

European Business & Nature Summit

GS4 — Towards common ground in biodiversity measurement approaches for business

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#BusinessNatureSummit



Biodiversity measurement in Environmental Footprint

European Business and Nature Summit

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Why Environmental Footprint methods?



- 2010:**
- proliferation of labels a potential threat to Single Market
 - request from major industry players
 - Council conclusions

Cannot use LCA
systematically in policy
making



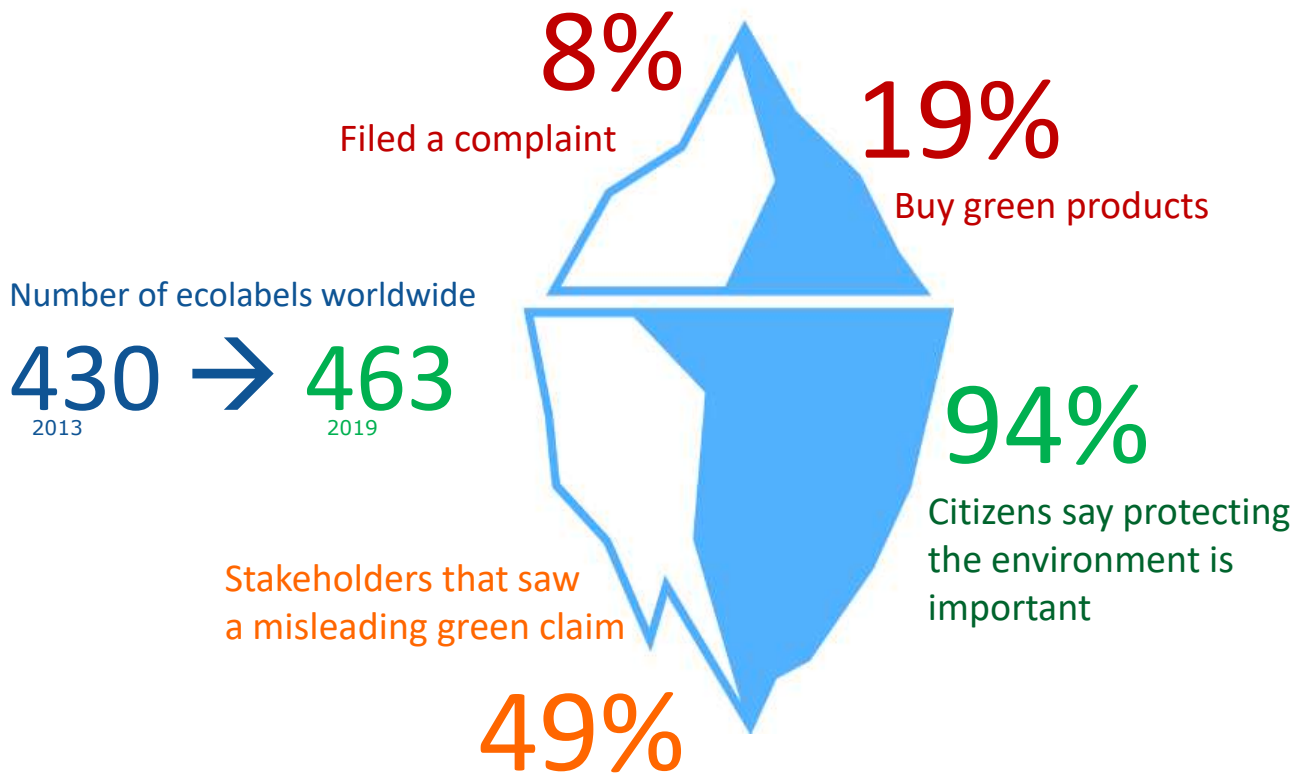
Same product

BUT

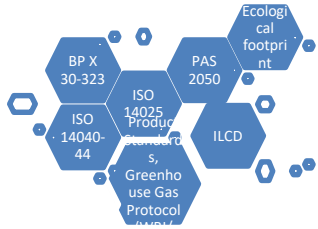


Different results

We need information that is **reproducible, comparable,**
and **verifiable**



What is Environmental Footprint?



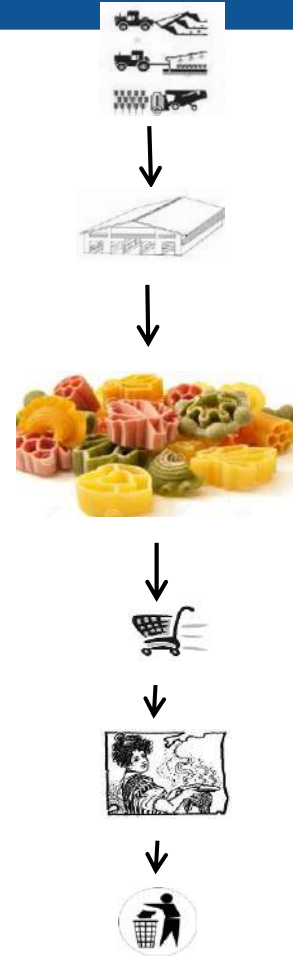
- **Life Cycle Assessment** methods
- Developed and adopted in 2013
- Road tested in collaboration with **27** industry sectors, **>300** companies worldwide and **>2000** stakeholders (till mid 2018)
- **Built on existing methods** (e.g. ISO 14040-44, ISO 14025, ISO 14067, LEAP,...)
- Complemented with stricter requirements & specific modelling rules
- To calculate environmental information that is reproducible, comparable and verifiable
- PEF: One guide to calculate the env. Impact of products
- OEF: One guide to calculate the env. Impact of organizations

Detailed modelling rules:

- *When to use primary data or secondary data*
- *How to handle co-products*
- *How to model agricultural activities*

- *How to model electricity*
 - ❖ *Green certificates allowed*
 - ❖ *Electricity grid mix to be used: country mix*
 - ❖ *Energy infrastructure and energy transport losses: included*

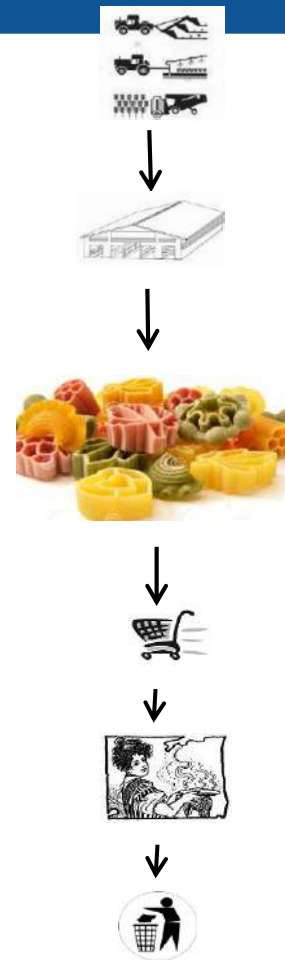
- *How to model transport: default data for scenarios*
- *How to model the use stage*
- *How to model secondary materials, recycling, end of life*



Detailed modelling rules:



16 Impact categories	Unit
Climate change	Kg CO ₂ eq
Ozone depletion	Kg CFC-11 eq
Particulate matter	Disease incidence
Ionising radiation, human health	kBq U ²³⁵ eq
Photochemical ozone formation, human health	Kg NMVOC eq
Acidification	Mol H ⁺ eq
Eutrophication, terrestrial	Mol N eq
Eutrophication, freshwater	Kg P eq
Eutrophication, marine	Kg N eq
Land use	Points
Human toxicity, cancer	CTUh
Human toxicity, non cancer	CTUh
Ecotoxicity, freshwater	CTUe
Water use	M ³ world eq
Resource use, fossils	MJ
Resource use, minerals and metals	Kg Sb eq



Shall be calculated using the specified impact assessment models + combined into single score.

“Additional environmental/technical information” may be added

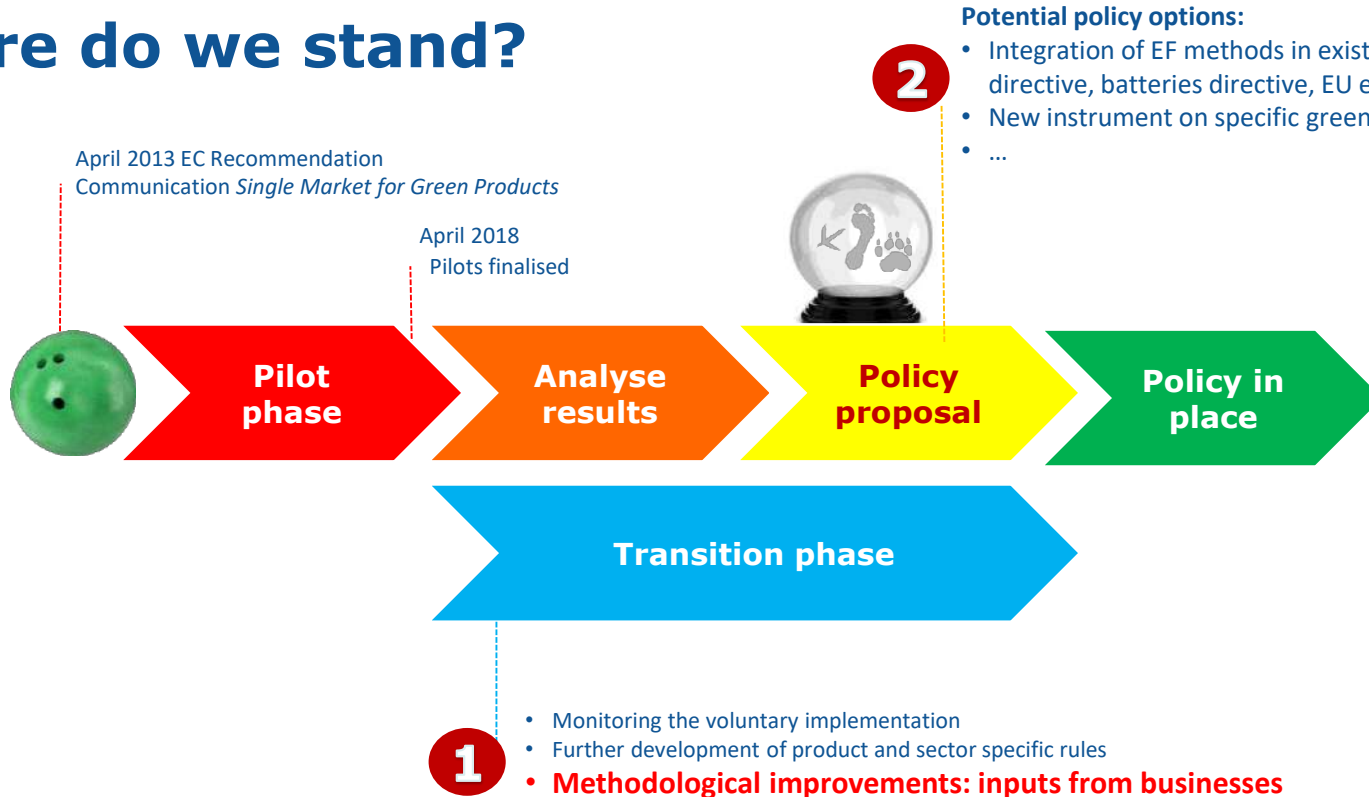
Biodiversity is indirectly covered by 8 different ICs



Land use

1. *Erosion resistance (kg soil /m²*a)*
2. *Mechanical filtration (m³ water/m²*a)*
3. *Groundwater replenishment (m³ groundwater regeneration/m²*a)*
4. *Biotic production (kg/m²*a)*

Where do we stand?



1

Methodological developments: Technical advisory board

*The TAB provides **advice and expertise** to the Commission
An open exchange where we are striving for consensus*

Tasks:

*Technical advice related to the implementation of PEFCRs/OEFSRs
New methodological developments necessary for EF*

...

Agricultural working group

- *A more granular approach for LCI modelling of pesticides*
- *Improving LCI modelling of fertilisers*
- *Identify an approach to model flows/direct emissions related to feed digestion and manure management (animal/fish) at farm*
- *Detailed guidelines for LCI modelling of water use*
- *Biodiversity impacts: recommendations on how to improve/complement the current EF impact indicators*
- *Primary data collection/quality for farm related activities, in line with the data requirements of the EF methods.*



**Draft version:
Discussed at next TAB
meeting (November)**

Biodiversity impacts

(Agricultural working group)

Following steps are foreseen:

- 1) A mapping of existing methodologies quantifying biodiversity effects (inside and outside LCA);*
- 2) Selecting suitable options, depending on the scope, covering one or more ICs from EF or beyond;*
- 3) Testing the options selected, if seen necessary;*
- 4) A proposal will be made on the how to better assess biodiversity in the EF context, this can include different recommendations depending on the scope of the study.*

Priorities of the new European Commission 2019-2024



"I will propose a European Green Deal in
my first 100 days in office"

Ms. Ursula von der Leyen
President-elect European Commission

EF (incl. biodiversity): to support several initiatives



Abundance of methods available



IMPACT world

The Biological Diversity Protocol

The agribiodiversity index **GLOBIO**

Product Biodiversity Footprint

EcoScarcity 2013 **ReCiPe 2008**

Kering's Environmental Profit & Loss approach
Larrey-Lassalle et al. 2018

Pressure-State-Response indicators (LEAP) **Verones et al. 2017**

Species Threat Abatement and Recovery Metric

Chaudhary and Brooks 2018
Biodiversity Footprint for Financial Institutions

Biodiversity Impact Metric Crenna et al. 2018
Stepwise

Balancing value initiative



ASSESSMENT OF BIODIVERSITY MEASUREMENT APPROACHES FOR BUSINESSES AND FINANCIAL INSTITUTIONS
EU Business @ Biodiversity Platform



Learnings and inputs are more than welcome!!

Conclusions

It is possible to capture and measure the impact of biodiversity

Proliferation of methods



Guidance is needed on what to use in which situation, with the EF methodology

http://ec.europa.eu/environment/eussd/smgp/PEFCR_OEFSR_en.htm

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End of Day 1

Thank you!
Muchas gracias!

7 & 8 November 2019

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Building actions for nature & people

Back to Plenary!

#EUbiodiversity
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Madrid, 7 & 8 November 2019



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