A public enquiry on the recast of the EPBD is made on the internet.
The questions are listed below, followed by the proposed EAA answers.
For your comfort, relevant articles of the present EPBD have been inserted as reference.

GENERAL INFORMATION

Your profile (compulsory)

- ○ Citizen
- ◉ Organisation

Region (compulsory)

- ◉ European Union
- ○ Europe outside European Union
- ○ Other

Which European Union country? (optional)

- ○ Austria
- ○ Belgium
- ○ Bulgaria
- ○ Cyprus
- ○ Czech Republic
- ○ Denmark
- ○ Estonia
- ○ Finland
- ○ France
- ○ Germany
- ○ Greece
- ○ Hungary
- ○ Ireland
- ○ Italy
- ○ Latvia
- ○ Lithuania
- ○ Luxembourg
- ○ Malta
- ○ Netherlands
- ○ Poland
- ○ Portugal
- ○ Romania
- ○ Slovakia
- ○ Slovenia
- ○ Spain
- ○ Sweden
- ○ United Kingdom
- ◉ EU as a whole (for organisations only)
- ○ Some EU Member States (for organisations only)

- ○ Albania
- ○ Andorra
- ○ Armenia
- ○ Azerbaijan
- ○ Belarus
- ○ Bosnia and Herzegovina
- ○ Croatia
- ○ Georgia
- ○ Iceland
- ○ Liechtenstein
- ○ Moldova
- ○ Monaco
- ○ Montenegro
- ○ Norway
- ○ San Marino
- ○ Serbia
- ○ Switzerland
- ○ Turkey
- ○ Ukraine
- ○ Vatican City State

○ Former Yugoslav Republic of Macedonia ○ Russia

Organisation name (optional)

European Aluminium Association

Organisation type (compulsory)

- ◉ Association/Non-governmental organisation (NGO)
- ○ Chamber of commerce
- ○ Consultancy/Lobbying
- ○ Educational establishment
- ○ Employers' organisation
- ○ Energy Agency (national, regional, local)
- ○ European institution or body
- ○ Government, Ministry
- ○ Industry, business
- ○ International organisation
- ○ Local government
- ○ National government
- ○ Not-for-profit association
- ○ Parliament
- ○ Press
- ○ Private company
- ○ Public sector body
- ○ Publishing
- ○ Regional government
- ○ Scientific/research institute
- ○ Trade union
- ○ University
- ○ OTHER

Main field of activity (compulsory)

- ○ Building or building services engineering maintenance
- ○ Construction works
- ○ Policy and legislation
- ○ Real estate
- ○ Building services engineering equipment
- ○ Energy supply
- ○ Private housing
- ○ Users associations
- ◉ Construction products
- ○ Infrastructure
- ○ Public housing
- ○ OTHER

1. Which of the definition(s) or requirement(s) of the existing Directive should be clarified or simplified? Please choose the part(s) of the Directive you refer to:

☐ None	☐ Article 4	☐ Article 9
☐ Preamble	☑ Article 5	☐ Article 10
☐ Article 1	☑ Article 6	☐ Article 11
☐ Article 2	☐ Article 7	☐ Article 12
☐ Article 3	☐ Article 8	☐ Article 13

What do you propose to clarify or simplify in article 5 of the Directive?

Article 5
New buildings
Member States shall take the necessary measures to ensure that new buildings meet the minimum energy performance requirements referred to in Article 4.
For new buildings with a total useful floor area over 1 000 m2, Member States shall ensure that the technical, environmental and economic feasibility of alternative systems such as:
- decentralised energy supply systems based on renewable energy,
- CHP,
- district or block heating or cooling, if available,
- heat pumps, under certain conditions,
is considered and is taken into account before construction starts.

Include building integrated photovoltaic BIPV in the examples, e.g. between brackets after "decentralised energy supply systems based on renewable energy". Thermal Solar heating solutions should also be strengthened.
Make clear that the list is not exhaustive.

What do you propose to clarify or simplify in article 6 of the Directive?

Article 6
Existing buildings
Member States shall take the necessary measures to ensure that when buildings with a total useful floor area over 1 000 m2 undergo major renovation, their energy performance is upgraded in order to meet minimum requirements in so far as this is technically, functionally and economically feasible. Member States shall derive these minimum energy performance requirements on the basis of the energy performance requirements set for buildings in accordance with Article 4. The requirements may be set either for the renovated building as a whole or for the renovated systems or components when these are part of a renovation to be carried out within a limited time period, with the abovementioned objective of improving the overall energy performance of the building.

The target shall be the optimisation of the building's overall energy consumption, what only can be achieved by a holistic approach. I.e. there is no difference between new and existing buildings, when undergoing major renovation.
Requirements on components makes only sense, if part replacement is taking place, e.g. roof renovation, window replacements, etc.
Should minimum energy performance requirements be set for renovated systems or components, these should be based on a sufficient number of performance properties representative of aspects listed in Annex 1 & 2, to secure that both energy losses and AND ENERGY GAINS are taken into account, as well as occupant's comfort and health, e.g. daylight gains, indoor air exchange by natural ventilation. In summary, such minimum requirement cannot be based on one single aspect like a U-value, because it

impacts other energy efficiency aspects and could create a negative overall result for the occupant if not balanced and analysed carefully.

ANNEX
General framework for the calculation of energy performance of buildings (Article 3)

1. The methodology of calculation of energy performances of buildings shall include at least the following aspects:
(a) thermal characteristics of the building (shell and internal partitions, etc.). These characteristics may also include air-tightness;
(b) heating installation and hot water supply, including their insulation characteristics;
(c) air-conditioning installation;
(d) ventilation;
(e) built-in lighting installation (mainly the non-residential sector);
(f) position and orientation of buildings, including outdoor climate;
(g) passive solar systems and solar protection;
(h) natural ventilation;
(i) indoor climatic conditions, including the designed indoor climate.

2. The positive influence of the following aspects shall, where relevant in this calculation, be taken into account:

(a) active solar systems and other heating and electricity systems based on renewable energy sources;
(b) electricity produced by CHP;
(c) district or block heating and cooling systems;
(d) natural lighting.

2. THRESHOLDS WITHIN THE DIRECTIVE

The obligations of the current Directive on minimum energy performance requirements and inspections respectively cover existing buildings above 1000 m2 total useful floor area that undergo major renovation, and all new buildings, as well as boilers and air-conditioning systems above a certain rated output (in kW) respectively.

Please provide an answer to each of the following questions and, if possible, justify it by quantifying the environmental, social and economic impact of your proposal.

2.1. Do you propose that the 1000 m2 total useful floor area threshold for existing buildings that undergo major renovation (article 6 of the Directive) be changed or eliminated?
Yes, huge energy saving potential is lying idle in the existing building stock.

2.2 Do you propose that the 1000 m2 total useful floor area threshold for the requirements on 'alternative systems' (article 5 of the Directive) and/or on the display of the energy performance certificate (article 7(3) of the Directive) be changed or eliminated?
Yes

2.3. Do you propose that the thresholds on the rated output of boilers and/or air-conditioning systems subject to regular inspections (article 8 and article 9 of the Directive) be changed or eliminated?
No opinion

3. STRENGTHENING OF REQUIREMENTS

The existing Directive gives room for implementation at national/regional levels. Some national, regional or local authorities have laid down requirements which go beyond the Directive's requirements, e.g. on control schemes, link to financial incentives or on the realization of energy efficiency improvement measures.

*Please provide an answer to each of the following questions and, if possible, **justify it by quantifying the environmental, social and economic impact of your proposal***

3.1. Which new/changed requirement(s) or content concerning the energy performance certificate (article 7 of the Directive) do you consider to have a high impact on realizing energy savings in the buildings sector?

No opinion

3.2 & 3.3 (inspection of boilers & air conditioning systems):

No opinion

3.4. Due to the complexity and variation of boundary conditions in the 27 Member States (e.g. with regard to the existing buildings stock, outdoor climate conditions, costs of energy, labour and material, taxes, etc.), minimum energy performance requirements are not stipulated at EU level in the existing Directive. They are left for the Member States to define as regards both their definition and parameters instead.
What type of approach do you consider feasible and effective which could be laid down at EU level with regard to minimum energy performance requirements for buildings?

Define European classes for Energy Performance of Buildings (using the same philosophy as what has been done for reaction to fire).
Define boundary conditions.
Base all calculation on harmonised EN standards (CEN TC 89)

We could develop a set of "EuroEnergyClasses" based "EuroEnergyClimaticZones". It's not the aim to define an A, B, C ranking of the entire building, but to provide a common tool (language) and framework to the national authorities to require the appropriate zones for their territory. Zones could be defined by sun radiation, attitude, heating degree days, etc... The following EuroEnergyClasses could consist of a range such as 5-15 / 15-50 / 50-100 / 100-150 kWh/m2 year based on the different Zones.
What would be common and consequently harmonised, the methodology for calculating the energy consumption of a building, and the boundary conditions for the different climatic zones. This shall be based on the European Standards from CEN/TC 89, 256 and others. A Mandate has already been given to CEN, now the EU Commission & Community should make use of the results.

It's still left to the Member States to cluster their territory in zones in which EuroClass X or Y or ... must be applied. In short, the regulatory aspect remains with the Member States, but the EU provides a harmonised tool. Furthermore, the tool is fully performance based as only performance levels are described in the EuroClasses and the methodology in the present CEN-standards is performance oriented.

Such an approach is already well known in the construction society as the Construction Products Directive is also built up on this spirit.

3.5. Which other requirement(s) do you consider to need strengthening, and in which way?

For new buildings, member states should state minimum performance requirement at building level, but not set measures for achieving these targets. In particular, setting minimum performance level at component level should be avoided. As outlined above in item 1 Article 6) the limitation of the engineer/ architect's freedom for optimisation only results in sub-optimised solutions, what has negative overall impact to the society's aim of energy saving but also increasing occupants comfort/ health.

For existing buildings, in case minimum energy performance requirements should be set for renovated systems or components, these should be based on a sufficient number of performance properties representative of aspects listed in Annex 1 & 2, to secure that both energy losses and AND ENERGY GAINS are taken into account, as well as occupant's comfort and health.

4. THE ROLE OF THE PUBLIC SECTOR

The public sector is often seen as an important actor to raise broad awareness on energy efficiency in buildings and which can therefore also contribute to stimulating energy savings by acting as a leading example.

Please, if possible, justify your answer by quantifying the environmental, social and economic impact of your proposal.

Besides the current requirement of the Energy Performance of Buildings Directive for the public sector to display the energy performance certificate in a prominent place:
Do you consider the public sector should play a stronger role to act as a leading example for energy savings in buildings?
Yes

What further requirement(s) would you propose to include in the Directive for the public sector in order to act as a leading example for energy savings in buildings?
For State-owned buildings, the public sector should commit to ambitious renovation plans. E.g. having all buildings built before year "yyyy" be energy-audited and x% of them renovated before year "zzzz" following EPBD requirements.

For buildings rented by the public sector, a rent reduction should be obtained through an appropriate mechanism, if the building's energy consumption overruns a certain benchmark. This would motivate the building owner to upgrade his building to achieve better energy values and consequently a higher profitability. The benchmark level can be made tougher on regular basis. This would stimulate the entire renovation market in Europe.

5. OTHER

5.1. Do you consider that climate adaptation should significantly influence the level of requirements laid down by buildings regulation?
Yes

5.2. Do you propose other aspects/ideas than the aforementioned to be included in the recasting of the Energy Performance of Buildings Directive?
Yes

What other requirement(s) do you propose?
Please provide an answer and, if possible, justify it by quantifying the environmental, social and economic impact of your proposal.

SUSTAINABILITY ASSESSMENT OF BUILDINGS

The EPBD is focused on the use stage of buildings and does not include sustainability considerations around the life-cycle of construction materials, but it could become a puzzle piece in the overall sustainability assessment of buildings (CEN TC 350).
This would secure that the optimization of the energy consumption related to the operation of a building is not done at the detriment of the environment over the whole lifecycle of the building.

STIMULATION OF RENOVATION MARKET

A possible stimulation of the renovation market would be, the occupant can require a rent reduction, if the building's energy consumption overruns a certain benchmark. This would motivate the building owner to upgrade his building to achieve better energy values and consequently a higher profitability. The benchmark level can be made tougher on regular basis. This would stimulate the entire renovation market in Europe.