

SUMMARY OF THE 2nd MEETING FOR THE REVISION OF THE GPP CRITERIA FOR WINDOWS AND EXTERNAL DOORS

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1. Opening and welcome

The European commission explained the background and the political context of the GPP criteria development process in general and the particular aspects of this project. The relation of this policy tool within the possible forthcoming communications on sustainable buildings and energy label on windows were commented and the timelines of both projects were roughly explained highlighting the mismatches and the convenience of revising first these GPP criteria for windows and external doors.

No other SPC policy tools are expected to be developed in the coming years for this product group.

Subsequently, the state-of-the-art of the revision of GPP criteria for windows and external doors was introduced as well as the agenda for the meeting. The European Commission explained that the main purpose of this meeting was the technical discussion on the revised GPP criteria and the proposed benchmarks and verification procedures.

The discussions held in this meeting and the resulting feedback will form the input to the development of a new final draft of the GPP criteria. These final draft GPP criteria will be distributed throughout the official website to the stakeholders in the coming days.

2. Discussion on the revised criteria

2.1 Selection criteria

First, an overview of the existing and the revised GPP criteria was presented. The revised GPP selection criteria for windows and external doors consist of two criteria dealing with different aspects to be considered for the selection of the companies in charge of the windows and external doors installation. The proposed criteria are widely applied in other GPP criteria schemes in the construction sector and are proposed in the form of a "pick and choose" list of criteria.

Both selection criteria were generally speaking welcome. However, the proposed verification processes is still unclear. The use of references is quite vague and does not ensure the high quality of the previous works. In addition, a definition of what is considered of "high quality" should be included. In some Member States quality refers to the formal qualifications of the employees of the company, the assessment of the works or the accreditation of the company by national or international standards.

Several alternative ways of verification were proposed by stakeholders and their advantages and disadvantages shortly commented:

1. Use of national quality schemes: there are Member states where quality schemes for installers have been developed. These schemes can be considered as a means of verification of the experience and quality of the companies. The disadvantages are that they are not available at European level; they have additional costs being a drawback for SMEs and they can be considered as burdens for foreign contractors. For these reasons, it will be considered the possibility of referring to Member States schemes as verification procedure only when they are considered to be more updated/advanced than

2. Proof of the quality of the works by using Air tightness testing: thermal imaging and/or blower door pressurisation test. Stakeholders pointed out the need of proving the quality of previous works included in the references. This can be done by testing the previous works and using thermal imaging and/or blow-up tests in accordance with international standards.

3. Use of European standards for accreditation. The selection of installers accredited with international or European standards, as in the case of Turkey, can be considered as a proof of the quality of the works. Further information will be sent to the Commission by BM Trada.

A revision of the verification procedure of this selection criterion will be considered in the new draft.

2.2 Technical specification criteria: energy performance

An overview of the existing and revised criterion on the energy performance of windows and external doors was presented. This criterion consists of two options within a priority order.

Option A is based on the cost effectiveness methodology and is the one to be preferably applied while **option B**, based on the existing criterion and the improvement of the thermal parameters of the windows and doors, is the one to be used only when option A is not yet available.

A brief explanation of the differences between the core and comprehensive criteria was also added. Core criteria are formulated to be achieved for all the Member States regardless their experience in GPP while comprehensive criteria are considered of higher level of ambition and therefore proposed for the most advanced Member States or purchaser authorities.

Stakeholders acknowledged the consistency of **Option A** within the existing policy tools, e.g EPBD, the importance and priority given to this option and the holistic approach. However, for the time being, there is a lack of information about the inclusion of the external doors in this methodology by the Member States being this aspect proposed for further investigations. Feedback concerning the verification procedure of option A was also required by the Commission.

Regarding **Option B** several aspects were pointed out to be improved:

- **highlighting that option B should be used only when option A is not available**
- **the combination of thermal parameters of the unit** (U and g- values and L-50 values or air tightness class) should be considered as a whole. The percentage of improvement of the thermal parameters of the units should consider the combination of U and g values since they are linked. It would be misleading to suggest "better" values without considering their relation. In addition, it is inadvisable to require good performance of U and g-values without considering the particular characteristics e.g. the existence of shutters, climate, etc. of the location where the windows and external doors will be installed.

The proposed verification procedure for this criterion should, therefore, include the evaluation of the combination of the thermal parameters. Regarding this aspect, it was highlighted that a certain expertise from the purchaser authority to choose the best combination of the parameters and carry out the verification of the criterion is needed. In order to make the verification procedure easier, a possible solution would be the use of **national energy window ratings** when existing, although these ratings are mainly developed for the residential sector and are not applicable to the commercial sector. This limitation is proposed to be included in the criterion formulation

- **The verification procedure of the energy performance is proposed to rely on self-declarations of the producers instead of on calculations made by the bidder.**

These values should be verified according to the Member State regulation.

As a verification procedure the reporting of the ITT values and the intervention of a notified body was proposed before the meeting. However, feedback concerning the difficulties of this route was raised.

- the *air-tightness and leakage of the units* was proposed to be reported by using the L-50 parameter in the revised criterion, however, this parameter is not in line with CE marking . The substitution of the L-50 parameter by the use of classes from EN 12207 in line with CE marking is proposed.

- several *aspects to be regarded in the check-list should be enlarged and improved*. Among them, the influence of the shading on the solar gains and the insulation as well as the influence of U and g-values in the unit will be included.

2.3 Technical specification criteria: Materials

2.3.1 Criteria regarding the use of timber, wood and wood-based materials

Two criteria concerning the use of timber and wood and wood-based materials were proposed. The first one claims for the use of legal sourced timber while the second one suggests a percentage of responsible sourcing wood and wood-based materials.

Both criteria were widely welcomed. Feedback received before the meeting suggested the exclusion of recycled wood from these criteria while feedback received during the meeting pointed out the *impossibility of having recycled wood in the frame of the units due to quality concerns*. Therefore, a rewording of the criterion leaving out this possibility will be considered.

2.3.2 Criteria regarding the marking of plastic

Criterion dealing with the marking of plastic parts of the window above 50g was *proposed to be removed* during the 1st AHWG meeting.

This agreement was widely confirmed in this meeting.

2.3.3 Criteria regarding the filler gas

A limitation in the kind of filler gas to be used in the units was proposed in the revised criterion. The filler gases to be used in the units are those gases with a GWP index lower than 5.

The *irrelevance of this criterion* was considered in the meeting for several reasons as:

1. The *low environmental impact caused by the production process of the filler gases* in comparison to the overall environmental impact of the windows or external doors

- *the compliance of this criterion by all the filler gases currently used on the market*. It was also pointed out that this criterion was needed in the past when other kinds of gases such as refrigerants or SF₆ were used. However, nowadays and due to the current legislation, the use of these kinds of gases is prohibited that therefore it does not make sense to set up this requirement.

- *it reminds unclear how this index is calculated* (database used) and why it is suggested 100 years while the lifetime of the units is under 25 years.

For these reasons, the removal of this criterion dealing with the filler gases was proposed.

2.3.4 Criteria regarding the use of hazardous substances

The revised criterion regarding the use of hazardous substances is based on two aspects: the release of substances classified under the H- or the R-phrases or as SVHC and the avoidance of intentional use of lead or lead components.

Feedback received during the meeting was:

- the *approach of limiting the release of hazardous substances was welcome* by the participants although it was proposed *to be referred to the forthcoming standard TC 351*. However, it was also pointed out that for the time being the standard TC 351 is not approved and therefore, while this standard remains in progress, a technical approach would be needed to assess the release of hazardous substances. The development of standard TC 351 is expected to last longer than two years.

- the compliance with *national standards* was also proposed as a proof of compliance with this criterion. There are national standards in several Member States such as Germany or France that can be used for this purpose. The advantages of using these schemes are that they deal with the quality of the indoor air and they put the responsibility on the producers, making easier the verification of the criterion. However, its use at European level seems to have several drawbacks as they are not fully harmonized among the Member States.

- the **present formulation of the criterion proposed the use of zero-released hazardous substances**. This fact is technically impossible and therefore a reformulation of the criterion was proposed.

Considering this aspect the introduction of benchmarks is needed. Due to the stability of the materials used and the low content of hazardous substances in the units (around 70% of the materials is glass, which is inert, and 30% are materials with very low emissions), extremely low values of release can be suggested. For examples, values even ten times lower than the REACH thresholds can be easily complied by this product group.

On the other hand, stakeholders pointed out that REACH is not a regulation to be used for this product group as it addresses substances and intermediate materials while windows and external doors are considered as final products. In addition, in REACH the exposition path should be considered what is not regarded in the GPP criteria.

The alignment with European regulation schemes was welcomed by the European Commission although it was highlighted that the level of ambition of the GPP policy tool must go beyond that of the existing legislation while being simple to be verified. For example, it is not recommendable to set up verification procedures that can only be done by certain labs with high costs for the bidder. Finally, it was suggested that instead of referring to REACH, the CPR can also be referred.

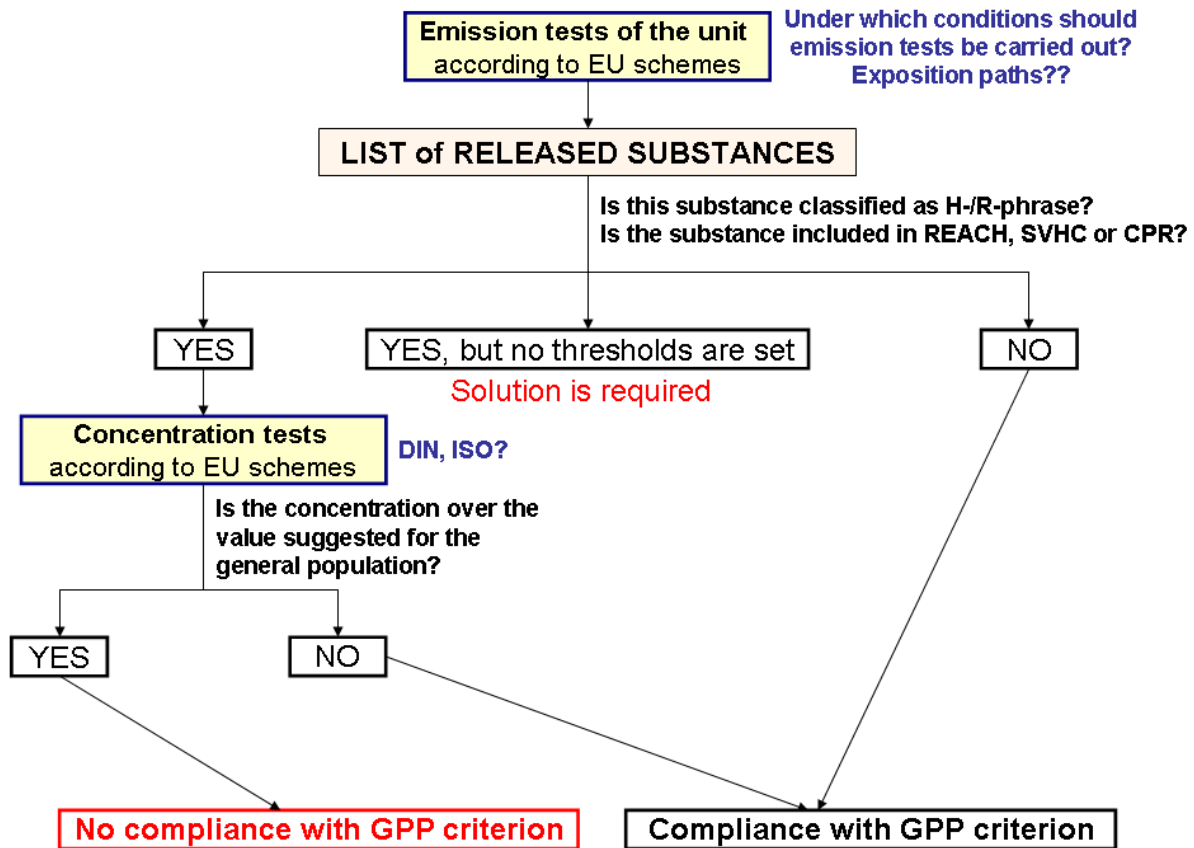
- the information provided by *a group of experts "Expert group of Dangerous substances (EGDS)"* lead by DG Enterprise and with members and experts from most Member States was suggested to be used in the revision of this criterion. According to this information and the draft amendment of mandate M101 "Doors and windows", expected to be finished by the end of November, no specific requirements were identified for this product group. Therefore, the inclusion of this criterion seems to be unnecessary.

- *setting up of the thresholds for the released hazardous substances brings the need of envisaging possible exceptions and the possible burdens for the development of new technologies*: while limiting the use of materials, this criterion can block the innovation and the development of the new technologies.

- the *verification of this criterion is proposed to be based on the self-declaration of the producers*. They are responsible for demonstrating the value of released substances and their compliance with the thresholds set up in the GPP criteria.

For this reason, the alignment of the GPP criteria within well-known standards or regulations is of particular importance. Even if the thresholds were set up as a fraction of the benchmarks required by national or international schemes, the way to be proved should be exactly the same as that suggested in the standards to avoid additional costs to the industry.

- In order to apply this idea the following decision tree was suggested for further development:



Regarding this decision tree, threshold values for each classified H- and/or R-phrase substances should be included. Currently, these values are only provided in the cases where the mass weight in content of the hazardous substance is above 0.1% in the product.

In addition, several disadvantages were pointed out such as the need of including testings for the release of hazardous substances to the air, water or soil because of the need of covering all the life cycle phases of the product and the mismatches with the schemes that are mainly focused on the indoor air quality.

On the other hand, the low content of hazardous substances in most of the units can allow the exemption of this kind of testing, except for the materials used in the batteries of the motors of the windows.

No comments were raised regarding the avoidance of lead or lead components.

The inclusion of the use of Type III labels was proposed and agreed during the first AHWG meeting, however, the use of this type III label does not seem recommendable in all the cases.

Type III labels provide information about the content of different substances in the material without including a comparison of these values from the environmental point of view and without judging the environmental performance. The use of Type III label is therefore recommended when a threshold (a defined value) is included in the criterion, and as far as this information is included into the information provided by this label. E.g the use of this Type III label is not recommended to assess the content of lead in the final product as information regarding the use of lead stabilizers is not supplied.

A modification regarding the acceptance of Type III labels as verification proof for those criteria where values are set up and where the needed information is included in this type of labels is proposed. **The acceptance of Type III labels as a mean of verification will be complemented by an explanation about the needed information.**

2.4 Award criteria

Award criteria are those that, without addressing aspects related to the product group itself and its environmental performance, can help the purchaser authorities to take a decision. The revised award criterion includes the use of recycled materials in the production of the new units.

Several remarks were received regarding this criterion:

- **Composite materials:** the use of composite materials e.g. glass fibre reinforced polyester can also be made of recycled material and, however, this option is not included in the award criterion.

- **Metals: the indicator "recycled content" is not the most suitable one** for this kind of materials. The use of this indicator could put additional value on scrap while the recycling of metals is well-established. Nowadays, the trade of scrap arises about 500 million tonnes/year and in average 80% recycling rate is achieved. If the award criterion is focused on the recycled content a perverted effect can be developed.

According to a stakeholder, steel can be produced by two different processes depending on the technology used. In the case of blast furnaces a higher amount of recycled material can be used while it is not possible due to technical problems in the case of the electric furnaces. The choice of one or another type of steel/production process is in general not made based on the recycled content but based on economical reasons/situations.

The recyclability concept is proposed as a better indicator for the award criterion.

The requirement of a % of recyclable content can lead to distortions in the markets: metals are used in and for different markets, so taking a part away from a market to be used in another market can have environmental effects as well as economical consequences.

The requirement of higher content of recycled content in the windows and external doors does not make sense since it is **more important the end-of-life of the units**, and to ensure that they will be recovered. Recycled content is therefore not a good indicator as it is difficult to assess the impact of using it.

- **plastics:** similar discussion were brought in the case of the amount of recycled plastics

- **wood and wood-based materials:** the difficulty of finding out recycled wood or wood-based materials suggests that this criterion makes no sense in this case.

- **glazing:** in the revised criterion the inclusion of the process waste was proposed. Feedback suggested that it was not clear enough what process waste is considered and until which extent it can be included into this criterion. Setting up a threshold for glazing makes necessary an indication about how to calculate the recycled content and define what is included or excluded. Regarding these differences a benchmark of 20%

seems to be too low if the process waste is included while it seems to be too high if excluded.

Additionally, it was pointed out that it **is not possible to certify the recycled content of the materials in any case**. Producers have no control on it and the assemblers buy raw materials or intermediate products without knowing the exact amount of recycled material that is included. Recycled content of the materials are generally reported as average values for long periods of time (e.g. six months) and not by batches. On top of that, materials can come from outside Europe what even makes it more complicated to track this information. In this sense, to ensure the compliance with a minimum % of recycled content, it could be necessary to bring materials from very far away. This fact would lead to higher overall environmental impacts of the final product because of the higher environmental impacts of the transportation phase. An example mentioned by a stakeholder is a building in Paris constructed under the LEED criteria with the whole façade made of aluminium and glass. The aluminium used was imported from China, in order to comply within the LEED requirements, disregarding the environmental impacts caused by transportation of the material and leading to higher overall environmental impacts than if the material would have been locally produced.

Moreover, **most of the producers use on average the same amount of recycled content** regarding the production technology used. It is because most of them use the optimal recycled content and therefore this quantity is similar in all the cases.

After this discussion it was proposed **to delete the award criterion** concerning the content of recycled materials and to **include this concept in the criterion addressing the end-of-life phase** of the windows and external doors.

Finally, new award criteria were proposed to be developed in order to help the purchaser authorities to differentiate between several offers while complying all of them within the technical specification criteria.

Some propositions for the new award criteria are the use of bio-renewable materials or innovative technologies.

2.5 Contract performance clauses

The contract performance clauses are criteria that do not address technical aspects of the product group but additional services or aspects of the tenderers.

The contract performance clauses consist in two criteria: the first one deals with the end-of-life phase and the second one with the maintenance during the use phase.

Both criteria were considered of high importance for the participants. The *post-consumer waste criterion* should be reworded to introduce **all possible ways of recovery** such as energy recovery or reusage. Explanation about the concepts behind these recovery processes should also be included in the new formulation.

It was pointed out that the **removed windows should be treated in a sustainable manner**. The development of a system to identify the best ways of dealing with the different parts of the units during the end-of-life phase would be included. This system will ensure that elements come in the proper waste streams avoiding bringing them to the landfill which is nowadays considered the easier/cheaper option.

The **verification of the maintenance** criterion by means of a Type I label does not seem to be correct. In addition, maintenance information should always be provided in accordance to the current legislation. **It was proposed to amend this criterion including just those aspects that are not covered by the regulation.**

2.6 Cost considerations

The importance of the cost considerations can be considered by means of a LCC study. These LCC studies should be done in accordance with the forthcoming Directive on life-cycle costs and do not start from the cradle but from the production process and the sourcing of the materials.

The inclusion of not only end-of-life costs but also recycling costs was suggested as well as comments on the lifetime and maintenance of the units. The lifetime of the unit depends on the materials they are made of.

LCC studies give a better transparency of the price of the product during the lifetime. The reference to EPD schemes can be made at this point as LCC should be reported considering operational costs and energy savings.

2.7 Conclusions

The need of comments and feedback from the stakeholders, especially regarding those criteria and the proposed check-list was highlighted. **Comments and feedback on written format are expected by 8th November.**

Concerns about nil/little involvement of those parties that are not coming from the industry sector were commented. This fact can lead to the impossibility of reflecting the received feedback on the new draft of GPP criteria.

Minutes and a new version of the GPP criteria and the technical background report are expected to be uploaded in the official website in the coming weeks. Stakeholders will be informed by email.