



Sustainability: A new perspective to Product Stewardship

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Sika Milestones

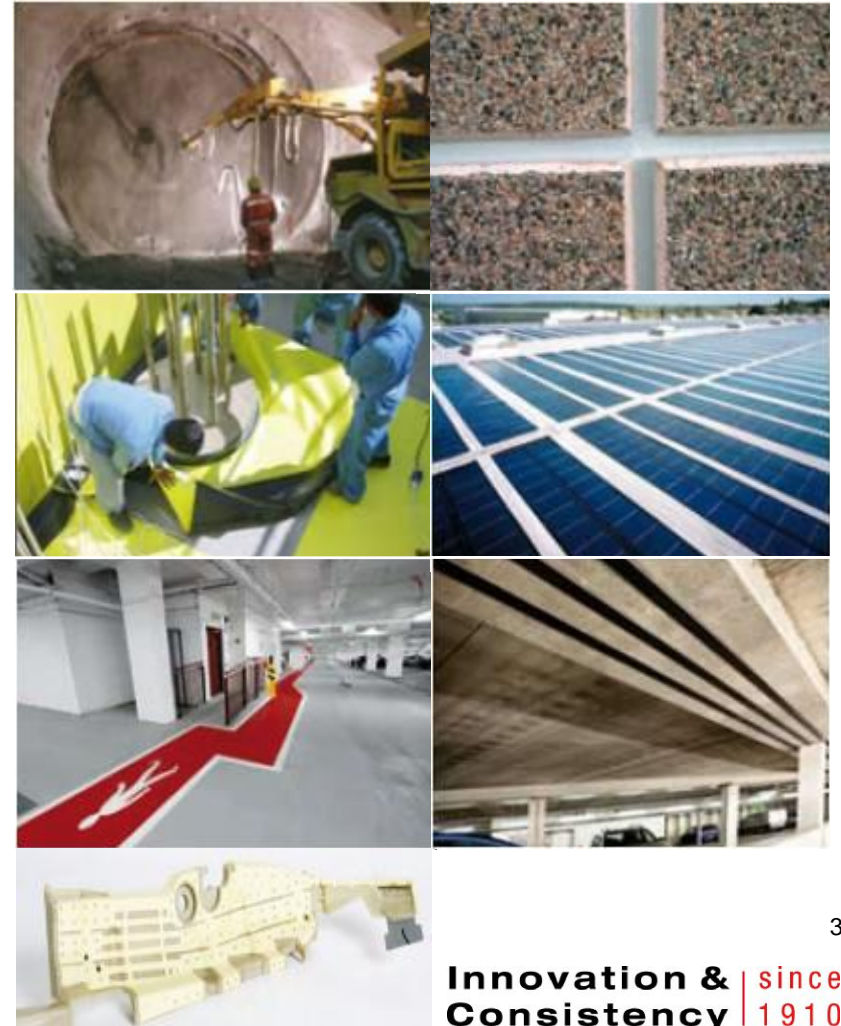
- 1910: Foundation by Kaspar Winkler
First product: Sika 1 (waterproof mortar)
- 1918-1922: Successful waterproofing of Gotthard railway tunnel (need for electrification)
- 2010: **100th anniversary, and again
Gotthard for the NEAT**



Vision

Achieve strong positions in target markets:

- § Concrete production
- § Elastic sealing and bonding
- § Waterproofing
- § Roofing
- § Flooring
- § Refurbishing and strengthening
- § Industry (mainly automotive)



Trends shape our future markets

- Energy & raw materials
 - Climate change
 - Water
 - Infrastructure
 - Societal stability
-
- These trends will change the needs
 - for e.g. concrete, building shell, construction, industry and automotive products



Our sustainability principles

- "Sustainable" and "Sustainability“:
 - meet the needs of the present
 - without compromising the needs of future generations
- Dimensions:
 - market & financial
 - social & ethical
 - environment & safety
- Long term perspective
- Needs integrity and trust
- Has become one center for innovation for many companies



Sustainability – 360°

Dual direction of action

1. Sustainable products / applications:

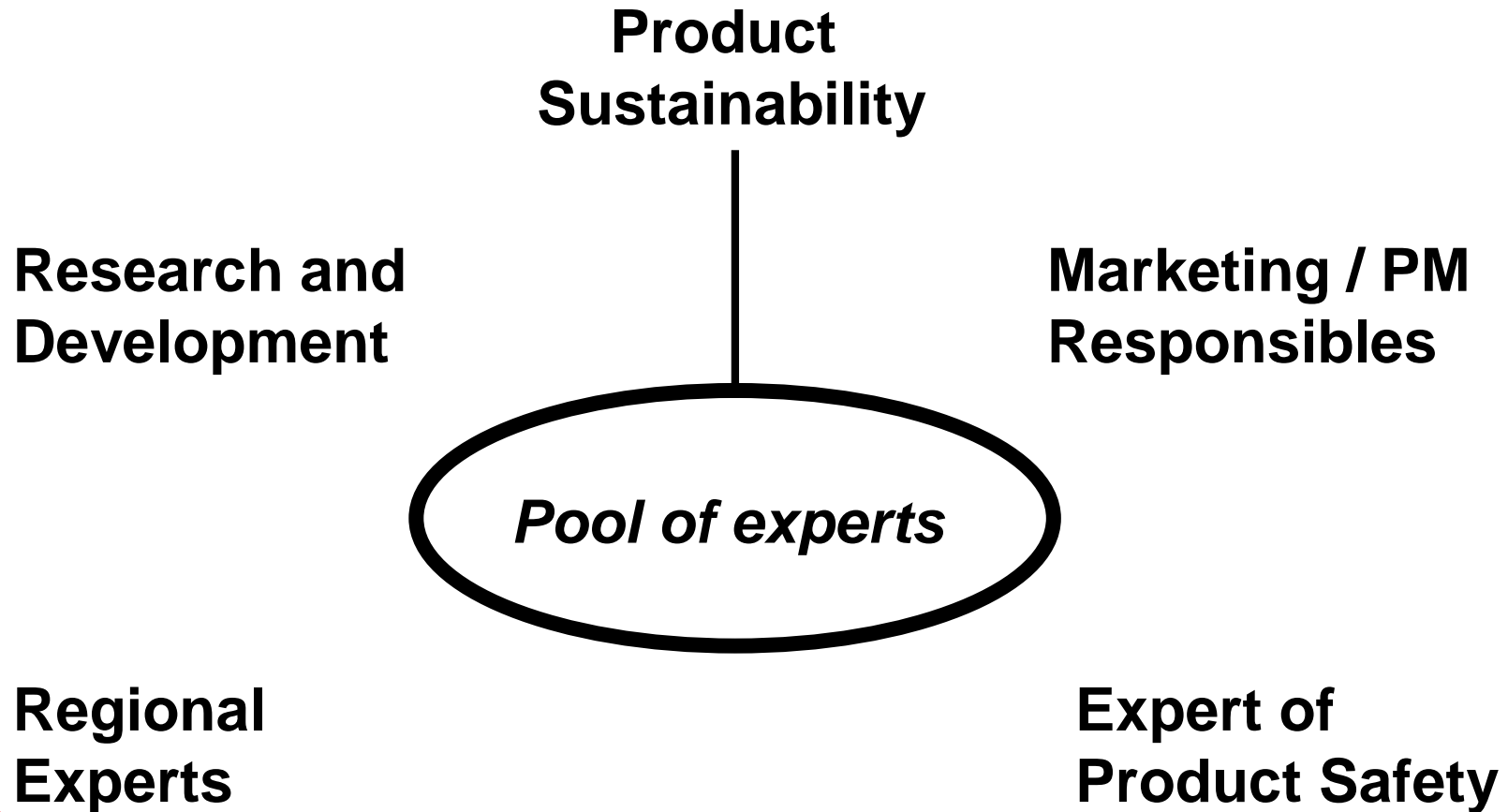
- energy, water and material efficiency
- guide and enhance innovation

2. Sustainable operations / supply chain:

- safe, lean and clean operations
- highly effective EHS management



Product Sustainability Network



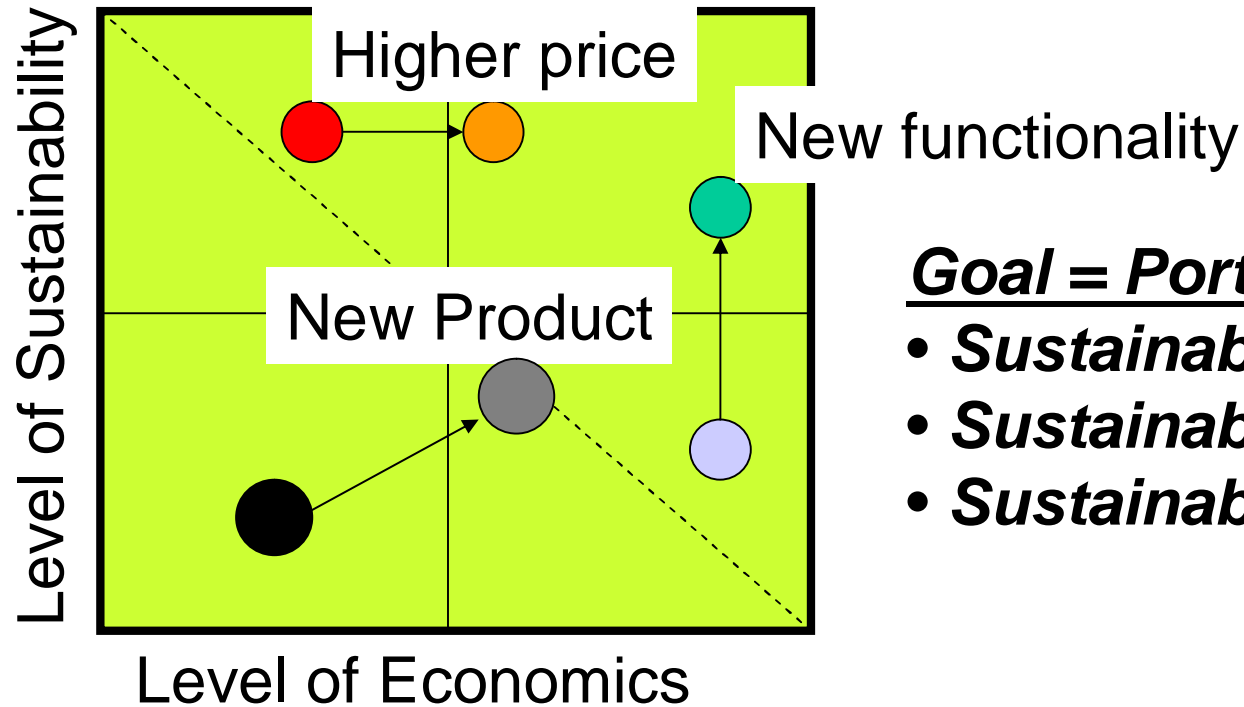
Sustainability: Product evaluation and trends

- Increasing demand for limited non-renewable resources
- Climate is changing
- Water is a scarce commodity
- Rising need for efficient infrastructure
- Rising need for hazard-free products

CRITERIA?



Product / Portfolio Assessment



Goal = Portfolio Management

- **Sustainable technologies**
- **Sustainability stars/dogs**
- **Sustainable applications**



„Green Building“ programs





Growth Opportunities

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Growth Opportunity: Ecological Development / Sustainable Buildings

- CO₂ reduction, water savings with high-end admixtures
- Energy reduction with grinding aids in cement production
- Energy savings with highly reflective membranes for roofing
- Energy savings and micro climate improvement with green roofs enabled by membranes
- High demand for waterproofing products to save water
- Growing wind power industry drives high demand for bonding, strengthening, anchoring, protecting and coating products



Benefits of grinding aids

Ecological impact of cement production:

1t of cement [50 kWh for grinding
Global cement production [130 million MWh

Benefit of grinding aids: reduction of grinding time and energy

SikaGrind® [- 11% for grinding
100% use of grinding aids [- 14.3 million MWh



Benefits of concrete admixtures

Ecological impact of concrete production:

1t of concrete	[80 l of water
Global concrete	[1200 million m ³ of water

Benefit of plasticizers: reduction of water consumption

Sika [®] ViscoCrete [®]	[- 15% of water
100% use of Super Plast.	[- 180 million m ³ of water



What does this mean for Responsible Care

- New methodology and logic for product rating, on top of regulatory framework, for product stewardship
- Sika strives to rate their products and also prune less sustainable materials
- Need to open the scope of RC and could make sustainability the center
- Responsible Care will not be the (only) program of the chemical industry
- We need to invest into step-change technology: Sika sponsored a professorship for sustainable construction, Zuerich ETH

