

**3rd European Workshop
Life Cycle Analysis of Algal based Biofuels & Biomaterials**

Brussels, 11/05/ 2015

9:00 – 17:30

AUDIT meeting room, BREYDEL building

08.30-09.00 Registration

09.00-09.30 Opening Session

Kyriakos Maniatis & Vitor Verdelho, opening and welcome

Guido Reinhardt, IFEU, Overview, status and prospects on LCA for algae products

09.30-10.50 LCA for Algal Biofuels and Biomaterials (part a)

Chair: Professor Mario Tredici

Franziska Kugler, KIT, ITAS, "*Comparative LCA of microalgae production in horizontal tubular PBRs for biogas application*"

Lorenzo Facco, D'Appolonia, "*LCA of micro algae production chains from cultivation to biofuel*"

Isabel Sousa Pinto, University of Porto, "*LCA of macroalgae production for biofuels*"

Maria Hingsamer, JOANNEUM RESEARCH, "*LCA of biopolymers in comparison to polypropylene from photoautotrophic microorganisms*"

10.50-11.10 Discussion, Q & A

11.10-11.30 Coffee Break & networking

11.30-13.10 LCA for Algal Biofuels and Biomaterials (part b)

Chair: Mario Tredici

Roland Essel, NOVA Institute, "*Environmental profiles of microalgae photobioreactors – what are the environmental hot spots?*"

Sophie Sfez, EnVOC, Ghent University, "*Forecasting the environmental sustainability of newly developed algae-based technologies: case of the up-scaling and integration of a MaB-floc raceway pond treating aquaculture wastewater in Belgium*"

Pierre Collet, IDEEL & IFP, "*How significant are regional water consumption and water impact assessment approaches for microalgae cultivation systems?*"

Sara Anton, Abengoa Bioenergy, BIOFAT project; Tom Bradley, NAREC, INTESUSAL project; Daniel Maga, Fraunhofer-Institute, ALL GAS project; "*The Algae Cluster: Three European algae biofuel projects with a common LCA approach*"

13.10-13.30 Discussion, Q & A

13:30-14.30 Lunch & Networking

14.30-15.40 Standards for algal products

Chair: Vitor Verdelho

Silvio Mangini, Archimede Ricerche, "*Quality standards for algae biomass and algal products: 2 need for definition and international harmonization of technical specifications*"

Lieve Laurens, NREL, "*Algal Biomass and Product Yields as Critical Elements of a Growing Industry*"

Indra te Ronde, NEN, "*How to cooperate in CEN standards' development in general and on LCA in specific?*"

K. Maniatis, DG ENER, "*The draft Mandate to CEN for standardisation related to algae and their products*"

15.40-16:00 Discussion, Q & A

16.00-16.20 Coffee Break & networking

16:20-17:40 Upscaling Algae systems

Chair: Vitor Verdelho

Gerfried Jungmeier, JOANNEUM RESEARCH, "*Overview of up-scaling issues in algae systems*"

Diana Fonseca, A4F, "*A4F experience in scaling-up closed photobioreactors and open cascade raceways for the large-scale production of microalgae*"

Victoria del Pino, NECTON, "*A growing experience: from playing with dolls to operating an industrial production facility*"

Jorge I. Bauzá, EEM / BuggyPower, "*Microalgae for nutrition and biofuels into a biorefinery concept*"

17:40-17.50 Discussion Q & A

17:50 Conclusions

Rapporteur: David Chiaramonti

18:00 Closure of the Workshop