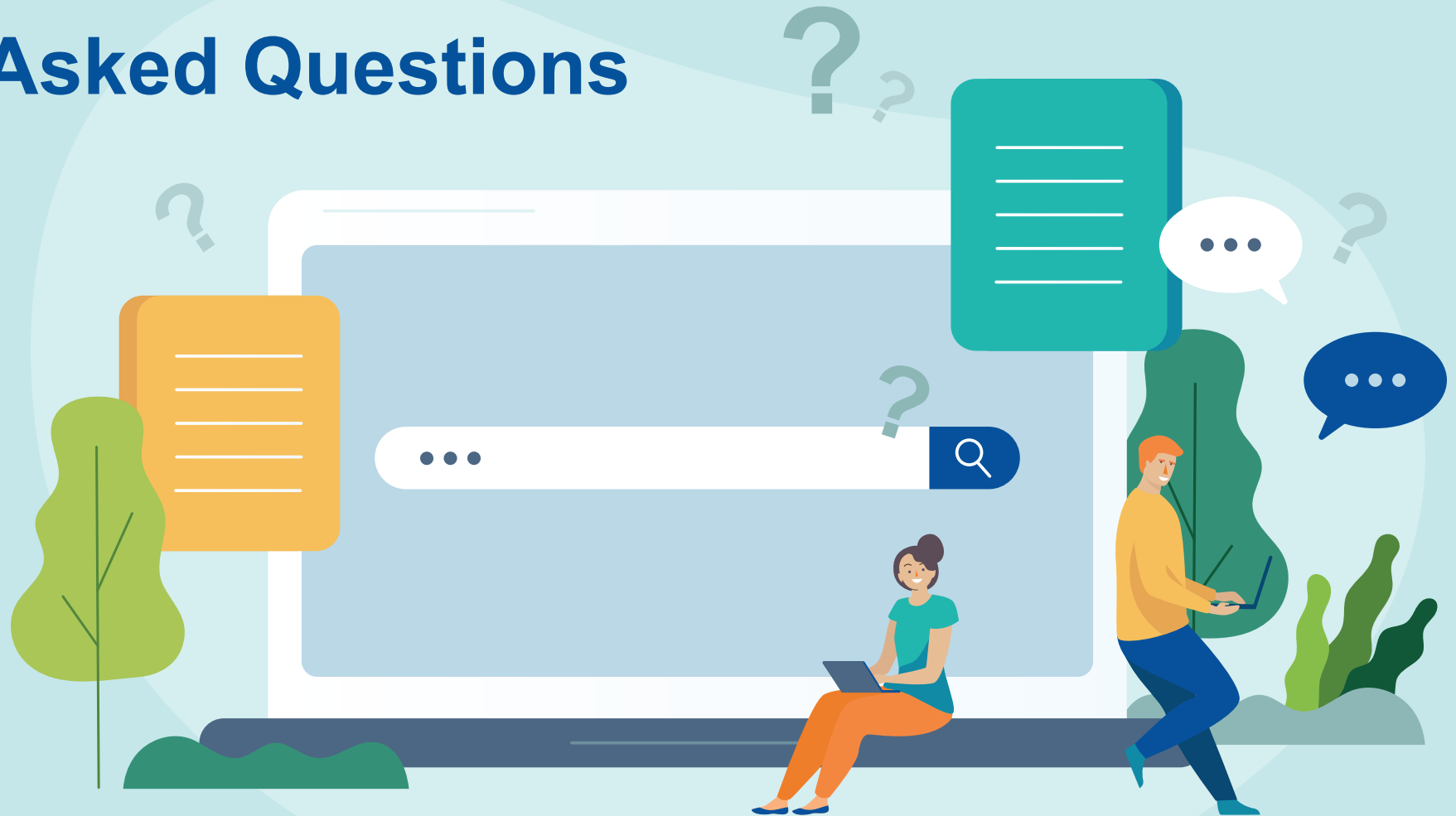


Level(s) Frequently Asked Questions

December 2024



Level(s) Frequently Asked Questions



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- + Is there any environmental life cycle impact reduction required in Level(s)?
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Level(s) Frequently Asked Questions



- + Which will be the changes in the material categories listed in the current manual?
- + Which LCA software can I use to carry out the LCA according to Level(s)?
- + How can a Life Cycle Assessment (LCA) tool be included in the software list provided in the indicator 1.2?
- + Is RICS Whole Life Carbon guidance compliant with the Level(s) framework?
- + What happens if the data quality indicator is not achieved? Can the results of such an analysis (not meeting the quality data indicator) be presented for the purpose of EU Taxonomy?
- + Is it mandatory to report all impact categories listed in EN 15978?
- + Which is the link between EU Taxonomy and Level(s)?
- + Is there any reporting tool that can be used to show the results of LCA?
- + Should the calculator Bill of Quantities from Indicator 2.1 be used for reporting at all levels?
- + Should the cost fields in the calculator of indicator 2.1 be filled in?



Level(s) Frequently Asked Questions

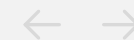


- + In the “L2 CW estimate” sheet of indicator 2.2 v1.1 calculator, the over-ordered materials (OO) in the table “Probable CW+OO outcome” is calculated using the best outcome for Construction Waste (CW) instead of OO, is this correct?
- + Will there be a calculator available for office and residential scoring within the adaptability indicator?
- + Manual for indicator 2.3 only contains criteria for evaluating the functional adaptability of residential and office buildings. How should the manual be used to review alignment of other types of buildings for this indicator?
- + When calculating indicator 2.3 of level 2 respectively, are minimum points expected in all specific design aspects?
- + Where can the template for Indicator 2.4 of Macro-Objective 2 be downloaded?
- + How can you implement Level 2 for the Indicator 4.2, and which is the reference temperature?



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If you are new to the European framework for sustainable buildings, we recommend you first read the introductory guide found on the homepage of the Level(s) [website](#). Then, we advise you to start by exploring the [e-learning programme](#) which is designed to help you to learn how to apply Level(s) in practice.

Once you are familiar with the basics, you will need to review the user manuals which provide guidance about how to use the framework.

All the documentation is freely accessible on the '[Start using Level\(s\)](#)' page of our website which is linked to the Joint Research Centre website:

- The introduction on how to work with Level(s). **User Manual 1.**
- How to set up a Level(s) project. **User Manual 2.**
- How to use each indicator, step by step. **User Manual 3** for each indicator, depending on which Level(s) objectives and indicators are relevant to you.

This website also includes links to the specific calculators (Excel templates) available for different indicators.

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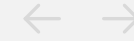
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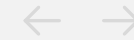


We encourage you to:

- Join the LinkedIn group if you are not already a member, to connect with the Level(s) community [here](#).
- Subscribe to the Level(s) mailing list to receive the newsletter and important messages about the framework [here](#).

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Yes!

To further support you, we have developed a comprehensive set of online training materials. Our eLearning course provides a detailed overview of Level(s) and prepares you to start using it in your working environment.

For those already using Level(s), the Calculation and Assessment Tool (CAT) makes it easier to complete your sustainability performance assessments. **You can access them at:**

https://environment.ec.europa.eu/topics/circular-economy/levels/elearning-and-tools_en

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The Level(s) common framework is based on six macro-objectives that address key sustainability aspects over the building life cycle. These can be tracked through sixteen indicators divided by each macro-objective. They describe how the building performance can be aligned with the strategic EU policy objectives in areas such as energy, material use and waste, water, indoor air quality and resilience to climate change.

A project team decides which objectives to focus on, which indicators to work with and finally, at what level. Level(s) can be applied at each stage of a building's life cycle:

- Setting objectives at concept stage.
- Assess performance at design and construction.
- Follow up after completion.

Please refer to the *Learning journey* document in [e-learning programme](#) under the Resources section on the right-hand side of the screen.

It will suggest the indicator that best suits your priorities.

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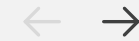


Level(s) was designed with residential and office buildings in mind, however, it may be used to assess the sustainability performance of other types of buildings too. In particular, macro-objective 1 and 2 indicators can generally be quite easily applied to all building types. One possible exception is indicator 2.3, which might be less important for warehouses. This is because warehouses are normally built with large open spaces and long roof spans so that lots of different things could be set up in that space. For this reason, warehouses would, by default, tend to score high in indicator 2.3 for any interior aspects.

There are no plans at the moment to expand the scope of Level(s) to other types of construction work.

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Level(s) is a voluntary framework, not a certification scheme, based on 16 indicators related to the following six macro-objectives that together make up the key aspects of a building's sustainability: greenhouse gas emissions, resource efficient life cycles (materials and water), healthy and comfortable spaces, adaption and resilience to climate change and optimised life cycle cost and value.

This framework provides a clear set of priorities for a building's performance and a standardised basis for setting requirements for new and renovated buildings. A common language, developed at EU level, for stakeholders throughout Europe's buildings and construction sectors to follow or to incorporate within existing sustainability practices or certification systems. Public authorities at national, regional and local level and certification providers can also adopt the Level(s) common language to stay aligned with the European Union and its Member States.

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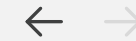


As a non-certification scheme, Level(s) is designed to provide a common language for the sustainability performance assessment of buildings throughout Europe:

- Level(s) does not come with built-in benchmarks. It provides you with a valuable set of information and data which can enable you to understand, improve and optimise the sustainability performance of an individual building.
- Level(s) does not require a verification process by third party. Users are responsible for collecting data, benchmarking, and quality assurance.
- Level(s) does not require any registration process for users and projects. In addition, there is no repository of projects and their results. However, there is a real interest in having some comprehensive case studies. We are currently working on a large project with 10 different building projects across the EU that are using the Level(s) indicators. The results will be used to develop practical case studies, which we can then share with people to show more clearly how the process works.

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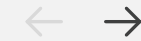
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- Level(s) is also a voluntary tool helping building professionals to assess and report the sustainability of their building project. There is currently no roadmap to become policy. However, Level(s) is increasingly being integrated into EU legislation. For example, the EU Taxonomy refers to Level(s) in the technical screening criteria of several of its sustainable activities. More recently, the Energy Performance of Buildings Directive (EPBD) requires assessment of the whole life carbon for new buildings and refers to the Level(s) methodology to do so. Another example is the upcoming Green Procurement Criteria for office buildings.

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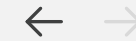


1. Select the macro-objectives and indicators to address depending on the project objectives and at what level to apply them. **This could depend on the stage of the building's life cycle:**
 - a. Level 1: conceptual design assessment.
 - b. Level 2: detailed design and construction assessment.
 - c. Level 3: as-built and in-use assessment.

A design team could use different levels for the different indicators, using one or more levels for each indicator to track performance over the course of the project. The more levels that can be addressed, the more complete the picture of the project's sustainability performance.
2. Establish a **Level(s) project plan considering:**
 - a. Level(s) performance assessments
 - b. Information and data management
 - c. Renovation baseline
 - d. Property market valuation
 - e. External verification

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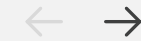


3. Complete **building description**:
 - a. Location and climate
 - b. Building type and age
 - c. How the building will be used
 - d. The building model and characteristics
4. Read carefully each User Manual 3 of the defined indicators in the Level(s) project plan and complete the reporting formats. **Reporting formats could be completed using different tools:**
 - a. Calculation Assessment Tool (CAT).
 - b. Reporting format tables included in the User Manual 3 of each indicator.
 - c. Calculators Excel templates

See User Manual 1 and 2 for more information.

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The Directorate General for Environment (DG ENV) of the European Commission oversees the Level(s) framework. The set of indicators has been developed with the Joint Research Centre of the Commission and the building sector and tested during a beta phase. Since its launch in 2020, there have been no plan to further develop Level(s). However, DG ENV ensures that the framework remains updated, user-friendly and fit for policy developments with some initial progress in the following indicators:

- **1.2 Life cycle Global Warming Potential (CO₂ eq./m²/yr):** update the indicator in line with the new Energy Performance of Buildings Directive.
- **2.1 Bill of quantities, materials and lifespans:** update the tiers with a clear guidance of the building elements to be considered through the Level(s) indicators.
- **2.2 Construction & Demolition waste and materials:** update the tiers and EU Taxonomy issues.
- **2.3 Design for adaptability and renovation:** update the scoring system for residential projects and development of a calculator excel tool.
- **2.4 Design for deconstruction, reuse and recycling:** update the tiers.

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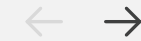
- **4.3 Lighting and visual comfort:** development of Level 2 and Level 3.
- **4.4 Acoustics and protection against noise:** development of Level 2 and Level 3.
- **6.1 Life cycle costs (€/m²/yr):** update the tiers.

In addition, it is planned to update the CAT tool every two years. However, we need some time to analyse how the system works and whether the structure should be changed. It will likely be in 2025 when we introduce any new updates or structural improvements.

We will make sure that Level(s) continues to be relevant and take into account the latest developments in standards and policy. However, this does not mean that Level(s) will change, but rather that more detail will be added as EU policies evolve in the future.

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Level(s) area definition is being update within the User Manual 2 “Setting up a project to use Level(s)” where there are two types of areas:

- **Gross external area of the building:** It is defined as the area of a building measured externally at each floor level taking into account perimeter wall thickness.
- **Useful internal floor area:** Refers to the measurement of the net internal area inclusive of shared circulation areas that are within the thermal envelope. Total useful surface area of any building located outside, such as balconies, covered galleries or exclusive-use roof terraces, will be reported separately.

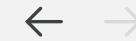
Particularity residential

Accommodation schedule for the development or renovated stock, with the following information:

- *Number of residential units per typology and by bedspaces.*
- *Total useful internal floor area of each residential unit type in the schedule.*

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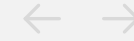


See table 10 within the user manual for more information related to inclusions and exclusions.

Alternatively, Directive (EU) 2024/1275 of the European Parliament and of the Council of 24 April 2024 on the energy performance of buildings (EPBD) the definition of 'reference floor area' may be used. If this standard is used, it should be clearly specified.

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"Level(s), the European Union framework for sustainable buildings".

Level(s) was developed by and is under the responsibility of the European Commission Directorate-General for the Environment.

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Indicator 1.2

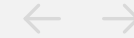


Level(s) is a voluntary framework, not a certification scheme. Level(s) is designed to provide a common language for the sustainability performance assessment of buildings throughout Europe. It does not come with built-in benchmarks. Indicator 1.2 measures the greenhouse gas (GHG) emissions associated with a building at different stages along the life cycle. It measures the building's contribution to emissions that cause the earth's global warming or climate change. Therefore, there is no set percentage reduction that needs to be met.

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Indicator 1.2



At this stage there is no central register of projects/results.

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Indicator 1.2

Some Member States can be considered as frontrunners, having developed their own methodologies - some of them were developed before the introduction of the Level(s) framework and, as such, they can differ from it. France and the Netherlands are examples of such countries. Other Member States, particularly in northern Europe, have developed methodologies subsequent to the development of Level(s). These methodologies are largely based on the Level(s) framework, but very few Member States have them.

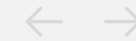
Level(s) is a common language framework where Member States that do not yet have their methodologies can build their own. Regarding the EPBD, we are working to align Level(s) with the new directive. However, it is important to note that Level(s) itself does not accommodate different national methods that do not meet the minimum criteria laid down by Level(s).

Still, the policy could allow for other nationally recognised methodologies.

Level(s) Frequently Asked Questions

- + Is there any environmental life cycle impact reduction required in Level(s)?
- + Is there any central database where reference studies are provided or where buildings can be added?
- + How is Level(s) dealing with the existence of national building LCA methodologies?
- + Is indicator 1.2 related to EN 15804?
- + Can Level(s) indicator 1.2 life cycle Global warming potential be used to calculate LCA for any type of building?
- + Is it possible to assess indicator 1.2 life cycle Global warming potential in a renovation project?
- + What is the exact definition and scope of the area of the building used for indicator 1.2 Life Cycle Global Warming Potential?
- + As for lifespans, are they realistic?
- + Is there any simplified method to carry out the LCA according to Level(s), with a minimum number of modules and building elements to be included in the system boundaries and in the assessment?

Indicator 1.2



Level(s) refers to EN 15804, which is the standard for Environmental Product Declarations (EPDs), as well as the EN 15978 standard for the whole building.

Additionally, it refers to the ISO 14040/44 standards and the European Commission's product environmental footprint methods.

Level(s) Frequently Asked Questions

- + Is there any environmental life cycle impact reduction required in Level(s)?
- + Is there any central database where reference studies are provided or where buildings can be added?
- + How is Level(s) dealing with the existence of national building LCA methodologies?
- + Is indicator 1.2 related to EN 15804?
- + Can Level(s) indicator 1.2 life cycle Global warming potential be used to calculate LCA for any type of building?
- + Is it possible to assess indicator 1.2 life cycle Global warming potential in a renovation project?
- + What is the exact definition and scope of the area of the building used for indicator 1.2 Life Cycle Global Warming Potential?
- + As for lifespans, are they realistic?
- + Is there any simplified method to carry out the LCA according to Level(s), with a minimum number of modules and building elements to be included in the system boundaries and in the assessment?

Indicator 1.2



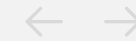
Level(s) was designed with residential and office buildings in mind, however, it may be used to assess the sustainability performance of other types of buildings too.

In particular, this indicator can generally be quite easily applied to all building types.

Level(s) Frequently Asked Questions

- + Is there any environmental life cycle impact reduction required in Level(s)?
- + Is there any central database where reference studies are provided or where buildings can be added?
- + How is Level(s) dealing with the existence of national building LCA methodologies?
- + Is indicator 1.2 related to EN 15804?
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- + What is the exact definition and scope of the area of the building used for indicator 1.2 Life Cycle Global Warming Potential?
- + As for lifespans, are they realistic?
- + Is there any simplified method to carry out the LCA according to Level(s), with a minimum number of modules and building elements to be included in the system boundaries and in the assessment?

Indicator 1.2



Yes.

This indicator applies for construction of new buildings and renovation of existing buildings.

The User Manual of Indicator 1.2 defines the different aspects to be considered both for new buildings and renovation of existing buildings.

Level(s) Frequently Asked Questions

- +

Is there any environmental life cycle impact reduction required in Level(s)?
- +

Is there any central database where reference studies are provided or where buildings can be added?
- +

How is Level(s) dealing with the existence of national building LCA methodologies?
- +

Is indicator 1.2 related to EN 15804?
- +

Can Level(s) indicator 1.2 life cycle Global warming potential be used to calculate LCA for any type of building?
- +

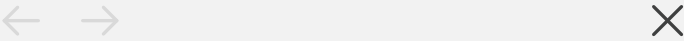
Is it possible to assess indicator 1.2 life cycle Global warming potential in a renovation project?
- +

What is the exact definition and scope of the area of the building used for indicator 1.2 Life Cycle Global Warming Potential?
- +

As for lifespans, are they realistic?
- +

Is there any simplified method to carry out the LCA according to Level(s), with a minimum number of modules and building elements to be included in the system boundaries and in the assessment?

Indicator 1.2



Level(s) area definition is being updated within the User Manual 2 “Setting up a project to use Level(s)” where there are two types of areas:

- **Gross external area of the building:** It is defined as the area of a building measured externally at each floor level considering perimeter wall thickness.
- **Total useful internal floor area:** Refers to the measurement of the net internal area inclusive of shared circulation areas that are within the thermal envelope. Total useful surface area of any building located outside, such as balconies, covered galleries or exclusive-use roof terraces, will be reported separately.

Table 10 of User Manual 2 identifies those items that will be included or excluded from a floor area measurement exercise. In all cases, the method used will be reported on for comparative purposes.

Alternatively, the Directive (EU) 2024/1275 of the European Parliament and of the Council of 24 April 2024 on the energy performance of buildings (EPBD) the definition of ‘reference floor area’ may be used. If this standard is used, it should be clearly specified.

Level(s) Frequently Asked Questions

- + Is there any environmental life cycle impact reduction required in Level(s)?
- + Is there any central database where reference studies are provided or where buildings can be added?
- + How is Level(s) dealing with the existence of national building LCA methodologies?
- + Is indicator 1.2 related to EN 15804?
- + Can Level(s) indicator 1.2 life cycle Global warming potential be used to calculate LCA for any type of building?
- + Is it possible to assess indicator 1.2 life cycle Global warming potential in a renovation project?
- + What is the exact definition and scope of the area of the building used for indicator 1.2 Life Cycle Global Warming Potential?
- + As for lifespans, are they realistic?
- + Is there any simplified method to carry out the LCA according to Level(s), with a minimum number of modules and building elements to be included in the system boundaries and in the assessment?

Indicator 1.2

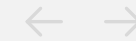


The lifespans are included in the User Manual 2.1 and are being reviewed in order to include the appropriate life (i.e.. Ground floor slab has been changed to 60 years).

Level(s) Frequently Asked Questions

- + Is there any environmental life cycle impact reduction required in Level(s)?
- + Is there any central database where reference studies are provided or where buildings can be added?
- + How is Level(s) dealing with the existence of national building LCA methodologies?
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- + As for lifespans, are they realistic?
- + Is there any simplified method to carry out the LCA according to Level(s), with a minimum number of modules and building elements to be included in the system boundaries and in the assessment?

Indicator 1.2



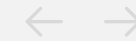
The aim of indicator 1.2 is to quantify the Global Warming Potential (GWP) contributions of a building along its life cycle from the 'cradle' (the extraction of the raw materials that are used in the construction of the building) through the 'grave' (the deconstruction of the building and how to deal with its building materials, i.e., recovery, reuse, recycling and disposal) and to the 'cradle' (the benefits and loads beyond the system limits).

This indicator is being updated to be aligned with the Energy Performance Buildings Directive. Therefore, the minimum scope required by the Delegated Act to set out a Union framework for the national calculation of life cycle GWP will be adopted. Consequently, the systems boundaries and scope of building elements to be included in the assessment will be aligned with the Delegated Act of the EPBD.

Level(s) Frequently Asked Questions

- + Which will be the changes in the material categories listed in the current manual?
- + Which LCA software can I use to carry out the LCA according to Level(s)?
- + How can a Life Cycle Assessment (LCA) tool be included in the software list provided in the indicator 1.2?
- + Is RICS Whole Life Carbon guidance compliant with the Level(s) framework?
- + What happens if the data quality indicator is not achieved? Can the results of such an analysis (not meeting the quality data indicator) be presented for the purpose of EU Taxonomy?
- + Is it mandatory to report all impact categories listed in EN 15978?
- + Which is the link between EU Taxonomy and Level(s)?
- + Is there any reporting tool that can be used to show the results of LCA?
- + Should the calculator Bill of Quantities from Indicator 2.1 be used for reporting at all levels?
- + Should the cost fields in the calculator of indicator 2.1 be filled in?

Indicator 1.2



Indicator 1.2 refers to the “User Manual 2 document – Completing the building description” to identify the building elements, components, products and materials to be included in the assessment. User Manual 2 is in the process of being updated with additional level 4 and is also included within the User Manual 3 for indicator 2.1.

Therefore, these new tiers need to be considered for the scope definition of building elements.

Level(s) Frequently Asked Questions

- + Which will be the changes in the material categories listed in the current manual?
- + Which LCA software can I use to carry out the LCA according to Level(s)?
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Indicator 1.2



The tool used must ensure that the LCA covers certain minimum requirements, such as covering the minimum system boundaries proposed by Level(s), as explained in the User Manual 3: Indicator 1.2 Life cycle Global Warming Potential (GWP). A list of LCA tools aligned with Level(s) has been published in the [Level\(s\) documentation](#) site.

Level(s) Frequently Asked Questions

+ Which will be the changes in the material categories listed in the current manual?

+ Which LCA software can I use to carry out the LCA according to Level(s)?

+ How can a Life Cycle Assessment (LCA) tool be included in the software list provided in the indicator 1.2?

+ Is RICS Whole Life Carbon guidance compliant with the Level(s) framework?

+ What happens if the data quality indicator is not achieved? Can the results of such an analysis (not meeting the quality data indicator) be presented for the purpose of EU Taxonomy?

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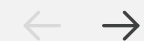
+ Which is the link between EU Taxonomy and Level(s)?

+ Is there any reporting tool that can be used to show the results of LCA?

+ Should the calculator Bill of Quantities from Indicator 2.1 be used for reporting at all levels?

+ Should the cost fields in the calculator of indicator 2.1 be filled in?

Indicator 1.2



If you would like your software to be included in the recommended tool list, please add a new enquiry to the helpdesk. Specific information will be required to be provided to assess the compliance of the tool with Level(s) methodology such as:

- Methodological adherence to Levels and EN Standards
- System boundaries & scope
- Indicators
- Target market
- Database
- Building - specificity
- Model granularity
- Data Quality
 - The tool supports reliability assessment of the quality of the data input
 - Sensitivity analysis (influence of parameters and datasets on results)
 - Uncertainty analysis (variability of results)
 - The tool supports Scenario analysis (alternative options)

Level(s) Frequently Asked Questions

+ Which will be the changes in the material categories listed in the current manual?

+ Which LCA software can I use to carry out the LCA according to Level(s)?

+ How can a Life Cycle Assessment (LCA) tool be included in the software list provided in the indicator 1.2?

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+ Should the calculator Bill of Quantities from Indicator 2.1 be used for reporting at all levels?

+ Should the cost fields in the calculator of indicator 2.1 be filled in?

Indicator 1.2



- Transparency and verification
- Data exchange & interoperability: Import and Export
- Cost
- Accessibility
- Support
 - Demo version, documentation and/or initial training available for free
 - Long distance learning offered
 - After sale support offered (e.g., helpdesk)
 - No training support

Level(s) Frequently Asked Questions

- + Which will be the changes in the material categories listed in the current manual?
- + Which LCA software can I use to carry out the LCA according to Level(s)?
- + How can a Life Cycle Assessment (LCA) tool be included in the software list provided in the indicator 1.2?
- + Is RICS Whole Life Carbon guidance compliant with the Level(s) framework?
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Indicator 1.2

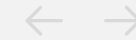


Due to the number of different building certification bodies (which are also subject to continuous change), we do not currently provide guidance on their alignment with Level(s). We suggest you cross check the RICS criteria against Level(s) or consider working directly in the Level(s) framework.

Level(s) Frequently Asked Questions

- + Which will be the changes in the material categories listed in the current manual?
- + Which LCA software can I use to carry out the LCA according to Level(s)?
- + How can a Life Cycle Assessment (LCA) tool be included in the software list provided in the indicator 1.2?
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Indicator 1.2



The overall data quality will be calculated as the contribution-weighted average of the data quality for each hot-spot according to the equation on page 35 of the User Manual 3 for the indicator 1.2.

A minimum data quality must be ensured to carry out an LCA.

Regarding EU Taxonomy, Level(s) is referred only to define the scope of elements required in the assessment and the selection of calculation tools. Data selection must be carried out according to EN 15978.

Level(s) Frequently Asked Questions

- + Which will be the changes in the material categories listed in the current manual?
- + Which LCA software can I use to carry out the LCA according to Level(s)?
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Indicator 1.2

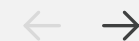


Level(s) requires reporting the Global Warming Potential of a building. However, with indicator 1.2 there is an opportunity to go further by selecting the full set of environmental impact category indicators specified in EN 15978 rather than just the GWP. The results will be obtained by applying the same methodology for each of the impact categories to the calculation of environmental impacts for the life cycle inventory.

Level(s) Frequently Asked Questions

- + Which will be the changes in the material categories listed in the current manual?
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Indicator 1.2



To help ensure your projects align with the EU taxonomy, please visit the EU taxonomy navigator section relating to the economic activity where you are working on (i.e.. construction of new buildings). This is an educational and user-friendly website offering a series of online tools to help users better understand the EU taxonomy in a simple and practical manner, ultimately facilitating its implementation and supporting companies in their reporting obligations.

Further explanations of the taxonomy requirement in relation to Level(s) indicator 1.2 can be found on this website under 'Substantial contribution criteria'. The criteria in question require that *'The life-cycle Global Warming Potential (GWP) of the building resulting from the construction has been calculated for each stage in the life cycle and is disclosed to investors and clients on demand.'*

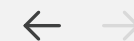
According to footnote 286 of the [Climate Delegated Act](#) published in the Official Journal on 9 December 2021 and applicable since January 2022, 'The scope of building elements and technical equipment is as defined in the Level(s) common EU framework for indicator 1.2.'

In addition, as the GWP must be a result from the construction, Level 3 should be carried out to report it.

Level(s) Frequently Asked Questions

- + Which will be the changes in the material categories listed in the current manual?
- + Which LCA software can I use to carry out the LCA according to Level(s)?
- + How can a Life Cycle Assessment (LCA) tool be included in the software list provided in the indicator 1.2?
- + Is RICS Whole Life Carbon guidance compliant with the Level(s) framework?
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Indicator 1.2



For the Global Warming Potential impact category, Level(s) user manual refers to the following category impacts:

- **Climate change – total:** Global Warming Potential total (GWP total) kg CO₂eq. The total global warming potential (GWP) is the sum of: GWP-fossil, GWP-biogenic and GWP-luluc.
- **Climate change – fossil:** Global Warming Potential fossil fuels (GWP fossil) kg CO₂ eq.
- **Climate change – biogenic:** Global Warming Potential biogenic (GWP-biogenic) kg CO₂ eq.
- **Climate change – land use and land use change:** Global Warming Potential land use and land use change (GWP luluc) kg CO₂ eq.

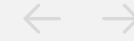
Level(s) refers to EN 15804 + A2 standard while the EU Taxonomy refers EN 15978:2011 (which corresponds with EN 15804+A1 standard).

However, EN 15978 is in the process of being updated and it is expected that it will refer to EN 15804 + A2 standard. Therefore, both Level(s) and EU Taxonomy will refer to EN 15804+A2.

Level(s) Frequently Asked Questions

- + Which will be the changes in the material categories listed in the current manual?
- + Which LCA software can I use to carry out the LCA according to Level(s)?
- + How can a Life Cycle Assessment (LCA) tool be included in the software list provided in the indicator 1.2?
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Indicator 1.2

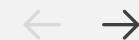


For transparency reasons, a new reporting tool is under development. This tool will not only report the LCA results, but will also include information of the project, the assumptions made for the LCA calculations, and other useful information to homogenise the information reported.

Level(s) Frequently Asked Questions

- + Which will be the changes in the material categories listed in the current manual?
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- + Should the calculator Bill of Quantities from Indicator 2.1 be used for reporting at all levels?
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Indicator 2.1



As outlined in the manual for the indicator, the appropriate reporting method should be selected and followed based on the project's current stage and Level:

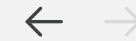
- **Level 1:** completion of the reporting table included in section L1.5 Reporting format. This table includes a checklist of the relevant aspects for optimising the consumption of construction materials and products with a brief description for the project.
- **Level 2:** Bill of Quantities calculator. In cases where users are already using BIM, it may be more appropriate for them to continue using BIM software for the compilation and manipulation of data relating to BoQ, BoM and associated costs and service life estimates. This is possible in case this BIM model can create the same links as the calculator. This Level 2 focuses on estimated costs.
- **Level 3:** Bill of Quantities calculator updated with final building elements. This Level 3 focuses on actual costs during the construction phase.

Data in green cells must be entered and data in yellow cells are optional (all levels) as per the definition included in the User Manual of this indicator).

Level(s) Frequently Asked Questions

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Indicator 2.1



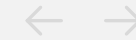
Please note that any deviations from the Level(s) default building element scope will be reported and that, for consistency, the building will be defined in terms of a minimum scope of building parts and associated elements from which they are made up.

These are set out in Bill of Quantities calculator.

Level(s) Frequently Asked Questions

- + Which will be the changes in the material categories listed in the current manual?
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Indicator 2.1



No.

These are optional steps for this indicator. Please note that as indicated in the indicator calculator instruction sheet, the cells highlighted in yellow are optional data.

Level(s) Frequently Asked Questions

+

In the “L2 CW estimate” sheet of indicator 2.2 v1.1 calculator, the over-ordered materials (OO) in the table “Probable CW+OO outcome” is calculated using the best outcome for Construction Waste (CW) instead of OO, is this correct?

+

Will there be a calculator available for office and residential scoring within the adaptability indicator?

+

Manual for indicator 2.3 only contains criteria for evaluating the functional adaptability of residential and office buildings. How should the manual be used to review alignment of other types of buildings for this indicator?

+

When calculating indicator 2.3 of level 2 respectively, are minimum points expected in all specific design aspects?

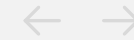
+

Where can the template for Indicator 2.4 of Macro-Objective 2 be downloaded?

+

How can you implement Level 2 for the Indicator 4.2, and which is the reference temperature?

Indicator 2.2



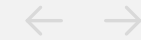
Yes.

This is being reviewed, and it will be considered in the updated version of the calculator that will be published soon.

Level(s) Frequently Asked Questions

- + In the “L2 CW estimate” sheet of indicator 2.2 v1.1 calculator, the over-ordered materials (OO) in the table “Probable CW+OO outcome” is calculated using the best outcome for Construction Waste (CW) instead of OO, is this correct?
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Indicator 2.3



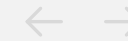
A new Calculator for this indicator will be published in the coming months.

This includes office and residential scoring system.

Level(s) Frequently Asked Questions

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Indicator 2.3



Level(s) was designed with residential and office buildings in mind. However, it may be used to assess the sustainability performance of other types of buildings too. Although Macro-objective 1 and 2 indicators can generally be easily applied to all building types, other indicators such as Indicator 2.3 might make more sense for office and residential. While the scoring system can serve as a guideline for different typologies, the indicator is not adapted to determine their score accurately.

In case of buildings with differences between floors, extrapolation of the score could be done.

Level(s) Frequently Asked Questions

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Indicator 2.3

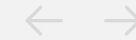


Indicators are meant to be used on entire buildings. A design with a higher number of points demonstrates a bigger alignment with the indicator, striving to make buildings more adaptable as a result. Regarding the calculations of indicator 2.3 at Level 2, you need to complete full calculation and assessment, but you do not need to reach a specific minimum score.

Level(s) Frequently Asked Questions

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Indicator 2.4



All material to support Indicator 2.4 can be found on the following website:

<https://susproc.jrc.ec.europa.eu/product-bureau/product-groups/412/documents>.

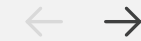
Once there, please click on the following accordion menu heading to open the list of resources on Macro Objective 2: "Macro-objective 2: Resource efficient and circular material life cycles".

You should then see a list of downloadable items including the "Indicator 2.4 Calculator V2.0" excel file.

Level(s) Frequently Asked Questions

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Indicator 4.2



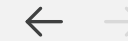
As stated in the User Manual: “Calculation of the reported performance shall be carried out using a dynamic simulation model and in accordance with the methods described in Annex F of EN 15251” and “The methods described in EN 15251 cover buildings with and without mechanical cooling. For the modelling of a building without mechanical cooling, the assumptions described in Annex F of EN 15251 that relate to adaptive conditions shall be followed (referred to as 'Acceptable indoor temperatures for design of buildings without mechanical cooling systems').” To assess the performance of a building you will need to calculate the time out of range and then use this to complete the reporting table. Instructions to calculate the time out of range can be found on page 12. You will need to calculate the time out of range for buildings with and without mechanical heating and cooling (Indicator 4.2 - pg.14). A maximum value (%) of time out of range is not stipulated as a condition of compliance.

Additionally, as also stated in the UM “In some Member States, the simulation model that supports the national calculation method is dynamic (e.g. CALENER/HULC in Spain). Training and support in the use of the tool is therefore available.”

Level(s) Frequently Asked Questions

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Indicator 4.2



As a conclusion:

- A dynamic simulation model is needed.
- The method for doing it includes buildings without mechanical cooling.
- Some national calculation methods are dynamic.

As far as reference criteria are concerned, none are provided in the user manuals, nor are acceptable limit values established. However, there are different standards and regulations, both national and international, which can be reviewed by the user for their knowledge and evaluation.

Although the manual mentions in the introduction that the reference temperature should be 18°C to 27°C, in the specific section for Level 2 it is clearly stated that “The Category II temperature ranges, as stipulated in EN 15251 and EN 16798-1 (or national equivalent), shall be used in all cases”. Therefore, 20°C as a minimum in winter and 26°C as a maximum in summer should be used in case of using EN 16798-1, but other temperature ranges could be used if national equivalent dictates differently.

From the user manual it can be inferred that in case a post-occupancy evaluation is intended to be carried out, it is in Level 2 when PPD shall be estimated, in order to later compare the results with Level 3 in-situ measurements of an occupier survey.

Thank you!



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