# LCA experiences in APEC countries

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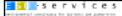






The 4th AIST Workshop on LCA for APEC Member Economies
-Capacity Building in the region-

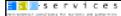
October 26, 2004 International Congress Center "Epochal #303", Tsukuba, Japan



# LCA experiences in APEC countries

- little experience in LCA carried out on products produced in APEC countries
- LCA of cooking with LPG and kerosene in India for German Agency for Technical Co-operation
- · LCI of lithium production in Chile
- · LCI for crude oil exploration in Nigeria
- · LCA of cotton and orange juice for WWF
- Co-organisation of the 2003 International Conference on Ecobalance and LCA in Mumbai, India
- Tutoring of (Swiss) students work on an LCA of sugar cane industry in South America

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### Experiences with LCA investigation of companies in APEC countries

- Product systems of goods and services purchased in Western Europe often include manufacturing in Asian countries or materials from Africa (crude oil) or South America (e.g. Lithium)
  - => LCI data investigation often involves APEC countries
- Large cultural differences in public access to environmental information and in response to foreign requests
- · International experiences facilitate data aquisition
- · Sector specific differences according to public awareness
- Incentive for these countries to participate in Western LCA studies? → public pressure, request by customers, awareness of responsible persons

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#### Do APEC countries need LCA ?

- Environmental problems are sometimes obvious, such as smog in cities due to private traffic, capacity of sewage or waste management systems not (yet) sufficient, ship wrecking in India
- $\bullet\,$  Not enough means for solving these problems
- Improvements on the spot (basic environmental infrastructure for sewage and waste, manufacturing plants, operation of cars) are (currently) probably most effective
- Need for life cycle perspective to discover "hidden" improvement potentials?

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### Threats and Opportunities

 International requirements to provide LCA information with a product can be perceived as a trade barrier against product imports from foreign countries (WHO)

#### BUT

Environmental performance of products may also be perceived as a chance:
 Example Brazil:

energy supply relies on sources perceived as
environmentally friendly (hydro power, ethanol)

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#### Make opportunities come true

APEC countries may profit from participating in foreign LCA studies and performing LCAs on their own:

- Processes with relevant contribution to environmental impact of a product may get special attention in a (multi-national) company
  - => improvement investments
- Products with excellent environmental performance may get improved competitiveness by means of LCA
   increase market shares

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### Possible next steps

- Join LCA capacities within the country for simple data investigation on the commons (energy supply, materials, transport and waste treatment services), divide work
- To get started: use existing databases, adapt them to country-specific needs, e.g. ecoinvent Database (see S3-1.1)
- · Advantages:
  - reasonably low costs
  - flexible (by and by adaptations possible)
  - internationally compatible
  - data transparency required
- Organise workshops with user-groups to discuss daily problems in LCI data investigation

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