

81st LCA Discussion Forum Thursday, 15. September 2022

DF 81: How to harmonize and compare LCA in the service industry

Location of this DF LCA: **Wädenswil, Campus Grüental, Aula in GA 203**

The official language of this event is English

The service industries – e.g., finance, insurance, health care, tourism, transport, resource trade or telecom – are together responsible for 75 % of GDP in both the European Union and in Switzerland. Despite its economic relevance, existing initiatives like the Product Environmental Footprint (PEF) and Organisational Environmental Footprint (OEF) of the European Commission do not focus on services, but on standardised rules for product groups and sectors. With the global economy continuously shifting to more service than product-oriented business models, it is crucial to also address service industries and their specific challenges related to environmental assessment.

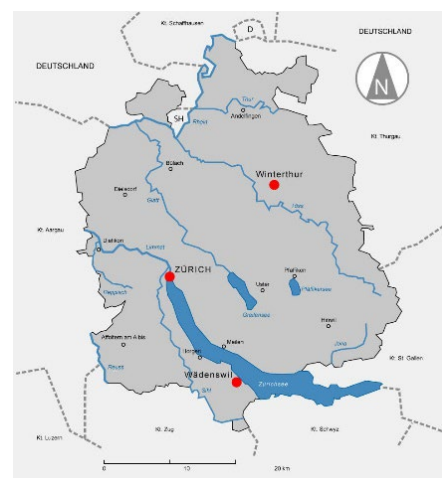
In the case of service industries, fundamental questions for LCA, like the choice of functional unit or the definition of the system boundaries, are considerably more challenging compared to products or organisations. As an example, it is extremely difficult to reasonably quantify health services: How can different treatments be compared and their positive impact on health be quantified? Another example is the finance sector: What is the functional unit of financial advice? Which system boundaries should be chosen when assessing the impact of a bank and their investment portfolio?

This discussion forum will provide an insight into the LCA related challenges of different service providers, focusing on information and communications technology, health care, as well as public services, and opens the discussion on specific challenges encountered when doing an LCA of services.

Furthermore, this forum will provide a platform to discuss new modelling approaches for the comparison of services and the importance of induced effects, e.g., caused by investments, and other indirect effects like rebounds tied to functional units and system boundaries for services.

We look forward to welcoming you at the Campus Grüental in Wädenswil.

*Regula Keller, René Itten and Matthias Stucki,
Zurich University of Applied Sciences (ZHAW)*



Programme (as of 2.9.2022)

Time	Session	Speaker [Chair]
08:30	Registration and welcome	(Barbara Dold, Regula Keller)
08:45	LCA and the Service Industry – an Introduction	[Regula Keller]
08:50	The service industry, its role for the national environmental footprint and challenges for analysis	Isabell O'Connor, Ernst Basler Partner
09:15	Information and Communication Services	[René Itten]
09:15	Environmental Footprint of Swisscom's service portfolio: approaches used and results	Marius Schlegel, Swisscom
09:35	Choosing an adequate functional unit for ICT-services: Learnings from case studies	Roland Hischier, EMPA
09:55	Discussion	
10:10	Coffee Break	
10:40	Health Care Services	[Matthias Stucki]
10:40	Applying LCA to health care: the care pathway approach	Rodrigo Alvarenga Senior Consultant, ERM
11:00	Comparing health services: Advantages and disadvantages of different approaches	Regula Keller, ZHAW
11:20	Public Services – Approaches of Cities	[René Itten]
11:20	Life cycle assessment of public services in the city of Zurich: Approaches and strategy	Rainer Zah, Stadt Zürich
11:35	Climate Plan of the City of Lausanne: approaches to estimate the GHG emissions	Denis Bochatay, City of Lausanne
11:50	Discussion	
12:05	Lunch Break	
13:20	Short Presentations	[Matthias Stucki]
13:20	Biodiversity impact of financial institutions	Daniël Kan, PRÉ Sustainability
13:30	Repair services and their rebound effect	René Itten, ZHAW
13:40	<i>Open spot</i>	
13:50	Discussion	
14:05	Coffee Break	
14:35	Modelling Approaches & Rebound Effect in the Service Industry	[Regula Keller]
14:35	Business-Model LCA: Comparing the impact per revenue to help decision making within companies – a suitable approach for service companies?	Henrikke Baumann, Chalmers
14:55	Environmental Impact of consulting - the case of ESU-services	Niels Jungbluth, ESU-services
15:15	Digitalization in the public sector: Case study of a medicine robot and proposed guidelines	Jáchym Judl, Finnish Environment Institute SYKE (online)
15:35	Discussion	
15:45	Discussion in Breakout Groups: Harmonizing LCA in the Service Industry	[Regula Keller]
16:35	Reporting back to plenary and discussion	
16:55	Synthesis, Announcements and Farewell	[Regula Keller]
17:00	End of Forum	

Further Information on the Discussion topic

1. How can we assess, benchmark and compare the environmental impacts of services and service companies of the same sector in a fair way? Which functional unit should be used for services in different sectors?
 - How should information and communication services be compared?
 - How should health care services be compared?
 - How should public services be compared?
2. How do service LCA differ from product LCA? Is there a need for specific guidelines for the LCA of services or service companies?
 - How should we draw the system boundaries for services?
 - How should induced effects be accounted for, e.g. caused by investments & rebounds?

Practical information

Registration

To register for the whole year or a single LCA Discussion Forum, please use the following link:

<https://ethzurich.eventsair.com/lca-2022/df81n/Site/Register>. To register you need to create a profile, which is done in very few steps and is self-explanatory. In case you are not able to pay by credit card, please send an e-mail to lcaforum@ethz.ch with a short notice that you want to receive an invoice instead. Please provide the full invoice address as well as the chosen fee type. Programme updates at: <https://tinyurl.com/DFLCA81>

For all further questions regarding the registration process, please do not hesitate to contact: lcaforum@ethz.ch

Lunch

Vouchers for lunch at the ZHAW restaurant in the building GD will be provided to all participants. A vegetarian meal option is always on offer.

Location

Pay attention that this DF will **not take place at ETH** in Zürich, but in the main auditorium GA203 in the building GA of the Campus Grüental, Zürich University of Applied Sciences (ZHAW), 8820 Wädenswil.

How to get there

The bus stop is called “Wädenswil, Campus Grüental”. Please find your most convenient connection here: www.sbb.ch. If you use a car, please follow the signs to the official parking spaces or study the map provided below.

The auditorium, in German “Aula”, is close to the main entry of the ZHAW Campus Grüental (GA), see <https://tinyurl.com/ZHAWGA>.

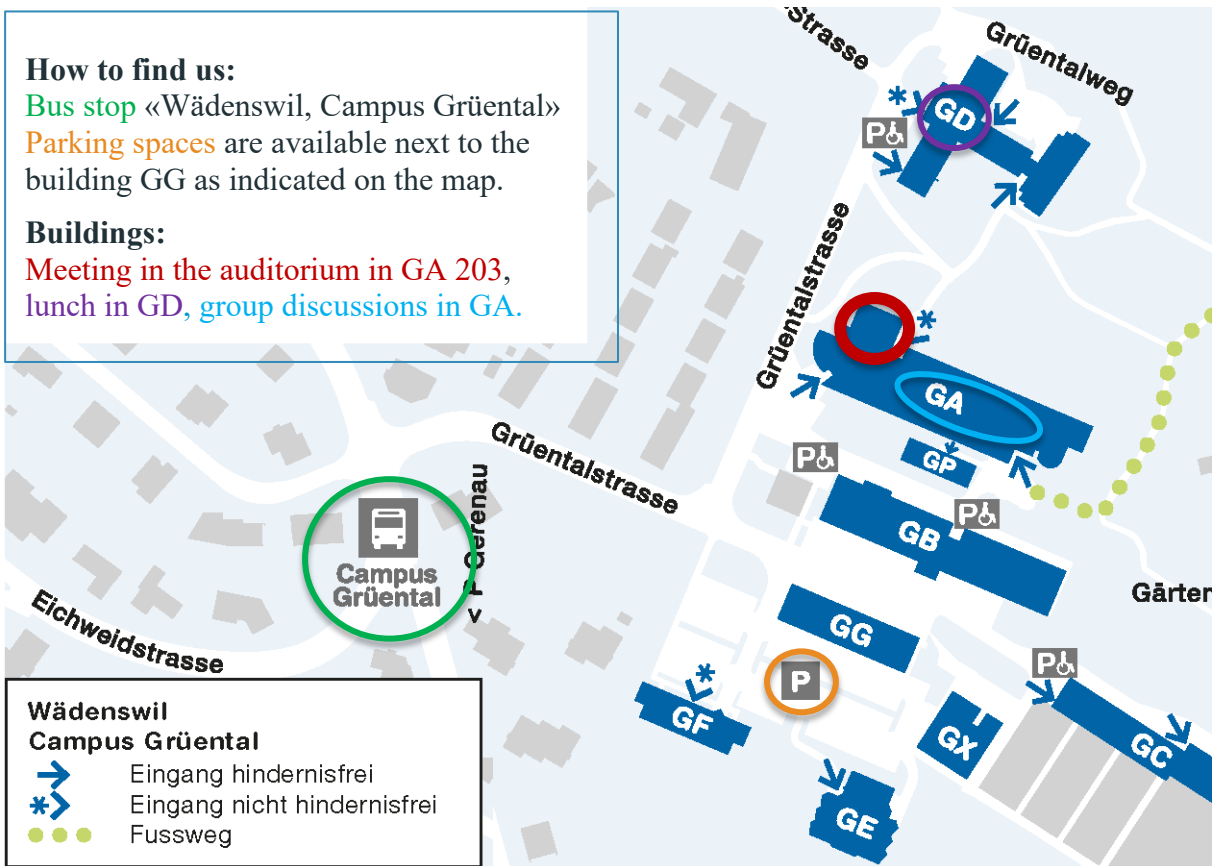
How to find us:

Bus stop «Wädenswil, Campus Grüental»

Parking spaces are available next to the building GG as indicated on the map.

Buildings:

Meeting in the auditorium in GA 203,
lunch in GD, group discussions in GA.



For further information, please contact Barbara Dold: lcaforum@ethz.ch