Green Public Procurement as a key to sustainability in the building sector




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WHO are we: JRC

JOINT RESEARCH CENTRE: **science for policy**

Provides scientific evidence for policy-making process

Over 400 people in Seville specialised in the following areas:

Fiscal policy analysis
Territorial development
Circular economy and sustainable industry
Industrial strategy, skills and technology transfer
Innovation policies and economic impact
Economics of climate change, energy and transport
Economics of the food system
Digital economy
Algorithmic transparency

PRODUCT POLICY ANALYSIS: ADDRESSES EU PRODUCT POLICY

Product bureau

WHY GPP: ambition level

Climate neutrality 2050

Clean Industrial deal

Sustainable competitiveness

European Commission

For WHOM: target

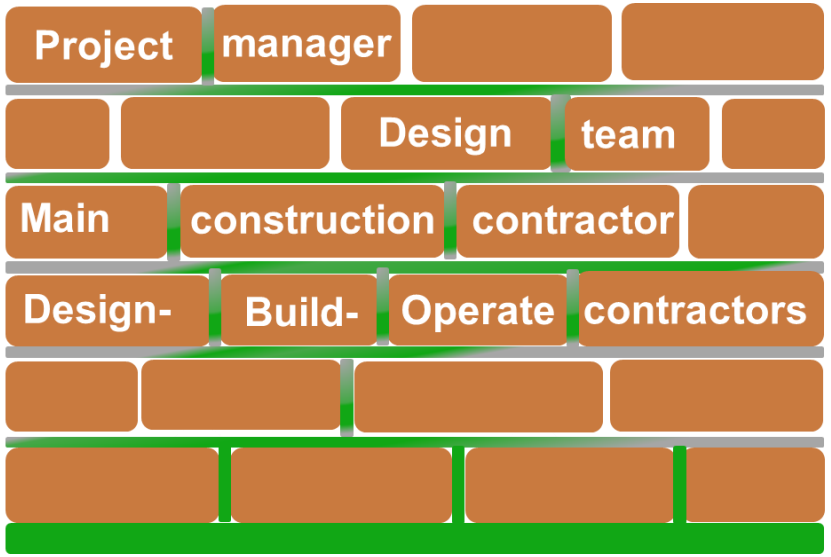
Contracting authorities

Local Governments

Regional Governments

National Governments

Building sector

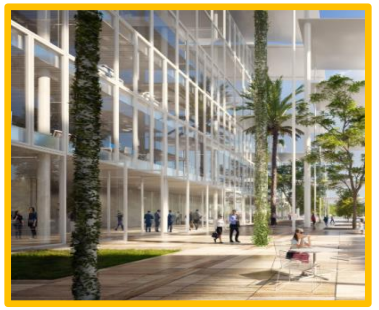


For WHAT: GPP aim and scope

A process whereby public authorities seek to procure goods, services and works with a **reduced environmental impact throughout their life cycle**

Road lighting and traffic signals

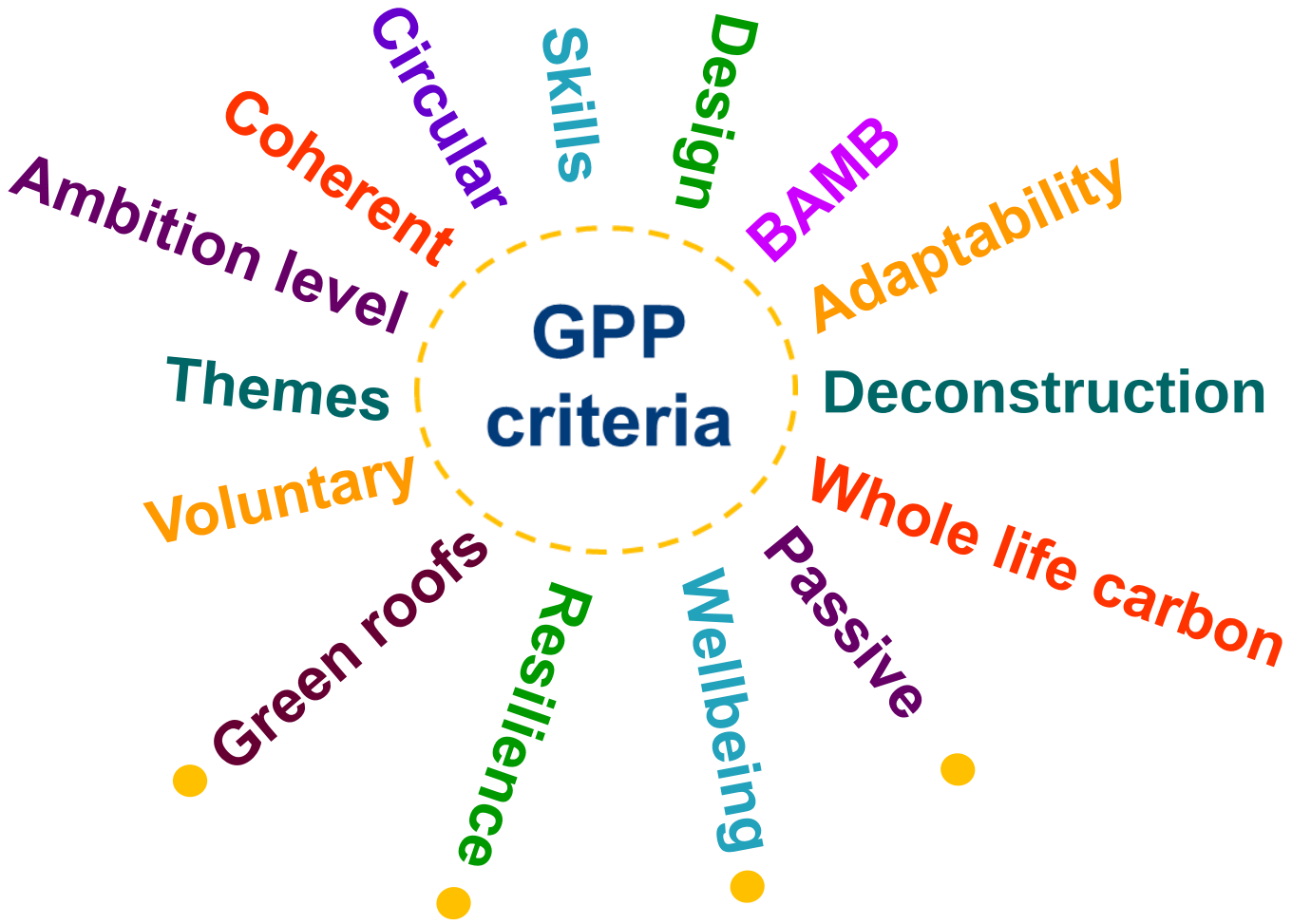
Computers



Buildings

European Commission

HOW: GPP buildings criteria at a glance



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GPP buildings criteria at a glance

SCOPE

Office

Educational

Social housing

TYPES

Selection criteria

Technical specifications

Contract performance conditions

Award criteria

Up-skilling building sector

POOL

A detailed set of measures

To choose the most appropriate ones

To adapt to the project and to the local reality in which it is carried out

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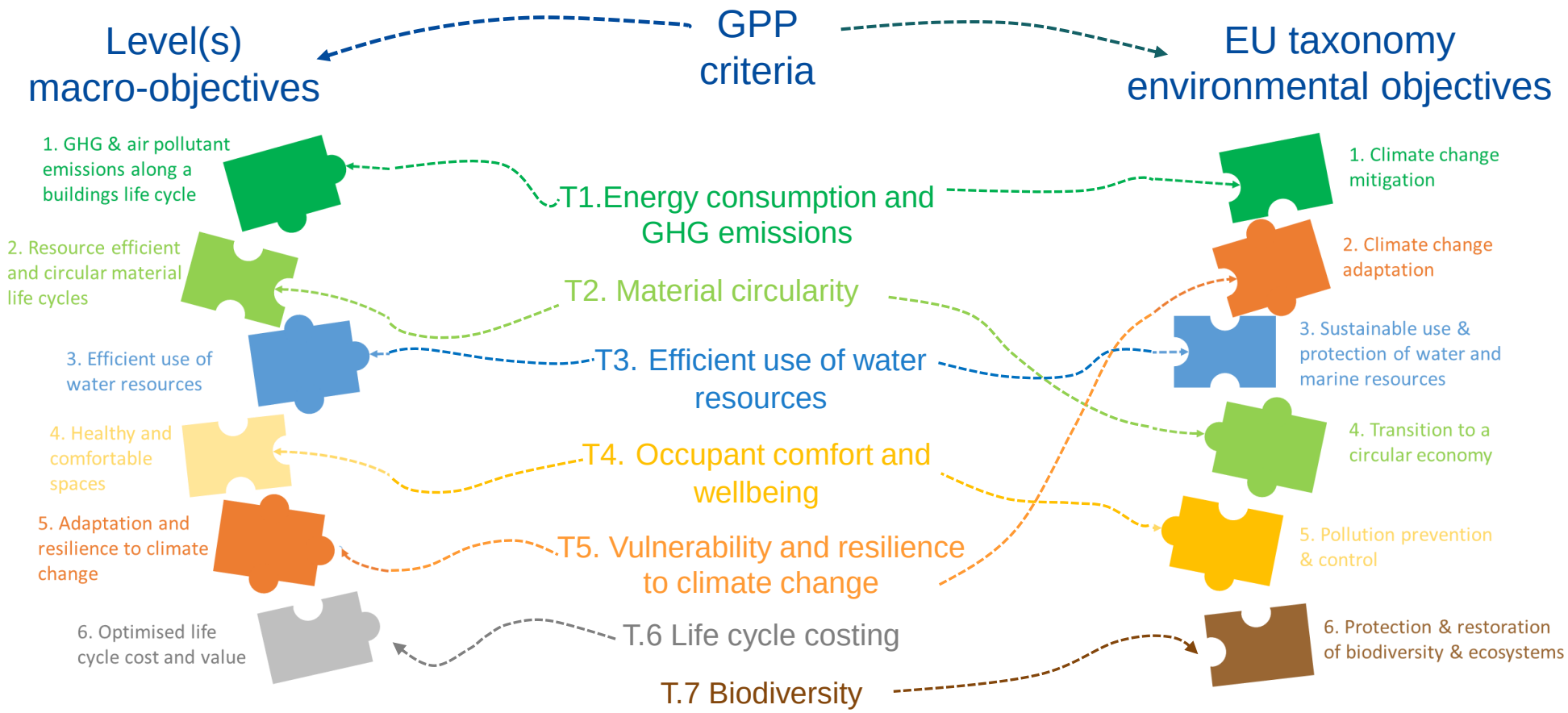
COHERENCE: cross-check with key policies



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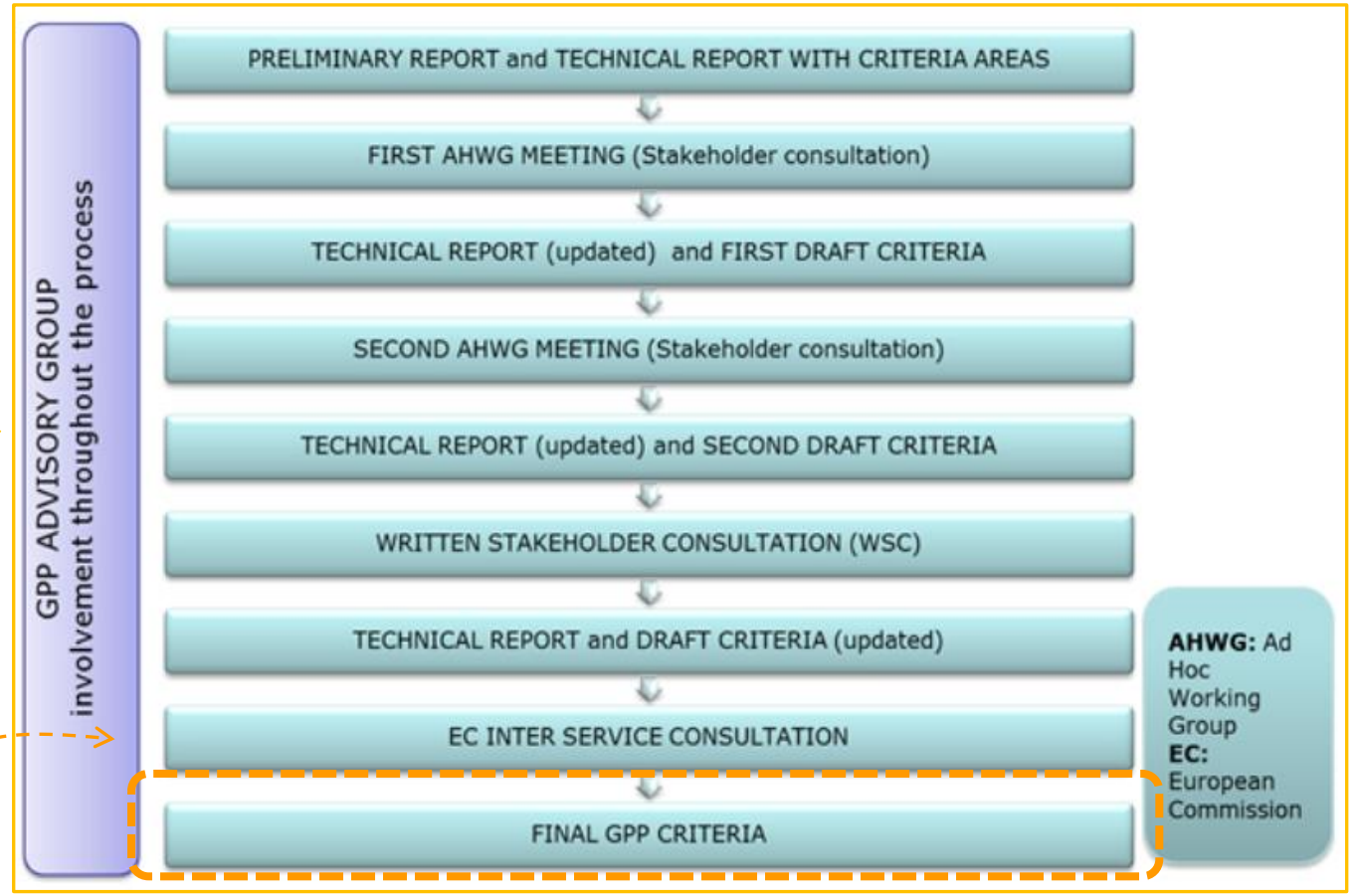
STATUS of GPP process

Co- creation

Transparent

Participatory

Consensus



Providing evidence for the policy making process

Updated criteria. Theme 1

T1.Energy consumption and GHG emissions

As transitional criteria more ambitious than NZEB definitions.

When available, as per ZEB requirements

Award: LCA Other impact categories

Use-stage energy consumption

- Passive features
- Efficient equipment
- Renewables and BEMS

Whole life carbon assessment

Installation of passive features

Thresholds for heat transfer and solar gain by climatic zones

HVAC, lighting, water heating, other building's equipment

Energy labelling: top 30 (20)%

Award: highest class/ BAT benchmark in Ecodesign

Renewables: 50% of the estimated energy consumption. Award: 100%

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Updated criteria. Theme 2

T2. Material circularity

70 (90) % preparing for reuse and recycling of all non-hazardous CDEW excluding soil and stones

90% 100% reuse on site of all non-hazardous CDEW of soil and stones

- Bill of materials
- Design for deconstruction
- Design for adaptability
- Design for reparability and upgrading
- CDE waste management
- Operational waste management

Order of the criteria following building lifespan to ease the understanding

Circular economy thinking

Selective demolition
Removal of hazardous s.
Facilitate reuse
High-q. recycling materials
Design for adaptability report

CPC: log of waste

Award: design for reparability/ upgrading

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Updated criteria. Theme 3

T3. Efficient use of water resources

Inclusion of a greywater reuse system subject to a feasibility study

- Per capita potable water use
- Water efficient devices and appliances
- Rainwater harvesting systems
- Greywater reuse systems

CPC: Verification of compliance of installed systems

Updated criteria. Theme 4

T4. Occupant comfort and wellbeing

Updated criteria. Theme 5

T5. Vulnerability and resilience to climate change

New approach

CVRA results lead to different ambition level

Pool of measures is provided to find the appropriate solution

Trade-offs with other hazards should be balanced

- Climate vulnerability risk assessment
- Future thermal comfort: time out of range
- Passive features to minimise overheating risk
- Design for resilience to drought
- Design for resilience to storm/heavy precipitations
- Design for resilience to flooding
- Sustainable drainage

Climate Vulnerability Risk Assessment

Phased CVRA:
1.Vulnerability
2. Risk

Updated criteria. Theme 6

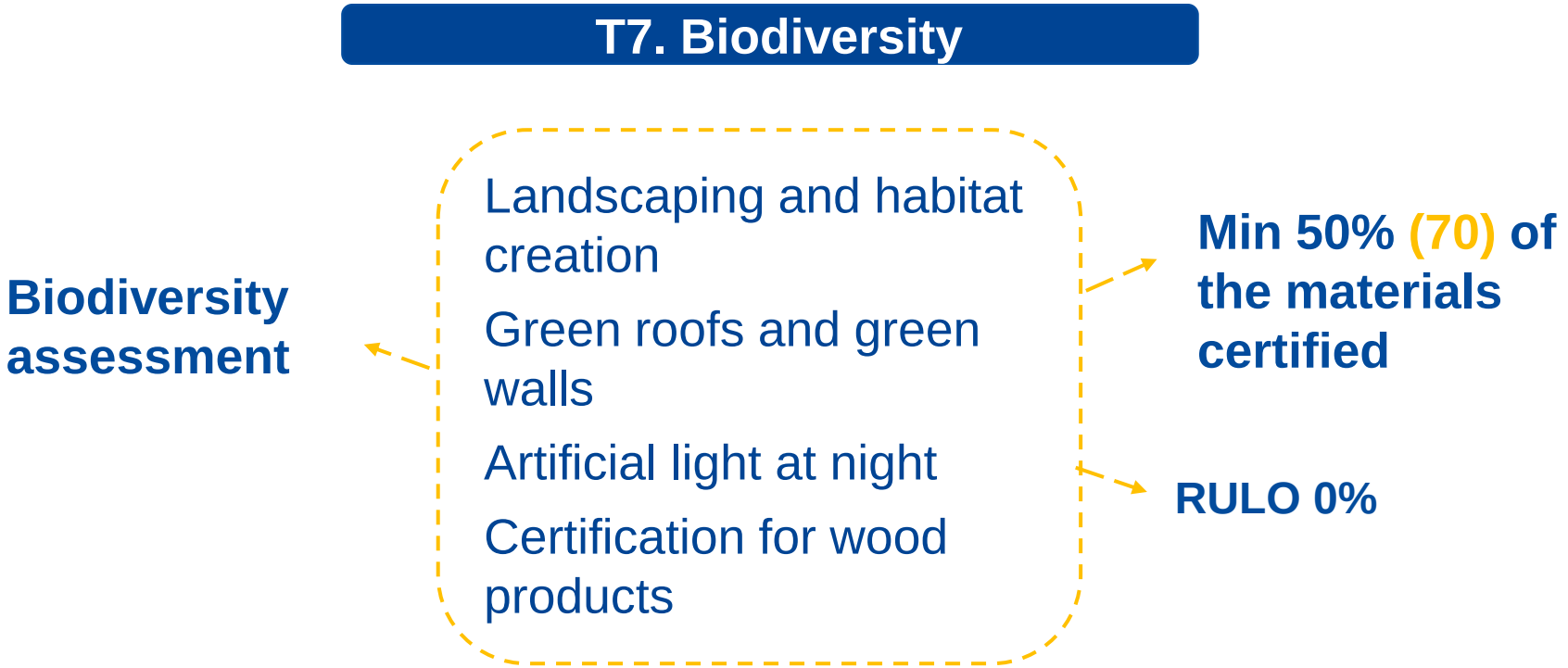
T6. Life Cycle Costing

Life cycle cost assessment

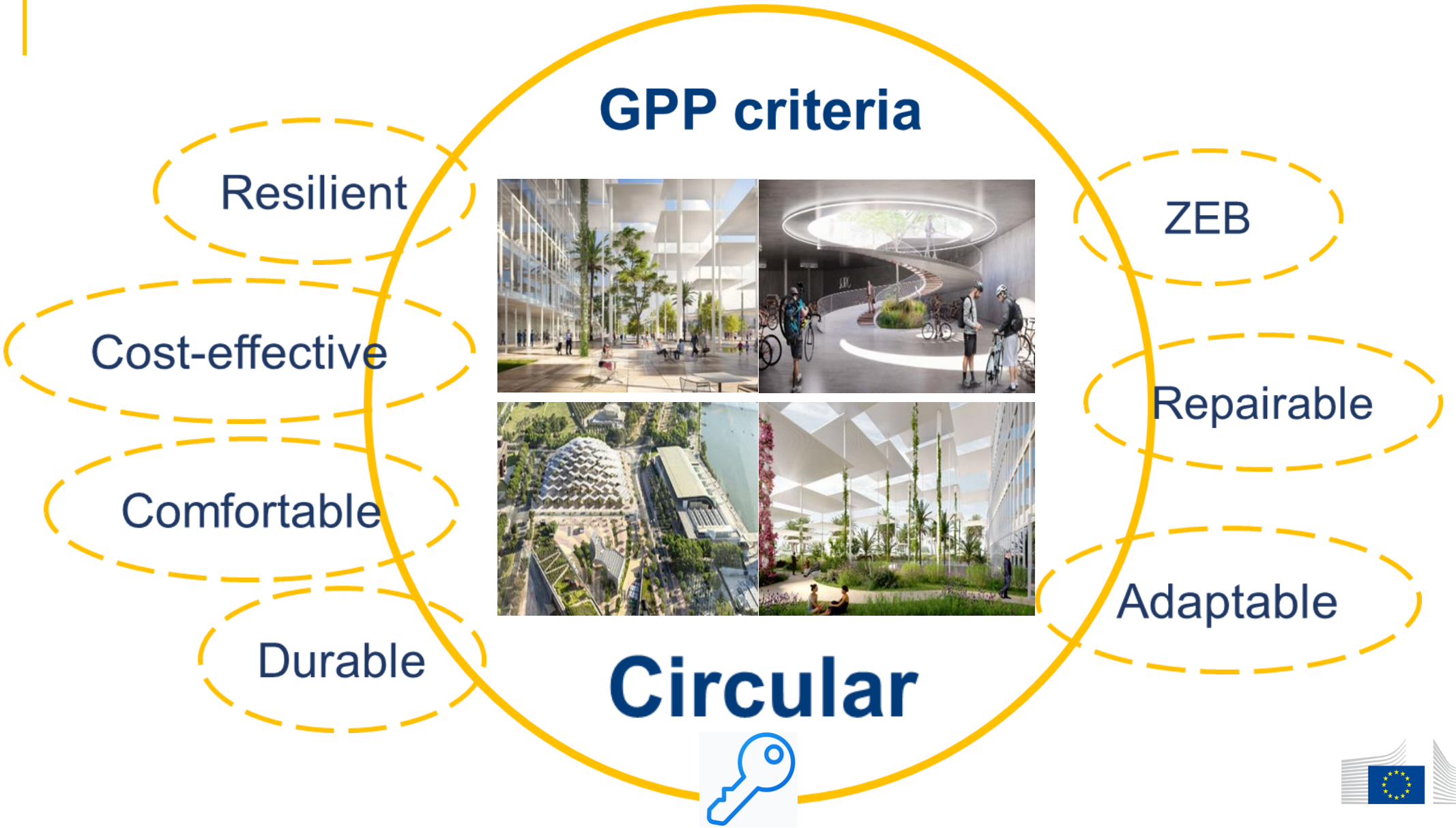
EUR/m^2/yr

EN 15459-1
Level(s) indicator 6.1

Updated criteria. Theme 7



GOAL: circular buildings



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We appreciate your interest

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