

Why embrace the EU framework for sustainable buildings (and where to start)?



JOSEFINA LINDBLOM
Policy Officer, DG ENV, European Commission

Anyone who follows developments at EU level will know that building sector policies and legislation, including those affecting the HVAC market, are being updated to help improve sustainability performance throughout the building life cycle – from design to end-of-life. This reorientation to a more circular built environment will be essential in delivering on commitments under the European Green Deal to reduce net greenhouse gas emissions to zero by 2050 and to decouple economic growth from resource use.

That is why, whenever my colleagues and I speak at industry events, buildings professionals, product manufacturers, business leaders and policymakers at national, regional and local level always seem to want to know one thing: how to stay ahead of the legislation and be ready to embrace changes in their working environments. Our answer is ‘Level(s)’, the EU common language framework guiding the sustainability performance assessment of buildings.

So, what is Level(s)?

Level(s) is a sustainability performance assessment solution. It has six objectives, addressing the main sustainability considerations throughout the building life cycle, from planning and design through to deconstruction and demolition. It can be used by all kinds of buildings professionals, including planners, procurers, product manufacturers, architects, heating and ventilation experts, waste management professionals and many others.

The sustainability indicators within each Level(s) objective describe how a building’s performance can be aligned with EU policy in areas such as indoor air quality, energy, material use, water, waste, and resilience to climate change.

While Level(s) has been freely available since October 2020, you will be pleased to learn that the European Commission recently published a new eLearning programme to make Level(s) easily accessible to professionals across the sector. So, if you are someone who is interested in Level(s) but unsure where to begin, the eLearning programme is your new starting point.

Why start using Level(s) now?

By starting to use Level(s) now, you will stay ahead of (and be compliant with) revisions to legislation. For example, the European Commission has

proposed a revision to the Energy Performance of Buildings Directive. It calls for buildings professionals to calculate the life cycle Global Warming Potential (GWP) for most new builds from 2030, using the Level(s) methodology. For large buildings (with a useful floor area of more than 2 000 square meters) the obligation to calculate GWP would apply sooner, as of 2027. Level(s) also informed the recent Commission Proposal for the Construction Product Regulation, which sets harmonised rules for CE marking construction products in the EU. The proposal covers the macro-objectives of Level(s) in the ‘basic requirements for construction works’ in Annex I of the Regulation. According to the plans, characteristics addressed in Level(s) will be part of the declaration of performance for CE marked products. Level(s) is referenced in the proposed revision of the Energy Efficiency Directive (EED) too, adopted by the Commission in July 2021. For the first time, the EED encourages Member States to include the life cycle perspective when procuring public buildings. Furthermore, Level(s) will be the basis for the revision of the Green Public Procurement Criteria for office buildings. These criteria will be expanded to cover schools and social housing, and will pay particular attention to renovation. We want to make them even more firmly based on circularity and life cycle principles. We can do so thanks to the Level(s) indicators. In short, Level(s) is guiding changes to several pieces of legislation, creating a strong incentive for the building sector to adopt the framework. That is where the new eLearning programme comes in!

How do you navigate the eLearning programme?

The eLearning programme is divided into seven self-guided eLearning modules.

We advise all users to take the opening Introduction module (Module 0), which will help you to get familiar with the purpose and metrics of the macro-objectives and indicators behind the Level(s) framework. It will also help you understand how to define the appropriate assessment level at each project stage and to apply the indicators in your context.

After completing the introduction, you can choose from a further six modules (Modules 1-6) covering each of the Level(s) macro-objectives and their corresponding performance indicators. Each module takes you step by step through the indicators you are interested in. You will cover the aim of each indicator, what you need for assessing performance, what to measure, and how to assign roles and responsibilities.

What many people reading this will appreciate is that the eLearning programme is fully customisable. With such a wide variety of buildings professionals interested in using Level(s), we have designed a programme that is adaptable to different needs and interests. This means you can pick and choose the modules most relevant to you or complete the programme from start to finish. Alternatively, you can select from a number of guided learning journeys, covering occupant welfare, global warming, circularity, future-proofing, and sustainable finance.

A case study approach

Throughout the eLearning programme you will explore a detailed case study showing how experts working on an office building project in Madrid applied each Level(s) indicator in their working environment. For example, Module 3 covers the Level(s) macro-objective on the efficient use of water resources. After completing the module and reinforcing your knowledge with a quiz, the case study will show you how the team used Level(s) to assess and monitor sustainability performance on water consumption at Level 1 (during the conceptual design assessment), Level 2 (during the detailed design and construction stages) and at Level 3 (when the building was in use, following handover to the client). You’ll read about all the factors they took into consideration and see their data and calculations, giving you deeper insight into how to put Level(s) into practice on your project.

Is the Level(s) eLearning programme for you?

The programme is for professionals involved in each or all the different stages of the building lifecycle - whether you're new to Level(s) or more experienced. The course materials also highlight the roles and responsibilities for each type of building professional when using Level(s). This means the eLearning programme is suitable for use by experts throughout the built environment. And of course, the programme covers the Level(s) sustainability performance assessment indicators likely to be of concern to REHVA members, such as those associated with indoor air quality, lighting, heating, ventilation and air conditioning, for example.

What else is new from Level(s)?

The Commission has released a new Calculation and Assessment Tool (CAT) to make it easier to measure sustainability performance, the Level(s) way. CAT is there to support you to complete life cycle assessments using Level(s) during the different life cycle stages. It is a user-friendly solution for completing Level(s) assessments on your building projects and provides a simpler way to calculate and compare results between different projects. Its interface is designed with SMEs and micro-enterprises in mind and there are no fees or charges for using CAT.

Need more information?

In case you missed it, you now can watch the video recording of the Commission's recent webinar (recorded on 3 June this year), introducing the eLearning programme and CAT to buildings professionals. The two-hour session gives a detailed overview of all the resources, as well as examples of different applications. The question-and-answer sessions during the event will anticipate many of the queries you may have, so be sure not to miss it.

Take your first steps into Level(s)!

Watch the webinar, recorded on 3 June 2022, introducing the new tools and addressing questions from buildings professionals like you. Visit <https://www.youtube.com/watch?v=-ms2XF9iSW4>.

You can find out more about Level(s) and access the eLearning programme and CAT tool on the Level(s) website. There, you will also find a short animation and set of factsheets introducing the new tools. Visit ec.europa.eu/environment/levels.

Finally, to keep updated with all the latest Level(s) developments, including updates to the eLearning programme and CAT, be sure to subscribe to the Level(s) LinkedIn Group. Visit <https://www.linkedin.com/groups/12501037/>. ■

What can I do with CAT?

Buildings professionals can work with CAT in many ways, but some of the most common use cases include:

- Testing different approaches to the design, construction, de-construction and maintenance of a building.
- Evaluating the relative advantages and disadvantages of, for example, different materials, and design options when exploring the most effective solutions for your project, taking into account sustainability considerations and life cycle costs.
- Compiling a choice of sustainability performance options in a clear and transparent way for your customers.