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:

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

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

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

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

12:30 Dynamic Life Cycle Assessment - Parameters for scenario development in prospective environmental modelling of building stocks
Dr. Katariina Savonrot, Université Catholique de Louvain, Belgium

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

12:45 NETWORKING BREAK

13:00 SESSION 2
RESPONSIBLY SOURCED MATERIALS 1
Chaired by:

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

Assessing material and embodied flows related to building services in office buildings — the case of Brussels, Belgium
Sebastien Lonjs, Université Catholique de Louvain, Belgium

A review of embodied life cycle assessment tools used to support the building design process
Fabian Prideaux, KU Leuven, The University of Melbourne, Australia

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

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

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13:45 NETWORKING BREAK
14:30  SESSION 3  NEW SKILLS AND NEW BUSINESSES  
Chaired by: 

14:30  SESSION 4  RESPONSIBLY SOURCED MATERIALS 2  
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 

14:30  BIMobility Simulator as a BIM-based solution for e-mobility integration in design process.  
Anna Dr. Boris. Fraschhofer, Italy, Italy 

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

14:45  Life Cycle Assessment through BIM-based advanced Calculation Virtual Environment Workflows.  
Tassiane Feijo Brazzalle, Politecnico di Milano, Italy 

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

15:00  Materials role in pavement design and its impacts in LCA of road construction and use phase.  
Dr. Raja Negishi, Dr. Renaud De Montaignac & Nicolas Miravalls, ORIS, France 

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

15:15  Building passports and material inventories – concepts, trends, job sharing.  
Matthias Buchholz, Germany 

15:30  Successful social entrepreneurship and its potential contribution to a more sustainable built environment.  
Carmen Antuña Rozado, VTT Technical Research Centre of Finland Ltd., Finland 

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Matthias Buchholz, Germany 

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

16:00  SESSION 6  RESPONSIBLY SOURCED MATERIALS 3  
Chaired by:  

16:00  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 

16:00  Circularity and LCA - material pathways: technical cascade potential and cascade database of an in-use building product.  
Simon Schaubroeck, KU Leuven, Belgium 

16:15  Natural gas distributing steel pipeline pit survey methodology modification  
Nika Rondachian, Riga Technical University, Latvia 

16:15  Circularity and LCA - material pathways: technical cascade potential and cascade environmental impact of an in-use building product.  
Simon Schaubroeck, KU Leuven, Belgium 

16:30  A new method combining BIM and GIS data to optimize the sustainability of new construction projects in Switzerland.  
Henri J. Berrogi, ZHAW Zurich University of Applied Sciences, Switzerland 

16:30  Embodied Carbon: a call to the built environment.  
Daniel Rondinelli, McGill University, Canada 

16:45  Towards understanding disruption in the market for professional services in construction  
Albou Zelghani Taft, Lulea University of Technology, Sweden 

16:45  Potential of Earth-Based Bamboo Bio-Concrete in the Search for Circular and Net Zero Carbon Solutions to Construction Industry  
Arthur Araujo & Prof. Lucas Caldas, Universidade Federal do Rio de Janeiro (UFRJ), Brazil 

17:00  Green Public Procurement and the circularity of the built environment  
Dr. Margherita Finamore, Pesaro Municipality, Italy 

17:00  Environmental evaluation of a prefab construction method employed to build the Evandro Chagas National Institute of Infectious Diseases  
Ana Carolina Rocha Tostes de Oliveira, Universidade Federal do Rio de Janeiro, Brazil 

17:15  Circular Economy Design towards Zero Waste: Laying the foundation for constructive stakeholder engagement on improving construction, renovation and demolition (CRD) waste management.  
Dr. Naomi Reena, McGill University, Canada 

17:15  Analyzing Embodied Energy and Embodied Water of Construction Materials for an Environmentally Sustainable Built Environment  
Dr. Manish Dixit, Texas A&M University, United States 

17:45  NETWORKING BREAK  

18:00  KEYNOTE PRESENTATION 
Chaired by:  

18:00  KEYNOTE 4  Anna Dyson, Yale Center for Ecosystems in Architecture, United States 

ANNA DYSON
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, Spacedef, 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
  Kai Lindsa, Ramboll Finland, Finland

12:00 Maptionnaire - Insights that enable cities to change
  Dr. Maart Kuhlja, Maptionnaire, Finland

12:15 Evolution of recycling in infrastructure and green area construction
  Mikko Suominen, City of Helsinki, Finland, Elina Regardh, WSP, Finland

12:30 Timber-Hybrid Makes the Breakthrough: Natural Principles Take Hold in Large Scale Projects
  Elfirbolubou, CEE Buildings, Austria

12:45 Conceptual and circular procurement is key to overcome actual crises!
  Thijs Kustten, Active, The Netherlands

13:00 From universal science to global INDUSTRY
  Prof. Hendrik Harnichi, 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
  Veronica Fuiminen, FPMG Oy Ab, Finland

14:30 WVDM Living Lab: Sustainable renovation strategies for the VUB student residences of Willy Van Der Meerens
  Prof. Waldo Galle, VUB Architectural Engineering, Belgium

14:45 Long-term renovation strategy 2020-2050: assessment from a low carbon perspective view - case Finland
  Terttu Vainio, VTT, Finland

15:00 Incorporation of sustainable development goals into built environments-related business management concepts
  Pekka Huovinen, Business Management PH, Finland

15:15 Energy Monitoring in existing Building Structures
  Prof. Alexander Redozi & Lisa Fireane, 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. Loreto von der Talm, Norwegian Geotechnical Institute, Norway

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

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

**16:30** Circular material passports for buildings – Providing a robust methodology for promoting circular buildings
Dr. Verena Göswein, 3Smers – Ingenharia, Inovação e Ambiente, Lda, 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**

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

**17:45** Business models for rolling out Positive Energy Buildings
Maia-Jaouet* (Finland) - VIT, 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**
Mya McCann, NTNU Norwegian University of Science and Technology, Norway

18:30 **RENAISSANCE OF VILLAGES FOR THE REVITALIZATION OF MARGINAL AREAS**
Dr. Sara Tobar Mezzadri & Maurizia Pignatelli, Politecnico di Torino, Italy

18:45 **TOWARDS INTEGRATION OF SMART AND RESILIENT CITY: LITERATURE REVIEW**
Mustafa Shahrabani, Kaunas Technology University, Lithuania

19:00 **NETWORKING BREAK**

19:15 **SESSION 15**

**19:15** Public and private developers toward social-ecological sustainable housing in Sweden: A resilience perspective
Johanna Mattsson, Malmö University/Osaka University, Sweden

**19:45** Responsible sourcing for concrete as a construction material in Latin America
Manuel Lascarro, Universidad de Medellin, Colombia

**20:15** **CLOSING THE CONFERENCE FOR SCIENTIFIC AND INDUSTRY SESSIONS INTRODUCTION OF THE WORKSHOPS**
Pekka Hannula, Chair of the Scientific Committee
WORKSHOP 1
Circular solutions for sustainable material economy in urbanizing Africa
Harri Hakaste, Ministry of the Environment Finland, Finland
Ninni Westerholm, HELST, Finland
Jeremy Gibbrest, GAUGE, South Africa
Jonathan Duwyn, UNEP, France

WORKSHOP 2
Enhancing the sustainability of traditional walking street markets through creating the vitality
Phoowadech Wongsom, Chiang Mai University, Thailand

WORKSHOP 3
Urban Nature Labs: Sharing the Knowledge on Co-creation of NBS
Annika Kettunen, Ramboll Finland, Finland
Mauri Särkilahti, City of Tampere, Finland
Salla Leppänen, City of Tampere, Finland

WORKSHOP 4
Municipalities Leadership in Neighbourhood Renovation Planning
Prof. Targo Kalamees, Tallinn University of Technology, Estonia

WORKSHOP 5
Tools for Circular and Sustainable Housing in the Global South
Pekka Huovila, FIGBC, Finland
Dr. Usha Iyer-Raniga, RMIT University, Australia
Jonathan Duwyn, United Nations Environment Programme, France

WORKSHOP 6
Safety and Seniors
Dr. Anna Grabowska, Academy of Third Age, Poland

WORKSHOP 7
Compact modelling for Smart Cities
Carmen Antuña Rozado, Henri Wiman & Dr. Markos Xenakis, VTT Technical Research Centre of Finland Ltd., Finland

WORKSHOP 8
Design of Global and General Applicable Systems
Hedwig Vanwalraven, Belgium

WORKSHOP 9
To Zero and Beyond! Toward the Next Generation of EU Building Performance Assessments and Energy Certificates
Ahmed Ikhoja, Munich University of Applied Sciences, Germany
Dr. Musa Karaman, Fudak, Energy Institute Hrvio Podar, Croatia
Peter Gmur, Geronardo Environmental Technologies, Hungary
Dr. Uli Gulla Doz, Scientific and Technical Building Centre (CSTB), France
Dr. Sylviane Nibet, Scientific and Technical Building Centre (CSTB), France

WORKSHOP 10
by Saint Gobain

WORKSHOP 11
AI applications in buildings. Explaining and building confidence on their results
Prof. Nikos Sakas, Apintech Ltd., Cyprus
Dr. Stavros Hadjiantoni, CyMIC Ltd., Cyprus

WORKSHOP 12
Biodiversity Museum of Nature and Culture Exposition Concept (BMNCEC)
Yvan Tresor Karugira, Center of the Fourth Industrial Revolution, Burundi