2nd MEETING ON DEVELOPMENT OF GPP CRITERIA FOR OFFICE BUILDING
SUMMARY OF THE MEETING AND FURTHER WORK

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Participants List

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Introduction

The draft criteria proposal and technical background, available at the project website (http://susproc.jrc.ec.europa.eu/ecobuilding/stakeholders.html) constituted the key inputs to the meeting. Moreover, some modifications were included into the slides presented during the meeting as a consequence of the evaluation of the comments already received at that point.

The meeting was introduced by Oliver Wolf and followed by a round table of the participants. After that a short presentation given by DG-ENV and highlighting the common points and the differences between Ecolabel and GPP tools took place. GPP and Ecolabel policy tools are closely linked because both are developed from a scientific basis with multiple common points. In addition, at the beginning of December the Commission tabled a new proposal for Public Procurement that contains the possibility to refer directly to Ecolabels in contrary to the current rules. However, it is currently just a proposal.

For these reasons, in this project the development of both policy tools is carried out in parallel, although this fact does not mean that both set of criteria should be similar.

At this point an effort to harmonize both Ecolabel and GPP criteria (wording) was required by the participants. GPP is regarded as a good way of promoting Ecolabelled products and a procedure on how to apply information on the products one wants to acquire. In this sense,

participants considered that a way of proving the satisfaction with the GPP environmental requirements can be the compliance with Ecolabel criteria or through Ecolabelled products. In addition, participants pointed out that GPP criteria development should respect ongoing standardisation efforts in industry in order not to become a burden for them.

Finally, it was explained that the main purpose of this meeting was a discussion on the proposed GPP criteria and not their relation to Ecolabel criteria. However, there are comments done during the discussion on Ecolabel criteria that are going to be the same for the GPP criteria and therefore IPTS will take them into account on the forthcoming work. The discussions during this meeting and the resulting feedback will form the input into the draft final criteria proposal for GPP criteria. EU GPP criteria are generally developed with the aim of potentially being taken over as a whole by any European public authority. However, procurers have the possibility to chose only individual criteria from the proposal and adapt them to their needs. It relies on the tender the decision of which criteria are significant for his/her offer and the determination of the benchmarks required. Criteria are proposed with explanatory notes were the typical rates and applicability of the criteria are briefly discussed.

The timescales were proposed and feedback on the discussions held in the meeting, the working document and draft criteria proposal was invited from stakeholders. The draft criteria proposal does not yet include the finalised criteria and they will be further developed with stakeholder feedback.

- Selection criteria:

- **Criterion 1.1 – Exclusion of certain constructors**
- **Criterion 1.2 – Experiences of the construction contractor and/or proper developers**
- **Criterion 1.3 – The contractor shall have relevant experience in environmental related aspects**
- **Criterion 1.4 – Technical capacity to take the necessary environmental management measures**

This set of criteria is related to the selection of the developers or designers of the building. Several points were commented in this section:

- a clearer definition of what is considered to be a contractor (and the subcontractors that can be included) is needed. In this sense, a base line scenario considering the building designer as the contractor was proposed.

- the required "experience" or "high environmental experience" of the contractors/designers in the selection criteria seems to be not enough. It is important to specify clearly which expertise is required and from whom in the overall procurement process. General

experience in construction is not enough while competence and experience in constructing buildings with high environmental performance seem to be difficult concepts to be proved. Regarding the verification processes, the fulfilment of the requirements is more important than any kind of certification, therefore other proofs of fulfilling the criteria should be accepted.

- selection criteria were proposed not to appear as explicit criteria but as a manual. However, it was pointed out the risk of contracting inexperienced contractors if this set of selection criteria is left out.

- requirements on the functionality, service life, flexibility and adaptability of the building were proposed to be included into this set of selection criteria.

Technical Specifications criteria

Criteria related to energy performance

- Criterion 2.1 – Energy consumption during the use phase

- Criterion 2.2 – Energy monitoring and efficiency training

- Criterion 2.3 – Localized renewable energy sources

A general consensus on the proposed energy performance criteria was reached during the meeting, although it was pointed out that these criteria could be modified in the near future when the nearly zero energy (NZE) buildings come into force (by 2018 for public buildings and by 2020 for the rest of buildings).

A rewording of some aspects of these criteria was proposed. Firstly, the concept "overall" energy consumption seems to be misleading and not in line with the wording provided by international standards such as EN 15798. Some mistakes in the wording of criterion 2.1 concerning the existing energy performance rating developed by the Member States were pointed out.

Secondly, a clarification of what is considered as localised energy sources was required (definition and minimum share of renewable energy sources in the buildings should be in line with the Directive 2009/28/EC on the promotion of the use of energy from renewable sources**).** Under this concept should be determined/properly defined the kinds of renewable sources that are considered, their location on the building or building site and their minimum share depending on the location of the building. Also the possibility of including green electricity will be evaluated.

Finally, the monitoring of the energy consumption was pointed out to be required by EPBD 2010 recast. However, a more sophisticated monitoring system criterion (exceeding the EPBD requirements), information about how to maintain the building and its high energy performance must be provided to the end-users of the building. The monitoring of the energy consumption was proposed to be linked to the design of the building and to establish the level of deviation between the current energy performance and the estimated energy performance that should

bring corrective measures. The differences between the design and the actual performance can reach up to 25% according to the literature. The information provided by the monitoring system should be delivered to the end-users and/or to the person that will be in charge of energy performance of the building. The content of the training sessions was required to be defined.
The possibility of not accepting the building if it does not fulfil the requirements can be included into the contract performance clauses or in other parts of the contract.

GPP criteria related to construction materials

- **Criterion 2.4 – Use of construction materials complying with certain environmental criteria**
- **Criterion 2.5 – Recovery materials**
- **Criterion 2.6 – Use of recycled and reused construction materials**
- **Criterion 2.7 – Use of responsible sourcing wooden and wooden based materials**

The proposed GPP criteria related to construction materials are considered to be developed following a construction product approach instead of a building performance approach. In this sense, a modification of this set of criteria was suggested by some participants.
Not all the Member States are equally advanced in the GPP policy tool implementation. This fact brings the necessity of developing two different sets of criteria related to the building materials. On one hand, it was suggested that the core criteria should be developed for those Member States that do not have any or have scarce experience in the GPP for buildings. On the other hand, a new set of criteria following a building performance approach (the comprehensive criteria) should be developed for those Member States within large experience in this field.
The core criteria are proposed to highlight aspects of the construction materials related to their environmental performance. In this sense, the comments received on the proposed criteria were:
- there are no criteria related to the embodied energy of the construction materials. According to some participants this indicator can be useful to choose lower environmental impact construction material are considered as high energy intensive construction materials such as concrete or steel , while other participants considered that the embodied energy of the construction materials is of no use.
- the verification of the criteria needs clarification and this question was arisen to the participants. One possible requirement is the compliance with labels Type I as well as Type III – EPD labels, although EPD does not judge a construction material from the sustainable point of view. The current state of the market where there are very few construction products with a Type I label does not allow any other alternative. Concerning to this point it was agreed to accept both Type I and Type III labels because at least EPD provides some information on the environmental performance of the construction product, and this information can be used for the environmental assessment of the entire building in a building performance based approach.

- another set of criteria concerning the recovery of the construction materials, the recycled and reused content and the responsible sourcing of wood and wood-based construction materials was proposed as part of the core criteria related to the construction materials.

The importance of the recoverability of the material was agreed to be an important aspect. The reduction of the demolition waste, the reduction of the extraction of materials and the reduction of resources needed are among the benefits of this criterion. However, the verification of this criterion seems to be complex due to the scarcity of data about the recyclability of the materials and the potential recoverability.

- the objectives of these criteria should be in line with the resource efficiency roadmap. The main objective of this roadmap is to minimize the use of resources and in this sense recycling could be one of the possible ways

- the use of responsible sourcing wood and wood-based materials was supported by the participants and an increase up to 100% of the wood-based materials within responsible resourcing was required. In addition, an extension of this criterion to other kinds of materials was pointed out (as responsible extraction).

The wording of the proposed criteria needs revision to address the goal of decreasing the use of natural resources without creating niche products.

The development of comprehensive criteria related to construction materials was proposed to be done by following a building performance approach since the environmental impact of construction materials separately does not refer the overall environmental impact of the whole building. The total environmental impact of the building comes from other issues too, e.g. energy consumption in heating, cooling, lighting, water consumption and management.

The difficulties to develop criteria based on the building performance approach, among other factors, are the lack of expertise in using LCA software tools for buildings, the lack of widespread and high quality available tools and databases at European level, the lack of experience in the interpretation the results of the studies and the increase in the administrative efforts to verify this criterion.

Several LCA software programs, guidelines e.g. Green Council and databases can be used to assess the environmental impact of buildings, although none of them seem to be widespread available. In these software's (free and available on-line) the material requirements based on standard labels should be included. Moreover, data related to the end-of-life scenario should also be introduced getting an inaccuracy that can vary up to 20%.

The use of LCA studies allows the determination of the most suitable construction materials and the assessment of the benefits of the recovery of the construction materials as well as the inclusion of recovered content.

It was discussed that an important aspect that influences the results of the LCA studies is the lifetime estimated for the construction materials. This aspect should be homogenously considered in all studies.

Criteria related to the indoor air quality and the well-being

- Criterion 2.11 – Visual comfort

Criteria for ensuring the well-being of the occupants of the office building are desirable to be included in the GPP criteria set for office buildings. The proposed GPP criteria set include a criterion dealing with the visual comfort. However, an enlargement of this criterion to address other aspects such as acoustic comfort, thermal comfort, etc was required.

Regarding the visual comfort proposed, a rewording of the criteria was asked to refer to the European standards for the illumination levels to be used in buildings, the new ISO TC 250 concerning "building environmental design" and to demand a higher level of strictness (higher than that required by the national standards)

In addition, it was pointed out the necessity of proposing lighting control measures and referring to the GPP for indoor lighting that will be released in the coming days.

- Criterion 2.5 – Separate rooms for printers and office equipment

- Criterion 2.9 – Exclusion of certain materials

- Criterion 2.10 – Minimum ventilation rates

IPTS will consider skipping the criterion on separate rooms for imagining equipment.

The exclusion of certain construction materials is proposed to avoid the release of indoor air pollutants inside the building and/or the use of substances considered as "substances of very high concern (SVHC)".

The criterion related to the exclusion of certain material needs the development of a comprehensive list and the setting of minimum thresholds; otherwise compliance might become difficult (it is technically impossible to avoid 100% of the SHVC).

National and European standards were suggested to be referred to avoid the release of indoor air pollutant. On one hand, some participants pointed out the necessity of referring to national standards or voluntary schemes where the maximum release of CO/CO_2/PM is specified while others pointed out the convenience of referring to the European scheme that are under development by DG ENTR. This new standard tries to combine the German and French schemes and seems to be the best way for a harmonization of the values.

In addition, at European level a new TC 351standard concerning the indoor air quality is being developed. This standard will be mandatory in the coming years and was proposed to be used for the reformulation of this criterion.

The setting of a ventilation rate was accepted, to be set according to national standards.

Criteria related to the water consumption and waste generation and management

- **Criterion 2.12 – Recycling facilities**
- **Criterion 2.13 – Water saving**

The installation of recycling facilities and water saving facilities in the office buildings were proposed. Regarding the criterion 2.12 the discussions held during the 2nd AHWG meeting on Ecolabel criteria should be taken over.

The inclusion of both recycling facilities in the design of the office building regardless the location of the building and the development of a waste management plan dedicated for the use phase were appreciated.

The criteria related to the water saving technologies and water management plan should also take over the discussions held during the 2nd AHWG meeting on Ecolabel criteria.

The estimation of water consumption in public office buildings seems to be challenging due to the variable number of visitors (apart from the workers) that they can account.

In this sense, the criterion 2.13 related to the installation of water saving sanitary fixtures seems to be more feasible.

The development of a water management plan was welcome

Criteria related to the other aspects

- **Criterion 2.14 - promotion of bicycles**

IPTS is considering the possibility of skipping this criterion based on the discussion held during the 2nd AHWG meeting on Ecolabel criteria.

Award Criteria on energy efficiency and rain and grey water

The award criteria need to be reformulated to be as quantitative as possible in order to be easily verified.

The use of rainwater and grey-water is technically difficult. Based on a decade experience in Netherlands it seems that the quality of the water supplied by these systems is too low to be installed across Europe. For this reason, IPTS is considering to skip this criterion.

Contract performance criteria:

- **Criterion 4.1: Waste management**
- **Criterion 4.2: Water management**

Contract performance criteria were proposed on water and waste management. Both criteria are needed to be reformulated and linked to the technical specification criteria.

Regarding the waste management, construction and demolition (C&D) waste produced during the demolition phase of the building can not be included into the GPP criteria because the

tenderer is not responsible for this phase and because it is impossible to foresee what is going to happen at the end-of-the-life of the building.

An extra GPP criterion was proposed, the requirement of a data collection of the building characteristics and its reporting in a manual.

Water management criterion is proposed to be linked to the technical specification criteria commented above.