## Life Cycle Assessment & Environmental footprinting

- a look at the existing standards

#### **WEBINAR**



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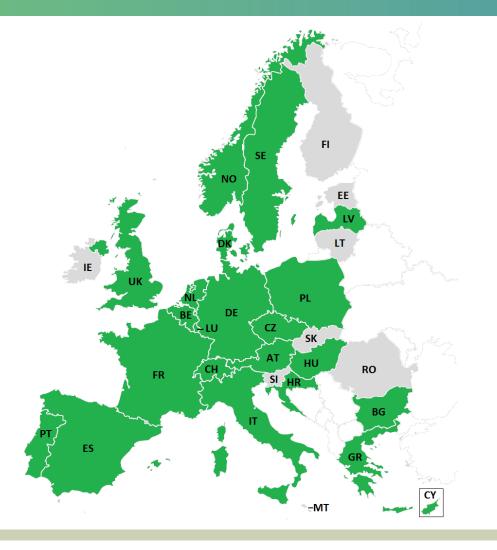
## ECOS - European Environmental Citizens' Organisation for Standardisation

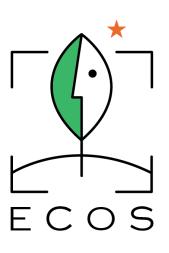














## TODAY ON THE AGENDA









- LCA: what is it and what is it for?
- ISO standards for LCA: the basics
- ISO standards for LCA: the limitations
- Policy use of LCA: recommendations
- Q&A











## LIFE-CYCLE ASSEMENT WHAT & WHY



Mathilde Crêpy Programme Manager, ECOS



### Life Cycle Assessment – a brief introduction



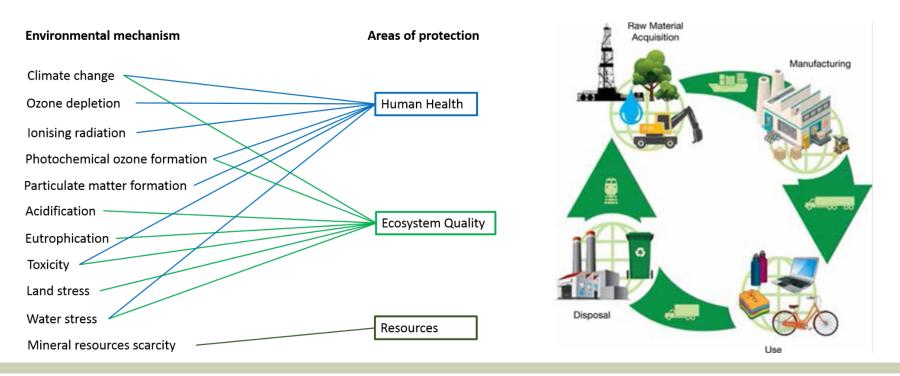






## Technique for assessing the environmental impacts of a product in a **holistic** way

i.e. product system & environmental impacts













## A QUICK POLL!



## LCA of... pasta

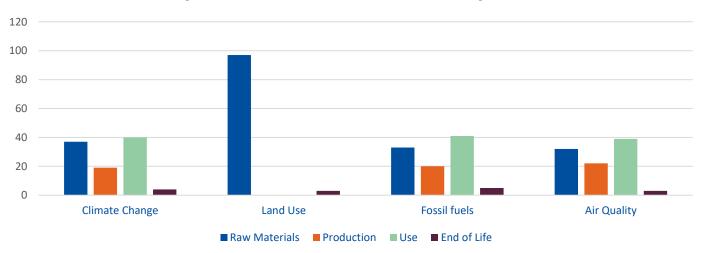








### Life Cycle Assessment of pasta





Raw materials... and use!



### What do we use LCA for?











Assess "modelled" vs. "assumed" impacts



Inform decision makers



• Improve performance / reduce impacts



Avoid burden shifting



• Compare <u>similar</u> products



Marketing





### What NOT to use LCA for?









Create non-tariff trade barriers

Set legal obligations

Compare <u>different</u> products













## ISO STANDARDS FOR LCA T H E B A S I C S



Kim Christiansen ECOS Expert



### ISO 14040 and 14044: some history









- Developed in the 1990's
- First version in 1997
- "Revised" in 2006, not revised since!
- Other standards based on 14040/44:
  - carbon footprint (2013, revised 2018)
  - water footprint (2014)







## ISO 14040 and 14044: the basics

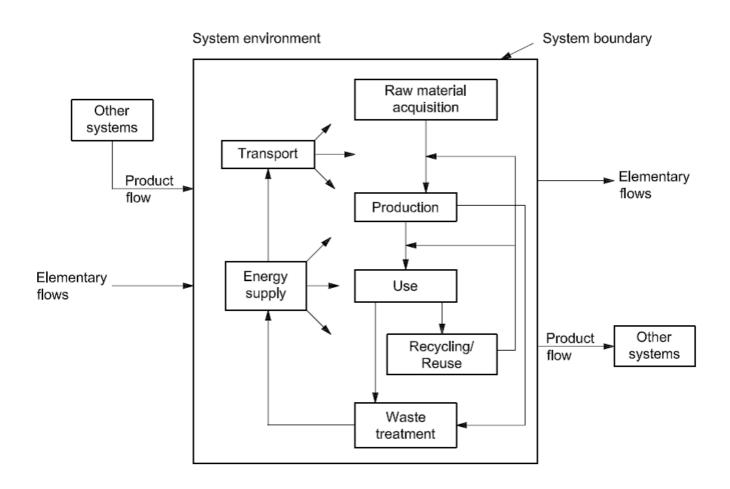








## LCA: based on the **input** and the **outputs** to the **system** and understanding their relationship with the environment



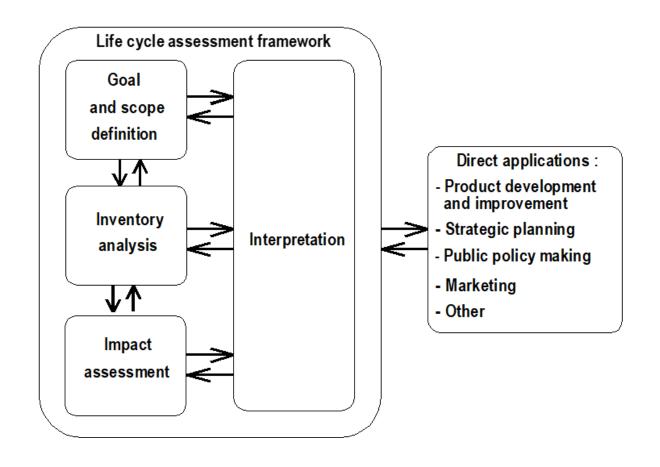
### ISO 14040 and 14044: the basics





















## ISO STANDARDS FOR LCA THE LIMITATIONS



Kim Christiansen ECOS Expert



## ISO standards and their limitations









- ISO standards are old & updated information on the different existing methodologies and approaches is needed
- Data coverage limitations
- Vague terminology
  - Meaning of science based
  - "no weighting for comparative assertion to the public"
- "Not intended for contractual or regulatory purposes or registration and certification", and yet...
- No list of essential impact categories





















# TIME FOR A QUIZ!











## POLICY USE OF LCA RECOMMENDATIONS



Mathilde Crêpy
Programme Manager, ECOS



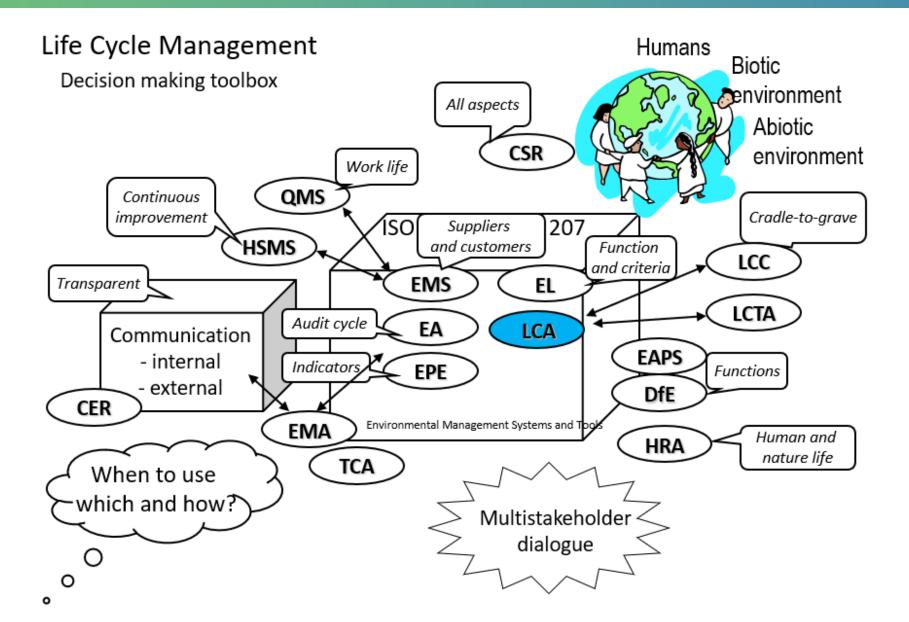
## Many tools to choose from...











## Use of LCA: examples from EU product policy instruments









- Policies developed based on life cycle approach
  - Ecodesign
  - Construction Products Regulation
  - EU Ecolabel
- Policies whose implementation rests upon LCAs
  - Environmental Product Declaration
  - Product Environmental Footprint



















### LCA in policy: shortcomings & recommendations









#### Main shortcomings

- Aspects and/or impacts partially considered (biodiversity, toxicity) or not at all (nanomaterials)
- Limited involvement from NGOs and civil society
- Communication on certain environmental aspects and impacts <u>only</u> (subjective)





#### Recommended applications

- Common methodology (EU Ecolabel, ecodesign/energy labelling, sustainability of construction products, GPP)
- Communication platform for B2B only
- Communicate on better performance only if unequivocally better





## OVER TO YOU! Q & A



#### Join us for our December conference!











Registration is free of charge and open for all!



## Thank you!











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