EuroACE welcomes the drive towards sustainable buildings and recalls that it should start with energy efficiency

EuroACE comments related to the Public Consultation on Sustainable Buildings

Brussels, 30th September 2013

Summary

EuroACE supports the move by the EU towards a greater focus on the long-term viability and value of our buildings. This focus is expressed through work on the environmental, social and economic impact of buildings and will underpin the development of new legislation, policies and standards.

To achieve a high level of sustainability, EuroACE recalls that having a high energy performance is the crucial first parameter that must be achieved in the EU, both for new and existing buildings. Buildings that do not have a high energy performance cannot be considered as sustainable.

Any policy initiative to move towards sustainability should depart from the existing policy frame and widen the scope of impacts in an incremental and holistic manner.

1. EuroACE supports the move by the EU towards a greater focus on sustainability in buildings, including their long-term viability and value. This focus is expressed through work on the environmental, social and economic impact of buildings and will underpin the development of new legislation, policies and standards. Due to the high level of energy that buildings consume and linked to the many roles they fulfill in our lives (social, economic, comfort, etc.), buildings play a key role in helping our economies become more sustainable.

- The EU low-carbon economy roadmap envisages an ambitious reduction of about 90% in greenhouse gas emissions by 2050. Given that the EU building stock to a great extent accounts for about 40% of total greenhouse gas emissions and an equally high share of the total energy consumption, it must therefore provide a very substantial contribution to achieve the 2050 long-term goals established in the EU low-carbon economy roadmap. EuroACE estimates that this contribution will mean that the energy demand of the EU’s building stock will have to be reduced by 80% by 2050 (as compared to demand in 2005).

- However, given their long lifetime, their contribution to people’s well-being and their significant share in society’s total fixed assets, Europe’s buildings cannot only be assessed on the basis of greenhouse gas emissions and energy consumption, but require a holistic life cycle assessment of their environmental, economic and social performance.

- In the past, even newly constructed buildings were poorly performing with energy demand often exceeding 350kWh/m²/a. The impact on the environment (energy wastage, pollution), people (health problems, energy poverty) and the economy (energy bills, import dependency) were significant.

- EuroACE recognises that together with the implementation of higher requirements for the energy performance of buildings, there is a shift in the impacts of energy used in the use phase versus the
energy used for construction and end of life phase. With the recast of the EPBD and its requirement that all new buildings are nearly zero energy buildings after 2020, and the adoption of the Energy Efficiency Directive in 2012, a significant move towards better performing buildings – both new and existing ones – is under way. **EuroACE fully supports this process which will have a strongly positive impact on all three pillars of sustainability.** At the same time, EuroACE recognises that the move towards more efficient buildings changes the relative weight of the main components of a building’s life cycle environmental impacts, as we move towards nZEB buildings. While the impact of the use phase (energy consumption) decreases thanks to the use of high-performing building products, systems and design solutions, impacts from construction and demolition phase get relatively bigger.

- **EuroACE supports a life cycle approach** to assess the sustainability of new and existing buildings based on their environmental, economic and social performance. When considering sustainability in buildings, all aspects and all phases should be considered in a holistic manner, not just a selection of impacts (e.g. only environmental ones) at a specific moment of time. Limiting sustainability assessments to environmental impacts ignores the **complex interrelations between buildings and society.**

2. To achieve a high level of sustainability in buildings, EuroACE recalls that having a high energy performance is a prerequisite both for new and existing buildings. Buildings that do not have a high energy performance cannot be considered as sustainable.

- Buildings are built for a long time and only get refurbished every 30 or 40 years. High energy performance of a building is the primary concern that should be accounted for. Due to the long life time of buildings **energy consumption in the use phase remains the biggest environmental impact of buildings.** This is why EuroACE focuses on encouraging energy efficiency to become a reality.

- **Today, the progress towards low energy buildings is too slow.** In spite of a shared aspiration for low energy buildings and the strong legislative push this has translated into, both for new and existing buildings, progress is slow and our buildings’ energy consumption remain too high. In fact, low energy buildings only represent a small proportion of the building stock and with the current progress it will take decades until low energy buildings become the norm.

- **Importantly, energy efficiency technologies are also a major contributor to the other pillars of sustainability (social and environmental pillars).** By implementing energy efficiency measures in a holistic manner, be it for new low energy buildings or during the course of renovation works, this will deliver multiple positive impacts for the building, in terms of reduced energy consumption, but also in other areas, in terms of comfort, safety, well-being, etc... For example, when it comes to the social performance of a building, air-tight building envelopes coupled with efficient (heat recovery) ventilation contribute to a healthy indoor climate. Likewise, a well-conceived combination of daylight through properly oriented windows and efficient lighting systems contributes to the well-being of building users and to reduction of the energy consumption of the building.

- Energy efficiency is also a major driver for the **economic performance of buildings.** It drastically reduces their running costs, tackles fuel poverty and, from a macro-economic standpoint, leads to

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the creation of millions of local jobs, lowers health insurance costs thanks to better indoor and outdoor air quality, increases government income and reduces energy import dependency.

3. Any policy initiative to move towards sustainability should depart from the existing policy frame and widen the scope of impacts in an incremental and holistic manner. Likewise, existing tools, methodologies and standards should be taken into consideration when developing analytical tools to assess the sustainability of buildings.

• Policies to address the energy impact of buildings have been developed. It is worth bearing in mind that energy efficiency technologies (and renewables) are the main source for the reduced overall environmental impact of state-of-the-art buildings. In this perspective, EuroACE believes that any policy aiming to improve the environmental performance and sustainability of buildings in the EU must build on existing efforts to minimise the energy demand in the use phase.

• EuroACE encourages the use of existing standards developed by CEN TC 350 (EN 15643-series and EN 15804) which enable an assessment of buildings, which integrates product performance. CEN/TC 350 has developed a series of standards to determine the environmental, economic and social performance of new and existing buildings. They take account of the impacts and end-of-life scenarios of construction products, as stated in Environmental Product Declarations. These product-related impacts are then counterbalanced with their benefits during the building use-phase, i.e. their contribution to the reduced energy demand of the building over its life cycle. EuroACE encourages the use of these standards whenever sustainability assessments for buildings are conducted.

• The purpose of energy efficiency products such as those represented by EuroACE is to minimise the energy demand of the building as part of a complex overall system. Fitness for use in this respect is therefore of paramount importance. The impact from the production of these products is secondary when compared to the building’s life cycle performance as, over their life cycle, all energy efficient products will save far more energy than the energy used for their production. Building on this positive benefit, EuroACE member companies are constantly striving to further reduce the environmental impacts of their products.

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EuroACE Members (September 2013) are: