



#InvestEUresearch

Horizon 2020 Work Programme for Research & Innovation 2018-2020

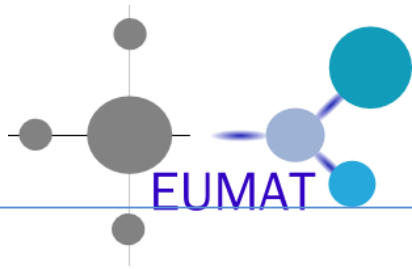
EMRS Event
Strasbourg 20th June 2018

Workshop: Europe in Motion-EUMAT Session

Time: 13:45-16:10

Proponent: Jan Meneve (VITO)

Proposal title: **Economical and Ecological Sustainability
of New Technologies**

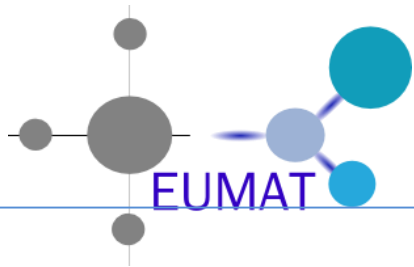


Circular Business Models



- For new technologies to have real impact, their business case must be profitable to survive in the market
- A circular economy requires drastically different business strategies:
 - Product-service-systems
 - Reverse logistics
 - Industrial symbiosis
 - ..
- VITO has the necessary experience in co-developing circular business models:
 - H2020 BAMB: Buildings As Material Banks, dealing with circular business models for the construction sector
 - H2020 CIRCUSOL: Circular business models for the Solar Power Industry
 - KIC EIT RawMaterials KAVA ORCERIS: coaching Eastern-European consultants in co-developing circular business models with entrepreneurs
 - Flemish region Expeditie Circulair: co-developing circular business models together with several industries, incl. SME



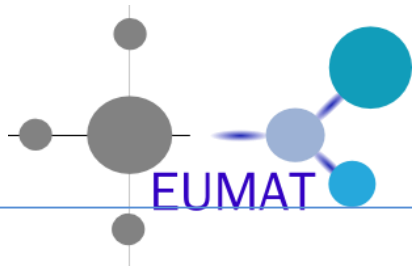


Ecological and Economical Sustainability



- For new technologies to have a positive impact, their economical and ecological consequences must be understood and optimized
- VITO has the necessary experience in assessing economical and ecological impact of innovative technologies using state-of-the-art and novel methodologies in LCA, LCC, ..
 - FP7 SUCCESS: upscaling of oxygen carriers for chemical looping combustion
 - FP7 NEWSPEC: development of sustainable carbon fibre based composites
 - H2020 METGROW+: metal recovery from low grade ores and waste
 - H2020 CHROMIC: recovery of Cr, Mo, V, Nb from stainless steel and ferrochrome slags



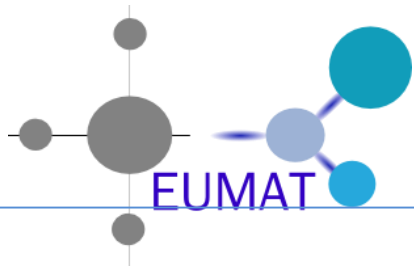


Support to projects responding to H2020 2019 calls



- VITO offer best suited for CE-SC5-07-2018-2019-2020 Raw materials innovation for the circular economy: sustainable processing, reuse, recycling and recovery schemes
 - IA pilot calls TRL 6-7
 - a) Sustainable processing and refining of primary and/or secondary raw materials
 - b) Recycling of raw materials from end-of-life products
 - c) Recycling of raw materials from buildings
 - d) Advanced sorting systems for high-performance recycling of complex end-of-life products

CE-SC5-07-2018-2019-2020	Raw materials innovation for the circular economy: sustainable processing, reuse, recycling and recovery schemes
CE-SC5-08-2018-2019-2020	Raw materials policy support actions for the circular economy
SC5-09-2018-2019	New solutions for the sustainable production of raw materials - Digital mine (b), Recovery of metals and minerals from sea sources (c)
SC5-10-2019-2020	Raw materials innovation actions: exploration and Earth observation in support of sustainable mining



- VITO – your partner in sustainability

Bart Mantels

Program Manager Sustainable Materials Management

VITO NV | Boeretang 200 | 2400 Mol

bart.mantels@vito.be

Phone tel:+32 14 33 59 72 | Mobile tel:+32 479 92 92 35

