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working group products

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What potential is there for a top-runner approach to product policy in the EU?

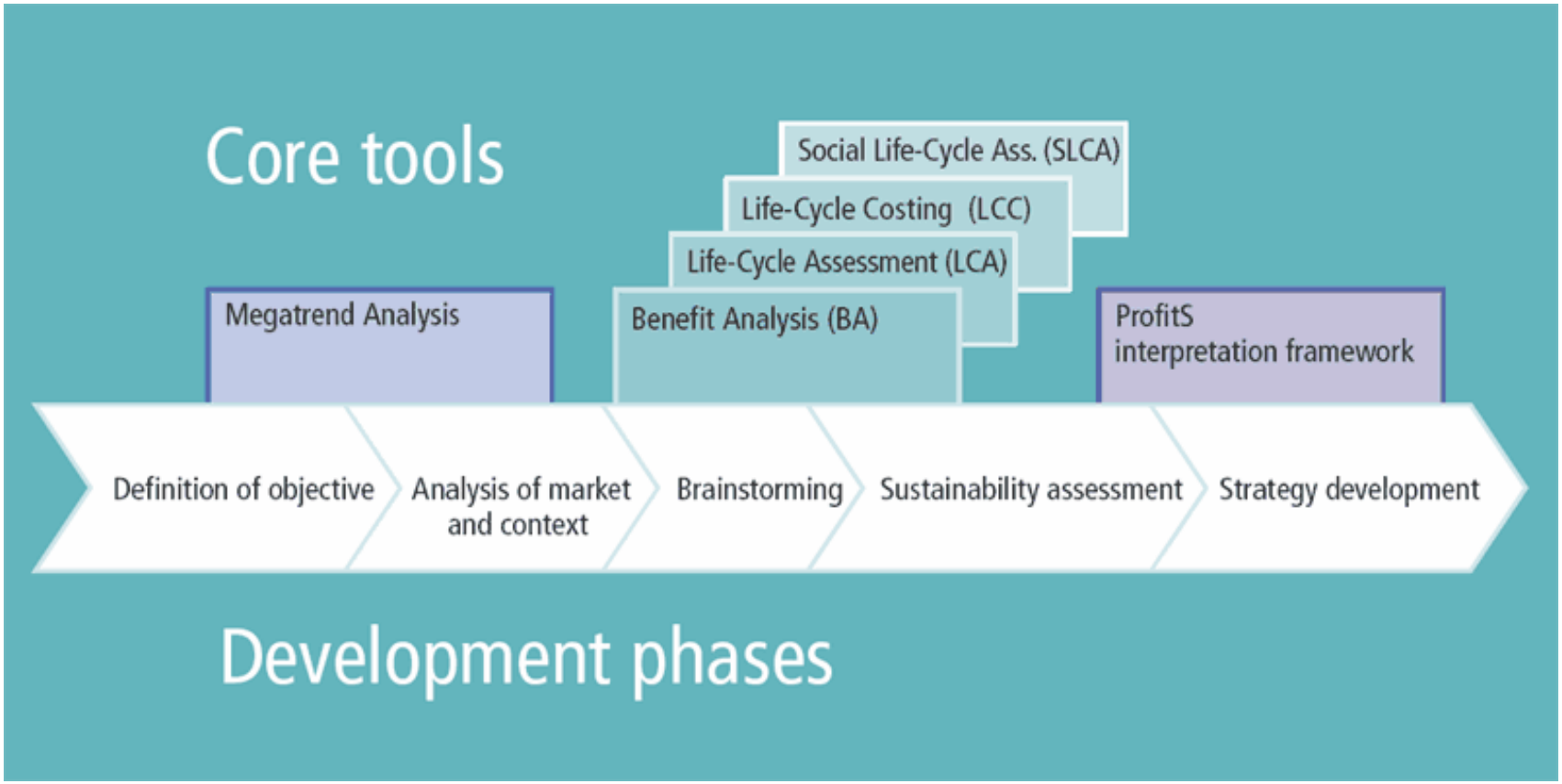
Directory

- Methodologies and Indicators
- Product Sustainability Assessment
- Very high Efficiency Potentials but …
- Examples: Buildings, Cars, Appliances
- Reasons for the backlog in efficient consumption
- Mix of instruments

Methodologies and Indicators

- life cycle approach
- environmental, economical and social aspects
- benefit analysis
- Focus on primary energy consumption and Global Warming Potential (GWP)
- but don‘t forget other categories like toxic substances, land, noise, radiation, risks
- Methodologies: LCA, LCC, SLCA, PROSA …

PROSA – Product Sustainability Assessment



Very high Efficiency Potentials but …

- good quality energy-efficent products and services are already available
- Enabling consumers to reduce their CO_2-emissions by as much as 40% at no extra life cycle costs (www.ecotopten.de)
- „time to market“ is not yet the problem, but „time to consumer“ (market penetration)
- massive efficiency backlog in consumption
- Increased consumption level (buildings, cars, household appliances, flights …)

Buildings

- Average in Germany
  - In the sixties: 30-40 kWh/m^2
  - 2006: 170 kWh/m^2
- New buildings: 60 kWh/m^2 (but less than 1%)
- Passive houses 15 kWh/m^2, Plus Energy-H.
- Energy consumption for heating 1995 – 2004 plus 2,4% (!)
- Living space per person:

  1960: 19,4 m^2 and 2006: 43 m^2

Cars

- Average gas consumption in Germany:
  7,9 l/100 km (2006) = approx. 190 g CO_2/km
- VW Lupo 3l TDI: 2,99 l or 81 g CO_2/km
- Toyota Prius: 4,3 l or 103 CO_2/km
- Proposal WBGU:

- by 2012: 120 g CO_2/km
- by 2015: 100 g CO_2/km

  (75% Toyota Prius/25% 3l-Lupo = 97,5 g) …
- by 2020: 80 g CO_2/km

Appliances 2006 (BAT) compared with the average in the eighties

- estimated: approx. 50 - 90 % reduction (exemption: tv-sets)
- but many new products, especially IT-products like personal computer, printer …
- Germany: electricity consumption in private households is increasing

Reasons for the efficiency backlog in consumption

- Change in the attitude of consumers
- Symbolic utilities are dominating
- Bad image of (technical) ecoproducts
- Still lack of information, especially at POS
- The concept of life cycle costing is not really understood and is not accepted
- No examples/first movers (peer groups, public procurement, large buyers, ..)

Change in underlying drivers for consumption

Alternative symbolism	⇒	Good design
Collective	⇒	Individual
Suffering	⇒	Fun
Disaster	⇒	Events
Anti-Companies	⇒	Success
Abstention	⇒	Gain
Home-made	⇒	Professional
Slow	⇒	Fast
Individual responsibility	⇒	Delegation

Life Cycle Costs and Savings

Top Runner or Policy Mix?

Good reasons for a Top Runner Approach, but we need a mix of intelligent instruments:

- Product Policy / Top Runner /ambitious targets
- Financial instruments/incentives
- Energy efficient Public Procurement
- Marketing campaigns for energy efficient consumption and products

Product Policy: ambitious targets

Proposal WBGU:

- Rapid revison of Directive 2002/91/EC (Energy perfomance of buildings) with the aim of passive house standard for new houses
- Fleet emissions of cars: 120 g CO_2/km (2012), 100 g (2015) and 80 g (2020)
- Dynamic product standards through the adoption of implementing measures based on the Ecodesign Directive (best energy ratings will apply four years later to all products)

Financial instruments/incentives

- Shift to taxation of ressources and pollutants
- Reduced VAT for energy efficient products
- Orientation on Life Cycle Costs (e.g. taxation of cars)
- Private capital and Public Private Partnership
- Consumers as energy producers
- Cooperation with the winners

Energy efficient public procurement

- Public sector as a role model
- Cars with maximum 100 g CO_2/km
- only A- resp. A^{++}-appliances
- Decison making based on life cycle costs and not on prices
- Don‘t forget (private) large buyers

Marketing campaigns

- Long term campaigns
- Ranking of real engergy efficient products
- Challenging Criteria, including Life Cycle Costs, Carbon Footprint
- Setting of targets for further product developments
- European harmonisation (see: the Topten initiatives and www.Topten.info , www.ecotopten.de , etc.

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