ANEC, BEUC AND EEB COMMENTS ON

THE 3RD VERSION OF THE DRAFT COMMISSION DECISION ON ESTABLISHING THE ECOLOGICAL CRITERIA FOR THE AWARD OF THE COMMUNITY ECOLABEL FOR NEW BUILDINGS

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ANEC, BEUC and EEB recognize the continuous advancement of the ecological criteria and the related assessment methods for new buildings in the last months. We have been actively contributing to the work and we realise that as numerous contradictory comments have been made on the previous drafts by different stakeholders, our comments could so far not be fully taken into account. However, we herewith reiterate some major concerns.

First, for reasons we have already expressed in the last months[1], we propose to exclude existing buildings and differentiate between residential and public buildings (see our comments to Article I below).

Moreover, we call for the EU Ecolabel for buildings to address the following consumer relevant issues in an explicit manner by elaborating an ambitious criteria catalogue:

- LCA-calculation (such as energy and CO_2 embodied) without corresponding requirements should be avoided;
- Adequate criteria for indoor air quality and health issues should be developed;
- Local impacts (dust and noise during construction phase, emission to soil and groundwater) ought to be considered;
- Clear requirements on the use /prevention of use of dangerous substances ought to be introduced;
- Social aspects like accessibility should be addressed;
- Clear sound insulation parameters for airborne and impact sound insulation should be incorporated.

In relation to the reduction of the number of criteria, we support the deletion of minor environmental issues and user-related requirements not inherent to the building. However, some of the criteria were changed from mandatory to optional requirements (i.e. energy and CO2 embodied in materials/products). We reiterate that such LCA-based calculations without any requirement have to be avoided, even in the optional part. Presenting mere numbers for the sake of calculation is not worth being awarded unless they are related to a clear requirement (also compare the related ANEC studies)[2].

One of the most critical issues is health and well being because consumers are affected directly by the buildings' characteristics. With respect to health issues we

[1] Existing buildings do not have a great margin for improvement of their environmental impacts except with respect to their energy performance. This holds also true for major renovations. There would be differences in the assessment of renovated buildings versus non-renovated buildings with respect to the availability of data of the products used.
The energy performance of a building is covered by national legislation and implementation of the Energy Performance of Buildings Directive (EPBD Directive 2002/91/EC). A consumer interested in buying or renting an existing building will be enabled to judge on the energy performance on the basis of the energy certificate which will have to be presented to him anyway, so there is no added value for the Ecolabel at this point.
The most essential information for consumers from an Ecolabel for existing buildings would be emissions to indoor air and impacts on local environment. This depends very much on the materials used and their related emissions (e.g. asbestos, lead tubes, chemical treatments of wood, VOC emissions from adhesives, paints...). Taking into account that information on built-in materials is hardly ever documented or traceable, the indoor air quality cannot be determined without measuring the actual indoor air concentration of these emissions. Again, there is no point for an Ecolabel here.

[2] "Benchmarking and additional environmental information in the context of Type III environmental declarations", Force Technology, Copenhagen, December 2007; "Environmental product indicators and benchmarks in the context of environmental labels and declarations", Öko-Institute, Freiburg, December 2008

would like to stress the importance of an adequate solution for indoor air emissions and impacts on the local environment.

We recognize that the text of the EU Ecolabel Directive (66/20109, article 6 §§ 6 & 7 has been taken into account when drafting the text for criterion 24 "Materials used for the interiors" (pg. 11). However, this criterion is not only applicable to materials for indoor use but to all materials used, according to the Directive. We therefore consider it odd to fall behind the Directive's requirements in the Decision for an Ecolabel for new buildings.

With respect to awarding the use of labelled wood and wood-based materials we question whether it would be feasible to introduce criteria for other major building materials, such as concrete and bricks. Otherwise designer might want to avoid the use of wood because it is related to requirements to be fulfilled.

With respect to well-being issues, we regret that only "minor" problems (such as the use of domotic systems) have been addressed. We believe the draft should also focus on severe nuisances such as dust emitted during construction phase and noise. Sound insulation is one of the major issues for multi-storey dwellings. We call for the incorporation of clear sound insulation parameters for airborne and impact sound insulation required to protect occupied rooms against noise from other dwellings or industrial premises. Noise control in buildings is of great significance for health and well-being of the occupants and should therefore be re-introduced into the criteria catalogue.

We principally support the re-introduction of criteria related to social responsibility, notwithstanding that criteria 5 and 41 are seen critically for the reasons given in the respective comments. We recommend introducing the criterion of 'design for all' in particular in terms of accessibility for wheelchair users (which would also imply environmental aspects).

More detailed comments on the Draft Commission's Decision are given below.

General comment / Article 1

The definition of the product group is still too broad.

First of all, for reasons we have expressed many times, we have strong reservations against the feasibility of the EU Ecolabel for existing buildings. We therefore refrain from commenting on the draft criteria for existing buildings.

Rather than dividing the Commission decision into two, one for new buildings and another for existing buildings, we consider the Decision should refer only to new buildings and be divided into residential and office buildings. A few criteria (e.g. criteria 21, 52 and 53) are indeed only relevant for office buildings.

However, many of our comments concerning new buildings are, of course, also valid for existing buildings.

ANNEX
FRAMEWORK

Assessment and verification requirements

"Where appropriate, test methods and standards other than those indicated for each criterion may be used if their equivalence is accepted by the Competent Body assessing the application."

Comments:
If competent bodies can accept other test methods and standards than those indicated for each criterion, the results might differ according to the test method used and the results might be biased. We therefore question the real need for a deviation from the methods described.

SECTION A - MANDATORY CRITERIA

Documentation

1. Building book

"The building shall have an information and description document (Building book) where are reported all information and technical characteristics about the building."

Comments:
We welcome that ANEC's original proposal to add design plans to the building book has been taken into account. However, deviations in realisation (especially for hidden installation like wiring) should be indicated in the design plans to ease repairing. Furthermore we propose to include the list of materials/products as stated in criterion 7.

2. Maintenance plan

"The building shall have an explicit plan for maintenance and efficient operation of the facility, covering all technical systems, system maintenance and replacement guidance over at least a 10-year period.

Maintenance plan shall guarantee the adequate working of filter systems."

Comments:
The maintenance and replacement guidance period was reduced from 25 years to at least ten years which seems ok for technical features or wooden window frames but rather short for building products such as flexible sheets for water proofing. We believe it wiser to set maintenance periods in relation to the specific product/device e.g. adjusting each period to the respective service life. Moreover, short replacement periods may cause a great environmental impact; this should also be taken into account.

Planning- Project- Construction

4. Design for disassembly, re-use, recycling

"The List of materials (Annex I) shall indicate, for each kind of materials or products, information for disassembling, reuse, recycling.

Assessment and verification: The applicant shall provide information fulfilling the apposite sector in the Annex I."

Comments:
We believe that the materials' list (Annex I) is not the right tool for assessment during design stage. Instead, it needs to be proven whether the assembly itself allows for recycling and reuse (i.e. whether components are glued, rather then fixed in a detachable way). Of course, the list of materials needs to indicate the recyclability.

5. Social responsibility during the construction phase

"(…) Assessment and verification: prEN 15643-3 Sustainability of Construction Works - Assessment of Buildings - Part 3: Framework for the assessment of social performance."

Comments:
As prEN 15643-3 (under development within CEN/TC 350) is not intended for assessment and the construction phase is explicitly excluded from its scope, we propose to delete this item for the time being. Although we strongly support the introduction of social aspects of sustainability, we have severe doubts that the results of the work of CEN/TC 350 could be used for this purpose as a means for assessment from a consumer perspective.

The most obvious social criterion to consider should be the accessibility of the building for wheel chair users. At the same time, this criterion would also imply ecological advantages due to less environmental burdens as a consequence of avoided energy consumption - and mass flows which would be necessary for adjusting a building to the needs of disabled people after erection.

Impacts on Site

6. Heat island

"In order to avoid the Heat island effect, for areas classified from BWh to Csb according to the Koeppen Climate Classification System 4, the building shall use passive systems.

Assessment and verification: The applicant shall provide documentation listing the measures taken in order to reduce the Heat Island effect (such as for instance planting of local trees, use of light colours for exposed external surfaces (albedo effect), solar screens, green roofs, green vertical gardens, etc.)."

Comments:
Although the criterion and related requirements have been split into a mandatory part and an optional part for different climates it remains unclear to which extent these elements shall be used to satisfy the criterion. It is important in inner-city areas but definitely not in rural areas. We again suggest introducing a restriction to inner-city projects.

Materials

7. List of materials / products

"The List of materials/products shall contain materials and products used for the building manufacturing and related quantity at the least for the 90% by weight.

All products and materials used for interiors (including floor coverings, windows, doors, partitions, paint and varnishes, plasters and their components and auxiliary materials - glue, resins, foams...) shall be reported in the List of materials.

Assessment and verification: The applicant shall provide the List of materials/products compiled according to the format presented in Annex I."

Comments:
With regard to the structure and content of the List given in Annex I, we believe they need to be analysed carefully. We propose the inclusion of this list in the building book, rather than awarding the list itself. With respect to plastic material, CO_2 and energy embodied in materials and use of products locally produced which are issues included in the list of materials, please see our comments on the respective criterion.

8. Wood based materials

"At least 30% wood-based material shall originate from reuse-recycling and/or from sustainable managed forests which have been certified by independent third party schemes fulfilling the criteria listed in paragraph 15 of the Council Resolution of 15 December 1998 on a Forestry Strategy for the EU and further development thereof."

Comments:
A reference to the Council Resolution is meaningless as it contains only some generic principles forest certification schemes should comply with. The Ecolabel should precisely mention the certificates which are acceptable (FSC or PEFC). Furthermore, it should be avoided that wood from controversial sources end up in Ecolabelled

buildings. With this in mind, we propose adapting the wording using the draft Ecolabel criteria for Copy and Graphic Paper as a basis as follows:

"Solid wood from forests shall be covered by valid forest management and chain of custody certificates issued by an independent third party certification scheme such as FSC, PEFC or equivalent.

The certification bodies issuing forest and/or chain of custody certificates shall be accredited/ recognised by that certification scheme."

Finally, we believe that the general requirements on chemicals should also apply for recycled or re-used wood based materials. We question the differences in the percentage in criteria 8 and 9 and believe the criteria could be merged again.

9. Wood materials

"At least 60% of solid wood shall originate from reuse-recycling and/or from sustainable managed forests which have been certified by independent third party schemes fulfilling the criteria listed in paragraph 15 of the Council Resolution of 15 December 1998 on a Forestry Strategy for the EU and further development thereof."

Comments:
See comments above.

10. Long life service materials

"For external and internal coverings and partitions, doors, windows and plants the service-life shall be declared according to technical specification provided by producers. Materials and products having a service life lower than 10 years shall not be used.

Assessment and verification: The applicant shall provide information compiling the apposite section of the List of materials (Annex I) and providing product datasheets."

Comments:
This criterion does not seem to be applicable for all materials, as it is largely depending on the purpose of the use of the material (i. e. carpeted floor in office areas). Moreover, the limit of "10 years" is arbitrary. Hence we propose to include a list of products and applications with their respective service life time.

11. Plastic materials

"At least 90% by weight of plastic parts/products used for the building manufacture shall be visibly labelled for recycling according to ISO 11469 standard.

Assessment and verification: The applicant shall provide proper indication in the List of materials (Annex I)."

Comments:
We consider this criterion as useful, but we are afraid that it does not reflect the market which would be a potential obstacle to the award of the Ecolabel. A solution would be to add a declaration according to ISO 11468 for plastic materials in the list of materials/products. Moreover, it is more relevant for the user to minimize (or even abandon) the use of e.g. PUR-Foams, silicon jointing sealants, PVC etc. We thus

recommend addressing certain dangers only relevant for certain types of products by excluding the respective R-phrases being listed under this criterion.

Energy

12. Energy efficiency - Heating

"The primary energy requirement for heating shall be not higher than 30 kWh/m^{2*}year.

*Assessment and verification: The applicant shall provide the energy efficiency certification showing the annual energy use per area for heating expressed as kWh/m2*year."*

Comments:
We appreciate that a common European level of requirements is sought. However, we suggest transforming this criterion into a criterion for the heating demand where the level of 30 kWh/m²*year is not very ambitious. Rather than splitting this criterion into one mandatory (30 kWh/m^{2*}year) and one optional (15 kWh/m²*year, see criterion 47 pg. 17) the mandatory requirement should be 15 kWh/m²*year for the period of validity of the label.

Furthermore, we consider the measuring methods of the Energy Performance of Buildings Directive (EPBD) are rather vague and leave too many options to Member States. We therefore suggest referring to an existing scheme (like the German passive house standard with a value for the energy need for heating of 15 kWh/m²*year).

Finally, we believe that referring to the primary energy consumption would distort the result. The efficiency of the plants (energy losses) should thus not be taken into account because it is not a characteristic of the building. However, the calculated energy need of the building is the most important characteristic and should therefore be taken into account in the process of awarding a building with the Ecolabel. Again, different national conversion factors would lead to different results and should thus be avoided.

13. Renewable energy source

"At least 50 % of the energy used for all purposes shall come from renewable energy sources."

Comments:
The criterion depends on the decision of the user regarding the energy provider. At the time of handing over the building the energy supplier(s) are normally not even known. At a later stage, contracts with energy providers can be changed. In addition, we wonder why this requirement is related only to energy but not to other energy sources.

We therefore suggest transforming the criterion into a building related one by referring to a photovoltaic device which are an integral part of the building (or integrated in roof coverings). In case of heating energy, reference to solar thermal devices, air ventilation units including heat recovery or geothermal devices also seems feasible. Important requirements regarding the (active) heating system are also missing (exclusion of electricity based heating or efficiency and pollution related requirements for heating systems).

Furthermore, it may be useful to think about a clause limiting the use of cooling in buildings (e.g. exclude or allow cooling depending on climate conditions) or at least, include mandatory requirements on cooling energy efficiency.

Water Consumption and Management

14. Rainwater use

"The building shall have a rainwater harvesting system. The collected water shall be used for toilet flushing and/or laundry and/or garden, etc.

Assessment and verification: The applicant shall provide documentation showing compliance with the criterion providing at least information on the capacity of collecting system and main uses of collected water."

Comments:
From an ecological point of view, we support the idea of awarding the re-use of rainwater as grey-water. However, this requirement is not suitable for buildings with low water consumption (e.g. office buildings) and should thus be limited to residential buildings. The use of rainwater also depends on local climate conditions and corresponding economic efficiency. This needs further consideration.

Health and Well-Being

19. Day lighting – common areas

"The Daylight Factor in every common areas (e.g. Halls, Staircase...) shall be > 5%. […]

Assessment and verification: The applicant shall provide a technical report from a professional technician reporting the list of rooms taken into consideration, the assessment method used and the result values."

Comments:
This criterion seems to be irrelevant for certain common areas such as staircases and should thus be applied (or made optional?) for some common parts of a building only. Furthermore, the use of daylight and the related criteria (daylight factor and glare control) are highly depending on the use of the building (office versus residential building), the requirements of the owner and the constraints of the site. Too much day light can also be counterproductive (requiring the use of sun blends, need for additional cooling…) most notably in the office area.

In this context, instead of introducing three different criteria (19, 21 and 23) which need a specialist for calculation and assessing, we recommend leaving the use of daylight in common areas to the requirement of the owner and award the installation of passive system (blinds/shutters) for glare control as an optional basis.

21. Day lighting - Glare Control

"Offices and school rooms and rooms used during the day in residential building shall have a Daylight Glare Index (DGI)[5] lower than 20. […]

Assessment and verification: The applicant shall provide a technical report from a professional technician reporting the list of rooms taken into consideration, the assessment method used and the result values."

Comments:
See comments on criterion 20 above.

22. Integrated indoor well-being

"The building indoor environment shall comply with the EN 15251 standard, integrating thermal environment, indoor air quality and ventilation rates, humidification and dehumidification, lighting and noise indicators.

Assessment and verification: The applicant shall provide a technical report from a professional technician indicating compliance with this criterion according to the ISO 15251 standard (Annex II)."

Comments:
We reiterate the comments we have already made before:

EN 15251[3] specifies different classes and categories which impact on the well being of the users and Category II is recommended for new buildings as a normal level of expectation. If that is average standard for new building we propose to award only buildings within Category I, which is recommended for a high level of expectation.

We also recommend including requirements on low emission products e.g. by awarding the use of eco-labelled products such as paints, varnishes, wall and floor coverings.

23. Day lighting – Daylight factor

"The Daylight Factor in each room of the building shall be > 3%. Criterion does not apply to store-rooms and other service-rooms. […]

Assessment and verification: The applicant shall provide a technical report from a professional technician reporting the assessment method used and the result values."

Comments:
This criterion seems to be the most relevant of the three criteria related to day lighting for residential buildings (namely criteria 19, 21 and 23). We however wonder whether the value > 3% is an average or the point light factor and believe this should be clarified in the document. Furthermore, the use of daylight and the related criteria (daylight factor and glare control) are highly depending on the use of the building (office versus residential building), the requirements of the owner and the constraints of the site. Too much day light can be counterproductive (requiring the use of sun blends, need for additional cooling) most notably in the office area.

[3] EN 15251 "Indoor environmental input parameters for design and assessment of energy performance of buildings addressing indoor air quality, thermal environment, lighting and acoustics"

24. Materials used for the interiors

"Materials and products used for interiors (floor coverings, windows, doors, partitions, paint and varnishes, plasters and their components and auxiliary materials - glue, resins, foams, ..) shall not contain substances or preparations/mixtures meeting the criteria for classification as toxic, hazardous to the environment, carcinogenic, mutagenic or toxic for reproduction (CMR), in accordance with Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures OJ L 353, 31.12.2008, p. 1., or substances referred to in Article 57 of Regulation (EC) No 1907/2006 of the European Parliament and of the Council of18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency OJ L 396, 30.12.2006, p. 1. or substances that meet the criteria of Article 57 of Regulation (EC) No 1907/2006 and that are identified according to the procedure described in Article 59 of that Regulation, present in mixtures, in an article or in any homogeneous part of a complex article in concentrations higher than 0,1 % (weight by weight)."

Assessment and verification: The applicant shall provide EU Ecolabel certification or Material Safety Data Sheets."

Comments:
We recognize that the text of the EU Ecolabel Regulation (66/2010), article 6 §§ 6 & 7 was taken into account when creating the text for criterion 24 "Materials used for the interiors". However, this criterion is not only applicable to materials for indoor use but to all materials used, according to the Regulation.

25. VOC emission into indoor air

"The VOC emissions from the building products used for interiors shall comply with the EN ISO 16000-9 to -11 standard.

Assessment and verification: Test report based on the outlined method in EN ISO 16000-9 to –11."

Comments:
The ISO16000 series only specifies the test methods for determining the VOC emissions without assessing them. A product category specific threshold needs to be defined as a pass/fail criteria, preferably by a European assessment scheme (under development - see JRC Workshop "Harmonised Framework on indoor material labelling schemes" in Somma Lombardo (Italy), 7-8 June 2010).

Facilities provided

26. Common ITC services – home office

"The TV antenna, or equivalent equipment, shall be centralised.

Assessment and verification: The applicant shall provide documentation showing the compliance with the criterion."

Comments:
We believe that this criterion relates to health rather than to the environment (other than avoidance of additional energy - and mass flows due to production of additional antennas). Avoidance of electro-smog needs to be addressed in the criterion.

27. Transport facilities

"The building shall have:
- for residential buildings no more than 1 car-place for flat;
- for offices/schools buildings no more than 1 car place for the 30% of employed persons.

The building shall have facilities for charging electric vehicles and open-space parking for LPG vehicles.

Car places shall include a percentage reserved to pregnant women and disabled persons (5%)."

Comments:
The content of the criterion has changed compared with to the previous version where a minimum amount of car places was required. On the one hand it seems welcomed to include facilities for charging electric vehicles, on the other hand those cars need a lot of parking space thereby causing soil surface sealing (implying environmental impacts). Moreover, the percentage of car places reserved for people with special needs is a social aspect and not an environmental aspect and is only applicable to public buildings.

We consider that a building which requires car traffic because it is planned in an area without infrastructure generates additional CO_2 emissions and should not be awarded with the Ecolabel. We therefore suggest deleting the proposed criterion.

In our view, a true environmental criterion would be the proximity of the building to public transports or access to bicycle lanes instead. However, we appreciate such criterion would be a characteristic of the site and could therefore not be included in the Ecolabel.

28. Cycle facilities

"All building users shall have adequate cycle storage facilities, either indoor or outdoor to ensure dry storage of bicycles.

Assessment and verification: The applicant shall provide documentation showing compliance with the criterion"

Comments:
We suggest adding "***easy to access,*** dry ***and safe*** (in terms of theft risks) storage of bicycles."

FITNESS FOR USE

29. Test of building and equipments

"The building book shall contain evidence of final tests carried out on the structure of the building and on its equipments."

Comments:
This criterion is too vague. It seems to be arbitrary which tests be carried out and to which extent. We believe that quality checks or checking of the proper functioning of every technical device should be part of the contract and should not be optional hence not be associated with awarding the environmental performance of a building. All building should be required to fulfil the requirements stated in the contract. We therefore suggest deleting the criterion.

SECTION B - OPTIONAL CRITERIA

Documentation

30. Other environmental certification systems (up to 3 points)

"The building shall have an ISO type I environmental certification according to:
A) if the certification is a Threshold Level (like the EU Ecolabel) - 3 points;
B) if the certification is a Rating System;
- B1 - 3 points for the first upper level;
- B2 - 2 points for the second-upper level;
- B3 - 1 point for the third-upper level.

Assessment and verification: The applicant shall provide valid Certification as awarded by the Certification Body."

Comments:
If the building already has an ISO Type I label the owner will definitely not apply and pay for another label. The same is valid for other certification schemes. This criterion will therefore hardly ever be considered. We therefore suggest deleting this criterion. For awarding the existence of ISO Type I label for construction materials see criterion 44.

Planning – Project – Construction

31. Site selection (2 points)

"The site location shall prefer:
- abandoned areas (residential or industrial);
- fringe areas in urbanised zones.

Assessment and verification: The applicant shall provide documentation reporting the previous use of the area."

Comments:
We understand that this criterion was changed from mandatory to optional. However, we believe that the wording "shall prefer" is difficult to verify. Under which conditions

other locations are acceptable? Furthermore, site selection of abandoned land could also generate additional CO_2 emissions by private transport and would not – by any means – imply positive effects (not to speak of hazardous substances which remain in the soil and have a potential negative impact on the local environment). Other criteria seem much more important such as public transport and infrastructure connection.

32. Experience of designers in environmental construction (2 points)

"The design's team shall demonstrate experience with environmental building design in at least two projects carried out in the last five years.

Assessment and verification: The applicant shall provide documentation showing compliance with the criterion. In particular projects shall show at least the adoption of following measures (indicative list):
- The use of renewable energy sources
- Bioclimatic architecture
- Use of construction materials and products complying with Ecolabels ISO type I
- Water efficiency
- Waste reduction"

Comments:
The assessment seems rather vague and we believe that this is not a building related criterion. The criterion should be deleted.

33. Quality Management System (2 points)

"Companies in charge of the construction of the building shall have a Quality Management System according to the ISO 9001 standard.

Assessment and verification: The applicant shall provide documentation, such as the QMS certification according to ISO 9001 standard."

Comments:
We disagree with this requirement which is *not* related to the quality of the building. Certificates according to ISO 9000 appeal as easy proof but compliance does not mean that the quality of the building improves. We therefore suggest deleting the criterion.

34. Building Life Cycle Assessment (LCA) (3 points)

"A Life Cycle Assessment shall be produced for the building according to the ISO14040 standard.

Assessment and verification: The applicant shall provide documentation such as calculation made according to CEN/TC 350 - prEN 15978 (Sustainability of construction works - Assessment of environmental performance of buildings - Calculation method) or LCA studies carried out according to standard ISO 14040."

Comments:
Presenting mere numbers for the sake of calculation is not worth being awarded unless they are related to a clear requirement. Given that any LCA based criteria for buildings would not add anything essential, we suggest deleting criterion 34.

35. Environmental Management System (EMS) (3 points)

"Companies in charge of the construction of the building shall have an Environment Management System according to EMAS regulation (2 points) or ISO 14001 standard (1 point).

Assessment and verification: The applicant shall provide the EMS certification according to EMAS regulation or ISO 14001 standard."

Comments:
We disagree with this requirement which is *not* related to the environmental quality of the building. Certificates according to ISO 14001 or EMAS appeal as easy proof but compliance does not mean that the quality of the building improves. We therefore suggest deleting the criterion.

36. Construction and demolition waste (3 points)

"At least 75% of construction and demolition wastes generated during the construction phase shall be reused or recycled.

Assessment and verification: The applicant shall provide the waste management plan and relative documentation showing compliance with the criterion."

Comments:
We believe this criterion should be split into waste during construction and demolition waste during construction. For the construction phase we propose to award the avoidance of waste, for the demolition waste during construction we recommend not to specify a certain percentage because the recyclability highly depends on the existing construction works on the site. Furthermore we suggest transferring this criterion from optional to mandatory.

Impacts on site

37. Green areas (1 point)

"In the green areas, existing trees shall be preserved and species belonging to the local dynamic series shall be used."

Comments:
We acknowledge that this criterion has been shifted from mandatory to optional and was rephrased. However, this criterion is related to the site and not applicable to prefabricated buildings. It still remains unclear whether green areas have to be maintained or only trees and the soil surface may be bituminized for parking lots.

6. Heat island (1 point)

"In order to avoid the Heat island effect, for areas classified from Af to Aw and from Cwa onwords according to the Koeppen Climate Classification System, the building shall use passive systems.
Assessment and verification: The applicant shall provide documentation listing the measures taken in order to reduce the Heat Island effect (such as for instance planting of local trees, use of light colours for exposed external surfaces (albedo effect), solar screens, green roofs, green vertical gardens, etc.)"

Comments:
Although the criterion and its related requirements have been split into a mandatory part and an optional part for different climates, it remains unclear to which extent these elements shall be used to satisfy the criterion. It is important in inner-city areas but definitely not in rural areas. We suggest introducing a restriction to inner-city projects.

MATERIALS

39. Energy embodied in materials/products (2 points)

"Energy embodied values shall be declared for at least 50% by weight of materials/products reported in the List of materials.

Assessment and verification: The applicant shall provide the List of materials (Annex I) with information provided by calculations made according to the CEN/TC 350 - FprCEN/TR 15941 (Sustainability of construction works - Environmental product declarations - Methodology and data) or EPDs made according to ISO 14025 standard or literature data."

Comments:
We reiterate that such LCA-based calculations without any requirement should be avoided, even in the optional part. Presenting mere numbers for the sake of calculation is not worth being awarded unless they are related to a clear requirement. We suggest either establishing max. embodied energy for the most relevant products (building shell materials) or deleting the whole criterion.

40. Use or re-use of recycled materials/products (2 points)

"At least 30% by weight of materials/products used for building's manufacturing shall originate from re-used or recycled materials. Re-used/recycled materials/products must not contain asbestos, PCB or heavy metals (mercury, cadmium, lead).

Assessment and verification: The applicant shall provide information compiling the apposite section of the List of materials (Annex I) and providing a declaration of producers on the content of asbestos, PCB and heavy metals (mercury, cadmium and lead) or MSDS (Material Safety Data Sheets)."

Comments:
We suggest limiting this criterion to solid building materials only.

41. Responsible sourcing of materials (2 points)

"At least 30% by weight of products/materials used for building's manufacturing shall come from producers operating according to the SA8000 standard.

Assessment and verification: The applicant shall provide information compiling the apposite section of the List of materials (Annex I) and providing a copy of related certification of producers."

Comments:
Although we support the introduction of social aspects of sustainability, we believe that the SA8000 standard is not the right standard to refer to. It is indeed based on the minimum standards set by the International Labour Organisation and may

therefore be relevant for developing countries but not necessarily for Europe (absence of slavery, forced labour, child labour, etc.). This criterion could thus be deleted.

42. Use of materials/products locally produced – non-structural functions (2 points)

"At least 30% by weight of products/materials used for non-structural functions shall come from a distance not longer than 500 km."

Comments:
The problem of transport emissions should rather be neglected than be handled on an arbitrary basis. Transport is one example indicating the usefulness of LCAs. Indeed, materials and products transported over 500 km (a distance which might even be too high to be called local) could nevertheless have less environmental impacts than materials / products transported over less than 100 km. We therefore propose to delete this criterion.

43. Use of materials/products locally produced – structural functions (2 points)

"At least 30% by weight of products/materials used for structural functions shall come from a distance not longer than 300 km."

Comments:
See previous comments.

44. Labelled construction products (2 points)

"At least 20% by weight of all materials/products used in the building shall have been awarded the EU Ecolabel or other national or regional ISO Type I Ecolabels.

Assessment and verification: The applicant shall provide information compiling the apposite section of the List of materials (Annex I) and providing a copy of related certification for materials/product, showing at least the certification body, the number of licence."

Comments:
It is very difficult to fulfil this criterion based on weight/volume as only a few of the heavy materials (for e.g. basement, walls, ceilings and roofs) are type I label certified. We suggest following a product specific approach and establishing minimum percentages for each product group, by including a list of EU Ecolabelled product categories in this criterion and specify a ratio of their use (e.g. indoor wall paintings: 90% of surface m^2).

45. CO_2 embodied in construction products (2 points)

"GWP assessment values (as CO2 eq) shall be declared for at least 50% by weight of materials/products reported in the List of materials.
Assessment and verification: The applicant shall provide the List of materials (Annex I) with information provided by calculations made according to the CEN/TC 350 - FprCEN/TR 15941 (Sustainability of construction works - Environmental product declarations - Methodology and data) or EPDs made according to ISO 14025 standard or literature data."

Comments:
As stated earlier, we believe that such LCA-based calculations without any requirement should be avoided, even in the optional part of the Decision. Presenting mere numbers for the sake of calculation is not worth being awarded unless they are related to a clear requirement. Moreover, there is no need to include a CO_2 criterion in addition to an embodied energy criterion (both are highly correlated in case of building products). We therefore suggest deleting criterion 45.

46. Indoor and outdoor paints and varnishes, coverings materials (up to 2 points)

"A) At least 50 % by weight of the indoor and/or outdoor painting used in the building shall be awarded with the EU Ecolabel or other national or regional ISO Type I eco-labels (1 point).
B) At least 50 % by weight of covering materials used in the building shall be awarded with the EU Ecolabel or other national or regional ISO Type I eco-labels (1 point).

Assessment and verification: The applicant shall provide information compiling the apposite section of the List of materials (Annex I) and providing a copy of related certification for materials/product, showing at least the certification body, the number of licence."

Comments:
This requirement is unacceptable. First, the figure of 50% is too low (even minor components can produce high pollution). Secondly, it is not ensured that the Ecolabel criteria address properly indoor air emissions and other properties. Thirdly, the ambition level in various schemes will be quite different. We suggest introducing clear-cut product specific rules taken over from existing labels. In any case, we need clearly defined, obligatory indoor air quality criteria.

ENERGY

47. Energy efficiency - Heating (3 points)

*"The primary energy requirement for heating shall be not higher than 15 kWh/m^2*year.*

*Assessment and verification: The applicant shall provide the energy efficiency certification showing the annual energy use per area for heating expressed as kWh/ m^2*year."*

Comments:
We propose to delete this criterion for the following reason. For more details, see our comments on criterion 12.

48. Energy efficiency – Cooling and ventilation (3 points)

"At least the 50% of the annual needs for ventilation and cooling shall be satisfied through the use of passive systems.

Assessment and verification: The applicant shall provide design documentation showing the total annual cooling and ventilation demand and the related sizing of plants."

Comments:
There is no need to address passive systems separately from the energy consumption requirements. The latter should theoretically take into account passive systems in the energy calculation. However, it may be useful to think about a clause limiting the use of cooling in buildings (e.g. exclude cooling depending on climate conditions) or include mandatory requirements on cooling energy efficiency.

49. Energy efficiency – Hot water (3 points)

"At least the 50% of the annual needs for hot water production shall be satisfied through the use of passive systems.

Assessment and verification: The applicant shall provide design documentation showing the total hot water demand and the related sizing of plants."

Comments:
See previous comments.

HEALTH AND WELL-BEING

50. Domotic systems (up to 3 points)

"Plants and equipment in the building shall be controlled and managed by domotic systems.
In particular domotic systems shall be foreseen:
- for Heating, Ventilation and Air Conditioning (HVAC) (point 1);
- for Lighting (point 0,5);
- for Natural lighting (point 0,5);
- for Audio and Video (point 0,5);
- for Security, including Fire protection (point 0,5).

Assessment and verification: The applicant shall provide documentation showing compliance with the criterion."

Comments:
This is a rather energy using comfort criterion (especially with respect to domotic systems for natural lighting, audio and video) and should thus not be a criterion to be awarded.

51. Natural ventilation (... points)

"The building shall adopt only natural ventilation systems, with the exclusion of sanitary and kitchen areas."

Comments:
Although the criterion has been rephrased, our initial comment is still valid:
The requirement runs against the building of highly energy efficient buildings which are based on ventilation systems including heat recovery. In some assessment schemes, such systems are even obligatory (including efficiency criteria for energy recovery). Bearing in mind that modern buildings are almost air tight, a high quality of the indoor air can only be achieved by using ventilation (or opening frequently windows which reduces energy efficiency). We suggest deleting the criterion.

OPERATION AND MAINTENANCE

52. Internal partitions and walls (up to 2 points)

"Internal partitions and walls, without structural functions, shall be:
- removable and reusable (point 2);
- or removable and recyclable (point 1)."

Comments:
This criterion (as well as criterion 53. Piping and cabling) is more relevant for non residential buildings. For residential buildings, adaptability is a minor issue in comparison with accessibility. We would therefore recommend limiting this criterion to office buildings (see our comments on the scope of the Decision) or replace it with one for accessibility.

53. Piping and cabling (up to 3 points)

"Building utility systems (water, heating, ventilation, cooling, electrical) shall be planned and installed to facilitate ease of maintenance, monitoring and replacement. Piping and cabling shall placed in accessible spaces (such as service ducts, countertops, etc) with regular access points.
- water system (point 1);
- heating / ventilation-cooling system (point 1);
- electrical - ITC plant (1)."

Comments:
This criterion is a minor issue for residential buildings and should be limited to office buildings (see our comments on the scope of the Decision).

Facilities provided

54. Open spaces, green areas, common areas (1 point)

"The building shall have common recreational area. Rules of their use shall be reported in the User's Guide.

The criterion does not apply to one-family houses if they are not part of a condominium".

Comments:
The heading implies requirements on the site (i.e. open spaces, green areas and common areas) but no requirements are referred to in the text. Moreover the criterion is too vague (and questionable from an economic point of view). We therefore propose to delete it.

END.