

# Typologies of ecolabels beyond the ISO 14020-series classification

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- Background on ecolabels
- Goal and approach
- Hypotheses testing, trends and results
- Discussion and outlook



- Labelling:
  - any action of an organization to communicate product-specific information to customers and end users
  - a suitable tool in improving the production and consumption decision-making
- Environmental label/declaration:
  - “*claim which indicates the environmental aspects of a product...*” (ISO 14020:2000)
  - especially useful when disclosing the credence attributes of products





- Labels serve different communication purposes → different formats exist
- ISO on ecolabels and declarations
  - ISO 14020:2000 on general principles of labels and declarations
  - ISO 14024:1999 - Type I ecolabels (ISO/DIS 14024:2016)
  - ISO 14021:2016 - Type II self-declared environmental claims
  - ISO 14025:2006 - Type III environmental declarations

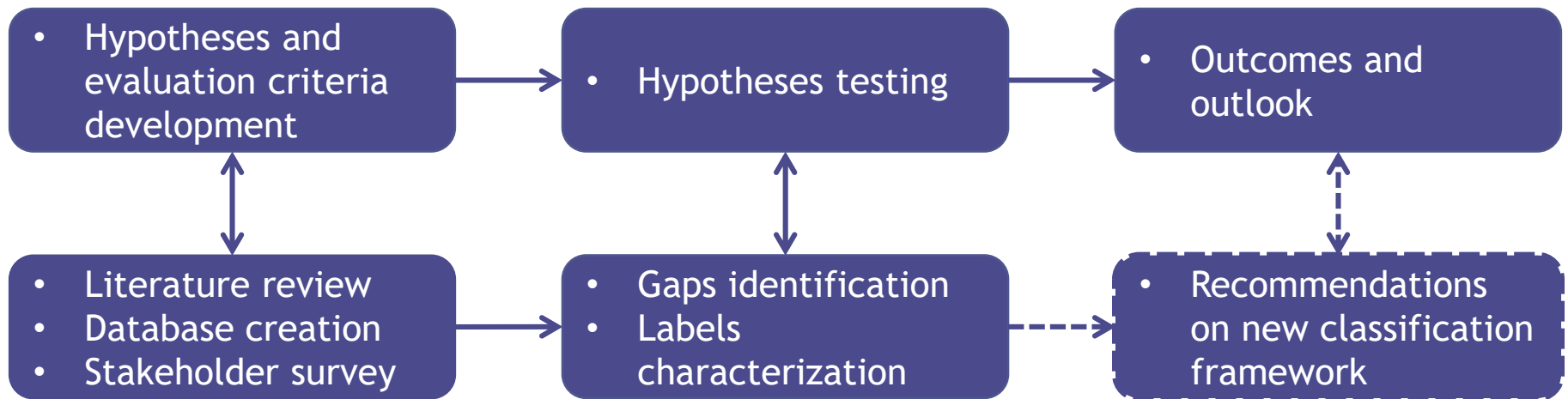


## But is ISO sufficient?

- Over **450** environmental labels on the market → developed on individual basis, serving particular needs
- Different awarding approaches and criteria, impossibility for comparison
- Consumer confusion on the multiplicity of information formats, overlap between labels, hybrid forms

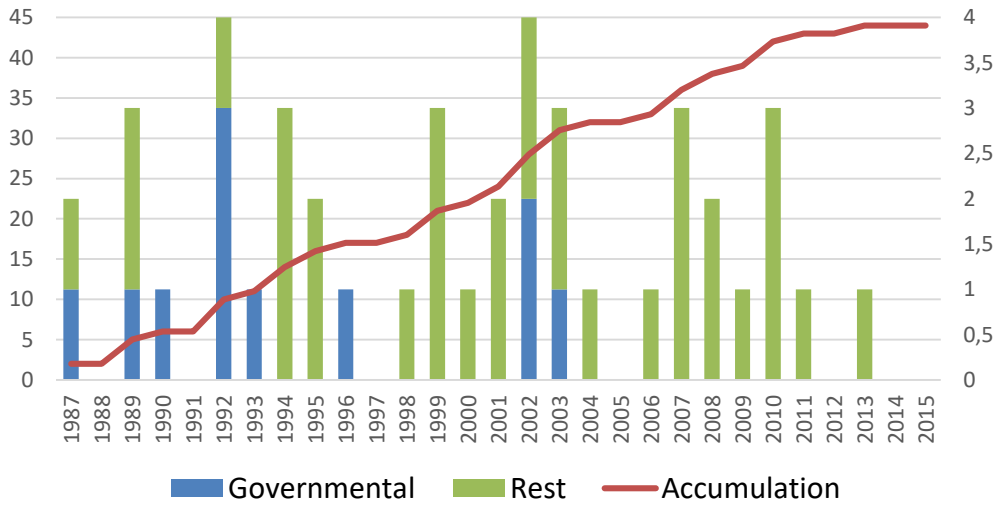
- Goals:
  - Identify trends in ecolabel development
  - Challenge the existing ISO typologies
  - Identify gaps in the current categorization systems

- Approach:

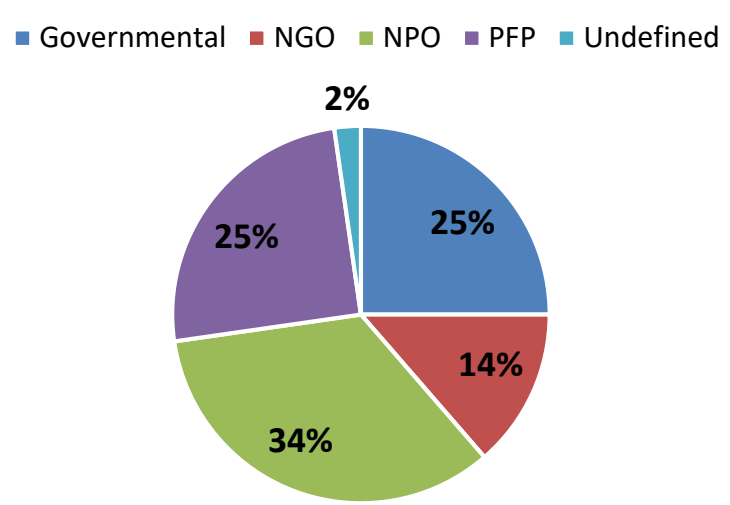


- **H1:** Governmentally owned and operated labels are steadily giving in to the privately led initiatives

New establishments/year + accumulation



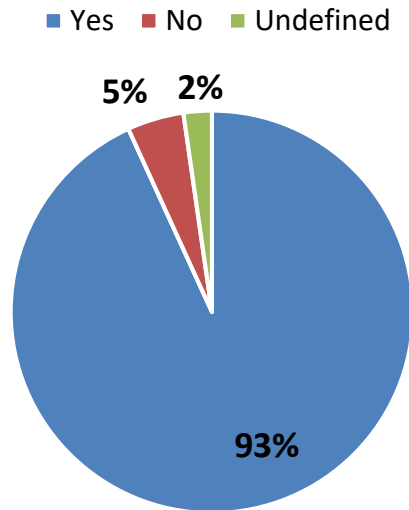
Ownership



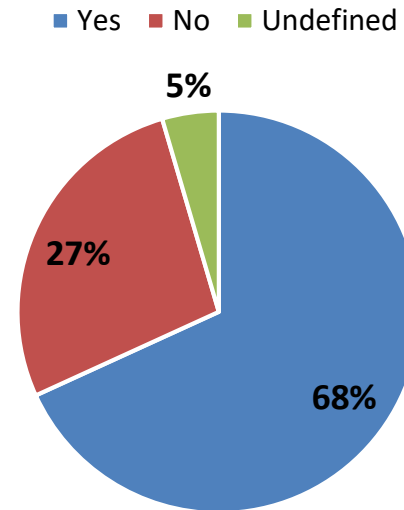
- Outcome: enough evidence to support the hypothesis
  - No newly established governmental labels since 2003 (almost all → established in early 90's)

H2: The credibility of many labels is hampered by insufficient transparency and objectivity in their label/criteria setting process and regarding their awardees (P4&9)

Access to awarding criteria



Access to awardees

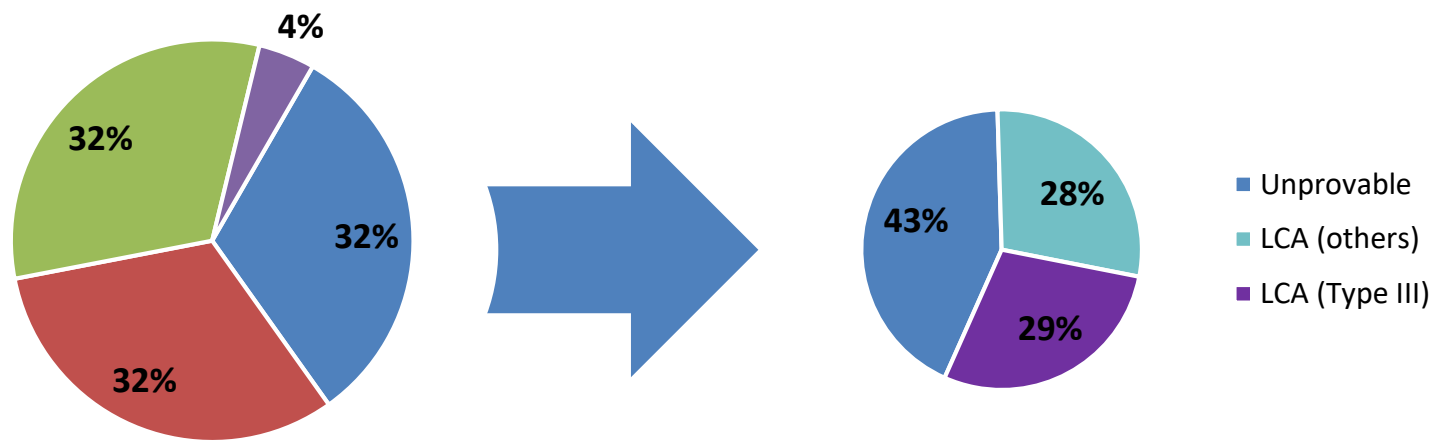


- Outcome: sufficient evidence NOT to support this hypothesis; however:
  - Unclear objectives of many labels + strategies to reach these objectives
  - Vagueness about environmental themes, “*their failure to assure the buyer about the product’s ecological impact[...]*” (van Amstel et al., 2008) → link to ISO 14020

- **H3:** Many labels plead to apply LCT (even full LCA) and cover impacts along the whole life cycle, but not many certainly do it in reality (P5)

## Life Cycle Perspective

■ Full LCA ■ LC-based ■ Non LC-based ■ Undefined



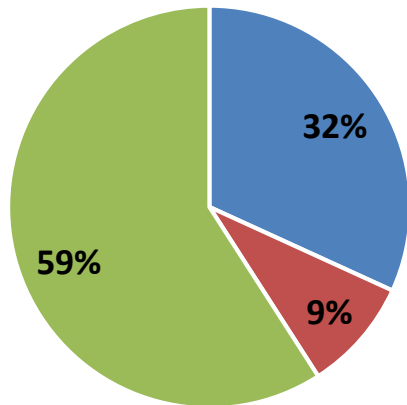
- Outcome: enough evidence to support the hypothesis
  - Difference between pleading and applying LCA in reality → misuse of ‘LCA’
  - No clear trend, if newer labels adopt more often LCA, though better recognized



- **H4:** Different types of labels can be distinguished on the markets nowadays, going beyond the classical three types of ISO labels

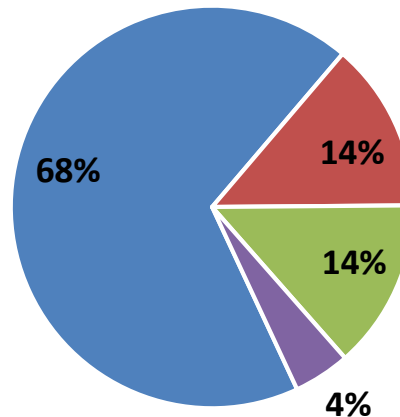
ISO Typology

■ Type I ■ Type III ■ Undefined



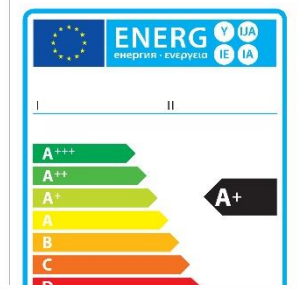
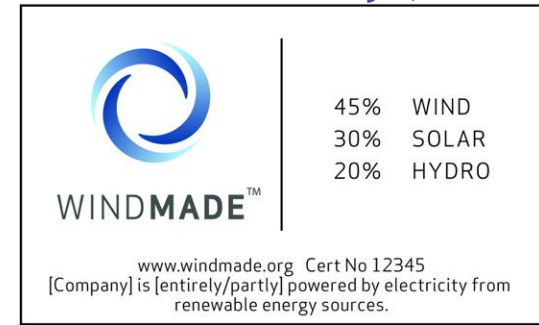
Awarding format

■ Seal ■ Declaration ■ Rating ■ Undefined



Non-sealed: 83%  
Sealed: 17%

Rating only: 60%  
Seal and rating: 40%



- Outcome: enough evidence to support the hypothesis
  - Many labels have no typology assigned or assigned wrongly
  - More formats exist beyond the ISO ones → ISO typologies do not serve properly as a classification and differentiation media

- 15 different categories of attributes currently defined

Awarding format	Seal	Environmental attributes	Single-attribute
	Rating (seal and rating)		Multi-attribute
	Rating (only)	Governance	Governmental
<b>Still TO DOs:</b>	Declaration (sealed)		Quasi-governmental
	Declaration (non-sealed)		Private for profit (PFP)
<b>Complete the list of labels attributes</b>			Private for non-profits (NPO)
<b>Sector scope</b>	Sector specific		Non-governmental (NGO)
	Multi-sectorial	<b>Financial sourcing</b>	Private
<b>Operation scope</b>	Product/service		Governmental
<b>Extend the study to other products → correlation and verification of results</b>	Production process/method		Fees
			Member dues
<b>Define patterns and interlinkages</b>	Business/ organization	<b>End-user communication</b>	Business-to-consumer
<b>Geographic scope</b>	National		Business-to-business
	Regional		Business-to-government
<b>Propose an alternative classification of labels</b>	International		Government-to-consumer
<b>Life cycle perspective</b>	Full LCA	<b>Transparency</b>	Label setting process (y/n)
	LC-based		Awardees (y/n)
	Non-LC based	<b>Quality assurance</b>	First party
<b>Life cycle scope</b>	Mining/extraction		Second party
	Production/manufacturing		Third party
	Logistics	<b>Serving purpose</b>	Ideals-centric
	Use/operation		Adversity-centric
	End-of-Life	<b>Longevity</b>	Single-issued
	All LC stages		Renewable
<b>Covered aspects</b>	Environmental		Renewable + improvement
	Social/health		
	Both		



- Discussion:
  - More label formats exist, than ISO currently characterize
  - Although access to criteria is ensured by most of the labels, still objectives and strategy to reach these objectives is unclear → trustworthiness of the consumer
  - Environmental effects of labels
  - Social criteria in ecolabels: often relate to the organization, but not the product
  - Imposition of full LCA, but not semi-qualitative assessments → to get the broad picture; to set clear rules for exhaustive awarding criteria
  - Where is PEF heading to in this context?
- Outlook:
  - Proposal for alternative classification of environmental labels and declarations
  - Exploration of applying organizational LCA approach to labels
  - Exploration of the real environmental effects of existing labels



# Thanks for your attention!

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