

MINEA WG 1: “Resource potential of construction & demolition waste”

Workshop Theme: Prospecting urban minerals and evaluating the recoverability from buildings and infrastructure

Thursday (Oct 24):

Prospecting urban minerals: Framework, classification, and case studies

12:00 - 13:00	Registration Light Lunch and Welcome <ul style="list-style-type: none">• Welcome address (Jakob Kløve Keiding, GEUS)• Introduction to the workshop (Gang Liu, SDU)	
Session I: Modelling the building environment: Methods and case studies (15’ presentation + 5’ Q&A) (Moderator: Per Kalvig)		
13:00-13:20	Maud Lanau	Taking stock of built environment stock studies: Progress and prospects
13:20-13:40	Verena Göswein	Dynamic Assessment of Construction Materials in Urban Building Stocks: A Critical Review
13:40-14:00	Ruichang Mao	High-resolution mapping of the urban built environment stocks in Beijing
14:00-14:20	Christian Dierks	Component level building typology: Benefits and challenges in bottom-up data collection
14:20-14:40	Break (20 mins)	
Session II: Case studies on environmental impacts of urban mining (15’ presentation + 5’ Q&A) (Moderator: Ulrich Kral)		
14:40-15:00	Harpa Birgisdottir	Potential GHG emission savings by different reuse and recycling strategies
15:00-15:20	Andrea Di Maria	Who gets the benefits from construction waste recycling? The balance between environmental gains and economic cost
15:20-15:40	Chiara Piccardo	Retrofitting with different building materials: life-cycle energy and carbon implications
15:40-16:00	Diane Bastien	Physical assessment of the durability of buildings: perspectives from hygrothermal analysis

Session III: Framework for prospecting urban minerals and anthropogenic resources		
16:00-16:20	Ulrich Kral	A conversation on UNFC for assessing material recoverability in the construction sector
16:20-17:00	Discussion moderated by <ul style="list-style-type: none"> - Gang Liu (University of Southern Denmark, Denmark) and - Per Kalvig (Geological Survey of Denmark and Greenland, Denmark) 	
17:00	Conclusion	
18:30	Get together dinner (Cafe Petersborg, Bredgade 76, 1260 København. On your own cost)	

Friday (Oct 25):

Enablers and barriers of urban mining: technology, market, and policy

08:00-08:30	Registration Welcome address (Per Kalvig, GEUS; Ulrich Kral, TU Vienna)	
Session IV: Introductory talks on urban mining and circular economy of the built environment (20' presentation) (Moderator: Gang Liu)		
8:30-8:50	Lisbeth M. Ottosen	Mining from ashes – scarce resources and raw material for construction materials
8:50-9:10	Felix Heisel	Building an Anthropogenic Material Depot - Case studies from Germany and Switzerland
9:10-9:30	Daniela Perrotti	Mining Urban Ecosystem Services to offset material and energy demand: towards an integrated assessment framework
9:30-9:50	Stefan Anderberg	Potentials and challenges in relation to recycling of wire-based urban infrastructure
9:50-10:10	Morten Birkved	Issues related to environmental performance & sustainability assessment of circular economy within the built environment
10:10-10:30	Panel Discussion and Q&A (20 mins)	
10:30-10:50	Break (20 mins)	
10:50-11:40	Session IV: Break-out and group discussion (in three pre-defined groups, with assigned reporters and note-taking assistants) • Technology • Market • Policy	
11:40-12:20	Lunch break (40 mins) <u>Including taking a group photo</u>	

Technology perspective (15' presentation) (Moderator: Rui Vasco Silva)		
12:20-12:35	Rui Vasco Silva	Proposal of a Specification for Structural Recycled Aggregate Concrete
12:35-12:50	Katrine Hauge Smith	Demolition as a tool to optimize use of construction and demolition waste
12:50-13:05	Thomas Hougaard	Content and leachability of potentially problematic substances in crushed concrete and tiles
13:05-13:25	Report from group discussion, Q&A, and Plenary Discussion	
Market perspective (15' presentation) (Moderator: Morten Birkved)		
13:25-13:40	Elma Durmisevic	Reuse Potential tool for assessing reversibility of existing buildings for material/product reuse and Dutch case study on recovery and reuse
13:40-13:55	Tim Riis Tolman	From resource mapping to architecture. Case studies on projects in Copenhagen.
13:55-14:10	Martha Lewis	Hazardous Chemicals in Danish Building Products – Actual Usage & Implications for Circularity
14:10-14:30	Report from group discussion, Q&A, and Plenary Discussion	
14:30-14:50	Break (20 mins)	
Policy perspective (15' presentation) (Moderator: Daniela Perrotti)		
14:50-15:05	Serena Giorgi	Stakeholder suggestions and policies improvements towards a circular and sustainable regeneration of the building stock
15:05-15:20	Rolf André Bohne	Circular economy in the Norwegian Built environment: status, barriers and opportunities
15:20-15:40	Report from group discussion, Q&A, and Plenary Discussion	
15:40-16:00	Conclusion and farewell	

Workshop organizers

- **Chair: Gang Liu**, University of Southern Denmark
- **Local organiser: Per Kalvig**, Geological Survey of Denmark and Greenland
- **Organizing team:**
 - Jakob Kløve Keiding, Geological Survey of Denmark and Greenland
 - Morten Birkved, University of Southern Denmark
 - Ruichang Mao, University of Southern Denmark
 - Ulrich Kral, Vienna University of Technology
 - Harpa Birgisdottir, Danish Building Research Institute

Contact person for practical questions

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