



Innovative circular
economy & AI methodology
for sustainable high-energy
performance buildings



Alexander Bassis

Committee Manager
Austrian Standards International



Standardization as a Bridge Between Research and Market

Innovation in the field of sustainable building materials is crucial to reducing the environmental footprint of the construction industry while simultaneously creating economic opportunities. Yet, new materials, processes, or technologies often emerge in research laboratories and remain there because the path to market is complex and uncertain. Standardization offers a solution: it creates a common language, builds trust, and facilitates the practical implementation of innovative solutions.

Why Standardization is Essential

Standards ensure the comparability, compatibility, and interoperability of products and systems. They provide guidance for companies and researchers: What requirements apply to my product? How are these requirements to be tested and the results reported? Standards in the construction sector cover a wide variety of topics but are not always at the forefront of technological development. In such cases, it may be beneficial to initiate a revision of an existing standard or to develop a new standard to foster market uptake of innovative products and solutions.



Standardization



Standards also support trust in the market. They demonstrate that a product or system meets the expectations and requirements of industry and consumers. In this sense, standards act as a common language – a way to translate scientific results into a practical market vocabulary.

Standardization as an Economic Driver

Standards have both micro- and macroeconomic effects:

- At the national level, standards contribute directly to economic growth. Studies show that standards are responsible for around 20% of real GDP growth in Austria (equivalent to €1 billion per year).
- At the company level, standards increase profitability, even for small and medium-sized enterprises, by facilitating market access, building trust, and simplifying processes.

European standards are also a key instrument for the single European market: they promote cross-border trade, strengthen the competitiveness of European companies, and ease expansion into international markets. Many European standards are developed in conjunction with international standards, which remove technical as well as trade barriers and facilitate the development of new markets.

Standards Provide Guidance and Trust

Beyond economic benefits, standards offer practical advantages:

- **Benchmarking:** They provide benchmarks for performance, quality, and safety.
- **Innovation guidance:** Standards incorporate best practices and state of the art, allowing companies to align with the most recent advancements.
- **Consumer confidence:** Standards ensure that products, such as sustainable building materials, are safe, effective, and environmentally friendly, increasing adoption and acceptance.

- **Stakeholder trust:** Compliance with standards demonstrates commitment to best practices and regulatory requirements to investors, regulatory authorities, and partners.
- **Market access:** Standards simplify compliance with legal requirements (e.g. EU Construction Products Regulation, CPR) and reduce barriers to entry.

Harmonized EU standards play a particularly important role: they are aligned with legislative requirements. Companies adhering to these standards can demonstrate that their products meet the essential requirements of the directives.

SNUG and Standardization Gaps

As part of the SNUG project, identifying potential standardization gaps is a key objective. A gap can involve missing technical specifications, obstacles to implementing existing standards, or the substantial need for a new standard in a specific field. Market access for newly developed sustainable building materials is greatly facilitated if the right standards exist or are developed. SNUG works to identify these gaps and to propose solutions that connect research, industry, and regulatory authorities.

Accelerating Innovation

Standardization is not a barrier to innovation – on the contrary, it accelerates the transfer of research results into practice. Clearly defined standards allow companies to test, certify, and deploy new materials faster. Researchers receive feedback from practice, which in turn generates new research questions and speeds up further development.

Conclusion: Standardization as a Bridge Between Research and Market

Standardization is a catalyst for innovation, economic growth, and societal benefit. It makes research tangible, facilitates market access, and increases the adoption of sustainable technologies.

This is particularly relevant for sustainable building materials. Only by connecting research, market, and regulatory requirements can innovative materials and processes fully realize their ecological, economic, and societal benefits.

SNUG demonstrates that standardization can be practical, flexible, and co-creative. The more stakeholders are involved in developing and implementing standards, the more successful the bridge between research and market will be.

Standardization is therefore not an obstacle to innovation – it is its accelerator. Recognizing the opportunities that standardized procedures and products provide strengthens the economy, the environment, and society alike, paving the way for a sustainable future in construction.



Alexander Bassis



Committee Manager
Austrian Standards International



Alexander Bassis is a committee manager at Austrian Standards International with a focus on standards pertaining to the construction sector, such as insulation products, aggregates and timber houses. He is involved in both national and European standardization projects. Alexander Bassis holds a PhD in geology and has a background in geotechnics.

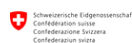
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