ResUM

Energy and resource savings due to urban mining (ResUM)

Due to the enormous anthropogenic stock which has been built up in urban regions, enhanced urban mining can substantially contribute to increasing the resource efficiency of modern cities. The goal of the proposed project is to analyze energy- and resource savings induced by the enhanced utilization of urban material stocks and to evaluate the potential contribution of urban mining to resource and energy efficient product cycles based on three case studies. The case studies relate to specific parts of the anthropogenic stock, which contain a substantial amount of valuable materials in (currently or future) obsolete applications (1. Use and recovery of materials in photovoltaic systems, 2. Management (construction, maintenance and recovery) of subsurface infrastructures, 3. Management of end-of-life buildings). Besides the case studies, the broad involvement of relevant stakeholders in a well-structured and goal-oriented way is a central aspect of the proposed project, because it enables knowledge transfer among stakeholders and serves as a basis to identify potentials, opportunities and challenges as well as barriers for urban mining within the project.

>> Project characteristics