

Product environmental footprint seminar on biodiversity & LANCA (Land Use Indicator Value Calculation in Life Cycle Assessment)

November 24, 13.00-15.00

*Webinar arranged within the project
Environmental footprint in Sweden*



VINNOVA
Sweden's Innovation Agency

Swedish Life Cycle Center



Partners



Government agencies in collaboration



Environmental footprint in Sweden

- Coordinate Sweden's work on Product Environmental Footprint (PEF)
- Engage Swedish actors in PEF
- Give Swedish actors a better understanding of the methodological issues in PEF and the PEF policy development
- Impact the PEF method development

...through

- Coordination between TAB members in Sweden
- Arrange forums for dialogue
- Information & communication
- Research and case studies

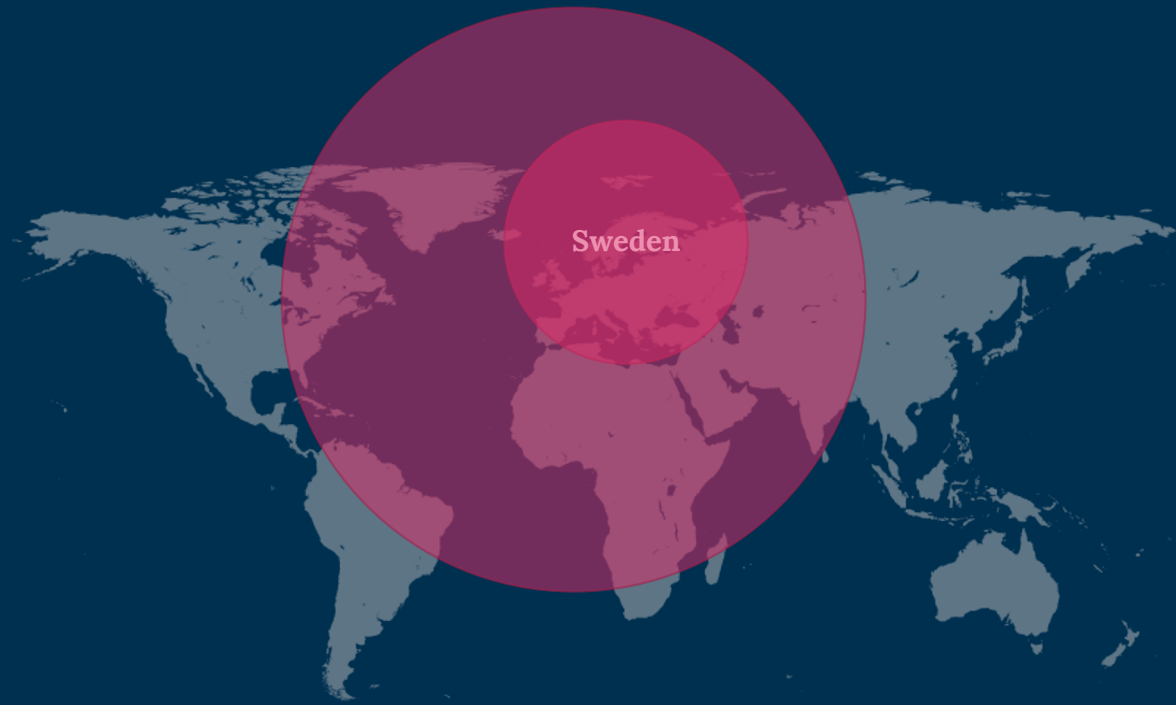
Aim of webinar

insight into biodiversity and land use methodologies for Environmental Footprints (EF) and through discussion influence the continued development of Environmental Footprint

Agenda

- Welcome and introduction to Product Environmental Footprint and the project Environmental Footprint in Sweden (Sara Palander SLC, Elin Eriksson, IVL)
- Strategies and policy requirements from EU Commission related to Biodiversity and Land use; e.g. Green Deal, Taxonomy, EU Forest Policy (Elin Eriksson, IVL)
- Introduction to the LANCA method, and ongoing developments (Rafael Horn, Fraunhofer)
- Status of Biodiversity in the Agricultural WG in TAB and the ongoing evaluation (Rafael Horn, Fraunhofer)
- Short break!
- Status of development of Biodiversity Standard within ISO (Andreas Englund, IVL)
- Example of approaches to quantify biodiversity in LCA in relation to PEF (Serina Ahlgren, RISE, Eskil Mattson, IVL)
- Discussion
- Reflections and ways forward!

Participants



Experienced in Life Cycle
Assessment

Expertise in biodiversity

Learning!

House rules!

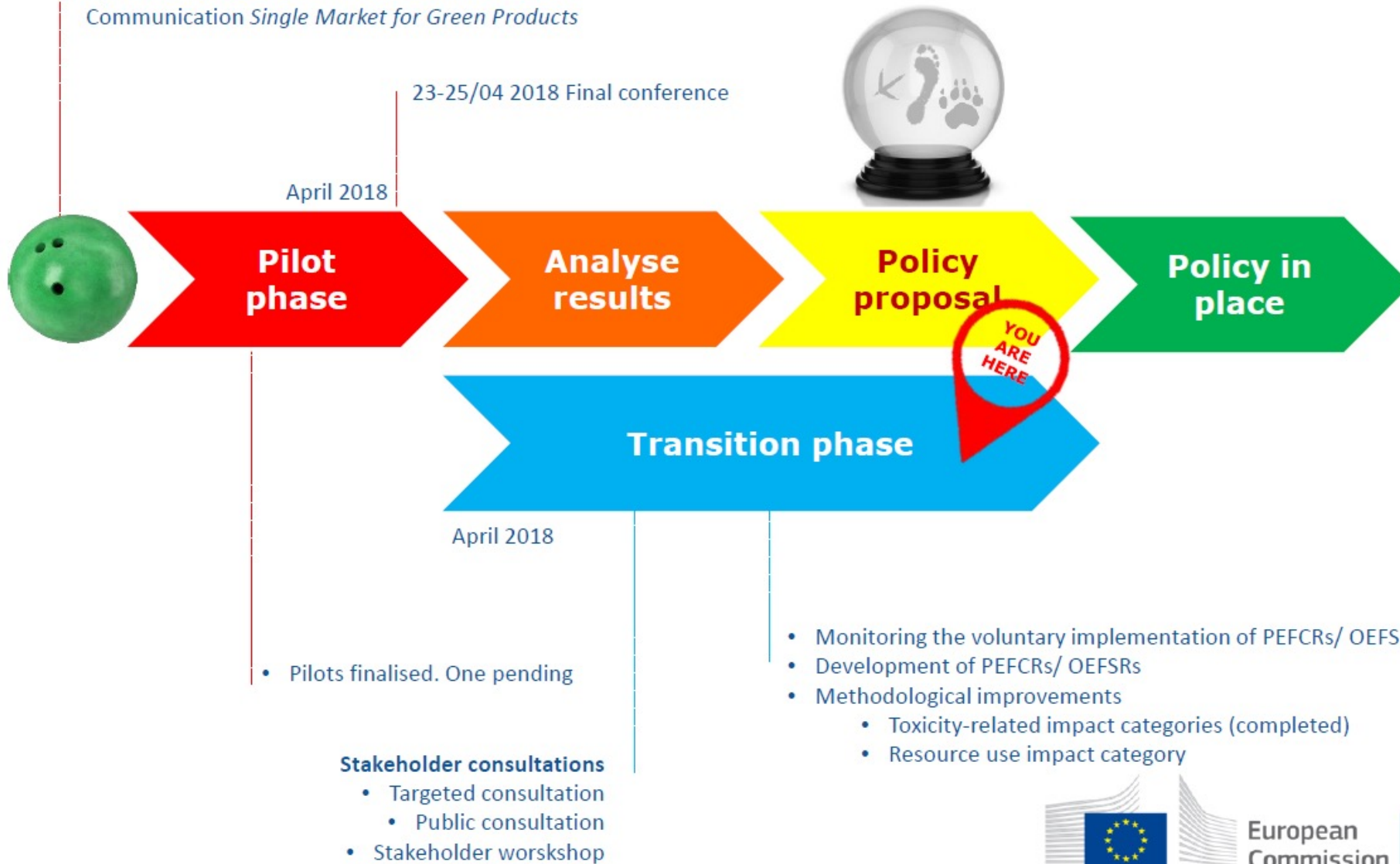
- Keep your microphone muted!
- Time for questions – use the chat function
- If you have problems with the audio? – dial in!
- This webinar is recorded!

Product Environmental Footprint

Elin Eriksson, IVL Swedish Environmental Research Institute

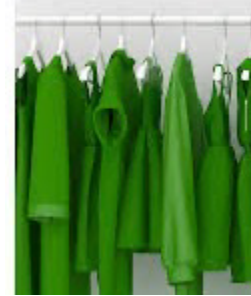
Product Environmental Footprint – to harmonise footprints, declarations and claims in EU

April 2013 EC Recommendation
Communication *Single Market for Green Products*



PEFCR development during Transition phase (Product Environmental Footprint Category Rules)















- Apparel and footwear
- Cut flowers and potted plants
- Flexible packaging
- Marine Fish
- Synthetic Turf




Product Environmental Footprint and Organisational Environmental Footprint Pilots



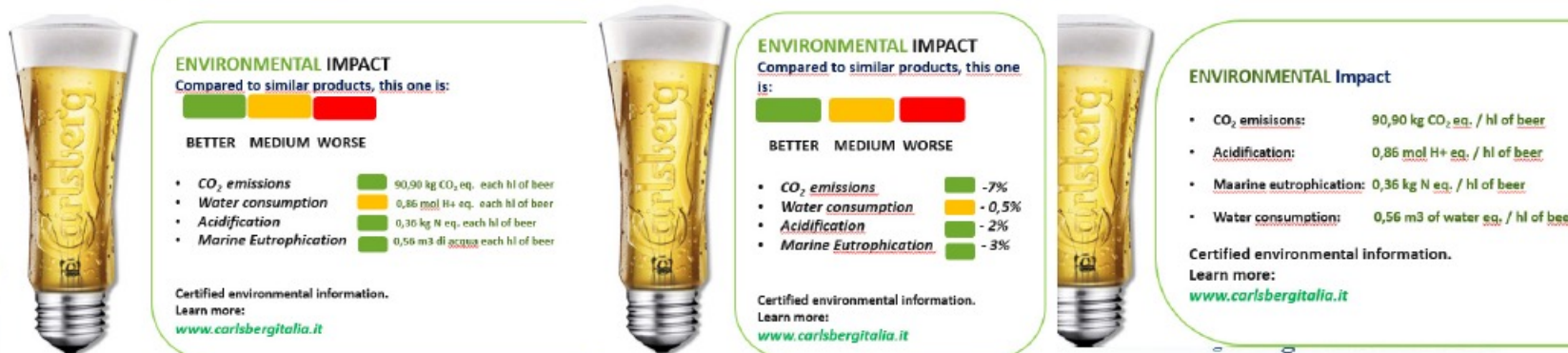
1st wave of pilots

-  Batteries and accumulators
-  Decorative paints
-  Hot & cold water pipe systems
-  Liquid household detergents
-  IT equipment
-  Metal sheets
-  Non-leather shoes
-  Photovoltaic electricity generation
-  ~~Stationary~~
-  Intermediate paper products
-  T-shirts
-  Uninterrupted power supplies
-  Retailer sector
-  Copper sector

2nd wave of pilots

-  Leather
-  Thermal insulation
-  Beer
-  ~~Coffee~~
-  ~~Fish~~
-  Dairy products
-  Feed
-  ~~Meat~~
-  Pet food
-  Olive oil
-  Pasta
-  Wine
-  Packed water

Possible ways to communicate PEF results



Harmonised modelling rules



Rules have been developed

- 😊 How to define representative product/organisation
- 😊 Life Cycle Impact Assessment Methods
- 😊 Materiality principle (Hotspot procedure)
- 😊 Cut-off
- 😊 Climate change modelling
- 😊 Agricultural modelling
- 😊 Electricity modelling
- 😊 Transport modelling
- 😊 Infrastructure and equipment modelling
- 😊 Packaging modelling
- 😊 Use stage modelling
- 😊 End-of-Life modelling
- 😊 Data Need Matrix

- 😊 Benchmark
- 😊 ~8000 EF-compliant secondary dataset
- 😊 Normalisation

Discussions needed

- 😊 Functional Unit
- 😊 Scope (granularity)
- 😊 Allocation
- 😊 Biodiversity
- 😊 Data Quality Requirements
- 😊 Toxicity
- 😊 Weighting

No agreement on method

- 😞 Slaughterhouse modelling
- 😞 Classes of performance

Strategies and the policy requirements from the EU Commission

Elin Eriksson, IVL Swedish Environmental Research Institute

The EU Biodiversity Strategy

ONE VISION

By 2050, all of the world's ecosystems are **restored**, **resilient**, and adequately **protected**

ONE GOAL

Put Europe's biodiversity on the path to recovery by 2030 for the benefit of **people**, the **planet**, the **climate** and our **economy**

FOUR PILLARS



1

Protect Nature

Expand protected areas to 30% of the EU's land and sea, and put a third of these areas under strict protection



2

Restore Nature

Restore nature and ensure its sustainable management across all sectors and ecosystems



3

Enable transformative change

Strengthen the EU biodiversity governance framework, knowledge, research, financing and investments



4

EU action to support biodiversity globally

Deploy EU external actions to raise the level of ambition for biodiversity worldwide, reduce the impact of trade and support biodiversity outside Europe



ACTIONS AND COMMITMENTS TO 2030

Taxonomy requirements



Substantial contribution to Climate Change Mitigation



And compliance with the requirements of the other five objectives

Including Biodiversity



Introduction to the LANCA method

Rafael Horn, Fraunhofer

Ongoing in the Agricultural working group within the Technical Advisory Board

Rafael Horn, Fraunhofer

Short break!



Development of Biodiversity Standard within ISO

Andreas Englund, IVL Swedish Environmental Research Institute

Example of approaches to quantify biodiversity in LCA

Serina Ahlgren, RISE Research Institutes of Sweden

Eskil Mattsson, IVL Swedish Environmental Research Institute

Discussion!

Go to menti.com and use the code 2697 0898

Q: Comparison of product environmental performance is a basic aspect promoted through introduction of PEF. How can we compare the biodiversity/land use performance of different products?

Q: Where are the gaps and needs?

Q: How can Scandinavian conditions be more taken into account? How can we drive and impact the development?

The background of the slide is a close-up, high-speed photograph of water. It features a series of concentric ripples emanating from a central point, with smaller, more chaotic ripples and droplets scattered across the surface. The water is a deep, vibrant blue, and the lighting creates bright highlights and dark shadows, emphasizing the texture and movement of the liquid.

Reflections & ways forward

lifecyclecenter@chalmers.se

www.lifecyclecenter.se/calendar

LinkedIn: Swedish Life Cycle Center

<https://www.lifecyclecenter.se/registration-to-public-newsletter/>