Geophysical Research Abstracts Vol. 20, EGU2018-8638, 2018 EGU General Assembly 2018 © Author(s) 2018. CC Attribution 4.0 license.



Cost Action CA15115 Mining the European Anthroposphere (MINEA)

Soraya Heuss-Aßbichler (1) and Ulrich Kral (2)

- (1) Department of Earth and Environmental Sciences, Ludwig-Maximilians Universität, Munich, Germany (heuss@lmu.de,
- (2) Institut für Wassergüte und Ressourcenmanagement, Technische Universität Wien, Vienna, Austria ulrich.kral@tuwien.ac.at(ulr

Traditional mining gets more and more sophisticated, due to grade and quality declines of valuable elements in ores, increasing awareness of environmental and social considerations and stricter regulations. At the same time, a large fraction of material being extracted end up in tailings, cities where materials are used in buildings, infrastructure and consumer durables, and if not being recovered, in landfills. In the context of a dramatic increase in demand for resources and the challenge of ensuring the supply of raw materials, the question arises if mining the anthroposphere should become mandatory in addition to geological mining. Currently, there is no integrated framework to assess the availability of materials from anthropogenic and geogenic sources. To overcome this gap, the pan-European expert network MINEA aims to actuate the classification of anthropogenic resources.

MINEA covers three WGs that focus on the resource potential of selected material stocks and flows, namely construction and demolition waste (WG1), residues from extractive industries and landfills (WG2) and solid residues from municipal solid waste incineration (WG3). The outcomes are integrated by WG4, which also develops Specifications to apply the United Nations Framework Classification (UNFC) to anthropogenic resources and tests their applicability in a case study approach (WG4). The communication WG collects the knowledge from WG1-4 and cares about dissemination.

By means of coordinating national research activities in European countries, this COST Action is striving for a breakthrough in the integrated assessment of geogenic and anthropogenic resources that is necessary for managing the portfolio of recovery projects, national resource management and policy setting, and for capital allocation.