2nd Ad-Hoc Working Group (AHWG) meeting for the revision of EU Ecolabel criteria for the product group:

Hard Coverings

Revised criteria proposals for natural stone, agglomerated stone, ceramic and precast concrete products

Room 4B, Albert Borschette Centre, Rue Froissart, 36, Brussels, 1040 3-4 October 2019

Minutes of the meeting

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List of participants

Name	Organisation	
Beatrice Barbiero	ASTA worldwide (agglomerated stone association)	
David Bernad Beltran	JRC-Seville	
Isabella Bianco	University Politecnico di Torino (natural stone)	
Karen Bonvallet	Ernst and Young (on behalf of French competent body)	
Anne-Claire Bruant	Cerame-Unie (European ceramics association)	
Irina Celades	Instituto de Tecnologia Ceramica (ITC)	
Shane Donatello	JRC-Seville	
Marisa Ferrer	COMPAC (agglomerated stone producer)	
Fabianne Godin	Belgian Competent Body (EUEB member)	
Magdelena Herbik	BIBM (European pre-cast concrete association)	
Jean Hetzel	BEUC/EEB nominated expert	
Malgorzata Kowalska	JRC-Seville	
Sylvie Ludain	DG Environment	
Blanca Morales	BEUC/EEB (EUEB member)	
Alessio Rimoldi	BIBM (European pre-cast concrete association)	
Ulla Sahlberg	Swedish Competent Body (EUEB member)	
Carmen Sanchis	COMPAC (agglomerated stone producer)	
Javier Sanfelix	JRC-Seville	

		SCHEDULE
1.	Welcome and introduction to work programme and timeline	14:30 - 15:00
2.	Product groups scope and definitions	15:00 - 15:30
3.	Structure of the Criteria. Preamble to the Annex- Assessment and verification	15:30 - 15:50
	Coffee break	15:50 - 16:05
4.	Discussion about scoring approach	16:05 - 16:20
5.	Horizontal criteria 1.1 to 1.3	16:20 - 16:50
6.	Horizontal criteria 1.4 to 1.7	16:50 - 17:20

Agenda Day 1: Thursday 3rd October 2019

Day 2: Friday 4th October 2019

		SCHEDULE		
1.	Ceramic criterion: 4.1. Specific fuel energy consumption	9:30 - 10:00		
2.	Ceramic criterion: 4.2. Specific CO2 emissions	10:00 - 10:30		
3.	Ceramic criterion 4.3: Process water	10:30 - 10:50		
	Coffee break	10:50 - 11:05		
4.	Ceramic criterion 4.4: Emissions of dust, HF, NOx and SOx	11:05 - 11:35		
5.	Ceramic criteria 4.5, 4.6 and 4.7: Waste water management, process waste reuse and glazes	11:35 - 12:00		
6.	Concrete criterion 5.1: Clinker factor	12:00 - 12:20		
7.	Concrete criterion 5.2: CO2 emissions from the cement kiln	12:20 - 12:40		
8.	Concrete criterion 5.3: Non-CO2 emissions from the cement kiln	12:40 - 13:10		
	Lunch break	13:10 - 14:10		
9.	Concrete criterion 5.4: Concrete recovery and responsible sourcing of raw materials	14:10 - 14:40		
10.	Concrete criteria 5.5 and 5.6: concrete plant energy management and environmentally innovative concrete products	14:40 - 15:00		
11.	Natural stone quarry criteria (2.1.1 to 2.1.4): quarry landscape ratio; material efficiency; water and waste water management; quarry dust control	15:00 - 16:00		
	Coffee break	16:00 - 16:10		
12.	Natural stone transformation plant criteria (2.2.1 to 2.2.4): energy consumption; water and waste water management; dust control; transformation waste reuse	16:10 - 17:10		

Day 1

EUEL for Hard Coverings Products (HCP): scope and definitions, horizontal criteria

DG ENV welcomed participants and informed that the present working group was the last forum for the discussion of the technical aspects of the revised EU Ecolabel criteria. The Commission Decision establishing the criteria is planned to be voted by Member States in June 2020 and be adopted by the Commission by end 2020.

The JRC briefly explained that it was the intention of the Commission to ensure a good uptake of the revised EU Ecolabel criteria by boosting demand, and finding synergies with Green Public Procurement (GPP) and Green Building Assessment (GBA) schemes.

The scope for the product group was explained, in terms of product type and product material. In terms of materials, the JRC explained that the idea was to exclude agglomerated stone from the scope, due to a lack of response from the industry. However, following some very late input and expression of interest from the industry, it was considered appropriate to discuss the situation with agglomerated stone criteria again at this meeting.

The JRC also requested assistance with the definition of product types and materials since, in many cases, there did not seem to be a direct definition in relevant technical standards that would match to some of the products covered by the EU Ecolabel HC group.

Stakeholder discussion:

In general, attempts to promote awareness of the EU Ecolabel for hard coverings on the demand side were considered to be highly important.

It was pointed out by one industry representative that this sector (construction products in general), has already heavily invested in EPDs. Of course, if there a customers demand for the EU Ecolabel, the industry will invest in the EU Ecolabel. Consequently, it was recommended that the Commission focusses its efforts on raising awareness on the demand side, instead of the supply side.

The JRC acknowledged this salient point and added that this was also precisely why efforts were underway for Type I ecolabels, such as the EU Ecolabel, to be recognised by Green Building Assessment schemes and why hard coverings products would be one of the first products to be promoted via the GPP user manual, which is under preparation.

The JRC also pointed out that EPDs were not cheap and required a certain level of LCA expertise, a comprehensive data gathering exercise and third party verification. Unless compared to relevant benchmarks (if such benchmarks exist), an EPD cannot tell consumers if a product is "green" or not. The JRC added that the recent trends towards "sectorial" EPDs was interesting in the sense of developing benchmarks but could be misused in cases where producers refrain from publishing individual product EPDs. The aim of the EU Ecolabel approach was to allow criteria to be focused on LCA hotspots and be applied to specific products and production lines, but without requiring any LCA expertise on the applicant side. EU Ecolabel criteria would focus

on actual product and production data which applicants or their tier 1 suppliers would have ready access to. The criteria are being designed in a way to allow more flexibility for the applicant: thresholds are set in many criteria in order to define minimum and excellent environmental performance requirements as well.

Types of criteria and scoring system

The JRC explained that there were three types of requirements defined in the criteria: (i) mandatory requirements; (ii) purely optional requirements and (iii) combined requirements.

Mandatory requirements must be complied with in order to obtain the EU Ecolabel license. Optional requirements do not need to be complied with, but offer the possibility to gain points. Finally, the combined requirements will have a mandatory element (e.g. a maximum limit on CO2 emissions) but also offer the possibility to gain points in proportion e.g. to how far below the limit the actual CO2 emissions are.

Therefore, in order to be awarded with the EU Ecolabel, the product must not only comply with all mandatory requirements, but also reach a specific minimum number of points which can be obtained under some of the criteria, in cases where the product performs better than the mandatory requirement. The total points for all sub-products will be set at 100. Across all criteria, 50% of the total of points would be needed to obtain the EU Ecolabel.

Such an approach was considered as a more flexible alternative to the rigid pass-fail approach that normally applies to EU Ecolabel product groups and incentivises/rewards those producers in areas where they perform excellently.

Wherever sufficient market data is available, the JRC explained that 50% of the points available for a given criterion could be obtained for being in the top 50% of the market for that particular environmental aspect (with maximum points for being in the top 25%).

Stakeholder discussion:

A general discussion about the scoring approach led to some concerns that the score for the product was somehow reducing the transparency of the product performance to the consumer. It was requested that a breakdown of the score should also be available to the consumer. The JRC took note and responded that there may be some concerns about confidentiality of scores associated with suppliers (especially cement) which might lead to difficulties in communicating a breakdown of scores. One stakeholder stated a desire to see a more quantitative approach to information, citing the VOC labelling now used for some construction products as an example (e.g. the A+, A, B...etc. classification system in France and Belgium). The EC replied that the EU Ecolabel was (currently) not a graded label but that certain aspects where the product performs exceptionally well could be promoted in optional information appearing on the EU Ecolabel.

One stakeholder also requested that transport criteria be reflected in the criteria, since this could be an important source of environmental impacts. The JRC responded that any transport requirements could only potentially apply from raw materials to factory gate at the most, due to the impossibility of controlling the destination of sold products. The JRC also emphasised that restrictions on transport would need to be considered carefully, so as not to be potentially interpreted as introducing unnecessary obstacles to the market.

Horizontal criteria 1.1 to 1.7

The JRC presented some points about the criteria on Environmental Management System (1.1), industrial and construction mineral extraction (1.2), hazardous substance restrictions (1.3), VOC emissions (1.4), fitness for use (1.5), consumer information (1.6) and information appearing on the EU Ecolabel (1.7).

The main changes were: (i) removing any mandatory element from 1.1; (ii) reinserting previous requirements about authorisation, rehabilitation plans/environmental impact assessments and compliance with the Birds and Habitats Directives (and now with new requirement on invasive species) for 1.2; (iii) Removal of derogation for intentionally added TiO2 and insertion of derogation for crystalline silica for 1.3; (iv) simplification of VOC emission criteria (1.4) and (v) possible conditional messages linked to specific score breakdowns in 1.7.

Stakeholder discussion:

Regarding criterion 1.1 on the Environmental Management System (EMS), it was requested that this be made a mandatory requirement instead of an optional one. JRC stated that the EMS requirement was originally a mandatory requirement but it was decided to make this an optional requirement. The EU Ecolabel regulation requires that the EU Ecolabel criteria are determined considering the whole life cycle of the product itself, and in addition, there is concern about the request/recognition of ecolabels in public procurement exercises and the risk that some ecolabel criteria could be considered as not directly relevant to the subject matter of the procurement contract.

The reworking of criterion 1.2 was presented although the JRC expressed doubts about how equivalent compliance with the EU birds and habitats directives could be demonstrated in non-EU countries. One stakeholder stated that they would consult with their colleagues specialised in biodiversity for feedback on this point.

With criterion 1.3 (hazardous substance restrictions) it was explained that the derogation for TiO2 as an impurity in raw materials was necessary due to the fact that it is the 9^{th} most popular element in the earth's crust and could have average contents of around 1% as TiO2. A derogation for crystalline silica was introduced due to its potential use in several of the different materials covered by the scope. It was confirmed that crystalline silica could be used in agglomerated stone and pre-cast concrete and possibly too in ceramic production.

With criterion 1.4 (VOC emissions) it was stated that a separate limit for styrene (450 instead of 250 μ g/m3) may be needed for agglomerated stone products in order to respect the Greenguard limits. One stakeholder from the agglomerated stone sector confirmed that their leading companies use the Greenguard standard to distinguish low-VOC emission products.

With criterion 1.6 (installation instructions) in was requested to make it clear that this should not apply to dimension stone blocks exiting the quarry because they are huge, intermediate products that are not installed as such, but instead transformed into smaller products prior to any installation.

Day 2

Natural stone specific criteria

The JRC presented the revised criteria proposals for (i) natural stone quarries (2.1.1. quarry landscape impact ratio, 2.1.2. material efficiency, 2.1.3. water and wastewater management, and 2.1.4. quarry dust control) and for (ii) natural stone transformation plants (2.2.1. energy consumption, 2.2.2. water and waste water management, 2.2.3. dust control and 2.2.4. transformation waste reuse).

The main changes to the quarry criteria were:

- The removal of the requirement for a visual impact indicator and its replacement by an indicator related to "beneficial land use" (BLU). In the proposal, BLU is considered as land that is either used for renewable energy generation or that contributes to biodiversity.
- The introduction of an exemption for slate to the mandatory requirement for material efficiency due to the lamellar nature of the slate rock.
- The movement from a quantitative monitoring approach towards a good management approach for wastewater and dust emissions due to the highly variable nature of emissions of dust and wastewater and their dependence on outside factors such as neighbouring quarries and the weather.

Stakeholder feedback

In reaction to the natural stone criteria for the quarry (2.1.1 to 2.1.4) a number of comments were received. The land use ratios defined in 2.1.1 were considered as discriminatory against any quarry based in mountainous areas, because these are much more vertical than the opencast type quarries. Specifically, representatives of the Carrara region in Italy were against this approach. It was suggested that the criterion could perhaps be replaced by an end-of-life quarry plan or some condition about non-disturbance of the local requirement. The JRC responded that the end of life of quarry plan is already covered by the horizontal criterion 1.2 and that non-disturbance issues tend to be already covered when awarding operating permits.

Additional ideas for criteria or potential alternatives to criterion 2.1.1 included requirements relating to an energy inventory, social criteria or criteria limiting the transport distance of the raw material and/or intermediate product (e.g. from quarry to transformation plant only). Support was expressed for social criteria that would relate to non-EU quarries and be linked to the Fair Stone standard, which was developed for this very purpose. Due to the reality of accidents even in EU quarries, some of the safety and training aspects of social criteria could also apply to EU quarries.

For criterion 2.1.2, it was suggested that the minimum material efficiency ratio could perhaps be lowered from 0.25 to 0.20. This was because sometimes, due to factors outside of the producers control (e.g. hitting a seam that has many unexpected fissures) can adversely affect the material efficiency during one particular year. It was also requested that the term "irregular blocks" be included in total for "B – yield of saleable blocks" in cases where they can be sold and are not assumed to be extractive waste or by-products.

One stakeholder stated that the values proposed were not ambitious. The JRC responded that so far, only one quarry in the whole of Europe has met the existing

criteria, and even then, it almost failed on one of them. Although the values for material efficiency and quarry impact ratio do seem low in principle, due to a genuine lack of data, it is speculative to say whether or not the values are indeed low in reality. Based on the low uptake and the lack of data, the JRC is in favour of a "soft-start" approach with the hope that natural stone producers will start to obtain the EU Ecolabel, thus leading to better data availability and then being able to better judge the actual ambition level of the EU Ecolabel criteria in the future.

Regarding the criteria for natural stone transformation plants (2.2.1 to 2.2.4), feedback gathered from the Carrara region indicated that these criteria were generally acceptable and able to be controlled by the potential applicants.

Agglomerated stone specific criteria

The JRC went over the previous agglomerated stone criteria proposed in TR 1.0, which were split into four areas:

- Energy consumption
- Emissions to air
- Recycled / secondary material content
- Binder content

The JRC added that there was perhaps missing some requirement relating to process waste.

Stakeholder feedback

To date, two responses to the data collection questionnaire had been received by the JRC and the industry association promised that it was encouraging its members to submit more data.

For energy consumption criteria, it was understood that the proposed limit of 1.1 MJ/kg was achievable, but more data would need to be received in order to see where a threshold of environmental excellence might be set. Regarding possible points for renewable electricity, industry representatives confirmed that some companies where already purchasing special "ecological' certified electricity supplies.

Regarding emissions to air, the JRC stated that they believed the emissions of NOx and SOx to be irrelevant since onsite fuel consumption was not occurring and that all energy used was electricity-based. It was asked if dust emissions were centralised in agglomerated stone production facilities. The industry explained that cutting operations were carried out depending on whether customer orders were for slabs (no cutting needed) or small format pieces (cutting involved). In this sense, the cutting operations are therefore similar to those in a natural stone transformation plant, with operations carried out in localised areas on an ad-hoc basis. Consequently, dust control criteria should follow a similar logic to the natural stone criteria (i.e. management-based criteria instead of specific quantitative dust emission limits). Limits of styrene in air were not discussed but still need to be clarified.

The promotion of recycled and secondary material was discussed as well. It was stated that recycled waste glass (including mirror glass) is often used in the quartz-based agglomerated stone products and that secondary marble material from marble quarries is generally used in marble-based agglomerated stone products. The JRC

asked if process waste from the agglomerated stone process could be reused in the same production process (like what happens in pre-cast concrete and ceramic production). The industry stated that this was not normal practice because it would require the material to be milled to a very fine material (i.e. < 1mm diameter) and that crushed material would have to be sorted by colour. Instead of reuse in the same production process, process wastes are disposed of in inert landfills or, in some cases, be sent to cement kilns or used in geotechnical fill. Especially due to concerns about exposure to crystalline silica, it was explained that good practice was to store cutting wastes in enclosed spaces prior to disposal. Workers dealing with cutting operations or handling the dusts where appropriate personal protective equipment.

Regarding binder content, the range of 5 to 15% was confirmed as correct, although a limit set at 10% would exclude many products from the EU Ecolabel according to the industry expert. After prompting by the JRC, the industry expert confirmed that products made of finer particles (which result in more uniform colours) require higher contents of binder. Regarding the choice of resin binder, trends in the development of bio-based binders and binders based on recycled PET were revealed. Caution was urged against promotion of the bio-based binders since promotion of bio-based products, when taken to a broader level, may lead to the same food vs fuel issues that occurred with bio-diesel.

Ceramic specific criteria

JRC presented the ceramic criteria (4.1. specific fuel energy consumption; 4.2. specific CO2 emissions; 4.3 Process water; 4.4. Emissions of dust, HF, NOx and SOx; 4.5. Wastewater management; 4.6. Process waste reuse and 4.7. Glazes).

The main changes to the criteria since the TR 1.0 proposals were highlighted in the presentation. The most significant changes were to criterion 4.1, where two options were presented, one focussing on energy used in the kiln, and one focussing on energy used in the kiln and any drying stages. For ceramic tile production, drying energy can account for 45% of total thermal energy consumption. With brick and block production in tunnel kilns, the total fuel consumed in the kiln can vary simply as a function of how the kiln is designed with relation to waste heat transfer to the dryer. Tunnel kilns are less efficient if only kiln fuel consumption is assessed and dryer fuel consumption is ignored.

Criterion 4.2 is a new proposal, but given its relationship with criterion 4.1, it also came with two options, that reflect CO2 from the kiln only or CO2 from the kiln plus drying stages.

JRC explained the main changes to the ceramic criteria, the new criterion on CO2 and the fact that greater weighting was now given to the criteria on specific energy consumption, CO2 emissions and emissions to air since these are considered as the main LCA hotspots.

Stakeholder feedback

Regarding the setting of limits for CO2 emissions based on the assumed use of natural gas, one stakeholder stated that the EU Ecolabel should not be permitting the use of natural gas in kilns, but requiring the use of renewable fuels instead. The JRC

responded that the use of natural gas was already a progress from the use of fuel oils and coals as the fuel source and that renewable alternatives such as landfill gas or other bio-based syngas were currently 2-3 times more expensive than natural gas and had not yet been proven in terms of reliability of performance in ceramic kilns. Possible traces of N or S in these gases could also have an impact on final emissions from the facility.

It was also asked if the CO2 emission requirement could be extended to also include electricity. In principle this could be done, and might be important in cases where the sector may gradually shift towards increased electrification to meet 2050 climate goals. Currently, electricity only accounts for around 10% of the total energy consumption in ceramic manufacture. It was also requested to try to factor in the CO2 impact of transport of raw materials. To avoid transport CO2 calculations generating disproportionate burdens for applicants and competent bodies, some simple rules would need to be defined and care would need to be taken that obstacles to the market were not being introduced.

One stakeholder queried whether the data used to justify ambition levels for dust, HF, NOx and SOx emissions was representative of Europe. The JRC responded by saying that this data was from existing license holders, so it was arguably representative of only the better performing producers in Europe.

The JRC asked about whether the dust emission criteria should be modified from the "hot" and "cold" approach stated in the current criteria and the last BREF to a "full" and "partial" production cycle which the draft ISO 17889-1 standard promotes. It seems that the full and partial cycles only apply to the manufacture of ceramic tiles, but not to other fired clay products. No feedback on this distinction was received but it was confirmed that dust emissions from shaping would go to the "cold" stack.

Regarding emissions of NOx, it was explained that actual concentrations in the exhaust gas only vary by a factor of around 3 (from 25 to 80 mg/Nm3) although the specific NOx emissions can range by larger factors due to differences in the loading rates and air:product mass ratios of kilns.

Support was also expressed to maintain the criteria on water and wastewater because, even though these criteria are relatively easy to comply with for the good performers in Europe, they still prevent less well performing companies (in terms of water consumption and wastewater emission) from obtaining the EU Ecolabel.

The increase of the minimum requirement for process waste to 90% still seemed unambitious based on the data presented. The JRC explained that the data presented was that of current EU Ecolabel license holders only, and so it was not representative of the entire European ceramic sector.

Pre-cast concrete specific criteria

JRC presented the initial criteria proposals that are directly related to cement: 5.1. clinker factor; 5.2. net CO2 emissions from the kiln and 5.3. Emissions of dust, NOx and SOx from the kiln.

The criteria related to the precast concrete plant were also presented: 5.4. Concrete recovery and responsible sourcing of raw materials; 5.5. Concrete plant energy management and 5.6. Environmentally innovative precast concrete designs.

The main changes were highlighted by the JRC:

- *Limits revised in 5.3, especially for NOx (now a single value for all kiln types)*
- Responsible sourcing of virgin raw materials now considered in 5.4
- No longer any reward for onsite CHP in 5.5.

Stakeholder feedback

In response to criterion 5.1 (clinker factor) an industry representative stated that there were strict confidentiality issues relating to this information and that a cement producer would never tell a customer their precise clinker factor. However, they felt that the approach proposed allowing for the clinker factor to be estimated based on the EN 197-1 class of cement (which cement producers are obliged to communicate to customers) was a reasonable alternative approach to obtaining a proxy clinker factor. Another stakeholder added that a cement-specialist colleague wanted the EU Ecolabel criteria to state a maximum allowable clinker factor of 0.60. The JRC stated that this could lead to unintended consequences, such as needing to add higher quantities (in terms of kg cement per m3 concrete) of lower clinker factor cement to a pre-cast concrete product, which could cancel out any benefits from using the lower clinker factor cement in the first place. An industry representative supported the JRC explanation, adding that a crucial element of pre-cast concrete production is the development of early strength, so that products can be demoulded, cured and shipped out quickly - lower clinker factor cements generally result in lower early strength. In any case, the JRC requested the industry representative to consult with their members to check what are the most common cement classes used in pre-cast concrete production.

Regarding criteria 5.2, the JRC explained that the CO2 limits had been set based on the GNR database, which covers 90% of EU cement production capacity. The maximum CO2 emission allowed corresponded to zero points for the EU Ecolabel and to the top 75% of the EU market. The maximum points for the EU Ecolabel corresponded to the top 25% of the EU market. An industry representative stated that perhaps CO2 in cement was not so relevant anymore, or at least should not be singled out, because at the level of building LCA studies, as other impacts (e.g. ecotoxicity and eutrophication) can also be relevant. The JRC responded that some other impacts from cement production were being addressed by the NOx and SOx emissions. Another comment by the industry was to consider CO2 at the level of the precast concrete product and express the CO2 with a link to the functionality delivered. The JRC acknowledged the point, and felt this would be the best approach if sufficient data was available about the concrete compositions and CO2 footprints for precast concrete products for all the different performance classes and functions covered by EN standards and the EU Ecolabel hard coverings scope. Unfortunately this is not the case today.

With criterion 5.3, the JRC explained that the limits were set based on a joint consideration of upper BAT-AELs and data published by CEMBUREAU (it was also asked if the raw data points could be provided to the JRC to allow the data to be plotted in a cumulative manner). An industry representative expressed extreme doubt that cement producers would provide this specific information to any customers. The JRC explained that this concern could be avoided since the cement producer only has to provide the information to the Competent Body (with whom a confidentiality agreement is signed) and not necessarily to the customer. So the customer (i.e. the

concrete producer applying for the EU Ecolabel) would simply state the cement they use and provide contact details to the Competent Body, who would then obtain the information from the cement producer, calculate the score for the cement and provide this score the concrete producer. Another possibility would be that the cement producers themselves could apply for the EU Ecolabel. This could be done if a similar approach to that which is currently proposed for natural stone (where both the intermediate dimension stone block and the final natural stone product can be labelled) is applied.

Regarding criterion 5.4 (concrete recovery and responsible sourcing of raw materials) some split opinions were expressed about the promotion of secondary and recycled raw materials. The industry representative was in favour of recognising responsibly sourced cement and aggregates but believed that promoting recycled content without any further conditions may not always be the best option from an LCA perspective (a 2015 report by ECRA, the European Cement Research Academy, was cited). In some cases the most sustainable option may be downcycling for use in road fill or perhaps as use as an alternative raw material in cement production (due to Ca-rich material with a much lower carbonate content than limestone). Cases where recycled aggregates actually increase the required cement content in the pre-cast concrete would lead to negative environmental impacts. Another stakeholder stated that supporting recycled content was a key pillar of the circular economy and that it would be difficult to justify removing this criterion. The JRC added that the proposal already represented a balance between responsible souring of raw materials and the promotion of recycled/secondary material content but that putting some sort of limit on the transportation distance of recycled aggregates (relative to the transport distance of the virgin aggregates they would replace) could be inserted. The JRC emphasised that the recycled/secondary material criterion was purely optional (due to benefits being cancelled out if recycled materials is sourced from further away than virgin material) and was not a make or break criterion for meeting the threshold (being worth 15 out of 135 points).

Criterion 5.5 (concrete plant energy management) and criterion 5.6 (environmentally innovative concrete designs) were broadly supported and the possibility of adding another type of product to the list in criterion 5.6 was suggested (concrete elements for green roofs). The JRC was open-minded about this suggestion (and any others) and asked for further details.

Closing remarks

The JRC thanked the participants for their time and contributions and explained the next steps, which were to share the draft version of the minutes, make any corrections within a few days after sharing then to publish the minutes on the JRC website and on BATIS.

Stakeholders would have until 4 November 2019 to make any written comments. Comments should be made on the html version of the Technical Report. Comments on the html document will be transferred into an anonymised table of comments added as an annex to the next Technical Report. Instructions about how to make comments on the html document have already been uploaded to the BATIS forum. While comments can also be made on the BATIS forum, the JRC cannot guarantee that these comments would carry over to the next version of the Technical Report, but use of the forum is encouraged in order to share files and exchange opinions amongst registered stakeholders.

DG ENV stressed the importance of stakeholder feedback on the proposed points scoring system, and on the proposed allocation of points among the criteria (which reflects the "weight" given to certain criteria vs others).

DG ENV informed participants that communication/information actions would be organised by the EC to promote the revised criteria after their publication. This will include social media posts on EC social media accounts, "factsheets", communication "toolkits" (including articles, proposed posts, visuals etc. to be used by stakeholders to promote the criteria) etc. We need to identify the best target for these actions, as well as to work on the messages, the networks/multipliers we could use etc, and any feedback from stakeholders on this aspects would be welcome. Participants were warmly invited to promote the criteria through their networks.