

How Unilever applies LCA/LCM in a business context

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Safety & Environmental Assurance Centre



How we are organised

Unilever - SEAC

Household and personal care

Categories Categories

Brands Brands Brands

Food

Categories Categories

Brands **Brands** Brands

















SUNSILK



Unilever and sustainability



Changes in the World Around Us

Climate Change



Soil Degradation



Water Scarcity



Biodiesel



Draught



Declining Oil Reserves



Unilever

Consumer Concerns

Global Warming



Rainforest Destruction



Chemicals in products; how / where they're made

Greenhouse Gases



Health Epidemics



THESE PRODUCTS MAY

Babies are born with toxic chemicals already contaminating their hodies. These man-made chemicals come from household products we use

Natural Disasters



Mass Migration of People



Gap between Rich & Poor



Our external drivers

Logistics Suppliers **Providers** Investors Competitors / Trade Associations Unilever Customers (e.g. Consumers

NGO campaigning e.g. WW, Greenpeace

Government / Regulation e.g. IPP

Walmart & Tesco)



The Unilever Mission



"To make deanliness commonolace; to lessen work for women; to foster health and contribute to personal attractiveness, that life may be more enjoyable and rewarding for the people who use our products".

William Hesketh Lever, 1890

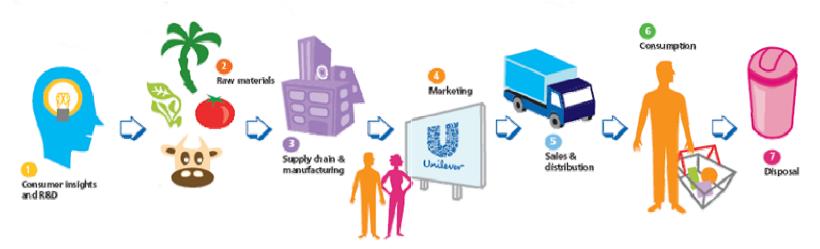


Unilever's mission is to add Vitality to life. We meet everyday needs for nutrition, hygiene and personal care with brands that help people feel good, look good and get more out of life.

Where does sustainability sit?



Nutrition



Social:

- Search for fulfilment & wellbeing
- Animal Testing
- Labour issues/human rights
- Women's issues
- Diversity/equal rights
- Hunger/malnutrition
- Wars/security/terrorism
- Health, illness and disease
- Loss of natural habits
- Obesity and weight
- Chemicals in the body
- Natural/organic
- Product safety
- Good causes/charity fundraising Ethical behavior /Responsible marketing
- Disaster relief/social migration

Economic:

- air trade/wages/pricing
- Poverty reduction/wealth creation/ wealth disparity
- Economic migration
- Developing local communities e.g. education, infrastructure
- Employment
- Transparency/corruption
- Cost of consumption e.g. taxes/congestion charges on CO2 emissions or high fuel costs
- Cost of recycling

Environment:

- Water usage
- Sustainability
- Ingredients/chemicals
- Climate change/CO2 emissions/pollution
- Energy use
- Transport/ food miles
- Genetic modification
- Excess packaging
- Deforestation/Biodiversity
- Recycling/Reuse
- Waste/ Land fill/ Biodegradability
- Pollution



LCA/LCM in Unilever



Unilever LCA Studies

- Household &Personal Care
 - Laundry
 - Dishwash
 - Wipes
 - Deodorants
 - Toothpaste
 - Shampoo
 - Soap
 - Shower Gel

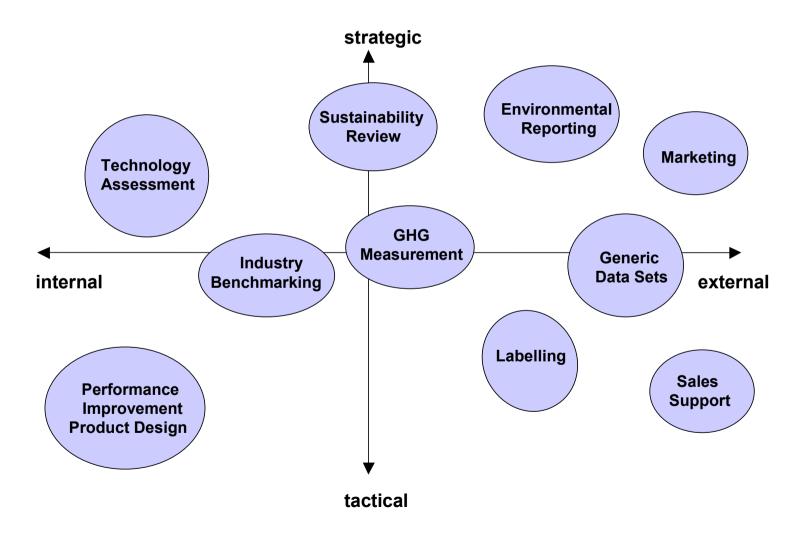
- Foods
 - Ice Cream
 - Frozen Peas & Spinach
 - Tomato Sauces
 - Margarine
 - Tea
 - Savoury
 - Dressings



The Life Cycle Focus



Applications of LCM





LCA/LCM in Innovation



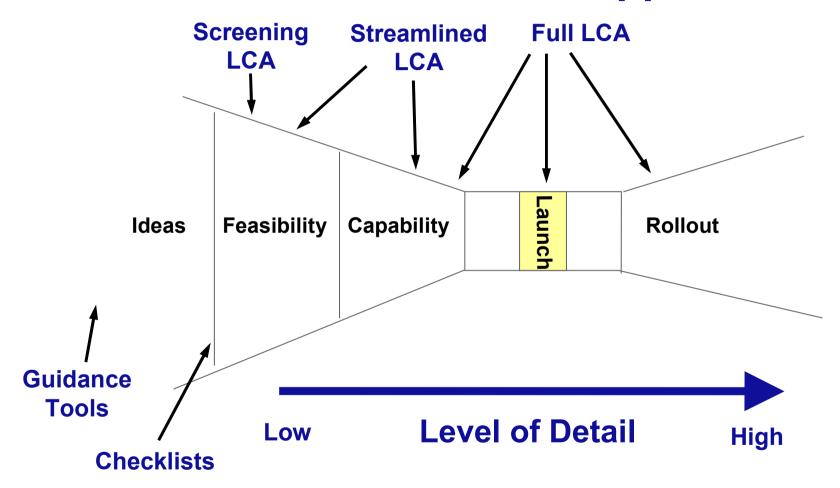
Facts

Unilever wants to reduce the Greenhouse Gas impact per tonne of production by 25 % by 2012.

It is assumed that about 80% of all environmental effects associated with a product are determined in the design phase of development (UBA, 2000)



LCA as an Innovation Support Tool





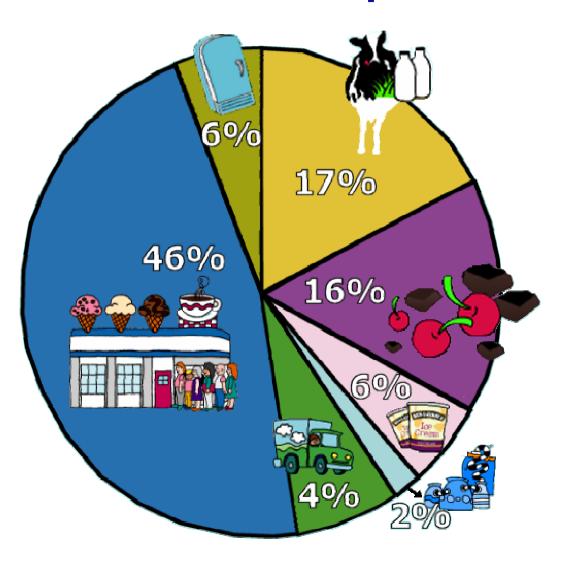
LCA in the Innovation Process

- Product/Process Comparisons
 - assess product/process options and improvements
 - explore design alternatives (e.g. materials, recycling, in-use habits, disposal, etc.)
- Category Assessments
 - improve understanding of product environmental performance
 - identify "hot-spots"

LCA as guidance and in decision support!



Example ice cream









OTHER INGREDIENTS



PACKAGING



MANUFACTURING



DISTRIBUTION



RETAIL



HOME USE



Common issues when conducting LCAs

- Data availability and relevance
- Scale of operation/complexity
- Timing/cost
- Often applied post-product development



LCA/LCM for strategic decisions



Brand imprint



BI is a tool designed to gain deeper insights on the SEE forces that can fuel or present barriers to brand growth.





LCA in Communication



Communicating Environmental Performance

- We use life cycle approaches to communicate environmental information to key stakeholders (e.g. NGOs, legislators, customers)
 - to support product launches (used both defensively and promotionally)
 - to assist lobbying activities
 - to inform the public









PACKAGING CONSUMPTION

Children Supports Substable Development of Designate with Capable



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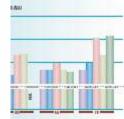
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A SUSTAINABILITY STEP

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UNIT DOSE A Sustainability Step for Fabrics Liquids

Brochures



see www.unilever.com

Current LCA challenges for Unilever

- Land issue (biodiversity, soil degradation...)
 - Food
 - biofuels
 - bioplastics
- 'Carbon neutral', offsetting
 - System boundaries in biotic systems
- Data availability (literature and site specific)
- Labelling
 - Carbon labelling in the UK (Tesco)
- B 2 B tool
 - Wal-Mart packaging scorecard (US)





Thank you for listening!



Reference

UBA Umweltbundesamt (German federal Environmental Agency) (Ed.) (2000) "How to do EcoDesign?", a guide for environmentally and economically sound design, Verlag form. In Commission of the European Communities (2003) Proposal for a Directive of the European parliament and of the council on establishing a framework for the setting of Ecodesign requirements for Energy-Using Products and amending Council Directive 92/42/EEC, Brussels

