

MODULE 2

Strategic planning phase

2.3. Ecolabels and green building certificates

Interreg
Baltic Sea Region



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SUSTAINABLE WATERS

NonHazCity 3

Ecolabels and green building certificates

Green building certificates

- Whole-building sustainability assessment systems
- Assess energy, materials, indoor climate, and lifecycle impacts
- Examples: LEED, BREEAM, DGNB, Nordic Swan Ecolabel (buildings)

Ecolabels

- Product-level environmental labels
- Require strict criteria for health, environment, and performance
- Examples: Nordic Swan, EU Ecolabel, Blue Angel



Why they matter?

- Enable **comparison** of building sustainability performance.
- Support **lifecycle thinking** and resource efficiency.
- Help ensure **material safety and transparency**.
- Include strict **chemical requirements** to minimise and avoid hazardous substances.
- Facilitate **easier, safer maintenance** and **end-of-life handling**.

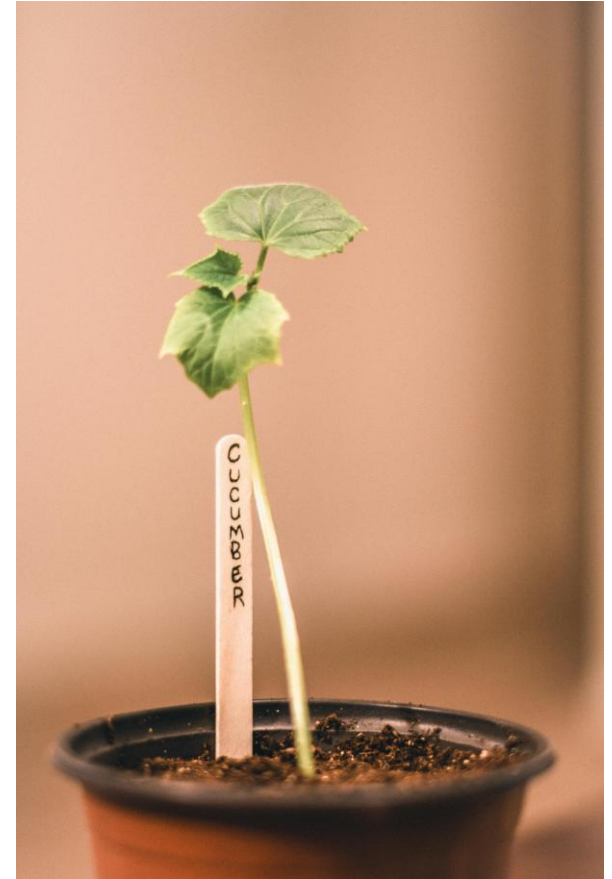


Photo by Jenny Uhling



ECOLABELS

Three types of environmental labels



Ecolabels and
environmental
labels
Verified



Self-declared
environmental
claims



Environmental
product
declarations

The International Organization for Standardization (ISO)

What are the ISO Environmental Product Information Standards?

ISO 14020 - series of standards:

- ISO 14024, Environmental labels and declarations

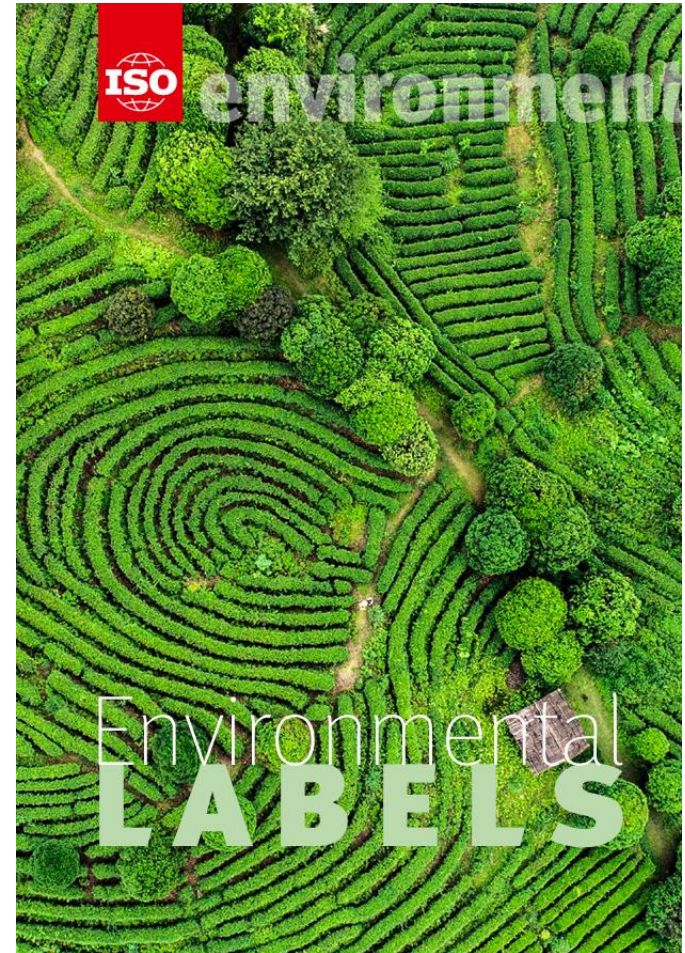
Type I environmental labelling

- ISO 14021, Environmental labels and declarations - Self-declared environmental claims

Type II environmental labelling

- ISO 14025, Environmental labels and declarations

Type III environmental declarations



The most common ecolabels

Type I – Complies with the standard ISO 14024

- Based on **life cycle** assessments
- **Holistic perspective** and strict environmental requirements
- Product-specific and absolute requirements
- Requirements developed with **full transparency**
- Requirements **tightened regularly** to ensure sustainable development
- **Independent** third-party certification

EU Ecolabel



Nordic Swan



The Blue Angel



EU Ecolabel: European Commission

Product categories in building sector:

- Indoor and outdoor paints and varnishes
- Wood- and bamboo-based floor coverings
- Hard covering products

Key features:

- Minimised content of hazardous substances
- Reduced volatile organic compounds (VOCs) emissions, with limits such as x g/l
- High performance standards



The Nordic Swan Ecolabel: Nordic Ecolabelling

Product categories in building sector:

- new buildings
- renovation
- chemical building products
- construction and facade panels
- mouldings
- floor coverings
- indoor paints and varnishes
- windows and exterior doors

Key features:

- known for its rigorous environmental and health standards
- certifies both building materials and entire buildings



Blue Angel: Federal Environment Agency

Product categories in building sector:

Within the construction sector, there are 17 group categories, e.g.,

- wall paints (indoor)
- wallpapers
- Varnishes, glazes and primers
- floor coverings (elastic, textile, wood)

Key features:

- Products must meet strict limits on pollutants (e.g., low emissions, exclusion of carcinogens)
- Emphasis on recyclability and durability



Nature plus: natureplus e.V.

Product categories in building sector:

- insulating materials
- roof tiles and roof stones
- wall paints
- plasters, panels
- flooring
- wooden doors

Key features:

- specifically designed for construction and interior products
- only building products made from renewable or abundant raw mineral materials or secondary raw materials are eligible
- raw materials must come from sustainable sources



Environmental labels

How do they differ from ecolabels?

- Third-party verified
- Main difference from ecolabels - focus on **specific aspects** (single attributes), like sustainable forest management, **not the full-life cycle**
- Examples: Forest Stewardship Council (FSC), Global Organic Textile Standard (GOTS)

Forest Stewardship Council (FSC)



Global Organic Textile Standard (GOTS)



OEKO-TEX® MADE IN GREEN



Labels for low emitting products



Information about emissions from building materials and furniture



Compliance of a product with low VOC emissions criteria



Requirements on VOC and SVOC emissions, solvents, oximes and on toxicity of the product

Self-declared environmental claims

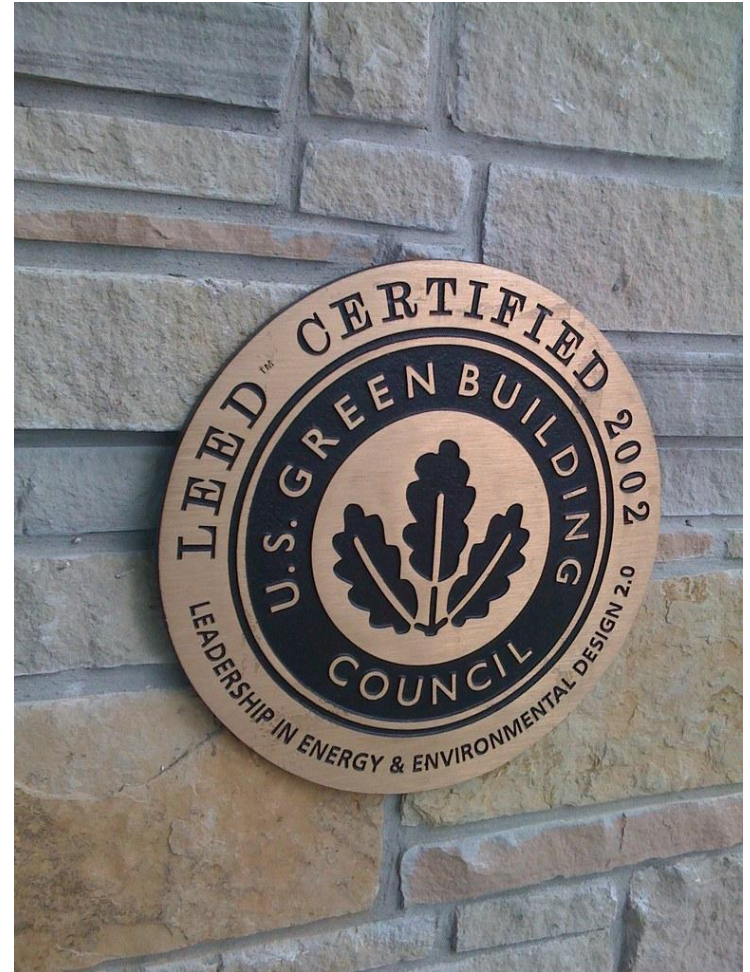
- Developed by manufacturers or service providers
- Not third-party certified
- Are expected to be verifiable and accurate
- However, often lead to misleading or so-called **“greenwashing”**
- Best practice principles are defined by ISO standard 14021 - *Environmental labels and declarations. Requirements for self-declared environmental claim*



GREEN BUILDING CERTIFICATES

Ecocertification of buildings

- Holistic environmental assessment
- Internationally recognized
- Third-party verification for credibility
- Market and regulatory benefits
- Continuous improvement and innovation



BREEAM: Building Research Establishment Environmental Assessment Method

Origin: United Kingdom

Year: 1990

Applications:

- New construction
- Refurbishment & fit out
- In-use buildings
- Communities (urban areas)
- Infrastructure

Focus areas:

Energy, waste, water, materials, health and well-being, transportation (usage phase), pollution, land usage & ecology and management



LEED: Leadership in Energy and Environmental Design

Origin: USA

Year: 1998

Applications:

- New construction
- Refurbishment and fit out
- In-use buildings
- Communities (urban areas)
- Infrastructure

Focus areas:

sustainable sites, water efficiency, energy & atmosphere, materials & resources, indoor environmental quality, innovation in design, location and transportation, regional priority



DGNB German Sustainable Building Council: Deutsche Gesellschaft für Nachhaltiges Bauen

Origin: Germany

Year: 2007

Applications:

- New buildings
- Commercial interiors
- Renovations
- Existing buildings
- Urban areas

Focus areas:

ecological quality, economic quality, socio-cultural and functional quality, technical quality, and process quality



Ecotool for buildings - *The Nordic Swan*

Origin: Nordic countries

Year: 2005

Applications:

- New buildings
- Renovation

Focus areas:

Energy and resources, indoor environment, materials and chemicals



Nordic Swan Kindergarten in Helsinki © Elisa Keto

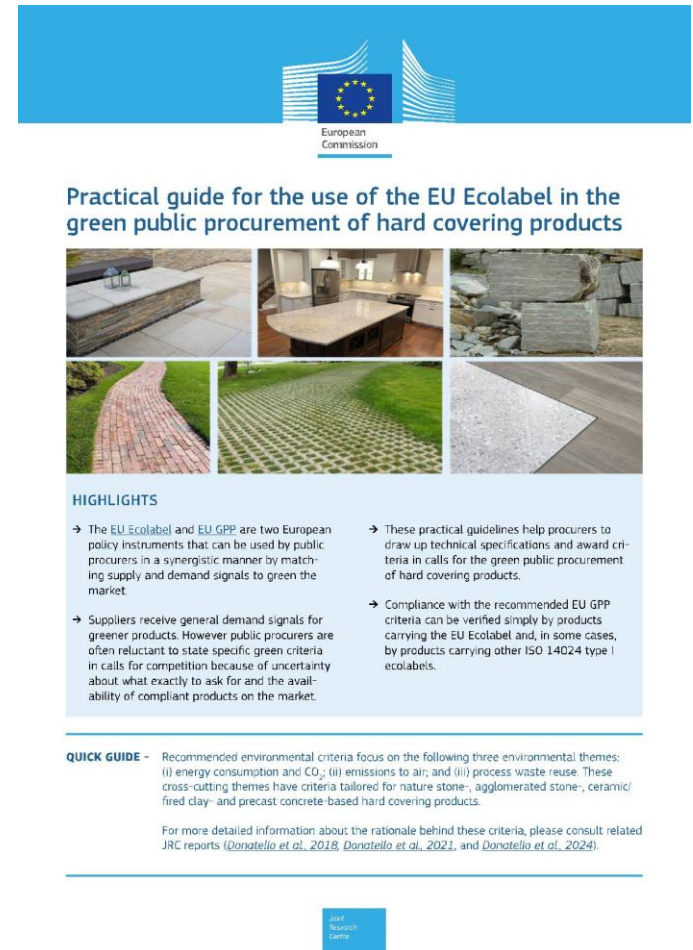
Application of ecolabels and ecocertification of buildings

- Full certification of the building
- Design or renovation in accordance with certification criteria, without formally applying for certification
- Selective use of elements from a certification scheme, without fulfilling all requirements for full certification
- Use of certified building materials



EU Ecolabel in Green Public Procurement (GPP)

- **Simplifies tender preparation** – requiring EU Ecolabel-certified goods or referencing its criteria in technical specs and award criteria
- **Eases verification** – products already meet strict environmental standards, reducing evaluation workload
- **Science-based & reliable criteria** developed through research and stakeholder consultation, adopted by legal acts
- **Cost-effective choices** – certified products are often competitively priced, not necessarily more expensive
- **Legally compatible** – Meets EU directives as valid proof of compliance (Directive 2014/24 & 2014/25)



EU Ecolabel "Practical Guides"

Thank you!

Explore further:
[NonHazCity 3 - Interreg Baltic Sea Region](#)



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