

Level(s) –
EU approach to
sustainable building
performance reporting

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Level(s) is:

- A voluntary reporting tool
- Using a focused set of performance based indicators
- Reflecting EU policy objectives
- Based on existing standards
- Targeting mainstream market to do better
- Possible for certification schemes to use as a module

Level(s) is NOT:

Used for EU benchmarks or EU certification



Level(s) at different levels!

 Tracking the <u>levels</u> of sustainability performance of buildings, taking into account the full life cycle.

 Three different <u>levels</u> of working with the indicators, depending on the readiness for sustainability assessment

















Images courtesy of Judit Kimpian, ACE

GHG Emissions Along the building lifecycle

Primary & Delivered Energy consumption in use: kWh/m²/vear

Global Warming Potential embodied CO₂ eq./m²

Deconstruction/Reuse/recyclability Adaptability Service Life

Photochemical

eutrophication, ozone creation

depletion, acidification,

ozone

Other LCA Criteria:

2. Resource Efficient Material Life Cycle

Bill of Materials:

Abiotic fossil fuels, minerals and metals, Biotic materials

Waste Flows: kg/m² Disposed, reused, recycled, recovery

3. Water Use

Circular use of water resources

Use Phase Consumption:

m³/occupant/vear

Light **Acoustic**

4. IEQ

Indoor Air Quality: ventilation rate I/s/m2; CO2 ppm; RH % Pollutants: TVOC, CVOC, RI VOC, formaldehyde, benzene, PM2.5 & 10 Thermal Comfort: % time out of range degree days or hours

5. Climate Change

Extreme weather events under future climate scenarios: Thermal Comfort: % time out of range degree days or hours 2030/2050

6. Cost & Value

Life cycle costs: acquisition, utility, maintenance EUR/m2/year

Value Creation & Risk Factors: Data quality of indicators



Reliability rating per indicator

- Technological representativeness
- Geographical representativeness
- Time related representativeness
- Uncertainty
- Technical capability of personnel carrying out assessment
- Independent verification





Benefits with Level(s)

- Common language
- Complement and reinforce existing initiatives
- Support national policy initiatives



Level(s) target groups

Design teams –

simple structure to present to clients, to prioritise attention on sustainability aspects

Construction management –

role in monitoring and checking that design performance is met



Level(s) target groups

Property agents and valuers –

simplified ratings of reliability of estimated performance

Asset and facilities managers –

guidance on life cycle management, like maintenance and replacement planning, and post-occupancy surveys



Level(s) target groups

Property owners, developers and investors –

how cost, value and risk associated with building performance can be managed to deliver long-term benefits

Public and private occupiers –

focus on performance aspects that are of direct financial interest to occupiers, like operating and maintenance costs



Testing - objectives

 A ready to market tool in 2 years, with robust indicators and guidance

 Understand necessary support mechanisms for its implementation



Testing – how?

- Test some indicators or full framework, on ongoing or finalised projects
- Agree with EC to...
 - ...provide feedback
 - on indicators via common reporting format
 - on general experience via specific survey
 - collaborate during verification (some testers)
 - ... and access support (for testers only!)
 - common reporting format, technical helpdesk
 - regular webinars, platform for information exchange



Testing workshop - 4 December

https://www.euconf.eu/conference-on-sustainable-buildings/index.html

- How to work with Level(s)
- Opportunities and challenges for testing organisations
- Support to testing organisations
- Market leaders preparing testing
- Certification schemes preparing integration

Web streaming will be provided!





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