

LCA, A TOOL FOR ACCOMPANYING INNOVATION PROCESSES ALONG THE TRL SCALE

Olivier Talon (1) Frédéric Erpicum (2)

(1) Materia Nova, Belgium

(2) Agence pour l'Entreprise et l'Innovation, Belgium

LCA may be used as a tool within R&D projects and innovation processes in order to evaluate the potential environmental benefits of the expected outcomes of the process. However, innovation projects are by nature undefined objects, whereas LCA is more designed to assess well-defined systems. The aim of this session is to explore how the LCA tools and methodologies can be used, with graduated efforts and different expectations, all along the innovation process and in reference with the Technology Readiness Levels assessment tool. The conjunction of TRL and LCA suggests differentiated approaches to detect and evaluate “innovation hot spot” for better economic and environmental impacts in regard with innovation maturity going from an idea, levels of prototyping and validation, up to the success on the market. Case studies representative of the whole TRL scale would be welcome.

Keywords: TRL scale, innovation, life cycle thinking, eco-design

Session format

Presentation from the lectern followed by moderated questions (and panel discussion)

Chair and co-chair biography

Olivier TALON, Materia Nova

Olivier is Scientific Leader of YLCA, the environmental impact unit of Materia Nova R&D centre. The main driving idea of the work of YLCA team is to promote ecodesign all along the innovation process through Life Cycle Thinking, from the lowest to the highest TRL.

Frédéric ERPICUM, Agence pour l'Entreprise & l'Innovation, Wallonie | Enterprise & Innovation Agency, Wallonia - Réseaux, Innovation & Croissance des Entreprises | Networks, Innovation & Business Growth

Frédéric is project leader for the co-development and implementation of tools and methodologies supporting communication and collaboration between public and private stakeholders of the innovation ecosystem at regional level.