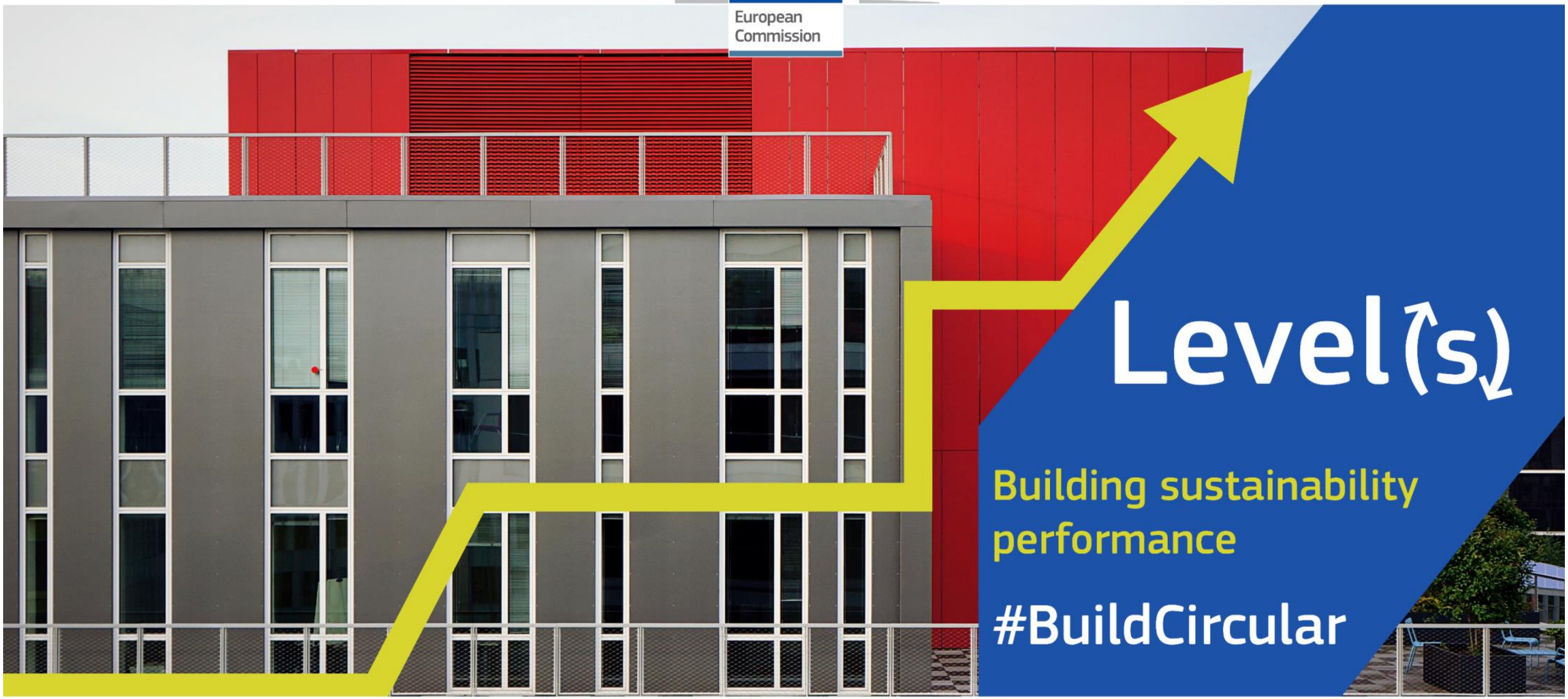
European Commission



Level(s)

Building sustainability performance

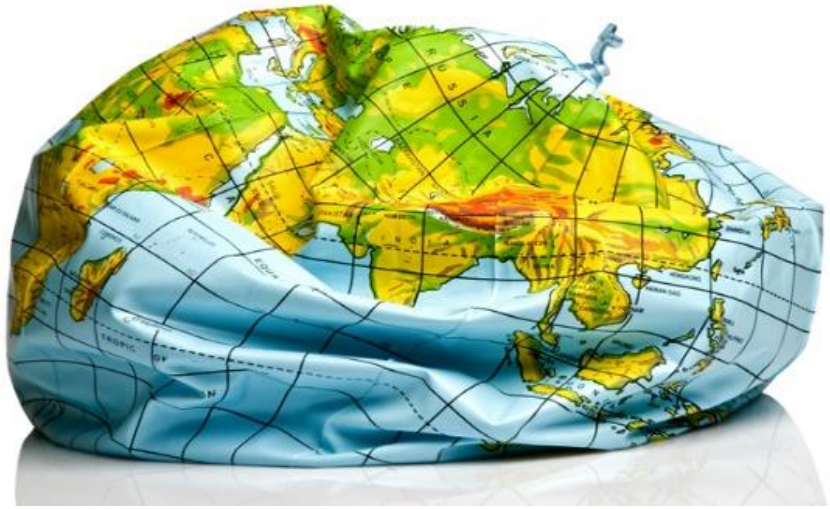
#BuildCircular

50% energy
50% materials
50% carbon

1%

European Commission

Common Language



Images courtesy of Judit Kimpian, ACE

European Commission

Level(s) is…

- Sustainability assessment and reporting
- Covering full life cycle
- Using few indicators
- For offices and residential, for new built and renovation

European Commission

Level(s) is not…

- an EU certification
- setting EU benchmarks

European Commission

“Currently, there is no real industry level index or metric in place. That means that every company is collecting data and information on what they feel is appropriate, making it difficult for investors to differentiate between companies.

Unless a standardised ‘yardstick’ is available, it will be difficult to get investors to include buildings’ sustainability credentials as key decision making criteria and to use their investment as a vehicle to push for change in the industry and ultimately, market transformation .”

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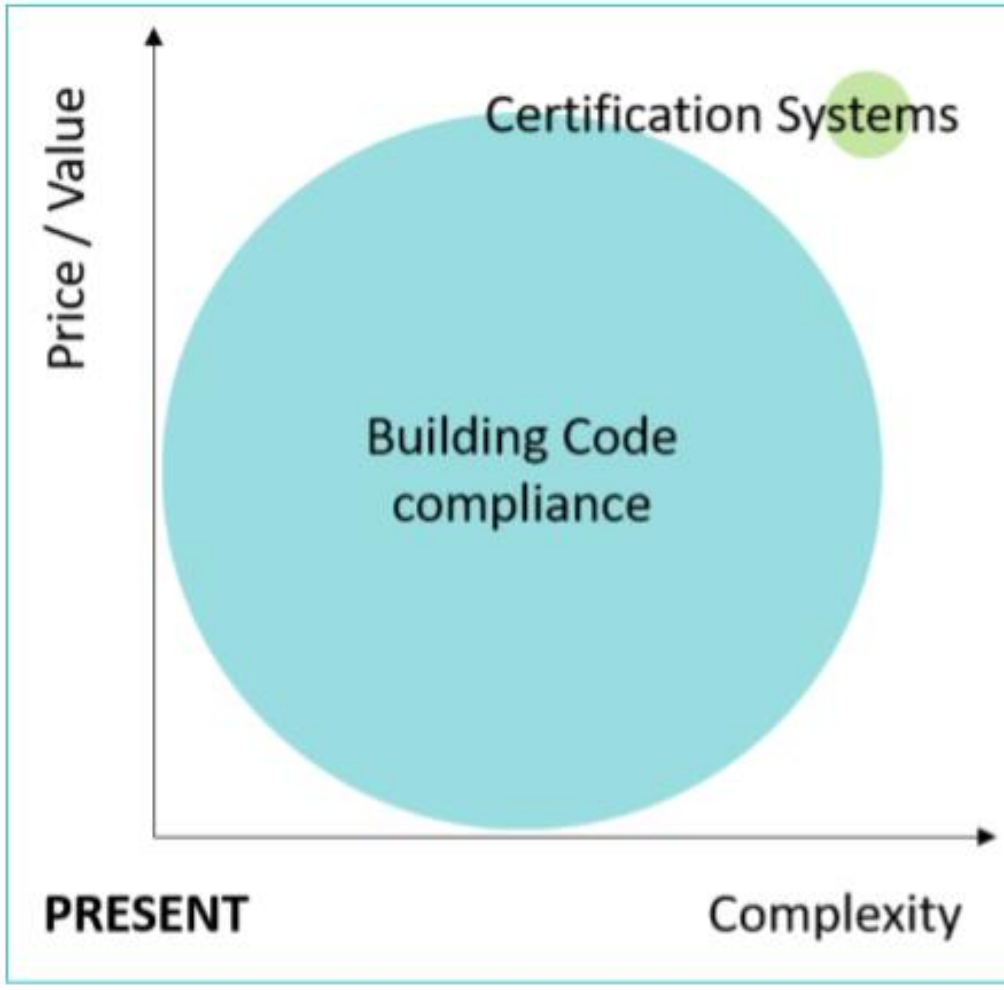
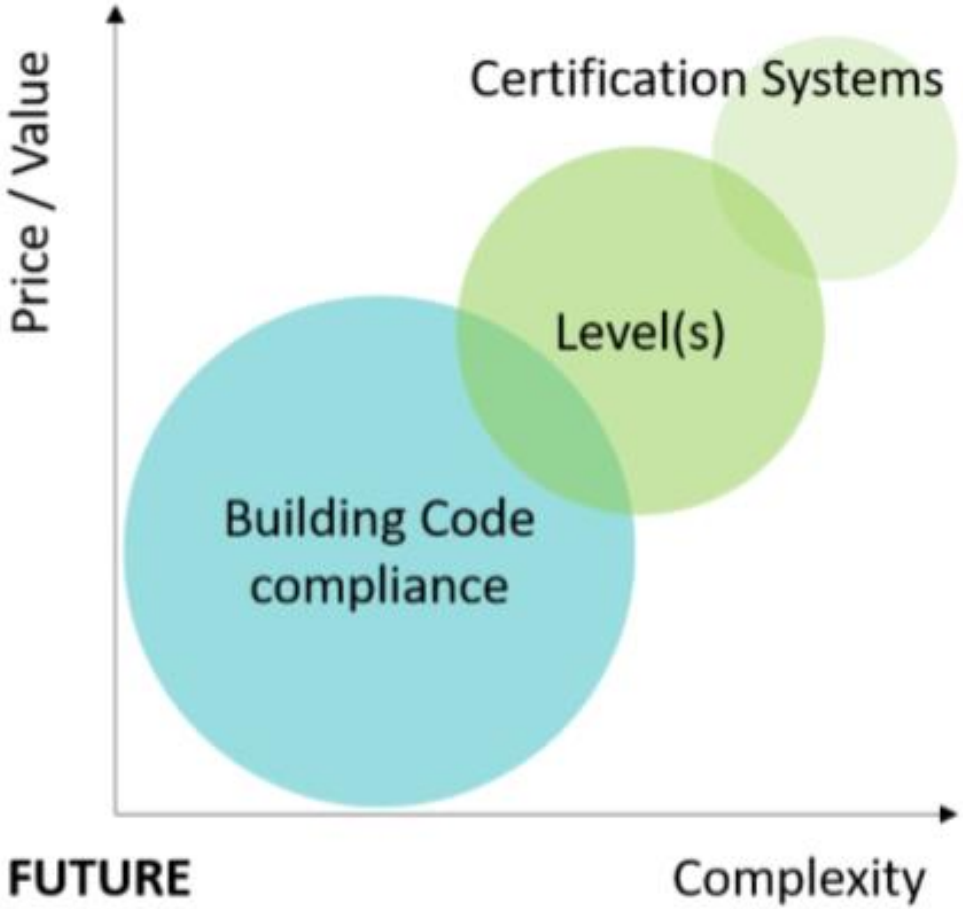
Why a common European language?

- Countries, to integrate sustainability into their building codes
- Cities and public authorities, to integrate sustainability in procurement
- Building certification schemes, to assure work reflecting European policy
- Investors, valuers and companies, looking for European “yardstick”
- Comparable life cycle performance data, enabling learning and benchmark-setting

→ Going from niche to “the new normal” *(DGNB)*

Level(s) drives transformation





EU Policy Context

2020 Q1	European Green Deal within 100 days of new Commission, with a new Circular Economy Action Plan "*focusing on sustainable resource use, especially in resource-intensive and high-impact sectors such as textiles and* ***construction****.*"
2020 Q2	Launch of Level(s)
2020-2021	Green Public Procurement criteria based on Level(s)
2021	Sustainable Finance – with Level(s) input
2021	Public Private Partnership on Sustainable Built Environment, in Horizon Europe

European Commission

https://ec.europa.eu/environment/eussd/buildings.htm

ENV-LEVELS-TESTING@ec.europa.eu

Thematic area: Life cycle environmental performance

Macro-objective 1: Greenhouse gas emissions along a buildings life cycle

1.1 Use stage energy performance (kWh/m²/yr)
- ✓ Primary energy demand
- ✓ Delivered energy demand

1.2 Life cycle Global Warming Potential (CO_2 eq./m²/yr)

Macro-objective 2: Resource efficient and circular material life cycles

2.1 Life cycle tool: Building bill of materials (kg)
- ✓ The main building elements
- ✓ Reporting on the four main types of materials

2.2 Life cycle tools: Scenarios for lifespan, adaptability and deconstruction
- ✓ Design aspect checklists
- ✓ Semi-quantitative and LCA based assessments

2.3 Construction & demolition waste and materials (kg/m²)
- ✓ Demolition
- ✓ Construction
- ✓ End-of-life

Macro-objective 3: Efficient use of water resources

3.1 Use stage water consumption (m³/occupant/yr)
- ✓ Water scarcity by location
- ✓ Potable waste substitution

2.4 Life cycle tool: Cradle to cradle Life Cycle Assessment (LCA) (impact/m²/yr)
- ✓ Seven impact categories (EN 15978)
- ✓ Flows of the four main types of materials
- ✓ Assessment of the three life cycle scenarios (2.2)

Overarching assessment tool

Thematic area: Health and comfort

Macro-objective 4: healthy and comfortable spaces

4.1 Indoor air quality
- ✓ Good quality indoor air (ventilation, CO_2, humidity)
- ✓ Concentrations of a target list of pollutants

4.2 Time out of thermal comfort range
% of the time out of range during the heating and cooling seasons

Potential future aspects
4.3 Lighting and visual comfort
4.4 Acoustics and protection against noise

Thematic area: Cost, value and risk

Macro-objective 5: Adaptation and resilience to climate change

5.1 Life cycle tools: Scenarios for projected future climatic conditions
Protection of occupier health and thermal comfort in 2030/2050

Potential future aspects
5.2 Increased risk of extreme weather events
5.3 Increased risk of flood events

Macro-objective 6: Optimised life cycle cost and value

6.1 Life cycle costs (€/m²/yr)
- ✓ Use stage energy and water costs
- ✓ Construction and long-term maintenance, repair and replacement costs

6.2 Value creation and risk factors
- ✓ Comprehensiveness of a valuation or risk rating
- ✓ Reliability of the reported performance assessments