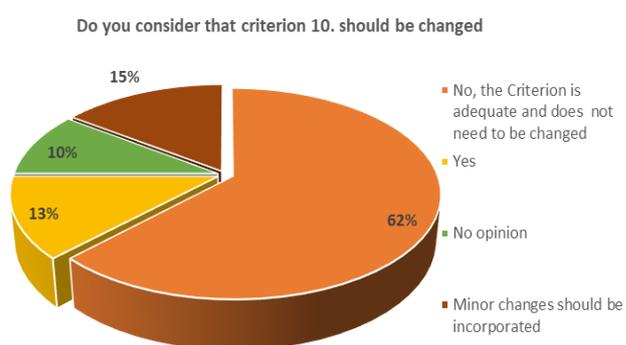


The 45% of stakeholders considered that the criterion is adequate and does not need to be changed, whereas the 25% and 3% indicated the need for a thorough or light revision, respectively. Additional comments collected reveal that the revision of criterion 9 should focus mainly on the revision of the reference test methods, as follows:

- *We wonder whether the indicated method is consistent with the application of materials in practice;*
- *Different test methods provide different results. Only 1 standard method should be used;*
- *The test method does not correspond with the method used for growing media and soil improvers. This is not applicable. In the past a cabbage method was used;*
- *More commonly used in practice is the method in BGK kap IV B1 (2006);*
- *Bring this in line with currently existing quality schemes on Growing media, such as RHP⁴;*

⁴ <https://www.rhp.nl/en/product/growing-media>

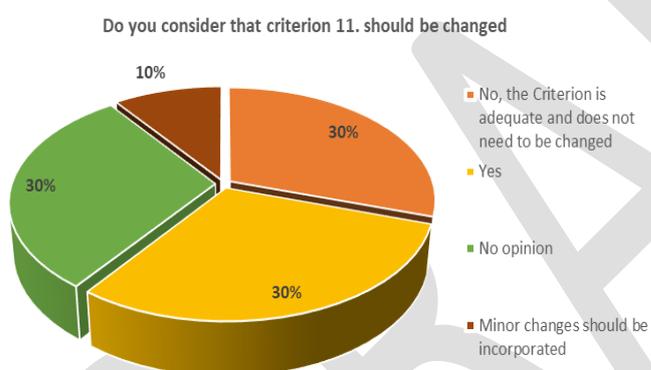
Criterion 10 – Plant response



The 62% of stakeholders considered that the criterion is adequate and does not need to be changed, whereas the 13% and 15% indicated the need for a thorough or light revision, respectively. Stakeholders generally discussed the appropriateness of test methods and requested thresholds, as follows:

- *Financial support should be incorporated into the program for SME's to perform testing. Other testing methods should be allowed, i.e. pot growth test: sage test;*
- *Compared to peat-based GM, peat-free GM give always neg. effects on emergence and growth;*
- *I think it's useless to make growth test because users won't follow the same steps. Plant response depends on the management of the crop, I think it does not need a test;*
- *Peat free substrates wit organic fertilizer may require other threshold values. This is too strict for GM;*

Criterion 11 – Growing media features



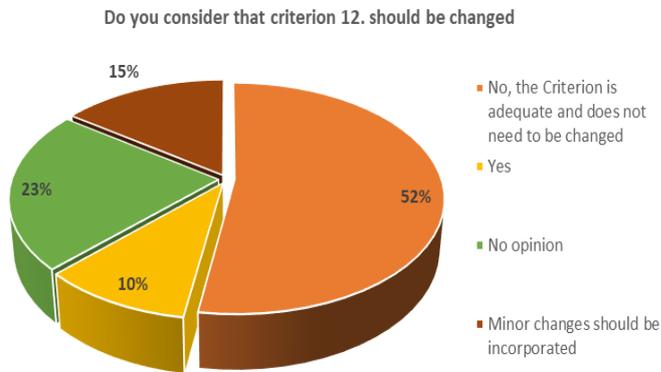
The split view was observed in reference to the revision of criterion 11: 30% of responses indicated the soundness of the criterion, whereas 30% - the need for its thorough revision, and 10% the need to introduce minor adjustments. 30% of respondents did not express any particular opinion. The aggregated opinion of stakeholders in reference to changes that should be considered is stated below.

Action	Number of respondents	%
Deep revision of the Criterion	0	0.0%
Incorporation of a new requirement or withdrawal of the existent requirements	10	25.0%
Other	1	2.5%
Change of the structure of the Criterion	0	0.0%
Revision of the referenced test method, please specify	1	2.5%
Revision of the reference values, please specify	4	10.0%
Deep revision of the Criterion	24	60.0%

Stakeholders pointed out the need to harmonise the requirement with FPR Regulation, to analyse the validity of reference values and validity of requested test methods and thresholds, as follows:

- *Should be harmonised with FPR Regulation and upcoming EN Standards; the limits may need revision;*
- *With the presence of peat in the GM the values are adequate. If no peat is allowed, the values are too strict;*
- *Due to the nature of some of the constituents (e.g. compost), higher pH level should be considered, at the range of 3-8. Growing media for truffle (*Tuber melanosporum*) needs pH 7,5-8. EC < 300 / pH: 4 – 8;*

Criterion 12 – Provision of information

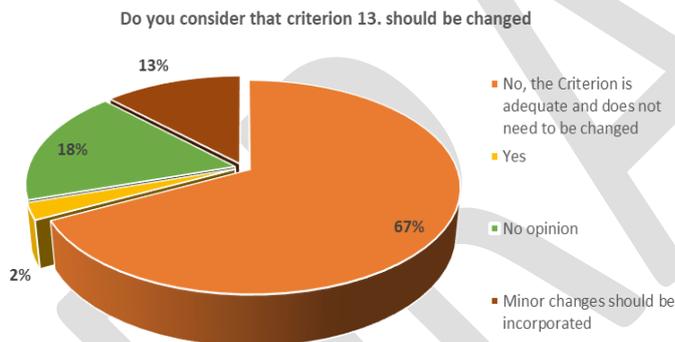


The 52% of stakeholders considered that the criterion is adequate and does not need to be changed, whereas the 10% and 15% indicated the need for a thorough or light revision, respectively.

In general, stakeholders requested the simplification of the criterion, and analysis if all information requested brings additional benefits to the end-user. It was also suggested to harmonise the criterion with the labelling requirements introduced by FPR Regulation.

- Please align with labelling requirements in FPR, and apply EN Standard;
- Criterion contains information that is not useful for an end-user (i.e. growth inhibition). It needs to be checked during the revision process;
- To simplify and request less information, in the case of Growing Media l, m, n, o, p should be removed;
- The test method in the package is useless, because it's in the Technical sheet;
- Germination and growth can change batch wise and cannot be printed on bags.

Criterion 13 – Information appearing on the EU Ecolabel



The majority of stakeholders (67%) considered that the criterion is adequate and does not need to be changed, whereas the 2% and 13% indicated the need for a thorough or light revision, respectively. Additional comments collected stated that the information appearing on the EU Ecolabel will depend on the final requirements and revision should focus on guaranteeing points that are enumerated. Mentioning of

product's technical quality should be fine to complete environmental statements. The promotion of renewable and circular materials does not exclude other materials; text box completion proposal: *promotes the use of recycled materials*. Other stakeholder stated that text is not appropriate for mineral growing media

Conclusions

This analysis provides preliminary background information for the revision of [EU Ecolabel criteria for Soil Improvers growing media and mulch](#) established by Commission Decision (EU) 2015/2099 of 18 November 2015⁵.

Simplified summary of the feedback collected in respect to the validity of [EU Ecolabel criteria for growing media, soil improvers and mulch](#), gathered via survey, is presented on Figure 3. In general, stakeholders acknowledged the technical soundness of the currently valid criteria set. The key exceptions are: Criterion 2 (*Organic constituents*), Criterion 3.3 (*Mineral growing media and mineral constituents: Mineral growing media use and after use*), Criterion 5 (*Limitation of hazardous substances*), Criterion 6 (*Stability*), Criterion 9 (*Viable weed seeds and plant propagules*), and Criterion 11 (*Growing media features*). The key revision suggestions that are summarised in this document as a part of the criterion per criterion analysis, refer mainly to harmonising the ambitious level or technical specification of EU Ecolabel criteria with FPR Regulation and related EN Standards. As previously indicated, the preparation of EN Standards that are harmonised with FPR Regulation is an on-going work of CEN Technical Committee. As to Criterion 2, the majority of comments were referring to peat exclusion. In this respect the position of the Commission is stated in the Green Deal Communication, the Biodiversity Strategy for 2030 which aim to protect and restore carbon-rich ecosystems and peatlands, and in the 2030 Climate Target Plan which sets the way for the EU to achieve climate neutrality by 2050 and the need for a growing sink.

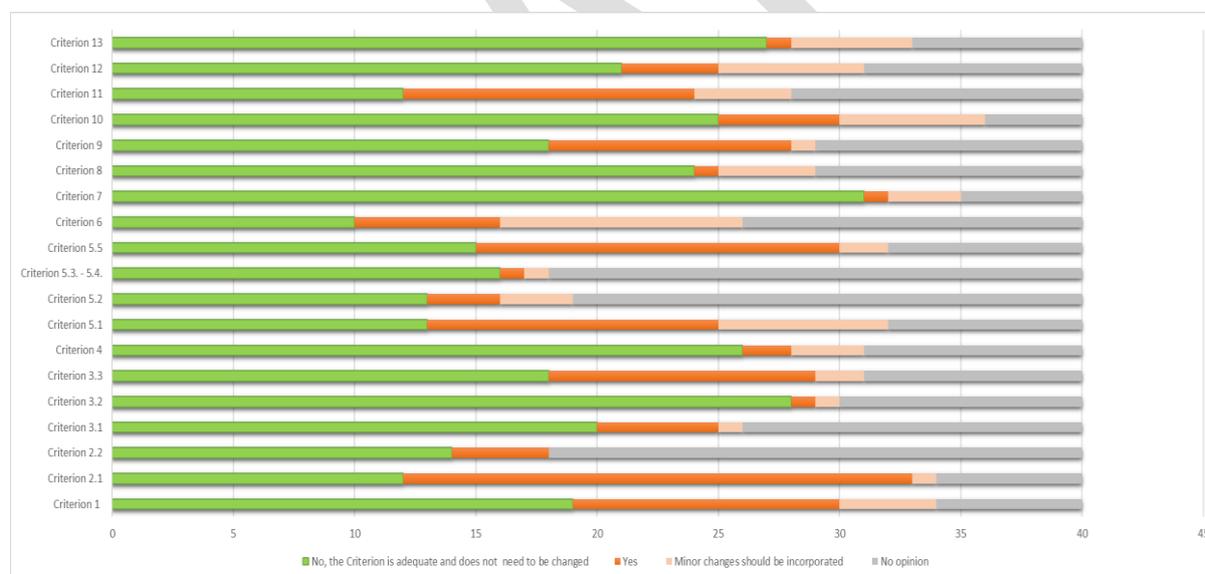


Figure 3. Summary of the stakeholders' opinion on the validity of the current EU Ecolabel criteria for growing media, soil improvers and mulch

Having in mind the output of the survey, in light of the position of the EU Ecolabel on the market, the interest from industry in the EU Ecolabel certification and discussions between DG JRC and DG ENV the following conclusions and options are proposed for the future revision of the EU Ecolabel for the product group:

- A. The vast majority of survey participants were representing industry stakeholders, among them license holders and companies potentially interested in EU Ecolabel

⁵ OJ L 303, 20.11.2015, p. 75–100

certification. This proves the existence of a potential interest and demand for the certification of soil improvers, growing media, and mulch among the target business group. Stakeholders indicated that the key reason for having/applying for the EU Ecolabel license is to increase product visibility given that a consumer is more and more targeting “green” products.

- B. The majority of stakeholders agreed with the currently valid scope of the product group. Those respondents that requested the revision were referring mostly to the need to harmonise the definitions with FPR Regulation.
- C. The criteria set was voted in 2015, the validity of environmental aspects addressed by the criteria was confirmed by survey’s participants. This also demonstrates that the environmental aspects of the currently valid set of criteria meet the market expectation. The product group have not faced major technical changes for 5 years on. Consequently, it seems appropriate not to re-revise life cycle analysis for the product group, concluding the validity of the environmental hotspots identified⁶. The market data, the reference values and verification test methods, as applicable, in some cases might be dated and therefore need to be revised and contrasted with the market and environmental data as well as standards changed and communicated to be changed within the period 2015-2021.
- D. For some criteria certain simplification measures were proposed, this should be a subject of the further communication with stakeholders within the revision process.
- E. The feedback collected indicates the need to harmonise the criterion, text, reference values and test methods with the FPR Regulation, and on-going EN standards linked to that Regulation. Not all EN Standards triggered by the Revision are currently available and in-place, some of them are still under development. The alignment with (FPR) Fertilising Products Regulation (EU) 2019/1009, applying as of 16/07/2022, including ongoing amendments is one of the key intentions of the planned revision. The timeline of the revision of EU Ecolabel criteria needs to be harmonised with the development of harmonised EN Standards that is an on-going work of the relevant CEN Technical Committee.
- F. The shortened criteria development procedure may apply, provided that the proposed criteria have been developed in line with the procedure established by Part C of Annex I to EU Ecolabel Regulation, as well as in line with Art 7(4) where a non-substantial revision of the criteria is necessary. Application of the shortened procedure seems appropriate considering that the major focus of the criteria revision should be harmonisation with legal and policy changes, and cross check of reference values and applicable test methods. This also responds to the communication between DG ENV and JRC that targets simplification of the process and whenever possible, reduction of the time required for the revision.

⁶ For more information, please check: [Revision of European Ecolabel Criteria for Soil Improvers and Growing Media. Preliminary report.](#)

Sources of information:

Commission Decision (EU) 2015/2099 of 18 November 2015 establishing the ecological criteria for the award of the EU Ecolabel for growing media, soil improvers and mulch OJ L 303, 20.11.2015, p. 75–100;

Regulation (EU) 2019/1009 of the European Parliament and of the Council of 5 June 2019 laying down rules on the making available on the market of EU fertilising products and amending Regulations (EC) No 1069/2009 and (EC) No 1107/2009 and repealing Regulation (EC) No 2003/2003, OJ L 170, 25.6.2019, p. 1–114

Questionnaire (blank copy in Annex I)

DRAFT

ANNEX I

Revision of European Ecolabel criteria for Growing media, Soil improvers and Mulch - preliminary stakeholders questionnaire

Fields marked with * are mandatory.

Preliminary stakeholder survey on the upcoming revision of EU Ecolabel criteria for growing media, soil improvers and mulch established by the Commission Decision (EU) 2015/2099

Fields marked with * are mandatory.

The informative notes are provided in green

Note: For the survey clarity in some cases additional information on the currently valid requirement has been hidden. If you require additional information, please click on YES

- Yes, I want to see more information about the currently valid requirement
- No

Respondent details (personal data will be treated as confidential)

* Please add a contact email address

* Which of the following options best represents the type of organisation/interests that you represent?

- Buyer / Consumer interests
- EUEB Member / Competent Body
- Government (local, regional or national)
- Industry
- Non-Governmental Organisation (NGO)

* Has/is your organisation:

- Been actively involved with the EU Ecolabel criteria development process previously for growing media, soil improvers and mulch
- Obtained an EU Ecolabel license for this product group
- In the process of applying for an EU Ecolabel license for this product group
- Potentially considering to apply for an EU Ecolabel license for the product group
- None of the above

General Environmental Concerns

In your opinion, which environmental issues and claims related to growing media, soil improvers and mulch seem to be most important for single consumers/professionals? (e.g. lower energy consumption, lower CO2 emission, constituents),

150 character(s) maximum

In your opinion, which are the major changes on the environmental front that have occurred in the past 5 years in the growing media, soil improvers and mulch business ? (e.g. customers ask for "greener" products, new legal requirements, monetary incentives, new public sector requirements, internal company philosophy shifts)

150 character(s) maximum

What are the biggest costs linked to getting EU Ecolabel certification? (e.g. monetary, testing requirements, contact supply chain, other resources)

100 character(s) maximum

In general, what would you change about the EU Ecolabel criteria for growing media soil improvers and mulch?

- There are too many criteria
- The requirements are too demanding
- The complexity of the criteria is too high
- There is a need to develop additional criteria
- Other

If you have selected "Other", please specify below:

50 character(s) maximum

For EU Ecolable license holders: Concerning the EU Ecolabel for growing media, soil improvers and mulch, why did your company apply for the EU Ecolabel

- To increase visibility
- To increase in sales
- To obtain more public procurement contracts
- Other

If you have selected "Other", please specify below:

50 character(s) maximum

Scope and Definition

The product group 'growing media, soil improvers and mulch' shall comprise *growing media, organic soil improvers and organic mulch*.

The following definitions shall apply:

- (1) 'Growing medium' means a material used as a substrate for root development, in which plants are grown;
- (2) 'Mineral growing medium' means a growing medium totally composed by mineral constituents;
- (3) 'Soil improver' means a material added to soil in situ whose main function is to maintain or improve its physical and/or chemical and/or biological properties, with the exception of liming materials;
- (4) 'Organic soil improver' means a soil improver containing carbonaceous materials whose main function is to increase soil organic matter content;
- (5) 'Mulch' means a type of soil improver used as protective covering placed around plants on the topsoil whose specific functions are to prevent the loss of moisture, control weed growth, and reduce soil erosion;
- (6) 'Organic mulch' means mulch containing carbonaceous materials derived from biomass;
- (7) 'Constituent' means any input material that can be used as an ingredient of the product;
- (8) 'Organic constituent' means a constituent composed by carbonaceous materials;
- (9) 'Product family' means the range of products composed by the same constituents;
- (10) 'Annual output' means annual production of a product family;
- (11) 'Annual input' means the annual amount of materials treated in a waste or animal by-product treatment plant;
- (12) 'Batch' means quantity of goods manufactured by the same process under the same conditions and labelled in the same manner and is assumed to have the same characteristics;
- (13) 'Bio-waste' means biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises and comparable waste from food processing plants;
- (14) 'Biomass' means the biodegradable fraction of products, waste and residues from biological origin from agriculture (including vegetal and animal substances), forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste.

* Do you think that the scope and definition need to be revised and/or changed

- No, the scope and definition are adequate and valid for the product group
- Yes, The scope and definition need to be revised and/or changed

Please provide any more detailed comments on proposal for the revised scope

Existing EU Ecolabel criteria for growing media, soil improvers and mulch

Assessment and verification

The sampling shall be carried out according to EN 12579 (Soil improvers and growing media. Sampling). Samples shall be prepared according to EN 13040 (Soil improvers and growing media. Sample preparation for chemical and physical tests, determination of dry matter content, moisture content and laboratory compacted bulk density).

For the application year, the sampling and test frequency shall fulfil the requirements set in Appendix 1. For the following years, the sampling and test frequency of final products shall fulfil the requirements set in Appendix 2. Different sampling and testing frequencies are set for the following types of plants:

- Type 1: Treatment plants for waste or for animal by-products
- Type 2: Product manufacture plants using materials from Type 1 plants
- Type 3: Product manufacture plants not using materials derived from waste or from animal by-products.

For Type 2 plants, the sampling and test frequencies for the application year and the following years will be the same as the frequencies set for Type 3, if their waste/animal by-product-derived materials' suppliers comply with the EU Ecolabel criteria for soil improvers. The applicant shall provide the Competent Body with the test reports from the suppliers, together with the documentation to ensure the compliance of the suppliers with the EU Ecolabel criteria. The Competent Body may recognize the sampling and testing frequencies within the national or regional legislation and standards as valid to ensure the compliance with the EU Ecolabel criteria of the suppliers of waste or animal by-products derived materials. In case when a product constitutes or contains material of animal origin reference shall be done to microbiological standards and animal and public health controls set out in Commission Regulation (EU) No 142/2011 (*).

In your opinion, are the indicated above test methods and sampling frequency adequate?

- Yes, the test method and sampling frequency are adequate
- No, the test methods and/or sampling frequency are not adequate and should be revised
- No opinion
- Other

Please specify changes that in your opinion should be incorporated and add any further comments or opinions that you have regarding general Assessment and Verification

100 character(s) maximum

Criterion 1 — Constituents

This criterion applies to growing media, soil improvers and mulch.

The constituents admitted shall be organic and/or mineral constituents.

Assessment and verification: The applicant shall provide the Competent Body with a list of constituents of the product

* Do you consider that the criterion should be changed?

- No, the Criterion is adequate and does not need to be changed
- Yes
- No opinion
- Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion

- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Revision of the assessment and verification
- Other

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 1

Criterion 2 — Organic constituents

This criterion applies to growing media, soil improvers and mulch.

Criterion 2.1.

A final product shall not contain peat.

* Do you consider that the criterion should be changed?

- No, the Criterion is adequate and does not need to be changed
- Yes
- No opinion
- Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 2.1

100 character(s) maximum

Criterion 2.2.

The criterion specifies material that are allowed/not allowed as organic constituents of a final product

Additional information on the currently valid requirement

- Yes, I want to see more information about the currently valid requirement
- No

(1) The following materials are allowed as organic constituents of a final product.

—Materials derived from the recycling of bio-waste from separate collection, as defined in Article 3 of Directive 2008/98/EC of the European Parliament and of the Council (3).

—Materials derived from category 2 and 3 animal by-products as laid down in Article 32 of Regulation (EC) No 1069/2009 of the European Parliament and of the Council (4) and technical standards which are laid down by implementing Regulation (EU) 142/2011.

—Materials derived from faecal matter, straw and other natural non-hazardous agricultural or forestry material as defined in Article 2(1)(f) of Directive 2008/98/EC.

—Materials derived from any other biomass by-products, as defined in Article 5 of Directive 2008/98/EC, that are not mentioned above, subject to the provisions of (2) and sub-criterion 2.3.

—Materials derived from recycling or recovery of any other biomass waste not mentioned above, subject to the provisions of (2) and sub-criterion 2.3.

(2)The following materials are not allowed as organic constituents of a final product.

—Materials totally or partially derived from the organic fraction of mixed municipal household waste separated through mechanical, physicochemical, biological and/or manual treatment.

—Materials totally or partially derived from sludges derived from municipal sewage water treatment and from sludges derived from the paper industry.

—Materials totally or partially derived from sludges other than those allowed in

—Materials totally or partially derived from category 1 animal by-products according to Regulation (EC) No 1069/2009.

* Do you consider that the criterion should be changed?

- No, the Criterion is adequate and does not need to be changed
- Yes
- No opinion
- Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 2.2

100 character(s) maximum

Criterion 2.3.

Criterion specifies Waste Codes (Commission Decision 2000/532/EC) of materials that derive from recycling or recovery of sludge that are acknowledged to be used in a product

Additional information on the currently valid requirement

- Yes, I want to see additional information on the currently valid requirement
- No

Materials derived from recycling or recovery of sludges are only allowed if the sludges comply with the following requirements:

- (a) they are identified as one of the following types of waste according to the European List of Wastes, as defined by Commission Decision 2000/532/EC (*) presented in Table 2:

Table 2

Sludges allowed and their codes according to the European List of Wastes

0203 05	sludges from on-site effluent treatment in the preparation and processing of fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco, conserve production, yeast and yeast extract production, molasses preparation and fermentation;
0204 03	sludges from on-site effluent treatment in sugar processing;
0205 02	sludges from on-site effluent treatment in the dairy products industry;
0206 03	sludges from on-site effluent treatment in the baking and confectionery industry;
0207 05	sludges from on-site effluent treatment in the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa).

- (b) they are single-source separated, meaning that there has been no mixing with effluents or sludges outside a specific production process.

* Do you consider that the criterion should be changed?

- No, the Criterion is adequate and does not need to be changed
- Yes
- No opinion
- Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 2.3

100 character(s) maximum

Criterion 3 — Mineral growing media and mineral constituents

Criterion 3.1. Energy consumption and CO2 emissions

This criterion applies to mineral growing media only.

Criterion specifies reference limit values for energy consumption/product (11 GJ/t), and CO2 emission /product (0.8 t CO2/t)

The manufacture of expanded minerals and mineral wool shall fulfil the following energy consumption and CO₂ emissions thresholds:

- Energy consumption/product ≤ 11 GJ/t product
- CO₂ emissions/product ≤ 0,8 t CO₂/t product

The ratio energy consumption/product shall be calculated as an annual average as follows:

$$\text{ratio} \frac{\text{Energy}}{\text{Product}} = \frac{1}{\sum_{i=1}^n \text{Production}_i} \cdot \sum_{i=1}^n \left(F + 2,5 \cdot \text{El}_{\text{grid}} + \left(\frac{H_{\text{cog}}}{\text{Ref}H\eta} + \frac{\text{El}_{\text{cog}}}{\text{Ref}E\eta} \right) \cdot (1 - \text{PES}_{\text{cog}}) \right)_i$$

Where:

- *n* is the number of years of the period used to calculate the average
- *i* is each year of the period used to calculate the average
- *Production_i* is the production of mineral wool or expanded minerals in tonnes in the year *i*
- *F* is the annual consumption of fuels in the production process in the year *i*
- *El_{grid}* is the annual electricity consumption from the grid in the year *i*
- *H_{cog}* is the annual consumption of useful heat from cogeneration in the year *i*
- *El_{cog}* is the annual consumption of electricity from cogeneration in the year *i*
- *Ref Hη* and *Ref Eη* are the reference efficiencies for the separate production of heat and electricity as defined in the Directive 2012/27/EU of the European Parliament and of the Council (15) and calculated according to the Commission Implementing Decision 2011/877/EU (16)
- *PES_{cog}* is the primary energy saving of the cogeneration plant as defined in the Directive 2012/27/EU, in the year *i*

The ratio CO₂ emissions/product shall be calculated as an annual average as follows:

$$\text{ratio} \frac{\text{CO}_2 \text{ emissions}}{\text{Product}} = \frac{1}{\sum_{i=1}^n \text{Production}_i} \cdot \sum_{i=1}^n (\text{DirectCO}_2 + \text{IndirectCO}_2)_i$$

Where:

- *n* is the number of years of the period used to calculate the average
- *i* is each year of the period used to calculate the average
- *Production_i* is the mineral wool production in tonnes in the year *i*
- *Direct CO₂* is the CO₂ emissions as defined in Commission Regulation (EU) No 601/2012 (17), in the year *i*
- *Indirect CO₂* is the indirect CO₂ emissions due to final energy consumption in the year *i*, and shall be calculated as:

$$\text{IndirectCO}_2 \text{ emission} = FE_{\text{grid}} \cdot \text{El}_{\text{grid}} + FE_{\text{fuel cog}} \cdot \left(\frac{H_{\text{cog}}}{\text{Ref}H\eta} + \frac{\text{El}_{\text{cog}}}{\text{Ref}E\eta} \right) \cdot (1 - \text{PES}_{\text{cog}})$$

Where:

- *FE_{grid}* is the EU average carbon intensity of the electricity grid, according to MEErP (18) methodology (0,384 tCO₂/MWh = 0,107 tCO₂/GJ)
- *FE_{fuel cog}* is the CO₂ emission factor of the fuel consumed in the cogeneration plant

The direct CO₂ emissions shall be monitored according to Regulation (EU) No 601/2012.

The period to calculate the ratios energy consumption/product and CO₂ emissions/product shall be the last 5 years before the application. If the operation period of the plant is less than 5 years at the date of application, the ratio shall be calculated as an annual average of that operation period, which shall be at least 1 year.

Assessment and verification:

The applicant shall provide the Competent Body with a declaration which includes the following information.

- Ratio energy consumption (GJ)/product (tonne).
- Ratio CO₂ emissions (tonne)/product (tonne).
- Direct CO₂ emissions (tonnes) for each year of the period to calculate the average.
- Indirect CO₂ emissions (tonnes) for each year of the period to calculate the average.
- Fuels consumed, consumption of each fuel (GJ), sub-process/es of the manufacture process where they are consumed for each year of the period to calculate the average.
- Electricity consumption from the grid (GJ final energy) for each year of the period to calculate the average.
- Useful heat consumption from cogeneration (GJ final energy) for each year of the period to calculate the average.
- Electricity consumption from cogeneration (GJ final energy) for each year of the period to calculate the average.
- Reference efficiencies for separate production of heat and electricity.
- Primary energy saving (PES) (%) of the cogeneration for each year of the period to calculate the average.
- Identification of fuels used in cogeneration and their share in the fuel mix, for each year of the period to calculate the average.

The following documents shall be provided together with the declarations.

- Annual emissions report according to Regulation (EU) No 601/2012, for each year of the period to calculate the average.
- Verification report finding the annual emissions report satisfactory according to Commission Regulation (EU) No 600/2012 (19), for each year of the period to calculate the average.
- Records of electricity consumption from the grid provided by the supplier, for each year of the period to calculate the average.
- Records of the useful heat and electricity consumption from cogeneration, both on-site and purchased, for each year of the period to calculate the average.

Criterion 3.1 Sources of mineral extraction

- * Do you consider that the criterion should be changed?
- No, the Criterion is adequate and does not need to be changed
 - Yes
 - No opinion
 - Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other
- Revision of the reference value for Energy consumption
- Revision of the reference value for the CO2 emission

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 3.1

100 character(s) maximum

Criterion 3.2. Sources of mineral extraction

This criterion applies to growing media, soil improvers and mulch.

Extracted minerals can be used as constituents of the final product provided that:

(1)(Within the EU): If they are extracted from Natura 2000 network areas, composed of Special Protection Areas under Directive 2009/147 /EC of the European Parliament and of the Council (11) on the conservation of wild birds, and Special Areas of Conservation under Council Directive 92/43/EEC (12) on the conservation of natural habitats and wild fauna and flora, extraction activities have been assessed and authorised in accordance with the provisions of Article 6 of Directive 92/43/EEC and taking into account the EC Guidance document on non-energy mineral extraction and Natura 2000 (13);

(2)(Outside the EU): If they are extracted from protected areas designated as such under the national legislation of the sourcing/exporting countries, the extraction activities have been assessed and authorised in accordance with provisions that provide assurances equivalent to those under (1).

Assessment and verification: *In case mineral extraction activities have been carried out in Natura 2000 network areas (in the EU) or protected areas designated as such under the national legislation of the sourcing/exporting countries (outside the EU), the applicant shall provide a declaration of compliance with this requirement issued by the competent authorities or a copy of their authorisation issued by the competent authorities.*

- * Do you consider that the criterion should be changed?
- No, the Criterion is adequate and does not need to be changed
 - Yes
 - No opinion
 - Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 3.2

100 character(s) maximum

Criterion 3.3. Mineral growing media use and after use

This criterion is applicable to mineral growing media only.

The mineral growing media shall only be offered for use for professional horticultural applicants

Additional information on the currently valid requirement

- Yes, I want to see additional information on the currently valid requirement
- No

The mineral growing media shall only be offered for use for professional horticultural applications.

The applicant shall offer customers a structured collection and recycling service, which may use third party service providers. The collection and recycling service shall cover a minimum of 70 % v/v of the applicant's sales of the product across the European Union.

Assessment and verification: *The applicant shall provide the Competent Body with a declaration that the mineral growing media is only offered for use in professional horticultural applications. A statement about the professional horticultural application of the product shall be included in the information provided to the end-user.*

The applicant shall inform the Competent Body about the option(s) on offer of structured collection and recycling service and the results of the option(s) implemented. In particular, the applicant shall provide the following documentation and information.

—Contract documentation between the manufacturer and the service providers.

—Description of collection, processing and destinations.

—Annual overview of the total sales volume of growing media in the European Union Member States and an annual overview of the sales volumes in areas of those Member States where collection and processing are on offer.

—In case of new entrants, an estimation of the annual overview of the total sales volume of growing media in the European Union Member States and an estimation of the annual overview of the sales volumes in areas of those Member States where collection and processing are on offer, shall be provided. Real data shall be provided 1 year after the EU Ecolabel license is awarded.

* Do you consider that the criterion should be changed?

- No, the Criterion is adequate and does not need to be changed
- Yes
- No opinion
- Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 3.3

100 character(s) maximum

Criterion 4 — Recycled/recovered and organic materials in growing media

This criterion applies to growing media only.

Growing media products shall contain a minimum percentage of recycled/recovered content or organic content, as follows:

(a) The growing medium shall contain a minimum of 30 % of organic constituents (expressed as volume of organic constituent per total volume of the final product); or

(b) The mineral growing medium shall contain mineral constituents manufactured from a process using at least 30 % of recycled materials (expressed as the dry weight of recycled/recovered materials per total dry weight of the input materials).

Assessment and verification: The applicant shall declare the following information:

—for the case (a): volume of organic constituents declared in Criterion 1 per total volume of the final product, or

—for the case (b): dry weight of recycled/recovered materials per total dry weight of the input materials.

For the case (b), the applicant shall also declare the following information about the mineral constituents:

—identification of raw material inputs, dry weight of the raw material input per total dry weight of the input materials, and origin, for each raw material input, and

—identification of recycled/recovered material inputs, dry weight of recycled/recovered material input per total dry weight of the input materials and origin, for each recycled/recovered material input.

* Do you consider that the criterion should be changed?

- No, the Criterion is adequate and does not need to be changed
- Yes
- No opinion
- Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other
- Revision of the reference value for a minimum organic constituents content
- Revision of the reference value for a minimum recycled material content in the mineral constituents

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 4

100 character(s) maximum

Criterion 5 — Limitation of hazardous substances

Criterion 5.1. — Limits for heavy metals

This criterion applies to growing media, soil improvers and mulch.

The criterion establishes reference limit values for heavy metals content, as follows:

- 1) for soil improvers, mulch and organic constituents of growing media: for Cd and Hg (1 mg/kg DW), for Ni (50 mg/kg DW), for Cr, Cu, and Pb 100 mg/kg DW, and for Zn (300 mg/kg DW);
- 2) for growing media, including mineral growing media: for Hg (1 mg/kg DW), for Cd (3 mg/kg DW), for Ni (90mg/kg DW), for Cu (100 mg/kg DW), for Cr and Pb (1590 mg/kg DW), and for Zn (300 mg/kg DW).

Criterion indicates the testing procedures that should be used for the assessment and verification

Additional information on the currently valid requirement

- Yes, I want to see additional information on the currently valid requirement
- No

The content of the following elements in the final product or constituent shall not exceed the values shown Tables, measured in terms of dry weight (DW) of the product.

Heavy metal limits	For soil improvers, mulch and organic constituents of growing media Maximum content in the product (mg/kg DW)	For growing media, including mineral growing media Maximum content in the product (mg/kg DW)
Cadmium (Cd)	1	3
Chromium total (Cr)	100	150
Copper (Cu)	100	100
Mercury (Hg)	1	1
Nickel (Ni)	50	90
Lead (Pb)	100	150
Zinc (Zn)	300	300

Assessment and verification: The applicant shall provide the Competent Body with test reports conducted in accordance with the testing procedure indicated in the respective EN standards presented in Table 5. In the case of organic constituents of growing media, the test reports may be provided by the suppliers.

Standard methods of extraction and measurement of heavy metals

Heavy metals	Method of measurement	Method of extraction
Cadmium (Cd)	EN 13650	For soil improvers, mulch, organic constituents of growing media and growing media, except mineral growing media: EN 13650 Soil improvers and growing media — Extraction of aqua regia soluble elements For mineral growing media: EN 13651 Soil improvers and growing media — Extraction of calcium chloride/DTPA (CAT) soluble nutrients and elements
Chromium total (Cr)	EN 13650	
Copper (Cu)	EN 13650	
Mercury (Hg)	EN 16175 ⁽¹⁴⁾	
Nickel (Ni)	EN 13650	
Lead (Pb)	EN 13650	
Zinc (Zn)	EN 13650	

* Do you consider that the criterion should be changed?

- No, the Criterion is adequate and does not need to be changed
- Yes
- No opinion
- Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other
- Revision of the limits for heavy metals content for growing media, including mineral growing media
- Revision of the limits for heavy metals content for soil improvers, mulch and organic constituents of growing media
- Revision of the standard test methods of extraction and/or measurement of heavy metals

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 5.1

100 character(s) maximum

Criterion 5.2. — Limits for Polycyclic Aromatic Hydrocarbons (PAH)

This criterion applies to growing media, soil improvers and mulch, with the exception of mineral growing media.

The content of the following polycyclic aromatic hydrocarbons (PAH16) in the final product shall not exceed 6 mg /kg of dry weight of the product.

Assessment and verification: *The applicant shall provide the Competent Body with test reports conducted in accordance with the testing procedure indicated in CEN/TS 16181 Sludge, treated biowaste and soil — Determination of polycyclic aromatic hydrocarbons (PAH) by gas chromatography (GC) and high performance liquid chromatography (HPLC) or equivalent.*

*PAH16= sum of naphthalene, acenaphtylene, acenaphtene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, indeno [1,2,3-cd]pyrene, dibenzo[a,h]anthracene and benzo[ghi]perylene

- * Do you consider that the criterion should be changed?
- No, the Criterion is adequate and does not need to be changed
 - Yes
 - No opinion
 - Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other
- Revision of the limit for PAH 16 content
- Revision of the referenced test method

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 5.2

100 character(s) maximum

Criterion 5.3. — Hazardous substances and mixtures

This criterion applies to growing media, soil improvers and mulch.

The final product shall not be classified and labelled as being acutely toxic, a specific target organ toxicant, a respiratory or skin sensitiser, or carcinogenic, mutagenic or toxic for reproduction hazardous to the environment, in accordance with Regulation (EC) No 1272/2008 of the European Parliament and of the Council (15).

The product shall not contain substances or mixtures classified as toxic, hazardous to the environment, respiratory or skin sensitisers, or carcinogenic, mutagenic or toxic for reproduction in accordance with Regulation (EC) No 1272/2008 and as interpreted according to the hazard statements listed in the criterion. Any intentionally added ingredient present at a concentration above 0,010 % w/w (in terms of wet weight) in the product shall meet this requirement. Where stricter, the generic or specific concentration limits determined in accordance with Article 10 of Regulation (EC) No 1272/2008 shall prevail to the cut-off limit value of 0,010 % w/w (in terms of wet weight) mentioned above.

Criterion 5.4. — Substances listed in accordance with Article 59(1) of Regulation (EC) No 1907/2006

The final product shall not contain any intentionally added substances of very high concern and included in the list provided for in Article 59(1) of Regulation (EC) No 1907/2006, present in the final product in concentrations > 0,010 % in terms of wet weight.

Assessment and verification:

Reference to the latest list of substances of very high concern shall be made on the date of application. The applicant shall provide a declaration of compliance with criterion 5.4, together with related documentation, including declarations of compliance signed by the material suppliers and copies of relevant SDS for substances or mixtures in accordance with Annex II to Regulation (EC) No 1907/2006 for substances or mixtures.

Concentration limits shall be specified in the safety data sheets in accordance with Article 31 of Regulation (EC) No 1907/2006 for substances and mixtures.

- * Do you consider that the criterion should be changed?
- No, the Criterion is adequate and does not need to be changed
 - Yes
 - No opinion
 - Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 5.3 and/or 5.4

100 character(s) maximum

Criterion 5.5. — Limits for E. coli and Salmonella spp.

This criterion applies to growing media, soil improvers and mulch, with the exception of mineral growing media.

The maximum content of primary pathogens in the final product and testing procedure are indicated in Table below

Pathogen	Limit	Test method
E. coli	1000 CFU/g fresh weight	CEN/TR 16193 Sludge, treated biowaste and soil. Detection and enumeration of Escherichia coli or equivalent
Salmonella spp	absent in 25g fresh weight	ISO 6579 Microbiology of food and animal feeding stuffs - Horizontal method for the detection of Salmonella spp.

- * Do you consider that the criterion should be changed?
- No, the Criterion is adequate and does not need to be changed
 - Yes
 - No opinion

- Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other
- Revision of the limit value, please specify
- Revision of the referenced test method, please specify

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 5.5

100 character(s) maximum

Animal by-products can be used as material for soil improvers. Commonly used antibiotics in animal production might be maintained in the solid fraction. The same concern may exist for pesticides. Please note that the growing media containing or composed of animal by-products may be subjected to (FPR) Fertilising Products Regulation (EU) 2019/1009 or to the ABP Regulation 1069/2009.

Should the new criterion for the presence of veterinary drug and pesticide residues be incorporated?

- Yes
- No
- No opinion

Criterion 6 — Stability

This criterion applies to growing media, soil improvers and mulch, with the exception of mulch totally composed of lignocellulosic constituents and mineral growing media.

Soil improvers and mulch for professional and non-professional application, and growing media for all applications shall meet one of the requirement that is verified according to indicated Standards.

Stability parameter and indicated test method	Requirement	
	<i>Soil improvers and mulch intended for non-professional applications and growing media intended for all applications</i>	<i>Soil improvers and mulch intended for professional applications</i>
Maximum Respiriometric index Respirometric index EN 16087-1 Soil improvers and growing media - Determination of the aerobic biological activity. Oxygen uptake rate (OUR)	15 mmol O ₂ /kg organic matter/h	25 mmol O ₂ /kg organic matter/h
Minimum Rottegrad, where applicable Rottegrad: EN 16087-2 Soil improvers and growing media. Determination of the aerobic biological activity. Self heating test for compost	IV (self-heating test temperature rise of maximum 20 °C above ambient temperature)	III (self-heating test temperature rise of maximum 30 °C above ambient temperature)

Do you consider that the criterion should be changed?

- No, the Criterion is adequate and does not need to be changed
- Yes
- No opinion
- Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other
- Revision of the limit value, please specify
- Revision of the referenced test method, please specify

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 6

100 character(s) maximum

Criterion 7 — Physical Contaminants

This criterion applies to growing media, soil improvers and mulch, with the exception of mineral growing media

The content of glass, metal and plastic with mesh size of > 2 mm in the final product shall not exceed 0,5 %, measured in terms of dry weight.

Assessment and verification: *The applicant shall provide the Competent Body with test reports conducted in accordance with the testing procedure indicated in the Technical Specification CEN/TS 16202 (Sludge, treated biowaste and soil — Determination of impurities and stones), or another equivalent testing procedure authorised by the Competent Body.*

* Do you consider that the criterion should be changed?

- No, the Criterion is adequate and does not need to be changed
- Yes
- No opinion
- Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other
- Revision of the limit value, please specify
- Revision of the referenced test method, please specify

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 7

100 character(s) maximum

Criterion 8 — Organic matter and dry matter

This criterion applies to soil improvers and mulch.

(1) The organic matter as loss on ignition of the final product shall be at least 15 % dry weight (% DM) - Test Method: EN 13039 Soil improvers and growing media. Determination of organic matter content and ash

(2) The dry matter content of the final product shall be at least 25 % of the fresh weight (% FW) - Test method: EN 13040 Soil improvers and growing media. Sample preparation for chemical and physical tests, determination of dry matter content, moisture content and laboratory compacted bulk density

* Do you consider that the criterion should be changed?

- No, the Criterion is adequate and does not need to be changed
- Yes
- No opinion
- Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other
- Revision of the limit value, please specify
- Revision of the referenced test method, please specify

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 8

100 character(s) maximum

Criterion 9 — Viable weed seeds and plant propagules

This criterion applies to growing media and soil improvers, with the exception of mineral growing media.

Final products shall not contain more than two units of viable weed seeds and plant propagules per litre.

Assessment and verification: *The applicant shall provide the Competent Body with a test report in accordance with the testing procedure indicated in the Technical Specification CEN/TS 16201 (Sludge, treated biowaste and soil — Determination of viable plant seeds and propagules), or another equivalent testing procedure authorised by the Competent Body.*

- * Do you consider that the criterion should be changed?
- No, the Criterion is adequate and does not need to be changed
 - Yes
 - No opinion
 - Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other
- Revision of the limit value, please specify
- Revision of the referenced test method, please specify

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 9

100 character(s) maximum

Criterion 10 — Plant response

This criterion applies to growing media and soil improvers.

Final products shall not adversely affect plant emergence or subsequent growth.

Assessment and verification: *The applicant shall provide the Competent Body with a valid test conducted in accordance with the testing procedure indicated in EN 16086-1 (Soil improvers and growing media — Determination of plant response — Part 1: Pot growth test with Chinese cabbage).*

- * Do you consider that the criterion should be changed?
- No, the Criterion is adequate and does not need to be changed
 - Yes
 - No opinion
 - Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other
- Revision of the referenced test method, please specify

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 10

100 character(s) maximum

Criterion 11 — Growing media features

This criterion only applies to growing media.

Criterion	Requirement	Test method
Criterion 11.1. — Electrical conductivity	The electrical conductivity of the final product shall be below 100 mS/m.	Test report conducted in accordance with the testing procedure indicated in EN 13038 (Soil improvers and growing media — Determination of electrical conductivity).
Criterion 11.2. — pH	The pH of the final product shall be in the range 4-7.	Test report conducted in accordance with the testing procedure indicated in EN 13037 (Soil improvers and growing media — Determination of pH).
Criterion 11.3. — Sodium content	The sodium content in water extracts of the final product shall not exceed 150 mg/l of fresh product.	Test report conducted in accordance with the testing procedure indicated in EN 13652 (Soil improvers and growing media — Extraction of water soluble nutrients and elements).
Criterion 11.4. — Chloride content	The chloride content in water extracts of the final product shall not exceed 500 mg/l of fresh product.	Test report conducted in accordance with the testing procedure indicated in EN 13652 (Soil improvers and growing media — Extraction of water soluble nutrients and elements).

* Do you consider that the criterion should be changed?

- No, the Criterion is adequate and does not need to be changed
- Yes
- No opinion
- Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other

- Revision of the referenced test method, please specify
- Revision of the reference values, please specify

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 11
 100 character(s) maximum

Criterion 12 — Provision of information

This criterion applies to growing media, soil improvers and mulch.

The following information shall be provided with the product either on the packaging or in accompanying fact sheets.

Criterion 12.1. — Soil improvers	Criterion 12.2. — Growing media	Criterion 12.3. — Mulch
<p>(a) The name and address of the body responsible for marketing;</p> <p>(b) A descriptor identifying the product by type, including the wording 'SOIL IMPROVER';</p> <p>(c) A batch identification code;</p> <p>(d) The quantity (in weight);</p> <p>(e) Range of moisture content;</p> <p>(f) The main materials (those over 5 % by weight) from which the product has been manufactured;</p> <p>(g) The recommended conditions of storage and the recommended 'use by' date;</p> <p>(h) Guidelines for safe handling and use;</p> <p>(i) A description of the purpose for which the product is intended and any limitations on use, including a statement about the suitability of the product for particular plant groups (e.g. calcifuges or calcicoles);</p> <p>(j) pH (reference of the test method used);</p> <p>(k) Organic carbon content (%), total nitrogen content (%) and inorganic nitrogen content (%) (reference to the test method used);</p> <p>(l) Carbon/Nitrogen ratio;</p> <p>(m) Total phosphorus (%) and total potassium (%) (reference to the test method used);</p> <p>(n) For products for non-professional use, a statement about the stability of organic matter (stable or very stable);</p> <p>(o) A statement on recommended methods of use;</p> <p>(p) In non-professional applications: recommended rate of application expressed in kilograms of product per unit surface area (m²) per annum.</p>	<p>(a) The name and address of the body responsible for marketing;</p> <p>(b) A descriptor identifying the product by type, including the wording 'GROWING MEDIUM';</p> <p>(c) A batch identification code;</p> <p>(d) The quantity (in volume or number of slabs, in case of mineral wool, specifying the dimensions of the slab);</p> <p>(e) Range of moisture content;</p> <p>(f) The main materials (those over 5 % by volume) from which the product has been manufactured;</p> <p>(g) The recommended conditions of storage and the recommended 'use by' date;</p> <p>(h) Guidelines for safe handling and use;</p> <p>(i) A description of the purpose for which the product is intended and any limitations on use, including a statement about the suitability of the product for particular plant groups (e.g. calcifuges or calcicoles);</p> <p>(j) pH (EN 13037);</p> <p>(k) Electrical Conductivity (1:5 extraction);</p> <p>(l) Germination inhibition (EN 16086-1);</p> <p>(m) Growth inhibition (EN 16086-1);</p> <p>(n) A statement about the stability of organic matter (stable or very stable);</p> <p>(o) A statement on recommended methods of use;</p> <p>(p) For mineral growing media, a statement about the professional horticultural application.</p>	<p>(a) The name and address of the body responsible for marketing;</p> <p>(b) A descriptor identifying the product by type, including the wording 'MULCH';</p> <p>(c) A batch identification code;</p> <p>(d) The quantity (in volume);</p> <p>(e) Range of moisture content;</p> <p>(f) The main materials (those over 5 % by volume) from which the product has been manufactured;</p> <p>(g) Guidelines for safe handling and use;</p> <p>(h) A description of the purpose for which the product is intended and any limitations on use, including a statement about the suitability of the product for particular plant groups (e.g. calcifuges or calcicoles);</p> <p>(i) pH (reference of the test method used);</p> <p>(j) A statement about the stability of organic matter (stable or very stable), where applicable, for non-professional uses;</p> <p>(k) A statement on recommended methods of use;</p> <p>(l) In non-professional applications: recommended rate of application expressed in mm.</p>

* Do you consider that the criterion should be changed?

- No, the Criterion is adequate and does not need to be changed
- Yes
- No opinion
- Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 12

100 character(s) maximum

Criterion 13 — Information appearing on the EU Ecolabel

The optional label with text box shall contain the following text:

- promotes the recycling of materials
- promotes the use of renewable and recycled materials

For soil improvers and mulch, the additional information shall be included:

- reduces soil and water pollution, by limiting heavy metals concentrations

The guidelines for the use of the optional label with the text box can be found in the 'Guidelines for the use of the EU Ecolabel logo' on the website:

http://ec.europa.eu/environment/ecolabel/documents/logo_guidelines.pdf

Assessment and verification: *The applicant shall provide the Competent Body with a sample of the product packaging showing the label, together with a declaration of compliance with this criterion.*

* Do you consider that the criterion should be changed?

- No, the Criterion is adequate and does not need to be changed
- Yes
- No opinion
- Minor changes should be incorporated

In your opinion, the revision of the criterion should consist on:

- Change of the structure of the Criterion
- Deep revision of the Criterion
- Incorporation of a new requirement or withdrawal of the existent requirements
- Other

Please indicate the reasons and add any further comments or opinions that you have regarding Criterion 13

100 character(s) maximum

Thank you for your contribution