



The example of A.I.S.E.'s PEFCR pilot project on household liquid laundry detergents

56th LCA Discussion Forum – ‘Are environmental declarations of products and organisations the way to harmonise LCAs?’ - Zurich, 9 September 2014



A.I.S.E.: "The Voice of the Detergent and Maintenance products industry in Europe"

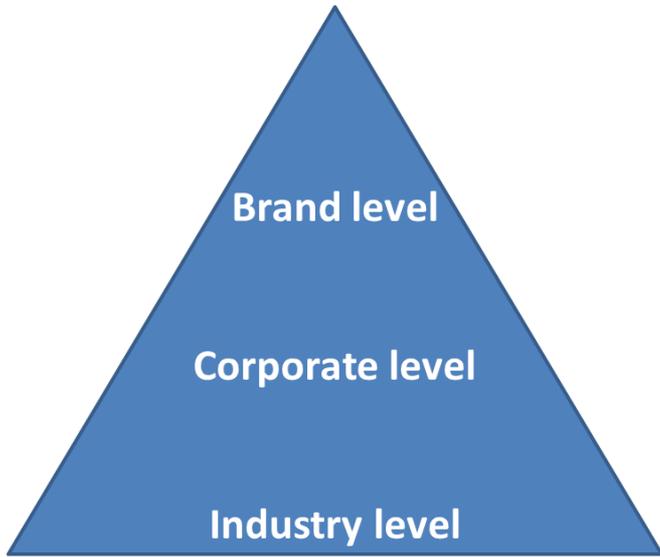
39 countries = **900** companies

9 direct member companies (Colgate-Palmolive, Ecolab, Henkel, McBride, P&G, SC Johnson, Sealed Air, Unilever)

35 billion €

2 KEY ACTIVITY PILLARS:

- Partnering to achieve a better regulatory framework
- Developing and promoting voluntary initiatives



SUSTAINABILITY STRATEGY through voluntary agreements

		Sustainable Production	Sustainable Consumption
1997 2002	CODE OF GOOD ENVIRONMENTAL PRACTICE The 'Code of Good Environmental Practice' ('the Code') was the first major voluntary initiative by A.I.S.E. specifically designed for household laundry detergents.		
1997 →	WASHRIGHT® Initially developed in the context of the Code, Washright is a pan-European awareness-raising campaign to promote good washing practices to consumers when doing the laundry. www.cleanright.eu		
1999 2004	HERA (Human and Environmental Risk Assessment on Ingredients of Household Cleaning Products) A joint A.I.S.E./Cefic initiative, five years ahead of REACH. www.heraproject.com		
2001 →	DUCC (Downstream Users of Chemicals Co-ordination group) A platform to address REACH's objectives. www.duccplatform.org		
2004 →	CHARTER FOR SUSTAINABLE CLEANING Promoting a life-cycle approach to sustainability through independent assessment, with annual reporting. Updated in 2010 with additional product specific requirements. www.sustainable-cleaning.com		
2005 →	SAFE USE ICONS A harmonised set of icons and sentences for voluntary, proactive use by companies to help consumers use products in a safe way.		
2006 →	LAUNDRY SUSTAINABILITY PROJECTS Educating consumers to dose concentrated laundry detergents correctly. www.aise.eu/preps		
2006 →	SAVE ENERGY AND WATER PROJECT Promoting the use of low-temperature dishwasher programmes www.saveenergyandwater.com		
2007 →	PRODUCT STEWARDSHIP PROGRAMMES Air Fresheners 2007: an initiative to promote responsible manufacturing, communication and use of Air Fresheners www.aise.eu/airfresheners Gel Capsules 2012: an Initiative to secure safe use and storage by consumers of liquid laundry detergent capsules		
2008 →	WWW.CLEANRIGHT.EU A joint Cefic and A.I.S.E. industry website initiative providing consumers across Europe with information and advice on the safe and sustainable use of soaps, detergents and maintenance products. www.cleanright.eu		
2013 →	I PREFER 30° A unique multi-stakeholder campaign by the detergent industry to drive low temperature washing, in partnership with retailers, appliance manufacturers and fashion houses. www.iprefer30.eu		



PART 1:

Background: Sustainability through voluntary agreements – A.I.S.E. Charter for Sustainable Cleaning



A.I.S.E. Charter for Sustainable Cleaning

11 Charter Sustainability Procedures

11 Key Performance Indicators

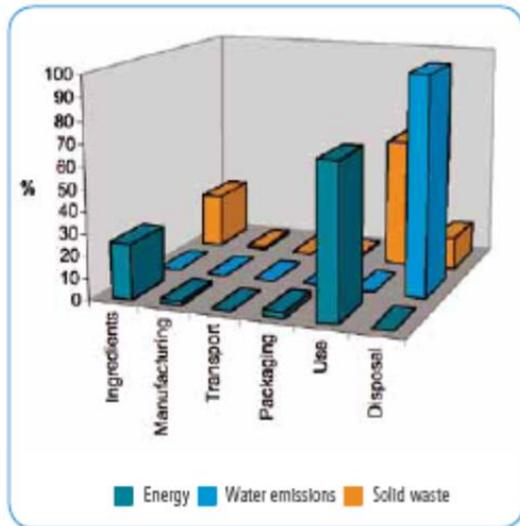
Product Dimension:

Independent verification

Knowledge Mapping Hotspot

Product Scheme & Criteria

Deployment



Category Criteria

(ASP – Advanced Sustainability Profile)

- Product makes wise use of resources (ingredients, packaging, etc.)
- Ingredients safety (via ESC = safety scan of ingredients in product)
- Safe and sustainable use (Consumer advice)

- Continual improvement
- Innovation-friendly and environmentally relevant criteria
- Focus on the 3 to 4 most relevant environmental impacts
- Available for 8 product categories



TIPS FOR SAVING WATER, ENERGY, CO₂, AND MONEY



Avoid underfilling the machine



Use the dosing instructions



Wash at low temperature

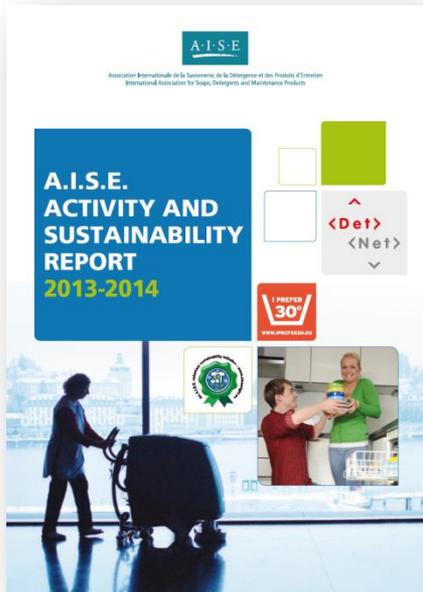


Save packaging - recycle or refill

WWW.CLEANRIGHT.EU

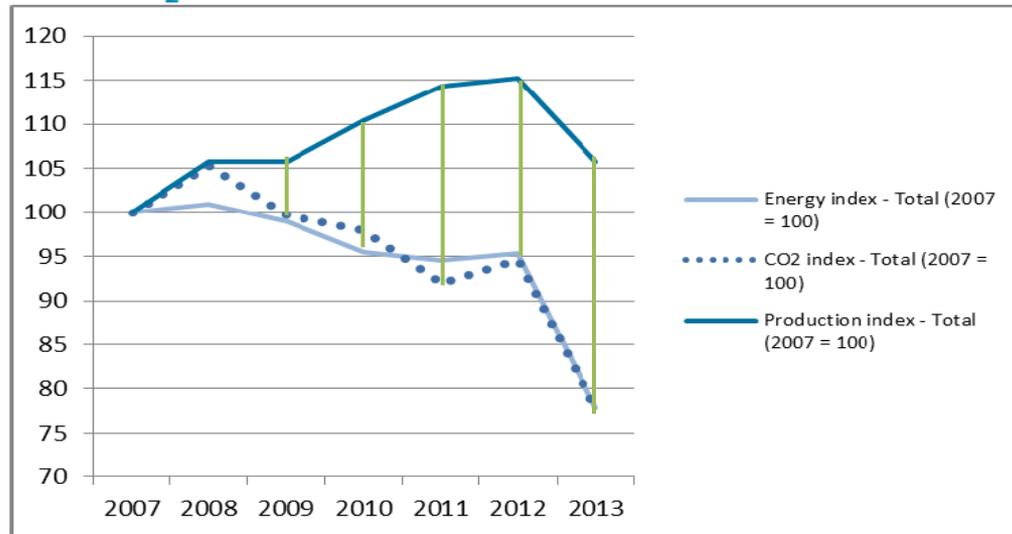


Charter achievements



- Charter members: 216 (>90% of market)
 - ASP products: 820 m
 - Energy consumed: -25%
 - CO₂ emitted: -29%
 - Waste: -14%
- (2007-2013)

The production is decoupled from energy use and CO₂ emissions





PART 2:

The EU Product Environmental Footprint (PEF) and A.I.S.E.'s pilot on liquid laundry detergents



Why do we participate?

- Potential that PEF will become future reference tool for EU environmental policy
- Harmonised approach
- Contribute with our expertise and knowledge
 - LCA and availability of LCI data
 - Charter and ASP category criteria
 - Risk assessment of ingredients
 - Consumer campaigns
 - Participation in French experimentation on environmental labelling:
 - Characterisation method to assess ecotoxicity
 - Collection of LCI data for product ingredients
 - Model for detergent end-of-life in wastewater



A.I.S.E. PEF pilot on liquid laundry detergents – Technical Secretariat

Lead members:

Industry Associations:			
Multinational Enterprises:			
Large Enterprises and SMEs:			
			

Experts and advisors:

Academia:			
Local authorities:			
Supply Chain:			
Other Organisations:			

LCA consultant:



Other contacts (LCI data):

- AMFEP
- CECED
- IFRA
- Plastics Europe

Stakeholder involvement:

- Via Wiki page and workshops

External Communication:

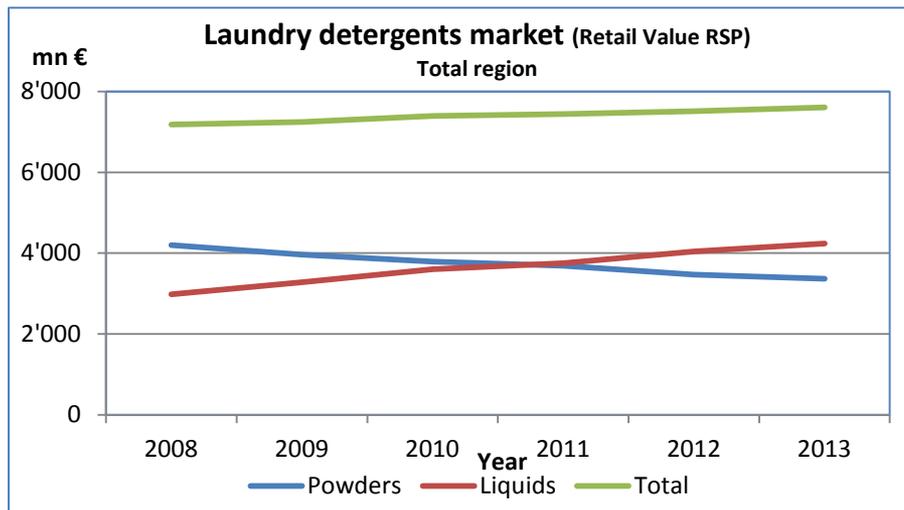
- Via conferences, workshops, etc.



Product Scope

In scope

Household Heavy Duty Liquid Laundry Detergents (HDLLD) for Machine Wash, including 100% Liquid Tablets (Unitdose)



Source: Euromonitor

Not in scope

Light Duty Liquid Laundry Detergents, Powder Laundry Detergents/Tablets

Why?: different product types vary in their function (e.g. different soil level) and composition – BUT: assessment at a later stage, if and how PEFCR might be applied to other laundry detergent formats ('read across')



Functional unit

In conformance with the **Detergent Regulation (EC648/2004)**:

- What?: washing dry fabric (excludes drying and ironing);
- How much?: 4,5kg of dry fabric (in 6 kg capacity machine, 75% loading);
- How well?: wash normally soiled fabric with a medium water hardness until clean (reaching a performance acceptable to consumers);
- How long?: during one washing machine cycle.

Representative Product

Process:

1. Each of 7 manufacturing companies represented in the TS identified 1 to 3 most sold products in EU+4 within the scope
2. Calculation of company average bill of materials on basis of weight of each ingredient and pack material and market share of each product
3. Calculation of representative product bill of materials on basis of companies' market share in EU+4 in the product segment

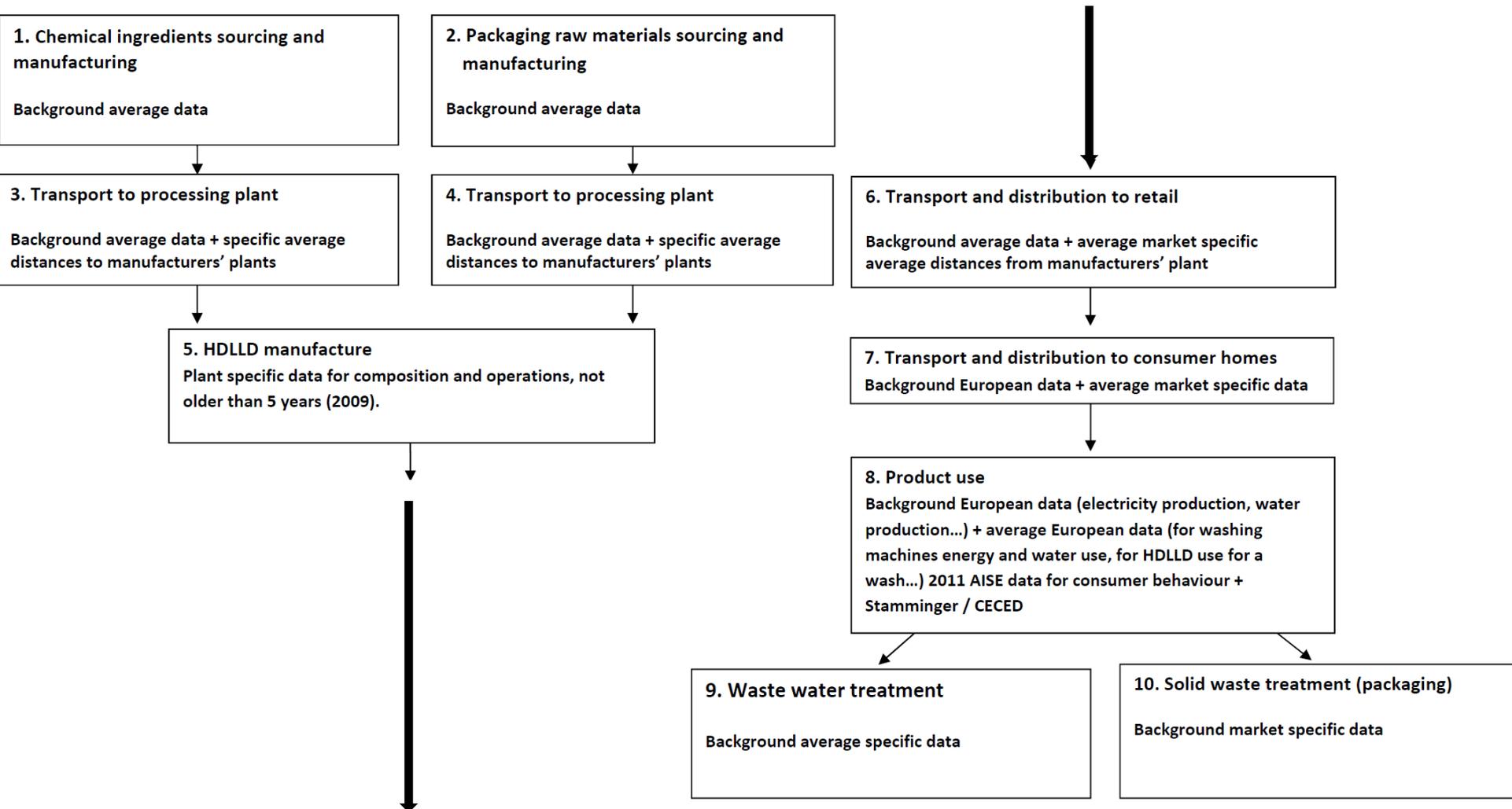


Companies

Consultant

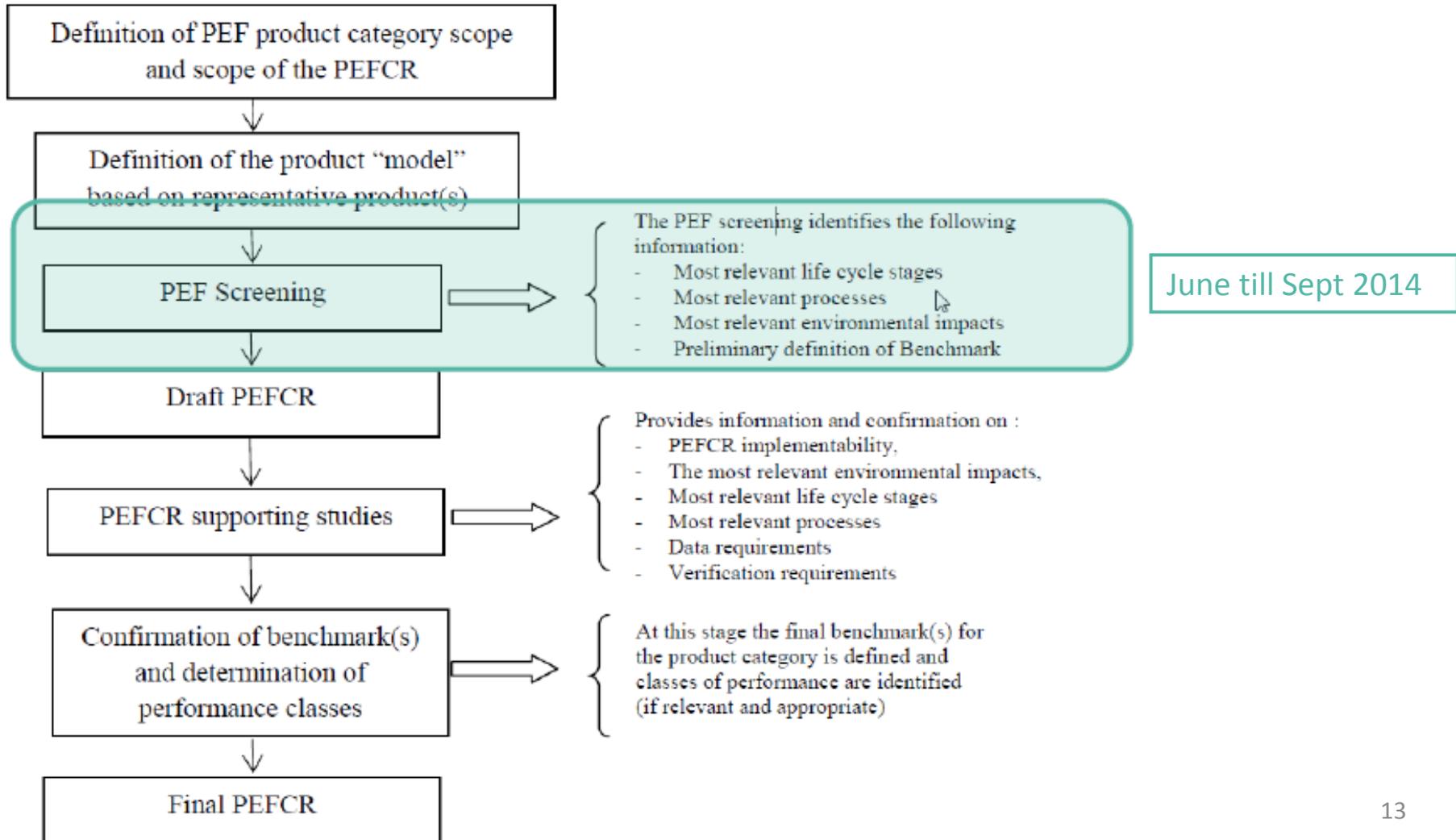


System boundaries (Cradle to grave assessment)





Where are we in the process now?





Harmonisation aspects (1/3)

Issue/LCA aspect	A.I.S.E. approach	Comments/Significance
PEF guidance document, other guidelines, papers, templates (PEFCR, PEF screening) and training	<p>Strictly followed (A.I.S.E. PEFCR IT tool for PEF screening and supporting studies)</p> <p>Testing of alternative approaches, e.g. on ecotoxicity</p>	<p>Ensures common approach and harmonisation by default</p> <p>Alternative and complementary approaches might conflict with common harmonisation</p>
Direct exchange of different industry sectors	E.g. dialogue with other downstream users of chemicals	Can create synergies
Analysis of existing LCAs and PCRs	Existing studies served as starter and/or example	Can be regarded as a best practice on harmonisation
Existing LCA standards and work (global but also sector specific)	To be considered	<p>Good: different terminology between EF and ISO being solved;</p> <p>Application of PEF methodology to concrete case studies might contribute to bridge gaps;</p>
Overall approach on data quality assessment	Strictly followed	Might give good insights, especially with regard to lack of data
Local characteristics (physical and cultural)	To be considered	Harmonisation not always appropriate (e.g. different energy mix, water hardness, consumer behaviour, etc.)



Harmonisation aspects (2/3)

Issue/LCA aspect	A.I.S.E. approach	Comments/Significance
Product ingredients / Packaging data	Harmonised approach for LCI data sourcing (available via Cesio, Amfep, IFRA, PlasticsEurope, other suppliers, public data, e.g. Eurostat)	Lack of inventory data for some substances ->barrier to full harmonization and fair comparison of products
Transport	Background average data and specific average distances	
Manufacture	Plant specific data for composition and operations	
Distribution	Allocation might be applied	Average basket and purchase scenario with objective to propose common harmonised approach, based on work performed by 'The Sustainability Consortium'
Product use	Background European data for water and electricity production, based on consumer behaviour studies (A.I.S.E.) and input from washing machine producers (Ceced)	Most relevant LC phase for laundry detergents; consumer behaviour is important



Harmonisation aspects (3/3)

Issue/LCA aspect	A.I.S.E. approach	Comments/Significance
End of life: Solid waste	Modelled solid waste treatment for packaging	
End of life: Waste water treatment	Objective to propose harmonised approach for emissions to water and sludge; LCI from Ecoinvent	
Ecotoxicity	2 methods: <ul style="list-style-type: none"> • USETox: extensive work on harmonised characterisation factors for industry specific ingredients due to lack of inventory/ecotoxicity data for some ingredients • Charter Environmental Safety Check (ESC) of product ingredients (officially recognised in context of French experimentation on environmental labelling for our industry sector) 	Does the science support the intended use of data? Is the data specific enough to differentiate products?



Next milestones

Autumn 2014 - Winter 2014/2015

- Finalisation of PEF Screening
- Review of PEF Screening by A.I.S.E. PEF Review Panel
- Technical check of PEF Screening by EC/JRC
- Draft of PEF Category Rules based on PEF screening
- Stakeholder virtual consultation on draft of PEF Category Rules
- Start preparation of communications vehicles

Spring 2015

- PEFCR supporting studies on min. 3 existing products sold in Europe
- Start test of verification processes



Links:

Charter technical website:

www.sustainable-cleaning.com/en.home.orb

A.I.S.E. and PEF:

www.aise.eu/pef

European Commission PEF website:

http://ec.europa.eu/environment/eussd/sm_gp/product_footprint.htm

THANK YOU!

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