



General Assembly GA19/2

Summary of the ACE positions developed by the ESA WG since 2013

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Most people in the EU spend approximately 90% of their time in buildings and 100% in the built environment. Buildings shape social and cultural constructs and affect the health, well-being and productivity of people. Buildings account for over 40% of EU carbon emissions, while half of all raw materials and a third of all waste in the EU is construction related.

Despite the increasingly tight regulatory framework and large-scale investment for improving the energy performance of buildings, evidence shows that these have only had a marginal effect on carbon emissions, while creating a plethora of **unintended consequences** in terms of resource depletion, health and wellbeing, resilience and social cohesion.

The growing sense of a Climate and Biosphere Emergency puts unprecedented public pressure on EU institutions and professionals to take urgent actions to establish a financial, regulatory and research framework that:

1. Embeds **feedback and the validation of achieved performance** in use at its core to ensure accountability for quality and performance;
2. Tackles **impacts across the entire lifecycle** of buildings and their components;
3. Recognises the creation of **social, economic and environmental value** as fundamental to achieving a step-change in stock-wide building performance.

Based on feedback from ACE members representing over 562,000 architects in Europe, ACE advocates the following actions in these areas:

CREATING SUSTAINABLE VALUE THROUGH ARCHITECTURE: Reducing the consumption of natural resources, while increasing the economic and social value of buildings is the imperative of our times. The energy and environmental performance of new buildings and renovations relies on the expert integration of spatial, material and technical solutions that is led by architects. As a regulated profession, practitioners in the EU have to follow high standards of ethics and are the only member of the supply chain obliged to maximise the long-term resilience as well as the cultural, health and productivity benefits of buildings. It is this value creation that drives the long-term sustainability of buildings, yet it is also the least recognised aspect of building performance.

Aligning stakeholder incentives to support holistic value creation is a major challenge for this highly fragmented sector. It is widely acknowledged that the regulatory framework for the built environment must make whole life impacts as well as benefits more explicit for these to begin to translate into value.

- ⇒ **ACE calls for a holistic definition of building performance in line with the 17 UN Sustainable Development Goals, which includes accounting for both the resources consumed and the value created in terms of societal and economic well-being.**
- ⇒ **ACE emphasises the power of high-quality architecture as a means to re-cast our relationship with the natural world. Greater priority should be given to research and investment focusing on the role of the creative arts and design in the social, economic and environmental transformation of the built environment.**
- ⇒ **ACE advocates the creation of a Sustainable Buildings Directive to level the playing field for investors and to empower architects to effectively target whole life environmental performance enabling the transition towards circularity.**



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ESTABLISHING A HOLISTIC & LIFE-CYCLE APPROACH TO BUILDING PERFORMANCE:

There is an increasing body of scientific evidence showing a need to define 'building performance' as the use of natural resources for the creation of environmental quality, resilience and value. Considering environmental impacts beyond energy consumption over the full life-cycle of buildings is essential so that designers can balance the multiple and often conflicting factors driving building performance. To prevent impacts being transferred to less reported areas, the role of regulation is to require holistic reporting, while the role of architecture is to re-design the evolving interface between the built environment, its enabling technologies and its occupants.

Studies already show that a lifecycle approach tackles inefficiencies across the supply chain and can save substantially more carbon compared to targeting operational savings only. Given that to deliver 2050 targets new buildings and refurbishments should already be net zero, no stone should be left unturned.

⇒ **ACE therefore calls for a greater acknowledgement of all five pillars of building performance, namely:**

- Reducing the consumption of natural resources, including energy, water, materials, the creation of waste and environmental impacts;
- Improving indoor environmental quality including indoor air quality, thermal comfort, daylight, acoustics, biophilia;
- Raising occupant satisfaction including occupants' health and their perception of building functionality, indoor environmental quality and how the building meets their needs;
- Reducing the risks presented by the heating climate and ensure that buildings and neighbourhoods are resilient to extreme weather events.
- Transform the perception of value to reflect social, economic and environmental contributions over a building's life span as defined by the 17 UN Sustainable Development Goals.

⇒ **ACE advocates that energy renovation needs to be incentivised and regulated as part of overall functional and aesthetic upgrades of buildings and neighbourhoods.**

⇒ **ACE advocates a greater recognition of architectural solutions over technological ones: unless whole life cost and impacts are fully addressed, priority should be given to simple, passive, low-tech, locally tested solutions that do not consume energy and are less prone to human error.**

'MEASURE TO MANAGE': NEED FOR FEEDBACK AND VALIDATION: Current EU legislation does not mandate the reporting of achieved operational performance nor the validation of the indoor spatial and environmental quality achieved. **Validation and disclosure** of building performance in use is necessary to ensure that the investment of natural resources and funds deliver the anticipated outcomes, reducing risks. The reporting and validation of performance data is the most effective way to overcome the fragmentation of the sector and introduce greater accountability. Making such data accessible to the market would grow the evidence base for continuous performance, allow comparability of solutions between buildings, neighbourhoods and at stock level.



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- ⇒ **ACE calls for the creation of transparent reporting and benchmarking tools on achieved building performance, harmonised across MS.**

- ⇒ **ACE calls for a broad disclosure of the actual energy consumption data: aggregated anonymised data should be made available in the public domain, to ensure the rapid and continuous improvement of energy efficiency measures and technologies.**

- ⇒ **ACE strongly advocates the validation of the *actual* capabilities of building systems and fabric as well as performance in use to introduce accountability for building performance.**