Metals are essential for sustainable buildings

7th October 2013

As part of the "Sustainable Buildings" initiative of the European Commission and the related public consultation, METALS FOR BUILDINGS would like to emphasize the following points:

- METALS FOR BUILDINGS does not recommend the use of additional legislative instruments that will add cost and burdens on the construction industry without promoting a holistic approach towards "sustainable buildings".
- Rather than additional legislation, METALS FOR BUILDINGS considers that financial EU instruments have a key role to play in order to stimulate the renovation of existing buildings.
- METALS FOR BUILDINGS considers that the flexibility and adaptability of buildings is an important aspect of the building's sustainability dimension.
- METALS FOR BUILDINGS considers EPDs as the most appropriate format to communicate environmental information but perceives the need for a true European harmonisation.
- METALS FOR BUILDINGS considers as essential to recognise the recyclability dimension as a key element in the environmental assessment of construction products and therefore supports that "Module D", which is optional in today's EN15804, should become compulsory in the future.
- METALS FOR BUILDINGS calls for optimising deconstruction and demolition practices in order to maximise the environmental benefits from the secondary materials resulting from such operations.
- Flexibility, lightness, strength, durability and recyclability of metals make them essential for sustainable buildings.

1. Market stimulation but no additional legislative framework

METALS FOR BUILDINGS supports market stimulation instruments for more sustainable buildings but does not support the implementation of a new legislative framework. Building sustainability needs to be addressed from a holistic perspective integrating the 3 pillars of sustainability on the whole building life cycle. Striving towards more sustainable buildings is then very challenging and complex. Implementing additional legislative pieces to the existing ones (e.g. EPBD, CPR, Eco-design, etc.) will create a patchwork which will lead to a sub-optimisation with additional burdens to the industry. There are already today Building assessment schemes which stimulate the market. Building sustainability assessments are frequently requested by investors/banks due to the higher ROI they expect on medium or long term. In such a case, Life cycle cost, societal consideration and environmental impacts are all considered and stimulate the market in the right direction. However, there is still room for improving the harmonisation of criteria used in the various schemes.

Hence, METALS FOR BUILDINGS recommends using more intensively LCC[1] as a tool to stimulate the market in the right direction. In addition, EU financial support for energy efficient and sustainable buildings should be reinforced. **METALS FOR BUILDINGS does not recommend the use of additional legislative instruments that will add cost and burdens on the construction industry without promoting a holistic approach towards "sustainable buildings"**.

2. Need to stimulate the renovation market

Owing the huge building stock in Europe, METALS FOR BUILDINGS considers that renovation should have been more specifically addressed into the public consultation. Indeed, there is today a strong need to stimulate the renovation market since there are still many buildings with very low energy performance. In this context, financial EU instruments have a key role to play in order to unlock the market.

3. Buildings flexibility and adaptability

METALS FOR BUILDINGS considers that **the flexibility or adaptability of buildings is an important aspect of the building sustainability dimension**. Under the current quickly moving society, it is effectively crucial to secure an easy adaptability of the buildings to the new societal needs. This aspect needs to be considered as an important dimension.

4. Harmonisation of building assessment schemes

METALS FOR BUILDINGS considers that **stimulating more harmonisation among existing building sustainability assessment schemes is a more realistic objective than imposing a new one**. Several building assessment schemes are already well implemented and used by the market for many years. Striving for better harmonisation among these schemes makes sense and will help giving more credibility and robustness to the deliverables. In addition, it would reduce the efforts of various players in the building value chain for providing the appropriate data, e.g. by using in Europe a harmonised format of EPD based on EN15804 as potential input data for these schemes.

5. Harmonisation of EPD rules and requirements among program operators

METALS FOR BUILDINGS considers **EPDs as the most appropriate format to communicate environmental information** in a "BtoB" context. Since the publication of the standard EN15804, the development and use of EPDs in the Building sector has been significantly intensified. EN15804 becomes progressively the reference core rules in Europe. Within the ECO-platform alliance, most EPD operators active in Europe have also acknowledged the importance of EN15804 and agreed to align their product category rules to EN15804. However, **METALS FOR BUILDINGS still perceives the need for a true European harmonisation** since the various EPD programs operating nationally or internationally tend to require additional rules to EN15804 (e.g. indicators) which are specific to their program. Hence, while in practice, there is a trend to go for harmonised core rules at European level, there are still some specific rules which are generating complexity and obstacles to European-type EPD. In order to reduce cost and inconsistency, reducing or eliminating these additional requirements/rules would be beneficial for the whole value chain of the construction sector in Europe.

[1] prEN 166727 Sustainability of construction works – Assessment of economic performance of buildings – Calculation Methods – [Expected to be available in 2014]

6. Recognition of recyclability as part of the sustainability of building products

"Turning waste into resource" is one key priority as clearly stated in the roadmap for a more resource efficient Europe. METALS FOR BUILDINGS considers as **essential to recognise the recyclability dimension as a key element in the environmental assessment of construction products**. In practice, this means that the environmental aspects, i.e. benefits and burdens, resulting from the end-of-life recycling or/and recovery operations should be considered into "cradle to grave" or "cradle to cradle" EPDs. **As far as EN15804 is concerned, this means that the so-called module D, which is only optional, should become compulsory in the future**.

7. Optimizing the contribution of Construction and Demolition Waste (CDW) to resource efficiency

Under the same logic, the potential contribution of CDW to resource efficiency should be better exploited. Considering the renovation need and its high building stock, Europe is expected to generate a high quantity of CDW including renovation waste where significant improvement in term of resource efficiency can take place. It would make sense that this initiative better targets the maximisation of the contribution of CDW to resource efficiency, i.e. turning waste into resource. **Optimising renovation and demolition practices in order to maximise the environmental benefits from the secondary materials resulting from such operations should be a key objective**. In order to promote these practices, European guidance and/or standards on product or building recyclability and best practices should be developed.

8. Metals are essential for sustainable buildings

Due to their intrinsic properties, metals are widely used in the building and construction sector. They are a first choice material for structures, reinforcements, cladding, roofing, window frames, plumbing, heating equipment and many other applications. Metals are also frequently used in modular buildings which can be easily customised or adapted to specific needs. Metals can be found in old and historic buildings as well as in new, modern architecture.

Flexibility, Lightness, Strength, Durability and Recyclability are five key attributes which make metals sustainable solutions in the building sector. In particular, metal products are recycled without loss of quality at the end of the life cycle. The fact that metals do not degrade ensures that they can be recycled and used for the same application, with the same quality, again and again. Recycled metals and alloys can have the same properties as the original material.

When a building reaches the end of its life, some metal products can be directly re-used: being flexible and adaptable, the functional life of these parts can be extended. If not re-used, most metal products are then recycled. Indeed, more than 95% of the metal products used in buildings are nowadays collected at their end-of-life. Small and medium-sized companies play a key role in the collecting and processing of metal-containing products, on their journey to metal-recycling installations. High economic value is the main driver for this systematic collection and recycling. As metal recycling provides energy savings of between 60% and 95% compared to primary production, depending on the metal and the metal-bearing product, metal recycling creates a win-win situation for both the environment and the economy. The reuse or recycling of metal building products saves resources.