

Sustainable Portfolio Management (SPM) Monetization of environmental impacts

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AGENDA

Business Solutions

Solvay's Ambition

SPM steering portfolio toward Business Solutions

Sustainable Portfolio Management

SPM in a nutshell

Key decisions-making tool

Better Business because more Sustainable

SPM Reference Guide

Integrate sustainability in business strategy



SPM is Solvay proprietary approach to assess business sustainability risks and opportunities

Sustainable Portfolio Management (SPM) map

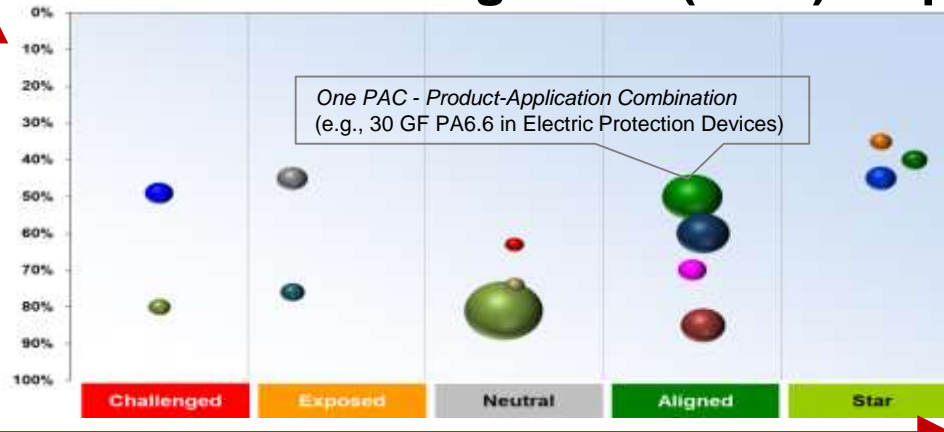
Low Risk

1 € revenue cannot be created at (too) high environmental expense.

The lower the environmental footprint, the lower the risk of substitution by less impacting solutions

High Risk

Operations Vulnerability



Market Alignment to sustainability

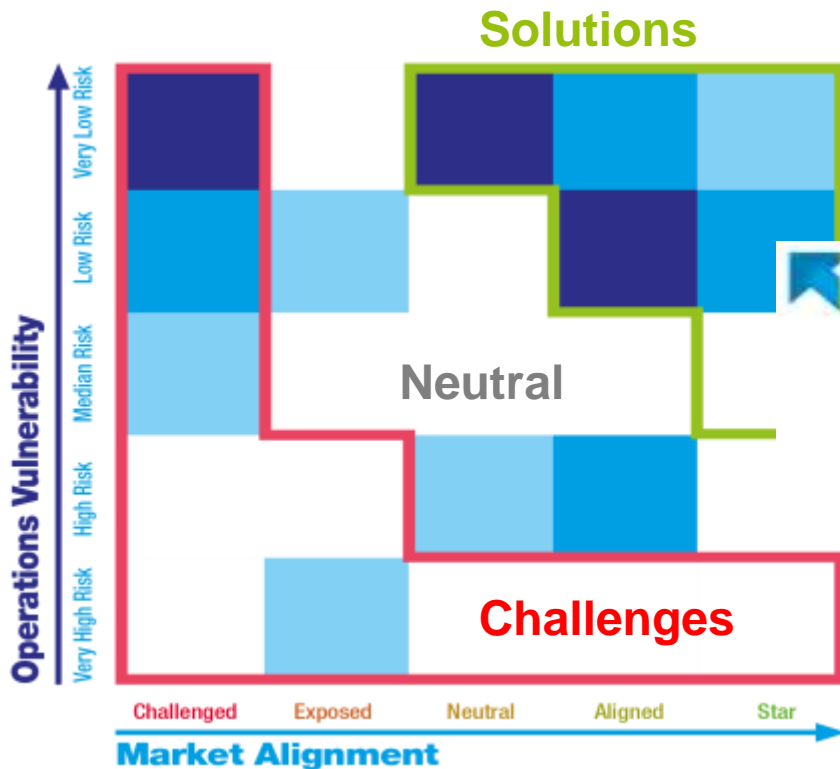
Problems

Solutions

From a sustainability standpoint and a consumer perspective, is our product used in selling propositions that are part of the solutions or part of the problems?

SPM methodology in a nutshell

Environmental footprint vs Value
The higher the environmental footprint, the higher the risk of substitution by less impacting solutions



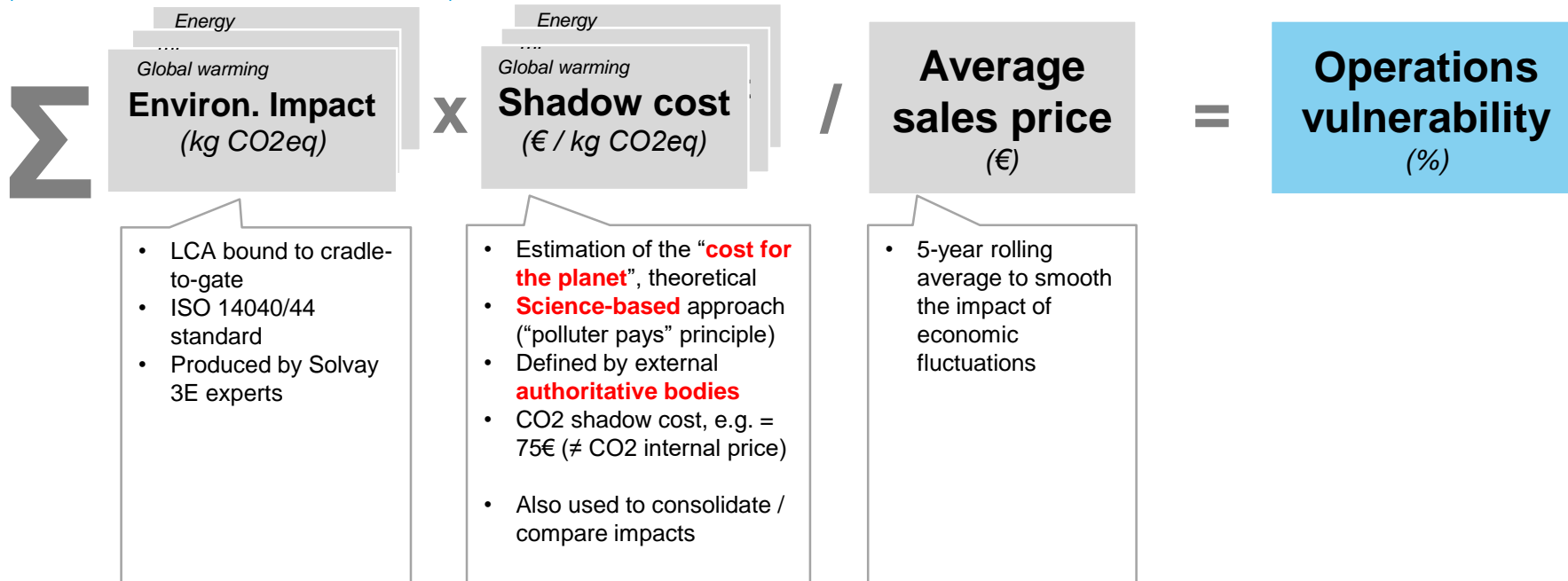
An area represents one or several products in their application. The shading intensity depends on sales volume: the darker the color, the higher the turnover

From a sustainability standpoint and a consumer perspective, is our product used in selling propositions part of the solutions or part of the problems?

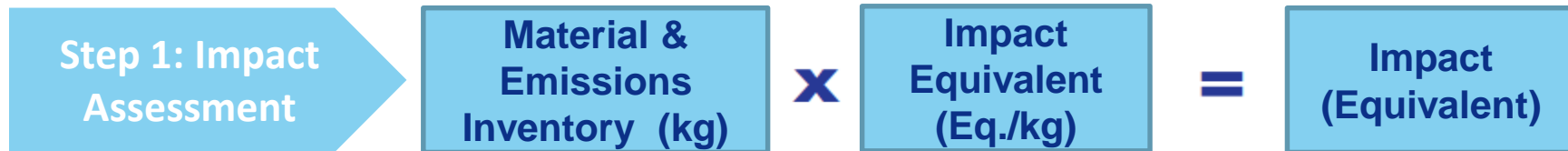
Operations Vulnerability formula is based on monetized Ecoprofiles

Monetized Ecoprofile

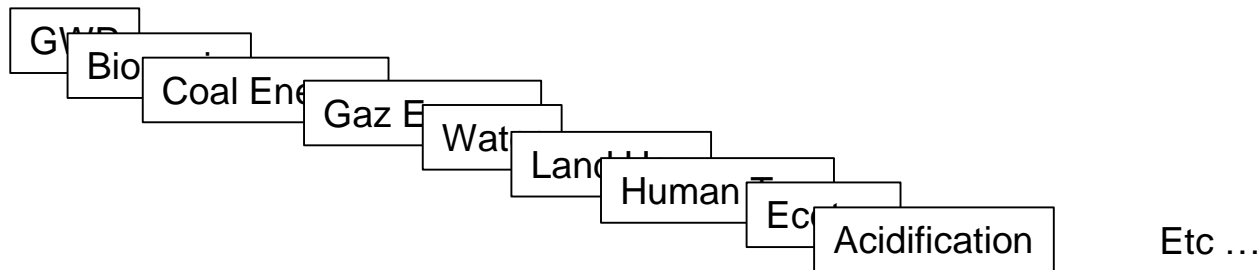
Ecoprofile



Step 1 : Impact Assessment



- LCA « Cradle-to-Gate » - ISO 14040-44
- 19 indicators (Environmental and Energy) – Mid-points CML and CED
- Quality assessment



Step 2 : Impact Valuation



- Shadow Cost = « cost for the planet » (Polluter Pays), defined by external authoritative bodies
- To prevent environmental or human toxicity damage (**avoidance cost** route)
- To remediate the damage caused (**repair cost** route)
- Time Horizon >10 years
- For **comparison** of products / technologies

Step 3 : Operation vulnerability



- Assess the financial risk of negative impacts (externalities)
- Comparison

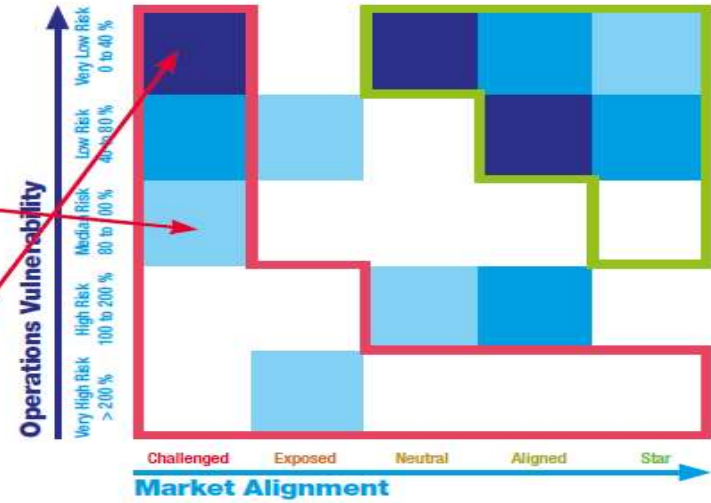
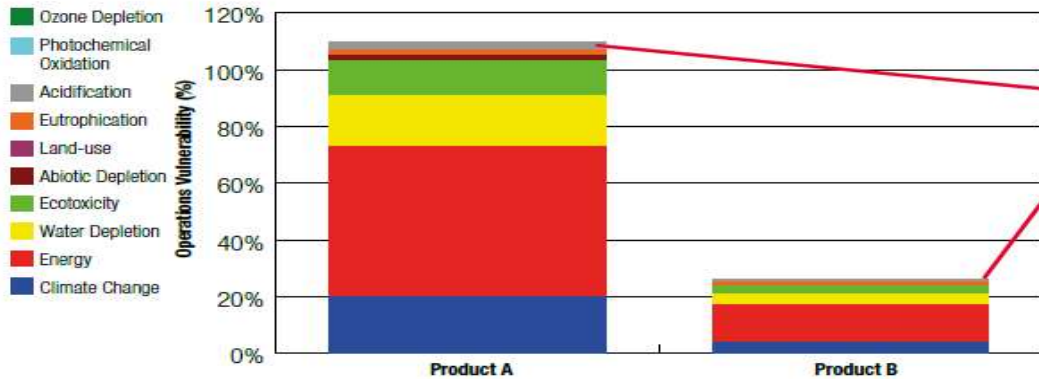
monetized environmental footprint
VS

value added by our product / activity (proxied by the sale price)

- **Lower OV** → High opportunity to displace of less environmentally-friendly product (< 80 %)
- **High OV** → High sustainability risk for the product (> 100 %)

Zoom on Operations Vulnerability components

Operations Vulnerability by midpoints (or impacts) Illustrative product with projection on Heat map



MORE BUSINESS SOLUTIONS

Launch of a simple & digitalized SPM Guide



- Executive summary for Business Leaders
- Detailed explanations for Practitioners
- Presentation of SPM Fast Track (simplification)
- 3 precise Business Cases
- Glossary and Q&A

<http://www.solvay.com/en/binaries/Solvay-SPM-Guide-154709.pdf>

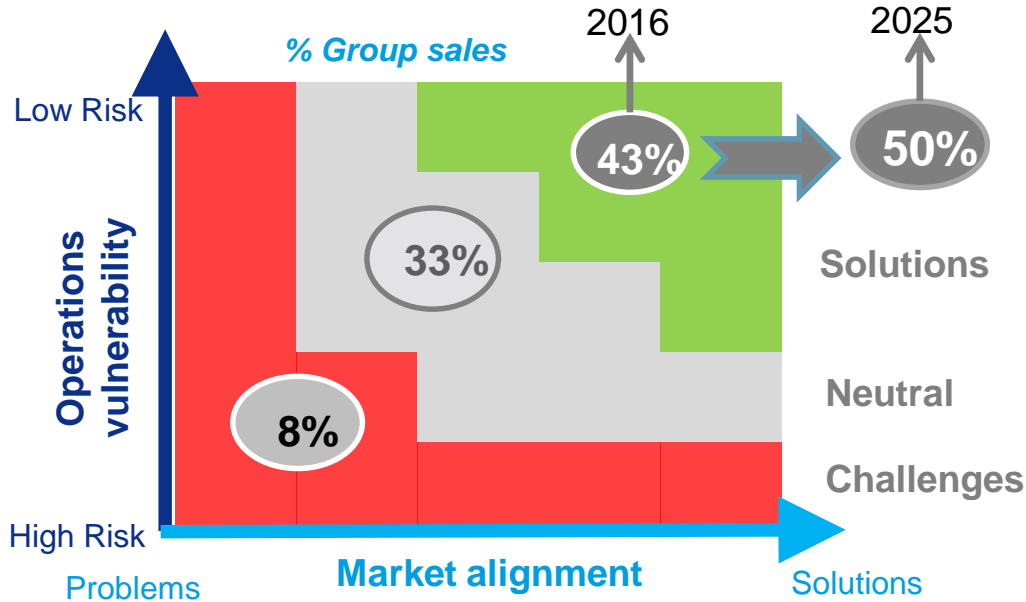
MORE FUTURE



SOLVAY

asking more from chemistry®

Objectives on Business Solutions



Solvay Solutions

- Climate Change (28%)
- Resource Efficiency (17%)
- Safety & Prevention (14%)
- Very low environmental manufacturing footprint (13%)
- Human Toxicity (7%)
- Environment Toxicity (4%)

Example: Composites

Reducing the weight of a passenger car by 1 kg represents 10 kg CO₂ eq. saved during its full life time (**Climate Change benefits**)