

Environmental assessment of future technologies: how to trim LCA to fit this goal

LCA discussion forum 38
ETH Zürich, June 19 2009

Questions today

- Is there a role for LCA in far future technology development?
- If yes, how to trim LCA to fit to this role?
- How does industry assess future trends in consumer needs and product development?

Program of today

Morning session

- External costs and multi-criteria decisions *
- Long-term LCI modeling aspects *

Afternoon session

- Industry implementation and case studies
- Discussion: role of and requirements on LCA in long-term future technology assessment

*: includes results of the NEEDS project

Goal of the NEEDS-Project

Evaluate the:

- **full costs and benefits** (i.e. direct + external)
- of **energy policies** and
- of **future energy systems**
- at the level of **individual countries** and
- for the **enlarged EU**

Identification of **external costs**, based on **Life cycle inventories (LCI)**

3 scenario families:

- Business as Usual,
- 440ppm CO₂,
- Renewables and Energy Efficiency

3 time horizons:

2000, 2025, 2050

External costs per **group of countries**

Facts & Figures of the NEEDS-project

- NEEDS stands for
-> **New Energy Externalities Developments for Sustainability**
- European project over 4 years (2005 - 2008)
- Budget: 12 Mio. EURO
- and ...

66 Partners from 26 countries are involved in the NEEDS-project



Research streams and interfaces

