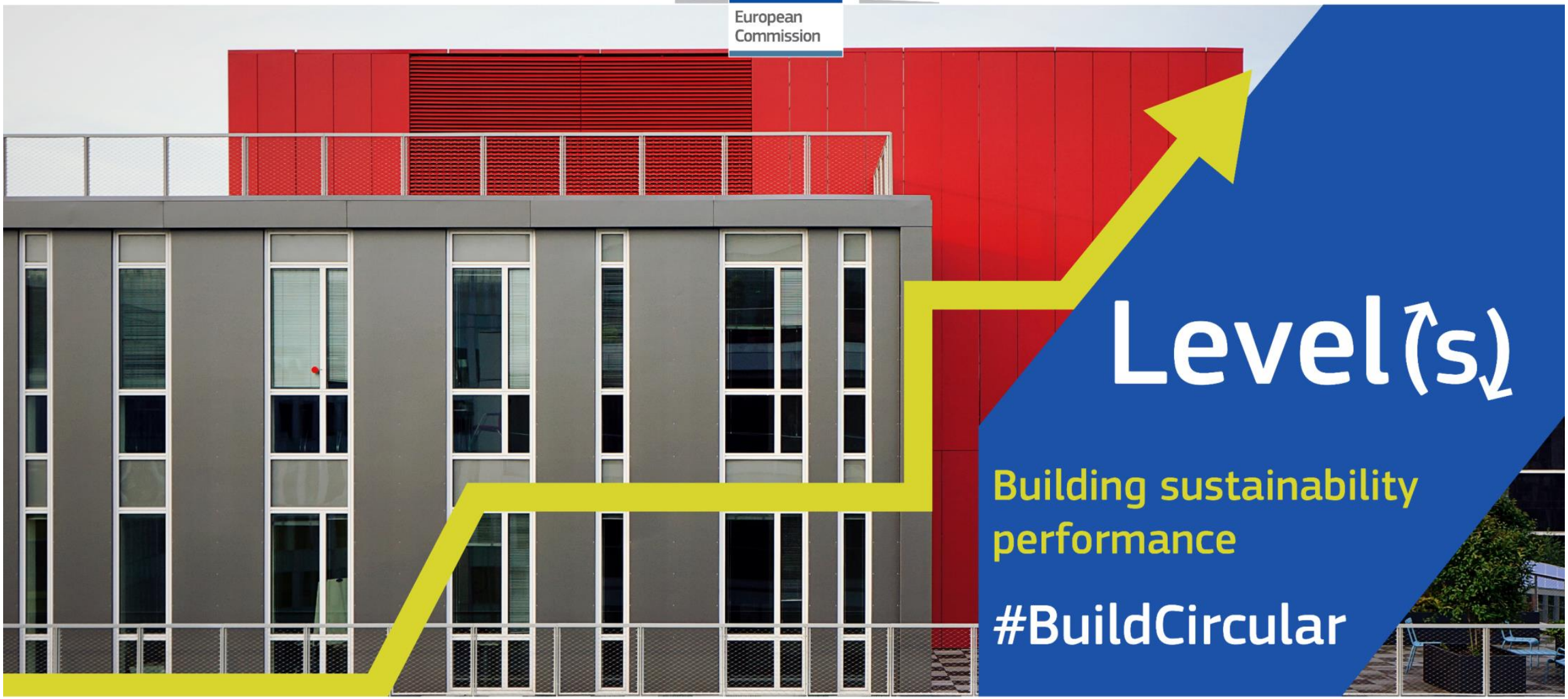
European Commission



Level(s)

Building sustainability performance

#BuildCircular

50% energy

50% materials

50% carbon

1%

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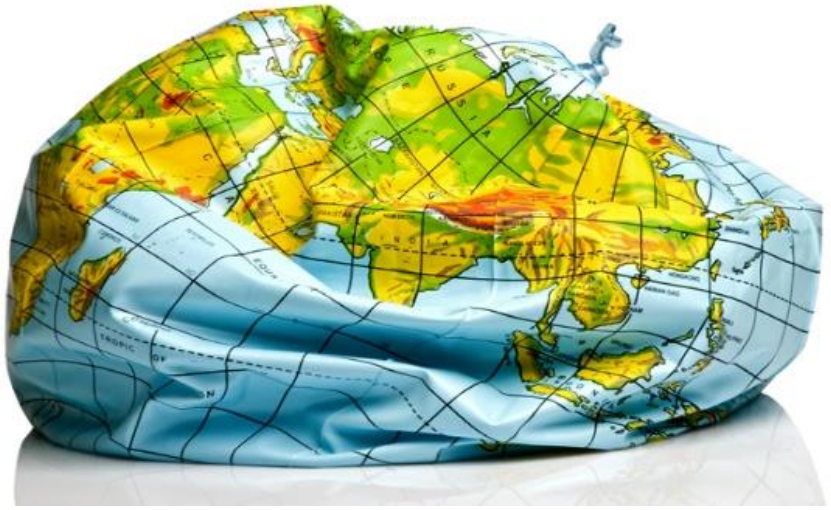
Common Language



Images courtesy of Judit Kimpian, ACE

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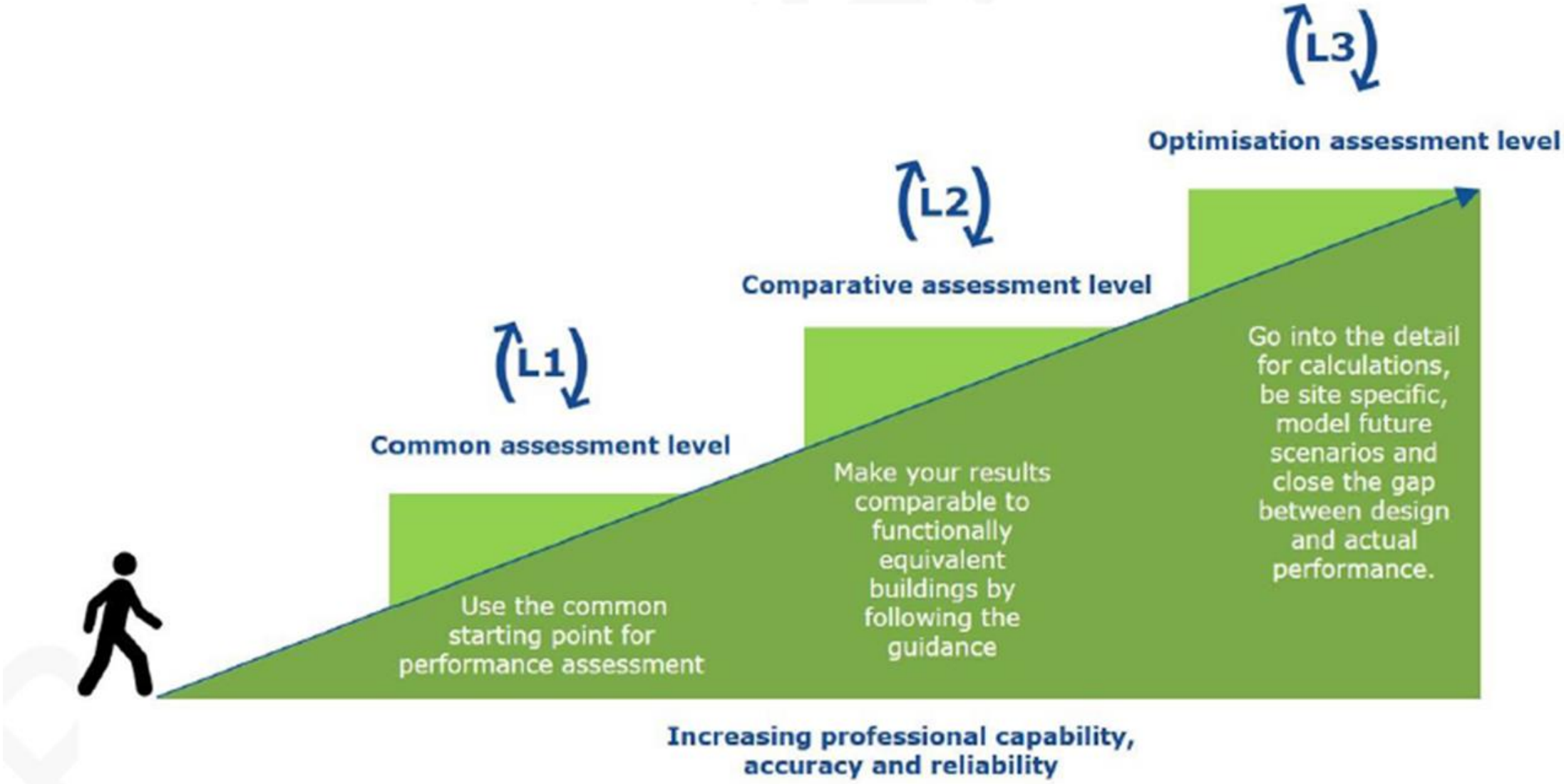
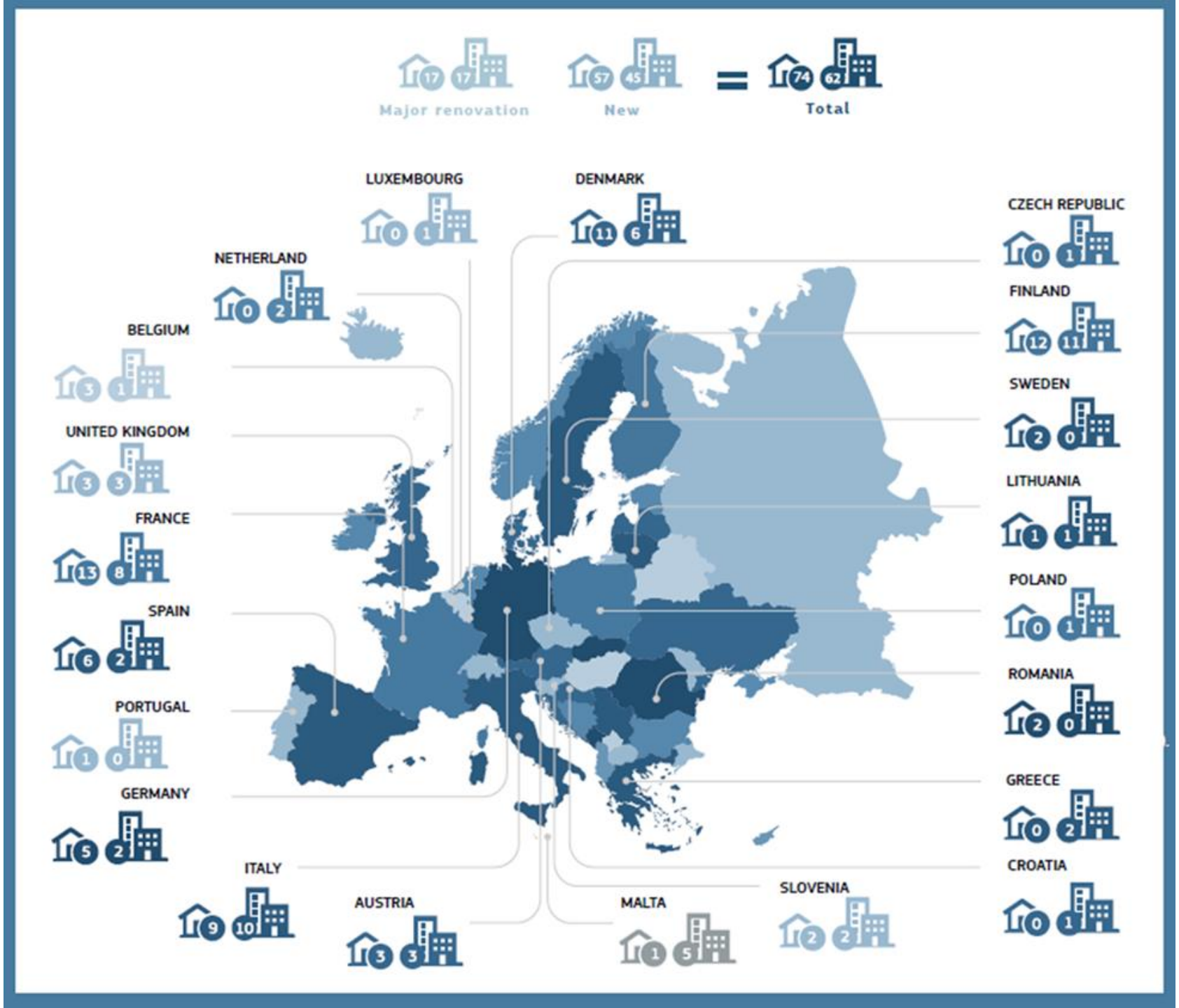
Get started – climb the ladder



Test phase

Final launch 2020



Testers and their tests
–
First impressions of tester feedback

Analysis of test phase

30 June	End of test phase, reporting of indicator results
30 September	Horizontal feedback
2019 – Q3 Q4	Verification and analysis
2020 – Q1 Q2	Modification and consultation
2020 Q2	Launch of final version

80 of 130 testers have sent feedback on the indicators
-
who are these testers?

- Projects with no experience respond to a lower degree, but more respondents with “some experience” than “substantial experience”.
- Few results from Eastern Europe

- Good response rate (70-90%) from:
  - Construction companies
  - Public authorities
  - Construction product manufacturers
- Slightly less (55-65%) from:
  - Developers/investors
  - Design teams
  - Research institutes

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Helpdesk observations

- No “difficult” enquiries, but rather straight forward, typically in the areas of:
  - National vs EU harmonisation
  - Access to and use of standards and other tools
  - Categorising different building materials and products
  - Basis for modelling scenarios

Testing to be verified

- Verify use of Level(s)
- Identify problems with using Level(s)
- Inform finalisation of the tool

- 15 projects
- Representing different geography, type of project etc
- Scheduled interviews for September

Policy Context and Supportive Actions

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	Public Private Partnership on Sustainable Built Environment, in Horizon Europe
2020-2021	Green Public Procurement criteria
2021 Q4	Sustainable Finance - Level(s) supporting
2020-2021	Software and training material
2019 Q4 - 2022	LIFE project (*Green Building Councils*), linking rating tools and GPP to Level(s)

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