Requirements of EPI systems and their fulfilment by ecoinvent

Swiss Centre For Life Cycle Inventories

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Bern (Switzerland) / June 22, 2010

41st Discussion Forum LCA

« Environmental Product Information and LCA »

Roland Hischier
ecoinvent Centre
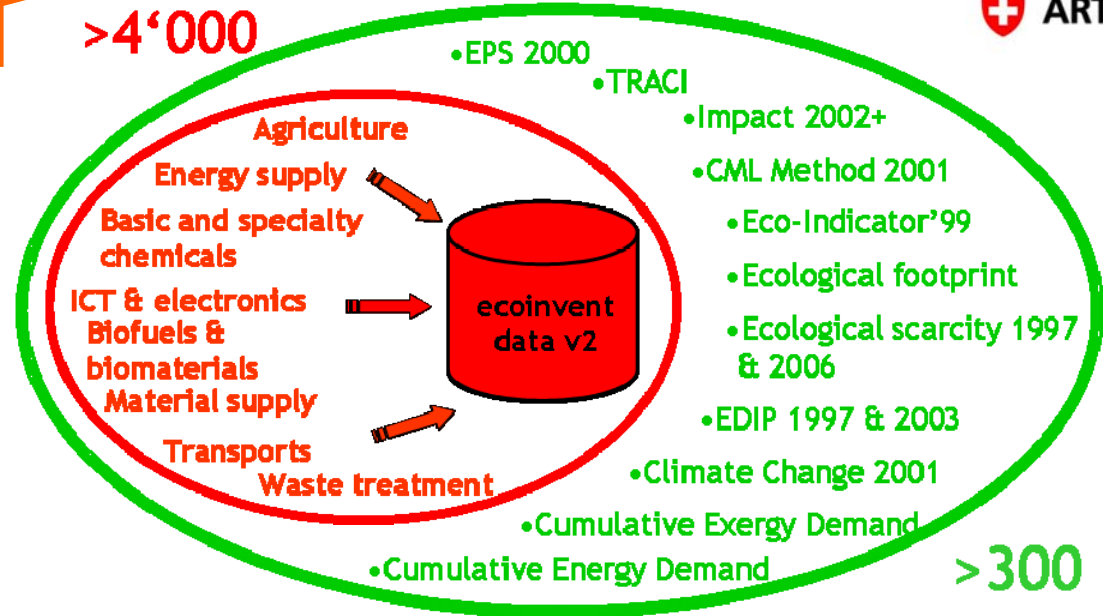
the ecoinvent database (today) …

- **Online** database with **fully interlinked** data;

- **a simultaneous calculation** of about 4'000 product systems;

- **Link** to **major LCIA methods**;

- **Independent quality assurance** mechanism;

- full access to **unit process** data and **rolled-up** data;

- all Multi-output datasets with **unallocated** data **provided**;

- using an **ISO-compatible format** in XML technology:
  - easy data **exchange**
  - **one format** for LCI & LCIA
  - **working**, widely applied and accepted

consistent

reliable

transparent

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>4'000

- Agriculture
- Energy supply
- Basic and specialty chemicals
- ICT & electronics
- Biofuels & biomaterials
- Material supply
- Transports
- Waste treatment

ecoinvent data v2

- EPS 2000
- TRACI
- Impact 2002+
- CML Method 2001
- Eco-Indicator'99
- Ecological footprint
- Ecological scarcity 1997 & 2006
- EDIP 1997 & 2003
- Climate Change 2001
- Cumulative Exergy Demand
- Cumulative Energy Demand

>300

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... (already now) more than a Swiss DB

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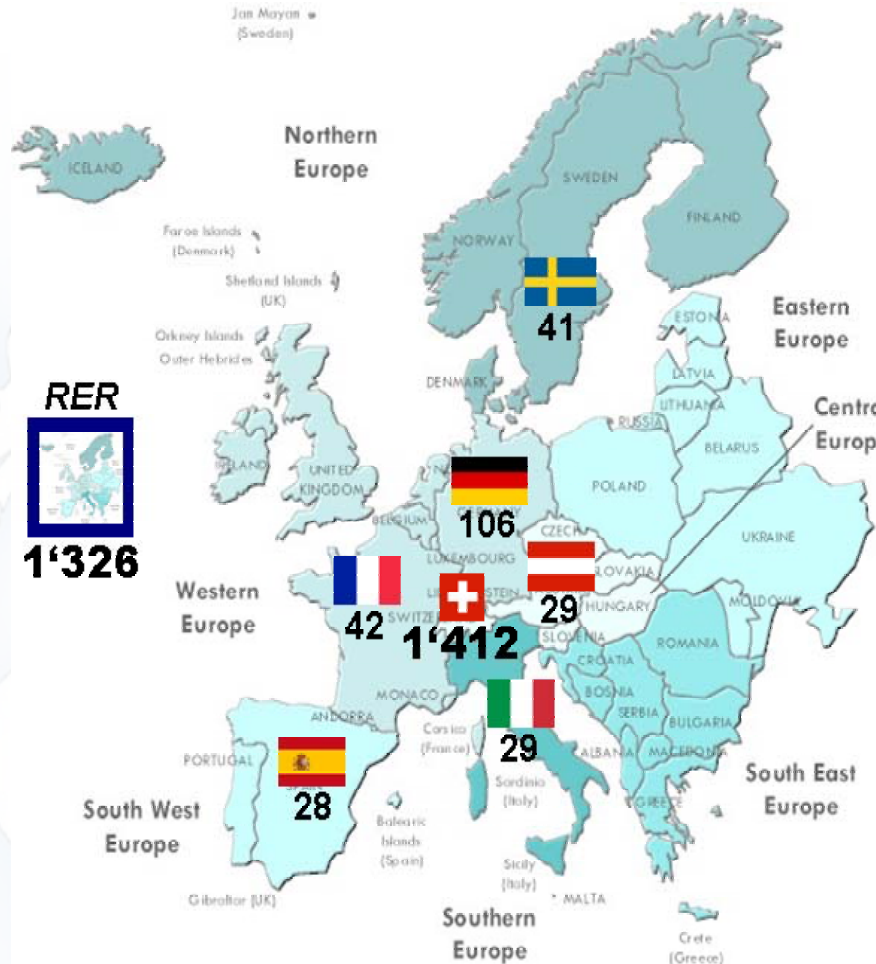
Requirements of EPI systems
concerning input data ...

- Examples of EPI systems:
    - Carbon footprinting
    - ISO 14'025 Type III label / Environmental Product Declaration (EPD)

- Common requirements:
    - Life Cycle Approach, including the complete supply chain
    - Relevant, verified and comparable data – also outside Europe
    - Common allocation rules across complete life-cycle

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... fulfilment by
the ecoinvent database (tomorrow)

- Database wide application of consistent allocation or system expansion/substitution criterias (i.e. average and marginal market modelling)
    - e.g. Carbon content allocation → „Carbon Footprinting"

- More detail, more technologies, more completeness
    - International editorial board and broader supplier base
    - Parameterization (geography, time, technologies, markets)
    - New sectors (e.g. food, water) & new areas (e.g. India) covered
    - Well above 10'000 datasets in next version

- Highest quality standards, in terms of transparent, well-documented, consistent, complete and validated data

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ecoinvent Centre

c/o Empa, Lerchenfeldstrasse 5

CH-9014 St-Gallen, Switzerland

support@ecoinvent.org

www.ecoinvent.org

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