

COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels,

COMMISSION DECISION

on

establishing the ecological criteria for the award of the Community Eco-label for Buildings

(Text with EEA relevance)

EN EN

COMMISSION DECISION

on

establishing the ecological criteria for the award of the Community for Buildings

(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 1980/2000 of the European Parliament and of the Council of 17 July 2000 on a revised Community Eco-label award scheme¹, and in particular the second subparagraph of Article 6(1) thereof,

Whereas:

- (1) Under Regulation (EC) No 1980/2000 the Community Eco-label may be awarded to a product possessing characteristics which enable it to contribute significantly to improvements in relation to key environmental aspects.
- (2) Regulation (EC) No 1980/2000 provides that specific Eco-label criteria, drawn up on the basis of the criteria drafted by the European Union Eco-labelling Board, are to be established according to product groups.
- (3) It also provides that the review of the Eco-label criteria, as well as of the assessment and verification requirements related to those criteria, is to take place in due time before the end of the period of validity of the criteria specified for the product group concerned.
- (4) The ecological criteria, as well as the related assessment and verification requirements, should be valid until [four years from the date of notification of this Decision].
- (5) For Buildings, the ecological criteria should be divided into mandatory and optional criteria.
- (6) As regards the fees relating to applications for and use of the Eco-label by micro enterprises, as defined by Commission Recommendation 2003/361/EC of 6 May 2003², concerning the definition of micro, small and medium-sized enterprises it is appropriate, in order to take account of the limited resources of micro-enterprises and their particular importance within this product group, to provide for reductions additional to those provided for by Regulation (EC) 1980/2000 and Article 1 and 2 of Commission Decision 2000/728/EC of 10 November 2000 establishing the application and annual fees of the Community Eco-label³, accordingly to Article 5 of Commission Decision 2000/728/EC.
- (7) Measures provided for in this Decision are in accordance with the opinion of the Committee instituted by Article 17 of Regulation (EC) No 1980/2000,

_

OJ L 237, 21.9.2000, p. 1

² OJ L 124, 20.05.2003.

³ OJ L 293, 22.11.2000, p. 18.

HAS ADOPTED THIS DECISION:

Article 1

- 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".
- 2. For the purposes of this Decision, dwellings are excluded; new buildings include also major refurbishments; existing buildings include also renovations.
- 3. Residential purpose is meant as for dwelling purpose.
- 4. Use as offices is meant to be the use of the building for administrative, bureaucratic and educational activities of a public or private nature.

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?

Article 2

- 1. 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:
- (a) it shall fall within the product group "buildings"
- (b) it shall comply with each of the criteria set out in Section A of the Annex 1 or 2 of this Decision
- (c) it shall comply with a sufficient number of the criteria set out in Section B of the Annex 1 or 2, in order to acquire a number of points as referred to in paragraphs 2 and 3.
- 2.Scoresystemfornewbuildings(underdevelopment)
- 3.Scoresystemforexistingbuildings(underdevelopment)

Article 3

1. Fees(tobedefined)

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].

Article 5

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

Article 6

This Decision is addressed to the Member States.

Done at Brussels,

For the Commission Stavros Dimas Member of the Commission

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 ecolabel 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.

ANNEX

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.

The aim of these criteria

These criteria aim to set limits on the main environmental impacts from the three phases of the life cycle of buildings (project, construction, use and maintenance, refurbishment, end of life). In particular they aim to:

- limit energy and water consumption,
- limit waste production and enhance recycling,
- favour the use of materials with high environmental performances
- favour the use of renewable resources and of substances which are less hazardous to the environment.
- promote information and education on a correct management of the building

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.

Assessment and verification requirements

The specific assessment and verification requirements are indicated immediately below each criterion. Where appropriate, test methods and standards other than those indicated for each criterion may be used if their equivalence is accepted by the Competent Body assessing the application. Where the applicant is required to provide declarations, documentation, analyses, test reports, or other evidence to show compliance with the criteria, it is understood that these may originate from the applicant and/or his supplier(s) and/or their supplier(s), et cetera, as appropriate.

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

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

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.

General requirements

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:

1. 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.

- 2. The physical structure respects the European, national and local laws and regulations regarding energy conservation, water sources, water treatment and disposal, waste collection and disposal, maintenance and servicing of equipment, safety and health dispositions.
- 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.

ANNEX 1 NEW BUILDINGS

SECTION A – MANDATORY CRITERIA

DOCUMENTATION

1. Building Book

The building shall have an information and description document (Building book) where are reported all technical characteristics and the management, such as construction year, designer, project data, list of materials used, plants installed, any renovation and modification occurred during years, certification awarded, evidence of failings, remarks from users or third parties and corrective actions undertaken.

The Building Book shall be looked after and updated by the building's manager, such as the administrator for residential buildings, any other professional for offices and schools.

What happens if someone loses the building book (usual situation especially for existing buildings)?

Assessment and verification: the applicant shall provide the Building book showing compliance with the criterion.

2. Maintenance plan

The building shall have an explicit plan for maintenance and efficient operation of the facility, covering all technical systems, and providing performance targets, system maintenance and replacement guidance over a 25-year period.

The plan shall be updated when the building or part of the building or building's plants are renovated.

Assessment and verification: the applicant shall provide the Maintenance plan showing compliance with the criterion.

3. User's guide

The building shall have a User's guide giving information on the use of the building and on its equipments.

Everyone who uses the building should have free access to the User's guide as well as the Building Book therefore it will be suitable to store all the information on electronic devices (maybe a common PC installed in the Share Facility Room) or even on a dedicated internet domain.

PLANNING - PROJECT

4. Sustainable project

The project phase shall consider local characteristics such as landscape, ecosystem quality, environmental resources, area's vocation.

Assessment and verification: the applicant shall provide adequate design documentation in order to show compliance with the criterion.

5. Site selection

Unless required by local regulations, the site location shall prefer:

- abandoned areas (residential or industrial);
- fringe areas in urbanized zones.

Too much focus on the urban areas. Standard of living – does everyone want to live in the city? A city is much more resource intensive than a sustainable eco-village. There are many solutions to alleviate transport from outside and this will become a minor problem once all cars are electric.

General – the costs of all this analysis and planning are high for the owner or developer, will the EU fully subsidise costs?

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

6. Design for disassembly, re-use or recycling.

The List of materials as required in criterion 11 shall indicate, for each kind of materials, possible end-life use destinations specifying valorization processes or treatments in order to reuse, recycling or disposal them.

Assessment and verification: the applicant shall provide the List of materials with adequate information.

IMPACTS ON SITE

7. Heat island

In order to avoid the heat island effect, the building shall use passive systems such as planting of local trees, use of light colors for exposed external surfaces (albedo effect), solar screens, green roofs, green vertical gardens, etc.

Assessment and verification: (under development)

8. Light pollution

Providing that local security standard are respected, the external lighting of the building shall avoid light pollution.

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

9. Green areas

For green areas, the building shall prefer the use of local plant species.

MATERIALS

10. Wood and wood based materials

At least the 50-60% of any solid wood or of wood-based material shall originate from reuse-recycling and/or from sustainable managed forests which have been certified by independent third party schemes fulfilling the criteria listed in paragraph 15 of the Council Resolution of 15 December 1998 on a Forestry Strategy for the EU and further development thereof.

Assessment and verification: the applicant shall provide appropriate documentation from the wood supplier indicating the types, quantities and precise origins of wood used in the building. The applicant shall provide appropriate certificate(s) showing that the certification scheme correctly fulfils the requirements as laid down in paragraph 15 of the Council Resolution of 15 December 1998 on a Forestry Strategy for the EU.

11. List of products/materials

The Building Book shall report the list of products and materials used and the related quantity (in weight / volume).

The list shall be updated in case of renovation.

For each and every product and material used it should also be provided technical specifications as well as their supplier.

Assessment and verification: the applicant shall provide the complete list of materials and products used for the building's construction specifying type of materials, commercial denomination, weigh and volume.

12. Long life service materials

Materials used for non-structural functions (external and internal coverings and partitions, doors and windows, plants) shall have a life service period longer than 25 years.

Assessment and verification: the applicant shall provide the List of materials and adequate information showing compliance with the criterion.

13. Thermal insulation materials

Thermal insulation materials shall:

- achieve U-values (heat loss rate) lower than ones foreseen by national laws;
- ensure longevity of performance over the lifetime of the materials;
- have zero ozone depletion potential (ZODP);

All insulation materials must not be classified as carcinogenic according to Directive 97/69/EC.

14. Halogenated free materials

(under development)

Assessment and verification: (under development)

15. Chemical products

Products and materials used for the interiors shall comply with the UE regulation n. 1272/2008.

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

16. Energy embodied in materials

At least XX% in weight/in volume (to be defined) of materials and products used for the building's manufacture shall declare the energy embodied.\

Energy embodied in materials is and information difficult to get in the moment. The LCA analysis (based on which one could obtain information on the energy embodied) is yet a tool in development and also the results obtained are qualitative (is relevant for a limited/defined quantity of products coming from one manufacturer). The availability of this information might require higher costs for the manufacturer and implicitly to the developer that uses the material. CO2 emissions coming from buildings are important and they should really be tracked. However most of the CO2 emissions come in the operation phase of the building and the information could be much easier obtained from the energy bills. The solution here might be a combination – requiring the energy embodied info from a very small percentage from the total volume of materials used (so that the developers to be encouraged to use and ask those type of info from the manufacturer) and combine it with a requirement/criteria to demonstrate/track CO2 emissions in the operation phase of the building (in this way the developer is encouraged to create a high energy efficient building or to use RES and the facility manager of the building will be encouraged/demanded to operate the building respecting the performance standards for which the building was initially designed)

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

17. Traceability chain of materials

At least XX% in weight/in volume (to be defined) of materials and products used for the building's manufacture shall declare the productive chain.

The traceability chain of material should be provided especially for those with a long life cycle, used for the structural functions.

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

ENERGY

18. Renewable and low emission energy source

At least 50-80% of the electricity used for all purposes shall come from renewable energy sources, as defined in Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market.

This criterion only applies to buildings that have access to a market that offers energy

generated from renewable energy sources.

Assessment and verification: the applicant shall provide a declaration from (or the contract with) the electricity supplier indicating the nature of the renewable energy source(s), the percentage of electricity supplied that is from a renewable source, documentation on the boilers (heat generators) used, if any and an indication of the maximum percentage that can be supplied. According to Directive 2001/77/EC, renewable energy sources shall mean renewable non-fossil energy sources (wind, solar, geothermal wave, tidal, hydro power, biomass, landfill gas, sewage treatment plant gas and biogases).

In case of non applicability, documentation of the request for renewable energy has to be provided.

19. Heating and cooling passive systems

The building shall use heating and cooling passive systems for at least YY% of the annual energy consumption (in relation with meteo-climatic areas).

Too simple – climate systems in a cold country (e.g. Estonia) or a hot country are not sufficient on their own. This penalises certain territories.

Assessment and verification: (under development)

20. Labelled lighting systems

All light bulbs in the building shall have an energy efficiency of Class A or higher as defined in Commission Directive 98/11/EC of 27 January 1998 implementing Council Directive 92/75/EEC with regard to energy labeling of household lamps

Living standards? Are energy saving bulbs good for eyesight and living standards?

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

21. Labelled domestic appliances

All common appliances and machines shall be Energy class A or higher.

How can you keep trace of the building's common appliances if they are not preinstalled before it is sold?

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

22. Insulation of heating and cooling distribution system

All heating and cooling distribution systems shall be insulated according to local regulations/standards.

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

23. Energy efficiency certification

The energy requirement of the building shall be not higher than 50% of maximum primary energy specific consumption.

Assessment and verification: the applicant shall provide the energy certification under Directive 2002/91/EC of the European Parliament and of the Council (1) or where not available in the national implementation system, the results of an energy audit performed by an independent expert on the energy performance of buildings.

24. Energy consumption

Yearly energy consumption shall be monitored and registered. In particular shall be registered the consumption of electric energy and thermal energy coming from public networks and from non renewable sources.

It will be better to monitor the consumption monthly and even develop a software application at which each and every inhabitant should have access (if is possible the monitoring results should be posted on a dedicated internet site.)

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

EN 10 EN

EMISSIONS

25. Rainwater loads

The building shall foresee a first flush rain-water diverter for rain water coming directly or indirectly from the building and their annexes, in order to divert them to the waste water management system.

Too specific, there are various water reuse systems rather than just rainwater. Also too single building specific. Also rainwater can be used for other purposes, e.g. green roof, watering plants.

Assessment and verification: the applicant shall provide adequate project documentation.

26. Release of dangerous/toxic substances into soil

The building and their annexes shall be structured in a way to avoid possible release of dangerous substances into soil (such as release from garages, tanks, use of detergents, etc.).

Assessment and verification: the applicant shall provide adequate project documentation.

WATER CONSUMPTION AND MANAGEMENT

27. Rainwater use

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

Too specific, there are various water reuse systems rather than just rainwater. Also too single building specific. Also rainwater can be used for other purposes, e.g. green roof, watering plants. (**Hadley Barrett**)

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

28. Low-flush systems

All taps, showers, toilets in the building shall have water saving system.

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

29. Water consumption

Water consumption shall be measured and registered yearly.

Assessment and verification: the applicant shall provide collecting procedures and provide data registered yearly.

30. Grey-water reuse system

The building shall have a dual system for water adduction and distribution. Gray water shall be used for toilets and sanitary facilities.

WASTE MANAGEMENT

31. Recycling facilities

The building shall have common waste systems in order to differentiate domestic and special wastes, produced by the building's users, in accordance with local regulations.

Building regulation shall foresee the delivery of such waste fractions to the public collecting systems.

It is known the fact that the waste volume tends to be a problem, therefore it should be encouraged/assessed also reducing it by compaction.

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

HEALTH AND WELL-BEING

32. Noise reduction

The building shall comply with noise regulations.

Assessment and verification: the applicant shall provide technical documentation showing compliance with the criterion (e.g. phonometric assessment).

33. Exhaust gases

The building shall have in place measures in order to avoid dispersions of exhausted gases coming from boilers and /or motor vehicles within the building.

What about encouraging the usage of electric cars?

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

34. Allergies

Maintenance plan shall guarantee the adequate working of filter systems. Internal vertical and horizontal surfaces shall be anallergic and cleanable. Building service equipments and machines generating dust shall be placed in adequate service rooms.

We don't want to filter out allergens and other 'natural' substances. This is leading to a reduced health level of the population in general as we isolate ourselves from nature and therefore the immune system is not prepared to react. Some dirt is good.

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

35. Radon

The building shall comply with radon legislations.

Radon and all other dangerous substances.

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

36. Day lighting

According to the security and healthy standards, the building shall use at least the 60% of day natural lighting by means of, for example, window systems and light tubes or light pipes.

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

EN 12 EN

37. Temperature and humidity control

Heating and cooling equipments shall have systems regulated by users. Users shall be informed on how to use correctly the systems, including switching off of appliances in unused locals.

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

38. Lighting system control

The building shall have lighting regulation and control systems.

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

39. Glare Control

The building shall have glare control systems, such as hooded glasses, tents and other passive systems. The glare control systems shall allow the use of natural lighting.

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

40. Integrated indoor well-being

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

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

OPERATION AND MAINTENANCE

41. Flexibility and adaptability (space)

The building shall allow flexibility and adaptability in the space modularity.

Assessment and verification: the applicant shall provide technical information on partition walls and related plants.

42. Flexibility and adaptability (plants)

Technical plants shall be easily checked and maintained. Single joins and connections shall be easily modulated.

Assessment and verification: the applicant shall provide technical information on plants and their location in the building.

FACILITIES PROVIDED

43. Open spaces, green areas, common areas

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

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

44. Common ITC services - home office

The building shall have shared ITC plants such as internet and TV antenna.

Suggestion: The ITC plants should come with a special PC (storage unit) in which should be kept all the records (building documentations) such as: an electronic copy of the building Book, Users Guide, Consumptions Monitored, Maintenance Book, List of materials/consumables used in the building for the different purposes.

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

45. Car facilities

The building shall have adequate number of car places such as:

- for residential buildings at least 1 car-place for flat;
- for offices/schools buildings at least 1 car place for the 30% of employed and an adequate shared transport service.

Car places shall include a percentage reserved to pregnant women and disabled persons.

Create special facilities that would accommodate electric cars as well.

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

46. Cycle Facilities

All building users shall have cycle storage facilities and the building shall have specific cycle-pedestrian pathways.

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

FITNESS FOR USE

47. Quality control

A pre-inspection shall be conducted where the licensee building supervisor checks the entire house delivery. Any defect found should be corrected where possible before the final inspection. If any defect is found at the final inspection, a plan to correct them must be drawn up in agreement with the buyer.

48. Fitness for use control

The Building Book shall contain a specific evidence of failings, remarks from users or third parties and corrective actions undertaken.

Assessment and verification: (under development)

SECTION B – OPTIONAL CRITERIA

Each of the criteria set out in this Section has been attributed a value expressed in points or fractions of points. In order to qualify for award of the eco-label, buildings must score a minimum of points.

PLANNING - PROJECT

49. Constructor's requirements (... points)

The constructor shall have capability on eco/green building.

Assessment and verification: the applicant shall provide the constructor's capability score card or the constructor's professional CV.

50. Project and Construction QMS - Quality Management System (... points)

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

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

51. Innovative or regional design (... points)

Unless required by local regulations, the building shall respect local constructive characteristics or shall have innovative characteristics in accordance with environmental and security standards.

How can 'innovative design' be measured?

Assessment and verification: the applicant shall provide a technical report showing compliance with the criterion.

52. Integrated project planning (... points)

Design and construction phase shall involve a work team composed by experts in environment and performance topics related to the specific local characteristics.

Assessment and verification: the applicant shall provide an adequate documentation including evidence of the main environmental aspects and building's performances and relative list, and CV, of professionals involved.

53. Building LCA (... points)

The building shall have a LCA made according to ISO14040 standard.

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

54. Project and Construction EMS (... points)

Companies in charge of the construction/renovation/maintenance of the building shall have an Environment Management System according to EMAS regulation or ISO 14001 standard.

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

MATERIALS

55. Labelled construction products (... points)

At least the 20% in weight/in volume (to be defined) of all materials used in the building shall have a ISO Type I certification.

How come is possible if until now none of the constructions materials except the painting ones has eco labeling certifications. (Schneider)

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

56. Use of re-used or recycled materials for non-structural functions (... points)

At least XX% of materials used for non structural functions shall originate from re-used or recycled materials.

Assessment and verification: the applicant shall provide the list of materials and adequate information showing compliance with the criterion.

57. Use of re-used or recycled materials for structural functions (... points)

At least XX% of materials used for structural functions shall shall originate from re-used or recycled materials.

Assessment and verification: the applicant shall provide the list of materials and adequate information showing compliance with the criterion.

58. Responsible sourcing of materials (... points)

Building shall have at least XX% of products/materials coming from producers operating according to SA8000 standard.

Assessment and verification: the applicant shall provide adequate documentation showing compliance with the criterion such as producer's SA8000 certification or CEN TC 350 - prEN 15643-3 "Sustainability of construction works - Sustainability assessment of buildings - Part 3: Framework for the assessment of social performance".

59. Use of materials locally produced (... points)

At least XX% of products and materials used for the building manufacture shall not come from a distance longer than 100 tkm.

ENERGY

60. Energy consumption monitoring and control (... points)

The building shall have a building management control system (BMS).

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

61. Energy efficiency certification (... points)

The energy requirement of the building shall be not higher than:

25% of maximum primary energy specific consumption (number of points to be defined)

10% of maximum primary energy specific consumption (number of points to be defined)

Assessment and verification: the applicant shall provide the energy certification under Directive 2002/91/EC of the European Parliament and of the Council (1) or where not available in the national implementation system, the results of an energy audit performed by an independent expert on the energy performance of buildings.

EMISSIONS

62. CO2 embodied in construction products (... points)

At least 50% in weight of materials reported in the list of materials shall have the GWP assessment values (as CO2 eq.)

There is an argument that embedded carbon is useful – this can be a way to take it out of the atmosphere.

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

63. Particulate matter embodied in construction products (... points)

At least 50% in weight of materials reported in the list of materials shall have assessment values as particulate matter (<2.5mm, 2.5<mm<10mm, >10mm.).

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

WATER CONSUMPTION AND MANAGEMENT

64. Water use (... points)

The building yearly average water consumption shall be lower than 250 liter/inhab.day, excluding rainwater.

Assessment and verification: the applicant shall provide building consumption data showing compliance with the criterion.

WASTE MANAGEMENT

65. Sustainable management of construction and demolition waste (... points)

At least 75% of wastes generated during the construction or renovation processes shall be reused or recycled.

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

HEALTH AND WELL-BEING

66. Natural ventilation (... points)

The building shall have only natural ventilation according to UNI EN 15251 standard with the exclusion of sanitary and kitchen areas.

Assessment and verification: the applicant shall provide technical documentation showing compliance with the criterion (to be defined technical assessment).

67. Indoor, outdoor paints and varnishes and coverings materials (... points)

- a) At least 50 % of indoor and/or outdoor painting used in the building shall be awarded with the Community eco-label or other national or regional ISO Type I eco-labels.
- b) At least 50 % of coverings materials used in the building shall be awarded with the Community eco-label or other national or regional ISO Type I eco-labels.

Assessment and verification: the applicant shall provide data and documentation (including relevant invoices) showing quantities of such products used and quantities that have an ecolabel.

68. Chemicals (... points)

- a) At least 80 % by weight of detergents used in the building for cleaning operations shall have been awarded the Community eco-label or other national or regional ISO Type I eco-labels.
- b) Disinfectants shall be used only where they are necessary in order to comply with legal hygiene requirements.

Assessment and verification: a) The applicant shall provide data and documentation (including relevant invoices) showing compliance with the criterion.

b) The applicant shall provide a declaration of compliance with this criterion, together with an indication of where and when disinfectants are used.

FACILITIES PROVIDED

69. Shared Facilities (... points)

The building shall have shared facilities such as dishwasher for residential buildings, common areas, dry-air appliances, vacuum cleaner.

Is this useful? People like their own space and facilities. Compare communism.

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

ANNEX 2 EXISTING BUILDINGS

SECTION C - MANDATORY CRITERIA

DOCUMENTATION

1. Building Book

The building shall have an information and description document (Building book) where are reported all technical characteristics and the management, such as construction year, designer, project data, list of materials used, plants installed, any renovation and modification occurred during years, certification awarded, evidence of failings, remarks from users or third parties and corrective actions undertaken.

The Building Book shall be looked after and updated by the building's manager, such as the administrator for residential buildings, any other professional for offices and schools.

Assessment and verification: the applicant shall provide the Building book.

2. Maintenance plan

The building shall have an explicit plan for maintenance and efficient operation of the facility, covering all technical systems, and providing performance targets, system maintenance and replacement guidance over a 25-year period.

The plan shall be updated when the building or part of the building or building's plants are renovated.

Assessment and verification: the applicant shall provide the Maintenance plan showing compliance with the criterion.

3. User's guide

The building shall have a User's guide giving information on the use of the building and on its equipments.

IMPACTS ON SITE

4. Light pollution

Providing that local security standard are respected, the external lighting of the building shall avoid light pollution.

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

MATERIALS

5. List of products/materials

The Building Book shall report the list of products and materials used and the related quantity (in weight / volume).

The list shall be updated in case of renovation.

Assessment and verification: the applicant shall provide the complete list of materials and products used for the building's construction specifying type of materials, commercial denomination, weigh and volume.

6. Long life service materials

Materials used for non-structural functions (external and internal coverings and partitions, doors and windows, plants) shall have a life service period longer than 25 years.

Assessment and verification: the applicant shall provide the List of materials and adequate information showing compliance with the criterion.

7. Thermal insulation materials

Thermal insulation materials shall:

- achieve U-values (heat loss rate) lower than ones foreseen by national laws;
- ensure longevity of performance over the lifetime of the materials;
- have zero ozone depletion potential (ZODP);

All insulation materials must not be classified as carcinogenic according to Directive 97/69/EC.

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

8. Chemical products

Products and materials used for the interiors shall comply with the UE regulation n. 1272/2008.

9. Renewable and low emission energy source

At least 50-80% of the electricity used for all purposes shall come from renewable energy sources, as defined in Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market.

This criterion only applies to buildings that have an independent electrical heating system and have access to a market that offers energy generated from renewable energy sources.

Relevant economical penalties for the change of power supplier can be considered as no access to a free energy market.

Assessment and verification: the applicant shall supply a declaration from (or the contract with) the electricity supplier indicating the nature of the renewable energy source(s), the percentage of electricity supplied that is from a renewable source, documentation on the boilers (heat generators) used, if any and an indication of the maximum percentage that can be supplied. According to Directive 2001/77/EC, renewable energy sources shall mean renewable non-fossil energy sources (wind, solar, geothermal wave, tidal, hydro power, biomass, landfill gas, sewage treatment plant gas and biogases).

In case of non applicability, documentation of the request for renewable energy has to be supplied.

10. Heating and cooling passive systems

The building shall use heating and cooling passive systems at least for the XX% of the requirement (in relation with meteo-climatic areas).

Assessment and verification: (under development)

11. Labelled lighting systems

All light bulbs in the building shall have an energy efficiency of Class A or higher as defined in Commission Directive 98/11/EC of 27 January 1998 implementing Council Directive 92/75/EEC with regard to energy labelling of household lamps.

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

12. Labelled domestic appliances

All common appliances and machines shall be Energy class A or higher.

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

13. Energy efficiency certification

The energy requirement of the building shall be not higher than 75% of maximum primary energy specific consumption.

Assessment and verification: the applicant shall provide the energy certification under Directive 2002/91/EC of the European Parliament and of the Council (1) or where not

available in the national implementation system, the results of an energy audit performed by an independent expert on the energy performance of buildings.

14. Energy consumption

Yearly energy consumption shall be monitored and registered. In particular shall be registered the consumption of electric energy and thermal energy coming from public networks and from non renewable sources.

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

EMISSIONS

15. Rainwater loads

The building shall foresee a first flush rain-water diverter for rain water coming directly or indirectly from the building and their annexes, in order to divert them to the waste water management system.

Assessment and verification: the applicant shall provide adequate project documentation.

16. Release of dangerous/toxic substances into soil

The building and their annexes shall be structured in a way to avoid possible release of dangerous substances into soil such as release from garages, tanks, use of detergents, etc.

Assessment and verification: the applicant shall provide adequate project documentation.

WATER CONSUMPTION AND MANAGEMENT

17. Low-flush systems

All taps, showers, toilets in the building shall have water saving system.

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

18. Water consumption

Water consumption shall be measured and registered yearly.

Assessment and verification: the applicant shall provide collecting procedures and provide data registered yearly.

WASTE MANAGEMENT

19. Recycling facilities

The building shall have common waste systems in order to differentiate domestic and special wastes, produced by the building's users, in accordance with local regulations.

Building regulation shall foresee the delivery of such waste fractions to the public collecting systems.

HEALTH AND WELL-BEING

20. Noise reduction

The building shall comply with noise regulations.

Assessment and verification: the applicant shall provide technical documentation showing compliance with the criterion (e.g. phonometric assessment).

21. Exhaust gases

The building shall have in place measures in order to avoid dispersions of exhausted gases coming from boilers and /or motor vehicles within the building.

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

22. Allergies

Maintenance plan shall guarantee the adequate working of filter systems. Internal vertical and horizontal surfaces shall be an allergic and cleanable. Building service equipments and machines generating dust shall be placed in adequate service rooms.

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

23. Radon

The building shall comply with radon legislations.

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

24. Day lighting

According to the security and healthy standards, the building shall use at least the 60% of day natural lighting by means of, for example, window systems and light tubes or light pipes.

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

25. Temperature and humidity control

Heating and cooling equipments shall have systems regulated by users. Users shall be informed on how to use correctly the systems, including switching off of appliances in unused locals.

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

26. Lighting system control

The building shall have lighting regulation and control systems.

27. Glare Control

The building shall have glare control systems, such as hooded glasses, tents and other passive systems. The glare control systems shall allow the use of natural lighting.

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

28. Integrated indoor well-being

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

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

FACILITIES PROVIDED

29. Common ITC services - home office

The building shall have shared ITC plants such as internet and TV antenna. Old plants shall be removed and disposed in a proper way.

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

FITNESS FOR USE

30. Quality control

In case of renovation works, a pre-inspection shall be conducted where the licensee building supervisor checks the entire house delivery. Any defect found should be corrected where possible before the final inspection. If any defect is found at the final inspection, a plan to correct the defects must be drawn up in agreement with the owner.

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

31. Fitness for use control

The Building Book shall contain a specific evidence of failings, remarks from users or third parties and corrective actions undertaken.

Assessment and verification: (under development)

SECTION D – OPTIONAL CRITERIA

Each of the criteria set out in this Section has been attributed a value expressed in points or fractions of points. In order to qualify for award of the eco-label, buildings must score a minimum of points.

PLANNING - PROJECT

32. Sustainable project (... points)

The project phase shall consider local characteristics such as landscape, ecosystem quality, environmental resources, area's vocation.

Assessment and verification: the applicant shall provide adequate design documentation in order to show compliance with the criterion.

33. Site selection (... points)

Unless required by local regulations, the site location shall prefer:

- abandoned areas (residential or industrial);
- -fringe areas in urbanized zones.

How can you choose the site of an existing building? Because it is already chosen.

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

34. Design for disassembly, re-use or recycling (... points)

The list of materials as required in criterion 5 shall indicate, for each kind of materials, possible end-life use destinations specifying valorisation processes or treatments in order to reuse, recycling or disposal them.

Assessment and verification: the applicant shall provide the List of materials with adequate information.

35. Constructor's requirements (... points)

The constructor shall have capability on eco/green building.

Assessment and verification: the applicant shall provide the constructor's capability score card or the constructor's professional CV.

36. Project and construction QMS - Quality Management System (... points)

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

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

37. Innovative or regional design (... points)

Unless required by local regulations, the building shall respect local constructive characteristics or shall have innovative characteristics in accordance with environmental and security standards.

Assessment and verification: the applicant shall provide a technical report showing compliance with the criterion.

38. Integrated project planning (... points)

Design and construction phase shall involve a work team composed by experts in environment and performance topics related to the specific local characteristics.

Assessment and verification: the applicant shall provide an adequate documentation including evidence of the main environmental aspects and building performances and relative list, and CV, of professionals involved.

39. Building LCA (... points)

The building shall have the LCA made according to the ISO14040 standard.

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

40. Project and construction EMS (... points)

Companies in charge of the construction/renovation/maintenance of the building shall have an Environment Management System according to EMAS regulation or ISO 14001 standard.

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

IMPACTS ON SITE

41. Heat island (... points)

In order to avoid the heat island effect, the building shall use passive systems such as planting of local trees, use of light colors for exposed external surfaces (albedo effect), solar screens, green roofs, green vertical gardens, etc.

Assessment and verification: (under development)

42. Green areas (... points)

For green areas, the building shall prefer the use of local plant species.

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

MATERIALS

43. Wood and wood based materials (... points)

At least the 50-60% of any solid wood or wood-based material shall originate from reuse-recycling and/or from sustainable managed forests which have been certified by independent third party schemes fulfilling the criteria listed in paragraph 15 of the Council Resolution of 15 December 1998 on a Forestry Strategy for the EU and further development thereof.

Assessment and verification: The applicant shall provide appropriate documentation from the wood supplier indicating the types, quantities and precise origins of wood used in the building. The applicant shall provide appropriate certificate(s) showing that the certification scheme correctly fulfils the requirements as laid down in paragraph 15 of the Council Resolution of 15 December 1998 on a Forestry Strategy for the EU.

44. Halogenated free materials (... points)

(under development)

Assessment and verification: (under development)

45. Energy embodied in materials (... points)

At least the YY% in weight/in volume (to be defined) of materials and products used for the building's manufacture shall declare the energy embodied.

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

46. Traceability chain of materials (... points)

At least for the YY% in weight/in volume (to be defined) of materials and products used for the building's manufacture shall be declared the productive chain.

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

47. Labelled construction products (... points)

At least the 10% in weight/in volume (to be defined) of the all materials used in the building shall have a ISO Type I certification.

48. Use of re-used or recycled materials for non-structural functions (... points)

At least XX% of materials used for non structural functions shall originate from re-used or recycled materials.

Assessment and verification: the applicant shall provide the list of materials and adequate information showing compliance with the criterion.

49. Use of re-used or recycled materials for structural functions (... points)

At least the YY% of materials used for structural functions shall originate from re-used or recycled materials.

Assessment and verification: the applicant shall provide the list of materials and adequate information showing compliance with the criterion.

50. Responsible sourcing of materials (... points)

Building shall have at least XX% of products/materials coming from producers operating according to SA8000 standard.

Assessment and verification: the applicant shall provide adequate documentation showing compliance with the criterion such as producer's SA8000 certification or CEN TC 350 - prEN 15643-3 "Sustainability of construction works - Sustainability assessment of buildings - Part 3: Framework for the assessment of social performance".

51. Use of materials that are locally produced (... points)

At least the YY% of products and materials used for the building's manufacture shall not come from a distance longer than 100 tkm.

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

ENERGY

52. Insulation of Heating & Cooling distribution system (... points)

All heating and cooling distribution systems shall be insulated according to local regulations/standards.

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

53. Energy consumption monitoring and control (... points)

The building shall have a building management control system (BMS).

54. Energy efficiency certification (... points)

The energy requirement of the building shall be not higher than:

50% of maximum primary energy specific consumption (number of points to be defined)

25% of maximum primary energy specific consumption (number of points to be defined)

10% of maximum primary energy specific consumption (number of points to be defined).

Assessment and verification: the applicant shall provide the energy certification under Directive 2002/91/EC of the European Parliament and of the Council (1) or where not available in the national implementation system, the results of an energy audit performed by an independent expert on the energy performance of buildings.

EMISSIONS

55. CO2 embodied in construction products (... points)

At least the 25% in weight of materials reported in the list of materials shall have the GWP assessment values (as CO2 eq.)

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

56. Particulate matter embodied in construction products (... points)

At least the 25% in weight of materials reported in the list of materials shall have assessment values as Particulate Matter (<2.5mm, 2.5<mm<10mm, >10mm.).

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

WATER CONSUMPTION AND MANAGEMENT

57. Rainwater use (... points)

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

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

58. Grey-water reuse system (... points)

The building shall have a dual system for water adduction and distribution. Gray water shall be used for toilets and sanitary facilities.

59. Water use (... points)

The building yearly average water consumption shall be lower than 250 liter/inhab.day, excluding rainwater.

Assessment and verification: the applicant shall provide building consumption data showing compliance with the criterion.

WASTE MANAGEMENT

60. Sustainable management of construction and demolition waste (... points)

At least 75% of wastes generated during the construction or renovation processes shall be reused or recycled.

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

HEALTH AND WELL-BEING

61. Natural ventilation (... points)

The building shall have only natural ventilation according to UNI EN 15251 standard, with the exclusion of sanitary and kitchen areas.

Assessment and verification: The applicant shall provide technical documentation showing compliance with the criterion (to be defined technical assessment)

62. Indoor, outdoor paints and varnishes and coverings materials (... points)

- a) At least 50 % of indoor and/or outdoor painting used in the building shall be awarded with the Community eco-label or other national or regional ISO Type I eco-labels.
- b) At least 50 % of coverings materials used in the building shall be awarded with the Community eco-label or other national or regional ISO Type I eco-labels.

Assessment and verification: the applicant shall provide data and documentation (including relevant invoices) showing quantities of such products used and quantities that have an ecolabel.

63. Chemicals (... points)

- a) At least 80 % by weight of detergents used in the building for cleaning operations shall have been awarded the Community eco-label or other national or regional ISO Type I eco-labels.
- b) Disinfectants shall be used only where they are necessary in order to comply with legal hygiene requirements.

Assessment and verification: a) the applicant shall provide data and documentation (including relevant invoices) indicating the quantities of such products used and the quantities that have an eco-label.

b) the applicant shall provide a declaration of compliance with this criterion, together with an indication of where and when disinfectants are used.

OPERATION AND MAINTENANCE

64. Flexibility and adaptability (space) (... points)

The building shall allow flexibility and adaptability in the space modularity.

Assessment and verification: the applicant shall provide technical information on partition walls and related plants.

65. Flexibility and adaptability (plants) (... points)

Technical plants shall be easily checked and maintained. Single joins and connections shall be easily modulated.

Assessment and verification: the applicant shall provide technical information on plants and their location in the building.

FACILITIES PROVIDED

66. Open spaces, green areas, common areas (... points)

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

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

67. Car facilities (... points)

The building shall have adequate number of car places such as:

- for residential buildings at least 1 car-place for flat;
- for offices/schools buildings at least 1 car place for the 30% of employed and an adequate shared transport service.

Car places shall include a percentage reserved to pregnant women and disabled persons.

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

68. Cycle Facilities (... points)

All building users shall have cycle storage facilities and the building shall have specific cycle-pedestrian pathways.

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

69. Shared Facilities (... points)

The building shall have shared facilities such as dishwasher for residential buildings, common areas, dry-air appliances, vacuum cleaner.