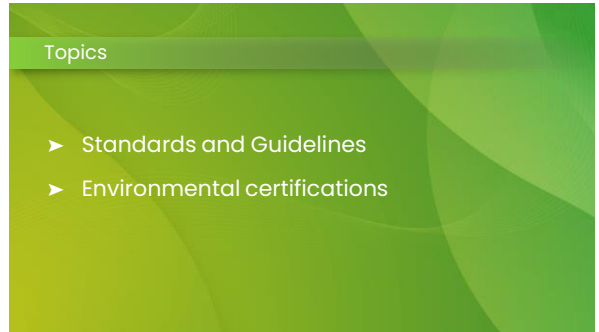


Progetto L2C – Modulo II

Prof. Persi

Lez. 2.3 - INTERNATIONAL STANDARDS AND CERTIFICATIONS



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ISO International Standards

- ▶ Include standards concerning environmental sustainability and the circular economy
- ▶ International validity
- ▶ ISO 14001family (ISO 14021- 14024 and 14025) for the sustainability and circularity of product and processes
- ▶ The ISO/TC 323 “Circular Economy” technical committee set of standards

BS8001 standard

- ▶ Guideline on how to successfully make the transition to a circular business model
- ▶ **6 key principles:**
 1. System thinking
 2. Stewardship
 3. Value optimization

4. Innovation
 5. Collaboration
 6. Transparency
- ▶ Can be adopted by any type of organization



Standard XP X30 -901

- ▶ Introduces a project management system to improve environmental, economic and social performance of an organization
- ▶ Sets out the requirements for a project management system



- ▶ It identifies **seven specific areas of action**, including:
 1. Sustainable procurement
 2. Eco-design
 3. Industrial symbiosis
 4. The product or function economy (such as product as a service)

5. Responsible consumption
6. Service life extension
7. Efficient end-of-life management of resources and materials



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Review Questions

- What is meant by technical standard ?
- What is the difference between a standard and a guideline?
- What are ISO standards ?

Review Questions

- BS8001 standard what principles does it define ?
- what areas of focus does the standard XP X30-901 focus on ?



What is an environmental certification ?

«Environmental labelling can be defined as “making relevant environmental information available to the appropriate consumers.

Environmental labelling is the practice of labelling products based on a wide range of environmental considerations (e.g., hazard warnings, certified marketing claims, and information disclosure labels)”...

...The environmental labels represent a communication tool to inform purchaser and customer about the conformity with specific requirements as, for instance, the above mentioned GPP environmental criteria»

M. Migliore et al., Strategies for Circular Economy and Cross-sectoral Exchanges for Sustainable Building Products, Springer Tracts in Civil Engineering, https://doi.org/10.1007/978-3-030-30318-1_6

Types of certification

- Mandatory / voluntary
- Corporate certification / product or service certification

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Voluntary certification examples

Green Label Certification (ISO 14024 Type I Eco-label)

Green Label Certification (ISO 14021 Type III Green Dot)

Environmental Product Declarations Type III - ISO 14025

EPD
THE ALTERNATIVE: EPD 14025

Images taken from https://environment.ec.europa.eu/system/files/2021-10/101_ecolabel_infographic_key_figures_2021_09.pdf and <https://www.epdinternational.com/>

ECOLABEL

- ▶ A registered label used in accordance with EC Regulation 66/2010
- ▶ Voluntary certification
- ▶ Certifies that the product has been environmentally analyzed throughout its life cycle
- ▶ Three years effectiveness

- ▶ Financial facilities are provided for small and medium-sized enterprises, as well as for companies already certified under ISO 14001 or EMAS

Green Dot

- ▶ Registered trademark
- ▶ Symbolizes the participation and financing of the Europe-wide certified packaging material recovery and recycling system

EPD

- ▶ Voluntary declaration
- ▶ Outlines the environmental impacts associated with the production of a specific quantity of a product or service

Images taken from <https://www.ecofootprint.com/>

- ▶ Is based on a Life-Cycle Assessment (LCA)
- ▶ subject to verification by an independent third party

Images taken from <https://www.ecofootprint.com/>

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Main benefits of adopting green certificates

- ▶ Cost reduction through process optimization, particularly in energy use, raw materials, waste management and personnel management.
- ▶ Increased internal efficiency through business process and supply chain optimization

- ▶ Minimization of the risk of accidents through the identification of inefficiencies in production processes, through better information on potential risks and proper management of facilities, work procedures and emergencies

- ▶ Gaining competitive advantages through gaining or maintaining market share
- ▶ Enhancement of corporate image through increased credibility vis-à-vis other economic actors
- ▶ Motivation of staff through a greater sense of responsibility and involvement toward eco-efficiency

Review Questions

- ▶ How can we define a certification?
- ▶ What types of certifications exist?
- ▶ What are the main benefits of adopting green certification?

SUMMARY REVIEW QUESTIONS

- ▶ What is meant by technical standard ?
- ▶ What is the difference between a standard and a guideline?
- ▶ What are ISO standards ?
- ▶ BS8001 standard what principles does it define ?

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- ▶ What areas of focus does the standard XP X30 -901 focus on ?
- ▶ How can we define a certification?
- ▶ What types of certifications exist?
- ▶ What are the main benefits of adopting green certification?

