

The Organisation Environmental Footprint (OEF) Retailers pilot testing

Presentation of this pilot selected by the European Commission

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Carole Dubois

Director Institutional Affairs

✉ carole.dubois@quantis-intl.com

☎ 0041 78 757 23 87

Sebastien Humbert

Scientific Director

✉ sebastien.humbert@quantis-intl.com

☎ 0041 79 754 75 66

What is the environmental footprint of...



a retailer?



Retailers act as a **link** between a multitude of **upstream and downstream markets**

Retail
10.9%
of non-financial
business economy

Key player in the European economy
Turnover = EUR 2'592 billions in 2010 (EU-27)



Close relation to the **supply chain partners**
and the **consumers**

OEFSR Retail Technical Secretariat



6 retailers



3 public agencies



1 retailers assoc.



1 NGO



1 LCA consultant

Organisation Environmental Footprint (OEF)



development guided by
4 core criteria

multi-criteria

life cycle-based approach

reproducibility

physically realistic modelling

The EF pilot phase

The steps for building an OEFSR



1. Definition of the **sector**

2. Definition of **representative organisation**

3. OEF **screening** : most relevant life cycle stages and processes

4. **Draft** of sector rules

5. Supporting study: identification of the **most relevant impacts**

6. Final **OEFSR**

OEF Screening study

Currently on-going

OEF retail screening report in the context
of the EU Organization Environmental
Footprint Sector Rules (OEFSR) Pilots

01 October 2014 - v.1.0

DRAFT FOR COMMENTS BY DGENV AND JCR

1

Check it on the stakeholders workspace:

[https://webgate.ec.europa.eu/fpfis/wikis/display/EUENVFP/
Stakeholder+workspace%3A+OEFSR+pilot+Retail](https://webgate.ec.europa.eu/fpfis/wikis/display/EUENVFP/Stakeholder+workspace%3A+OEFSR+pilot+Retail)

Public online consultation for your feedback:
**Spring / Summer 2015 (date to be confirmed
soon)**

Draft OEFSR

Currently in writing



Check it on the stakeholders workspace:

<https://webgate.ec.europa.eu/fpfis/wikis/display/EUENVFP/Stakeholder+workspace%3A+OEFSR+pilot+Retail>

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Scope of the screening

Unit of analysis

Activities of a retailer, as a product provider, i.e. taking into account, when relevant, the life cycle impacts of the products provided, over a 1-year time interval

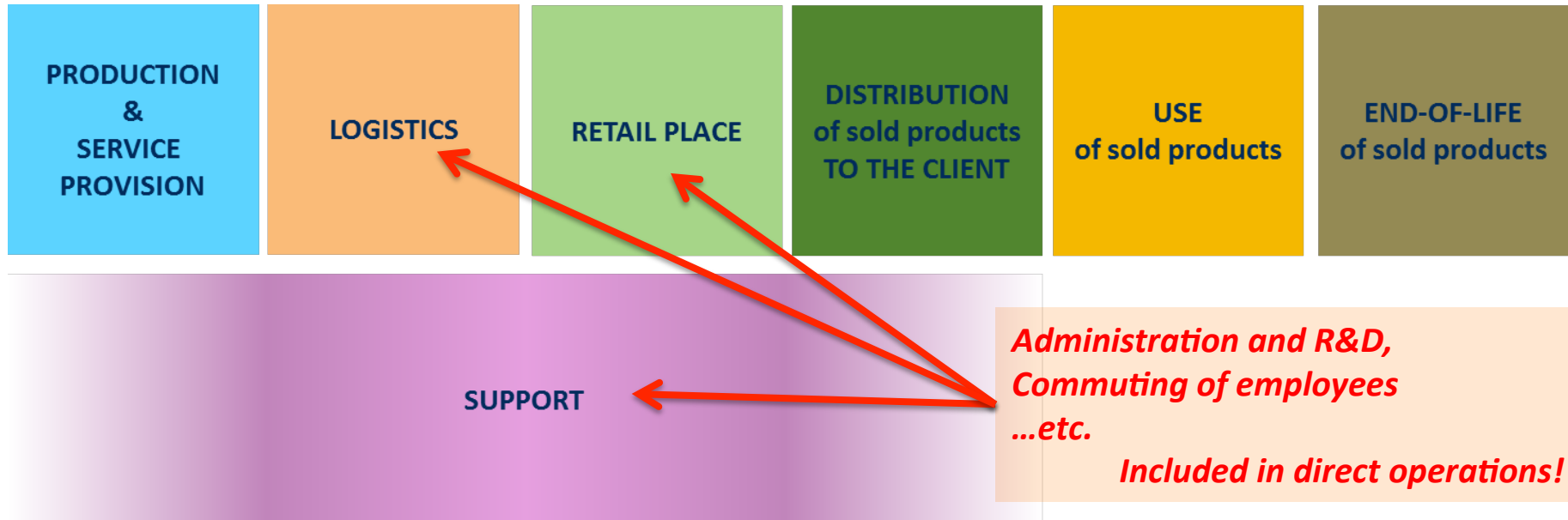
Scope of the screening

System boundaries



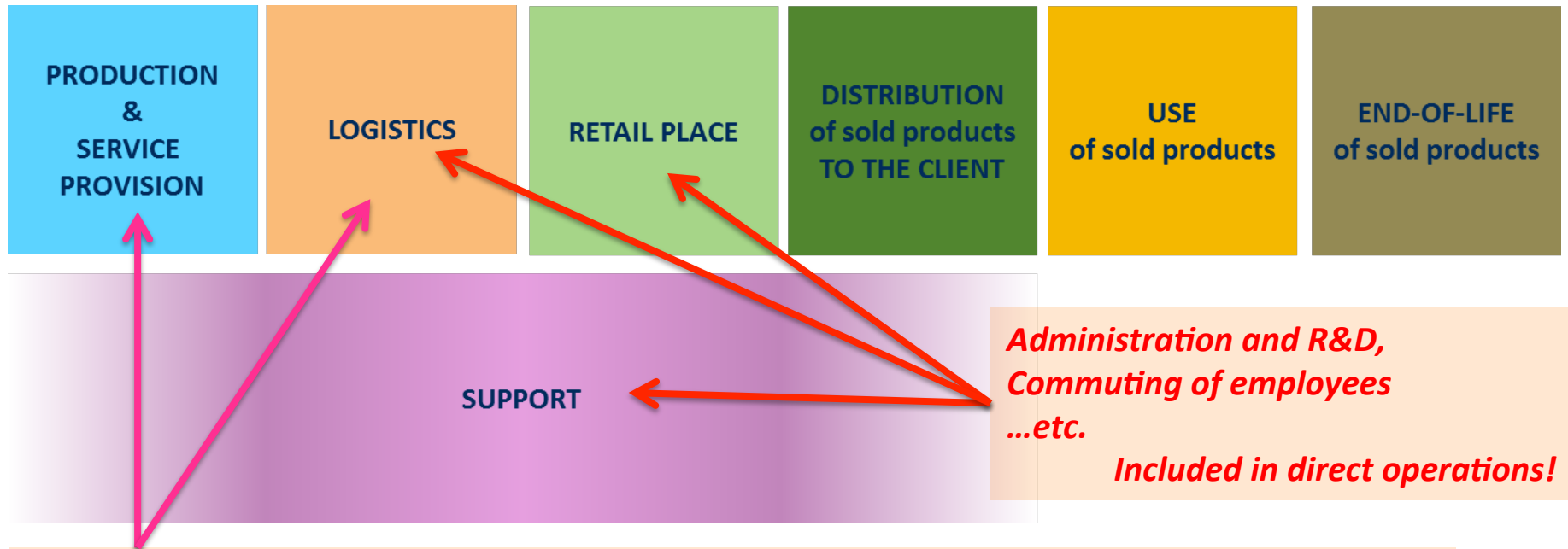
Scope of the screening

System boundaries



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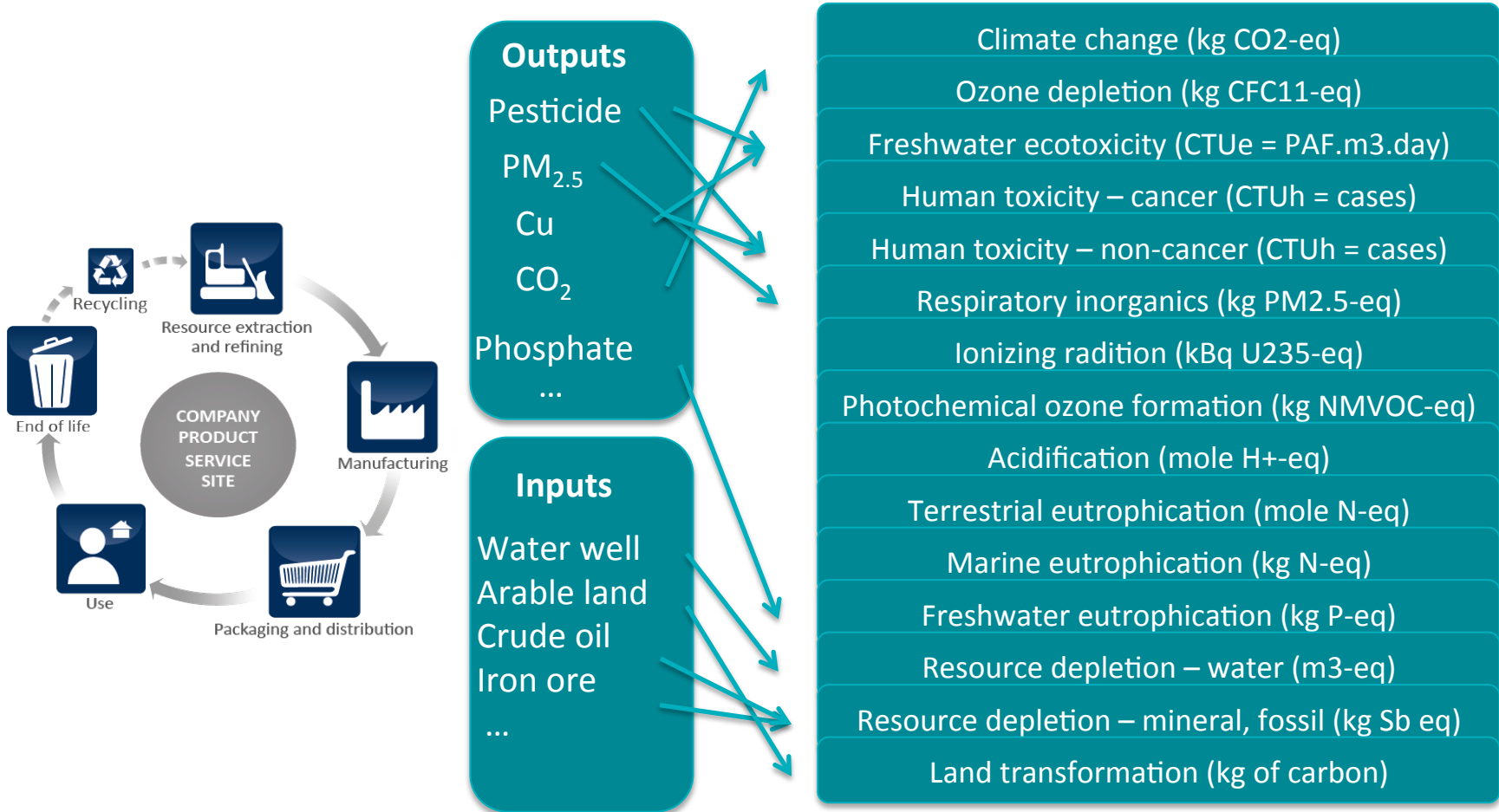
What about those elements in supply chain?

Traditionally not included → inconsistency!?

→ Improve/complete LCI databases?

→ Importance to have transparent LCI databases so that check can be done and potential necessary adaptations can be done

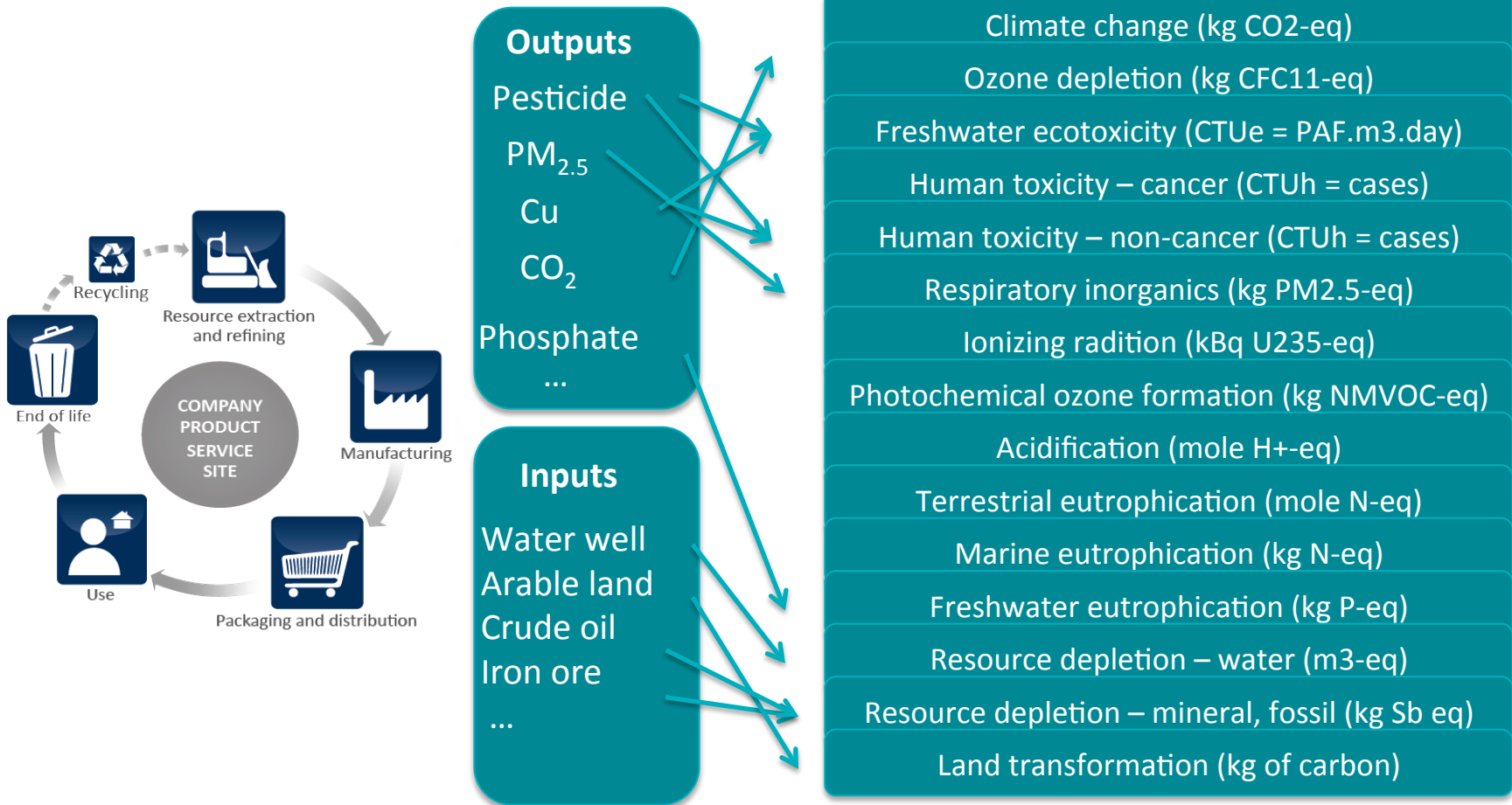
LCIA method recommended by PEF/OEF



And hundreds more...

LCIA method recommended by PEF/OEF

Methodological challenges



And hundreds more...

LCIA method recommended by PEF/OEF

Methodological challenges

**Identification of
« most relevant »
impact categories?
(→ with midpoint categories?)**

**→ explore damage methods such as IMPACT World+
to help identify most relevant categories**



Inputs
Water well
Arable land
Crude oil
Iron ore
...

And hundreds more...

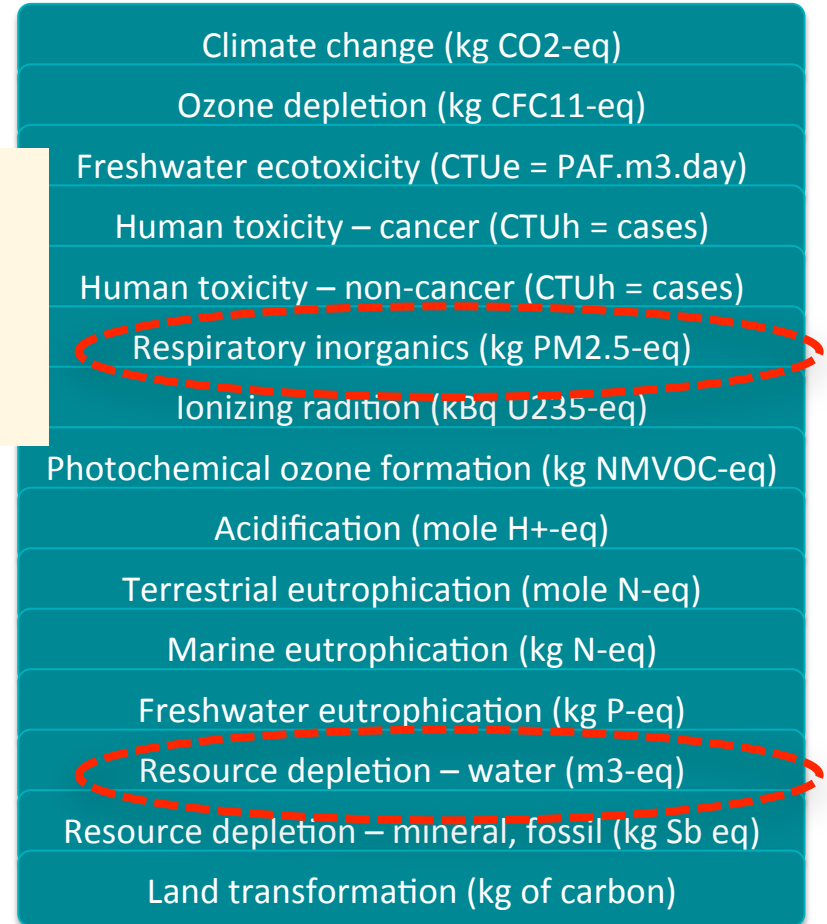
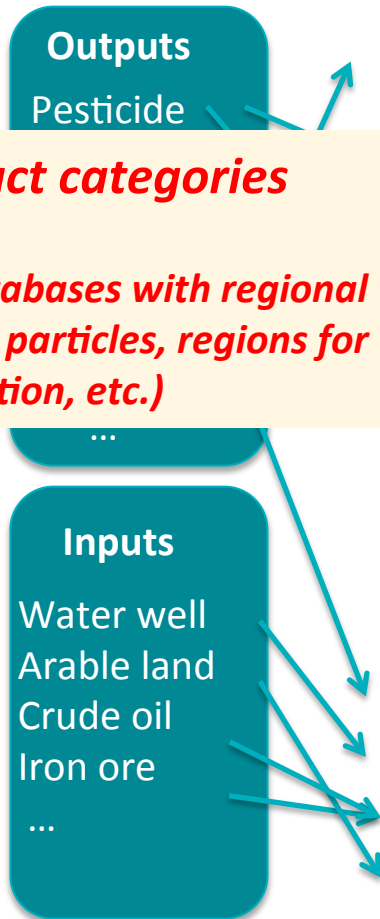
Climate change (kg CO₂-eq)
 Ozone depletion (kg CFC11-eq)
 Global warming potential (CTUe = PAF.m³.day)
 Photochemical oxidant toxicity – cancer (CTUh = cases)
 Photochemical oxidant toxicity – non-cancer (CTUh = cases)
 Acid equivalents (kg PM_{2.5}-eq)
 Ionizing radiation (kBq U235-eq)
 Acid equivalent (kg NMVOC-eq)
 Acidification (mole H⁺-eq)
 Terrestrial eutrophication (mole N-eq)
 Marine eutrophication (kg N-eq)
 Freshwater eutrophication (kg P-eq)
 Resource depletion – water (m³-eq)
 Resource depletion – mineral, fossil (kg Sb eq)
 Land transformation (kg of carbon)

LCIA method recommended by PEF/OEF

Methodological challenges

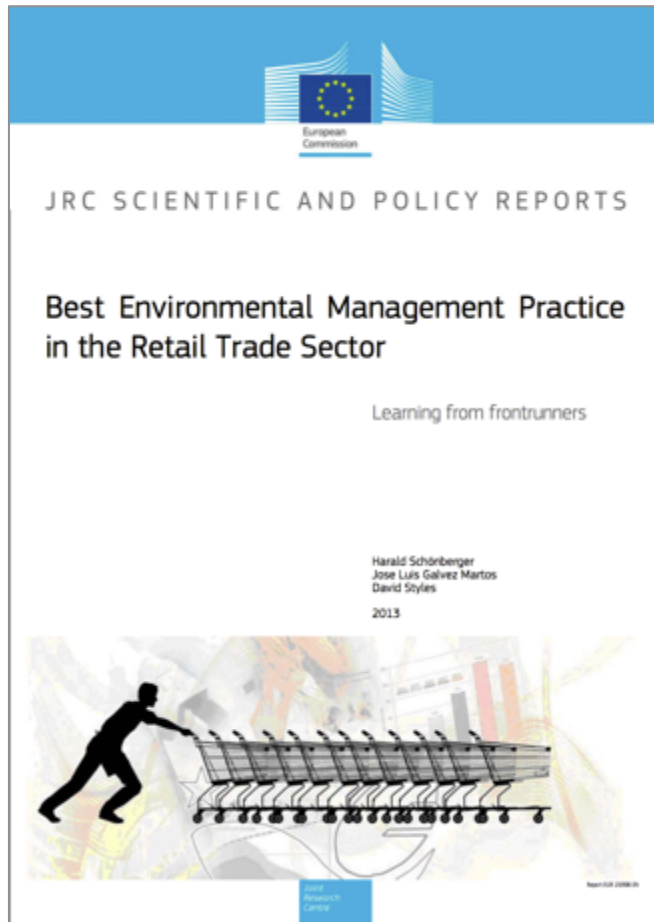
Regionalized impact categories

→ Necessity to have LCI databases with regional information (archetypes for particles, regions for water consumption, etc.)



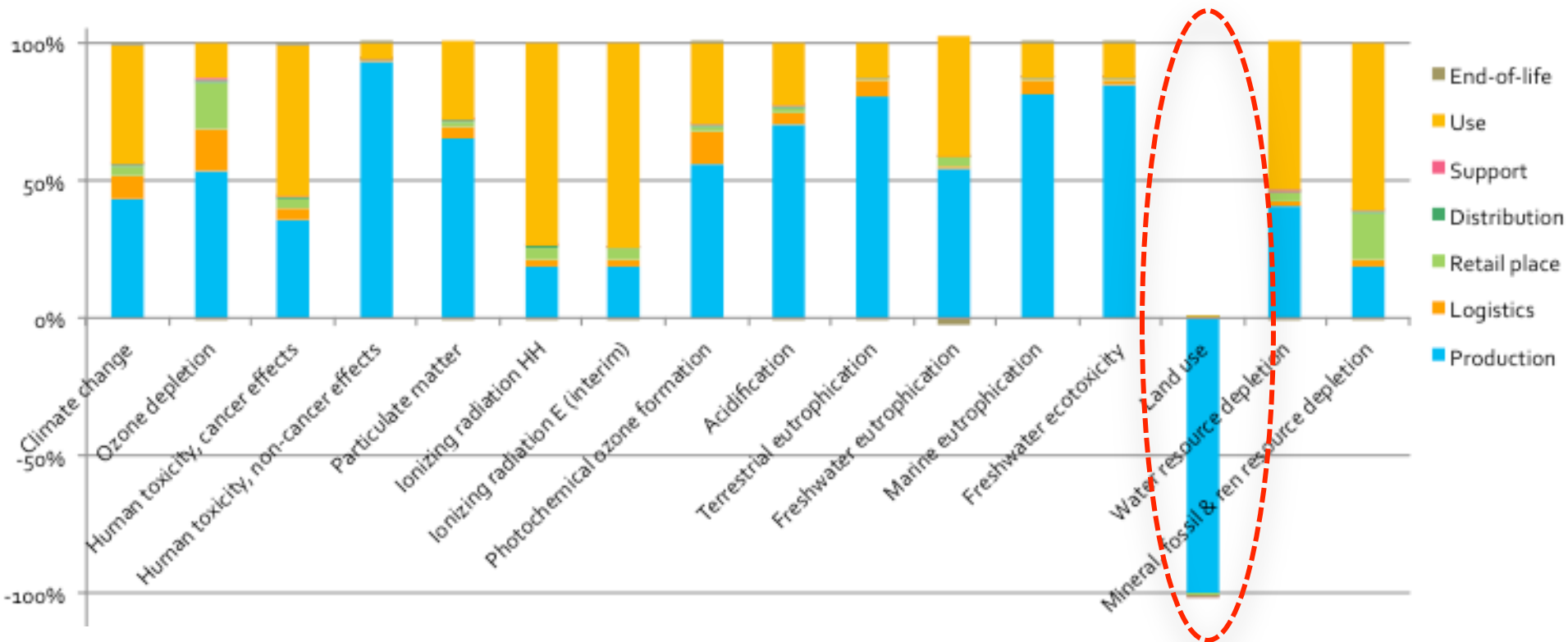
And hundreds more...

(Virtual) product portfolio (goods and services)



| Retail trade sector | Retail trade sector | Retail trade sector |
|---|---|--|
| Food | ICE: telecommunications equipment | CRG: sporting equipment |
| Beverage | ICE: audio and video equipment | CRG: games and toys |
| Tobacco | Textiles | Clothing |
| Fruit and vegetables | Hardware, paints and glass | Footwear and leather goods |
| Meat and meat products | Carpets, rugs, wall and floor coverings | Dispensing chemist |
| Fish, crustaceans and molluscs | Electrical household app. furniture, lighting eq. | Medical and orthopaedic goods |
| Bread, cakes, flour and sugar conf. | CRG: books | Cosmetic and toilet articles |
| Automotive fuel | CRG: newspapers and stationery | Flowers, plants, seeds, ferti., pet an. and pet food |
| ICE: computers, per. units and software | CRG: music and video recordings | Watches and jewellery |

Preliminary results

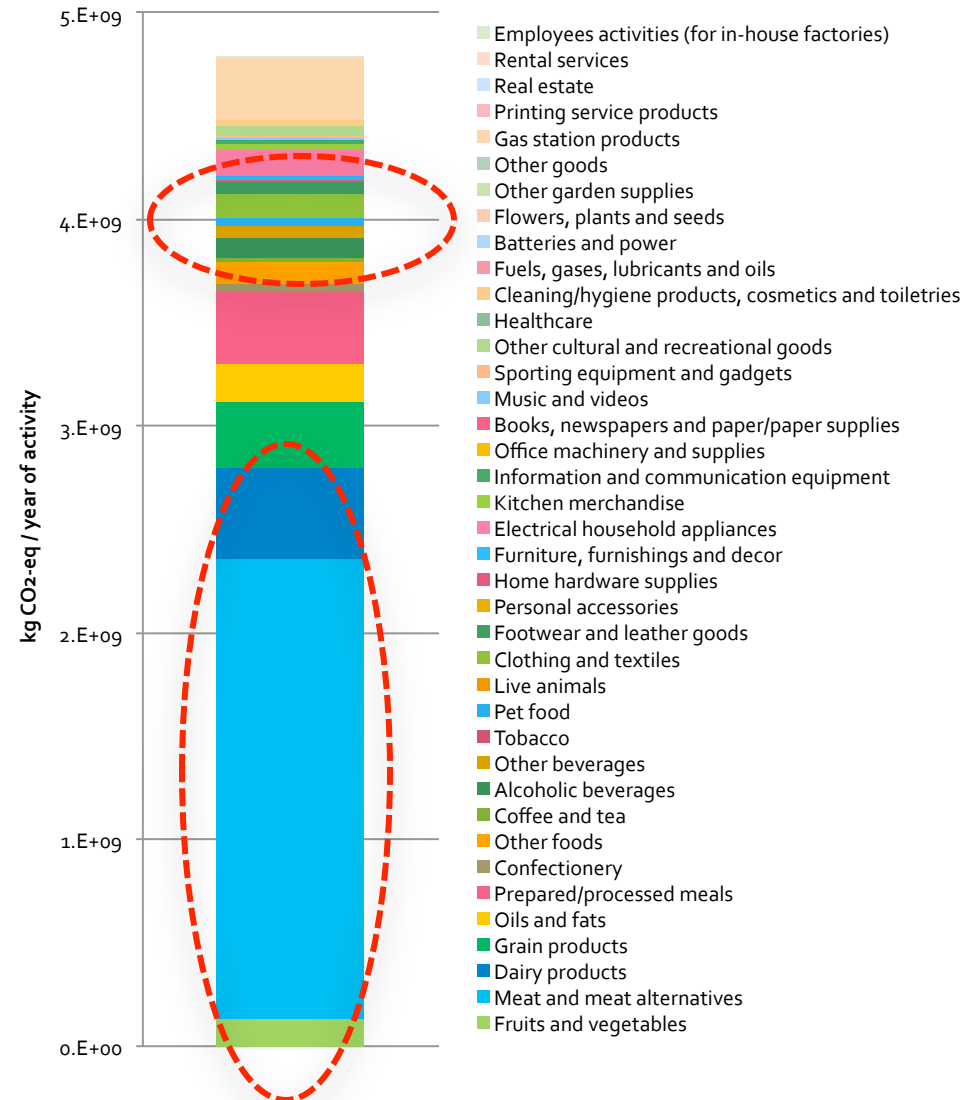


Bug identified in Agribalyse

→ Shows the importance to have fairly complete and bug-free databases to make meaningful learnings for the organization

Preliminary results

Importance of products with a significant energy consumption during the use phase (e.g. Tshirt, Fridge, Dishwasher, etc.) (if present in the portfolio)!



Importance of animal based products (if present in the portfolio)!



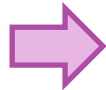
In a nutshell

The roadmap of the communication phase

Conception

Implementation

Feedback



Results based on the
draft PEFCR/OEFSR



Ready for
implementation

Transparency



Availability and accessibility



Reliability



Completeness

ENERGY
EUTROPHICATION
NO_x CO₂
HEAVY METALS
ACIDIFICATION
HUMAN TOXICITY
NH₃ CH₄ OIL
WATER
MINERALS
BIODIVERSITY
PESTICIDES
LAND OCCUPATION
ECOTOXICITY
N₂O
RESPIRATORY EFFECTS
SO_x CARBON

Comparability



Clarity



OEFSR Retail

The next steps are ...



For companies desiring to...

... **know the rules**

... **be source of proposal**

... be recognized as **leaders** in sustainability

Public online consultation:

Spring / Summer 2015 (date to be confirmed soon)

Communication phase

from Summer 2015

Thank you 😊

Questions?



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✉ carole.dubois@quantis-intl.com

☎ 0041 78 757 23 87

Sebastien Humbert

Scientific Director

✉ sebastien.humbert@quantis-intl.com

☎ 0041 79 754 5 66

Seb, met ta photo

OEFSR Retail

Technical Secretariat



Agathe Grossmith (agathe_grossmith@carrefour.com)
Pascal Léglise (pascal_leglise_be@carrefour.com)

Frederic Vermeiren (Frederic.Vermeiren@colruyt.be)
Steven Van Hemelryck (Steven.vanhemelryck@colruyt.be)
Mieke Vercaeren (mieke.vercaeren@colruyt.be)

Arnaud Brulaire (Arnaud_Brulaire@picard.fr)

Emilie Aubry (emilie.aubry@oxylane.com)

François-Xavier Morvan (francois-xavier.morvan@kering.com)

Shela Fletcher (shela.fletcher@officedepot.com)