

# **MINEA Workshop: Recovery Potential of Construction and Demolition Waste**

21-22 March 2019

**Belgian Building Research Institute (BBRI)**  
Boulevard Poincaré 79 Poincarélaan – 1000 Brussels  
(<http://goo.gl/maps/gY7BI>)

## **Context**

The construction industry plays a leading role in improving the quality of the built environment, but its activities also impact on the wider environment in a number of ways, including waste production. Recent figures published by EUROSTAT reveal that construction and demolition activities in EU Member States generate 850 million tonnes waste, which equate to 33% of all waste generated in the EU. As a result, the Waste Framework Directive (WFD) set a recycling target to attain 70% construction and demolition waste (C&DW) recycling by 2020.

The introduction of regulations, the emergence of new technologies and practices in both waste disposal and recovery, and the rising tide of public awareness are all conspiring to change the face of C&DW management. Europe's economy has generated unprecedented wealth over the last century. However, resource productivity in the built environment remains hugely underexploited as a source of wealth, competitiveness and renewal. The workshop addresses the untapped potential of C&DW recovery.

## **Workshop scope**

The workshop, which is part of the EU COST Action CA15115: "Mining the European Anthroposphere (MINEA)" and supported by the European Commission and the International Waste Working Group (IWWG), will provide a unique opportunity to present, discuss tools and case studies on the recovery potential of C&DW.

The workshop programme includes: keynote presentations, specialised sessions, oral presentations and interactive debates. Representative from the European Commission, the European Demolition Association, H2020 C&DW flagship projects, universities, research centres, industrial organisations, public organisations and local governments will be attending the workshop to share C&DW recovery best practice.

## **Workshop themes**

1. C&DW best practice recovery case studies.
2. Innovative C&DW recovery methods and tools.

## Workshop programme

Day 1: Thursday 21 <sup>st</sup> March 2019	
9:00	<b>REGISTRATION</b>
9:30	<b>OPENING AND INTRODUCTION</b>
09:30	<b>Welcome and workshop overview</b> Mohamed Osmani (Loughborough University, UK)
09:40	<b>COST Action CA15115: Mining the European Anthroposphere (MINEA)</b> Ulrich Kral (Vienna University of Technology, Austria)
10:00	<b>PLENARY PRESENTATIONS</b>
10:00	<b>The revised Waste Framework Directive: implications for C&amp;DW and future policy trends</b> Chiel Berends (The European Commission, Directorate-General for Environment)
10:20	<b>Recovery potential of demolition waste: The sky is the limit!</b> Johan D'Hooghe (The European Demolition Association)
10:50	<b>COFFEE BREAK</b>
11:05	<b>H2020 PROJECTS ON C&amp;DW RECOVERY</b>
10:35	<b>Advanced solutions fostering circular economy of end of life building materials (H2020 projects: HISER and VEEP)</b> Iñigo Vegas (Tecnalia, Spain)
11:05	<b>Buildings as material banks (H2020 project: BAMB)</b> Gilli Hobbs (Building Research Establishment, UK)
11:35	<b>C&amp;DW RECOVERY CASE STUDIES</b>
11:35	<b>Innovative approaches to C&amp;DW management in Belgium</b> Jeroen Vrijders and Ambroise Romnee (The Belgian Building Research Institute)
12:05	<b>Traceability and quality management of C&amp;DW</b> Annelies Vanden Eynde (Tracimat, Belgium)
12:35	<b>LUNCH</b>
13:35	<b>BREAKOUT SESSION</b>
	<b>Topic 1: CURRENT status of C&amp;DW recovery</b> Facilitator: Christina Elhert (Luxembourg Institute of Science and Technology, Luxembourg)
	<b>Topic 2: FUTURE prospects of C&amp;DW recovery</b> Facilitator: Paola Villoria Sáez (Universidad Politécnica de Madrid, Spain)
14:35	<b>Plenary: synthesis of topic 1 and 2 sessions</b> Facilitator: Mohamed Osmani (Loughborough University, UK)
15:05	<b>COFFEE BREAK</b>
15:20	<b>DEBATE: ROUTE MAP for the potential C&amp;DW recovery to inform a knowledge base for material reserves and resources in the EU</b> Facilitator: Mohamed Osmani (Loughborough University, UK)
	Panel members: Johan D'Hooghe (The European Demolition Association); Ambroise Romnée (The Belgian Building Research Institute); Liesbet Van Cauwenberghe (Tracimat, Belgium); Iñigo Vegas (Tecnalia); Gilli Hobbs (Building Research Establishment).
16:20	<b>CLOSE OF DAY 1 ACTIVITIES</b>

## Day 2: Friday 22<sup>nd</sup> March 2019

<b>9:00</b>	<b>WELCOME AND DAY 2 PROGRAMME</b>
	<b>Overview of Day 2 workshop activities</b> Mohamed Osmani (Loughborough University, UK)
<b>9:10</b>	<b>ORAL PRESENTATIONS: SESSION 1_C&amp;DW recovery case studies</b> <b>Chair: Paola Villoria Sáez (Universidad Politécnica de Madrid, Spain)</b>
<b>9:10</b>	<b>Assessment of construction and demolition waste recycling facilities' performance</b> Berta Galan (University of Cantabria, Spain)
<b>9:30</b>	<b>Usage of C&amp;DW for ground improvement: a case study from Turkey</b> Hamdi Tekin (Istanbul Arel University, Turkey)
<b>9:50</b>	<b>Cement mortars reinforced with mineral fibers from C&amp;DW</b> Carolina Piña Ramírez (Universidad Politécnica de Madrid, Spain)
<b>10:10</b>	<b>Gypsum plasterboard recycling</b> Karin Weimann (BAM Federal Institute for Materials Research and Testing, Germany)
<b>10:30</b>	<b>COFFEE BREAK</b>
<b>10:45</b>	<b>ORAL PRESENTATIONS: SESSION 2_C&amp;DW recovery methods and tools</b> <b>Chair: Christina Elhert (Luxembourg Institute of Science and Technology, Luxembourg)</b>
<b>10:45</b>	<b>Energy retrofit and material flows</b> Emilei Gobbo (Université catholique de Louvain, Belgium)
<b>11:05</b>	<b>Connecting the supply and demand of secondary building materials: estimating the environmental impact of reprocessing technologies for façades and roofs</b> Lucinda Kootstra (TNO, Netherlands)
<b>11:25</b>	<b>Environmental assessment of Cement Concrete Demolition Waste recycling at regional scale combining LCA, MFA and a local economic market model</b> Anne Ventura (IFSTTAR, France)
<b>11:45</b>	<b>Managing construction resources in Europe and emerging economies: raw materials and disposal of cement and concrete in the UK and Thailand</b> Oliver Heidrich (Newcastle University, UK)
<b>12:05</b>	<b>WORKSHOP CLOSING REMARKS AND COST Action CA15115 (MINEA) NEXT STAGES</b>
<b>12:15</b>	<b>LUNCH</b>