



Life cycle management in industry

Supporting business with life cycle based assessments

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Agenda

01 Application of LCA in the industry

02 Data exchange along the value chain

03 LCA Methodologies

04 ISPN Vision & Mission

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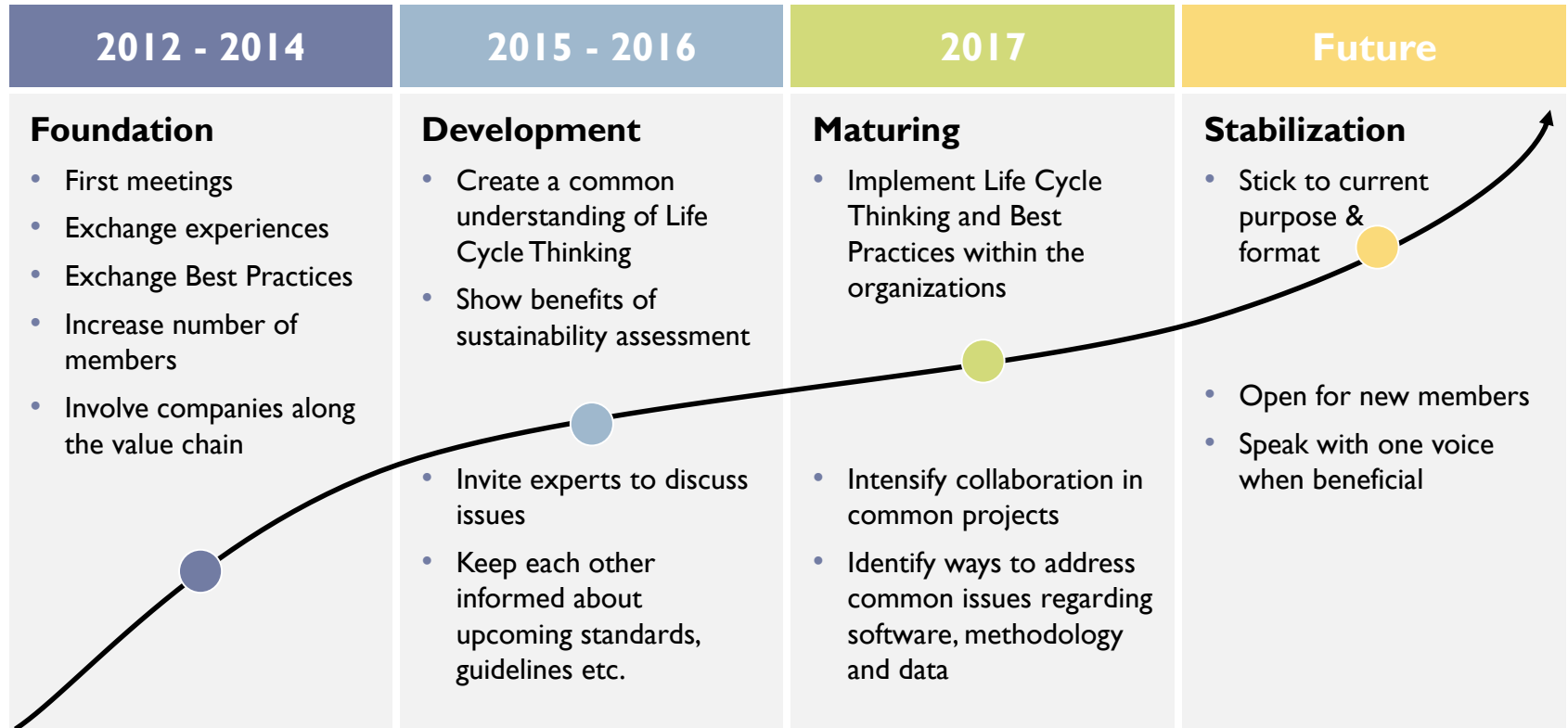
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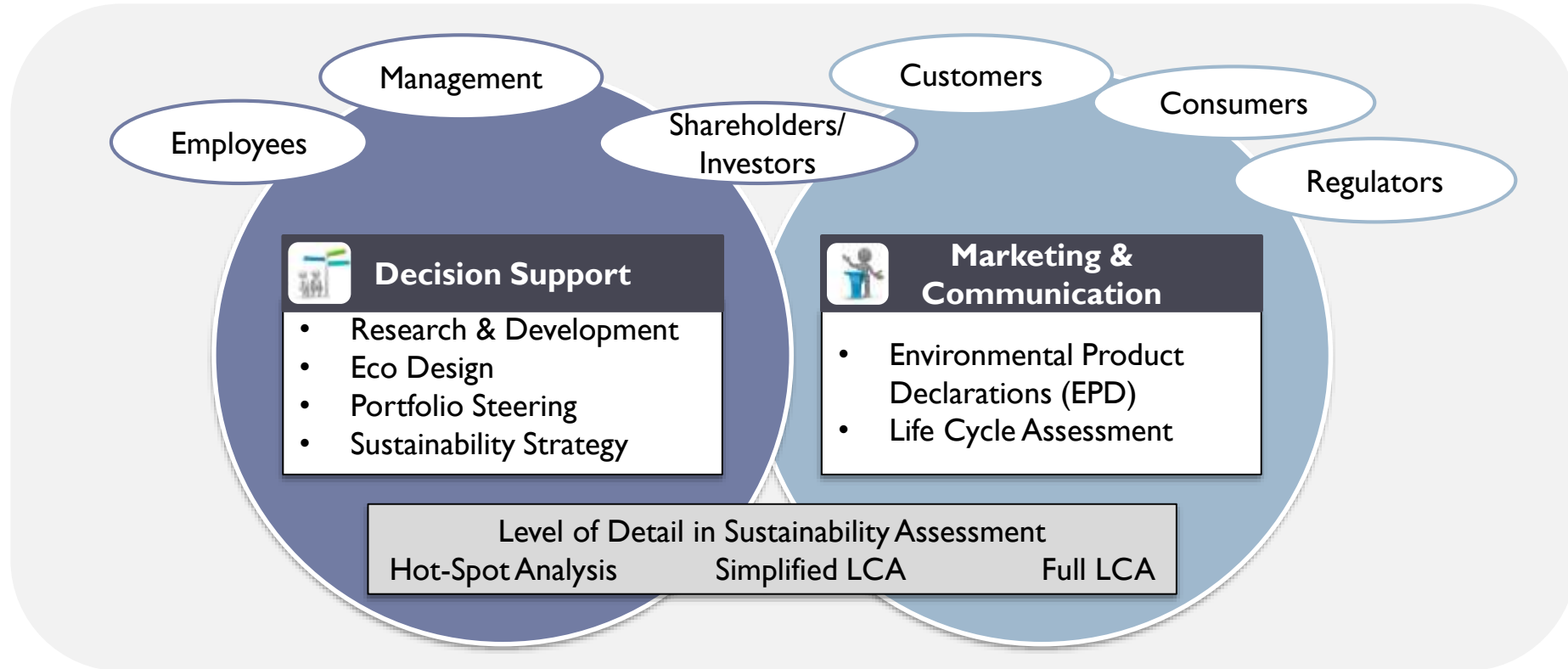
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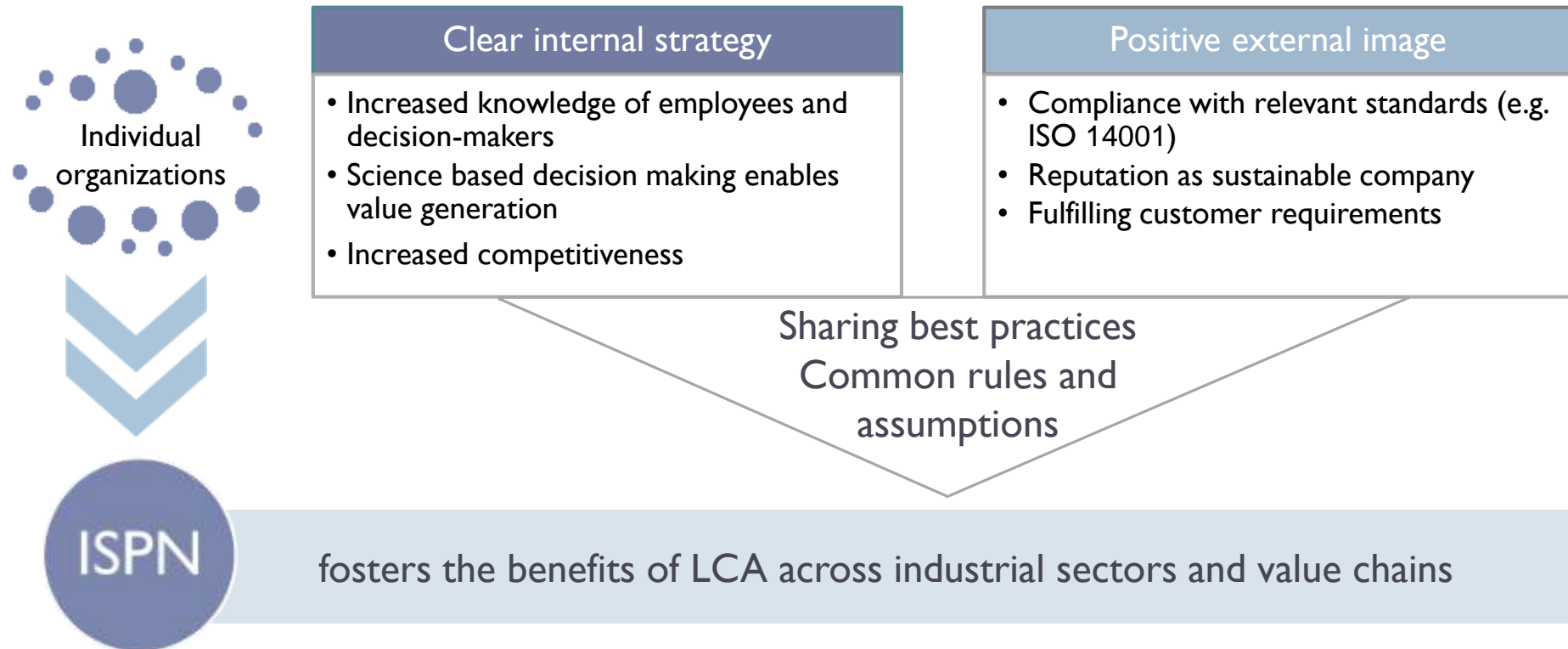
History of the ISPN



Sustainability assessments support decision making and marketing based on LCA...



...and thus help to create a clear strategy, a positive image & a competitive product portfolio



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Data exchange along the value chain is challenging

- ▶ LCA data exchange is becoming more important, but is still challenging



- ▶ Inconsistency in flow definitions
 - Names and compartments
 - Granularity
 - ▶ Different implementation of LCIA methods
 - ▶ Completeness of flow list in LCIA methods
- ⇒ Different LCIA results by using different tools

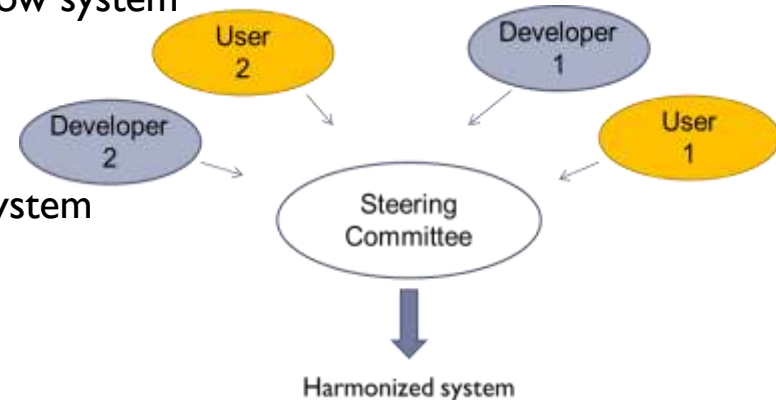
Flows are not harmonized e.g. regarding their characterization factors

Element	Compartment	Sub-compartments	Characterization Factor Software A	Characterization Factor Software B
Chromium (+VI)	air	low population	42.140	41.972
	air	high population	41.800	
	air	unspecified	41.970	
	soil	unspecified	52.560	52.555
	water	ground-, long-term	52.560	104.644
	water	river	104.600	
	water	ground-	52.560	
	water	unspecified	104.600	

- The difference in the granularity of characterization factors leads to a significant difference in the results of the impact assessment (e.g. eco-toxicity)
- Matching these flows for data exchange is too time-consuming without appropriate tools

Harmonization is needed to overcome inconsistencies

- ▶ Development of a harmonized flow definition is key for a successful data exchange future.
 - ▶ Establish an independent facilitator
 - ▶ Creation of a flow system accepted and used by all market participants, such as LCA data providers, LCA software providers, academia and companies
 - ▶ Maintenance and further development of such flow system
 - ▶ Willingness to use such new flow system
 - ▶ All market participants adopt and use this flow system
 - ▶ Adequate integration in LCIA methods



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ISPN members support methodological developments

Goal & Scope	LCI	LCIA	Interpretation (communication)
Granularity	Data availability Data quality	Consensus on impact methods (e.g. (Eco-)Toxicity, Near-Far / Nutritional benefits, Land-use / (Biodiversity), Water)	Hot-Spot Analysis recommendation
Horizontal issues	Horizontal issues		B2B / B2C approaches



Product environmental Footprint (PEF)



European Food SCP Roundtable



Sustainable Process Industry (SPIRE/SAMT/ Measure)



ISPN

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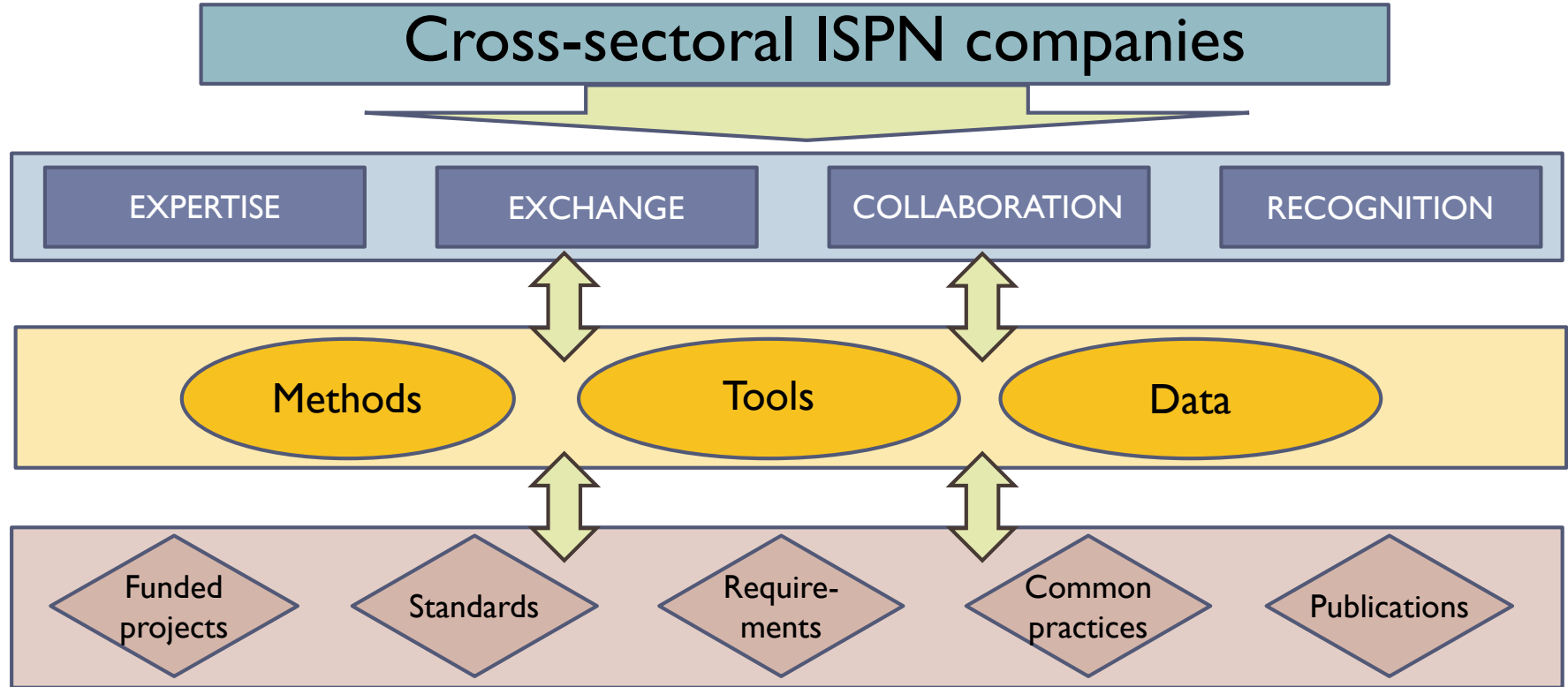
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Our processes and activities take place on various levels...



... and lead us to our Vision & Mission

- Leadership of cross-sectorial industry LCA experts
- High recognition by academia, government and industry
- Effective platform for collaboration on methods, tools and data

- facilitate exchange platforms of LCA experts
- identify and prioritize relevant topics of cross-sectorial challenges
- collaborate on projects or method developments
- extend the collaboration platform to new sectors
- recommend and suggest changes based on experiences in methodologies, data management and tools.

⇒ work together effectively and with smart solutions.

Many thanks for your attention !



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Backup slides