Program for PhD course: **Advanced LCA – consequential modelling, EIO LCA, iLUC, and Social LCA**

September 2nd – 6th 2013 at Aalborg University

Organised by DCEA, Aalborg University in collaboration with the International Life Cycle Academy (ILCA) DCEA: www.DCEA.dk/english ILCA: www.ILCA.es

Monday 2/9 – Consequential modeling in life cycle inventory I – location: Nybrogade 6, room 1.133			
08:30	-	09:00	Registration & Coffee
09:00	-	09:15	Welcome & overview of course (Associate Professor Søren Løkke, Aalborg University)
09:15	-	10:45	Lecture: Introduction to LCI as a model. The comparability algorithm: Defining the functional unit (Professor Bo Weidema, DCEA & ILCA)
10:45	-	11:00	Coffee break
11:00	-	13:00	Lecture and Exercise: The linking algorithm: Composing a consumption mix. Identifying the determining product. (Professor Bo Weidema, DCEA & ILCA)
13:00	-	14:15	Lunch
14:15	-	16:15	Lecture and Exercise: The co-product algorithm (Professor Bo Weidema, DCEA & ILCA)
16:15	-	17:15	Exercise: Bringing it all together: The consequential system model (Jannick, Bo, Massimo, Søren)
19:00	-	22:00	Social Dinner
Tuesday 3/9 – Consequential modeling in life cycle inventory II – location: Nybrogade 6, room 1.101			
09:00	-	11:00	Lecture: A short history of LCA. ISO and consequential modelling. (Professor Bo Weidema, DCEA & ILCA)
11:00	-	11:15	Coffee break
11:15	-	13:00	Plenary discussion: The role for attributional LCA (Professor Bo Weidema, DCEA & ILCA)
13:00	-	14:15	Lunch
14:15	-	16:15	Myths about consequential and attributional modelling (Professor Bo Weidema, DCEA & ILCA)
16:15	-	17:15	Plenary discussion: Communicating consequential models
Wednesday 4/9 – Input-output modeling (the basics, hybrid LCA, IO-based mass flow analysis and waste accounts) – location: Nybrogade 6, room 1.101			
09:00	-	10:30	Lecture: Introduction to IO-modelling – back to the basics. How can we also use the matrix 'universe' to understand and make process LCAs. IO-modelling as a frame for mass flow analysis (MFA). Multiregional models and trade-linking. How do we apply it in practise and what are the challenges? Strengths and weaknesses of the IO-approach (**Jannick H Schmidt**).
10:30	-	10:45	Coffee break
10:45	-	12:00	Exercise: Creating IO-inventories (Jannick, Bo, Massimo, Søren)
12:00	-	13:00	Lunch
13:00	-	14:15	Lecture: IO-LCA in hybrid units. Hybrid LCA: tiered and embedded analysis. How do we apply hybrid-LCA in practise and what are the challenges? (Jannick H Schmidt).
14:15	-	15:15	Exercise: Working with Hybrid datasets (Jannick, Bo, Massimo, Søren)
Thursday 5/9 – Modeling of indirect land use change (iLUC) – location: Nybrogade 6, room 1.101			
09:00	-	10:15	Lecture: Modelling of indirect land use changes in life cycle inventory.(Jannick H Schmidt)
10:15	-	10:30	Coffee break
10:30	-	12:00	Presentation of new model which is based on FAO land and forestry statistics, and with the application of attributional and consequential modelling assumptions. (Jannick H Schmidt)
12:00	-	13:15	Lunch
13:15	-	15:15	Exercise: Hands on iLUC (Jannick, Massimo, Søren, Bo)
15:15	-	16:15	…Plenary discussion
Friday 6/9 – Social LCA – location: Skibbrogade 5 room C1/12			
08:30	-	09:30	Lecture: The need for social impact assessment tools (Professor Bo Weidema, DCEA & ILCA)
09:30	-	11:15	Lecture: Introduction to the methodological sheets. Selection of impact categories and characterization models. (Professor Bo Weidema, DCEA & ILCA)
11:15	-	11:30	Coffee break
11:30	-	12:30	Lecture: Introduction to and comparison of practical methods. (Professor Bo Weidema, DCEA & ILCA)
12:30	-	13:30	Lunch
13:30	-	14:30	Exercise: Quantifying social impact pathways. (Jannick, Bo, Massimo, Søren)
14:30	-	15:00	Ending the course (Jannick, Bo, Massimo, Søren)