10:00 OPENING OF THE CONFERENCE
Pekka Huovila, Chair of the International Scientific Committee, Finland

10:05 PRINCIPAL PARTNER SAINT GOBAIN

10:10 SBE SERIES INTRODUCTION
Anders Persson, FIDIC

10:20 KEYNOTE PRESENTATIONS
Chaired by: Anders Persson, FIDIC

KEYNOTE 1
Harri Hakaste, Ministry of the Environment, Finland

KEYNOTE 2
Usha Iyer-Raniga, RMIT University, Australia

KEYNOTE 3
Jonathan Duwyn, UNEP, France

12:00 NETWORKING BREAK

12:15 SESSION 1
CIRCULAR NEIGHBOURHOODS
Chaired by:

12:15 Towards solutions and infrastructure for circular neighbourhoods in rural areas
Dr. Wendy Wuyts, Norwegian University of Science and Technology, Norway

12:30 The equitable housing workshop. Mapping and improving stakeholders’ decision-making process for circular equitable housing projects.
Margaux Laspaigne, Vrije Universiteit Brussel, Belgium

12:45 Combining BIM & GIS information to Simulate Circularity of Building Stocks in City: A Case Study of Taipei City
Yun-Tsui Chang, National Taiwan University, Taiwan

13:00 Sustainable development goals and indicators for circular built environment. Regional comparison based on a global survey.
Pekka Huovila, Green Building Council Finland

13:15 Dynamic Life Cycle Assessment - Parameters for scenario development in prospective environmental modelling of building stocks
Dr. Katarina Slavkovic, Université Catholique de Louvain, Belgium

13:30 Nested Phoenix: a bottom-up Python model for the life cycle environmental performance of urban built stocks
Prof. André Stephan, Université Catholique de Louvain, Belgium

13:45 NETWORKING BREAK

STREAM 2

SESSION 2
RESPONSIBLY SOURCED MATERIALS 1

Chaired by:

12:15 Improving the life cycle greenhouse gas emissions of transport infrastructure assets – a case study in Brussels, Belgium
Saroosh Ataee, Université Catholique de Louvain, Belgium

12:30 Assessing material and embodied flows related to building services in office buildings – the case of Brussels, Belgium
Sebastien Loreau, Université Catholique de Louvain, Belgium

12:45 A review of embodied life cycle assessment tools used to support the building design process
Katarina Slavkovic, KU Leuven, The University of Melbourne, Australia

13:00 Developing a ‘Design with Reuse’ guide: A case study analysis from a design procedural perspective for the integration of reclaimed wood in façade architecture.
Gabrielle Kawa, Vrije Universiteit Brussel, Belgium

13:15 Value network mapping applied to the flat glass sector: constraints and leverage points for circularity
Esther Geboes, Vrije Universiteit Brussel, Belgium

13:30 Emissions at a crossroad – a crossroad NZE design method
Søren Dietz, Bjørg Arkitektur - Green Lab., Niue

13:45 NETWORKING BREAK

DAY 1 23 November
14:30 SESSION 3
NEW SKILLS AND NEW BUSINESSES
Chaired by:

14:30 Distributed cyber-physical systems that enhance local-based frugal innovation toward a sustainable built environment. Prof. Tomonari Yashiro, The University of Tokyo, Japan

14:45 Frugal innovation with citizens to improve city life. Case Bielefeld. Carmen Antuña Rozado, VTT Technical Research Centre of Finland Ltd., Finland

15:00 Successful social entrepreneurship and its potential contribution to a more sustainable built environment. Carmen Aantua Rozado, VTT Technical Research Centre of Finland Ltd., Finland

15:15 Architectural Practice Supporting Sustainability Transitions in the Built Environment. Alise Pavin. NTNU Norwegian University of Science and Technology, Norway

15:30 Designing and implementing solar photovoltaic system in secondary residence. Dr. Kari Lilja, Satakunta University of Applied Sciences, Finland

16:00 SESSION 5
CONSTRUCTION VALUE CHAIN 1
Chaired by:

16:15 A comparative analysis of sustainable construction tools and their applicability to the housing sector in two countries; Burkina Faso and Sri Lanka. Alicia Regodon, UN-Habitat, Spain; Jesus Salcedo, UN-Habitat, Kenya; Dr. Giulia Celentano, ETH Zurich, Switzerland

16:30 Natural gas distributing steel pipeline pit survey methodology modification. Nikita Kondrahin, Riga Technical University, Latvia

16:45 A new method combining BIM and GIS data to optimize the sustainability of new construction projects in Switzerland. Helge J. Berrengger, ZHAW Zurich University of Applied Sciences, Switzerland

17:00 Towards understanding disruption in the market for professional services in construction. Abbas Dehghani Tafti, Lulea University of Technology, Sweden

17:15 Green Public Procurement and the circularity of the built environment. Dr. Margherita Finamore, Pesaro Municipality, Italy

17:30 Circular Economy Design towards Zero Waste: Laying the foundation for constructive stakeholder engagement on improving construction, renovation and demolition (CRD) waste management. Dr. Naomi Keena, McGill University, Canada

17:45 NETWORKING BREAK

18:00 KEYNOTE PRESENTATION
Chaired by: Jonathan Duwyn (tbc.)

18:00 KEYNOTE 4 Anna Dyson, Yale Center for Ecosystems in Architecture, United States
10:00 **KEYNOTE PRESENTATIONS**
Chaired by: Usha Iyer-Raniga (tbc.)
10:00 **KEYNOTE 5** Matti Kuittinen, Ministry of the Environment of Finland, Finland
10:45 **KEYNOTE 6** Tjeerd Haccou, Space&Matter, The Netherlands
11:30 **NETWORKING BREAK**
11:45 **SESSION 7**
**INDUSTRY**
Chaired by:
11:45 Partnering with Nature - In search of regenerative approaches in urban environments
Kari Erinda, Ramboll Finland, Finland
12:00 Maptionnaire - Insights that enable cities to change
Dr. Maant Kähälä, Maptionnaire, Finland
12:15 Evolution of recycling in infra structure and green area construction
Mikko Suominen, City of Helsinki, Finland, Elina Regård, WSP, Finland
12:30 Timber-Hybrid Makes the Breakthrough: Natural Principles Take Hold in Large Scale Projects
Elif Istanbulluoglu, CREE Buildings, Austria
12:45 Conceptual and circular procurement is key to overcome actual crises!
Thijs Kustjens, Attive, The Netherlands
13:00 From universal science to global INDUSTRY
Prof. Hendrik Hendrickx, Free University Brussels, Belgium
13:15 **NETWORKING BREAK**
14:00 **SESSION 9**
**CONSTRUCTION VALUE CHAIN 2**
Chaired by:
14:00 Exploring Economic Impacts of Sustainable Construction Projects on Stakeholders: The Role of Integrated Project Delivery
Prof. Steve Rowlinson, The University of Hong Kong, Hong Kong
14:15 Circular economy in the built environment sector – business risks and opportunities
Veronika Pálinkopf, FPMG, Oy Ab, Finland
14:50 WVDM Living Lab: Sustainable renovation strategies for the VUB student residences of Willy Van Der Meeren
Prof. Waldo Galle, VUB Architectural Engineering, Belgium
15:00 Incorporation of sustainable development goals into built environments-related business management concepts
Pekka Huovinen, Business Management FH, Finland
15:15 Energy Monitoring in existing Building Structures
Prof. Alexander Redenb & Lisa Freijer, Vienna University of Technology, Austria
15:30 **NETWORKING BREAK**
15:45 SESSION 11
RESPONSIBLY SOURCED MATERIALS 4
Chaired by:

15:45 First steps in the development of standardised processes for life cycle assessments of geotechnical works: Dr. Lorentz von der Tann, Norwegian Geotechnical Institute, Norway

16:00 Barriers for data management as an enabler of circular economy: an exploratory study of the Norwegian AEC-industry
Messo Bethin, NTNU Norwegian University of Science and Technology, Norway

16:15 Demolish, recycle, build new or renovate? Energy use throughout the life cycle
Dr. Ulla Janzon, Lund University, Sweden

16:30 Circular material passports for buildings – Providing a robust methodology for promoting circular buildings
Dr. Verena Göswein, 3smers – Engenharia, Inovação e Ambiente, S.A., Portugal

16:45 Responsible sourcing of concrete and CO2 reduction certification
Cynthia Imesch, The Concrete Sustainability Council, Switzerland

17:00 Modeling Artificial Neural Networks to Predict Asbestos-containing Materials in Residential Buildings
Pei-Yu Wu, RISE Research Institutes of Sweden, Lund University, Sweden

17:15 NETWORKING BREAK

17:30 SESSION 13
CONSTRUCTION VALUE CHAIN 3 & INCLUSIVE AND RESILIENT CITIES 4
Chaired by:

17:30 Which drivers and obstacles affect in applying circular economy principles in the construction and real estate sector in Finland?
Eila Laitinen, Green Building Council Finland, Finland

17:45 Business models for rolling out Positive Energy Buildings
Ma-Aia Jaoua* (Finland) - VTT, Finland

18:00 Process-specific digital recording of construction-site LCA-inventory to identify decarbonisation pathways
Anna Wagner, Technical University Munich, Germany

18:15 Area Neutrality: safeguarding urban biodiversity with a new land management framework in Trondheim, Norway
Kathy McCammon, NTNU Norwegian University of Science and Technology, Norway

18:30 Renaissance of villages for the revitalization of marginal areas
Dr. Sara Torabi Moghadam & Maurizia Pignatelli, Politecnico di Torino, Italy

18:45 Towards integration of smart and resilient city: literature review
Mustafa Shahzabani, Kaunas Technology University, Lithuania

19:00 NETWORKING BREAK

19:15 SESSION 15
Chaired by:

19:15 Public and private developers toward social-ecological sustainable housing in Sweden: A resilience perspective
Johanna Mattsson, Mälardalen University/Olarna University, Sweden, Dr. Care Nordseth, Dalarna University, Sweden, Dr. Lars Lindbergh, Umeå University, Sweden

19:30 Histent
Pavel Parn, Eesti ÜL, Estonia

19:45 Responsible sourcing for concrete as a construction material in Latin America
Manuel Lascarro, Colombian Chamber of Cement and Concrete PROCEMCO, Colombia

20:15 CLOSING THE CONFERENCE FOR SCIENTIFIC AND INDUSTRY SESSIONS INTRODUCTION OF THE WORKSHOPS
Pekka Huovila, Chair of the Scientific Committee
<table>
<thead>
<tr>
<th>Time</th>
<th>Workshop</th>
<th>Title</th>
<th>Organizers</th>
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<tr>
<td>09:00</td>
<td>WORKSHOP 1</td>
<td>Circular solutions for sustainable material economy in urbanizing Africa</td>
<td>Harri Hakaste, Ministry of the Environment Finland, Finland, Ninni Westerholm, HELST, Finland, Jeremy Gibberd, GAUGE, South Africa, Jonathan Duwyn, UNEP, France</td>
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<tr>
<td>10:30</td>
<td>WORKSHOP 2</td>
<td>Enhancing the sustainability of traditional walking street markets through creating the vitality</td>
<td>Phoowadech Wongsom, Chiang Mai University, Thailand</td>
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<td>12:00</td>
<td>WORKSHOP 3</td>
<td>Urban Nature Labs: Sharing the Knowledge on Co-creation of NBS</td>
<td>Annika Kettunen, Ramboll Finland, Finland, Maarit Särkilahti, City of Tampere, Finland, Salla Leppänen, City of Tampere, Finland</td>
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<td>13:30</td>
<td>WORKSHOP 4</td>
<td>Municipalities Leadership in Neighbourhood Renovation Planning</td>
<td>Prof. Targo Kalamees, Tallinn University of Technology, Estonia</td>
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<td>15:00</td>
<td>WORKSHOP 5</td>
<td>Tools for Circular and Sustainable Housing in the Global South</td>
<td>Petkki Huovila, FIGBC, Finland, Dr. Usha Iyer-Raniga, RMIT University, Australia, Jonathan Duwyn, United Nations Environment Programme, France</td>
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<td>16:30</td>
<td>WORKSHOP 6</td>
<td>Safety and Seniors</td>
<td>Dr. Anna Grabowska, Academy of Third Age, Poland</td>
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<td>15:00</td>
<td>WORKSHOP 7</td>
<td>Compact modelling for Smart Cities</td>
<td>Carmen Antuña Rozado, Henri Wiman &amp; Dr. Markos Xenakis, VTT Technical Research Centre of Finland Ltd., Finland</td>
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<td>15:00</td>
<td>WORKSHOP 8</td>
<td>Design of Global and General Applicable Systems</td>
<td>Hedwig Vanwalleghem, Belgium</td>
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<td>15:00</td>
<td>WORKSHOP 9</td>
<td>To Zero and Beyond! Toward the Next Generation of EU Building Performance Assessments and Energy Certificates</td>
<td>Ahmed Alhoss, Munich University of Applied Sciences, Germany, Dr. Marina Malinovec Puček, Energy Institute Hrvješki Potok, Croatia, Peter Gyuris, Geonardo Environmental Technologies, Hungary, Dr. Lila Cazalet, Scientific and Technical Building Centre (CSTB), France, Dr. Sylviane Nibit, Scientific and Technical Building Centre (CSTB), France</td>
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<td>15:00</td>
<td>WORKSHOP 10</td>
<td>Biodiversity Museum of Nature and Culture Exposition Concept (BMNCEC)</td>
<td>Yvan Tresor Karugira, Center of the Fourth Industrial Revolution, Burundi</td>
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<td>15:00</td>
<td>WORKSHOP 11</td>
<td>AI applications in buildings. Explaining and building confidence on their results</td>
<td>Prof. Nikos Sakkas, Apintech Ltd., Cyprus, Dr. Stavros Hadjisavvas, CyRIC Ltd., Cyprus</td>
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