



Stimulation of Substitution within a Circular Economy perspective, in the metals sector: *concepts and examples*

University of Antwerp: Wednesday 7 November 2018

Agenda update

- 13:00-13:10** *Welcome*
- 13:10-14:10** *Introductory presentation* by Eurometaux: Stimulating Substitution within the Circular Economy perspective in the metals sector a conceptual frame (by the workshop chair)
- 13:30-14:10** *Example of direct “drop-in” substitutes, may look easy but is it?*
- The substitution of Lead stabilisers in PVC, how it progressed (PVC stabilisers)
 - Drop-in substitutes: a rare potential on metals, but why? (Jens Tørsløv DHI-group)
- 14:40-15:20** *Substitution, innovation and challenges for the circular economy*
- *Possibilities and limits of Lead substitution in Copper alloys*; a case study on the technical feasibility of substitution (Klaus Ockenfeld,, Deutsches Kupferinstitut))
 - *Bismuth challenging the recycling of Copper* and the metal primary balance, is this a right solution from a REACH-Circular Economy perspective? (Dirk Goris, Metallo)
- 15:40 16:20** *Substitution: a longer planning may provide different views*
- *NiO catalysts for desulphurisation* not economically feasible today, but what about its use in the longer term with reduced diesel and fuel use? (Jens Tørsløv DHI-group)
 - *The longer-term agenda*: what drove substitution in metal cases so far and what learnings can we take from it for the future (Hugo Waeterschoot, Eurometaux)
- 16:20 16:40** *Substitution: SVHCs may be critical for economic development of breakthrough sustainable technologies* requiring a different way of thinking on risk management during the design phase:
- The case of Cobalt in batteries for electric cars (Wouter Ghyoot, Umicore)
- 16:40-17:15** *Remarks and conclusions*: from “the observation panel” (ECHA (Matti Vainio, Commission (tbc), Industry (Inge Maes, Metallo), Representatives of society (Mike Holland, EMRC)
- 17:15** *Closure*