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Istituto Superiore per la Protezione e la Ricerca Ambientale

Italian Institute for Environmental Protection and Research

EU ECOLABEL FOR BUILDINGS



Supporting document to
Third draft criteria

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1. Introduction

This document provides decisions taken for developing the Third draft criteria for buildings based on decisions taken during the IV AHWG meeting and EUEB meeting, and comments received (Annex A).

The document reports a synthesis of general comments received (Annex B) while comments related to specific criteria are reported in a different document called "Specific comments" (Annex C).

The document gives an explanation for some criteria of which the approach has been changed from the Second draft criteria such as Energy, Integrated indoor well-being, chemical and dangerous substances, and also a new criterion on social aspects.

It also provides a proposal for a score system for optional criteria.

The work carried out so far is the results of study activity and a confrontation with stakeholders during the following meetings since 2008 up today:

- 4 AHWG meetings
 - o 2008.04.15
 - o 2008.10.28
 - o 2009.03.26
 - o 2009.11.20
- 3 EUEB
 - o 2008.12.4
 - o 2009.09.22
 - o 2009.12.09

The following documents have been produced as results of analysis and researches carried out so far:

- Preliminary report, April 2008
- Product group definition, August 2008
- First background report, October 2008
- Second background report, March 2009
- First draft criteria, September 2009
- Second draft criteria, November 2009
- Third draft criteria - May 2010



2. Major changes between Second and Third draft criteria

According to the conclusion taken during the IV AHWG meeting held in Rome on 20th of November 2009 and the comments received (see the complete list in Annex A), major changes can be summarized as follow:

- The criteria have been split in two Commission Decisions: new Buildings and Existing buildings;
- The product group definition has been changed accordingly and it has been better specified the field of application;
- All criteria related to consumptions during the use phase or to behaviour of the users have been removed;
- In order to give indications to users for the correct use of the building and its facilities, criteria for the correct use and maintenance have been maintained/entered;
- Any specification to renovation and refurbishment related to the building has been removed;
- The aims of criteria have been modified accordingly;
- The applicant for this product group has been clarified;
- It has been specified how many buildings can be certified in one application;
- The duration of criteria has been specified;
- A proposal for onsite inspections has been provided;
- 28 criteria have been deleted for New buildings, 34 for Existing buildings;
- 8 new criteria have been added;
- The approach to energy efficiency, Integrated indoor well-being, chemical and dangerous substances, have been changed (see paragraphs 2.1, 2.2, 2.3);
- A new criterion on social aspects has been proposed;
- The score system for optional criteria has been proposed.

2.1 CRITERIA ON ENERGY

Criteria related with energy aspect have been reformulated taking into consideration the integrated approach of the forthcoming revised EPBD (Energy Performance of Buildings Directive) which considers not only energy efficiency for heating, but also cooling/ventilation and hot water.

Considering the EPBD deadline for Member States implementation, about 3 years, its approach has been applied to criteria as follow:

- The consideration on the integrated energy efficiency approach through:
 - o Limits on the specific energy consumption for heating;
 - o Share of renewable energy for cooling/ventilation and hot water;
- The nearly energy zero building concept.

In addition, the criterion on RES (renewable energy sources) has been modified in order to set up, as a mandatory requirement, the share of renewable energy feeding the building's needs.



For the above reasons, following criteria on energy have been identified:

- Energy efficiency - Heating (mandatory requirement)
- Energy efficiency - Heating (optional requirement)
- Energy efficiency - Cooling and ventilation
- Energy efficiency - Hot water
- Renewable and low emission energy source.

The approach for the Energy efficiency on heating has been changed, with respect to the Second draft criteria, and threshold values have been identified as a result of a review of building's performance among European Union member states¹.

2.2 CRITERION ON INTEGRATED INDOOR WELL-BEING

Although the criterion on Integrated indoor well-being has not been changed, an explanation² is here reported that may help in understanding the criterion itself and its assessment method.

As far as the "fitness for use" conditions are related to the context (that, in this case, can be assimilated to the indoor performances of buildings), in order to evaluate the indoor well-being it is necessary to refer to existing standards.

This is feasible through the recent EN 15251 European Standard concerning the parameters for the assessing and the design of energy performances of buildings addressing indoor air quality, thermal environment lighting and acoustic issues.

The following description refers to the evaluation of the indoor performances of buildings, verified according to the EN 15251 standard.

Within this standard, the indoor levels are split-up into four categories, according to the level of expectation of the occupants, as reported in Table 1.

Table 1: Description of the applicability of the category used

Category	Explanation
I	High level of expectation - it is recommended for spaces occupied by very sensitive and fragile persons with special requirements like handicapped, sick, very young children and elderly persons
II	Normal level of expectation - it should be used for new buildings and renovations
III	An acceptable, moderate level of expectation - it may be used for existing buildings
IV	Values outside the criteria for the above categories - this category should only be accepted for a limited part of the year

¹ EPBD Buildings Platform, European Commission, Directorate General for Energy and Transport, *Implementation of the Energy Performance of Buildings Directive. Country reports 2008*, Brussels, 2008.

² Maurizio Cellura, Giorgia Peri, Gianfranco Rizzo, *Indoor environment requisites for EU Eco-label criteria*, Dipartimento di Ricerche Energetiche ed Ambientali (D.R.E.A.M.) - Università degli Studi di Palermo.



Source: EN 15251 standard.

On the purpose of the singling out of acceptable requirements for the attribution of the EU Ecolabel to single rooms of new buildings, an indoor environment can be acknowledged as candidate for this excellence award if the issues of the indoor performance described by the EN 15251 and referring to thermal environment and indoor air quality and ventilation rates fall into the category II, for which a normal level of expectation of people is foreseen and should be used for new buildings and renovations.

On the other hand, for existing buildings an indoor environment is acknowledged as candidate for the Ecolabel award if the cited two issues (thermal environment and indoor air quality and ventilation rates) fall into the category III, for which an acceptable moderate level of expectation is foreseen by people and may be used for existing buildings.

It is important to observe that, in the case of mechanically heated and cooled buildings, the design values refer to the Predicted Mean Vote (PMV) indicator while, in the case of non mechanically cooled buildings, the design values refer to the operative temperature calculated by means of the adaptive approach.

Concerning the lighting and acoustic requisites, since the EN 15251 standard does not define level categories, the buildings candidate for the attribution of the EU Ecolabel must accomplish some recommended criteria, reported in the standard in table D.1 for lighting and in table E.1 for noise.

By summarizing, recommended criteria found in the EN 15251 standard to be utilized for defining the indoor parameters for the EU Ecolabel for buildings, are reported in Table 2 for thermal environment, in Table 3 for indoor air quality and ventilation rates, in Table 4 for humidification and dehumidification, in Table 5 for lighting and in Table 6 for noise.

Table 2: Recommended criteria for the thermal environment in the EN 1251 standard

	THERMAL ENVIRONMENT	
	Mechanical heated and cooled buildings	Buildings without mechanical cooling systems
New buildings and renovation	Category II of Table A.1 (Indicator: PMV and/or PPD)	Category II of Figure A.1 (Indicator: Operative temperature Θ_0)
	Category II of Table A.2 (Indicator: Operative temperature)	
Existing buildings	Category III of Table A.1 (Indicator: PMV and/or PPD)	Category III of Figure A.1 (Indicator: Operative temperature Θ_0)
	Category III of Table A.2 (Indicator: Operative temperature)	

Source: elaboration from EN 15251 standard.



Table 3: Recommended criteria for indoor air quality and ventilation rates in the EN 1251 standard

	INDOOR AIR QUALITY AND VENTILATION RATES		
	<i>Non-residential buildings</i>	<i>Residential buildings</i>	
<i>New buildings and renovation</i>	Category II of Table B.2 (Indicator: total ventilation rate q_{tot})	<i>Ventilation during occupied hours</i>	<i>Ventilation during non-occupied hours</i>
	Category II of Table B.3 (Indicators: • ventilation rate for person • ventilation rate for m ² floor area)	Category II of Table B.5 (Indicators: • air change rate for m ² floor area • air change rate for hour	SB.4
	Category II of Table B.4 (Indicator: outdoor CO ₂ concentration)		
<i>Existing buildings</i>	Category III of Table B.2 (Indicator: total ventilation rate q_{tot})	Category III of Table B.5 (Indicators: • air change rate for m ² floor area • air change rate for hour	SB.4
	Category III of Table B.3 (Indicators: • ventilation rate for person • ventilation rate for m ² floor area)		
	Category III of Table B.4 (Indicator: outdoor CO ₂ concentration)		

Source: elaboration from EN 15251 standard.

Table 4: Recommended criteria for humidification and dehumidification in the EN 1251 standard

	HUMIDIFICATION AND DEHUMIDIFICATION
<i>New buildings and renovation</i>	Category II of Table B.6 (Indicator: relative humidity)
<i>Existing buildings</i>	Category III of Table B.6 (Indicator: relative humidity)

Source: elaboration from EN 15251 standard.



Table 5: Recommended criteria for lighting in the EN 1251 standard

	LIGHTING
<i>New buildings and renovation</i>	Values of Table D.1 (Indicators: <ul style="list-style-type: none">• Maintained luminance at working areas• UGR• Ra)
<i>Existing buildings</i>	Values of Table D.1 (Indicators: <ul style="list-style-type: none">• Maintained luminance at working areas• UGR• Ra)

Source: elaboration from EN 15251 standard.

Table 6: Recommended criteria for noise in the EN 1251 standard

	NOISE
<i>New buildings and renovation</i>	Values of Table E.1 (Indicator: sound pressure level)
<i>Existing buildings</i>	Values of Table E.1 (Indicator: sound pressure level)

Source: elaboration from EN 15251 standard.

It shall be noted that these criteria are applicable to single confined environments but, for EU Ecolabel application, the indoor parameters concerning a whole building should be those referred to a room where people perform activities that can be assumed as representative (or mean) of the entire building.

2.3 CRITERIA ON CHEMICALS AND DANGEROUS SUBSTANCES

The approach of criteria on chemicals and dangerous substances has been changed, according to comments received and to the new Ecolabel Regulation 66/2010.

The new EU Ecolabel Regulation, among general requirements for EU Ecolabel criteria, foresees specific requirements for toxic, hazardous to the environment, carcinogenic, mutagenic or toxic for reproduction (CMR) substances and for some substances from Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): this approach has been used for materials and products used for interiors.

Criteria on chemical products which are out of control of the applicant (such as home cleaning products, etc) have been eliminated.



The criterion on halogenated material has been deleted because it would prevent the use of a wide range of materials widely used in building which, however, present during the use of appropriate environmental performance³.

As halogenated materials can have VOC emissions, a specific criterion has been added in order to prevent and control VOC emissions in indoor environment.

2.4 CRITERIA ON SOCIAL ASPECTS

According to the new EU Ecolabel Regulation 66/2010 which states “where appropriate, social and ethical aspects, e.g. by making reference to related international conventions and agreements such as relevant ILO standards and codes of conduct”, optional criteria related to social aspects have been introduced both for new and existing buildings criteria. The criteria have the aim to promote the use of products and materials coming from producers who operates in accordance with the standards SA8000.

For new buildings, another criterion on social aspects has been proposed in order to check social aspects of construction companies involved in the construction processes.

3. Criteria deleted

According to major decisions taken:

- during the IV AHWG of the 20th of November 2009
- during the EUEB meeting of the 9th of December 2009

and according to specific comments received on the Second draft criteria from Competent bodies and stakeholders, many criteria, previously present in the Second draft, have been deleted.

In particular, Table 7 shows criteria deleted for New buildings, while Table 8 shows criteria deleted for Existing buildings.

The numbering of the criteria is the one used in the Second draft criteria document.

Table 7: New buildings - criteria deleted

n. NB - 2 nd Draft	ISSUE	CRITERION
4	Planning - Project - Construction	Sustainable project
7	Impacts on site	Light pollution
10	Materials	Thermal insulation materials
11	Materials	Halogenated materials
13	Energy	Labelled lighting systems
14	Energy	Labelled domestic appliances
16	Energy	Energy consumption
17	Energy	Insulation of heating and cooling distribution system
18	Emission to water	Rainwater loads

³ European Commission (Commissioned by) - PE Europe GmbH, Universität Stuttgart - Institut für Kunststoffkunde und Kunststoffprüfung (IKP), Institutet for Produktudvikling (IPU), DTU, RANDA GROUP, *Life Cycle Assessment of PVC and of principal competing materials*, European Commission, 2004.



19	Emission to soil	Release of dangerous/toxic substances into soil
22	Water consumption and management	Water consumption
23	Water consumption and management	Grey-water reuse system
25	Health and well-being	Chemical products
26	Health and well-being	Noise reduction
27	Health and well-being	Exhaust gases
29	Health and well-being	Surfaces
42	Fitness for use	Fitness for use control
46	Planning - Project - Construction	Innovative or regional design
47	Planning - Project - Construction	Integrated project planning
53	Materials	Traceability of materials
55	Materials	Use or re-use of materials for structural functions
61	Energy	Energy consumption monitoring and control
64	Emission to atmosphere	Particulate matter embodied in construction products
65	Water consumption and management	Water saving systems
66	Water consumption and management	Water use
71	Health and well-being	Chemicals
73	Facilities provided	Shared Facilities

Source: ISPRA elaboration.

Table 8: Existing buildings - criteria deleted

n. EB - 2 nd Draft	ISSUE	CRITERION
4	Impacts on site	Light pollution
6	Materials	Thermal insulation materials
7	Materials	Halogenated materials
9	Energy	Labelled lighting systems
10	Energy	Labelled domestic appliances
12	Energy	Energy consumption
13	Emission to water	Rainwater loads
14	Emission to soil	Release of dangerous/toxic substances into soil
16	Water consumption and management	Water consumption
18	Health and well-being	Chemical products
19	Health and well-being	Exhaust gases
21	Health and well-being	Surfaces
31	Fitness for use	Fitness for use control
32	Planning - Project - Construction	Sustainable project
34	Planning - Project - Construction	Site selection
35	Planning - Project - Construction	Experience of designers in environmental construction
36	Planning - Project - Construction	Quality Management System
37	Planning - Project - Construction	Innovative or regional design
38	Planning - Project - Construction	Integrated project planning
40	Planning - Project - Construction	Environmental Management System
44	Materials	Long life service materials
46	Materials	Use or re-use of materials for structural functions
51	Energy	Insulation of heating and cooling distribution system
53	Energy	Energy consumption monitoring and control
56	Emission to atmosphere	Particulate matter embodied in construction products
58	Water consumption and management	Grey-water reuse system
59	Water consumption and management	Water saving systems
60	Water consumption and management	Water use
61	Planning - Project - Construction	Construction and demolition waste
62	Health and well-being	Noise reduction
66	Health and well-being	Chemicals
72	Facilities provided	Shared Facilities
74	Materials	Traceability of materials

Source: ISPRA elaboration.



4. Criteria added

According to major decisions taken:

- during the IV AHWG of the 20th of November 2009
- during the EUEB meeting of the 9th of December 2009

and according to specific comments received on the Second draft criteria from Competent bodies and stakeholders, some new criteria have been added.

In particular, Table 9 shows criteria added in the Third draft criteria both for New and Existing buildings.

Table 9: New buildings / Existing buildings - criteria added

ISSUE	CRITERION
Documentation	Other environmental certification systems
Energy	Energy efficiency - Cooling and ventilation
Energy	Energy efficiency - Hot water
Health and well-being	Materials used for the interiors.
Health and well-being	VOC emissions in indoor environment
Impacts on site	Heat Island - Optional criterion
Materials	Plastic materials - Labelling
Planning - Project - Construction	Social responsibility during the construction phase

Source: ISPRA elaboration.

5. ISO standards

The following ISO standards (International Organization for Standardization), connected with environmental performances of buildings have been analysed:

- SO 15392:2008 - Sustainability in building construction -- General principles
- ISO 16814:2008 - Building environment design -- Indoor air quality -- Methods of expressing the quality of indoor air for human occupancy
- ISO 21930:2007 - Sustainability in building construction -- Environmental declaration of building products
- ISO 16813:2006 - Building environment design -- Indoor environment -- General principles
- ISO/TS 21931-1:2006 - Sustainability in building construction -- Framework for methods of assessment for environmental performance of construction works -- Part 1: Buildings
- ISO/TS 21929-1:2006 - Sustainability in building construction -- Sustainability indicators -- Part 1: Framework for development of indicators for buildings.

Definitions and possible test methods defined by ISO will be considered. In particular useful definitions will be included in the user manual while test methods available will be included in the assessment and verification of appropriate criteria.



6. CEN works

Ongoing works carried out from CEN (the European Committee for Standardization) on issues connected with environmental performances of buildings have been analysed in particular available documents and reports (by April 2010) on:

- Activity of the CEN/TC 350: Sustainability of construction works;
- Activity of the CEN/TC 351: Construction products - Assessment of release of dangerous substances.

In particular following documents have been taken into consideration:

- CEN/TC 350
 - o prEN 15643-1:2010 - Sustainability of construction works – Sustainability assessment of buildings – Part 1: General framework;
 - o prEN 15643-2:2010 - Sustainability of construction works – Assessment of buildings – Part 2: Framework for the assessment of environmental performance;
 - o prEN 15978:2010 - Sustainability of construction works – Assessment of environmental performance of buildings – Calculation method
- CEN/TC 351
 - o CEN/TR 15855:2009 - Construction products - Assessment of the release dangerous substances - Barriers to trade;
 - o CEN/TR 15858:2009 - Construction products - Assessment of the release of regulated dangerous substances from construction products based on the WT, WFT/FT procedures.

Definitions and possible test methods defined by CEN will be considered. In particular useful definitions will be included in the user manual while test methods available will be included in the assessment and verification of appropriate criteria (e.g. criterion on LCA of building).

Considering the comments received it is useful to underline that objectives and fields of application of CEN TCs works are different from those of the EU Ecolabel criteria for buildings and there is no overlapping.

7. Score system

The score system has been elaborated taking into account, for each criterion, the technical and economical difficulty for implementing the criterion, together with its environmental effectiveness, using a qualitative scale (low, medium, high). Table 10 and Table 11 show single score for each criterion as a result of this evaluation.

In order to give a score to each criterion the following levels have been used according to the combinations of the quality evaluation for the two aspects Technical/economical difficulty and Environmental effectiveness, used for the scoring system:

- Score up to 1 point: low/low
- Score up to 2 points: low/medium



- Score up to 3 points: medium/high

As the number of optional criteria for New buildings and for Existing buildings is different, consequently, the total optional score to be reached in order to awarding the EU Ecolabel has to be different as well.

In order to set the threshold score and concurrently balancing the certification system between New buildings and Existing buildings, it is necessary to consider the theoretically attainable score on all criteria (total score for all the criteria both mandatory and optional):

- Total number of criteria for New buildings is 54 (with a total theoretical score of 117 points), of which 25 optional (with a total available score of 56 points).
- Total number of criteria for Existing buildings is 49 (with a total theoretical score of 106 points), of which 29 optional (with a total score of 65 points).

Setting a common threshold level of 85 points (points from mandatory criteria plus points from optional criteria) in total it implies that:

- For New buildings the score threshold level for optional criteria is 24 points;
- For Existing buildings the score threshold level for optional criteria is 44 points.

In order to balance the score system among different issues, thresholds levels have been set up for different group of issues, as follow:

- For New buildings: the building must score a minimum of 24 points, distributed among different issues according to:
 - At least 6 points for criteria among Documentation, Planning-Project-Construction, Impact on site issues;
 - At least 12 points for criteria among Materials and Energy issues;
 - At least 6 points for criteria among Health and well-being, Operation and maintenance, Facilities provided issues.
- For Existing buildings: the building must score a minimum of 44 points, distributed among different issues according to:
 - At least 6 points for criteria among Documentation, Planning-Project-Construction, Impact on site issues;
 - At least 26 points for criteria among Materials, Energy and Water consumption and management issues;
 - At least 12 points for criteria among Health and well-being, Operation and maintenance, Facilities provided issues.

Table 10: New buildings criteria - Score system proposed for optional criteria.

n. NB - 3D	ISSUE	CRITERION	Score up to	Technical/economical difficulty	Environmental effectiveness
30	Documentation	Other environmental certification systems	3	Medium	high
31	Planning - Project - Construction	Site selection	2	Low	medium
32	Planning - Project - Construction	Experience of designers in environmental construction	2	Low	medium
33	Planning - Project - Construction	Quality Management System	2	Low	medium
34	Planning - Project - Construction	Building Life Cycle Assessment (LCA)	3	Medium	high



n. NB - 3D	ISSUE	CRITERION	Score up to	Technical/economical difficulty	Environmental effectiveness
35	Planning - Project - Construction	Environmental Management System	2	Low	medium
36	Planning - Project - Construction	Construction and demolition waste	3	Medium	high
37	Impacts on site	Green areas	1	Low	low
38	Impacts on site	Heat island	1	Low	low
39	Materials	Energy embodied in materials/products	2	Low	medium
40	Materials	Use or re-use of recycled materials/products	2	Low	medium
41	Materials	Responsible sourcing of materials	2	Low	medium
42	Materials	Use of materials/products locally produced - non-structural functions.	2	Low	medium
43	Materials	Use of materials/products locally produced - structural functions.	2	Low	medium
44	Materials	Labelled construction products	2	Low	medium
45	Materials	CO ₂ embodied in materials/products	2	Low	medium
46	Materials	Indoor and outdoor paints and varnishes, coverings materials.	2	Low	medium
47	Energy	Energy efficiency - Heating	3	Medium	high
48	Energy	Energy efficiency - Cooling and ventilation	3	Medium	high
49	Energy	Energy efficiency - Hot water	3	Medium	high
50	Health and well-being	Domotic systems	3	Medium	high
51	Health and well-being	Natural ventilation	3	Medium	high
52	Operation & Maintenance	Internal partitions and walls	2	Low	medium
53	Operation & Maintenance	Piping and cabling	3	Medium	high
54	Facilities provided	Open spaces, green areas, common areas	1	Low	low

Source: ISPRA elaboration.

Table 11: Existing buildings criteria- Score system proposed for optional criteria.

n. EB 3D	ISSUE	CRITERION	Score up to	Technical/economical difficulty	Environmental effectiveness
20	Documentation	Other environmental certification systems	3	Medium	high
21	Planning - Project - Construction	Design for disassembly, re-use or recycling.	3	Medium	high
22	Planning - Project - Construction	Building Life Cycle Assessment (LCA)	3	Medium	high
23	Impacts on site	Green areas	1	Low	low
24	Impacts on site	Heat island	1	Low	low
25	Materials	Wood based materials	2	Low	medium
26	Materials	Wood materials	2	Low	medium
27	Materials	Use or re-use of recycled materials/products	2	Low	medium
28	Materials	Responsible sourcing of materials	2	Low	medium
29	Materials	Use of materials/products locally	2	Low	medium



n. EB 3D	ISSUE	CRITERION	Score up to	Technical/economical difficulty	Environmental effectiveness
		produced - non-structural functions.			
30	Materials	Use of materials/products locally produced - structural functions.	2	Low	medium
31	Materials	Labelled construction products	2	Low	medium
32	Materials	CO ₂ embodied in materials/products	2	Low	medium
33	Materials	Indoor and outdoor paints and varnishes, coverings materials.	2	Low	medium
34	Materials	Energy embodied in materials/products	2	Low	medium
35	Materials	Plastic materials	2	Low	medium
36	Energy	Energy efficiency - Heating	3	Medium	high
37	Energy	Energy efficiency - Cooling and ventilation	3	Medium	high
38	Energy	Energy efficiency - Hot water	3	Medium	high
39	Water consumption and management	Rainwater use	2	Low	medium
40	Health and well-being	Domotic systems	3	Medium	high
41	Health and well-being	Natural ventilation	3	Medium	high
42	Health and well-being	Materials used for the interiors.	3	Medium	high
43	Health and well-being	VOC emissions in indoor environment	3	Medium	high
44	Operation & Maintenance	Internal partitions and walls	2	Low	medium
45	Operation & Maintenance	Piping and cabling	3	Medium	high
46	Facilities provided	Car facilities	2	Low	medium
47	Facilities provided	Cycle Facilities	1	Low	low
48	Facilities provided	Open spaces, green areas, common areas	1	Low	low

Source: ISPRA elaboration.

Annex A - Comments received

Following table list all comments received during the work carried out by ISPRA for the development of the EU Ecolabel for buildings.

The comments listed follow the progress of the work from the beginning, Autumn 2007, till now with the definition of the Third draft proposal criteria for buildings.

While comments received up to the First draft criteria have been discussed during the AHWG meetings, comments received on the Second draft criteria have been taken into account from the working group of ISPRA in order to prepare the Third draft criteria. Some of them contain comments on the general approach of the Second draft criteria (generic comments); some of them contain comments specific on each criterion (specific comments), suggesting modifications and/or improvements.

Generic comments are summarised and commented by the working group of ISPRA and presented in the Annex B.



Specific comments are reported, for each criterion, in the Annex C. Decision taken for modification of each criterion of the Second draft into the corresponding criterion of the Third draft are presented in the field "Notes".

Table 12: Comments received from stakeholders and competent bodies

Who	Country	On	When	Addressed to	Comments on criteria
French Permanent Representation	France	Second draft criteria	23/04/2010	IT - CB + E.C.	generic
The Federation of Finnish Technology Industries	Finland	Second draft criteria	20/04/2010	IT - CB + E.C.	generic and specific
CEI-BOIS (European Confederation of Woodworking Industries)	Europe	Second draft criteria	05/02/2010	AHWG	generic
EPF (European Property Federation) (Michael MacBrien)	Europe	Second draft criteria	28/01/2010	IT - CB + E.C.	generic and specific
EWFA - European Window Films Association (Sarah Lee)	Europe	Second draft criteria	28/01/2010	IT - CB	generic and specific
ICSC Europe (Sarah Lee in behalf of)	Europe	Second draft criteria	19/01/2010	AHWG	specific
ECVM (European Council of Vinyl Manufacturers)	Europe	PVC	19/01/2010		(data on PVC)
Portugal CB	Portugal	Second draft criteria - additional comments	18/01/2010	AHWG	specific
Rockwool international (Chris Hamans)	Europe	Second draft criteria - update	16/01/2010	AHWG	specific
Rockwool international (Chris Hamans)	Europe	Second draft criteria	15/01/2010	AHWG	specific
Germany CB (Ines Oehme)	Germany	Second draft criteria	15/01/2010	AHWG	generic and specific
ANEC (Guido Hoff)	Europe	Second draft criteria - update	15/01/2010	IT - CB	specific
Danish Competent Body / Danish Ecological Council	Denmark	Second draft criteria	15/01/2010	AHWG	generic



Who	Country	On	When	Addressed to	Comments on criteria
Portugal CB	Portugal	Second draft criteria	15/01/2010	IT - CB	specific
Belgian CB	Belgium	Second draft criteria	15/01/2010	AHWG	general
EPEE (European Partnership for Energy and the Environment)	Europe	(general comment) + First draft criteria	15/01/2010	AHWG	generic and specific
Plastics Europe	Europe	Second draft criteria	14/01/2010	P. Misiga	generic and specific
University Chieti-Pescara (Basti A.)	Italy	Second draft criteria	12/01/2010	AHWG	generic and specific
Finland CB	Finland	(general comment)	12/01/2010	AHWG	
Ecolabelling Denmark	Denmark	Second draft criteria	08/01/2010	AHWG	yes
UK CB	United Kingdom	Second draft criteria	21/12/2009	AHWG	generic and specific
PU Europe (Formerly BING)	Europe	Second draft criteria	18/12/2009	IT - CB	generic
AIMC (Association des Industries des produits de Construction) - ADEME	France	Proposal on the development of an EU ecolabel for buildings	14/12/2009	IT - CB	
ANEC (Guido Hoff)	Europe	(general comment)	01/12/2009	IT - CB	(as previous comments)
EAA (European Aluminium Association) - Bernard Gilmont	Europe	Second draft criteria	19/11/2009	IT - CB	
Euroheat & Power (Eloi Piel)	Europe	First draft criteria	19/11/2009	IT - CB	generic and specific
UNI-PD CESQUA - Studio Altieri	Italy	First draft criteria	18/11/2009	IT - CB	generic and specific
Romania - Ministry of Environment	Romania	Second draft criteria	18/11/2009	IT - CB	generic and specific



Who	Country	On	When	Addressed to	Comments on criteria
Plastics Europe	Europe	First draft criteria	16/11/2009	AHWG	
Plastics Europe + ECVM	Europe	First draft criteria	13/11/2009	P. Misiga	
ANEC (Guido Hoff)	Europe	First draft criteria	09/11/2009	AHWG	generic and specific
ANEC (Guido Hoff)	Europe	First draft criteria	06/11/2009	AHWG	
Università Roma - ITACA - Arch. Raffaella Romani	Italy	First draft criteria	27/10/2009	IT - CB	
ANEC (Guido Hoff)	Europe	First draft criteria	26/10/2009	AHWG	
Danish Competent Body	Denmark	First draft criteria	23/10/2009	AHWG	
ECF (European Construction Forum)	Europe	First draft criteria	23/10/2009	AHWG	
BASF	Europe	First draft criteria	20/10/2009	R. Balzekaite	
BRE GLOBAL	United Kingdom	First draft criteria	19/10/2009	B. Caspar	
Spin-off ENEA - Paolo Neri	Italy	First draft criteria	16/10/2009	IT - CB	
EPEE (European Partnership for Energy and the Environment)	Europe	First draft criteria	16/10/2009	IT - CB	
EFCC (European Federation for Construction Chemicals)	Europe	First draft criteria	16/10/2009	AHWG	
Università Firenze (Maria Chiara Torricelli)	Italy	Wording proposed criteria	02/09/2009	IT - CB	
Università Sapienza Roma - ITACA (Eliana Cangelli)	Italy	Wording proposed criteria	02/09/2009	IT - CB	
Plastics Europe	Europe	Second background report	10/06/2009	P. Misiga	
BING (Federation of European Rigid Polyurethane foam associations)	Europe	Second background report	24/04/2009	AHWG	
UEAPME (Union europeenne de l'artisanat et des petites et moyennes entreprises)	Europe	First background report	01/12/2008	AHWG	
BING (Federation of European Rigid Polyurethane foam associations)	Europe	Product group definition	25/08/2008	AHWG	



Who	Country	On	When	Addressed to	Comments on criteria
UEAPME (Union europeenne de l'artisanat et des petites et moyennes entreprises)	Europe	Product group definition	01/06/2008	AHWG	
Danish Competent Body	Denmark	First AHWG	14/04/2008	AHWG	
HQE	France	Proposal on the development of an EU ecolabel for buildings	10/12/2007	AHWG	
AIMCC	France	Proposal on the development of an EU ecolabel for buildings	07/12/2007	AHWG	
ANEC - BEUC - ECOS - EEB	Europe	Proposal on the development of an EU ecolabel for buildings	01/12/2007	AHWG	

Source: ISPRA elaboration.



Annex B - General comments

This paragraph reports a synthesis of the general comments received from stakeholders (November 2009 - February 2010), mainly on the Second Draft Criteria of the EU Ecolabel for Buildings. Specific comments for each criterion are listed in a separate document. Please note that comments received after the deadline have been not included in this document.

In this document, together with the comments received, are the ISPRA Working Group's comments specifying the suggestions of stakeholders if accepted or not, and why. In particular with the wording "Comment accepted" is intended the consideration of the comment for the purpose of the third draft criteria elaboration, while "Comment rejected" is intended to be a comment considered but not applied in the elaboration of the third draft criteria as evaluated not appropriate or technically feasible, or consistent with the EU Ecolabel scheme.

Table 13: List of comments on the second draft criteria

Who	On	When	Comments on criteria
CEI-BOIS (European Confederation of Woodworking Industries)	Second draft criteria	05/02/2010	Generic
EPF (European Property Federation) (Michael MacBrien)	Second draft criteria	28/01/2010	generic and specific
EWFA - European Window Films Association (Sarah Lee)	Second draft criteria	28/01/2010	generic and specific
ICSC Europe (Sarah Lee in behalf of)	Second draft criteria	19/01/2010	Specific
ECVM (European Council of Vinyl Manufacturers)	PVC	19/01/2010	(data on PVC)
Portugal CB	Second draft criteria - additional comments	18/01/2010	Specific
Rockwool international (Chris Hamans)	Second draft criteria - update	16/01/2010	Specific
Rockwool international (Chris Hamans)	Second draft criteria	15/01/2010	Specific
Germany CB (Ines Oehme)	Second draft criteria	15/01/2010	generic and specific
ANEC (Guido Hoff)	Second draft criteria - update	15/01/2010	Specific
Danish Competent Body / Danish Ecological Council	Second draft criteria	15/01/2010	Generic
Portugal CB	Second draft criteria	15/01/2010	Specific
Belgian CB	Second draft criteria	15/01/2010	General
EPEE (European Partnership for Energy and the Environment)	(general comment) + First draft criteria	15/01/2010	generic and specific
Plastics Europe	Second draft criteria	14/01/2010	generic and specific
University Chieti-Pescara (Basti A.)	Second draft criteria	12/01/2010	generic and specific
Finland CB	(general comment)	12/01/2010	
Ecolabelling Denmark	Second draft criteria	08/01/2010	Yes



UK CB	Second draft criteria	21/12/2009	generic and specific
PU Europe (Formerly BING)	Second draft criteria	18/12/2009	Generic
AIMC (Association des Industries des produits de Construction) - ADEME	Proposal on the development of an EU ecolabel for buildings	14/12/2009	
ANEC (Guido Hoff)	(general comment)	01/12/2009	(as previous comments)
EAA (European Aluminium Association) - Bernard Gilmont	Second draft criteria	19/11/2009	
Euroheat & Power (Eloi Piel)	First draft criteria	19/11/2009	generic and specific
UNI-PD CESQUA - Studio Altieri	First draft criteria	18/11/2009	generic and specific
Romania - Ministry of Environment	Second draft criteria	18/11/2009	generic and specific
Technology Industries	Second draft criteria	19/04/2010	generic and specific

Comment's ref.: CEI-BOIS

Extract of Comment:

We indeed do not consider that the current proposals and criteria as put forward by ISPRA provide for a fair and equal treatment of all materials used for a building. In fact, from all building materials requirements are included for wood and wood-based materials only, completely neglecting the fact that wood is man's only naturally renewable material and offers a wide range of intrinsic environmental advantages, which do not find any recognition in the proposals at all.

Based on the current proposals, steel, brick or concrete based buildings could actually be awarded a label in the absence of any material criteria, which may be an incentive to specifiers or housebuilders to automatically opt for these materials, taking the "easy" route.

We can therefore but conclude that the approach is biased against the use of wood, which is totally unacceptable.

CEI-Bois therefore insists that ISPRA and the EUEB would fully review their approach to building materials in the context of a draft European ecolabel for buildings and duly consult with the relevant stakeholders.

Commento [LC1]: Comment partially accepted: we have considered the environmental performances of other construction materials including criteria for valorization of high environmental performances. Considering wood it is important to consider the sustainable management forest.

Comment's ref.: EPF

Extract of Comment:

We believe that greater clarity is needed on the intentions of the EcoLabel for Buildings. It appears at present that the initiative is seeking both to gear higher standards of construction of buildings, as well as to motivate improvements in the use of buildings. These goals are laudable, but in order to achieve both aims, the allocation of responsibilities needs to be clearer, and the mechanisms by which they will be achieved also need to be clarified. For example, delivery of solar shading for buildings is more likely to be within the purview of the building owner, as it concerns the fabric of the building. Collection of data on energy usage is likely to be a collaborative effort between owner and occupier, if energy efficiency and reductions in usage are to be achieved. Maintaining the standards imposed, which are material to the fit-out, is likely to affect both owners and occupiers.

Demand for EcoLabel Criteria

The labelling system is not fully developed and the proposed draft includes far too many indicators

Commento [MSOffice2]: Comment accepted: the draft has been reviewed eliminating criteria for users.



which make the system expensive and complicated.

As in many labelling systems the rating results are marketed as evidence of low environmental impact, it is very important to consider to what extent the different indicators in Eco-labelling are consistent with our idea of what environmental impact means and how many of the indicators with low environmental relevance can be eliminated. We recommend that in the development process one should examine many other national systems, for example the Swedish "The Environmental Classification of Buildings" ('MB' system).

The draft includes labelling of both new buildings and existing buildings, which is positive.

But the criteria regarding the indoor environment requirements, access to water, use of less hazardous substances, etc., are not adequately developed and moreover not always appropriate to regional conditions.

Many of the EcoLabel criteria mimic existing voluntary frameworks and are vague at present. This is because the EcoLabel criteria are seeking to tackle buildings over their lifecycle without a clear understanding of the different models for the design, construction and delivery of buildings operating across Europe.

It is vital to examine who, what, when and why a label might be acquired for a building which demonstrated its enhanced environmental performance and what it is designed to communicate. The intention of getting a building accredited by a building rating tool lies in:

Increased potential for attraction of premium occupiers with corporate social responsibility (CSR) policies - under this scenario, the construction client (i.e. developer) could specify a building rating to the constructor;

The acquisition of building ratings which can be reported on publicly and to investor audiences as a proxy for corporate social responsibility;

Used as a means to comply with local planning requirements as regards the minimisation of the impact on the environment; and

An ability for the developer itself to demonstrate CSR credentials.

Increasingly, existing and new rating systems are being applied to the refurbishment and management of existing buildings. Most of the commonly used green building rating systems now have multiple versions available for different stages of the property process and for different types of buildings.

(.....)

The criteria would be far more successful if there was a clearer delineation between stages of the property cycle. The draft criteria suggest that the EcoLabel is applied for 'when the building is completed and operational'. Very often, non-domestic buildings are completed speculatively by their developers, in the anticipation that a tenant will take the space. The majority of non-domestic buildings are also not occupied by their owners. This can often mean that fit-outs in new buildings are relatively standard, leaving it to tenants to introduce their own fit-out when they take the space. This can mean that the use of the space, and its energy performance can vary depending on occupancy density, the type of use to which the place is put (e.g. call centre versus data centre versus standard employee workstations) and even to the sophistication of the tenant/advisor to the tenant in choosing their fit-out. This could mean that the EcoLabel applied for by the building owner could easily become non-reflective of the space as occupied.

It is highly unlikely that owners would be able to compel tenants to comply with EcoLabel requirements, even if they wished to, since leasing structures may not permit them to do so. Voluntary agreements between owners and occupiers on environmental matters are being trialled in the industry, but even these have proven difficult to adopt, and tenants are often not interested in participating. Many of the criteria specify that data for resource use must be gathered on an annual basis. Operational measurement is absolutely necessary to assist in the management of natural

Commento [MSOffice3]: Comment accepted: information will be included in the new drafts.

Commento [MSOffice4]: Comment rejected: stakeholders during the AHWG meeting have requested to eliminate refurbishment

Commento [MSOffice5]: Comment accepted: during the 4th AHWG meeting was decided to eliminate all criteria related to users/occupiers.



resource use, but supportive mechanisms would be required to make the EcoLabel successful.

Commento [MSOffice6]: Comment accepted: see explanation above

.....

In all member states, any relationship between sustainability and financial performance in buildings continues to be anecdotal (see section below on relationship of sustainability to value). Valuers have operated in a culture where they observe the prevailing market direction, but do not lead the market in any way. This means that higher prices cannot be charged for sustainable buildings. Moreover, there are conflicting reports of the extent to which tenants are demanding more sustainable buildings. Against this background, anything as ambitious as the EcoLabel is likely to be greeted grudgingly, and the recognition that BREEAM and LEED already receive among both owners and occupiers is likely to ensure they continue to be used widely.

.....

We think that micro-enterprises would find it very difficult to attain the standards necessary for new/existing build without external advice. In addition to lower fees, the Commission may wish to consider the provision of grants to enable micro-enterprises access to advice in complying with the certificate.

The Commission may also wish to consider the model for introduction of the certificate. Many certification regimes focus on single buildings, whereas it can be more economical for the commissioning organisation to register portfolios of buildings.

Commento [MSOffice7]: Comment accepted: aspect clarified in the new drafts

Resource

The criteria are extensive, and the process of checking the assembled supporting data could be a lengthy and laborious process. It is vital for the success of the EcoLabel that:

The fees for the EcoLabel and associated inspections be set at a level which the industry will accept

The inspectors who accredit the EcoLabel will need to be suitably qualified to do so in order to preserve the reputation of the label

Penalties will need to be in place for those who fraudulently display an EcoLabel for a building which has not received accreditation and which does not comply with its requirements

Commento [MSOffice8]: Comment accepted: the Ecolabel regulation implies a control system for awarding the Ecolabel

Validity

It is likely that the complexities of the licence/certification mentioned in Article 1 for a building would not be readily understood by the market; they could also be potentially misleading. We recommend that a simpler validity regime be adopted. Most notably, the definition of 'existing buildings' and 'new buildings' should be revised as currently the 'new' and 'existing' are often used for other purposes in the industry to refer to newly constructed buildings and buildings in operation respectively. Under the current criteria, a building could be referred to as 'new' for several years.

Commento [MSOffice9]: Comment accepted: better clarification in the new drafts

We would also welcome further clarification of the period during which a certificate could be ascribed to a building prior to it being checked by an assessor. At the meeting in November, it appeared that an EcoLabel could be used for advertising purposes for 2 years prior to such a check taking place.

Commento [MSOffice10]: Comment accepted: better clarification in the new draft

Operational Data Gathering

Several of the criteria refer to the gathering of operational data, in order to tackle the use phase of the building. The complexities inherent in improving and understanding existing non-domestic buildings leads us to recommend that these concerns be stripped out into a separate set of criteria.

Commento [MSOffice11]: Comment accepted: better clarification in the new draft

For the reasons outlined in the previous paragraph, the EPF has been supportive of a European Parliament amendment to the Energy Performance of Buildings Directive Recast which would oblige

Commento [MSOffice12]: Comment accepted: in the new draft they will be eliminated



landlords and tenants to exchange data on energy use. This is because the majority of non-domestic buildings in many member states are rented. This can cause asymmetries of information and split incentives in those cases where services are supplied by the landlord to the tenant. To take energy as an example:

landlords use energy to provide services in the shared parts of the building, plus exclusive use services to the tenanted areas;

however, the extent of such provision varies, particularly for heating and air-conditioning;

the annual service charge accounts tell each tenant how much of the cost of these landlord services they bear, but seldom include the associated amounts of energy and carbon;

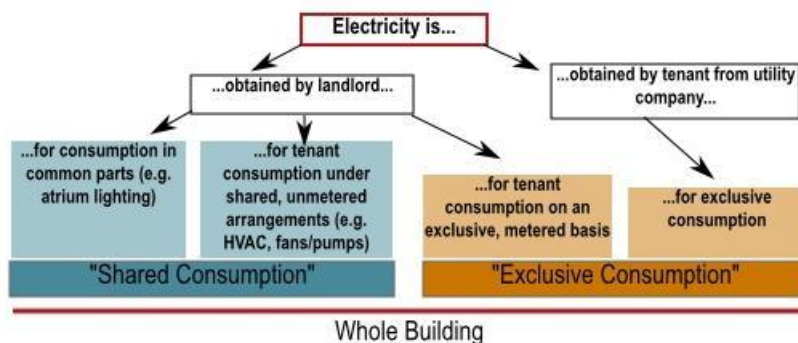
most tenants also pay for their own metered electricity supply for their lighting, office and kitchen equipment and any extra air conditioning installed during their fit-out, for example to server rooms, and can choose suppliers; and

some tenants also purchase other fuel directly, such as gas for kitchens and oil for generators.

Therefore, it can be very difficult to know, and even more difficult to understand who buys what and for whom (See Fig 1).

Fig: 1 – energy procurement and use in rented non-domestic buildings

Who buys what for whom?



Our recommendation is that there should be separate criteria which govern the construction, refurbishment and renovation of buildings and a separate set of mandatory and optional criteria which deal with the sustainable management of buildings. These *management* criteria should be complementary to the construction criteria, but it should be possible for these to be applied for independently. We understand that a set of criteria for services provided in hotels exist and so we presume there would be no barrier to such an approach. The advantages of such an approach would be:

It would permit building owners and occupiers to measure, monitor and understand before committing to a renovation or refurbishment which complied with the construction, refurbishment and/or renovation EcoLabel;

It would enable those who had undertaken an EcoLabelled construction, refurbishment or renovation to preserve the rating; and

It could enable owners and occupiers, relatively independently to accredit parts of buildings. This tackles a key deficiency in the way the criteria are currently drafted, which accredit a building for a number of years.

Commento [MSOffice13]: Comment rejected: according to the IV AHWG meeting it was asked to eliminate all the criteria related to the use phase with the exception of those criteria which can guide the user towards a sustainable use. The approach for buildings as a product is different than a service which is provided and implies management criteria.



Industry initiatives, such as the Landlord Energy Statement and Tenant Energy Review (LES-TER) in the UK⁴ already permit the transfer of data between landlords and tenants in offices, and by virtue of that reporting process, motivate improvement and engagement between them. It is not sufficient merely to pass the energy data, however, as it is often difficult for landlords to know whether tenants use a lot of energy because they are wasteful, or because they use a large amount of energy compared to normal because it is intrinsic to the nature of their business. Contextual factors, such as use of the building, occupancy, hours of use, special uses (e.g. server rooms, trading floors) can permit landlords to know whether energy use in the building is high, low or typical for a building of its type and to help to motivate tenants to reduce their energy use if savings can be made. There is a need to accompany any basic metrics with contextual factors such as these to enable the data to be used successfully.

Several member states are also participating in working groups of the Global Reporting Initiative (GRI) which is seeking to establish a common methodology for measuring and reporting on material impacts relating to construction and real estate companies' operations. We would ask that the EcoLabel criteria have due regard to the development of these criteria, and participate in the consultation phase which is expected in April/May 2010. We would be delighted to inform the Secretariat when the consultation becomes available.

Commento [MSOffice14]: Comment accepted: we will verify document from GRI

Domestic Versus Non-Domestic Buildings

Measuring and benchmarking the energy consumption of dwellings is much simpler than that of non-domestic buildings. There are no building services involved; occupancy patterns are similar from dwelling to dwelling; and homes come in broadly similar built forms. By contrast, non-domestic buildings come in all shapes and sizes; they have a range of building services, some of them are complex and require careful commissioning and management; and occupancy patterns are varied. At present, there are no differences in the requirements for residential buildings and offices.

Commento [MSOffice15]: Comment accepted: consumption will be not verified

The Relationship between Sustainability and Value/Financial Performance

In non-domestic buildings, the sustainability/valuation equation is the subject of much industry debate. Though a clearer link between sustainability and value would be helpful, it is essential to understand that value is simply a reflection of the market. If - as appears to be the case at present - the property market does not generally attach a value to energy performance, that may be because of information failures. Besides identifying and helping to address information-related issues, governments can only "encourage" the market to value environmental performance differently through regulatory intervention which alters the incentive structure around energy performance in a way that has financial implications for business.

Commento [LC16]: Comment not considered as not technical

There are conflicting reports as to the level at which sustainability performance begins to feature on the priorities of occupiers:

The UK Occupier Satisfaction Index 2008 indicated that tenants wanted more commitment from their landlords to sustainability issues (+54% positive change in opinion on the part of occupiers from 2007 to 2008)⁵. Occupier demand for more sustainable buildings would be a key driver of value, but currently more sustainable buildings tend to be sought only by companies with corporate social responsibility policies or where they do not impose higher costs⁶.

The ICSC Retailers Survey 2007 shows that almost 70% of tenants from Central and Eastern Europe agree that sustainability is not influencing leasing decisions.

There appears to be a perception (which is not necessarily borne out by the facts) among occupiers

⁴ www.les-ter.org.uk

⁵ <http://www.occupier-satisfaction.co.uk>

⁶ Investment Property Forum, 'Occupier Demand for Sustainable Offices', Spring 2009 (forthcoming)



that sustainable buildings cost more. In the ICSC Survey mentioned above, the strongest level of agreement among retailers is that “sustainability requirements will lead to increased common charges to tenants”. While that may not present a problem for occupiers who are strongly focused on environmental and social responsibility, for the part of the occupier market which is most focused on price it may in fact deter the sort of change in attitudes that would encourage greater investment in environmentally efficient buildings.

An additional issue is that energy costs remain a very small fraction of an occupier’s overall operating costs. As a result, demand for energy efficient non-domestic buildings from occupiers remains relatively weak. There are a number of projects underway in the wider industry at present to examine the link between sustainability and value in greater detail:

The Valuation Professional Group of the RICS has produced a paper to advise valuers on how to factor sustainability into their valuations. As mentioned above, the valuer’s role is to reflect the prevailing market, acting as ‘score keepers’ and not ‘score makers’. Accordingly, while the paper may help focus attention on sustainability, what it cannot do is tell valuers to attach a value to energy performance if the market does not do so.

The Investment Property Forum in the UK is working with the Investment Property Databank (IPD) to construct a Sustainable Property Investment Index (ISPI) which is being rolled out to cover a growing number of funds. Early findings show no correlation between sustainability characteristics and performance, but that seems likely to change over time as more reliable data becomes available. This serves to underline the points we make concerning operational measurement.

However, the main benefits that property developers and owners derive at present from providing more sustainable buildings would seem to be that such buildings may:

Let quicker (though evidence for this is anecdotal)

Command higher rents for longer, albeit not above market rents (reliable evidence is beginning to emerge in foreign markets⁷)

Attract premium occupiers, but this is dependent again upon prevailing occupier demand

For the moment, the direct impacts on the bottom-line are, therefore, not very great. The valuer does not and should not create a market, but there is a need for greater awareness in the industry about the risks and opportunities that the valuation of ‘energy performance’ is likely to present in the future. It seems likely, therefore, that eco-labelled buildings would not be able to command a ‘green premium’ on their value. This is a significant stumbling block to the success of the eco-label.

Relationship with Other Initiatives

A key feature of LEED and BREEAM is that the labels operate at specific points in the property cycle – at construction or refurbishment. This means that responsibilities for the rating are clear, and it is clear what the rating means and refers to. In reading the criteria, there is considerable blurring of the boundary of responsibility between the owner of the building and its occupier, which are frequently not the same individual. For example, the responsibilities for the design performance and the operational performance of the building are frequently conflated. Often the owner will have a limited ability to shape day-to-day usage of buildings.

A number of key providers of building rating tools have agreed to define common carbon metrics to underpin their tools in connection with the recent United Nations Sustainable Building and Climate Initiative (UN SBCI), which would provide comparability in terms of carbon impact in buildings, which have been rated utilising some of the most widely used building rating tools, across national boundaries.

Commento [MSOffice17]: Comment accepted: the new draft will foresee two separate drafts. The existing initiatives will be considered.

⁷ Universities of Maastricht and Berkeley, Doing Well by Doing Good? An analysis of the financial performance of green office buildings in the USA, March 2009



In addition, a number of European property firms are participating in the Working Group which is seeking to define a sector supplement under the Global Reporting Initiative for Construction and Real Estate Organisations to report on the impacts from their operations. This is likely to offer a coherent way for organisations to report on their material impacts throughout the lifecycle of buildings alongside the organisations' own operations.

There are also other initiatives lead by property companies, like the Greenprint Foundation and the International Sustainability Alliance, aiming to ensure that policy and practice are based on sound scientific and market evidence and lead to more sustainable, productive and higher value built environment. This includes the development of common metrics and data-gathering tools.

If an eco-label is to be defined for buildings, it is vital that the initiative take account of other initiatives already in the pipeline.

Specific Comments

Title

Under the Lisbon Treaty, the European Community and European Communities no longer exist. The title should be "Union Eco-label for Buildings"

Commento [MSOffice18]: Comment accepted: we will refer to the new regulation 66/2010

Articles

Article 1: we would be grateful for clarification of the definition of 'dwelling' in (5). There are several types of use of building which do not fit neatly within the category of domestic and non-domestic such as care homes for the elderly and for children, rest homes and mixed use (both domestic and non-domestic in one building) developments.

Commento [MSOffice19]: Comment accepted

Article 2: while the scoring system for buildings is under development, it is difficult to comment on the feasibility of what is proposed as it is not known how many of the optional criteria will be required in addition to the mandatory criteria for a building to pass. Weighing or aggregation of the score system is a crucial issue for the credibility of the labelling system. Many well known systems use a weighing system of different indicators to establish a rating of the building. Environmental assessment methods for new buildings include many assessment criteria like "management issues", that is to say, participants get points for specific procedures to be followed during the design, monitoring and more. A poor assessment in one area can be compensated with a corresponding better assessment in another area. That means that a building rated according to these systems may not perform well in vital indicators that are important from an environmental or health point of view. We believe that the weighing and aggregation is problematic in most classification methods. There is no generally accepted way to compute the various types of environmental issues. Often one cannot even get explanation of how different weights have been developed or any reference to whether they are based on "expert judgement" or are the result of "questionnaires and seminars". Therefore, it is necessary that the development of a score system be based on the principle that a labelling shall ensure a good performance in all the assessed environmental aspects and we recommend that the Swedish MB system be examined closely for this purpose.

Commento [MSOffice20]: Comment accepted

Comment's ref.: EWFA

Extract of Comment:



Glare Control

In order to capture this more accurately we propose that this element should be entitled 'Solar Gain Control' rather than glare control. Glare is generally considered to be limited to visible light however to address the energy impacts it is important to take into account both Visible Light and Infra Red. (49% and 52% of Solar Energy respectively; UV is the other 3%).

Although the effects of solar gain are greater in the more southerly countries, the proliferation of air conditioning systems throughout Central and Northern Europe indicates that passive solar gain reducing solutions are relevant throughout the EU. The EWFA would therefore recommend removing the phrase 'buildings in semi arid, subtropical dry summer and humid subtropical areas'

As the energy consumption for cooling a building by 1C is around four times greater than heating a building by 1C, it is vitally important to have a range of effective solutions considered that deal with this segment of energy usage. Being able to maximise natural daylight should also be encouraged where possible through the use of modern technologies in the areas of sun control window films and glazed or fabric awnings.

Day lighting

Window films can play an important role in improving the use of day light in buildings by allowing in natural light while reducing heat gain/loss

Long life service materials

It is important to more clearly define which materials will be required to have a service life of longer than 25 years.

For some materials such as paints and in particular windows films the service life may be slightly shorter than this. It would have a negative environmental impact if high effective energy saving technologies were ruled out because of this requirement.

Commento [MSOffice21]: Comment rejected: the effect is called "glare effect" and the index used is "daylight glare index". The title should be consistent with the text of the criterion.

Commento [MSOffice22]: Comment accepted: the criterion has been modified.

Commento [MSOffice23]: Comment accepted: a specific criterion has been elaborated.

Commento [MSOffice24]: Comment accepted. The criterion has been modified.

Comment's ref.: ICSC

Extract of Comment:

(OFF TOPIC)

Commento [LC25]: Comments rejected: the comments are addressed to shopping centers which are not in the field of application of the criteria.

Comment's ref.: PORTUGAL CB

Extract of Comment:

additional concern transmitted by the Portuguese Cement Association, late last Friday, relating the "material" group criteria, in particular criteria 54, 55, 57 and 58 of Annex 1 and criteria 45 to 50 of Annex 2 , namely the proposed percentages of recycled materials and materials/products locally produced, used for structural and non-structural functions.

For some materials/products, such as concrete, mortars, cement or pre-manufactured, the market availability of recycled and re-used materials is very low (above 5%) and depends on various factors, e.g., the existing type of residence park (if it is new or old, will make possible or not a larger number of demolitions and further re-use of materials). On the other side, when consumers buy a specific



amount of cement, they will have to add a certain amount of recycled materials, which are not available on the market.

In line with what Denmark has referred, we think that the actual text should be more specific, namely through the differentiation of different types of materials and taking into account the availability of alternative/re-used/recycled materials on the market.

Commento [MSOffice26]: Comment accepted: new % has been proposed

Commento [MSOffice27]: Comment rejected: it is not possible according to our knowledge to differentiate in %

Comment's ref.: GERMANY CB

Extract of Comment:

We support the position of UK and Finland. The current process should be paused, to allow for better integration with the ongoing TC 350 work on standards. Once the latter has been completed, the Ecolabel work should resume, but with a clear focus on the thresholds and limits that should be set, to maintain the EU Flower as a label of environmental excellence.

Whilst the CEN TC 350 process will provide a method for assessing the sustainability of products and product systems, it will not set specific benchmarks. This is the area where the EU Ecolabel should be making an important contribution, especially with regard to environmental impacts other than energy usage.

The German sustainable building certification established already reference values for office buildings for certain impact categories of a Building LCA including construction, use phase of 50 years and disposal. The assessment includes Global Warming Potential, Ozone Depletion Potential, Photochemical Ozone Creation Potential, Acidification Potential, Eutrophication Potential. As input parameters Non-renewable Primary Energy Demands and Total Primary Energy Demands and the Proportion of Renewable Primary Energy are assessed. In this respect the existing certification in Germany for new buildings is more advanced than the present criteria proposal for the EU Ecolabel. Therefore we can only support an EU Ecolabel, if a comparable level of requirements will be achieved.

Commento [MSOffice28]: Comment rejected: CEN TC 350 has different objective and timing respect the EU Ecolabel criteria on building and there is no technical reason to pause the project. Most of possible synergies with TC 350 will be considered.

Commento [MSOffice29]: Comment rejected: the characteristic of the EU Ecolabel is to be applicable in all Member States and therefore in different contexts and markets. The German context can be one of those considered.

Comment's ref.: ROCKWOOL

Extract of Comment:

Article 1

The product group "buildings" shall comprise "buildings considered in their entirety, as well as small houses, new or existing, public or private, used for residential purpose and for use as offices".

please allow me to suggest to give the document to a native Englishman to rephrase the text. The text now is not always easy to understand and allows different interpretations and leads therefor might lead to many misunderstandings.

With reference to art. 1.1 ,

individual apartments and flats in a building are not subjected to the criteria but the building as an entity. ;

buildings that have undergone a major renovation are subjected to the criteria that apply to new

Commento [MSOffice30]: Comment rejected: there are native Englishman in the European Commission and in the UK CB who can check the wording. The European Commission legal service will also ensure good wording from a legal point of view.



buildings;

the criteria for existing buildings apply to renovated buildings

Criteria for new buildings apply from the moment that the building is commissioned and handed over to the owner. Criteria for existing buildings apply to buildings that are operational and have tenants and/or users for more than 1 year.

Major refurbishments are meant to be modifications of non-structural and structural and load carrying elements, while renovations are meant to be modifications of non-structural and load carrying elements

see also definitions for renovation and for refurbishment in CEN TC350 and in ISO (Sorry not available here and now with me; I will look after for you)

Residential purpose is meant as for dwelling purpose.

unclear what you mean; however it is a very important definition! Please apply the CEN and/or ISO definitions

Use as offices is meant to be the use of the building for administrative, bureaucratic and educational activities of a public or private nature.

same remark as before: non-residential buildings (offices, schools, buildings for health and social care) Industrial buildings (facilitating industrial production processes are excluded) ????

Article 2

In order to be awarded the Community eco-label for buildings under Regulation (EC) N° 1980/2000 (hereinafter "the eco-label"), a building shall fulfil all of the following:

it shall fall within the product group "buildings"

it shall comply with each of the criteria set out in Section A of the Annex 1 or 2 of this Decision

it shall comply with at least with a specified number of the criteria set out in Section B of the Annex 1 or Section D of Annex 2, in order to acquire a number of points as referred to in paragraphs 2 and 3. The identification and the specification of the minimum number of criteria to be fulfilled for being rewarded with the Ecolabel are defined by the Memberstates in a comitology procedure.

Score system for new buildings will be defined in a Comitology process by the Memberstates

Score system for existing buildings will be defined in a Comitology process by the Memberstates

Article 3

Fees will be defined in a Comitology process by the Memberstates

Article 4

The ecological criteria for the product group "buildings", as well as the related assessment and verification requirements, shall be valid until [five years as from the date of entry into force of this decision].

warning: check if it is allowed to define buildings as a "product". Personally I would welcome

Commento [MSOffice31]: Comment rejected: it has been decided after the IV AHWG meeting and EU EB consultation to eliminate any reference to refurbishment and renovation.

Commento [MSOffice32]: Comment accepted: we will look at the CEN and ISO definitions.

Commento [MSOffice33]: Comment accepted: social health commercial and industrial buildings are excluded.



this qualification but I experienced in the past that for leag reasons this was not allowed. (if I am right this would imply that the European Commission then would have rights to give requirements to buildings which however is a right for Member States.

Commento [MSOffice34]: Comment not considered: not relevant for the EU Ecolabel scheme.

Where the eco-label is awarded on the basis of an application evaluated according to the criteria set out in Decision/EC, that eco-label may be used for twenty four months from the date of adoption of this Decision.

Where the eco-label is awarded according to Annex 1 (new buildings), the building shall only comply with revised criteria related to use phase of Annex 1 (as identified....) for a maximum of two times after which it shall comply with all revised criteria of Annex 2. Where the eco-label is awarded according to Annex 2 (existing buildings), the building shall comply with revised criteria of Annex 2.

Article 5

For administrative purposes the code number assigned to the product group 'buildings' shall be '..'.

warning: check if it is allowed to define buildings as a "product". Personally I would welcome this qualification but I experienced in the past that for leag reasons this was not allowed. (if I am right this would imply that the European Commission then would have rights to give requirements to buildings which however is a right for Member States.

Commento [MSOffice35]: Comment rejected: the comment is not pertinent for the EU Ecolabel scheme.

Article 6

This Decision is addressed to the Member States.

Done at Brussels,

For the Commission

Stavros

Member of the Commission

Dimas

ANNEX

FRAMEWORK

The aim of these criteria

The Ecolabel criteria aim to minimise the core environmental impacts over the life cycle of the building (including life cycle stages: project, construction, use and maintenance, refurbishment, end of life). The criteria aim to:

Maximise the indoor comfort and health for the users of the building

Minimise the use of energy, water and natural resources ,

it is not always possible to consume; in general it is the use of resources (also in environmental standardisation).

Recycling is not the core objective and cannot be the goal setting. Recycling could cause a higher



environmental impact than disposal. See waste_hierarchy in the Waste Framework Directive EC/2008/98.

putting specific requirements of use to construction products leads to sub-optimization ; for the integrated maximum result the selection of products, systems and processes shall be based on the integrated assessment of the building. Construction products are "just" intermediate products.

Commento [MSOffice36]: Comment rejected: recycling is important for this product group

promote and maximise the information , education and training on a correct management of the building

Minimise waste from all products and from all processes related to the building life cycle.

It should be noted that the environmental performance requirements should be considered within a full sustainability context as the environmental impact of a building is interlinked with its social and economical impact. The CEN TC350 standards allow the environmental assessment:

prEN15978: methodology for the environmental assessment of buildings

prEN15804: core product category rules for the environmental assessment.

Commento [MSOffice37]: Comment accepted: we will look to CEN TC work development

Assessment and verification requirements

The specific requirements to the assessment and verification requirements are specified with each criterion.

Following the subsidiarity principles other equivalent assessments can be applied but shall be notified, approved and be made transparent by the Competent Body

The applicant shall provide the specified relevant declarations, documentation, analyses, test reports, and/or other evidence to demonstrate compliance with the criteria. It is understood that these may originate from the applicant and/or his supplier(s) and/or be available as generic data where appropriate.

Competent Bodies shall carry out on site inspections before awarding the license to the building

Where appropriate, Competent Bodies may require supporting documentation and may carry out independent verifications. During the license period the Competent Bodies shall verify compliance with criteria at random.

The Competent Bodies are recommended to take into account the implementation of recognised environmental management schemes, such as EMAS or ISO 14001, when assessing applications and monitoring compliance with the criteria. (Note: it is not required to implement such management schemes.).

General requirements

In order to apply for the Ecolabel the applicant and the building meet all applicable European, national and local legal requirements. .

Any specification weakens the above requirement which is really most trivial ! With reference



to Article 1 this specification should be deleted.

Commento [MSOffice38]: Comment rejected: there is a specific format for criteria documents this is a format text normally adopted.

From chapter 5 onwards the criteria are building, product, material and process related. Most of all the criteria in the draft are lacking harmonised methodologies for assessment. This will also conflict with other Regulations and Directives. It will also block the communication on characteristics and performance data of construction products, installations, materials and services.

It is for this reason that the European Commission gave the Mandate M350 for establishing standards for assessment and communication of Environmental product performances. CEN TC350 is near completion of a suite of standards for the environmental, social and economical assessment of construction products and buildings. For this reason full reference should be made the CEN TC350 standards. The suggested text is a first attempt to make this reference.

Please study the scope and content of the standards. Be aware that the standards are not setting any requirements to the standardised performance indicators. The Ecolabel for Buildings project should leave the setting of minimum (or maximum) values to a comitology process with involvement of the Competent Bodies. Be aware that it might be necessary to take into account national, or even regional or local, specific performance requirements to meet best environmental conditions. (impacts are global and local; local impacts may require different level of performances)

Commento [MSOffice39]: Comment rejected: the EU Ecolabel has its own methodology to develop criteria. It is not a duplication of CEN. Reference to CEN will be made in order to have possible definition and assessment methods applicable to criteria identified.

Structure of the Directive

The Directive on itself is not a design guide. The Directive aims to achieve better buildings by setting criteria. Suggestions for design considerations should be made in an informative or explanatory Annex to the Directive.

Commento [MSOffice40]: Comment accepted: beside Commission Decisions, i.e. criteria documents, usually there is a user manual for applicants with definitions and explanations

IMPORTANT

Criteria consist of:

Relevant indicators (to identify and quantify the envisaged measure)

A well defined, proven and harmonised methodology for measuring

A harmonised communication format for the measured data

A valuation scheme for the eventual aggregation, weighting, qualification or classification of the measured data.

Number 1, 2 and 3 are subject of the CEN TC350 standardisation work. In a separate document the actual (January 2010) status of the progress of this standardisation work is given. The most relevant standards for an environmental assessment will be available end 2010-beginning 2011.



Number 3, a valuation scheme, requires a technical part for its methodology of aggregation and weighting, but most of all the making of political-social choices on the impact-indicators and their valuation factors for steering developments into the direction of a defined environmental (or sustainability) goal.

Fact is:

that for carrying out a solid and robust (environmental) assessment of buildings for rewarding the EcoLabel to buildings the standards must be available and the underlying (environmental) data of construction products, construction materials, installations, services and processes must be available.

That industry wants to deliver the (environmental) data based on the harmonised conditions defined in the CEN TC350 standards. The building chain is desperately waiting on the first standards of the CEN TC350 standardisation work, to communicate their product performances to the market. (Industry is highly involved and engaged in the standardisation work to make the system of assessment and information exchange working)

That it will require another 2 or 3 years before reliable quantified (environmental) data on the standardised indicators will allow a statistical analyses of the (environmental) scores of buildings (or most probably and more relevant, scores of building types)

That setting performance requirements on scores (see 4 above) only should be done on the basis of the before mentioned statistical analyses and

That the (environmental) performance requirements will depend on the national building types, the national or regional climate and the national or regional environmental goal setting.

- *(the building types and the building technology differ very much over Europe, due to building history, traditions, available resources, culture and climate)*
- *(the environmental goal setting may differ as (environmental) impacts have a global and/or a strong local impact, which may lead to different priorities and to national or even regional weighting factors: a social-political choice in defining the performance requirements in 4)*

It is strongly recommended:

To use the CEN TC350 standards as the basis for the assessment of the criteria elements 1, 2 and 3

To concentrate the project on the development and agreement between Member States and/or Competent Bodies on the development of the 4th element of the criteria setting

Based on the above,

It is strongly recommended to:



To postpone the introduction of the Directive until enough Environmental Product Declarations (with environmental data) are available in the market to allow making a reliable building assessment. Meanwhile industry should be incentivised to provide EPD's to their products and services.

Consider a two step and time wise staggered implementation of the Directive:

In a first implementation step, the EcoLabel ("candidate EcoLabel") could be rewarded to buildings that have carried an environmental assessment according to the CEN standard EN15643-part 2.

In a second step of the implementation, after the statistical analyses of the data gained and based on the verification results of the 1st. implementation step, performance requirements could be set for rewarding the "EcoLabel" for buildings.

At this point of time the CEN TC350 standards are very promising but the market is not yet enabled delivering the necessary data and data infrastructure contributing to a successful implementation of an EcoLabel Directive. Any investment of the sectors involved and all efforts of regulators and of Competent Bodies in trying to make the Ecolabel Directive for buildings work, would be wasted investments.

Nevertheless: the proposal would allow improving the Directive in the time ahead. Therefore the following suggestions are made:

Type of Ecolabel criteria of buildings

The Ecolabel for Buildings contain criteria related to the environmental aspects and impacts of the building as well as social performance related criteria and economic performance criteria.

The assessment of the environmental, the social and economic performance of the building, the construction products and processes on the EcoLabel criteria for buildings shall be carried out in accordance with the European standard prEN 15643-part1⁸.

The EcoLabel for Buildings aims to set challenging performances on the buildings functional and technical performances. The sustainability assessment of the building, is consisting of the environmental, social and economic assessment of the building and requires the definition of the Functional Equivalent (FE) of the building. The FE shall include the legal requirements and the client's (building owner) requirements exceeding the legal requirements. The client (building owner) applying for the Ecolabel for the building, shall specify the Ecolabel performance criteria in the Functional Equivalent. A design of a new building or the specification of a refurbishment of a building will have to take into account the ambitious and challenging criteria of the EcoLabel for Buildings set by the responsible Competent Body.

The criteria for the building contain quantifiable aspects and impacts and cover the entire

Commento [MSOffice41]: See previous comment

Commento [MSOffice42]: Comment accepted: we will look at the CEN documents

⁸ prEn15643-1:Sustainability of Construction Works-Assessment of Buildings-Part 1: General Framework



lifecycle of the building.

The Competent Body selects the mandatory criteria for the building on the indicators taken from the respective standards in the CEN TC350 suite of standards. Other criteria, beyond those based on the indicators defined in the suite of standards addressed in prEN1563-part1 will lead to distortions in the market and the data necessary for the assessment cannot be supplied by the construction sector.

The Competent Body defines the performance levels on the identified aspects and impacts. The performance levels in the selected criteria for the building shall exceed the legal required minimum performance, however in respecting the performances on the interlinked indicators in order to obtain an optimum solution in an integrated approach.

e.g. extreme low environmental impacts may be realised with advanced high tech installations but at this point of time still cause high life cycle costs (economic performance) which would exclude renting of the building's apartments for the envisaged users (social performance).

The performance levels required may differ from country to country and/or for the regions performance level to be met.

In accordance with the specified standards it is required that the building Design Lifetime is specified as well as all scenarios for each of the life cycle stages. The scenarios for maintenance, repair and replacement shall be in full accordance with before mentioned maintenance plan of the Building Book.

5.1 Assessment of the building performance on the environmental criteria

The Competent Body identifies the environmental aspects and impacts to be assessed. The Environmental aspects and impacts are taken from the standard prEN 15643-part2.⁹ The methodology for the assessment of the environmental performance of the building shall fulfill the methodology requirements of prEN15978¹⁰

5.2 Assessment of the building performance on the social criteria

The Competent Body identifies the environmental aspects and impacts to be assessed. The social aspects are taken from the standard prEN15643-part 3¹¹

The methodology for the assessment of the social performance of the building shall fulfill the methodology requirements of prEN xxxx¹²

5.3 Assessment of the building performance on the economic criteria

The Competent Body identifies the environmental aspects and impacts to be assessed. The

⁹ prEn15643-2: Sustainability of Construction Works-Assessment of Buildings-Part 2: Framework for the Assessment of Environmental Performance

¹⁰ prEN15978: Sustainability of construction works - Assessment of environmental performance of buildings - calculation methods

¹¹ prEn15643-3: Sustainability of Construction Works - Assessment of Buildings-Part 3: Framework for the assessment of social performance

¹² prENxxx: Sustainability of construction works — Assessment of social performance of buildings — methods (document number soon available)



economic aspects are taken from the standard prEN15643-part 4¹³

The economic assessment according to the standard prEN16643-4 provides two indicators for specifying the life cycle costs of the building.

The methodology for the assessment of the economic performance of the building shall fullfill the methodology requirements of prEN xxxx¹⁴

6 Building design criteria

The assessment of the environmental, social and economic performance of the building in accordance with the standards related to prEN15643-part 1 for the sustainability assessment of Buildings, provides the performance for each of the (following) life cycle stages of the building.

The Competent Body may set performance requirements per indicator . For some of the life cycle stages it is recommended to set the requirements per lifecycle stage. For other lifecycle stages however the setting of requirements per lifecycle stage could lead to sub-optimation and it is advisable to include them in an overall building performance where appropriate.

NOTE: for design considerations see ANNEX xxx

6.1. transport to the building site

The aspects and/or impacts of all transport activities are part of the before mentioned assessment methodologies.

(information module A4 in prEN15978)

6.2 construction process

The aspects and/or impacts of all construction process activities are part of the before mentioned assessment methodologies.

(information module A5 in prEN15978)

6.3. use of the building

The aspects and/or impacts of use are (will be) part of the before mentioned assessment methodologies.

(information module B1 in prEN15978)

6.3.1 maintenance

The aspects and/or impacts of maintenance activities are (will be) part of the before mentioned assessment methodologies.

(information module B2 in prEN15978)

¹³ prEN15643-4: Sustainability of Construction Works - Assessment of Buildings-Part 4: Framework for the assessment of economic performance

¹⁴ prENxxx: Sustainability of construction works — Assessment of economic performance of buildings — methods
(document number soon available)



6.3.2 repair

(information module B3 in prEN15978)

6.3.3 replacement

REMARK :Renovation within the context of the Ecolabel for Buildings Directive can be considered as replacement

The aspects and/or impacts of maintenance activities are (will be) part of the before mentioned assessment methodologies.

(information module B4 in prEN15978)

6.3.4 refurbishment

Within the context of the Ecolabel for Buildings Directive Refurbishment is considered as the assessment of a new building.

6.4 Operational energy use of the building

The aspects and/or impacts of maintenance activities are (will be) part of the before mentioned assessment methodologies.

(information module B6 in prEN15978)

6.5 Operational water use of the building

The aspects and/or impacts of maintenance activities are (will be) part of the before mentioned assessment methodologies.

(information module B7 in prEN15978)

6.6 End-of life of the building

The building assessments standards in accordance with PrEN15643-2 (for the environmental performance), prEN15643-3 (for social performance assessment) and prEN15643-4 (for the economic assement) provide the possibility for declaring the relevant performances.

Etc....

7 Ecolabel criteria set for products , services and processes

As construction products are intermediate products in the building, their contribution to the environmental, social and economic performance of the building is interdependent and strongly related to the building design and use of the building. Setting performance criteria for construction products, services and processes might easily lead to sub-optimal solutions for achieving best performances of the building and best solutions for the building users. The performance contribution of construction products (materials, services and processes) therefore only can be assessed within the environmental social and economic assessment of the entire building. (according chap. 5)

Commento [MSOffice43]: Comment accepted: we will look at CEN documents

Commento [MSOffice44]: Comment rejected: the comment is not consistent with the EU Ecolabel scheme



In an European Comitology process the Competant Bodies may set requirements or restrictive rules to products that have to be in line with European regulations. All requirements to products have to be based on the charateristics defined in the harmonised product standards for the respective products and in the socalled European technical Specifications in general Product criteria others than specified in the European technical Specification will lead to market distortions and create a barrier to trade. (as manufactirers and partners in the building chain cannot supply the data on the product)

The environmental, social and economic assessment report will list all the construction products, construction materials, installations and processes for the building.

The subsidiarity rules for applying alternative products, materials and installation must be allowed in the demonstration of compliance with the product performances on the defined criteria.

7.1 General performance criteria or restriction to products, materials, installations, processes and services.

All materials and construction products shall be free of Substances of Very High Concern (SVHC)

All technical installation shall be certified and meet the highest performance class,

Comment's ref.: ANEC

Extract of Comment:

ANEC would like to reinforce its position as presented in the detailed comments dated 6. November 2009 (ANEC-ENV-2009-G-052). In addition, we would like to make the following observations:

We strongly support the proposal to separate the product group "buildings" in two Commission Decisions: one for new buildings and the other for existing buildings as stated in an e-mail by Laura Cutaia on 26. Nov. 2009.

We also acknowledge the clarification of the scope with respect to the exclusion of individual apartments and flats in a building. However, we still are of the opinion that the inclusion of refurbishments or renovations should be carefully considered when establishing the criteria for existing buildings.

The concept of the user's manual, in which the assessment and verification for quite a few criteria are specified, remains slightly unclear. We would expect the basic specifications being part of the commission's decision rather than of a secondary document. Otherwise it is not clear who stipulates the specifications to what extend.

Commento [MSOffice45]: Comment accepted: refurbishment and renovations have been excluded

Commento [MSOffice46]: Comment accepted: assessment and verification will be better specified in the third draft



Criterion 11 "halogenated materials" needs to be elaborated. The addition of the wording proposed in a mail by Laura Cutaia and Stefania Ministrini, dated December 14th 2009 "Vinyl Chloride Monomer (VCM) used for the production of halogenated materials shall come from a closed loop production process" would mean a step backwards because it does not solve the problem of the environmental impact. However, a ban of certain products, such as polyvinyl chloride, would trigger the problem effectively. The same applies to a proposal for criterion 25 "chemical products" in the same e-mail. First of all it is not entirely clear to which part of the supply chain the material safety data sheets relates to but most of all it is not worth awarding the label by verifying the compliance with EU and/or local regulations. From a consumers perspective, the exclusion of substances, such as CMR, PBT, vPvB, is essential.

Commento [MSOffice47]: Comment accepted: the approach to chemical substances has been changed in the third draft

Despite the clarification on Criterion 15 "Energy efficiency certification" in the e-mail mentioned above ANEC still is of the opinion that due to the local conversion factors the primary energy consumption is not a mere building related criterion and should therefore not be used. Moreover, we still believe a common European reference approach needs to be followed, rather than referring to national building laws.

Commento [MSOffice48]: Comment accepted: the approach to Energy efficiency has been changed

We would like to express ANEC's willingness to contribute to the ongoing work on the EU Eco-Label for buildings and our strong disagreement with any attempt to postpone or withdraw it.

Comment's ref.: DANISH ECOLOGICAL COUNCIL

Extract of Comment:

We thank for the opportunity to comment on the Draft Commission decision.

First of all we would like to associate us with the many very needed and very important comment made buy the Danish Standards Foundation.

We find this second version still rather unfinished, with many unclear paragraphs and even many of them being at a low level of ambition.

We will not comment the various paragraphs in detail, but stress some overall comments which we find to be improved if a building really can be claimed environmentally friendly when obtaining the EU-flower label.

We will emphasize the following:

The EU flower criteria have to distinguish between new buildings and renovated or retrofitted buildings.

Commento [MSOffice49]: Comment accepted: the new draft has eliminated this problem

The level of ambition for energy efficiency have to be improved in order to comply with the expectancy of very low energy buildings as specified in the recast of the EBPD.

Commento [MSOffice50]: Comment accepted: the approach has changed

It has to be clear that application for the EU-flower should be made BEFORE the work is done in



order to inflict the plans in a more ambitious direction - and depend of the actual measurement of the performance after the construction / retrofitting.

We find it a paradox to ask for a specified minimum numbers of parking places for cars - if the building is close to energy efficient public transport the possibility for not having car parking at all should be the best option. And if a car owner then wants a parking space, it would be his own problem to rent a place. So we propose a maximum of parking places instead of a minimum.

The use of hazardous chemicals must be restricted. The description of materials and use of chemicals in the Community Eco-label are not well developed and lack ambition. Lessons could be learned from for instance Criteria for Swan labelling of Small Houses and of Chemical Building Products.

It is important to ban CMR substances and list unwanted R-sentences in the products used. This comment apply both for the section *Materials* (especially 8) and for *Health and well-being* (25)

When a score system is developed it is important that the applicant can not achieve all points in for instance energy savings and totally avoid making an effort on materials and the content of chemicals.

The obligatory use of rain-water should depend on the availability of clean water, since in some areas the money (and energy use) for reuse of rain-water could be spent better.

Toilets should be restricted to be dual-flush using only 4 liter / 2 liters, which is standard for new Danish buildings.

The in-door climate requirements are not good enough, and in some areas very old fashioned. Construction methods are moving toward very airtight buildings using hybrid ventilation systems, mechanical in winter and natural in summertime. So the demand for passive systems is not acceptable from indoor climate and energy perspectives.

If mechanical ventilation is to be used, A-labelled heat recovery systems must be mandatory.

Indoor temperatures higher than 25 to 28 degrees Centigrade shall be prevented by construction - there should be very strict restrictions on the possibility for using cooling. And when used it should be argued due to climate etc. and be at least A-labelled or better.

Etc.

We stress that this is not a complete list, but some important points that we identified during the rather short time for commenting.

Commento [MSOffice51]: Comment rejected: the building will be evacuate when is finished and operational

Commento [MSOffice52]: Comment accepted: the criterion has been modified in this sense

Commento [MSOffice53]: Comment accepted: the approach to chemical substances has been modified

Commento [MSOffice54]: See previous comment

Commento [MSOffice55]: Comment accepted: we will work in this sense

Commento [LC56]: Comment partially accepted: the criterion is mandatory for new buildings and optional for existing buildings.

Commento [MSOffice57]: Comment accepted: we will look at different limits

Commento [MSOffice58]: Comment accepted: the criterion has been modified.

Commento [MSOffice59]: Comment accepted: the approach has been changed

Commento [LC60]: Comment accepted: the approach has been changed

Comment's ref.: BELGIUM CB

Extract of Comment:

We focus on the main issues and prefer not to comment on the various paragraphs in detail as all issues raised in our note are of major importance and should be discussed, including a common agreement by the members before continuing the work.



Summary:

The EU Ecolabel for buildings should have criteria which are verifiable and which are not open to interpretation.

This is not the case at the moment.

We consider it is necessary to use CEN TC 350 as a starting point for the EU Ecolabel for buildings.

We do not want to put the work on hold due to the not yet finished work of CEN TC 350.

We propose a shift of the content: determine the missing indicators of CEN TC 350 (e.g. land use, indoor air quality, presence of CMR substances, ...) for the EU Ecolabel and determine benchmarks and a scoring/weighting system (how shall one evaluate the figures of the indicators coming out of CEN TC 350? Which global warming potential is ok, which not?).

Our other major remarks listed below:

- environmental product declarations for construction products should be included/promoted as it is not acceptable that construction products are used of which we do not know the global environmental impact over their life cycle.

- there should be an explicit and elaborated criterion on indoor air quality and the emissions of construction product to the indoor air (chemical, physical and biological).

A. Consistency with other initiatives.

Belgium considers it more coherent if the EU Ecolabel for buildings would take the future output of CEN TC 350 aboard.

The main advantages of CEN TC 350 are its life cycle approach in combination with a clearly defined and agreed upon set of environmental indicators which makes it quantifiable.

In our view the outcome of CEN TC 350 is indispensable, but it should be elaborated as CEN TC 350 is insufficient:

- only looks at sustainability from the viewpoint of construction products, which is not sufficient

- does not contain minimum criteria / threshold levels (in other words: you get a global warming potential, but from what level on do you grant a label?)

- does not look at certification issues

Even though Belgium insists in using the CEN TC 350 work as starting point for the EU Ecolabel, it does not support the view by some members of the working group that the EU Ecolabel should wait for the work of CEN TC 350 to be finished.

The EU Ecolabel for buildings should while waiting on CEN TC 350 focus its efforts and means now on elaborating these missing parts:

1. Determine the missing indicators (e.g. indicators which did not yet arrive at a consensus in CEN TC 350)

2. Prepare and establishing benchmarks/ threshold values.

This way once the CEN TC 350 work is finished we can put both together.

Commento [MSOffice61]: Comment accepted: we will consider the most possible synergies with the CEN works for definitions and assessment methods

Commento [MSOffice62]: Comment rejected: the EPDs are not a performance tool, they just communicate environmental information. They can be used for assessment and verification. Furthermore it is not possible to foreseen a mandatory criterion for requiring them as they are not sufficiently used in the market.

Commento [MSOffice63]: Comment accepted: the criterion has been changed.

Commento [MSOffice64]: Comment accepted: we will look at CEN works

Commento [MSOffice65]: Comment rejected: the EU Ecolabel has its own methodology and cannot be a duplication of CEN work. The tool on which CEN is working is EPDs and the EU Ecolabel is a complete different tool.



Two examples of missing indicators in CEN TC 350: land use and indoor air quality.

B. Assessment and verification.

The assessment and verification is at this time much too open and subject to interpretation. E.g. the text use quite often the wording "shall provide adequate documentation" without being elaborated into more detail what the understanding of 'adequate' is. **A lot of criteria become therefore unverifiable.**

Belgium also wants to put attention to a Belgian project called "Referentiekader duurzame woning" ("Reference framework sustainable dwellings", with the support of the Belgian federal and Flemish government) which has established criteria which can be measured and evaluated, and this by taking into account as much existing initiatives into account as possible. This document could serve as a major contribution to the exercise of quantification.

C. Other issues of major concern

Belgium regrets that there has not yet been a closed discussion on some general points of discussion of the EU Ecolabel for Buildings. These questions keep on coming back meeting after meeting without an agreed result.

This gives way to a non structural approach and to a difficult process of decision taking.

Who can be the applicant? The project developer? The person who bought the house from a developer? The tenant? This is of major influence to the development of the criteria.

Taking the large time spans between first design and final acceptance and the major investments into account, it is not realistic to allow application only when the building is completed and operational and to verify if the building fulfils the requirements valid at the time of completion.

Belgium considers it indispensable to have a **chapter with definitions**. This could be based on the work done in CEN TC 350. **Also the boundaries should be [testo mancante]**

The boundaries of the subject under evaluation should including the terrain it is on and the impact of the building on adjacent buildings. It should treat both local and global impacts.

Belgium proposes to **split up the criteria**, and maybe even the label, between **design phase and occupational phase**; between **existing buildings, new buildings and renewed buildings**; between **private dwellings, apartments, public buildings and office buildings**. This in order to achieve a high level of uniformity between the different competent bodies by sufficiently detailing the criteria.

Belgium thinks it is absolutely necessary to include a criterion that would lead to a situation that **the global impact over their full lifecycle of all construction products used in a building should be known**. It is unacceptable that products in an ecolabelled building are used of which the manufacturer does not know the environmental impact. **This could be achieved by setting a request for Environmental Product Declarations in the mandatory criteria.** In a second phase these data could be used to optimize the EU Ecolabel with a more scientific and measurable approach based on environmental indicators.

Belgium says clearly that **it is not the task of the EU Ecolabel to verify existing legislation**. This is the task of the MS market surveillance bodies. All references in the proposal as "conform MS legislation" should therefore be removed. On top of that it gives way to an unfair situation where an applicant in a country with few legislation is privileged. If there is existing legislation in some MS but

Commento [MSOffice66]: Comment accepted: the new draft will give a more details on the assessment and verification. However the formula quoted is a general formula used in criteria document. User manual beside gives examples of what is adequate.

Commento [MSOffice67]: Comment accepted: the new draft and the user manual will clarify these aspects.

Commento [MSOffice68]: Comment accepted

Commento [MSOffice69]: Comment rejected: EPDs are very little used in the market

Commento [MSOffice70]: Comment rejected: EU Ecolabel criteria where necessary can require compliance with legislation if it is not in place in some Member States.



not in all, this legislation could be included in the EU Ecolabel, if found necessary.

Criteria which are not in control of the applicant should be included. We does not agree with the point of departure (which has not yet been agreed upon) that only criteria which can be influenced by the applicant should be taken into account. E.g. the proximity of public transport and shopping facilities should be taken into account.

On the other hand, **criteria linked to the behaviour of the occupant should be removed.**

Belgium asks for an explicit and elaborated criterion on **indoor air quality and the emissions of construction product to the indoor air (chemical, physical and biological).**

Belgium also puts big question marks at the organisation of an EU Ecolabel for buildings within its actual

structures:

- **Who shall pay the yearly retribution?** It seems not realistic that their exists tenants willing to pay extra for an ecolabelled house. Idem for landlords. Idem for developers; they are willing to invest for an ecolabelled building up to the moment where it is sold. No way that they are going to pay for something

that isn't theirs anymore.

- Are the actual **competent bodies competent to evaluate such complex 'products'** as buildings, including office buildings? On top of that the on-site inspection will raise the efforts considerably. This will have a major influence on costs and on people needed and on the job profiles of people.

Belgium proposes to include **a criterion regarding efficient use of space:**

1. netto useful surface per projected groundsurface

2. useful surface per inhabitant.

How do we deal with the life time of a building? 60y? 100y? This has e.g. an influence on the maintenance of a building. How to link this with the replacement rate of an incorporated construction product due to wear (e.g. a floor covering).

We propose to work only with mandatory criteria. Optional criteria give the impression that you don't really need to consider them.

Commento [MSOffice71]: Comment rejected: only criteria on which the applicant can work shall be considered, to consider as requirement the presence of public transportation is a discrimination towards the applicant because it is not in his hands to have an infrastructure.

Commento [MSOffice72]: Comment accepted: the criteria related to the occupant have been removed

Commento [MSOffice73]: Comment accepted: the criterion has been modified

Commento [MSOffice74]: Comment accepted: a clarification will be in the user manual

Commento [MSOffice75]: Comment rejected. This criterion is related to users and all criteria related to the use phase have been eliminated.

Commento [LC76]: Comment accepted: the approach has been changed

Commento [MSOffice77]: COMMENT REJECTED: THE WILL BE A SPECIFICATION OF THE SCORE SYSTEM IN THE THIRD DRAFT

Comment's ref.: EPEE

Extract of Comment:

As an active and co-operative stakeholder of the Ecolabel for Buildings discussions, the European Partnership for Energy and Environment - EPEE (www.epeeglobal.org) - would like to provide its comments on the third draft criteria for Ecolabel for buildings, as a follow-up to the Ad hoc working



group meeting in Rome on 20 November 2009.

- 1) EPEE would like to thank ISPRA for all the effort put so far in the elaboration of the draft criteria;
- 2) EPEE would like to reassert that its comments made on the first (16/10/2009) and second criteria (during the meeting in Rome on 20/11/2009) still stand as they are;
- 3) In addition, EPEE also supports most of the comments made by the UK, Germany and Finland in their summary comments. We share their concerns about the vague verification criteria and the conflict between the TC350 work and other EC initiatives. We support the idea that the current process should be paused, to allow for better integration with the ongoing TC350 work on standards.

1. Feasible and realistic criteria: criteria should be measurable and objective to avoid confusion and misinterpretation

2. Consistency with EU legislation: Mandatory requirements under existing EU (or local) legislation should not be repeated in the Ecolabel criteria, to avoid overlap. (E.g. point 13 on ZODP, already regulated by 2037/2000/EC)

3. Relevant criteria at the time of awarding the label: EPEE invites ISPRA to focus on those criteria which can be fixed at the time of awarding the label. Parameters which can alter in the future should not be taken into account.

4. Practicality of the ecolabel: EPEE invites ISPRA to clarify who can apply for the label and how the validity of the label should be checked.

5. A BAT approach: when developing criteria for equipment, ISPRA should always adopt a BAT approach in order to reach the best energy performance of buildings.

Commento [MSOffice78]: Comment accepted

Commento [MSOffice79]: Comment accepted

Commento [MSOffice80]: Comment accepted

Commento [MSOffice81]: Comment rejected: we are not developing criteria for equipment

Comment's ref.: PLASTICSEUROPE

Extract of Comment:

Once more, the consultant ISPRA is proposing to discriminate halogen containing materials and thus PVC. We are once more stressing that the consultant has not a single scientifically underpinned comparative life cycle analysis that could justify a discrimination of halogenated plastics in buildings.

This is not merely a PVC issue. Many plastics contain halogenated additives, and these criteria would have a wider impact and exclude many plastics from being used in buildings. **This is unacceptable for the plastics industries.** We believe that specific materials should not be excluded without sound justification.

The draft is far from being finalised since the scoring systems for new and existing buildings have still to be developed.

The document, as it stands now, is unacceptable for the plastics industry for the following reasons:

It contains contradicting requirements, incompatibilities and raises many questions.



The criteria are set arbitrarily, without scientific justification.

The criteria set for lead, cadmium and organic tin would make an end to all recycling of post consumer PVC (window frames, pipes, ...) in Europe in the future. This is in contradiction with the recommendations from a study recently completed by RPA on behalf of the European Commission, see http://ec.europa.eu/enterprise/sectors/chemicals/files/markrestr/study_cadmium_dec09_en.pdf

The criteria for lead, cadmium and organic tin are incompatible with the purpose to use recycled material and in contradiction to the so called aim to prevent waste and to have 10- 30 % of recycled material. The criteria do not make sense, are very unscientific and counterproductive from the environmental point of view.

The proposed exclusion of halogenated additives would also exclude the use of a series of widely used non-PVC plastics in buildings which is unacceptable.

The full ban on all organic tin is inappropriate and scientifically not justified. A recently completed Risk Assessment and Reduction resulted in a Decision allowing continued use of octyl-tin substances in most PVC applications.

The proposed criterion on "embodied energy in materials" is not relevant over the life-cycle of a building, because the use phase which has an overwhelming impact over energy consumption.

A single percentage of minimum required quantity of recycled material for all plastics and all applications is not acceptable for the plastics industry and is not acceptable for other industries as well. It does not take into account the specific characteristics and requirements of the great variety of often complex building products.

Some of the terms used (e.g. heavy metals) are scientifically meaningless and misleading.

Some criteria are not key to a building in its entirety or are simply redundant.

Commento [MSOffice82]: Comment rejected: vague, inconsistent and captious. However the approach to chemical substances has been changed.

Comment's ref.: UNI CHIETI PESCARA

Extract of Comment:

It seems to me that the MANDATORY requirements related to the design strategies (paragraph 4) and to the selection of materials (paragraph 5) are so little compared with the OPTIONAL requirements.

Compared to the last I propose the introduction of:

A criterion on the reduction of the materials used, for the same service provided (static security, energy efficiency, etc.).

A criterion on the use of materials produced from renewable resources or widely available at local level;

A criterion for take-back of materials and products by producers, especially for those multi-materic and non-separable, hence not recyclables.

It seems to me besides that all references to a life cycle approach are concentrated in section B - OPTIONAL criteria.

Commento [MSOffice83]: Comment rejected: this is an interesting comment but is not applicable because it would imply the use factor of the building (equivalent inhabitants/m2) which is not influenced by the applicant

Commento [MSOffice84]: Comment accepted. These aspects are already included in the criteria

Commento [MSOffice85]: Comment rejected: this is an interesting proposal but the applicant has no influence on the criterion.



Comment's ref.: ECOLABELLING DENMARK
Extract of Comment: Please recall all the comments Ecolabelling Denmark represented during the 4th AHWG meeting about article 1 and 2 and 3: Make two separate criteria for new and existing buildings. Remember to leave out "major refurbishments" from New buildings. Leave out any wordings on refurbishments and renovations. When to apply: I can see you were thinking that you should apply for a Flower when the building is finished. That is not a good idea for new buildings, because there would be a risk that the finished house could not be approved, because of some construction issues that the Flower can not approve, and it can not be changed when the building is finished. Better to assure that the criteria fits an application on a not even build house. Who is the applicant for new buildings: The constructor or architect or developer of the house. They have no influence on what happens with the house after it is build, so assure that the requirements take that in to account. When is the new building Ecolabelled: Right at that moment when the building is finished. Not before not after! If the people who by the building is interested in getting an Ecolabel on it, they must apply on the criteria for existing buildings. Who is the applicant for existing buildings: The owner of the building What about garages and other small buildings in connection to the building? It must be specified if they are included in the requirements or no, if they are, which of the requirements they must live up to.

Commento [MSOffice86]: Comment accepted

Commento [MSOffice87]: Comment rejected: the buildings need to be finished and operational as the verification cannot be only on paper . The project phase is part of the requirements, so new buildings for having the EU Ecolabel needs to comply with criterion on design.

Commento [MSOffice88]: Comment accepted

Commento [MSOffice89]: Comment accepted

Commento [MSOffice90]: Comment accepted

Comment's ref.: UK
Extract of Comment: Following the 4 th ad hoc working group meeting, participants were asked to provide comments on the latest criteria i.e. those sent out by ISPRA on 26th November 2009. We have attached an annotated version with our detailed comments. Since then, at the meeting of the EUEB on 9 th December 2009, ISPRA indicated that the document



would be substantially amended to eliminate those criteria that are primarily tenant/user controlled and to focus better on the most significant environmental issues. Whilst we welcome this approach, we still have grave reservations regarding the timing and focus of the current work programme.

Fit with other EC sponsored initiatives. It is not yet clear, how this criteria development work fits with the intensive work programme of the CEN committee in relation to TC350 (sustainability of construction works , including environmental product declarations for construction products) and TC59 (Building construction). These initiatives are being sponsored by DG Enterprise with the aim of ensuring a harmonised approach to the measurement of embodied and environmental impacts of construction products and whole buildings across their lifecycles.

Closer harmonisation between the EU Ecolabel and these existing initiatives is therefore vital, to reduce the administrative burden on business and ensure that already significant EC investment and member state involvement in this work area is not duplicated/wasted. There is an opportunity for the Ecolabel to *add value* by defining the best practice benchmark based on these agreed measurement methods. If it is not seen to do this it will not gain industry acceptance/uptake and will not support efforts to establish GPP criteria on construction.

We are also concerned that the perceived conflict between the TC350 work and Ecolabel in respect of Buildings will lead to difficulties in the process of inter-service consultation.

Unfortunately, the timescales are not synchronised, with the CEN TC350 process not due to finish until October 2011.

Assessment & verification. Significant work still needs to be completed on the methods for verifying performance against the selected criteria. Currently, reliance is being placed on vaguely defined and unverifiable terms and statements e.g. local and on the as yet unseen 'User manual'. The results of the TC350 work would be particularly useful here as they will provide a standard methodology for assessing the environmental impact of the various component materials and systems that combine in a building. We are also concerned that some criteria are requiring compliance with local laws – this puts a significant verification burden on competent bodies but as all buildings on the market can be expected to be legally compliant, doesn't offer an environmental benefit. These criteria should be deleted.

Standard setting. Whilst the CEN TC350 process will provide a method for assessing the sustainability of products and product systems, it will not set specific benchmarks. This is the area where the EU Ecolabel should be making an important contribution, especially with regard to environmental impacts other than energy usage. For example water usage, indoor air quality, use of non-renewable resources in materials and reduction of CDEW (construction and demolition waste). However, such work can only be properly undertaken once the TC 350 process has finished.

We therefore conclude that the current process should be paused, to allow for better integration with the ongoing TC350 work on standards. Once the latter has been completed, the Ecolabel work should resume, but with a clear focus on the thresholds and limits that should be set, to maintain the EU Flower as a label of environmental excellence.

Commento [MSOffice91]: Comment accepted: the relation between the two initiatives will be guaranteed by considering possible common definitions and assessment methods.

Commento [MSOffice92]: Comment accepted: the third draft will give more details on the assessment and verification aspects

Commento [MSOffice93]: Comment rejected: the relation between the two initiatives will be guaranteed by considering possible common definitions and assessment methods on the work so far developed by CEN. When CEN will finish its work process then the outcome will be eventually considered in the revision Ecolabel criteria.

Comment's ref.: PU EUROPE



Extract of Comment:

Criterion 11. Halogenated materials

PU Europe comment:

The ad hoc WG decided on 20th November 09 to replace the title “halogenated materials” by “dangerous substances”. The next logical step would be to merge criterion 25 with this one.

Have the proposers checked whether REACH has already introduced restrictions on the manufacture, placing on the market and use of certain of the substances mentioned in this criterion?

In the WG meeting, it was proposed that TC351 test methods should be used or, until their final adoption, the ISO 16000-6 tests. They are

- comprehensive, as they include all regulated dangerous substances;
- non-discriminatory, as they include all construction products;
- cost-effective, as all manufacturers will conduct these tests as part of CE marking;
- providing real health and environmental benefits as they look at emissions of dangerous substances to the indoor air or to the ground water / soil. The presence of a substance in a construction product does not automatically lead to exposure risks or even concerns for the human health or the environment.

The Expert Group on Dangerous Substances of DG ENTR’s construction unit is currently examining the possibility of establishing emission levels. Finland is already running a voluntary certification scheme on emissions of dangerous substances. The highest class (lowest emissions) could become an eco-label requirement.

It is astonishing to see that the eco-label proposers seem to ignore this proposal completely.

Commento [MSOffice94]: Comment accepted: the approach to chemical substances has been changed

Commento [MSOffice95]: Comment accepted: we will look at the contents of TC351

Commento [MSOffice96]: Comment accepted. We will look at this issue.

Criterion 15 (annex 1) Energy efficiency certification

PU Europe comment:

The wording of this criterion is confusing. Does “primary energy specific consumption” refer to primary energy demand” (as opposed to final energy demand or primary energy consumption)?

According to the EPBD, the focus should be on primary energy demand.

Directive 91/2002 (EPBD) has gone through a recast process. The new text requires all new buildings to have a nearly zero energy demand from 2021 onwards (2019 in the case of public buildings). Already today, many Member States (A, D, DK, F, FIN, IRL, NL, S, UK) have introduced a binding path towards zero energy buildings. Requiring the energy demand to be 50% below a (nearly) zero energy building is not sensible. Hence, this criterion should be adaptable to national requirements. Using the A to G building efficiency rating may be the simplest solution.

Commento [MSOffice97]: Comment accepted: the approach to energy efficiency has been changed.

Criterion 25. Chemical products

PU Europe comment:

This criterion should be merged with criterion 11 “Dangerous substances”. The notion “chemical products” is not used in European legislation. The eco-label regulation speaks of dangerous

Commento [MSOffice98]: Comment accepted: the approach to chemical substances has been changed.



“substances and preparations / mixtures” and so does the construction products directive / regulation. This choice was made to provide a comprehensive end-user protection by including all substances whatever their origin. The Ecolabel should not fall short of this.

□ The following example demonstrates how incomplete and even pointless the proposed criterion is: In the case of insulation foams, a whole verification procedure is put in place to prove that a product which is not even in contact with the indoor air (and neither directly with the external environment) complies with applicable legal requirements. This implies on the one hand that there are such products on the market which do not respect legal requirements and, on the other hand, that other insulation products are less “dangerous” or do not have to comply with legislation. Both conclusions are not correct.

□ Insulation foam is an article according to REACH and, hence, no SDS is available. The eco-label would have to define its format and contents which we believe goes far beyond its remit.

□ Information requirements in the supply chain for the products mentioned in criterion 25 but also for all other products are covered by REACH (Articles 31-36). The SDS shall be provided only in the conditions legally defined by REACH, for all substances and preparations (alone or in articles) placed on the market, regardless of whether they are installed in an eco labelled building or not.

The information contained in the SDS can be important for the building contractor to guarantee the safe handling of the product. However, in the absence of exposure risks, nothing would be written in the SDS for substances used for the production of PU insulation foam regarding the use phase of this product (article). What is then the purpose of the whole procedure?

□ One SDS comprises 20 to 30 pages. The Ecolabel certifier would find it difficult to verify the SDS of all substances used in all of the above products to determine legal compliance.

□ As outlined above in more detail, the Ecolabel should use TC351 (ISO 16000-6) test procedures to determine emissions of all regulated dangerous substances from all construction products.

Commento [MSOffice99]: Comment accepted: we will look at the standard

Comment’s ref.: ADEME

Extract of Comment:

AIMCC members are strongly involved in the works of CEN TC 350 “Sustainability of construction works” aiming at answering to the mandate issued by the European Commission.

In this CEN / TC all interested parties of the construction sector (owners, designers, construction product manufacturers, constructors, consultancies, users...) meet together in order to reach a consensus regarding the definition of the criteria for assessing the environmental performance of buildings.

Therefore, construction products manufacturers who are in charge of providing Environmental Products Declaration in order to allow this environmental assessment of buildings are fully opposed to the development of such an ecolabel and especially as long as there is no consensus at the European level on the assessment criteria.

An ecolabel developed in only two meetings on one of the most complex product / service constitutes a fully unrealistic challenge.

If unfortunately the European Commission did not reconsider its decision, we do think that this initiative will provide the market with a totally confusing signal with high risks for the users of such ecolabelled buildings to be disappointed.

Commento [MSOffice100]: Comment rejected: the comment is out dated

Commento [MSOffice101]: Comment rejected: the comment is not technical but political



We thank you in advance to forward and support this position that we hope you share.

Comment's ref.: EUROHEAT&POWER

Extract of Comment:

Considering that nearly 40% of primary energy is consumed in buildings, eco-labelling for buildings could be a step to help reach the targets set by the EU for 2020.

Regarding energy, we advise to refer to the standards developed on behalf of the Commission within CEN to implement the Directive on energy performance of buildings. Such standards use primary energy factors to factor in the whole energy chain before delivery to the buildings, and therefore are the appropriate tools to evaluate and benchmark buildings.

In particular standard EN 15603 Energy performance of buildings - overall energy use and definition of energy ratings and

EN 15316 Heating systems in buildings: method for calculations of system energy requirements and system efficiencies. Part 4-5: space heating generation systems, the performance and quality of district heating and large volume systems.

Use of these norms would simplify dramatically the document. There would no further need to consider individually heating and cooling use of RES etc.. but the energy input to the building as a whole.

Commento [MSOffice102]: Comment accepted: we will look at the standards

Comment's ref.: CESQUA - STUDIO ALTIERI

Extract of Comment:

_ Non risulta chiaro se i criteri si applicano solo all'edificio o anche alle sue pertinenze (ad esempio parcheggi e aree esterne nel caso non sia esplicitato: si veda ad esempio requisiti relativi al consumo e alla gestione dell'acqua).

_ Non risultano chiare le modalità di applicazione dei criteri nel caso di multiproprietà. Esempio uso dell'energia (criterio 18 e 24), consumi di acqua (criterio 29) ecc. nel caso di un condominio il criterio si riferisce solo agli usi comuni o dovrebbe comprendere tutte le utenze?

_ Sarebbe auspicabile un riferimento esplicito al rispetto dei requisiti in materia di barriere architettoniche all'interno dei requisiti generali, pur essendo il tema implicitamente richiamato nelle disposizioni di legge applicabili

_ In generale sembrano poco sviluppati, nel quadro generale dei criteri, i requisiti relativi alla "fase di cantiere" nell'ambito del ciclo di vita dell'edificio, rispetto alle altre fasi (progettazione, uso e fine vita)

_ Si potrebbe considerare di inserire criteri specifici relativi alle emissioni degli impianti termici a servizio dell'edificio (rendimenti, limiti di emissione, ecc...) o all'uso di sostanze refrigeranti sugli impianti di condizionamento (in relazione all'impatto sull'effetto serra o sull'assottigliamento dello

Commento [MSOffice103]: Comment accepted: the new draft will better clarify the scope.

Commento [MSOffice104]: Comment accepted: all criteria related to users have been deleted

Commento [MSOffice105]: Comment rejected : for the new building is foreseen by legislation, for existing buildings there is the criterion

Commento [MSOffice106]: Comment accepted: these aspects will be considered



strato di ozono)

Commento [MSOffice107]: Comment rejected: the emissions are considered in the energy efficiency criterion

Comment's ref.: ROMANIA

Extract of Comment:

Article 1

Better definition of the building and delimitation of the types of buildings this eco-label refers to is needed. What happens in case of industrial buildings? Is there any plan/initiative for developing something specific for industrial buildings or this label will refer to that type of buildings as well?

Commento [S108]: Comment accepted

Commento [S109]: Comment accepted: industrial buildings are excluded from the field of application

The eco-label for buildings has the advantage to be a certification method supported by the European Commission. It can be competitive with the other certification systems in place (LEED, BREEAM, Green Star, CASBEE) if it proves to be an easy evaluation method, affordable even for small and medium sized developers/building owners (the competitiveness in price might be one of the main advantage for why people choose eco-label against already existing labels), heavily promoted and supported by the European Commission. However, in order to be a credible label - funding should be available for organizing the evaluation procedure, training the auditors (or find a solution for the audit - who will check the fulfillment of specific criteria?), promoting the label at the national and European level. The evaluation procedure cannot be done based on the contribution of volunteers (personnel of the relevant Ministries and/or NGO's) like it is happening for the other existing buildings. The eco-label should be implemented with the contribution of specific experts in the area and should be supported financially by the EU as well. Otherwise the eco-label will not be credible and competitive with other certification systems already in place and recognized internationally.

Commento [S110]: Comment accepted: a proposal has been made in the third draft

Framework

Structure is ok - keep it simple, not too complex methodology - a list of goals with points related to them is good. Simplicity might be one of the competitive advantages of this eco-label.

While it appears that these criteria are good, they may go against one of the regularly stated aims of the RoGBC that is: we should not reduce the lifestyle nor business performance of individuals, communities or businesses.

It is not necessary (but may still be good) to reduce energy or water consumption if that comes from a renewable source or can be recycled. It is not necessary to limit waste production if this can be re-used in another process.

The danger of looking at a solution for a single building is that it ignores regional factors such as, connection to a wind park (clean, renewable energy) which is much more favourable than each house having its own individual and (even when less) polluting energy source or national polluting source. If waste can be recycled, for instance, to increase crop production in the neighbouring area there is a greater benefit than just reducing waste. The focus is ok, but misses a major point.

Community benefit should be also considered, where possible. Focusing too much exclusively on the building might even have a negative effect for the surrounding area.



The Competent Bodies are recommended to take into account the implementation of recognized environmental management schemes, such as EMAS or ISO 14001, when assessing applications and monitoring compliance with the criteria. (*Note: it is not required to implement such management schemes.*)

The suggestion is too weak and vague – either EMAS or ISO 14001 are required or not.

Commento [S111]: Comment rejected: this is a wording normally adopted in all the Commission Decisions as standard wording.

In order to apply for the Ecolabel the applicant needs to comply with European, national and local legal requirements. In particular shall be guaranteed that:

The physical structure is built legally and respects all relevant laws or regulations of the area on which it is built, especially any related to landscape and biodiversity conservation.

Therefore local law must include all EU law to make this effective. This will be difficult to realise.

3. The building is completed and operational.

Ignores the focus on the design side, which is “more” important since it sets the rules for the construction.

Commento [S112]: Comment rejected: the design and the construction phase are considered in the criteria. The verification is made ex-post.

Comment’s ref.: Technology Industries

Extract of the comments:

Derogation for stainless steel and other metal alloys

The Ecolabel Regulation (EC 66/2010) stipulates that the Ecolabel should not be awarded to goods containing CMR substances, as defined by the CLP Regulation (EC 1272/2008). However, when specifying the criteria derogations can be granted provided.

Derogation for nickel in stainless steel and other inert metal alloys is needed in the building criteria. Otherwise buildings with stainless steel kitchen sinks, elevators or hand railings would not be eligible. This would exclude a large portion of existing and new buildings for no environmental or health benefit. Compare to the Toy Safety Directive (2009/48/EC, annex II, paragraph III 6), where as similar derogation for nickel in stainless steel was introduced. Stainless steel is a practically inert material with no adverse health or environmental effects. Additionally, with an input of on average 60 % recycled material; stainless steel helps achieve the recycling target. If stainless steel has to be replaced in buildings, it would have to be replaced by less sustainable materials also from a hygienic and safety perspective.

For restrictions for certain substances the threshold limit should be in line with REACH Regulation (EC 1907/2006), i.e. 0,1 % weight by weight.

The criteria shall be in line with the current building standards

The ecological criteria for the award of the Community Eco-label for Buildings should be in line with



the current building standards. As such, the 2nd version draft criteria contains several items where both the modern standards and the criteria for the Eco-label for Buildings cannot be met at the same time. Several examples of this are presented below.

General comments

Some of the criteria are written in such a way that, at least in Nordic climates, it is impossible to meet some of the mandatory criteria using some of the technical systems required in the optional criteria. For example, many criteria under "Health and well-being" (for indoor climate, noise, dust etc.) cannot be met by "only natural ventilation", at least without excessive consumption of energy. Generally speaking, the proposal does not take enough into account:

The variety of climates and building traditions in Europe

The best available technology, and the state-of-art in industry and practice

The differences in existing legislation in Europe.

Objectives and methods / technologies are seriously mixed up within the criteria. In our opinion, the whole text must be rewritten in such a way that the criteria only give the objectives, not any technical measures or solutions. Some limit values could be given as general guidance, but because these (as well as technologies to achieve the objectives) will change in the course of time, these should be presented in a separate document or in an annex. Description and even mentioning of certain technologies will make serious obstructions to development and innovations.

Commento [MSOffice113]: Comment rejected: the European Ecolabel foresee clear limit criteria so limits cannot be considered as guidance.

The text is in major part inconsistent, a mixture of trivial statements and practically unrealistic statements. Some mandatory criteria and some optional criteria are (at least in certain parts of Europe and/or certain building types) contradictory to each other (examples below under "specific comments").

Some criteria are dealing with issues that are not (typically) integrated in the building and thus beyond the control of the builder/owner. These include domestic appliances (criteria 14) and often also lighting (especially in residential buildings)

Commento [MSOffice114]: Comment accepted: criteria that go beyond the control of the builder/owner have been excluded.

Some criteria look trivial and should be deleted or completely rewritten (e.g. for Radon (30), "...shall comply with Radon legislation". **Everything shall comply with the existing legislation!** Of course radon shall be taken into account in building design and construction, and assessed in commissioning and/or operation, but this criteria must be expressed in a different way

Commento [S115]: Comment accepted. The criterion has been rephrased

Some other criteria are written in an unrealistic way, for example

Several criteria dealing with materials. Expressions like "shall not contain...material xxx..." may be interpreted in such a way that the allowed amount or concentration is absolute zero, hence not achievable and impossible to assess. Requirements on materials shall in general be in accordance with REACH Regulation (EC 1907/2006).

Commento [MSOffice116]: Comment accepted: the criterion has been rephrased

45 on Quality Management System - Most companies in charge of construction / renovation / maintenance are small or even micro-sized ones. ISO 9001 is generally perceived as too much of a burden for them. Hence, this requirement would exclude most of them from this market. So this criterion is in serious contradiction with the expressed intention on page 2 to take account of the limited resources of micro-enterprises

Commento [MSOffice117]: Comment rejected: ISO 9001 is very spread out in the building sector and it is a qualification used in call for tenders

General editorial comment: The document draws up two types of criteria, separately for new



buildings (Annex 1) and existing buildings (Annex 2) - mandatory criteria (sections A and C) and optional criteria (sections B and D). This principle is quite OK, but to avoid misunderstanding the optional criteria should not be written as requirements. **Simple solution: change all "shall" words into "should"** in sections B and D.

Commento [MSOffice118]: Comment rejected: the word "shall" is a legislation wording used in Commission Decisions even for optional criteria.

Specific comments (figures refer to Annexes A and B but are valid also for the corresponding criteria in Annexes C and D):

Article 2 (b): "...shall comply with each of (mandatory) criteria..."

Should refer to Annex C for existing buildings

Is unrealistic for existing buildings, because to comply with all criteria would generally require complete renovation of both the building envelope and all technical building systems.

Commento [MSOffice119]: Comment accepted: the wording has been changed in the third draft criteria

12 to 17, **ENERGY** - none of these criteria are expressed in a clear and practicable way, some (e.g. 14) are or may be beyond full control of the applicant, some totally lacking ambition or added value (e.g. 16).

Commento [MSOffice120]: Comment accepted: the criteria have been modified

22 **Water consumption** - As such the criterion provides no ambition or added value. The criterion should go towards metering separately for each consumer, e.g. in multi-dwelling residential buildings this is becoming a common practice in new buildings and soon also in renovation.

Commento [MSOffice121]: Comment accepted: the criterion has been eliminated

25 to 35 **HEALTH AND WELL BEING** - In some of the criteria the level of ambition is too low, while some others (e.g. 26) try to go a bit higher "...better...than regulations". Some (e.g. 35) are properly expressed as such, but in contradiction to certain optional criteria (e.g. 69).

Commento [MSOffice122]: Comment rejected: there is no contradiction between criterion 35 and 69 as the second is optional and applicable only in those situation were natural ventilation is possible. Eventually not in some countries. See answer

57 and 58 **Use of materials / products locally produced** - The criteria that building materials cannot come from distances more than a few hundred kilometers are not workable. For example stainless steel is a high value special alloy that with a global raw material base and a global market, not local or national. However, there are not more than approximately 10 melt shops in the EU producing stainless steel. **The proposed limitations would effectively restrict free competition and trade.**

Commento [MSOffice123]: Comment rejected: the criteria objective is to reduce travel environmental costs. As optional criteria they will stimulate local markets where possible and they will not prevent competition and trade.

60 **Heating and cooling passive systems** - This criterion is written in a more general way than many others, and thus cannot be assessed in practice. Actually the main focus should be to avoid unnecessary heating and cooling loads (by both architectural and technical means).

Commento [MSOffice124]: Comment rejected: this is an easy criterion, very easy to assess as it is only required to use passive systems.

62 **Energy efficiency certification** - **It is unclear what the criterion is as it seems to be uncompleted.**

Commento [MSOffice125]: Comment rejected: the criterion is linked to criterion 15.

66 **Water use** - the consumption is completely up to the individual user, so the criteria is useless if expressed this way.

Commento [MSOffice126]: Comment accepted: the criterion has been removed

69 **Natural ventilation** - This criterion is written in such a way that, especially in Northern Europe, it is impossible to fulfil most of the criteria under "HEALTH AND WELL BEING", at least without excessive energy use. **In Nordic climate, practically all new buildings (plus all renovated office**

Commento [MSOffice127]: Comment rejected: the principles underneath the presence of optional criteria in Ecolabel criteria is that not optional criteria can be fulfilled at the same time by an applicant. Optional criteria are a range of criteria in which companies can choose which criterion comply with in order to reach the minimum number of point required. They cannot be fulfilled all together.



buildings and an increasing number of residential building renovation) are equipped with mechanical ventilation with heat recovery. Mechanical ventilation systems and equipment are continuously developing to meet simultaneously the more and more stringent requirements for **both indoor environment and energy saving**. These developments include less energy-consuming and less noisy fans, demand-controlled ventilation, high-efficiency filtration of incoming air, and various system integrations (ventilation - heating - cooling). The many problems taken up with people in favour of natural ventilation are mainly not due to mechanical ventilation itself, but faults in **design, construction, commissioning, operation and maintenance**. So, this criterion should be completely changed, not to mention any type of ventilation systems, but focusing on the indoor environmental quality issues and energy performance of ventilation, plus paying attention to proper care of the systems throughout the building process and the whole lifetime of the building.



Annex C - Specific comments