

“The EU Framework of Core Indicators, Level(s), has just been published. Level(s) is the result of more than two years of combined effort by many construction stakeholders, including valuable input from Knauf Insulation. The next step is to fully implement a test phase and we call on the whole chain to show passion and commitment to create an ambitious long-term vision for a better sustainable built environment in Europe.”

Josefina Lindblom, Unit of Sustainable Production, Products and Consumption, European Commission for DG Environment

A new vision for green building

How Knauf Insulation can help specifiers make the most of the European Commission's new sustainable building framework.

2017 is set to be a landmark year for sustainable building with the launch of a European Commission framework, Level(s), that could pave the way for new environmental performance laws for Europe's buildings.

The framework Level(s) will “develop indicators to assess environmental performance throughout the lifecycle of a building and promote their use for building projects”.

The good news is that at Knauf Insulation we are familiar with every element of this framework which focuses on the environmental impact of building components — from cradle to grave — on energy performance, climate change impact, resource efficiency, water use, indoor air quality and lifecycle costing.

We have always championed a lifecycle assessment approach to our products, because it provides the most accurate available insight into issues of sustainability.

We have third party validated Environmental Product Declarations (EPDs) for the majority of our products and when verified EPDs are not available, dedicated Life Cycle Assessment documents for specific products can be delivered in a few days.

Vincent Briard, Sustainability and Product Regulatory Affairs Director at Knauf Insulation, said: “We welcome the Commission's Framework as a major step forward for improved construction practices and we hope that in the long-term it will form the initial foundations for an ambitious Environmental Performance of Buildings Directive in the future.”

“At Knauf Insulation we have long campaigned for a lifecycle assessment approach to sustainability and we believe such a directive would be good for the industry and innovation, good for people and ultimately good for the environment.”

And, of course, for specifiers who want to navigate this new framework we can help. Most of our products can make a significant contribution to all its key criteria. We also have an experienced in-house team of sustainability experts to support our customers as well as tools, such as KnaufTerm software, to dive deep into energy use and environmental impact across the lifecycle of products.

“We look forward to working with specifiers to provide the best possible solutions whatever the scope and scale of their projects,” said Vincent.

KNAUFINSULATION

How we are helping specifiers prepare for Level(s)

ENERGY PERFORMANCE

Energy use is the cornerstone of sustainability and the cornerstone of the Commission's framework. Our products are designed to save energy and money. Even better, our calculations reveal that one unit of energy used to manufacture one unit of our typical Glass Mineral Wool saves 570 energy units over its assumed 50-year use phase.

CLIMATE CHANGE IMPACT

The framework is inspired by the European Union's legal commitment to the Paris COP21 agreement to make on-going emission reduction commitments. As buildings are the biggest consumers of energy accounting for 40% of Europe's energy use and 36% of its emissions, our products can reduce emissions significantly over the lifetime of a building. Based on this assumption, our Glass Mineral Wool installed in 2016 reduced energy consumption in Europe's buildings by approximately 1.5 billion kWh. Lifecycle Assessment calculations show that the emissions generated during the manufacture of these solutions were offset within months of installation.

RESOURCE EFFICIENCY

Products such as our Glass Mineral Wool with ECOSE Technology are made from up to 80% recycled glass. Environmental Product Declarations (EPDs) also examine in minute detail every stage of our products' lifecycle from material sourcing to disposal or recycling and enable us to examine new ways to do more with less.

WATER USE

Vegetated roofing has long been recognised as an effective stormwater management tool in cities to help with storm water management. Our Green Roof Solution Urbanscape® can reduce storm water run-off, which reduces the burden on sewer systems by 70-95% in summer. Through natural bio-filtration, green roofs can also prevent contaminants and toxicants from reaching streams and waterways.

INDOOR AIR QUALITY

The framework's emphasis on improved air quality is a reflection of a wider focus on the health and well-being of buildings as an important indicator of good sustainable practice. Knauf Insulation with ECOSE Technology is certified Indoor Air Comfort Gold from Eurofins which meets Europe's most demanding indoor environmental standards such as Blue Angel and A+ labelling in France.

ACOUSTICS

We are delighted to see that acoustics found place in the first version of the framework. At this stage it is just indicative, but we are confident that it will become more important with the growing realisation of its impact on the well-being of building users. The majority of our products provide exceptional sound absorption performance and dramatically reduce the unhealthy impact of noise pollution.

LIFECYCLE COSTING

Lifecycle Costing evaluates the economic impact of an asset from the cradle to the grave. Our sustainability team understands the importance of integrating LLC into project management and also the critical role our products can play. Our solutions are affordable and designed to cut operational energy costs over their lifecycle.

FIVE REASONS WHY THE NEW EUROPEAN FRAMEWORK LEVEL(S) MATTERS

The impact of buildings is unacceptable

1 During their lifecycle European buildings pump out 36% of Europe's CO₂ emissions, consume half of all extracted materials, use 40% of Europe's energy, consume a third of its water and generate a third of all waste.

There is a need to drive improvement

2 The Commission describes the initiative as “a voluntary reporting framework that has a broad potential for use by building sector professionals across the EU” and is rigorous enough to drive improvement in performance and allow comparison between buildings.

Buildings need to be more sustainable

3 Buildings have long lifetimes and it is vital that innovations are encouraged that will help reduce the environmental impact of building components as well as increase their durability and recyclability.

Paris commitments are binding

4 The European Union is among the 197 parties that signed the Paris Agreement to keep global temperature rise this century well below 2°C. The Framework contributes.

Other countries are not waiting

5 Many countries are already putting the environmental impact of buildings at the heart of legislation such as in France where Fiches de Déclarations Environnementales et Sanitaires (FDES) — are mandatory on construction products. The declarations also insist on building indoor air quality and introduce a new French label system E+C- for new buildings which stands for positive energy and carbon reduction. In Finland the government is looking at implementing mandatory LCA of buildings by 2025, while in Austria subsidies are allowed if an LCA is conducted for a building and a reference target achieved.

For more details about the European Commission framework visit ec.europa.eu