



Daniel Dinuzzo / unsplash

EU drives sustainable buildings with Level(s)

As the EU works towards its ambitious climate goals, it has launched a series of strategies. Level(s) underpins these strategies by facilitating data collection, comparison and collaboration among stakeholders, including REHVA members, in order to transition to a new, green way of thinking when it comes to buildings and construction.

Bringing Level(s) to life

The European Commission began working on Level(s) in 2015, and officially launched the reporting framework in October last year. By improving data collection, the innovative platform aims to enhance communication between all stakeholders involved in the development of sustainable buildings. It introduces a common language to the industry and works towards



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the European Union's ambitious climate goals. The strategic policies in place under the EU Green Deal are supported by Level(s), a new building methodology focusing on sustainable growth.

The new pan-European framework underpins policy in the building sector. It is designed to support data collection to accurately measure and assess the

sustainability of buildings over their full life cycle, taking into account design, materials, performance, deconstruction and reusability.

“Level(s) is a broad framework, which covers key areas during the full life cycle of buildings, carbon, material, water, but also health and comfort, resilience to climate change and risk and value,” explains Kestutis Sadauskas, Director for Circular Economy and Green Growth at the European Commission’s Directorate-General for the Environment (DG ENV). “Member States are gradually looking at how to incorporate aspects like these, and we believe Level(s) can be the answer to many of their questions.”

Level(s) provides a common language for stakeholders and professionals across Europe, aiming to create a more innovative, sustainable and user-friendly built environment. “The concept behind the Level(s) framework started to take form once the building sector became a key area of action for the European Commission in terms of resource efficiency, circular economy and whole life carbon,” says Sadauskas. “We realised that, to truly achieve sustainable transformation in the building sector, we need a common language that not only could be used across the building chain, but also help with data comparison across different countries. This work was a natural continuation of objectives set out in the Roadmap to a Resource Efficient Europe, a few years earlier.”

Since the conception of Level(s), awareness around the carbon impact of buildings’ entire life cycles has drastically increased. “The timing for the launch of Level(s) could not be better,” explains Sadauskas. “We now find ourselves in a situation where more and more Member States realise that in order to reach their carbon objectives, it is necessary to look at the full life cycle of buildings. An enormous peak of carbon is emitted already before the building starts being used, through, for example, material production, transportation and construction. Design based on circularity, with lifespan extension, adaptable and flexible buildings, assembly and disassembly of building elements, deconstruction as opposed to demolition and clever low carbon design solutions – this has the potential to reduce these embodied carbon emissions significantly. This is at the core of Level(s).”

Who can use Level(s)?

Level(s) provides a simple platform to discuss and analyse the performance of buildings throughout

their lifespan, with indicators that can be applied at every life cycle stage. It helps building designers, investors and policymakers to transform the built environment into a sustainable and circular one. The indicators can be used to improve building and sustainability standards by encouraging different building professionals to work together to reach common sustainability objectives, comparing various design options and supporting the monitoring of building performance. They also support future EU policy and allow public authorities to develop and implement policies prioritising sustainable buildings. Investors, property owners and landlords benefit from Level(s) – the platform enhances dialogue between design, technical and financial stakeholders and ensures European buildings are futureproofed. Tracking the performance of buildings across their whole life cycle increases accountability in the industry and enables investors to have confidence in buildings.

The development of Level(s), which included a substantial test phase across the EU, has been a great collaboration between building professionals, national and regional authorities and the European Commission. “It has been fantastic to witness the enthusiasm of the building sector, with companies and authorities from the start to the end of the building chain, in developing and testing Level(s) as a reliable, future-proofed framework,” remarks Sadauskas. “It bodes well for a sustainable future in the building sector, and for the adoption of Level(s) across Europe, now that the final version of the framework has been launched.”

Level(s) is not a certification scheme. It is a tool for those looking to measure, understand and improve a building’s sustainability over its entire life cycle. It helps to analyse and compare data against environmental objectives and targets by focusing on the different impacts of each material and use, informing the design and functionality of the building. Furthermore, many certification schemes have been involved in the development of Level(s) and are now looking at how they can align with and incorporate the framework’s common language indicators. But first and foremost, Level(s) brings circularity and lifecycle thinking to the mainstream market. It consists of a minimum number of indicators with maximum leverage to deliver sustainability.

What’s in it for REHVA members?

Level(s) indicators consider every aspect of sustainable buildings and construction. As well as assessing

buildings' energy performance, water consumption and resilience to climate change, the indicators measure comfort and wellbeing aspects of buildings in their internal environment.

Creating buildings that are attractive to live and work in and that protect human health is a priority as occupant satisfaction is a critical parameter for the success of a building. **Indoor air quality, lighting, heating, ventilation and air conditioning** are all assessed in order to maximise the health and comfort of the occupier. For example, thermal comfort throughout the year, such as increased heating in summer or inadequate heating in winter, could significantly impact the user's health and comfort levels.

The road to greater sustainability and accountability

Level(s) has been met with enthusiasm and support from industry professionals and continues to gain traction as it evolves. A great example is the LIFE Level(s) project (<https://lifelevels.eu/>) run by Green Building Councils, which aims to mainstream sustainable buildings in Europe by working closely with stakeholders to explore how Level(s) can be implemented on a European scale. It is currently developing a comprehensive mapping system and a web-based reporting template to further its work in the building sector.

Further emphasising the importance of Level(s), the European Commission recently adopted legislation supporting sustainable investment. Within the Sustainable Finance and EU Taxonomy package, the EU Taxonomy Climate Delegated Act aims to attract private investment to green activities. It does so by defining which economic activities most contribute to the EU's environmental objectives and provides guidance on measuring their contribution to climate change mitigation.

The Act encompasses construction and real estate activities, and sets out criteria for new buildings to steer sustainable investment. Among other criteria, the life cycle Global Warming Potential (GWP) resulting from the construction phase will need to be calculated and made available to be disclosed, in the case of new buildings larger than 5 000 m². The Level(s) methodology is referred to for this assessment.

“With Level(s) helping to define metrics and methods, people can now talk about the targets instead of

discussing the ‘best’ calculation or assessment methods,” explains the Director of Research and Development at the German Sustainable Building Council (DGNB), Anna Braune, who was involved in testing Level(s) on the Knauf Insulation training centre in Slovenia, a collaboration with Knauf Insulation and the Slovenian Ministry of the Environment and Spatial Planning. Anna believes that the widespread adoption of Level(s) will be primarily motivated by the desire and commitment of Member States to contribute to a greener future. “First, public authorities and decision makers must say: yes, we want to decarbonise our building activities over the whole life cycle and promote low carbon buildings today. Yes, we want to contribute to the shift towards a real circular economy, and we will do this by securing healthy and comfortable spaces, resilient and adaptable for future climate, without excessive future costs, at low risks,” she explains. “Once they commit to these objectives, they will use Level(s) – or tools which incorporate Level(s) indicators – on their own activities, and include it as a basic requirement for permits or funding attribution for all cities, regions, and countries.”

Looking to the future with Level(s)

“The end goal is that, by using Level(s), users are investing in a cost-effective framework that helps them future-proof their building projects in line with circular economy, whole life carbon performance and other green policy goals,” explains Sadauskas. “We know from the great collaboration in the last six years, that the building sector sees this as a common language. In a way, we are not just harmonising data and metrics. We are also harmonising the built environment's vision of a sustainable future. This is something that we would like to see reflected in the implementation of the national Recovery and Resilience Plans.”

Level(s) will continue to push and lead the conversation around whole life carbon, sustainable building and circular economy. In turn, it will help Member States to reach their carbon objectives, supporting the work towards meeting the EU's energy and climate targets for 2030 and 2050. ■

Useful links

Level(s) website:

ec.europa.eu/environment/topics/circular-economy/levels

LinkedIn group: www.linkedin.com/groups/12501037/