



SUSTAINABLE CATEGORY MANAGEMENT

Approccio Hot Spots & Key Actions

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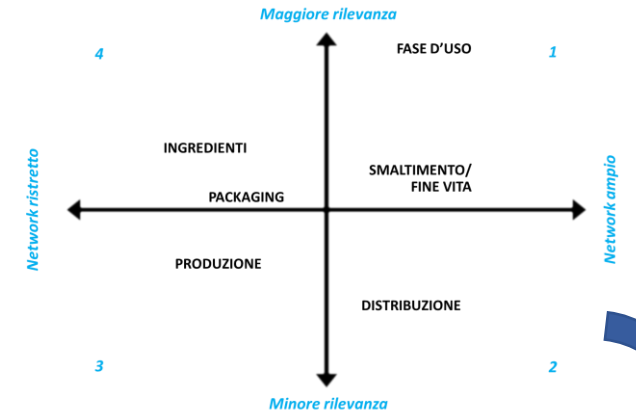
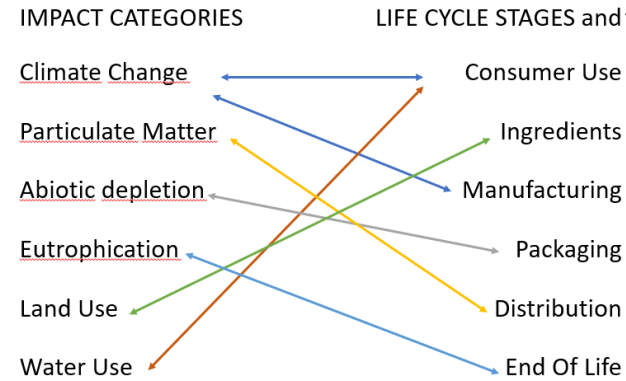


Percorso:

Step 1 - Hot spot

Step 2 - Key Actions

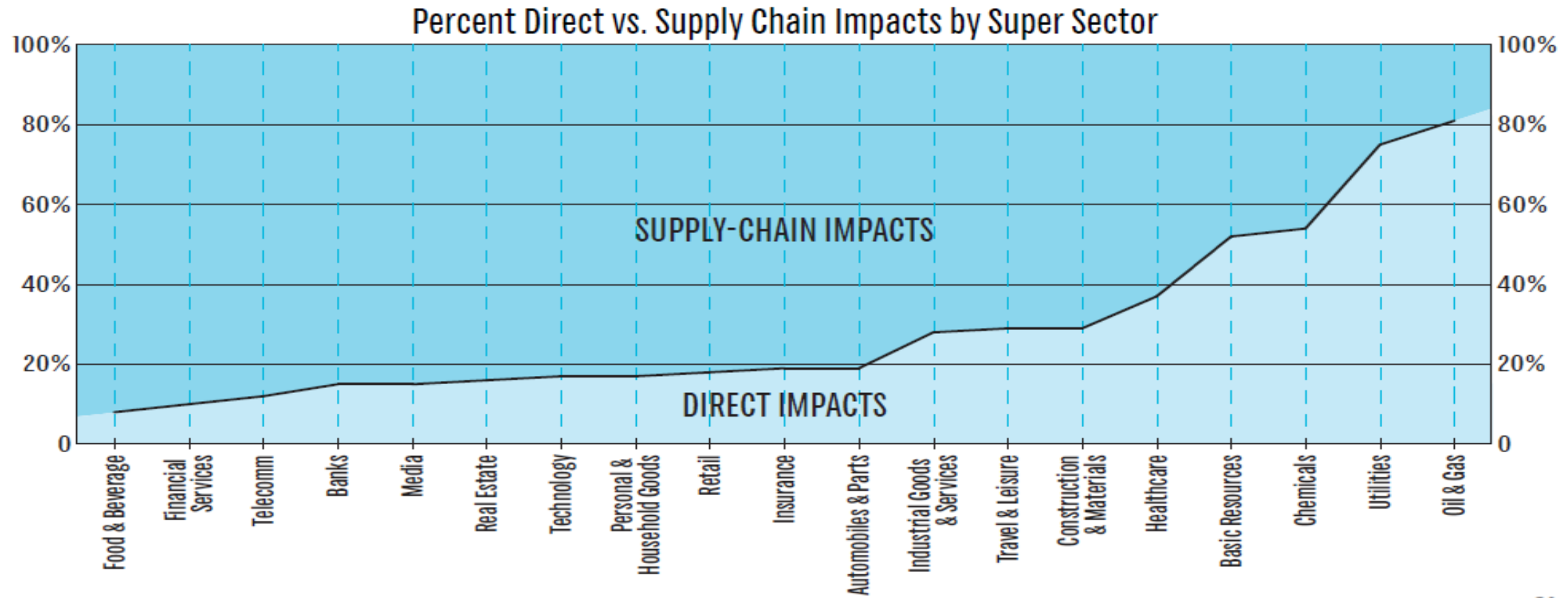
Step 3 - Benefici legati alle Key Actions



	Differenza % (1 vs As is)	Differenza % (2 vs As is)	Differenza % (3 vs As is)	Differenza % (4 vs As is)	Differenza % (5 vs As is)
RISORSE NON RINNOVABILI					
Risorse materiali (kg)					
Risorse a fini energetici (kg)					
RISORSE RINNOVABILI					
Risorse materiali (kg)					
Risorse a fini energetici (MJ)					
Consumo di acqua (m³)					
CATEGORIE DI IMPATTO					
Potenziale di Effetto Serra (kg CO ₂ eq.)					
Potenziale di Acidificazione (kg SO ₂ eq.)					
Potenziale di Formazione di Ossidanti Fotochimici (kg C ₂ H ₄ eq.)					
Potenziale di Eutrofizzazione (kg PO ₄ ³⁻ eq.)					



Premessa: è necessario un approccio «life cycle»



Step 1 – Molteplici fonti per l'analisi:



Original Articles

Operational Life Cycle Impact Assessment weighting factors based on Planetary Boundaries: Applied to cosmetic products

Marcial Vargas-Gonzalez^{a,*}, François Witte^b, Patricia Martz^b, Laurent Gilbert^b, Sébastien Humbert^a, Olivier Jolliet^c, Rosalie van Zelm^d, Jacques L'Haridon^b

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Life Cycle & Sustainability

Developing Product Environmental Footprint Category Rules (PEFCR) for Shampoos: The Basis for Comparable Life Cycle Assessments



DICHIARAZIONE AMBIENTALE DI PRODOTTO (EPD)
DI PRODOTTI PER LA PULIZIA E L'IGIENE DI



European Commission

PEF

Product Environmental Footprint
Category Rules
(PEFCR)

Household Heavy Duty Liquid Laundry Detergents
(HDLLD) for machine wash



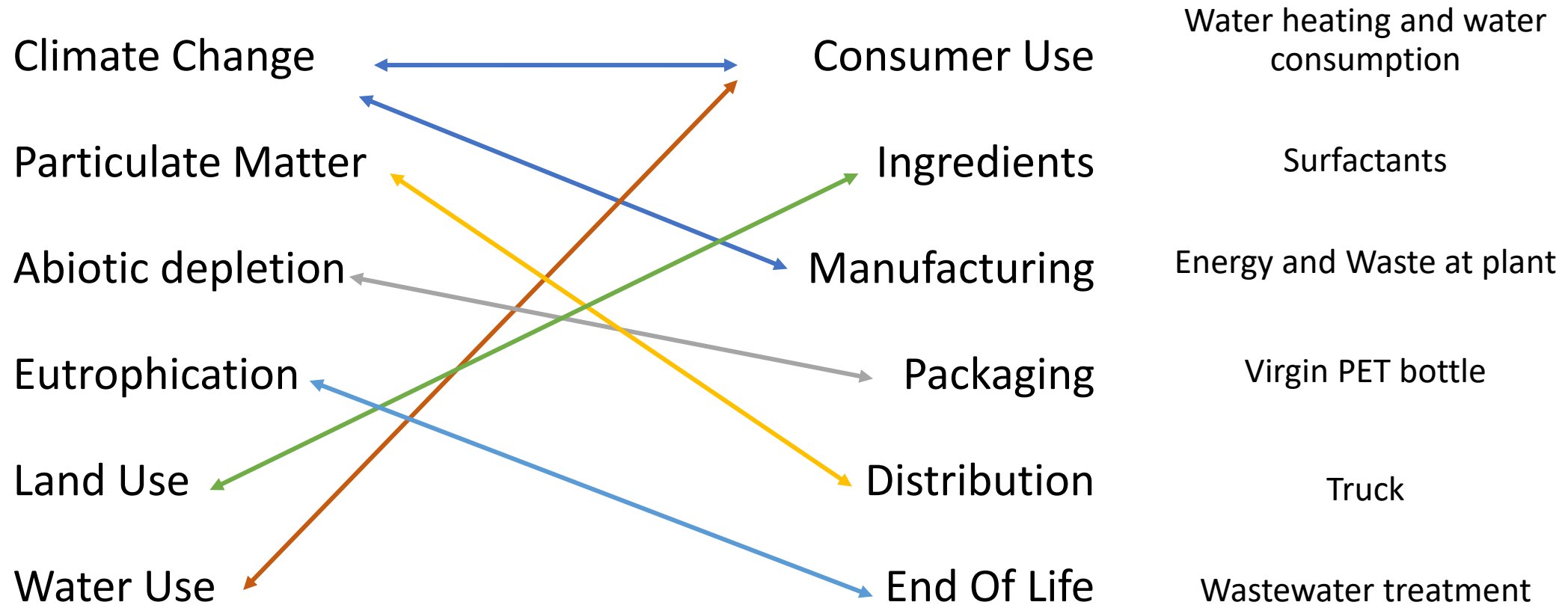
Step 1 – Matrice per l'identificazione degli Hot Spots

	B	C	D	E	F	G	H		I	J
1			<i>Functional Unit and System Boundaries</i>	<i>Ecolabel criteria</i>	<i>Climate Change-fossil (GWP)</i>	<i>Ozone Depletion</i>	<i>Human Toxicity</i>			<i>Particulate Matter (Respiratory inorganics)</i>
2							<i>cancer</i>	<i>non-cancer</i>		
3	1	<i>Socio-economic development & environmental sustainability: the European cosmetics industry's contribution</i> <i>Authors: Cosmetics Europe with support from Risk Policy Analysts Ltd (RPA)</i> <i>(June 2017)</i>	<ul style="list-style-type: none"> • Cradle to grave LCA 		<ul style="list-style-type: none"> • Main contributions: consumer use and manufacturing phase. • Around 90% of the total CO2 emissions come from the heating and use of tap water. 					
4	2	<i>Accordo T.R.A.C.C.I.A.: Risultati del progetto di analisi e comunicazione dell'impronta ambientale con metodo PEF (Product Environmental Footprint).</i> <i>Cluster: COSMETICA ITALIA</i> <i>Autori: Regione Lombardia e SSSUP</i> <i>(Maggio 2019)</i>	<ul style="list-style-type: none"> • A single application of the product • Cradle to grave (without consumer use for non-rinse off products) 		<ul style="list-style-type: none"> • Main contributions: wastewater treatment, truck for distribution, virgin PET bottle. 					<ul style="list-style-type: none"> • Main contributions: truck distribution, ingredient 1, wastewater treatment.
5	3	<i>Accordo T.R.A.C.C.I.A.: PEF REPORT. Cluster: COSMETICA ITALIA</i> <i>Azienda 1</i> <i>(Aprile 2019)</i>	<ul style="list-style-type: none"> • 1 application of the product on middle length hair • Cradle to grave 		<ul style="list-style-type: none"> • Main contributions: consumer use, packaging production, product disposal/end of life. 					<ul style="list-style-type: none"> • Main contributions: consumer use, ingredients production, packaging production, product disposal/end of life.
6	4	<i>Accordo T.R.A.C.C.I.A.: PEF REPORT. Cluster: COSMETICA ITALIA</i> <i>Azienda 2</i> <i>(Aprile 2019)</i>	<ul style="list-style-type: none"> • 1 application of the product on middle length hair • Cradle to grave without consumer use 		<ul style="list-style-type: none"> • Main contributions: packaging production, product distribution, ingredients production. 	<ul style="list-style-type: none"> • Main contribution: ingredients production. 				<ul style="list-style-type: none"> • Main contributions: packaging production, product distribution, packaging disposal/end of life.
	5	<i>Accordo T.R.A.C.C.I.A.: PEF REPORT. Cluster: COSMETICA ITALIA</i> <i>Azienda 3</i>	<ul style="list-style-type: none"> • 1 application of the product during a shower taken in Italy • Cradle to grave 		<ul style="list-style-type: none"> • Main contribution: consumer use. 					<ul style="list-style-type: none"> • Main contributions: consumer use, product disposal/end of life.

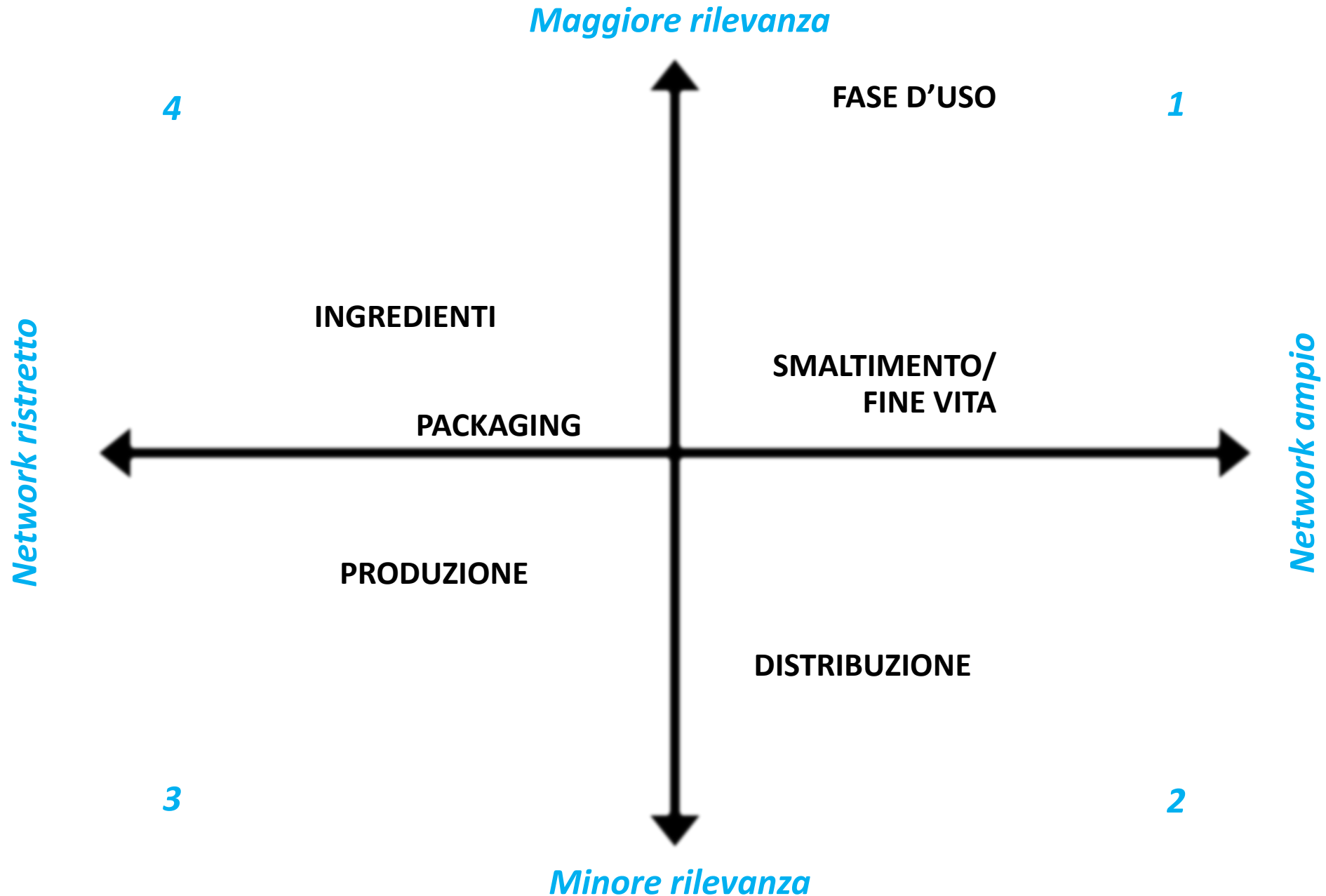
Step 1 – Associazione con i principali «contributori ambientali»:

IMPACT CATEGORIES

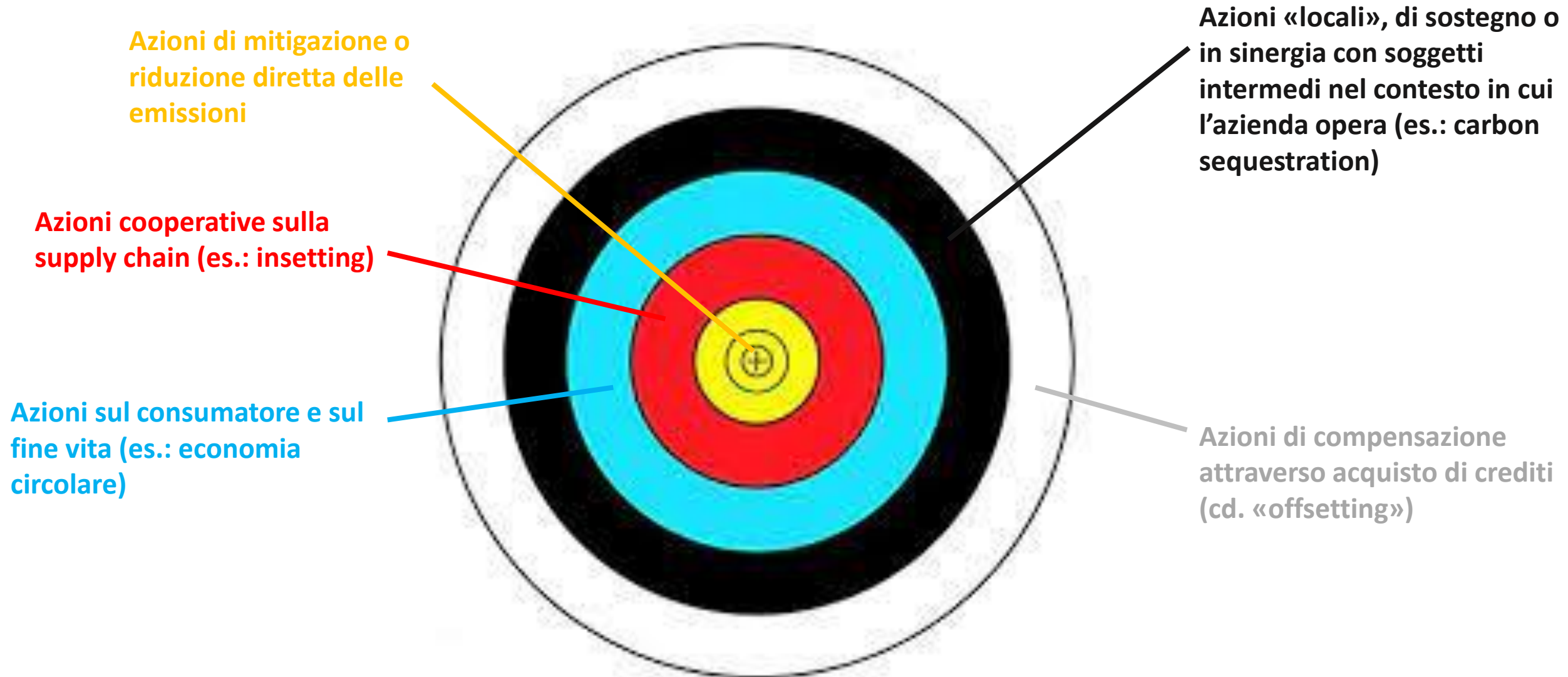
LIFE CYCLE STAGES and their MAIN CONTRIBUTORS



Dagli hot spot alle azioni, la mappatura delle fasi e dei processi:



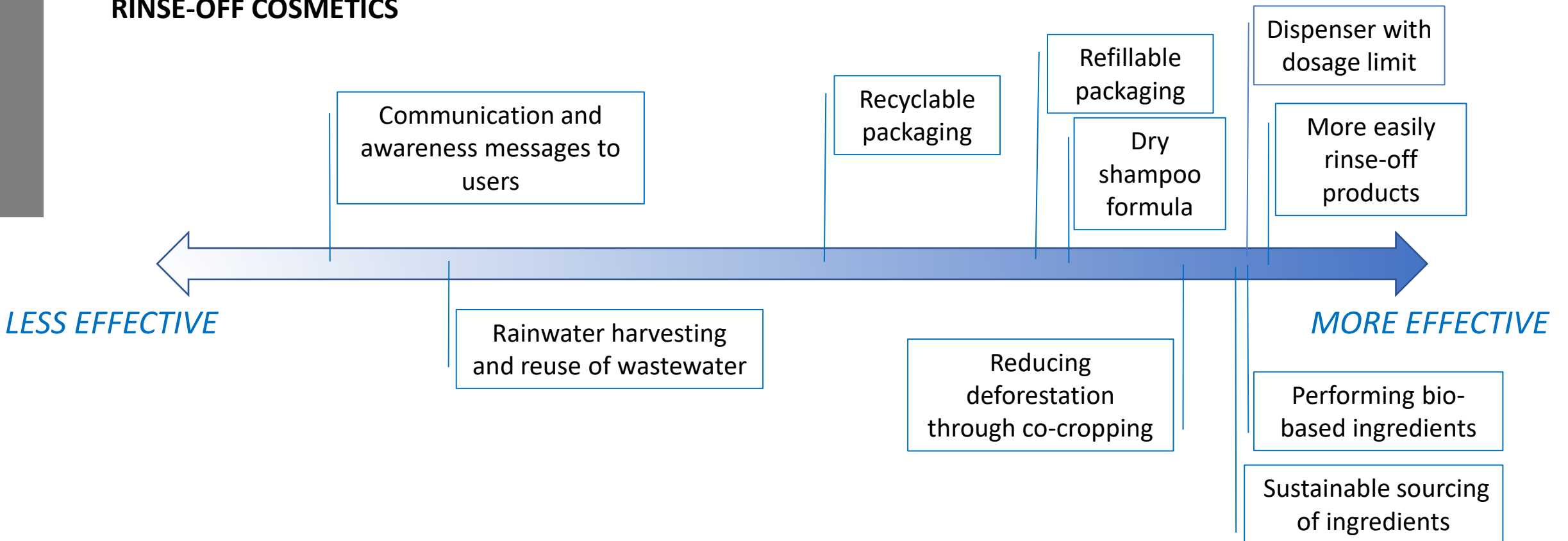
Step 2 - Un «bersaglio» per definire la gerarchia delle azioni. Ad esempio, per la decarbonizzazione:



Step 2 – Identificazione e sviluppo delle key-actions

Esempio:

RINSE-OFF COSMETICS



Step 3 - focalizzazione sulle key-actions da valutare,
(che possono essere modulari, ma agire anche in
sinergia):



Step 3 – Valutazione comparativa dei benefici ambientali raggiungibili grazie a ogni key-action (*stime differenziali in % o approccio semplificato a «semaforo»*)

	Differenza % (1 vs As is)	Differenza % (2 vs As is)	Differenza % (3 vs As is)	Differenza % (4 vs As is)	Differenza % (5 vs As is)
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Potenziale di Eutrofizzazione (kg PO ₄ ³⁻ eq.)					

Grazie!

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