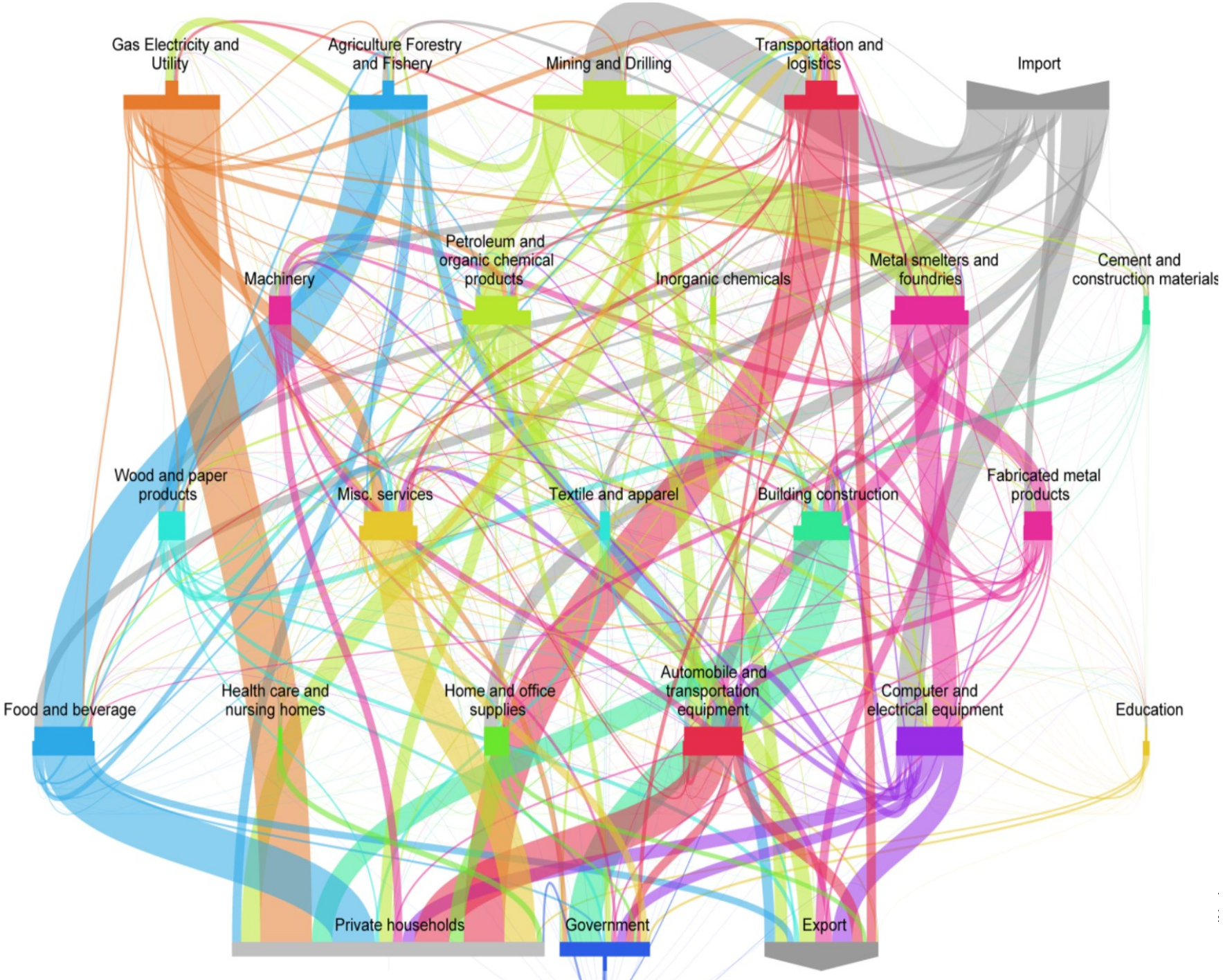
Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Eidgenössisches Departement für Umwelt, Verkehr,
Energie und Kommunikation UVEK
Bundesamt für Umwelt BAFU
Abteilung Ökonomie und Innovation

84th LCA Discussion Forum
– LCA development –
Did we forget about data?
Challenges and needs



Sangwon Suh, 2011 «The structure of life-cycle environmental impact of the U.S. economy – Using a multi-regional hybrid framework" at DF 45 – Environmentally-Extended Input-Output-Analysis and LCA

The need for LCA data (Scope 3) is increasing

Data is the basis for each LCA sucess story

It doesn't matter whether LCA …

- helps to inform on sustainable consumption and production,
- is used to design sustainable products
- serves as criteria for regulation and law enforcement or,
- is used as criteria for public procurement

→ LCA-data and its quality is important in any case.

→ We hope that the LCA discussion forum 84 brings data quality and management one step forward and contributes to a fruitful exchange.

«In LCA, we need three things: Data, Data and Data»

2011 SETAC Conference - Anonymous

Data in LCA is crucial

- Data is at the core of all LCA
  - **The quality of the outputs is determined by the quality of the inputs (foreground & background)**

➔ The development of transparent, time representative, reproducible, quality-controlled and consistent datasets is indispensable for reliable LCA-studies

- The development of background datasets is a great responsibility and a major challenge
  - It will be used by many LCA experts to support the turnaround to a more sustainable world
  - It might has been disregarded by the LCA community being focused on other key challenges (method, studies, etc.)

➔ But did we really forget about data? If yes, can we make up for it now?

The current situation

- The mass of information available has never been greater than today
  - A large amount of LCA-based studies are published yearly

  ➔ Converting this information into reference data for LCAs is a major challenge

- Collaborative data collection and dissemination platforms are now largely deployed in many domains but are only at its early stage for LCA

  ➔ We can benefit from experiences in other domains to develop innovative and efficient strategies

- Increasing demand for information for many many sectors

  ➔ The ability to provide reliable information rapidly is crucial

Developing datasets for LCA has to be a continuous process to remain competitive and credible

- Update/correct the information
- Enhance the databases
- Adapt to the evolution of the knowledge

➔ It's like the history of producing watches …

Same story – Same trends

Past

- At the core of the LCA development:
  - The LCA experts had to create concepts, collect and organize the information

Present

- As the methodology gained in maturity:
  - Dedicated LCA data experts started to develop systematic approaches to build consistent databases

Future?

- In the future:
  - We have to enhance, improve and consolidate the data field in LCA… But how?

Motivation for the discussion forum

- Past experiences help us improve future LCA methodologies and LCA data
  - It is a continuous process that must now be brought to the foreground

- Transparency, quality, reliability and consistency have to remain the key objectives when dealing with data
  - All LCA experts must contribute to the data development used by the community

- The expectations regarding the LCA field are very high
  - Policy development, voluntary comittments, etc.

➔ **<u>This is the reason for this discussions forum!</u>**

Motivation for the discussion forum

- Aspects to be discussed today:
  - Data collection for LCA today and in the future – Situation, needs and challenges
  - Trends to promote and facilitate data collection and quality control processes
  - Initiatives, emerging concepts and successful examples for collaborative work in data gathering
- Objectives:
  - Give an overview of the data in LCA
  - Illustration of emerging trends and innovative solutions
    Collect your view on this topic (workshop)
- Expected outcomes:
  - Short term: ideas regarding the data question in LCA
  - Mid: Development of concepts
  - Long (but rather mid): **Implementation !**

Program

We look forward to a constructive exchange.

All points of view count.

Time		Speaker [Chair]
08:30	Registration, coffee & croissants	
09:00	Welcome and introduction into day	
Subject – Where we stand, where we could go		
09:15	A historical perspective on the database development	Treeze – R. Frischknecht
09:40	Background database: central piece of the ecosystem	Ecoinvent – E. Moreno Ruiz
10:05	Beyond static inventory datasets	Cauldron – C. Mutel
10:30	Discussion	
10:45	Coffee break	
Subject – Trends for data in LCA		
11:15	International initiative regarding data accessibility and interoperability – GLAD	Life Cycle Initiative - Llorenç Milà i Canals
11:40	The future of LCI DBs: ADEME vision for 2030 *(Online)*	ADEME- O. Réthoré
12:05	LCA in EU policy and the role of LCA data	DG-Environment – A. Boyano Larriba
12:30	Discussion	
12:45	Lunch	
Short presentations		
14:00	Short presentations - Updating LCA datasets of the ICT sector: insights and intricacies when using public data - 25 years experience in LCI modelling for oil and gas extraction: developments and challenges in updating LCI data - Life-Cycle Analysis as Code: Bringing Software Practices to LCA Data Engineering - Issues and challenges regarding specific data for background database* - A tailored LCA database for the chemical value chain – cm.chemicals for robust environmental decisions	Empa - R. Adrianto - ESU-services - N. Jungbluth Kleis Technology - P. Blanchard Sphera – L. Thellier Carbon Minds - R. Meys
Subject – Emerging concepts & application examples		
14:45	Collaborative Platform in data exchange – OpenLCA	Greendelta – A. Ciroth
15:05	U.S. Federal LCA Commons: Publishing Open and FAIR data for LCA *(Online)*	USDA, Agricultural Research Service, National Agricultural Library – P. Arbuckle
15:25	Simplifying the consistency check and translation of different data sources in the context of various evolving GHG assessment frameworks	Empa – D. Beloin Saint Pierre
15:45	Coffee break	
16:05	Discussion in breakout groups *(on site)* on the topic of data in LCA: - How to foster the development of datasets in LCI databases? - Which roles for whom? Key actors and implications - What are the future trends for LCI background databases? - What are the needs of LCA practitioners regarding background data? (up-to-date data, adaptative system model, new processes for data collection, etc.)	
16:35	Reporting back to plenary and discussion	
Synthesis and Conclusion		
17:05	Synthesis and conclusions of the day	
17:20	Farewell	

A DISCUSSION FORUM
ON LIFE CYCLE ASSESSMENT