



WORLD Sustainable Built Environment Conference **2017 Hong Kong**

Transforming Our Built Environment through
Innovation and Integration:
Putting Ideas into Action

Date: **5-7 June 2017 (Mon-Wed)**

Venue: **Hong Kong Convention and Exhibition Centre**

www.wsbe17hongkong.hk



Organisers



International Co-owners

Version 1

WSBE17 Hong Kong: THE MOST INFLUENTIAL GREEN BUILDING MEGA EVENT

The Construction Industry Council and the Hong Kong Green Building Council jointly invite you to participate at the World Sustainable Built Environment Conference 2017 Hong Kong (WSBE17 Hong Kong) on 5-7 June 2017.

Pre-eminent Conference Series

The Sustainable Built Environment (SBE) series began in 2000 and is now the pre-eminent international conference series on sustainable building and construction. The series operates on a three-year cycle with planning in year one, regional conferences in year two and a global conference in year three. Albeit strong competition, Hong Kong won the hosting right of the 2015-2017 cycle global conference, which will conclude the conference cycle by embracing all the top findings from the 20 regional conferences held in 2016.

Past Editions of World SBE Conferences

2000 Maastricht 2002 Oslo 2005 Tokyo 2008 Melbourne 2011 Helsinki 2014 Barcelona



Convergence of top ideas
and discussions in
2016 Regional SBE Conference Series



About WSBE17 Hong Kong

With the theme of **Transforming Our Built Environment through Innovation and Integration: Putting Ideas into Action**, WSBE17 Hong Kong will bring together **1,800** green building advocates, policy-makers, academics, and industry practitioners from **50 countries**. The three-day event includes conference sessions with top-notch speakers, and around 100 parallel sessions, with an exhibition alongside.

About the Organisers

The **Construction Industry Council (CIC)** was formed in 2007 under the Construction Industry Council Ordinance (Cap. 587). The CIC consists of a chairman and 24 members representing various sectors of the industry including employers, professionals, academics, contractors, workers, independent persons and Government officials.



The main functions of the CIC are to forge consensus on long-term strategic issues, convey the industry's needs and aspirations to Government, provide training and registration for the construction workforce and serve as a communication channel for Government to solicit advice on all construction-related matters.



The **Hong Kong Green Building Council (HKGBC)** is a non-profit, member led organisation established in 2009 with the vision to help save the planet and improve the wellbeing of the people of Hong Kong by transforming the city into a greener built environment. The Founding Members of the HKGBC include the Construction Industry Council (CIC), the Business Environment Council (BEC), the BEAM Society Limited (BSL) and the Professional Green Building Council (PGBC). Its mission is to lead

market transformation by advocating green policies to the Government; introducing green building practices to all stakeholders; setting design, construction and management standards for the building profession; and promoting green living to the people of Hong Kong.

BENEFITS OF ATTENDING

Meet over **1,800** top-notch global green building experts from **50 countries**

Discover cutting edge findings from over **100 sessions**

Gain market insights from over **400 distinguished speakers**

Learn the latest products and solutions from **around the world**

Explore the **Fast Growing Asian Markets**, especially **Mainland China**

Appreciate the city development and natural beauty of high-density **Hong Kong**

PLENARY SESSIONS

Guests of Honour



Hon. LEUNG Chun-ying
Chief Executive,
Hong Kong Special Administrative Region



Dr QIU Baoxing
Representative of The Ministry of Housing and
Urban-Rural Development & Counsellor of Counsellor's Office
of the State Council of the PRC

Keynote Speakers



Mr Matthew CHEUNG Kin-chung
Chief Secretary for Administration,
Government of the HKSAR



Mr SU Yunshan
Director-General, Department of Science & Technology
and Energy Saving on Buildings, Ministry of Housing
and Urban-Rural Development, PRC



Ms Christiana FIGUERES
Vice-chair, Global Covenant of Mayors for
The Climate and Energy



Prof. Peter GUTHRIE
Director,
Centre for Sustainable Development,
University of Cambridge



Prof. Thomas AUER
Managing Director, Transsolar;
Professor, Building Technology and
Climate Responsive Design, TUM



Dr Raymond COLE
Professor, School of Architecture
and Landscape Architecture,
University of British Columbia

Session Chair



Ir Conrad WONG
Chairman, WSBE17 Hong Kong Organising Committee



Ir Prof. WONG Sze-chun
Chairman, WSBE17 Hong Kong Scientific Committee

Climate Change and Sustainable Development

Session Chair



Mr Curt GARRIGAN
Cities and Buildings Programme Manager,
UN Environment – Economy Division

Speakers



Mr WONG Kam-sing
Secretary for the Environment,
Government of the HKSAR



Ms Christiana FIGUERES
Vice-chair, Global Covenant of
Mayors for Climate and Energy



Ms Jennifer LAYKE
Director, Global Energy Program,
World Resources Institute



Mr Gregor HERDA
Regional Housing Advisor,
United Nations Human Settlement
Programme (UN-Habitat)



Mr John DULAC
Energy Technology Policy
Building Sector Lead,
International Energy Agency



Mr Nils LARSSON
Executive Director,
International Initiative for
a Sustainable Built Environment



Mr Pekka HUOVILA
Coordinator, 10YFP
Sustainable Buildings and
Construction (SBC) Programme



Ms Christine LOH
Under Secretary for the Environment,
Government of the HKSAR

Roundtable 1 -

Emerging Perspectives for Transforming the Build Environment

Session Chair



Prof. Thomas LÜTZKENDORF
Director, Centre for Real Estate; Head of Chair,
Sustainable Management of Housing and
Real Estate, Karlsruhe Institute of Technology

Speakers



Ar. TAI Lee-siang
Chair, WorldGBC



Prof. WANG Youwei



Prof. Serge SALAT
President, Urban Morphology and
Complex Systems Institute



Prof. Arno SCHLUETER
Professor, Architecture and Building Systems
ETH Zurich; Principal Investigator, Future Cities
Laboratory, Singapore ETH Center



Ar. Bryant LU
Vice Chairman,
Ronald Lu and Partners

Roundtable 2 -

Leadership Driving for the Sustainable Built Environment

Session Chair



Ms Christine LOH
Under Secretary for the Environment,
Government of the HKSAR

Speakers



Dr. George BAIRD
Emeritus Professor of
Building Science, School of Architecture,
Victoria University of Wellington



Mr Douglas WOO
Chairman & Managing Director,
Wheelock and Company Ltd.



Prof. Greg FOLIENTE
Enterprise Professor, University of Melbourne;
Regional Director in Asia-Pacific, iSBE;
Founding Director, nBlue Pty Ltd.



Mr TAN Tian-chong
Deputy Managing Director, Built Environment
Research and Innovation Institute,
Building and Construction Authority



Mr Lincoln LEONG
Chief Executive Officer,
MTR Corporation

Day 1 • 5 June 2017 (Mon)

08:00 - 09:00	Registration	
09:00 - 10:00	Opening Ceremony Guests of Honour: <ol style="list-style-type: none"> Hon. LEUNG Chun-ying, Chief Executive, Hong Kong Special Administrative Region Dr QIU Baoxing, Representative of The Ministry of Housing and Urban-Rural Development & Counsellor of Counsellor's Office of the State Council of the PRC Officiating Guests: <ol style="list-style-type: none"> Mr Matthew CHEUNG Kin-chung, Chief Secretary for Administration, Government of the HKSAR Mr Eric MA, Secretary for Development, Government of the HKSAR Mr WONG Kam-sing, Secretary for the Environment, Government of the HKSAR Ir Conrad WONG, Chairman, WSBE17 Hong Kong Organising Committee Mr Nils LARSSON, Representative from the International Co-owners of the Sustainable Built Environment Conference Series Sr CHAN Ka-kui, Chairman, Construction Industry Council Sr Bay WONG, Chairman, Hong Kong Green Building Council 	
10:00 - 10:30	Keynote 1: Mr Matthew CHEUNG Kin-chung , Chief Secretary for Administration, Government of the HKSAR	
10:30 - 11:00	Keynote 2: Mr SU Yunshan , Director-General, Department of Science & Technology and Energy Saving on Buildings, Ministry of Housing and Urban-Rural Development, People's Republic of China	
11:00 - 11:20	<i>Coffee Break</i>	
11:20 - 11:50	Keynote 3: Ms Christiana FIGUERES , Vice-chair, Global Covenant of Mayors for Climate & Energy	
11:50 - 12:00	Platinum Sponsor's Sharing - Mr Sean CHIAO , President, Asia Pacific, AECOM	
12:00 - 13:30	<i>Networking Luncheon</i>	
13:30 - 15:00	Parallel Session 1	
	1.1 Mainland China Session - The Comprehensive Scheme on Green Retrofitting and Performance Enhancement of the Existing Buildings in China	1.2 Regional Session - Czech Republic, Italy, Sweden and Switzerland
	1.3 Advanced Building Elements	1.4 Practices Review of High-Performance Green Buildings
	1.5 SBE Assessments - Green Neighbourhoods (1)	1.6 Innovations Driving for Greener Policies and Standards - Microclimate
	1.7 Vision-led Sustainable Neighborhoods: Myths and Musts	1.8 Innovations for Occupant Wellbeing (1)
	1.9 Practices & Methodologies for Green Building Management (1)	1.10 Green Infrastructure in SBE - Hong Kong Cases
	1.11 Processes, Design, Tools and Methodologies in SBE (1)	1.12 Regenerating Urban Space in Neighbourhoods
	1.13 Healthy and Sustainable Building for Resilient Future	1.14 To be announced
15:00 - 15:20	<i>Coffee Break</i>	
15:20 - 16:20	Roundtable 1: Emerging Perspectives for Transforming the Build Environment Session Chair: Prof. Thomas LÜTZKENDORF , Director, Centre for Real Estate; Head of Chair, Sustainable Management of Housing and Real Estate, Karlsruhe Institute of Technology Speakers: <ol style="list-style-type: none"> Ar. TAI Lee-siang, Chair, WorldGBC Prof. WANG Youwei, Chairman, China Green Building Council Prof. Serge SALAT, President, Urban Morphology and Complex Systems Institute Prof. Arno SCHLUETER, Professor, Architecture and Building Systems ETH Zurich; Principal Investigator, Future Cities Laboratory, Singapore ETH Centre Ar. Bryant LU, Vice Chairman, Ronald Lu and Partners 	
16:30 - 18:00	Parallel Session 2	
	2.1 Mainland China Session - Design and Construction Challenges of Eco-Skyscrapers in China	2.2 Regional Session: Turkey, Greece, Malta and Egypt
	2.3 Advanced Building Systems	2.4 Policies for High-Performance Green Buildings (1)
	2.5 SBE Assessments - Green Neighbourhoods (2)	2.6 Innovations Driving for Greener Policies and Standards - Carbon Assessment
	2.7 Successful Business Case Sharing on Deep Energy Saving and Other Innovative Green Measures for Commercial Buildings in Hong Kong, Mainland China and Overseas	2.8 Innovations for Occupant Wellbeing (2)
	2.9 Practices & Methodologies for Green Building Management (2)	2.10 Transforming SBE Practices - Energy Management (1)
	2.11 Processes, Design, Tools and Methodologies in SBE (2)	2.12 Processes of Urban Regeneration
	2.13 Powering Up Smart City	2.14 Sustainability Assessment of Buildings as Part of Green-Public Procurement Based on the German BNB-System

Day 2 • 6 June 2017 (Tue)

08:00 - 09:00	Registration	
09:00 - 11:50	Plenary Session on Climate Change and Sustainable Development Session Chair: Mr Curt GARRIGAN , Cities and Buildings Programme Manager, UN Environment – Economy Division Speakers: <ol style="list-style-type: none"> Mr WONG Kam-sing, Secretary for the Environment, Government of the HKSAR Ms Christiana FIGUERES, Vice-chair, Global Covenant of Mayors for Climate & Energy Ms Jennifer LAYKE, Director, Global Energy Program, World Resources Institute Mr Gregor HERDA, Regional Housing Advisor, United Nations Human Settlement Programme (UN-Habitat) Mr John DULAC, Technology Policy Building Sector Lead, International Energy Agency Mr Nils LARSSON, Executive Director, International Initiative for a Sustainable Built Environment Mr Pekka HUOVILA, Coordinator, 10YFP Sustainable Buildings and Construction (SBC) Programme Ms Christine LOH, Under Secretary for the Environment, Government of the HKSAR 	
11:50 - 12:00	Platinum Sponsor's Sharing - Dr Raymond YAU , General Manager, Technical Services & Sustainable Development, Swire Properties Ltd.	
12:00 - 13:30	<i>Lunch Break</i>	
13:30 - 15:00	Parallel Session 3	
	3.1 Mainland China Session - Turning Green to Gold – State of Green Finance to Drive Sustainable Low-Carbon Urban Development in China	3.2 International Youth Competition (1)
	3.3 Advanced Building Systems - Energy Generation (1)	3.4 Policies for High-Performance Green Buildings (2)
	3.5 Performance Review of Green Buildings (1)	3.6 Innovations Driving for Greener Policies and Standards - Practices Review
	3.7 High Performance Transportation Hubs: Their Critical Role and Requirements?	3.8 Innovative Practices for Occupant Wellbeing - Bioclimatic Design
	3.9 Practices & Methodologies for Green Building Management (3)	3.10 Transforming SBE Practices - Energy Management (2)
	3.11 BIM for Sustainability (1)	3.12 Emerging Practices in Sustainable Built Environment
	3.13 Community Empowerment (1)	3.14 Environmentally Responsive Buildings and Human Interactions
15:00 - 15:20	<i>Coffee Break</i>	
15:20 - 16:20	Roundtable 2: Leadership Driving for the Sustainable Built Environment Session Chair: Ms Christine LOH , Under Secretary for the Environment, Government of the HKSAR Speakers: <ol style="list-style-type: none"> Dr George BAIRD, Emeritus Professor of Building Science, School of Architecture, Victoria University of Wellington Mr Douglas WOO, Chairman & Managing Director, Wheelock and Company Ltd. Prof. Greg FOLIENTE, Enterprise Professor, University of Melbourne; Regional Director in Asia-Pacific, iiSBE; Founding Director, nBlue Pty Ltd. Mr TAN Tian-chong, Deputy Managing Director, Built Environment Research and Innovation Institute, Building and Construction Authority Mr Lincoln LEONG, Chief Executive Officer, MTR Corporation 	
16:30 - 18:00	Parallel Session 4	
	4.1 Mainland China Session - The Development Framework and Professional Best Practices of Healthy Buildings in China	4.2 International Youth Competition (2)
	4.3 Advanced Building Systems - Energy Generation (2)	4.4 Processes of High-Performance Green Buildings
	4.5 Performance Review of Green Buildings (2)	4.6 Green Construction Technologies (1)
	4.7 The Secret Ingredients of Sustainable Real Estate Development	4.8 Innovative Biophilic Design for Wellbeing
	4.9 A Collaborative Approach in Delivering Low Carbon Living	4.10 Transforming SBE Practices - Energy Management (3)
	4.11 BIM for Sustainability (2)	4.12 Healthy Building, Human Comfort & Wellbeing
	4.13 Community Empowerment (2)	4.14 PolyU Green Deck: A Catalyst for a Green and Vibrant Community

Day 3 • 7 June 2017 (Wed)

08:00 - 09:00	Registration	
09:00 - 09:30	Keynote 4: Prof. Peter GUTHRIE , Director, Centre for Sustainable Development, University of Cambridge	
09:30 - 10:00	Keynote 5: Prof. Thomas AUER , Managing Director, Transsolar; Professor, Building Technology and Climate Responsive Design, Technical University of Munich	
10:00 - 10:30	Coffee Break	
10:30 - 12:00	Parallel Session 5	
	5.1 Regional Session - Canada, Brazil-Portugal, The Netherlands, Germany and Tallinn-Helsinki	5.2 High Performance Buildings and Sustainable Neighbourhoods in Sweden
	5.3 Smart Initiatives in SBE (1)	5.4 Deep Renovations - Policies & Standards
	5.5 SBE Assessments - Green Building Policies	5.6 Green Construction Technologies (2)
	5.7 Innovations Driving for Greener Policies and Standards - Assessment, Analysis and Modelling (1)	5.8 Sustainable Neighbourhoods - Case Study Review (1)
	5.9 Transforming Green Market - Green Economics (1)	5.10 Zero Energy
	5.11 Processes, Design, Tools and Methodologies in SBE (3)	5.12 Occupants' Evaluation of Green Buildings
	5.13 Stakeholder Collaboration	5.14 Smart and Digital Transformation for Sustainable Living
12:00 - 13:30	Lunch Break	
13:30 - 15:00	Parallel Session 6	
	6.1 Regional Session - Australia, Mainland China, Singapore, South Korea and Philippines	6.2 SBE Urban Challenge: Assessment Protocol and Case Studies
	6.3 Smart Initiatives in SBE (2)	6.4 Deep Renovations - Practices & Performance Review
	6.5 SBE Assessments - Design Processes	6.6 Green Construction Materials (1)
	6.7 Innovations Driving for Greener Policies and Standards - Assessment, Analysis and Modelling (2)	6.8 Sustainable Neighbourhoods - Case Study Review (2)
	6.9 Transforming Green Market - Green Economics (2)	6.10 Innovative Practices to Transform SBE (1)
	6.11 Processes, Design, Tools and Methodologies in SBE (4)	6.12 Green Buildings - Occupants' Perspectives
	6.13 Place-making - Integrative Design Processes	6.14 BEAM Plus Neighbourhood: From Theory to Praxis
15:00 - 15:10	Coffee Break	
15:10 - 16:40	Parallel Session 7	
	7.1 Education and Training for Transforming SBE	7.2 SBE Buildings Challenge: Assessment Protocol and Case Studies
	7.3 Smart Initiatives in SBE (3)	7.4 Deep Renovations - Processes & Methodologies
	7.5 SBE Assessments - Practices Review	7.6 Green Construction Materials (2)
	7.7 Innovations Driving for Greener Policies and Standards - Smart Initiatives	7.8 Sustainable Neighbourhoods - Processes and Application
	7.9 Transforming Green Market - Supply Chain	7.10 Innovative Practices to Transform SBE (2)
	7.11 Processes, Design, Tools and Methodologies in SBE (5)	7.12 Multi-facet Considerations of Urban Regeneration Policies
	7.13 Place-making - Practices Review	7.14 To be announced
16:50 - 17:20	Keynote 6: Dr Raymond COLE , Professor, School of Architecture and Landscape Architecture, University of British Columbia	
17:20 - 18:00	Closing Ceremony Guest of Honour: Mr Eric MA , Secretary for Development, Government of the HKSAR Officiating Guests: <ol style="list-style-type: none"> Ir Conrad WONG, Chairman, WSBE17 Hong Kong Organising Committee Mr Nils Larsson, Representative from the International Co-owners of the Sustainable Built Environment Conference Series Sr CHAN Ka-kui, Chairman, Construction Industry Council Sr Bay WONG, Chairman, Hong Kong Green Building Council 	

Remark: The Organisers reserve the right to update or change the programme content, session and paper allocation without prior notice. Paper authors are recommended to check constantly the Conference Website to observe the latest programme and allocation of papers.

<p>Session 1.1 - Session Organiser: China Academy of Building Research Mainland China Session - The Comprehensive Scheme on Green Retrofitting and Performance Enhancement of the Existing Buildings in China</p> <p><i>Session details to be announced.</i></p>	<p>Session 1.2 Regional Session - Czech Republic, Italy, Sweden and Switzerland</p> <p>Session Chair: François BAILLON</p> <p>SBE16 Prague Antonin LUPISEK, Czech Technical University in Prague, University Centre for Energy Efficient Buildings, Czech Republic</p> <p>SBE16 Torino Andrea MORO, President, iSBE Italia, Italy</p> <p>SBE16 Malmö Roland ZINKERNAGEL, Lund University, Sweden</p> <p>SBE16 Zurich Guillaume HABERT, Professor, ETH Zurich, Switzerland</p>
<p>Session 1.5 SBE Assessments - Green Neighbourhoods (1)</p> <p>LEED Certification and the New Standard of Sustainable Construction in Colombia Andres PELAEZ, Architect, Universidad Pontificia Bolivariana, Colombia</p> <p>Comparison Study of China's Eco-City Key Performance Indicator Systems DENG Wu, Assistant Professor, University of Nottingham Ningbo China, Mainland China</p> <p>A Human-Oriented Study of The Assessment Method for Sustainable Urban District in China - Comparison of LEED Neighbourhood Development, BREEAM Community, CASBEE-Cities and DGNB Urban Districts Edison ZHANG Zhidong, GB Tech Consulting Ltd., Hong Kong SAR</p> <p>Reducing the Impacts of the Built environment on the Environment through the Integration of Socio-economic Indicators in Certification Standards Francesco CAPPAL, Civil Engineer, GRIDD-ÉTS École de technologie supérieure, Canada</p> <p>Development of a Comprehensive City Assessment Tool Applicable to Various Type of Cities Around the World: CASBEE-City (worldwide use version) Shun KAWAKUBO, Assistant Professor, Hosei University, Japan</p>	<p>Session 1.6 Innovations Driving for Greener Policies and Standards - Microclimate</p> <p>The Potential of Applying Local Climate Zone for the Sustainable Planning in Urban Built Environment CHEN Yu-cheng, Department of Architecture, National Cheng Kung University, Taiwan</p> <p>Building Envelopes and their Impact on Our Urban Thermal Environment MAING Minjung, The University of Hong Kong, Hong Kong SAR</p> <p>Urban Geometry and Wind Simulation Studies for Comfort in Bangkok Street Canyon Pattaranan TAKKANON, Professor, Kasetsart University, Thailand</p> <p>Research of Urban Heat Island (UHI) in Shenzhen Based on Climatic Design and Urban Planning Strategies YU Wenjuan, Sustainable Design Assistant, Ronald Lu and Partners (Hong Kong) Ltd., Hong Kong SAR</p> <p>Influence of Moving Vehicles on Pollutant Dispersion in Street Canyon – A Numerical Study ZHANG Wenjing, Division of Building Science and Technology, City University of Hong Kong, Hong Kong SAR</p>
<p>Session 1.9 Practices & Methodologies for Green Building Management (1)</p> <p>Incorporating Sustainability Criteria in Commercial Workplace Fit-out Guidelines for a Banking Operation James WONG Pow-chew, Program Manager, RMIT University, Australia</p> <p>Adopting Green Building Concepts in Housing Estate Development Projects in Abuja F.C.T., Nigeria: Exploring The Potentialities Of End-Users' Preference Salisu Gidado DALIBI, Business School of Hohai University Nanjing, Mainland China</p> <p>Project Management Strategies for Green Business Parks: Critical Success Factors, Barriers and Solutions SHAN Ming, National University of Singapore, Singapore</p> <p>Smart, Green + Productive Workplace Simone SKOPEK, JLL, Canada</p>	<p>Session 1.10 Green Infrastructure in SBE - Hong Kong Cases</p> <p>Implementing the Beautification and Sustainable Designs for the Harbour Area Treatment Scheme (HATS) Stage 2A Andrew LAI, Resident Engineer, Arup, Hong Kong SAR</p> <p>Building Water Resilience in Sustainable Neighbourhoods: A Progressive Shift in Hong Kong Edmond WF LIU, Senior Engineer, Water Supplies Department, Government of the HKSAR, Hong Kong SAR</p> <p>Integrating Water Management Facilities Into The Built Environment - A Smart Green Resilient Approach Kenneth KWOK, Associate Director, Arup, Hong Kong SAR</p> <p>Driving Innovations For Green Infrastructure Components Nicholas AU, Hong Kong Housing Authority, Government of the HKSAR, Hong Kong SAR</p> <p>Sustainable Engineering Practices in Landslip Prevention and Mitigation Works in Hong Kong Patrick HO Ho-man, Geotechnical Engineer, Civil Engineering and Development Department, Government of the HKSAR, Hong Kong SAR</p>
<p>Session 1.13 - Session Organiser: Link Asset Management Ltd. / Nan Fung Development Ltd Healthy and Sustainable Building for Resilient Future</p> <p>Session Chair: Chris KWAN Senior Project Manager, Project & Planning, Link Asset Management Ltd.</p> <p>Green Buildings - The Foundation for Sustainable Development Calvin Lee KWAN, General Manager- Sustainability, Link Asset Management Ltd., Hong Kong SAR</p> <p>NF's corporate initiative for new and revitalization development Gary LEUNG, Assistant General Manager, E&M, Nan Fung Development Ltd., Hong Kong SAR</p> <p>Leading Edge Trend for Resilient Future Building Design Vincent CHENG, Director of Building Sustainability, Arup, Hong Kong SAR</p> <p>Exemplar Next Generation Commercial Development - NKIL6512 Bing KWAN, Director, P&T Architects and Engineers Ltd., Hong Kong SAR Alvin LO, Associate Director of Building Sustainability, Arup, Hong Kong SAR</p>	<p>Session 1.14 <i>Session details to be announced.</i></p>

<p>Session 1.3 Advanced Building Elements</p> <p>Filter Facade Ferdinand OSWALD, Institute of Architecture Technology, Graz University of Technology, Austria</p> <p>The Impact of Double Skin Façade on the Energy Consumption of Office Buildings Under the Tropical Brazilian Climate Kenneth IP, Principal Lecturer, University of Brighton, United Kingdom</p> <p>Climate-Adaptive and Optimized Building Envelope Designs in East Asia Kevin WAN, Engineer, Arup, Hong Kong SAR</p> <p>Folded Cardboard Sandwiches for Load-bearing Architectural Components Stephan SCHÜTZ, Research Assistant, Architect, Bauhaus-Universität Weimar, Germany</p> <p>Multistorey Frame System for Energy Efficient Buildings Vlastimil BILEK, ZPSV a.s., Uhersky Ostroh, Czech Republic</p>	<p>Session 1.4 Practices Review of High-Performance Green Buildings</p> <p>When will Hong Kong Build its First Passive House? - Concepts and Case Studies around Asia Show Great Possibilities for Energy Savings Anne JACOBS, Senior Expert, Sustainable Construction, BASF, Hong Kong SAR</p> <p>Insights into Green Hotels: Case Studies Duygu ERTEK, Principal, TURKECO Consulting, Turkey</p> <p>Building Energy Efficiency in Hong Kong: Case Study of a Commercial Building with BEAM Plus Provisional Platinum Rating (Existing Buildings) POON Ka-man, Business Environment Council Ltd., Hong Kong SAR</p> <p>An Elemental Approach for Predicting Embodied Carbon of Office Buildings Srinath PERERA, Professor of Built Environment & Construction Management, Western Sydney University, Australia</p> <p>Exploring Risks and Rewards Associated with High Performance Manufactured Buildings Karlson Charles HARGROVES, Senior Research Fellow, Curtin University, Australia</p>
<p>Session 1.7 - Session Organiser: AECOM Vision-led Sustainable Neighborhoods: Myths and Musts</p> <p>Session Chair: WONG Chi-chung Executive Vice President, Asia; Global Head, Chinese Overseas Investment (COI) Program, AECOM, Hong Kong SAR</p> <p>Albert KB CHAN, Director of Development Planning & Design, Shui On Land</p> <p>Dr Belinda YUEN, Professorial Fellow and Research Director, Lee Kuan Yew Centre for Innovative Cities, Singapore University of Technology and Design, Singapore</p> <p>Claire BONHAM-CARTER, Principal and Director of Sustainable Development, Design and Planning, AECOM, United States of America</p> <p>Raymond LEE, Director of Planning, Planning Department, Government of the HKSAR</p>	<p>Session 1.8 Innovations for Occupant Wellbeing (1)</p> <p>Research and Development of Noise Mitigation Measures for Public Housing Development in Hong Kong John HL HO, Chief Civil Engineer, Hong Kong Housing Authority, Government of the HKSAR, Hong Kong SAR</p> <p>Estimating Typhoon Haiyan's Wind Speeds Using Windicators and Post-Storm Wind Vulnerability Analysis on the Affected Areas Joshua AGAR, Civil Engineer, University of Philippines Diliman, Philippines</p> <p>Outdoor Lighting Quality and Glare Rating Evaluation of Night-time Community Parks KUO Poyen, Associate Professor, Department of Architecture, Chaoyang University of Technology, Taiwan</p> <p>Better Places for People: Health and Wellbeing Measurement Methods in Workplaces Maira DE MACEDO, Architect – Institutional and Governmental Relations Coordinator, Green Building Council Brazil, Brazil</p> <p>Development of a Home Indoor and Outdoor Environment Visualization System Yusuke NAKAJIMA, Professor, Kogakuin University, Japan</p>
<p>Session 1.11 Processes, Design, Tools and Methodologies in SBE (1)</p> <p>Does the Sequence Matter? - Investigating the Impact of the Order of Design Decisions on the Life Cycle Performance Julia TSCHETWERTAK, Bauhaus-University Weimar, Germany</p> <p>Rethinking Architectural Passive Cooling Strategies in New Zealand's Non-residential Building Stock Lesley METIBOGUN, School of Architecture, Victoria University of Wellington, New Zealand</p> <p>Building in Existing Contexts – Densification Paul FLOERKE, Associate Professor, Associate Chair, Department of Architectural Science, Ryerson University, Canada</p> <p>Problems and Prospects of Urban Compaction—A Case of Jaipur City Sakshi BANSAL, Urban Planner, Malaviya National Institute of Technology Jaipur, India</p> <p>Where Planning Regulations and Development Practice Collide; the Multi-storey Apartment Building in SubTropical Brisbane Australia Rosemary Jean KENNEDY, Queensland University of Technology, Australia</p>	<p>Session 1.12 Regenerating Urban Space in Neighbourhoods</p> <p>Cultivating a Village Impulse in the Midst of Warsaw, the Jazdów Settlement of Finnish Houses Dariusz ŚMIECHOWSKI, Senior Lecturer, Academy of Fine Arts in Warsaw, Poland</p> <p>Productive Transforming of the Urban Traffic Space HAN Dan, Tianjin University, Mainland China</p> <p>Nature-based Urban Space Transformation Kristin BARBEY, Lecturer, Karlsruhe Institute of Technology, Germany</p> <p>Historic Relationship Between Urban Dwellers and the Tomebamba River M. Augusta HERMIDA, Universidad de Cuenca, Ecuador</p> <p>Transformation from River Channelisation to River Revitalisation Richard LEUNG Wah-ming, Senior Engineer, Drainage Services Department, Government of the HKSAR, Hong Kong SAR</p>

<p>Session 2.1 - Session Organiser: Shanghai Research Institute of Building Sciences</p> <p>Mainland China Session - Design and Construction Challenges of Eco-Skyscrapers in China</p> <p><i>Session details to be announced.</i></p>	<p>Session 2.2 Regional Session: Turkey, Greece, Malta and Egypt</p> <p>Session Chair: Wim BAKENS, Secretary General, International Council for Research and Innovation in Building and Construction</p> <p>SBE16 Istanbul Aygen ERKAL, Secretary General, Türkiye İMSAD- Association of Turkish Construction Material Producers</p> <p>SBE16 Thessaloniki Aikaterini TSICALOUDAKI, Associate Professor, Aristotle University of Thessaloniki</p> <p>SBE16 Malta Ruben Paul BORG, University of Malta</p> <p>SBE16 Cairo Wafaa NADIM, Architecture Program, German University Cairo, Egypt</p>
<p>Session 2.5 SBE Assessments - Green Neighbourhoods (2)</p> <p>Value Management as a Tool for Delivering Sustainable Rail Projects Clinton Ohis AIGBAVBOA, University of Johannesburg, South Africa</p> <p>Calculation Methodology of GHG Emissions from a Low Carbon Urban Development in an Underdevelopment Country – Case Study from a LEED ND Certified project in São Paulo City/Brazil Maria Carolina FUJIHARA, Green Building Council Brasil, Brasil; University of São Paulo, Brasil</p> <p>A Stakeholder-based Assessment Model (SAM) for Resource-efficiency Measures in the Construction Industry Richard Carl MÜLLER, Karlsruhe Institute of Technology, Germany</p> <p>Comparative Rich-Picture-Diagram for Assessment of Building Sustainability Label Sasha Nikolaus CISAR, Chair of Sustainable Construction, ETH Zurich, Switzerland</p> <p>More Than Green: The DGNB Certification System for Sustainable Buildings and Districts Prof. Thomas AUER, Managing Director & Founder, Transsolar; Professor, Building Technology and Climate Responsive Design, Technical University of Munich, Germany</p>	<p>Session 2.6 Innovations Driving for Greener Policies and Standards - Carbon Assessment</p> <p>Building Carbon footprint (BCF) Method for Nearly Zero-Energy Building Design Assessment CHAO Yu-chan, Assistant Professor, Feng Chia University, Taiwan</p> <p>Integrated Residential Household Energy Consumption and GHG Emissions Modelling at Metropolitan Scale Raul MARINO, Melbourne School of Design, University of Melbourne, Australia</p> <p>Building Life Cycle Carbon Emissions: A Review TENG Yue, The University of Hong Kong, Hong Kong SAR</p> <p>How Carbon Metric Standard Could Facilitate Innovation for Reduction of GHG Emission from Buildings? Tomonari YASHIRO, The University of Tokyo, Japan</p> <p>Climate Action Planning Strategies for Achieving Carbon Neutrality and Net Zero Campus Operation Vuk VUJOVIC, Director of Sustainability & Energy, Legat Architects, United States of America</p>
<p>Session 2.9 Practices & Methodologies for Green Building Management (2)</p> <p>Green + Smart Buildings Jiri SKOPEK, Managing Director, JLL, Canada; 2030 Districts</p> <p>Challenges in Realising Green Building Concepts in Trade and Industry Tower Joanna WAI, Senior Project Manager, Architectural Services Department, Government of the HKSAR, Hong Kong SAR</p> <p>Daniel NG, Contract Manager, Guardian Property Management Ltd., Hong Kong SAR</p> <p>The Perceptible Impacts of Building Envelope on Other Green Building Features: "A Review" Salisu Gidado DALIBI, Business School of Hohai University Nanjing, Mainland China</p> <p>Investigating Critical Safety Performance Factors in Green Building Construction Projects: The Case of Singapore SHAN Ming, National University of Singapore, Singapore</p> <p>Green Interior Renovation by Architectural Services Department Vetus LAU, Director, Llewelyn Davies Hong Kong Ltd., Hong Kong SAR</p>	<p>Session 2.10 Transforming SBE Practices - Energy Management (1)</p> <p>Development of an Integrated Energy Simulation Tool for Buildings and MEP Systems, the BEST - A Pilot Study on Simulation of Demand Response with Cogeneration Systems Ryota KUZUKI, Acting General manager, Energy Strategy Planning Department, Tokyo Gas Co., Ltd., Japan</p> <p>Driving Ultimate Building Performance through Smart E&M Systems for Sustainable Built Environment TAI Tak-him, Deputy Director / Trading Services, Electrical and Mechanical Services Department, Government of the HKSAR, Hong Kong SAR</p> <p>A Case Study to Automate Demand Response on a University Campus Thomas Mark LAWRENCE, University of Georgia, United States of America</p> <p>Short-term Load Forecasting Model with Predicted Weather Data ZHU Guangya, City University of Hong Kong, Hong Kong SAR</p>
<p>Session 2.13 - Session Organiser: CLP Power Hong Kong Ltd.</p> <p>Powering Up Smart City</p> <p>Powering Up for Brighter Tomorrows Eric CHEUNG, Senior Director - Customer & Business Development, CLP Power (Hong Kong) Ltd., Hong Kong SAR</p> <p>Big Data Era for Building Management Amen TONG, General Manager, Technical Services, Airport Authority Hong Kong</p> <p>Smart Power Control for Peak Load Compensation Clement WONG, Head of Facility Management Hong Kong Science and Technology Parks Corporation</p> <p>How Hong Kong to be a Data Centre Hub in Asia in the Next Decade Charles LEE, Founder and CEO OneAsia Network Limited & Newtech Technology Co Ltd.</p>	<p>Session 2.14 - Session Organiser: Division Sustainable Building, Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR), Germany</p> <p>Sustainability Assessment of Buildings as Part of Green-Public Procurement Based on the German BNB-System</p> <p>Session Chair: Thomas LÜTZKENDORF, Director, Centre for Real Estate and Head of Chair, Sustainable Management of Housing and Real Estate, Karlsruhe Institute of Technology, Germany</p>

<p>Session 2.3 Advanced Building Systems</p> <p>Remarkable Energy Retrofit for Existing Buildings by Advanced Fan Technology: Electronically Commutated Motor Plug Fan Isaac TSANG Siu-chung, Assistant Building Services Manager, Swire Properties Ltd., Hong Kong SAR</p> <p>Low Temperature Radiant Cooling Design and Application in Tropical/ Sub-Tropical Countries Paul CHAN Yim-cheong, Director, Wong & Ouyang (Building Services) Ltd., Hong Kong SAR</p> <p>Hybrid Air-conditioning System Efficiency for Districts in the Tropics HSIEH Shanshan, Future Cities Laboratory, Singapore ETH Center, Singapore; Chair of Architecture and Building Systems, ETH Zurich, Switzerland; Industrial Process and Energy Systems Engineering Group, Ecole Polytechnique Federale de Lausanne, Switzerland</p> <p>Evaluation of Saving Energy with SOFC and Battery Combined System Takeshi SASE, Cooperative Researcher, Building Research Institute, Japan</p>	<p>Session 2.4 Policies for High-Performance Green Buildings (1)</p> <p>Demystifying and Democratizing The Energy Use Conversation to Support The Net-Zero Challenge Birgit SIBER, Diamond Schmitt Architects, Canada Mike WILLIAMS, Rowan Williams Davies & Irwin Inc.</p> <p>Building Energy Saving Strategy in Hong Kong - "Built-in" + "Plug-in" CHIU Chun-ting, Electrical and Mechanical Services Department, Government of the HKSAR, Hong Kong SAR</p> <p>How Sustainable are the Quality Control Procedures for Constructions in Europe? Frits MEIJER, TU Delft / Faculty of Architecture and the Built Environment, The Netherlands</p> <p>Policy Scenarios of Zero Carbon Building for Hong Kong: To Survive or To Lead? PAN Mi, The University of Hong Kong, Hong Kong SAR</p> <p>A Discussion on the Benefits of Environment Performance of the Promotion of Kaohsiung Green Building Specialties Policy CHAO Chien-chiao, Director General, Bureau of Public Works, Kaohsiung City Government, Taiwan</p>
<p>Session 2.7 - Session Organiser: Swire Properties Ltd.</p> <p>Successful Business Case Sharing on Deep Energy Saving and Other Innovative Green Measures for Commercial Buildings in Hong Kong, Mainland China and Overseas</p> <p>Session Chair: Benny AU, Sustainable Development Manager, Swire Properties Ltd., Hong Kong SAR</p> <p>Sustainability Strategies on Deep Energy Saving and Energy Management of Property Developer Raymond YAU, General Manager, Technical Services & Sustainable Development, Swire Properties Ltd.</p> <p>Overview of Building Energy Efficiency in China and the Upcoming Trend WEI Qingpeng, Building Energy Research Center, Tsinghua University, Beijing</p> <p>Cost & Value: Multiple Benefits of Green Commercial Buildings in Western Countries Phil JONES, Chair Architectural Science, Welsh School of Architecture, Cardiff University, United Kingdom; Visiting Research Professor, Faculty of Architecture, University of Hong Kong, Hong Kong SAR</p> <p>YKK80 High Efficiency Building - Radiant Control Both Outside and Inside Kitaro MIZUIDE, General Manager, M&E Design Department of NIKKEN SEKKEI, Japan</p> <p>Performance Synergy from Integrated Design, Construction and Operation. Case Study on a High Performance Grade A Office - Swire One Taikoo Place Vincent CHENG, Director of Building Sustainability, Arup, Hong Kong SAR</p>	<p>Session 2.8 Innovations for Occupant Wellbeing (2)</p> <p>Outdoor to Indoor Air Quality in Urban Environment Alexis LAU Kai-hon, Professor, Division of Environment, The Hong Kong University of Science and Technology, Hong Kong SAR</p> <p>Redesigning Long-Term Senior Care: Design Solutions to Facilitate Different Levels of Care Needs in Senior Housing - Using Hong Kong's Latest Senior Housing as Example Bryant LU, Ronald Lu and Partners (Hong Kong) Ltd., Hong Kong SAR</p> <p>Occupant-Related Energy Use: A Qatar Office Case Study Chimay J. ANUMBA, Dean & Professor, University of Florida, United States of America</p> <p>Purifying City Air in Densely Urban Environment Jimmy CK TONG, Associate & East Asia Energy Skill Leader, Arup, Hong Kong SAR</p> <p>A Healthy and Sustainable Living Environment – LOHAS Josh CHENG, Building Sustainability Consultant, Arup, Taiwan</p>
<p>Session 2.11 Processes, Design, Tools and Methodologies in SBE (2)</p> <p>Decision Making in the Pre-design Stage of Building Renovation Projects Anne N. NIELSEN, University College of Northern Denmark, Aalborg University, Denmark</p> <p>A Holistic Thriving Design Approach Dennis LEE, Managing Director, Architecture: Innovative Limited, Hong Kong SAR</p> <p>Fostering Sustainable Buildings in Indonesia by Foreign Developer for Resilience Dennis MUI Heung-fu, (former) Assistant Project Director, Pacific Century Premium Developments Ltd., Hong Kong SAR</p> <p>Reconsidering the Design of High-rise Mass Housing in Tropical Climates – A Case Study in Malaysia GAN Hock-beng, G&A Architect, Malaysia FOO Chee-hung, Researcher, Construction Research Institute of Malaysia, Malaysia</p> <p>Embodied Energy Versus Building Height, The "Premium" of Building Tall Rolf André BOHNE, The Norwegian University of Science and Technology, Norway</p>	<p>Session 2.12 Processes of Urban Regeneration</p> <p>Energy Benchmarking Tool for Low-Carbon Transformation in Hong Kong: A Scientific Approach and Its Practical Applications Benny KM CHOW, Director, Hong Kong Green Building Council Ltd., Hong Kong SAR</p> <p>Sustainability Indicators for the Assessment of the Energy System Lisa ANDES, Institute of Sustainable Management of Housing and Real Estate (OEW), Karlsruhe Institute of Technology, Germany</p> <p>Creating Methods, Procedures and Tools for a More Sustainable Neighbourhood Development – Experiences from Germany Maria BALOUKTSI, Karlsruhe Institute of Technology (KIT), Germany</p> <p>How Can We Assess the Achievement of the Sustainable Development Goals? – A Review of Indicators and Their Application at the City Level Roland ZINKERNAGEL, Lund University, Sweden</p>
<p>Session 2.14 (Cont'd)</p> <p>The Assessment System for Sustainable Building BNB by Taking the Example of the Complete Refurbishment BNB Module for Educational Buildings Julia MÜLLER, Federal Institute for Research on Building, BBSR, Germany</p> <p>Sustainable Building Assessment System for Research- and Laboratory buildings - Austrian and Swiss Perspective on the BNB Applicability Alexander PASSER, Assistant Professor, Graz University of Technology, Austria</p> <p>Natural Resources and Sustainability Eike ROSWAG-KLINGE, Ziegert Roswag Seiler Architekten</p> <p>PL-E-N-AR Planning Aid for Energy Efficient and Sustainable Architecture Günter LÖHNERT, sol-id-ar planungswerkstatt, Germany</p> <p>Panel Discussion</p>	

<p>Session 3.1 - Session Organiser: Shenzhen Green Building Association and Shenzhen Institute of Building Research Mainland China Session - Turning Green to Gold – State of Green Finance to Drive Sustainable Low-Carbon Urban Development in China</p> <p><i>Session details to be announced.</i></p>	<p>Session 3.2 International Youth Competition (1)</p> <p>Presentation of 8 Shortlisted Teams Q & A Final Judging by International Jury Panel</p>
<p>Session 3.5 Performance Review of Green Buildings (1)</p> <p>Strategic Study on the Benefit Evaluation of Solar Photovoltaic Promotion Policy in Kaohsiung CHAO Chien-chiao, Director General, Bureau of Public Works, Kaohsiung City Government, Taiwan</p> <p>A Baseline Study on Thermal Performance of Prefabricated Modular Buildings in Australia Sareh NAJI, The University of Melbourne, Australia</p> <p>Energy Saving Potential of Thermal Broken Aluminum Frames in Hot Climate Areas Simon WONG, Technoform Bautec Hong Kong Ltd., Hong Kong SAR</p> <p>Potentials of Energy Efficiency and Generation Strategies for High-rise Office Buildings in Hong Kong YU Cong, The University of Hong Kong, Hong Kong SAR</p> <p>Effect of Corridor Design on Energy Consumption for School Buildings in the Cold Climate ZHANG Anxiao, Tianjin University, Mainland China; Delft University of Technology, The Netherlands</p>	<p>Session 3.6 Innovations Driving for Greener Policies and Standards - Practices Review</p> <p>Leap forward or Snail Speed? Examining Radical Sustainable Innovation Christian KOCH, Chalmers University of Technology, Sweden</p> <p>The Progress of Energy Renovations of Housing in The Netherlands Henk VISSCHER, Professor, Delft University of Technology-Faculty of Architecture and the Built Environment, The Netherlands</p> <p>Evaluation of Using BEAM-PLUS to Facilitate Waste Reduction in Building Construction Lara Celine JAILLON, City University of Hong Kong, Hong Kong SAR</p> <p>Energy, Comfort and Cost Optimization of A Net-Zero Energy Building in Berlin Olaf BOETTCHER, Federal Institute for Research on Building, Urban Affairs and Spatial Development, Germany</p> <p>Modeling the Built Environment Element by Element: Uncovering Greenhouse Gas Intensive Policies and Structures with a New Visualization Tool Verena GÖSWEIN, Instituto Superior Técnico, University of Lisbon, Portugal</p>
<p>Session 3.9 Practices & Methodologies for Green Building Management (3)</p> <p>Life Story of the Repurposed Shipping Container Alice LF YEUNG, Chief Architect, Architectural Services Department, Government of the HKSAR, Hong Kong SAR</p> <p>Factors Influencing Human Capability to Practice Sustainability in Facilities Management (FM) – A Review Fathima Sabrina NAZEER, University of Moratuwa, Sri Lanka</p> <p>Sustainable Construction: Quality of Life of Construction Workers in Private sector: Case Study of L.P.N. Development Public Co., Ltd., Pimchanok SRIRUTTRAKUL, Wisdom Consulting and Solution, Thailand</p> <p>Mining for Resources: Problem-oriented Building Information Management and Development of Agile Facility Management Methodologies Through Industry-University-Public Collaborations Yu MORISHITA, Assistant Professor, The University of Tokyo, Japan</p> <p>Development of MERIT and Normalization Factor for Different Operating Hours for Building Energy Intensity (BEI) Kevin HOR, Edgenta Energy Services PLC, Malaysia</p>	<p>Session 3.10 Transforming SBE Practices - Energy Management (2)</p> <p>Dynamic CO2 and occupancy modelling for predictive control Alexandros PANTAZARAS, National University of Singapore, Singapore</p> <p>Retro-commissioning Practice and In-depth Analysis Leading to Efficiency Optimization on HVAC Systems: Case Study on A Retail Mall in China Jean QIN, Swire Properties Ltd., Hong Kong SAR</p> <p>Study of Chiller Part Load Values for Hong Kong and Subtropical Climate LEUNG Wai-ho, Senior Engineer, Arup, Hong Kong SAR</p> <p>HVAC System Design and Operation Performance of a Low-Carbon High-Rise Tenant Office Building Located in Tokyo Yuichi TAKEMASA, General Manager, Kajima Technical Research Institute Singapore, Singapore</p> <p>Optimizing Energy Efficiency for a High Rise Office Tower in Tropics NG Yong-kong, NYK Engineering and Trading Sdn Bhd, Malaysia</p>
<p>Session 3.13 Community Empowerment (1)</p> <p>The Strategy of Launching Rural Regeneration in Pingtung County Government HUNG Chieh-jen, Pingtung County Government, Taiwan</p> <p>2030 Districts: Putting Ideas into Action LI Jixin, China Lead, 2030 Districts Jiri SKOPEK, Managing Director, JLL, Canada; 2030 Districts</p> <p>A Critical Discussion on the Role of Architectural Practice in Development of Rural China: for Living Sustainably LI Ke-han, The Chinese University of Hong Kong, Hong Kong SAR</p> <p>Retrofit or Behaviour Change? Which Has the Greater Impact on Energy Consumption in Low Income Households? Melissa JAMES, Senior Experimental Scientist, CSIRO, Australia</p> <p>Towards a Holistic Methodology: A Practical Approach to Local Energy Planning Thomas SCHLUCK, Senior Scientist, Hochschule Luzern, Switzerland</p>	<p>Session 3.14 - Session Organiser: Somfy Asia-Pacific Co. Ltd. Environmentally Responsive Buildings and Human Interactions</p> <p>Session Chair: Anders HALL International Business Development, Somfy International; Chairman, Marketing & Communication, ES-SO (EU Solar Shading Organisation)</p> <p>Research and Experiences on Sustainability by ES-SO Anders HALL, Somfy International; Chairman Marketing & Communication, ES-SO</p> <p>The Architect's View on a Design of More Sustainable and High Performing Facades – and It Works! Mark CURZON, Director of Architecture, Fender Katsalidis Mirams Architects</p>

<p>Session 3.3 Advanced Building Systems - Energy Generation (1)</p> <p>Analysis of Fourth-Generation District Energy Systems with Renewable Energy Cogeneration by Using Rational Exergy Management Model Birol KILKIS, Baskent University, Turkey</p> <p>The Application of Solid Oxide Fuel Cells in Buildings for Electricity, Heating and Cooling Tri-generation Using Natural Gas or Bio-gas from Waste WANG Qiancheng, Department of Building Real Estate, The Hong Kong Polytechnic University, Hong Kong SAR</p> <p>Building and Community Energy Retrofit Housing in Wales LI Xiaojun, Research Associate, Cardiff University, United Kingdom</p> <p>Geothermal District Heating Investigation of Retired Oil/Gas Wells as Higher-temperature Renewable Heat Sources GUO Hongshan, Princeton University, United States of America</p>	<p>Session 3.4 Policies for High-Performance Green Buildings (2)</p> <p>Baseline and Water Efficiency for Green Building in Taiwan CHENG Cheng-I, Dean of Design College; President of AIT, National Taiwan University of Science and Technology, Taiwan</p> <p>A Comparative Study on Economic Policies for Construction and Demolition Waste Minimization Jack CP CHENG, The Hong Kong University of Science and Technology, Hong Kong SAR</p> <p>Using Supply Chain Management for Sustainable Public Procurement Johannes WALL, Graz University of Technology, Austria</p> <p>Innovative Measures to Protect Residential Developments from Traffic Noise - Hong Kong Experience LAU Kwok-keung, Principal Environmental Protection Officer, Environmental Protection Department, Government of the HKSAR, Hong Kong SAR</p> <p>Energy Efficiency for a Sustainable Built Environment in Nigeria Susanne GEISSLER, SERA energy & resources, Austria</p>
<p>Session 3.7 - Session Organiser: AECOM High Performance Transportation Hubs: Their Critical Role and Requirements?</p> <p>Session Chair: Sylvester Timothy WONG Vice President, Strategies + Development, Buildings + Places, Asia; Head of Buildings + Places, Philippines & Emerging Markets, AECOM, Philippines</p> <p>Marc COLELLA, Industry Director, Building Structures Practice Lead, Australia and New Zealand, AECOM, Australia</p> <p>Kevin POOLE, Executive Director, Third Runway, Airport Authority Hong Kong, Hong Kong SAR</p> <p>Tony ARMSTRONG, Asia Pacific Representative, International WELL Building Institute</p>	<p>Session 3.8 Innovative Practices for Occupant Wellbeing - Bioclimatic Design</p> <p>Bringing Sustainable Neighbourhood Design into Reality—Case Sharing by Brickell City Centre, Miami Benny AU, Sustainable Development Manager, Swire Properties Ltd., Hong Kong SAR</p> <p>On the Study of Thermal Comfort and Temperature Enhancements by Park Features CK CHAU, The Hong Kong Polytechnic University, Hong Kong SAR</p> <p>Passive Design Strategies for Building Envelopes in Different Orientations Elizabeth PARRA, PVG Arquitectos, Colombia</p> <p>An Integrated Urban Microclimate and Building Energy Model for Early Stage Design HUANG Jianxiang, The University of Hong Kong, Hong Kong SAR</p> <p>Re-Thinking Courtyard Housing: Development of Traditional Islamic Courthouses into Zero-Energy Buildings Osama Mohamed OMAR, Assistant Professor of Architecture, Beirut Arab University, Lebanon</p>
<p>Session 3.11 BIM for Sustainability (1)</p> <p>BIM Based Deep Building Renovation Optimization for Sustainability HUANG Lizhen, Associate Professor, Norwegian University of Science and Technology, Norway</p> <p>Integrating BIM for Sustainable Planning, Design, Construction and Facility Management for Hong Kong's Public Housing Development Lawrence KW CHUNG, Assistant Director of Housing (Development and Construction), Hong Kong Housing Authority, Government of the HKSAR, Hong Kong SAR</p> <p>BIM Enabled Life Cycle Environmental Analysis for a Small Scale Zero Energy House LI Qiyuan, School of Architecture, Tianjin University, Mainland China</p> <p>The Use of FTA (Fault Tree Analysis) to Evaluate the Contribution of BIM Platform to the Environmental Quality on Rehabilitated Buildings Monica Santos SALGADO, Federal University of Rio de Janeiro, Brasil</p> <p>Sustainable Buildings with BIM Peter KONCZ, Sales Manager, GRAPHISOFT Asia Ltd., Hong Kong SAR</p>	<p>Session 3.12 - Session Organiser: Allied Environmental Consultants Ltd. Emerging Practices in Sustainable Built Environment</p> <p>Session Chair: Grace KWOK Managing Director, Allied Environmental Consultants Ltd.</p> <p>Acoustics and Lighting Design for Green Building Henry Chan Chi-kee, Associate Director, Allied Environmental Consultants Ltd.</p> <p>Showcase of Green Campus Development in Hong Kong – A Case Review of Hang Seng Management College's Master Campus Expansion Plan Danica CHAN, Environmental Consultant, Allied Environmental Consultants Ltd.</p> <p>Drive towards Sustainable Development and Management: Case Study on International Commerce Centre Andy LAI, Senior Consultant, Allied Environmental Consultants Ltd.</p> <p>Intelligence, Collaboration, Continuity – A Case Study of Improving the Environmental Performance of an Office Building Lewis LAM, Assistant General Manager (Property Management), Kai Shing Management Services Ltd.</p> <p>Sustainability Strategies in Towngas Headquarters Building Nelson Lo, Property Management Manager, The Hong Kong and China Gas Company Ltd.</p>
<p>Session 3.14 (Cont'd)</p> <p>Case Study - Understanding the key learnings from the use of Automated Solar Shading in Sustainable Buildings Alistair GRICE, Commercial Specification Manager, Somfy Oceania</p> <p>Connected Homes: A More Comfortable, Secure and Sustainable Life in the Future Jean-Pierre DUMAS, Managing Director, iHome Systems</p> <p>Panel Discussion</p>	

<p>Session 4.1 - Session Organiser: Green Building Research Centre and the Chinese Society for Urban Studies Mainland China Session - The Development Framework and Professional Best Practices of Healthy Buildings in China</p>	<p>Session 4.2 International Youth Competition (2)</p> <p>Presentation of 8 Shortlisted Teams Q & A Final Judging by International Jury Panel</p>
<p>Session Chair: MENG Chong Deputy Director, Green Building Research Centre, Chinese Society for Urban Studies, China</p>	
<p>The Roadmap of the Healthy Building Development LI Baizhan, Dean, School of Urban Construction and Environmental Engineering, Chongqing University (CQU), China</p> <p>The Control and Prevention of Indoor PM2.5 against the Health Risks of Occupants ZHANG Yinping, School of Architecture, Tsinghua University, China</p> <p>Development of the China Healthy Building Assessment Standards and its Professional Practices MENG Chong, Deputy Director, Green Building Research Centre, Chinese Society for Urban Studies, China</p> <p>Technological Innovations and Best Practices of Healthy Buildings JIA Yan, Founder & CEO, First Human Environmental Technologies (Beijing) Co., Ltd., China</p>	
<p>Session 4.5 Performance Review of Green Buildings (2)</p> <p>The Importance of Understanding The Material Metabolism of The Built Environment Danielle DENSLLEY TINGLEY, Lecturer in Architectural Engineering, The University of Sheffield, United Kingdom</p> <p>LCA Applied to Portland Cement: Net Loads Associated to Different Mineral Admixtures Marcella Ruschi SAADE, University of Campinas, Brazil</p> <p>Embodied Energy and Global Warming Potential in Construction – Perspectives and Interpretations Maria BALOUKTSI, Karlsruhe Institute of Technology, Germany</p> <p>Study of Human Embodied Energy for Masonry Work During Building Construction Sivakumar PALANIAPPAN, Assistant Professor, Indian Institute of Technology Madras, India</p> <p>The Life Cycle Cost-Energy Relationship Of Buildings WANG Jie, The University of Hong Kong, Hong Kong SAR</p>	<p>Session 4.6 Green Construction Technologies (1)</p> <p>Watering Type and Water Consuming Assessment of the Green Construction Fence in Taichung City, Taiwan CHEN Chen-chun, Feng Chia University, Taiwan</p> <p>Low Carbon Construction Implementation in a Public Housing Development and the Implication to the Life Cycle Decision Making Tool Felix WONG Yat-hang, Senior Environmental Consultant, AECOM Asia Co. Ltd., Hong Kong SAR</p> <p>Use of Incineration Bottom Ash for Road Construction in Singapore Kelvin LEE Yang-pin, Senior Technical Manager, Samwoh Innovation Centre, Singapore</p> <p>Exploring the Relationships between Construction Phases and Sustainable Construction Principles Olabode Emmanuel OGUNMAKINDE, University of Newcastle, Australia</p>
<p>Session 4.9 - Session Organiser: Arup A Collaborative Approach in Delivering Low Carbon Living</p>	<p>Session 4.10 Transforming SBE Practices - Energy Management (3)</p>
<p>Session Chair: Jimmy CK TONG Associate & East Asia Energy Skill Leader, Arup, Hong Kong SAR</p>	
<p>Beyond Energy and Resource Efficiency: Sustainable Building in Digital Transformation Vincent CHENG, Director of Building Sustainability, Arup, Hong Kong SAR</p> <p>Investing for Longer-term Development: Financing the New Generation in Sustainability Carl BERRISFORD, UBS Wealth Management, Head of Sustainable Investing, APAC Chief Investment Office, Hong Kong SAR</p> <p>Creation of Green Neighbourhood Edwin CHAN, Project Director, New World Development Company Ltd., Hong Kong SAR</p> <p>Tall Buildings and Sustainability Florence CHAN, Director, Kohn Pedersen Fox Associates PC, Hong Kong SAR</p>	<p>Energy Data Transparency Benefits to Drive Down of Energy Consumption in A Green Hotel Antonio CM CHAN, REC Engineering Co., Ltd., Hong Kong SAR</p> <p>ACT-Shop – A Retro-commissioning Scheme for Existing Buildings in Hong Kong Cary CHAN, Executive Director, Hong Kong Green Building Council Ltd., Hong Kong SAR</p> <p>Low-Carbon Building Environment Adaptation Countermeasures of Pingtung County CHEN Ping-hung, Pingtung County Government, Taiwan</p> <p>Impact of Energy Recovery Ventilation on The Ventilation and CO2 Concentration in One Bedroom Condominium in Thailand Darane JAREEMIT, Associate Dean for Academic Affairs, Faculty of Architecture and Planning, Thammasat University, Thailand</p> <p>Panpisu JULPANWATTANA, Senior Sustainable Designer, Magnolia Quality Development Corporation Ltd., Thailand</p>
<p>Session 4.13 Community Empowerment (2)</p> <p>'Pride the Citizens Action Factor for Resilient Sustainable Cities' Results of the 2016 Questionnaire Research Under Dutch Amsterdam Council Members Fred SANDERS, Researcher and Lecturer, Delft University of Technology in the Netherlands, The Netherlands</p> <p>Enhance Public Sustainability Awareness by Feng Shui Patrick LUI Yin-park, Senior Engineer, Cundall Hong Kong Ltd., Hong Kong SAR</p> <p>Social Sustainability Stephen YIM, Chief Architect; Development & Standards, Hong Kong Housing Authority, Government of the HKSAR, Hong Kong SAR</p> <p>The Application of Social Innovation in Designing an Aged Care Centre in Malaysia Thomas TANG Sek-khuen, Kuala Lumpur Centre for Sustainable Innovation, Malaysia</p> <p>Ritualised Place and Community Empower Wasana DE SILVA, Senior Lecturer, University of Moratuwa, Sri Lanka</p>	<p>Session 4.14 - Session Organiser: The Hong Kong Polytechnic University PolyU Green Deck : A Catalyst for a Green and Vibrant Community</p> <p>Session Chair: Alex LUI Chun-wan Chairman, Green Deck Task Force, The Hong Kong Polytechnic University, Hong Kong SAR</p> <p>From Grey to Green Alex LUI Chun-wan, Chairman, Green Deck Task Force, The Hong Kong Polytechnic University, Hong Kong SAR</p> <p>Improving Neighbourhood Sustainability with Landscaping in the Context of Climate Change: A Case Study of the Proposed Green Deck in Hong Kong Edwin CHAN, The Hong Kong Polytechnic University, Hong Kong SAR</p>

<p>Session 4.3 Advanced Building Systems - Energy Generation (2)</p>	<p>Session 4.4 Processes of High-Performance Green Buildings</p>
<p>Exergoeconomic Assessment of a Building Integrated Photovoltaic (BIPV) System: A Case Study of Yasar University, Izmir, Turkey Arif HEPBASLI, Chairman of Energy Systems Engineering Department, Yasar University, Turkey</p> <p>Variations of Systematic Solutions for 24-hour Operating Sustainable Small-scale Commercial Buildings Bumpei MAGORI, Project Lecturer, Institute Industrial Science, the University of Tokyo, Japan</p> <p>Study on the Potential of Converting Former Military Bunkers into Energy Storage Facilities Joachim SCHULZE, Research Assistant, Architect M.Sc., Technical University Darmstadt, Germany</p> <p>An Evaluation of Building Integrated Wind Energy Mehmet Koray PEKERICLI, METU, Turkey</p>	<p>What Are The Most Effective Drivers of Sustainable Development in The Decision Making Process Hanne Tine Ring HANSEN, Sustainability Engineer, Soren Jensen Consulting Engineers, Denmark</p> <p>German ÖKOBAUDAT Goes International - An Online Infrastructure for LCA as Basis for International Structures Tanja BROCKMANN, Head of Division Construction and Environment, BBSR Federal Inst. for Research on Building, Urban Affairs and Spatial Development, Germany</p> <p>How Actors Can Implement in Practice the General Principles of Sustainability in Their Buildings and Civil Engineering Projects Prof. Thomas LÜTZKENDORF, Director, Centre for Real Estate: Head of Chair, Sustainable Management of Housing and Real Estate, Karlsruhe Institute of Technology, Germany</p> <p>Driver And Challenges Facing Leadership in Adopting Sustainability in The Built Environment: A Developer's Perspective ZHANG Xiaoling, Department of Public Policy, City University of Hong Kong, Hong Kong SAR</p> <p>Analysing the Reference Flows for Energy Efficient Retrofit of Typical Residential Building in Tianjin, China LIU Lu, School of Architecture, Tianjin University, Mainland China</p>
<p>Session 4.7 - Session Organiser: Swire Properties Ltd. The Secret Ingredients of Sustainable Real Estate Development</p>	<p>Session 4.8 Innovative Biophilic Design for Wellbeing</p>
<p>Session Chair: Ashley HEGLAND Consultant, Swire Properties Ltd.</p>	
<p>Themes/Trends of Sustainable Urban Planning and Sustainable Built Environment Christopher LAW, Founding Director, Oval Partnership, Hong Kong SAR</p> <p>Ingredients of Sustainable Real Estate: Criteria, Transparency, Engagement Ruben LANBROEK, Head of Asia Pacific, GRESB, Hong Kong SAR</p> <p>Climate Change and Sustainable Real Estate: The Environmental, Social, and Economic Implications Liam SALTER, CEO, RESET Carbon</p> <p>Swire Properties' Approach to Sustainable Real Estate Dr Raymond YAU, General Manager, Technical Services & Sustainable Development, Swire Properties Ltd.</p>	<p>System Ecology as a Design Tool for Water Resources and its Environmental Education DAY Yeong-tyi, Associate Professor, Chung Yuan Christian University, Taiwan</p> <p>Sustainable Neighbourhood of Shek Wu Hui Sewage Treatment Works Echo LEONG I-man, Executive Director, AECOM Asia Company Ltd., Hong Kong SAR</p> <p>Biophilia and Nature-based Features to Support Stress Reduction in Knowledge Workers Ann CALLAGHAN, Conestoga College, Canada; Algonquin College, Canada</p> <p>Pioneering "Comprehensive Urban Landscape Technology" (CULT): An Integrated System Model for Urban Sustainability as Community Amenity in a Compact Urban Environment Thomas CHUNG Wang-leung, The Chinese University of Hong Kong, Hong Kong SAR</p> <p>Foster a Healthy Community through Active Design & Biophilic Design WANG Hong, Executive Director, AECOM Asia Company Ltd., Mainland China</p>
<p>Session 4.11 BIM for Sustainability (2)</p>	<p>Session 4.12 Healthy Building, Human Comfort & Wellbeing</p>
<p>Assessment of Different Data Collection Methods for the Creation of BIM Models for Existing Buildings Bjoern Arild GODAGER, Norwegian University of Science and Technology, Norway</p> <p>Boost Sustainability Certification by Using BIM Heinz J. BERNEGGER, Zurich University of Applied Sciences ZHAW, Institute of Facility Management, Switzerland</p> <p>LCA Integration in BIM Through The Use of Integrated Dynamic Models Marios TSIKOS, Civil Engineer, Burohappold Engineering, United Kingdom</p> <p>Visualizing Embodied Impacts Using Building Information Modeling (BIM) Martin RÖCK, Scientific Assistant, Working Group Sustainability Assessment - Institute of Technology and Testing of Building Materials - Graz University of Technology, Austria</p> <p>Lifecycle Evaluation of Building Sustainability Using BIM ZHANG Cheng, Assistant Professor, Xi'an Jiaotong-Liverpool University, Mainland China</p>	<p>Healthy Buildings & Energy Performance – A Balancing Act Eriko TAMURA, Assistant Engineer of Building Sustainability, Arup, Hong Kong SAR</p> <p>Significance of Sky Gardens for Healthy High-rise Living of Urban Children and Old Adults Tony IP, Deputy Director of Sustainable Design, Ronald Lu & Partners (Hong Kong) Ltd., Hong Kong SAR</p> <p>Radon Infiltration in Existing Rented Accommodation Torben Valdbjorn RASMUSSEN, Danish Building Research Institute, Aalborg University, Denmark</p> <p>A Case Study on Industrial Building IEQ Control and Operation Performance Analysis WANG Hui, Green Building Engineer, BlueScope Building System (Xi'an) Co., Ltd., Mainland China</p> <p>Research on the Strategies and Methods in Productive Green Renovation of Existing Urban Communities DING Xiaoying, Tianjin University, Mainland China</p>
<p>Session 4.14 (Cont'd)</p> <p>Noise Mitigation Potential of PolyU Green Deck Proposal TANG Shiu-keung, The Hong Kong Polytechnic University, Hong Kong SAR</p> <p>Effect of Green Deck on Local Air Quality LEE Shun-cheng, The Hong Kong Polytechnic University, Hong Kong SAR</p> <p>Proposed Green Deck Project: A Framework for Engaging Stakeholders Esther YUNG Hiu-kwan, The Hong Kong Polytechnic University, Hong Kong SAR</p> <p>"Smart Green Resilient" Integrative Urban Environment Wilfred LAU, Director, Arup, Hong Kong SAR</p> <p>Panel Discussion</p>	

<p>Session 5.1 Regional Session - Canada, Brazil-Portugal, The Netherlands, Germany and Tallinn-Helsinki</p>	<p>Session 5.2 - Session Organiser: Sweden Green Building Council High Performance Buildings and Sustainable Neighbourhoods in Sweden</p>
<p>Session Chair: Luis BRAGANÇA</p>	<p>Session Chair: Bengt WÄNGGREN</p>
<p>SBE16 Toronto Harry Robert BACH, Secretary Treasurer, iiSBE Canada; Director and Treasurer, iiSBE International; Director and Treasurer, Sustainable Buildings Canada</p> <p>SBE16 Brazil-Portugal Cristina Engel ALVAREZ, Professor/Coordinator, Laboratório de Planejamento e Projetos, Universidade Federal do Espírito Santo, Brazil</p> <p>SBE16 Hamburg Prof. Thomas LÜTZKENDORF, Director, Centre for Real Estate; Head of Chair, Sustainable Management of Housing and Real Estate, Karlsruhe Institute of Technology, Germany</p> <p>SBE16 Tallinn-Helsinki Pekka HUOVILA, Coordinator, 10YFP Sustainable Buildings and Construction (SBC) Programme</p> <p>SBE16 Utrecht Ivo OPSTELTEN, Professor, University of Applied Sciences Utrecht</p>	<p>CEO and Founding Chairman, Sweden Green Building Council; Member of the Board, World Green Building Council</p> <p>Five Cases of Best Practice High-Performance Buildings in Sweden</p> <p>Five Cases of Best Practice Sustainable Neighbourhoods in Sweden</p> <p>Q&A</p>
<p>Session 5.5 SBE Assessments - Green Building Policies</p> <p>From Research to a National Standard: SBTool and Protocollo ITACA Andrea MORO, iiSBE Italia R&D, Italy</p> <p>The Network for Sustainable Federal Building as an Instrument of Quality Assurance in the Implementation of the Assessment System BNB in the Public Sector Andreas RIETZ, Federal Institute for Research on Building, Urban Affairs and Spatial Development, Germany</p> <p>Competing Visions for Building Materials Assessment in US Green Building Certification Programs Charles Joseph KIBERT, Professor-Centre Director, University of Florida, United States of America</p> <p>CESBA: Together to a Harmonized Built Environment Assessment Markus BERCHTOLD-DOMIG, Heimateen, Austria</p> <p>LEED CS in Brazil: Discussing the Validity of the Method for the Improvement of Environmental Quality on Buildings Monica Santos SALGADO, Federal University of Rio de Janeiro, Brazil</p>	<p>Session 5.6 Green Construction Technologies (2)</p> <p>Innovative Building Technologies Towards Sustainable Construction – A Comparative LCA and LCC Assessment Alexander PASSER, Assistant Professor, Graz University of Technology, Austria</p> <p>A Peer-to-peer Reviewing Framework for Selecting Construction Material Suppliers Using the Integration of Building Information Modelling and Web-Map Service NGUYEN Thanh-chuong, National Taiwan University, Taiwan</p> <p>Improving the Sustainable Supply Chain of Housing Industrialization with Transaction Costs Considerations Queen K QIAN, OTB Research Institute for the Built Environment, Delft University of Technology, The Netherlands</p> <p>A Research Proposal to Improve the Environmental Performance of the Building Industry, by Increasing the Innovation Activity of Small Contractors Timothy ROSE, Queensland University of Technology, Australia</p> <p>Mongolia's First Cooperative Transformation Attempt on Built Environment through Greening Kindergarten Building Nergui DORJ, Founder and BOD member, Mongolia Green Building Council, Mongolia</p>
<p>Session 5.9 Transforming Green Market - Green Economics (1)</p> <p>Stakeholders View on Commercial Benefits for Energy Neutral Refurbishment of Let Properties Angela GRECO, Delft University of Technology, The Netherlands</p> <p>How a Changing Socioeconomic Context Affects the Demand for High-performance Buildings Clinton ANDREWS, Rutgers University, United States of America</p> <p>How Sustainable Planning Increases Real Estate Property Value Prof. Serge SALAT, President, Urban Morphology and Complex Systems Institute, France</p> <p>Green Lease Insight - Integrated Approach Andrew NICHOLSON, Executive Managing Director, Head of Asset Services, Asia Pacific, CBRE, RICS, Hong Kong SAR</p> <p>Responsible Investing in Green Buildings and Portfolios Ruben LANGBROEK, Head of Asia Pacific, GRESB, Hong Kong SAR</p>	<p>Session 5.10 Zero Energy</p> <p>Achieving Net Zero Carbon: A Case Study of Hong Kong's First Zero Carbon Building Justin LI, Assistant Director - Environmental & Sustainability, Construction Industry Council, Hong Kong SAR</p> <p>Life Cycle Greenhouse Gas Emissions of Material Use in the Living Laboratory Marianne Rose KJENDSETH WIIK, SINTEF, Norway</p> <p>Paradoxical Feasibility of High-rise Zero Carbon Buildings PAN Wei, Associate Professor, The University of Hong Kong, Hong Kong SAR</p> <p>Studies of Energy-Efficient Measures and Building Integrated Photovoltaic Toward Net Zero Energy Building LOU Siwei, City University of Hong Kong, Hong Kong SAR</p> <p>Net Zero Energy Building Policy: Benchmarking Australian Practices Against Asia Pacific Countries Usha IYER-RANIGA, Deputy Head International and Co Lead UN 10YFP SBC Programme, RMIT University, Australia</p>
<p>Session 5.13 Stakeholder Collaboration</p> <p>Green Management by Stakeholder Empowerment - The Hong Kong Housing Authority Experience Ada FUNG, Deputy Director of Housing (Development & Construction), Hong Kong Housing Authority, Government of the HKSAR, Hong Kong SAR</p> <p>CoLaboratoire Montreal: Living Experiments for Climate Change Awareness Carmela CUCUZZELLA, Design and Computation Arts, Concordia University, University Research Chair IDEASBE, L.E.A.P. Canada</p> <p>Putting Regenerative Development into Action: Understanding the Decision-making Process of a 680 Hectares Regenerative Project Dominique HES, Director – Thrive Research Hub, The University of Melbourne, Australia</p> <p>Gamification as A Means to User Involvement in Decision-making Processes for Sustainable Buildings Hanne Tine Ring HANSEN, Sustainability Engineer, Soren Jensen Consulting Engineers, Denmark</p> <p>Accelerating HKIA's Carbon Footprint Reduction through Multi-stakeholder Engagement and its Potential for Multi-tenant Facilities Mike KILBURN, Acting General Manager, Sustainability, Airport Authority Hong Kong, Hong Kong SAR</p>	<p>Session 5.14 - Session Organiser: Sino Group Smart and Digital Transformation for Sustainable Living</p> <p>Session Chair: Jimmy CK TONG Associate & East Asia Energy Skill Leader, Arup, Hong Kong SAR</p> <p>Sino's Smart Initiative Eugene LEUNG, Director, Sino Investment, Hong Kong SAR</p> <p>Artificial Intelligence in Built Environment Samson TAI, CTO, IBM Hong Kong, Hong Kong SAR</p> <p>Smart Eco Home - Project Moses Howard WAI, Managing Director, SRV, Hong Kong SAR</p> <p>Policy, Design, and People: Developing a Sustainable East Asia Vincent CHENG, Director of Building Sustainability, Arup, Hong Kong SAR</p>

<p>Session 5.3 Smart Initiatives in SBE (1)</p> <p>The New Smart Cities Cities Built from Scratch and Old Cities Transformed into Smart Cities. Sustainable Growth Ana Claudia Figueiredo OLIVEIRA, Lisbon Faculty of Architecture, Portugal</p> <p>Enhanced Engineering Services for Electrical & Mechanical System via Integrated Building Management System, Remote Monitoring Unit, and Geographic Information System LEE Che-kit, Electrical and Mechanical Services Department, Government of the HKSAR, Hong Kong SAR</p> <p>Decarbonising the City: Micro Energy Grids Richard WANG, Sustainability Consultant, Arup, Hong Kong SAR</p> <p>A Multi-disciplinary Approach in Developing Sustainable Built Environment: A Case Study in Hong Kong Kowloon East Development Project (KEDP) Schuman LAM, The Hong Kong Polytechnic University, Hong Kong SAR</p> <p>Sy(ener)gies between Mega Event Buildings and the Surrounding Neighbourhoods Simone MAGDOLEN, Munich University of Applied Sciences, Germany</p>	<p>Session 5.4 Deep Renovations - Policies & Standards</p> <p>Small, Beautiful, Yet Difficult: Energy Plus Renovation in Small Social Housing Companies Christian KOCH, Chalmers University of Technology, Sweden</p> <p>Deep Renovation as Tool for Active Protection of Modern Heritage: The Case of Architecture for The Service Sector Claudia CALICE, University of Rome, Italy</p> <p>Future Challenges for Renovation as Experienced by Housing Companies Liane THUVANDER, Chalmers University of Technology, Sweden</p> <p>Integration of Sustainability Analyses into Business models for Energy Renovation of Buildings: A Case Study in Norway Roberta MOSCHETTI, Norwegian University of Science and Technology, Norway</p> <p>The Development and Practice of Existing Buildings Green Retrofitting in China WANG Qingqin, China Academy of Building Research, Mainland China</p>
<p>Session 5.7 Innovations Driving for Greener Policies and Standards - Assessment, Analysis and Modelling (1)</p> <p>European Horizontal Standardized Methods for the Assessment of the Sustainability Aspects of Construction Works Ari ILOMAKI, Senior Adviser, Confederation of Finnish Construction Industries, Finland</p> <p>Life Cycle Energy and GHG Emissions Reductions of Retrofit Options for Existing Dwelling Stock Greg FOLIENSTE, Enterprise Professor, University of Melbourne; Regional Director in Asia-Pacific, iiSBE; Founding Director, nBlue Pty Ltd</p> <p>Renewable Energy Technologies - Economic Analysis Tool (RET-EAT) for Turkey Oguz Kursat KABAKCI, Expert on Energy And Natural Resources, Ministry of Energy And Natural Resources, Turkey</p> <p>Geo-dependent Heat Demand Model of the Swiss Building Stock Stefan SCHNEIDER, University of Geneva, Switzerland</p> <p>Quantitative Impact Assessment of SEAP Measures Implementation on Several Districts in the City of Donostia-San Sebastian Xabat OREGI, Tecnalia Research & Innovation, Spain</p>	<p>Session 5.8 Sustainable Neighbourhoods - Case Study Review (1)</p> <p>Learning from the Lessons of Transit-oriented Development to Improve Urban Planning in China Frederic Daniel DU VERLE, Urban Planner & Designer, Archimedialab, Germany / Mainland China</p> <p>A Green Campus Master Plan - The Chinese University of Hong Kong (CUHK) FUNG Siu-man, Director of Campus Development, The Chinese University of Hong Kong, Hong Kong SAR</p> <p>Stepping Up to the Water-Energy Nexus Challenges at Tai Po Water Treatment Works Jeffrey LAI Siu-ming, Engineer, Water Supplies Department, Government of the HKSAR, Hong Kong SAR</p> <p>Development Strategies for the Green Industry in Pingtung County KUO Wu-wei, Executive officer, Pingtung County Government, Taiwan</p> <p>Strategic Planning for Sustainable Neighbourhoods: A Case Study from Palestine Sameer ABU-EISHEH, Professor of Civil Engineering, An-Najah National University, Palestine</p>
<p>Session 5.11 Processes, Design, Tools and Methodologies in SBE (3)</p> <p>Assessing Sustainable Urban Densification Using Geographic Information Systems M. Augusta HERMIDA, Professor, Universidad de Cuenca, Ecuador</p> <p>Traffic Quality Index to Intersections Considering Fuel Efficiency Marta Monteiro da Costa CRUZ, Professor, Federal University of Espírito Santo, Brazil</p> <p>A Simulation-Based Method to Assess 3D Urban Noise Environment in High-Density Cities Mengdi GUO, The University of Hong Kong, Hong Kong SAR</p> <p>Real Coded Quantum-Inspired Evolutionary Algorithm Applied to Sustainable Building Omar QUISPE POLANCO, Universidad Catolica San Pablo, Arequipa-Peru</p> <p>Sustainable Neighborhood Regeneration: Holistic Decision Support Methodology Supported by a Software Tool Paul MITTERMEIER, Munich University of Applied Science, Germany</p>	<p>Session 5.12 Occupants' Evaluation of Green Buildings</p> <p>Users' Perceptions of Building Performance - An Analysis of the Occupants' Comments Dr George BAIRD, Emeritus Professor of Building Science, Victoria University of Wellington</p> <p>Cooperative Research for High Performance Buildings Herbert Claus LEINDECKER, University of Applied Sciences Upper Austria, Austria</p> <p>The Role of Perceived Social and Physical Environments on Older Adults' Social Interactions Piret VEEROJA, University of Melbourne, Australia</p> <p>Every Breath We Take – Transforming The Health of China's Office Space WU Xuchao, Associate Director of Energy & Sustainability Services, JLL, Mainland China</p> <p>Louie CHENG, President, PureLiving China, Mainland China</p> <p>Thermal Comfort Based Occupancy-driven Building Energy Saving Control Strategies ZHANG Cheng, Assistant Professor, Xi'an Jiaotong-Liverpool University, Mainland China</p>

<p>Session 6.1 Regional Session - Australia, Mainland China, Singapore, South Korea and Philippines</p>	<p>Session 6.2 - Session Organiser: iiSBE SBE Urban Challenge: Assessment Protocol and Case Studies</p>
<p>Session Chair: Greg FOLIENIE Enterprise Professor, University of Melbourne; Regional Director in Asia-Pacific, iiSBE; Founding Director, nBLue Pty Ltd</p>	<p>Session Chair: Andrea MORO President, iiSBE Italia, Italy</p>
<p>SBE Sydney Deo PRASAD, Scientia Professor, CRC for Low Carbon Living</p> <p>SBE Chongqing Andrew BALDWIN, Chongqing University</p> <p>SBE Singapore TAN Tian-chong, Deputy Managing Director, Built Environment Research and Innovation Institute, Building and Construction Authority</p> <p>SBE Seoul SHIN Sungwoo, Division of Architecture and Architectural Engineering at Hanyang University ERICA</p> <p>SBE Manila Fernando GERMAR, Chairman of Scientific Committee</p>	<p>A New SBE Challenge Process for a Transnational Generic Framework at Urban Scale Andrea MORO, President, iiSBE Italia, Italy Mr Nils LARSSON, Executive Director, International Initiative for a Sustainable Built Environment</p> <p>Case Study - Europe: CESBA MED, CESBA Alps, NewTREND and Felicity Projects Andrea MORO, President, iiSBE Italia, Italy Stefania UGLOLA, iiSBE Italia R&D, Italy Paul MITTERMEIER, Munich University of Applied Science, Germany Ken DOOLEY, Granlund Consulting, Finland</p> <p>Case Study - South America: URBENERE Network Cristina Engel ALVAREZ, Professor/Coordinator, Laboratório de Planejamento e Projetos, Universidade Federal do Espírito Santo, Brazil Luis BRAGANÇA, University of Minho, Portugal</p> <p>Case Study - Asia: China's KPIs for Sustainable Cities Case Study - Europe: CESBA MED, CESBA Alps, NewTREND and Felicity Projects Andrea MORO, President, iiSBE Italia, Italy Stefania UGLOLA, iiSBE Italia R&D, Italy Paul MITTERMEIER, Munich University of Applied Science, Germany Ken DOOLEY, Granlund Consulting, Finland</p> <p>Case Study - North America: DISTRICT 2030 Jiri SKOPEK, Managing Director, JLL, Canada; 2030 Districts</p>
<p>Session 6.5 SBE Assessments - Design Processes</p> <p>The Effects of Hong Kong Building Environment Assessment Method (HK-BEAM) Accreditation on Construction and Demolition Waste Minimization CHEN Xi, Department of Real Estate and Construction, The University of Hong Kong, Hong Kong SAR</p> <p>Contribution of Knowledge in Sustainable Building Design in Emerging Markets—A Case of Vietnam CHIH Ying-yi, The Australian National University, Australia</p> <p>Integrated Green Building Assessment Approach for the Next Decade May SIU, Director, Green Mark Department for New Development, Building and Construction Authority of Singapore, Singapore</p> <p>Certification of Sustainability—Case Study Analysis of New German Standard Merten WELSCH, Scientific Associate and Consultant, Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR), Germany</p> <p>Integration of Energy and Material Performance of Buildings: I+E+M Saskia VAN HULTEN, Senior Consultant, W/E Consultants Sustainable Building, The Netherlands</p>	<p>Session 6.6 Green Construction Materials (1)</p> <p>Naturally Ventilated Earth Timber Constructions Andrea KLINGE, Senior Architect, Roswag Architekten, Germany</p> <p>The Study on Durability Testing of Heat-insulation Coating CHEN Chien-fu, National Cheng-Kung University, Taiwan</p> <p>Utilizing Palm Rachis for Eco-Friendly and Flexible Construction in Egypt Eman Atef DARWISH, Demonstrator, Department of Architecture, Ain Shams University-Cairo, Egypt</p> <p>Bamboo for The 21st Century Martin TAM Tin-fong, Founder and CEO, Able Mart Ltd., Hong Kong SAR</p> <p>“Community Empowerment through Mud-concrete Technology” - Sustainable Building Techniques to Revitalise the War Victim Communities in Batticaloa, Sri Lanka Rizna AROOZ, Research Assistant, University of Moratuwa, Sri Lanka</p>
<p>Session 6.9 Transforming Green Market - Green Economics (2)</p> <p>Economic and Sensitivity Analysis of Net Zero Energy Refurbishment of Terraced Houses Angela GRECO, Delft University of Technology, The Netherlands</p> <p>Finding the Value in Deep Energy Retrofits James Scott BREW, Senior Sustainability Architect, Nikken Sekkei, Japan</p> <p>Productive Green Roofs Matthew PRYOR, Associate Professor (Teaching), The University of Hong Kong, Hong Kong SAR</p> <p>Sustainable Buildings – Impacts on Cash Flow and Business Case Analysis Thomas LÜTZKENDORF, Director and Head of Chair, Karlsruhe Institute of Technology, Germany</p> <p>Business for Sustainability: Market Incentives for the Better Thomas SCHLUCK, Senior Scientist, Hochschule Luzern, Switzerland</p>	<p>Session 6.10 Innovative Practices to Transform SBE (1)</p> <p>Comparative Analyses: Urban Quality, Living Standard, Sustainability, Modernist Housing Estates vs 21st Century City Aleksandar TEPAVCEVIC, University Assistant, Graz University of Technology, Austria</p> <p>Build Less and Make Cities Smarter by Unleashing Potential of Vacant Spaces CHAN Lai-kiu, arQstudio Ltd, Hong Kong SAR</p> <p>Green Transformation of Electrical and Mechanical Services Department Headquarters Building Dominic LAU Siu-kei, Senior Building Services Engineer, Electrical and Mechanical Services Department, Government of the HKSAR, Hong Kong SAR</p> <p>Shaping Energetic Neighbourhoods: A Dynamic Approach for a Future Proof Urban Energy Planning Jürgen KNIES, Jade University of Applied Sciences, Germany</p> <p>Building Drives for Behaviour Change - Role Model of Sustainability Tony LAM, Senior Engineer, Arup, Hong Kong SAR</p>
<p>Session 6.13 Place-making - Integrative Design Processes</p> <p>Integrated Design Guidance for the Early Process Phase Günter LÖHNERT, Sol-id-ar Planungswerkstatt, Germany</p> <p>Responsive Design - The Innovative Approach to Create Sustainable Neighbourhoods and Cities Mary CHAN, Dennis Lau & Ng Chun Man Architects and Engineers (HK) Ltd., Hong Kong SAR</p> <p>Conceptualising Sustainable Neighbourhoods Through Collaborative Place-making Solomon ADEWUMI, University of Dundee, United Kingdom</p> <p>A Conceptual Model of Integral Sustainable Design Framework Wilson YIK, Associate (Sustainability), Leigh & Orange Ltd, Hong Kong SAR Matthew LEE, Assistant Project Designer (Sustainability), Leigh & Orange Ltd, Hong Kong SAR</p> <p>From Environmental to Social and Cultural Sustainability Peter YAM, Ronald Lu & Partners (Hong Kong) Ltd., Hong Kong SAR</p>	<p>Session 6.14 - Session Organiser: Hong Kong Green Building Council BEAM Plus Neighbourhood: From Theory to Praxis</p> <p>Session Chair: Larry POON Convener of BEAM Plus Neighbourhood Steering Committee/ Roll-out Taskforce, Hong Kong Green Building Council Ltd., Hong Kong SAR</p> <p>BEAM Plus Neighbourhood: An Introduction Larry POON, Convener of BEAM Plus Neighbourhood Steering Committee/ Roll-out Taskforce, Hong Kong Green Building Council Ltd., Hong Kong SAR</p>

<p>Session 6.3 Smart Initiatives in SBE (2)</p> <p>Transforming Building Information Modelling to Sustainable Building Asset Management LEE Che-kit, Chief Engineer, Electrical and Mechanical Services Department, Government of the HKSAR, Hong Kong SAR CHAN Hor-yin, Senior Engineer, The Electrical and Mechanical Services Department, Government of the HKSAR, Hong Kong SAR</p> <p>Meter Online - Information Drives Behavioural Change to Save Building Energy Simon TSUI, CCE Manager - Commercial Accounts, CLP Power Hong Kong Limited, Hong Kong SAR</p> <p>Energy Efficient Optimal Controls and Smart Energy Management of Buildings and Their Energy Benefits in Real Applications WANG Shengwei, Chair Professor of Building Services Engineering, The Hong Kong Polytechnic University, Hong Kong SAR</p> <p>Interactive Building-user Systems for Positive Behavioral Change by Enhancing E-participation of Building Occupants ZHANG Qianning, Research Scholar, National University of Singapore, Singapore</p> <p>Review on Demand Control Ventilation ZHENG Caidan, Chongqing University, Mainland China</p>	<p>Session 6.4 Deep Renovations - Practices & Performance Review</p> <p>The Verification and Implementation of Practical Renovation for net-ZEB Office Hiroaki TAKAI, Design Department Head Office, Principal Engineer(Environment), Takenaka Corporation, Japan</p> <p>Humid Wall: Causes and Solutions Mohamad KHARSEH, Chalmers University of Technology, Sweden</p> <p>Improving the Market Up-take of Energy Producing Solar Shading: Experiences from Three Cases of Retrofit Paula FEMENIAS, Chalmers University of Technology, Sweden</p> <p>Towards a Holistic Approach to Retrofitting: A Critical Review of State-of-the-art Evaluation Methodologies for Architectural Transformation Stina Rask JENSEN, Aarhus University, Denmark</p> <p>Renovation Needs and Potential for Improved Energy Performance Depending on Ownership – A Location Based Study of Multi-Family Building Stocks in an Urban Context Magnus ÖSTERBRING, Chalmers University of Technology, Sweden</p>
<p>Session 6.7 Innovations Driving for Greener Policies and Standards - Assessment, Analysis and Modelling (2)</p> <p>Full Cost Assessment: A Method to Analyse Sustainability of Buildings Alessandra Akemi YOKOTA, The University of Melbourne, Australia</p> <p>Integrated System for Energy Optimization and Reduction of Building CO₂ Footprint Ernesto Enrique ECHEVERRIA VALIENTE, University of Alcalá, Spain</p> <p>Environmental Indicators for Monitoring the Swedish Building and Real Estate Management Sector Kristina EINARSSON, National Board of Housing, Building and Planning, Sweden</p> <p>Feasibility Study on Implementing Indoor Air Quality (IAQ) Index in Hong Kong MUI Kwok-wai, The Hong Kong Polytechnic University, Hong Kong SAR</p> <p>Integrating Capital Cost with Energy Efficiency – Cost@Work TANG Chee-khoay, CK@Work Sdn Bhd, Malaysia</p>	<p>Session 6.8 Sustainable Neighbourhoods - Case Study Review (2)</p> <p>Urban Regeneration Introduced with Resilient City Concept - A Case Study of Pingtung City in Taiwan CHANG Kuei-feng, Pingtung County Government, Taiwan</p> <p>The District Cooling System at The Kai Tak Development LO Siu-ken, Senior Engineer, Electrical and Mechanical Services Department, Government of the HKSAR, Hong Kong SAR</p> <p>Study on Business Scheme of a Community-wide Decentralized and Self-reliant Energy Network - Allocation of Co-benefits and Evaluation of Socio-environmental & Economic IRR Ryota KUZUKI, Acting General Manager, Energy Strategy Planning Department, Tokyo Gas Co., Ltd., Japan</p> <p>Policy Framework and Instruments for Green Transformation in East Asia Vincent CHENG, Director of Building Sustainability, Arup, Hong Kong SAR</p>
<p>Session 6.11 Processes, Design, Tools and Methodologies in SBE (4)</p> <p>Evidence-Based Approach to Calibration of Whole Building Energy Model Adrian CHONG, Carnegie Mellon University, United States of America; National University of Singapore, Singapore</p> <p>International LCA Data Network - Demonstration Project for an Open International Online Database Structure Hildegund FIGL, IBO Austrian Institute for Building and Ecology, Austria</p> <p>Noise Impact Assessment Study on High-performance of Sound Insolation for Residential Building at Neighboring Taiwan High Speed Rail Station LIN Wei, Associate Professor, Dep. of Interior Design, Hwa Hsia University of Technology, Taiwan</p> <p>The Failures of Initial Commissioning, and its Impacts on Overall Building Performance Madeline Kathleen PARROTT, British Columbia Institute of Technology, Canada</p> <p>Heating and Cooling Loads of a Poultry Shed in Central Coast, NSW, Australia ZHOU Yu, The University of Melbourne, Australia</p>	<p>Session 6.12 Green Buildings - Occupants' Perspectives</p> <p>Sculpting Socially Sustainable Neighbourhoods Franklin YU, Singular Studio Ltd., Hong Kong SAR</p> <p>Are Patterns of Use The Key to Resource Efficiency in Office Buildings? Ken DOOLEY, Granlund Consulting, Finland</p> <p>The Effect of Occupant Behaviour on Real-time Electricity Consumption in Canadian School Spaces Mohamed H. ISSA, University of Manitoba, Canada</p> <p>Deep Green Approach to Create Sustainable Built Environments and Neighbourhoods - Case Study of Lumpini Place Rama 4 - Ratchada Project Panita VARA-URAIKAT, Director of Sustainable Development Department, Wisdom Consulting and Solution Co., Ltd., Thailand</p> <p>M+, Sustainable Design for a Contemporary Art Museum in Hong Kong Mark RICHARDSON, Senior Engineer of Building Sustainability, Arup, Hong Kong SAR</p>
<p>Session 6.14 (Cont'd)</p> <p>Subsidised Sale Flats Development at Fat Tseung Street West Ada FUNG, Deputy Director of Housing (Development & Construction), Hong Kong Housing Authority, Hong Kong SAR</p> <p>Transformation of EMSD Headquarters into a Green Building Antony HO, Arup, Hong Kong SAR</p> <p>West Kowloon Cultural District William CHAN, Chief Operating Officer, West Kowloon Cultural District Authority, Hong Kong SAR</p>	

<p>Session 7.1 Education and Training for Transforming SBE</p> <p>Private Public Partnership Energy Efficiency Assessment Program at Hong Kong Aircraft Engineering Company, Xiamen Facility, China Samuel KWONG, John Swire & Sons HK Ltd, Hong Kong SAR</p> <p>Leveraging the Power of Story to Achieve Greater Sustainability James Scott BREW, Senior Sustainability Architect, Nikken Sekkei, Japan</p> <p>Embedding Sustainability in Higher Education Course Content: An Industry Perspective Lloyd Martin SCOTT, Dublin Institute of Technology, Ireland</p> <p>Importance of Built Heritage for World Sustainable Built Environment Shahid Ahmad RAJPUT, COMSATS Institute of Information Technology, Pakistan</p> <p>Developing A Conceptual Framework for Integrating Project Risk Management and Sustainability Objectives Timothy ROSE, Queensland University of Technology, Australia</p>	<p>Session 7.2 - Session Organiser: iiSBE SBE Buildings Challenge: Assessment Protocol and Case Studies</p> <p>Session Chair: Mr Nils LARSSON, Executive Director, International Initiative for a Sustainable Built Environment</p> <p>General Intro about the Process and the Idea of Predicted vs. Actual Performance and the CanTeam Protocol Gordon SHYMKO, President, G.F. Shymko & Associates Inc., Canada</p> <p>Green and Monitoring in Holiday Inn Express SoHo Hong Kong Antonio CM CHAN, REC Engineering Co., Ltd., Hong Kong SAR</p> <p>The 2014 CanTeam Evaluation of 9 Case Studies Gordon SHYMKO, President, G.F. Shymko & Associates Inc., Canada</p> <p>Current Proposal for New Canadian Work Gordon SHYMKO, President, G.F. Shymko & Associates Inc., Canada</p> <p>UNSW BPE for 50 Dwellings Lan DING, Senior Lecturer, Faculty of Built Environment, University of New South Wales, Australia</p> <p>Panel Discussion</p>
<p>Session 7.5 SBE Assessments - Practices Review</p> <p>Transnational Harmonization of Built Environment Assessment Systems: the CESBA Passport Principle Andrea MORO, President, iiSBE Italia R&D, Italy</p> <p>Generating and Providing Embodied Energy and Global Warming Potential Related Information – Recommendations for Construction Product Manufacturers Angelika HINTERBRANDNER, Graz University of Technology, Austria</p> <p>Discussing Sustainability in Building Construction: The Potential of SBtool for Brazilian Public Bidding in Fiocruz Monica Santos SALGADO, Federal University of Rio de Janeiro, Brazil</p> <p>Assessment Tools for The Sustainability Performance of Building - Development of A Sustainability Assessment Method for Small Residential Buildings in Germany Natalie ESSIG, University of Applied Sciences Munich, Germany</p>	<p>Session 7.6 Green Construction Materials (2)</p> <p>Self-Compacting Clay Concrete: A Sustainable and Innovative Process to Build with Earth Guillaume HABERT, Professor, ETH Zürich, Switzerland</p> <p>Trend of Dynamic Glass in Green Building HY CHIU, Director, Full Treasure, Hong Kong SAR</p> <p>Upgraded Mineral Sand fraction from MSWI Bottom Ash: An Alternative Solution for the Substitution of Natural Aggregates in Concrete Application Jacques Rémy MINANE, IMT Lille-Douai, LGCGE-GCE, France</p> <p>Autonomous Repair in Cementitious Material by Combination of Superabsorbent Polymers and Polypropylene Fibres - A Step towards Sustainable Infrastructure Souradeep GUPTA, National University of Singapore, Singapore</p>
<p>Session 7.9 Transforming Green Market - Supply Chain</p> <p>New Visitors? Small European Companies Entering the Chinese Sustainable Building Market Christian KOCH, Chalmers University of Technology, Sweden</p> <p>Sustainable Electrical and Mechanical Services - Vision with Action CHAN Ming-ye, Senior Engineer / Business Planning, Electrical and Mechanical Services Department, Government of the HKSAR, Hong Kong SAR</p> <p>Project Manager's Role in Sustainable Building Projects: A Case Study in Canada Ricardo Ferreira LEOTO, Architect and Sustainable Building Consultant, Faculté de l'Aménagement, Université de Montréal, Canada</p> <p>A Study on Green Industrial Project Construction Experience ZHANG Wei, Vice President - Engineering & Innovation, Bultar (Shanghai) Inc., Mainland China</p> <p>The Economic Cost-benefit Analysis of Green Building Based on the Low-carbon Economic Policy WAN Shiyu, School of Economics and Management, Beijing Jiaotong University, Mainland China</p>	<p>Session 7.10 Innovative Practices to Transform SBE (2)</p> <p>A Revolutionary Study Commons and University Library Extension, The Chinese University of Hong Kong FUNG Siu-man, Director of Campus Development, The Chinese University of Hong Kong, Hong Kong SAR</p> <p>Nearly Zero-Energy Care Home Design in Cold Climate in China HOU Shan-shan, Research Associate, Cardiff University, United Kingdom</p> <p>Preliminary Study on Natural Ventilation Efficiency in School Stadium by Different Opening Patterns Li Yenyi, Associate Professor, ShuTe University / TSSBE (iiSBE-Taiwan), Taiwan</p> <p>Quantifying and Improving Environmental and Human Sustainability in Remote-Region Health Clinics, Australia Steve BURROUGHS, University of Canberra, Australia</p> <p>Soaring of Urbanisation - Optimised Approaches through Adaptive and Sustainable Masterplanning Antony HO, Associate, Arup, Hong Kong SAR</p>
<p>Session 7.13 Place-making - Practices Review</p> <p>From Icon to Community: Repositioning the Image of the Modern Mega-Tower Ar. Bryant LU, Vice Chairman, Ronald Lu and Partners (Hong Kong) Ltd., Hong Kong SAR</p> <p>Do We Design Our Cities? Eugenio Maria FONTAN YANES, Director – Architect – BIM Implementation, Enzyme Apd, Hong Kong SAR</p> <p>Sustainable Residential Building Developments towards Neighbourhood Level – From a Hong Kong Private Developer Perspective Edward CHAN, Henderson Land Development Co. Ltd., Hong Kong SAR</p> <p>New Exposition of Sustainability – Linking People, Building and Community Gary CHEUNG, Consultant of Building Sustainability, Arup, Hong Kong SAR</p> <p>Sustainable Workplaces in High Density of Urban Areas Ryusuke KOJIO, Architect, Takenaka Corporation, Japan; General Manager, Design, Takenaka Europe GMBH, Germany</p>	<p>Session 7.14 <i>Session details to be announced.</i></p>

<p>Session 7.3 Smart Initiatives in SBE (3)</p> <p>Using Advance Thermodynamics and Online Big Data Analytics to Maximize the Chiller Plant Performance Glen ANDERSON, Vice President, ETC Group, Macau SAR</p> <p>Transforming Data into Action – Building Energy Management System to Actualize a Sustainable Built Environment Jovian CHEUNG Man-chit, Electrical & Mechanical Services Department, Government of the HKSAR, Hong Kong SAR</p> <p>Telecommunications Infrastructure for High Performance Buildings Philip TAI, Telecommunications Manager, Swire Properties Ltd., Hong Kong SAR</p> <p>Using Big Data Analytics and Continuous Monitoring to Increase the Return of Investment (ROI) in Projects for Sustainable Building Performance Rafael NAVARRO, Asia Regional Manager, ETC Group, Macau SAR</p>	<p>Session 7.4 Deep Renovations - Processes & Methodologies</p> <p>Towards a Holistic Methodology in Sustainable Retrofitting: Theory, Implementation and Applications Aliakbar KAMARI, Department of Engineering, Aarhus University, Denmark</p> <p>A Multidimensional Optimisation Approach to Refurbishment Design on a Multi-Building Scale Claudio NÄGELI, Chalmers University of Technology, Sweden</p> <p>Development of Regenerative Design Principles for Building Retrofits William James CRAFT, University of New South Wales, Australia</p> <p>Passive Building: Energetic Refurbishment of a Secondary School Antonio FRATTARI, University of Trento, Italy</p> <p>Factors Affecting High Performance Building Designs in Nigeria's Built Environment: "The Architects Perception" Abubakar Yahaya MUHAMMAD, Lecturer, Abubakar Tafawa Balewa University, Nigeria</p>
<p>Session 7.7 Innovations Driving for Greener Policies and Standards - Smart Initiatives</p> <p>Smart Cities: Selection of Indicators for Vitória Cristina Engel ALVAREZ, Professor/Coordinator, Laboratório de Planejamento e Projetos, Universidade Federal do Espírito Santo, Brazil</p> <p>Establishing Smart Cities for Sustainability: An Analysis of the Japanese Innovation System and Implications for Asia Masaru YARIME, Associate Professor, City University of Hong Kong, Hong Kong SAR</p> <p>PLUSQUA: Potential of Neighbourhoods to Reduce Thermal and Electrical Loads Matthias SULZER, Senior Scientist, Lucerne University of Applied Sciences and Arts, Switzerland</p> <p>Adoption of Smart Initiatives in Developing Anderson Road Quarry Site Towards A Sustainable and Green Living Area Michael LEUNG Chung-lap, Deputy Project Manager (New Territories East) 1, Civil Engineering and Development Department, Government of the HKSAR, Hong Kong SAR</p> <p>Roadmap towards Operational Energy Neutral Sewage Treatment Works Valeria ALVARADO, Civil and Environmental Engineering, The Hong Kong Polytechnic University, Hong Kong SAR</p>	<p>Session 7.8 Sustainable Neighbourhoods - Processes and Application</p> <p>Current Challenges of Urban Energy Planning in A Norwegian Municipality Eirik RESCH, Norwegian University of Science and Technology, Norway</p> <p>Citylab Action: Guiding Sustainable Urban Development Tarja LIND, Licentiate Candidate, KTH Royal Institute of Technology, Sweden; Project Coordinator, Sweden Green Building Council, Sweden</p> <p>The Break-Even Point : Impact of Urban Densities on Value Creation, Infrastructure Costs and Embodied Energy Prof. Serge SALAT, President, Urban Morphology and Complex Systems Institute, France</p> <p>Barriers and Needs for Energy-efficient Refurbishment at District Level Tarja HAKKINEN, Senior Principle Scientist, VTT Technical Research Centre of Finland Ltd., Finland</p> <p>Building Regulations and Urban Policies as Incentives for Application of District Cooling Systems in Singapore SHI Zhongming, Chair of Architecture and Building Systems, ETH Zurich, Switzerland</p>
<p>Session 7.11 Processes, Design, Tools and Methodologies in SBE (5)</p> <p>Measuring Sustainability in Buildings Using Construction Materials Database Based on Life Cycle Information in Turkey Ilker KAHRAMAN, Yaşar University, Turkey</p> <p>When Digital Fabrication Provides Environmental Benefits: Study of Complex Structures Isolda AGUSTI-JUAN, Scientific Assistant, Chair of Sustainable Construction, ETH Zurich, Switzerland</p> <p>Sustainable Building Design for Enhancement of Street Ventilation and Air Quality Improvement Karl AN, The Hong Kong University of Science and Technology; AECOM Environment, Hong Kong SAR</p> <p>Applicability of Maturity Assessment for Sustainable Construction Marco SCHERZ, Scientific Assistant, Graz University of Technology - Institute of Technology and Testing of Building Materials - Working Group for Sustainability Assessment, Austria</p> <p>Development of a Rotatable Outdoor Testbed and the Testing of an Integrated Auto-dimming Lighting and Automated Blind System in the Tropics WAN Man-pun, Energy Research Institute@NTU (ERI@N) Nanyang Technological University, School of Mechanical & Aerospace Engineering Nanyang Technological University, Singapore</p>	<p>Session 7.12 Multi-facet Considerations of Urban Regeneration Policies</p> <p>The Role of Stakeholders in Masterplan Regeneration Decisions Hannah BAKER, University of Cambridge, United Kingdom</p> <p>Effect of Residential Tower Geometries on Urban Wind Environment Ruffina THILAKARATNE, Associate Professor, Chu Hai College of Higher Education, Hong Kong SAR</p> <p>Health Co-benefits of Low Carbon Policies in the Built Environment: An Australian Investigation into Local Government Co-benefits Policies Sardar Masud KARIM, The University of New South Wales, Australia</p> <p>Bai Wan Zhuang, A Beijing Community at The Crossroads - An Analysis About the Sustainable Update of Chinese Old Distinctive Residential Areas WANG Liang, CAUPD, Mainland China</p> <p>Methodology for a Sustainable Urban Regeneration: Urban Cell as Dissemination Unit Miguel AMADO, Instituto Superior Tecnico, Portugal</p>

MAINLAND CHINA SESSIONS

With a population of 1.3 billion, China is one of the world's fastest-growing major economies while the rapid urbanisation creates great challenges on both the sustainable built environment, as well as the health and well-being of people. The four Mainland China Sessions will focus on various aspects addressing the issues on the transformation of existing buildings, challenging technologies of super skyscraper buildings, health and well-being for better places for people, and green finance opportunity for low carbon economy development.



The Comprehensive Scheme on Green Retrofitting and Performance Enhancement of the Existing Buildings in China

Session Organiser:
China Academy of Building Research (CABR)



Turning Green to Gold - State of Green Finance to Drive Sustainable Low-Carbon Urban Development in China

Session Organiser:
Shenzhen Green Building Association and Shenzhen Institute of Building Research (SGBA & IBR)



Design and Construction Challenges of Eco-Skyscrapers in China

Session Organiser:
Shanghai Research Institute of Building Sciences (SRIBS)



The Development Framework and Professional Best Practices of Healthy Buildings in China

Session Organiser:
Chinese Society for Urban Studies - Green Building Research Center (CSUS-GBRC)

REGIONAL SESSIONS

The four Regional Sessions will discuss the intensity and importance of the specific issues in relation to sustainability in the 20 countries which held the SBE Regional Conferences in 2016. Common challenges and differences will be identified, and the significance of current conditions, initiatives and trends will be explored.

The sessions will be presented by the 20 Regional Conference Organisers and chaired by SBE16 Conference Series Co-owners.

Southeast Europe & MENA	Americas & Europe	APAC	Europe
Turkey	Canada	Australia	Czech Republic
Greece	Brazil-Portugal	Korea	Switzerland
Egypt	Netherlands	Singapore	Ireland
United Arab Emirates	Germany	Philippines	Italy
Malta	Estonia	Mainland China	Sweden

EXHIBITION & BUSINESS MATCHING

- To be held alongside the Conference, the exhibition is an effective platform to identify and screen suitable business partners, potential buyers and practitioners to expedite business opportunities!
- Exhibitors range from Government Departments, Overseas Groups, Commercial Companies, Tertiary Institutions and more.



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Standard 9m² Booth with

- Product / Service Showcase Space
- Exhibitor listing in Conference App
- Business Matching service
- and more!

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EXHIBITORS

OPENING CEREMONY

(5 June 2017)



- **Hon. LEUNG Chun-ying**, Chief Executive, Hong Kong Special Administrative Region, and **Dr QIU Baoxing**, Representative of The Ministry of Housing and Urban-Rural Development & Counsellor of Counsellor's Office will be our Guests of Honour of the Opening Ceremony
- Top leaders from the Government and the industry will gather and witness the opening of the global conference, WSBE17 Hong Kong

CLOSING CEREMONY

(7 June 2017)



- **Mr Eric MA**, Secretary for Development, Government of the HKSAR, will be our Guest of Honour of the Closing Ceremony
- The host of the World Sustainable Built Environment Conference 2020 will be announced

NETWORKING LUNCHEON

(5 June 2017)

- To be held on Conference Day 1, the Luncheon is a perfect occasion for delegates to chill out and go around meeting people from 50 countries.



GALA DINNER

(6 June 2017)

- To be held on 6 Jun 2017 at the Renaissance Hong Kong Harbour View Hotel.
- Chief Secretary for Administration of Government of the HKSAR, **Mr Matthew CHEUNG Kin-chung** will be our Guest of Honour.
- Top leaders from the Government, property developers, architects consultancies, and other key industry players will gather and celebrate the achievements of green and sustainable developments around the globe.



INTERNATIONAL YOUTH COMPETITION (IYC)



- IYC invites imaginative ideas, projects and action plans that best demonstrate an innovative interpretation of the Conference theme and various discussion areas.
- Around 100 teams of young innovators from 25 countries have submitted their finest works to showcase their aspirations to the greener future.



Prof. Thomas AUER
Managing Director, Transsolar; Professor, Building Technology and Climate Responsive Design, TUM



Prof. George BAIRD
Emeritus Professor of Building Science, School of Architecture, Victoria University of Wellington



Prof. Greg FOLIENIE
Enterprise Professor, University of Melbourne, Regional Director in Asia-Pacific, iiSBE, Founding Director, nBLue Pty Ltd.



Prof. Peter GUTHRIE
Director, Centre for Sustainable Development, University of Cambridge



Ms Deborah KUH
Head of Greening, Landscape and Tree Management Section, Development Bureau, Government of the HKSAR



Ms Christine LOH
Under Secretary for the Environment, Government of the HKSAR



Prof. Serge SALAT
President, Urban Morphology and Complex Systems Institute



Prof. Arno SCHLUETER
Professor, Architecture and Building Systems ETH Zurich; Principal Investigator, Future Cities Laboratory, Singapore ETH Centre

After multiple rounds of judging and deliberation, the juries have selected 8 Shortlisted Teams. The 8 teams will present on 6 June (Day 2 afternoon) to impress the juries and receive their final awards.

Here are the snapshots of the shortlisted entries. They will be displayed at WSBE17 Hong Kong Exhibition. Check out their brilliant ideas at WSBE17 Hong Kong!



Adaptive Integrated Module 🇧🇷
"Adaptive environment is one of the development keys to harmonic and successful society... modular architecture is the future."



C3 Farming 🇺🇸
"...A comprehensive urban vertical farming community fulfills the target of sustainable neighborhood, in terms of ecological cycle, economy cycle and social cycle (C3)."



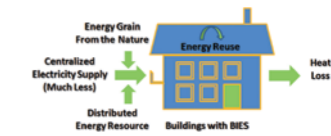
Kowloon City Castle 2.0 🇭🇰
"...The building structure was designed with flexibility for occupants' use, while recreational areas were bridged to connect people; imitating the rooftop in Kowloon City Castle... We want to create a neighborhood where people enjoy staying here."



Long for Sustainability 🇨🇦 🇨🇳 🇪🇺
"Our proposal includes a footbridge network which integrates different renewable energy systems to help reach energy-saving target in Hong Kong as well as to demonstrate an efficient water management system..."



Team: Preserve and Update 🇨🇳
"After we looked into ancient area in Suzhou... We want to transfer the built area by using passive-form energy efficiency methods... Local characteristic is also taken into consideration!"



The Application of Building Integrated Energy System in Hong Kong: SOFC-Based Multi-Generation Using Bio-gas from Waste 🇨🇳 🇭🇰
"Even though the biogas has to be complemented with town gas as input fuels, the reduction of organic waste being disposed to landfills represents an interesting option for Hong Kong as a city with limited space."



The Green - Blue City - Amazon Referent 🇧🇷
"Being a project that is in immediate contact between three rivers and the city, it can be seen from an essentially landscape and environmental angle for a new Amazon Referent and Green-Blue City"



Urban Framework 🇩🇪
"The fastest urban growth happens mostly in the global south, where many countries lack resources to counteract the negative side-effects. We attempt to simplify this complexity of planning."

Find out more:
www.wsbe17hongkong.hk/iyc

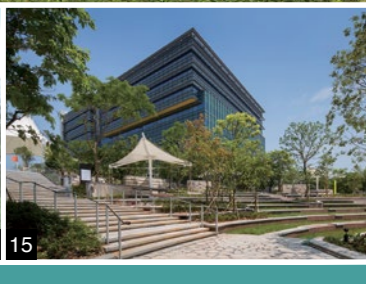
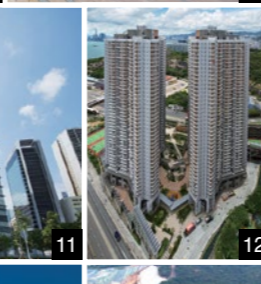
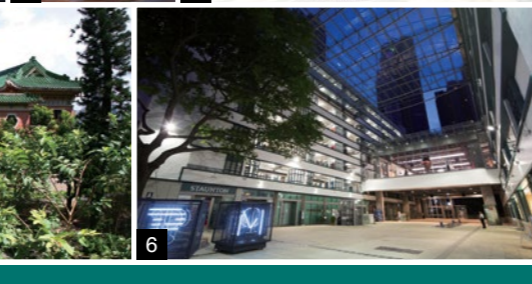
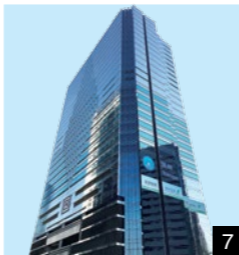
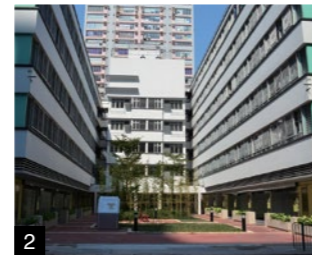
Green Building Technical Visit (8 June 2017)

Tentative Time: 09:00-18:00 Fee: HK\$650 per tour

Join the specially designed local green building tours to understand how signature green building projects could integrate and perform well in the unique high-rise high-density built environment of Hong Kong. You could obtain first-hand experience on the latest eco-friendly technologies and features implemented, as well as hear about their behind-the-scene stories. Pick one of the routes (Hong Kong Island / Kowloon / New Territories) for your exploration on 8 June 2017.

Core Technical Visit Location

- CIC ZCB**
First zero carbon building in Hong Kong



TOUR 1: Hong Kong Island Tour (2 routes)

- Chai Wan Factory Estate conversion**
Public Housing Estate, converted from H-shaped Chai Wan Factory Building
- Holiday Inn Express Hong Kong SoHo**
First high rise building (hotel) achieved 4 platinum or equivalent of green awards – BEAM Plus, LEED, BCA Green Mark and Green Building Design Label (3-Star)
- Hysan Place**
BEAM Plus Final Platinum project and first LEED Platinum certified composite vertical mall/ office in Greater China
- King Yin Lei**
Rare surviving example of the Chinese Renaissance style that reflects the excellence of design and construction in both Chinese and Western architecture in Hong Kong
- PMQ**
Transformed from residential units built in 1951 into design studios, shops and offices for creative enterprises and places for organising exhibits
- Towngas Headquarters**
First non-residential building in Hong Kong achieved the highest level of recognition under the BEAM Plus Final Assessment for existing buildings

TOUR 2: Kowloon Tour (2 routes)

- Kai Tak Development on 3 Muk Chui Street**
Achieved BEAM Plus Provisional Platinum rating and focused on building community, sustainability, and modest yet practical design
- Electrical and Mechanical Services Department Headquarters**
Showcase of sustainable development through renovation of the old structure of a former air cargo terminal building into an office-cum-workshop building
- Energizing Kowloon East Office**
Hong Kong's first low carbon temporary office with the use of a raft of integrated green building technologies and features
- Trade and Industry Tower**
Adopted series of renewable energy technologies
- Yau Lai Estate Phase 5**
Sustainable public housing estate

TOUR 3: New Territories Tour (2 routes)

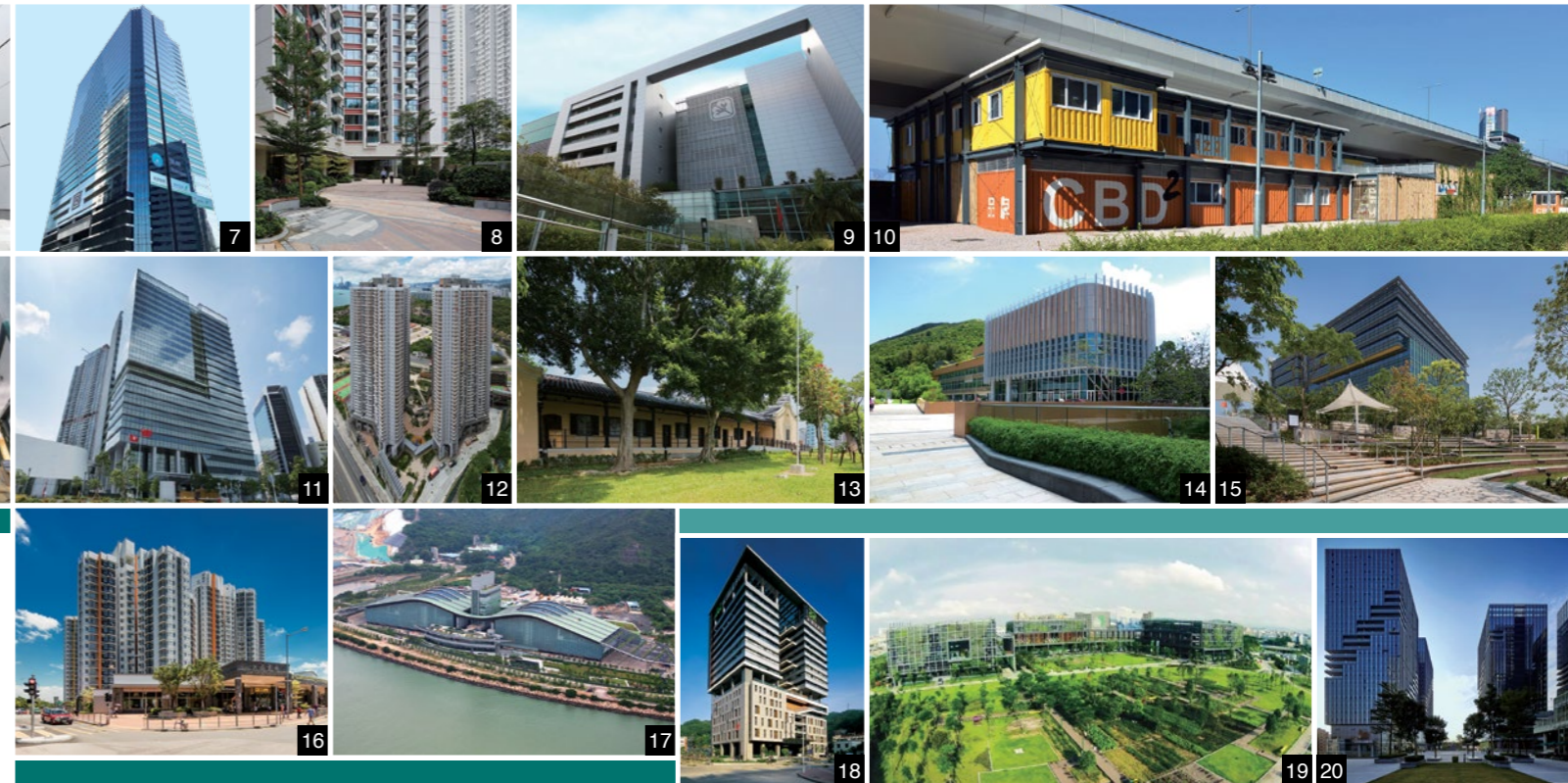
- Green Hub (Old Tai Po Police Station)**
Recognised with an Honourable Mention in the 2016 UNESCO Asia-Pacific Awards for Cultural Heritage Conservation in 2016
- Hang Seng Management College**
Post Secondary College, environmentally responsive and infused innovative environmental ideas in the building design
- Hong Kong Science Park - Phase 3a+3b & Green 18**
"Living laboratory" where the buildings are designed on sustainability principles
- Hung Fuk Estate**
One of the first large public housing developments in Hung Shui Kiu, Hong Kong which received the Grand Award (Residential) in Green Building Award 2016
- T · PARK**
Futuristic waste treatment facility that fires up Hong Kong's "waste-to-energy" and resource recovery ambitions

The coexistence of urban area and natural environment is one of the uniqueness and challenges of the development of Southern China area. Join one of our tours on 9 June 2017 to either enjoy the beauty of Hong Kong's natural environment, or experience mainland China's fast-paced green building development in Shenzhen, the city conveniently located right next to Hong Kong.

Shenzhen Tour (9 June 2017)

Tentative Time: 09:00-18:00 Fee: HK\$980 per tour

- Shenzhen Institute of Building Research (IBR)**
A National 3-Star green building incorporating more than 40 sustainable technologies
- Shenzhen International Low Carbon City**
A pioneer in forming a climate-friendly city
- Tianan Cloud Park**
An industry community focusing on cloud computing, networking, smart grid and other new generation information technologies



Hong Kong Eco Tour (9 June 2017)

Tentative Time: 09:00-18:00 Fee: HK\$980 per tour

- Hong Kong Geopark Boat Tour**
Get on a chartered boat for an cruise tour around the Sai Kung harbour and the islands around, where spectacular landforms and historical village can be explored
- Lai Chi Wo Eco and Cultural Tour**
A traditional Hakka village established as early as 1670s and being revitalised since 2013



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Don't miss the opportunity to create brand awareness and stand out from the crowd in front of the global green building community. A number of different packages are available to meet your marketing and promotional needs. Please contact us at +852 3468 7670 for more information.

Reasons to Sponsor



Reach Your Target Audience

Around 1,800 top green building advocates, policy-makers, industry practitioners and academics from all over the world will gather at WSBE17 Hong Kong. WSBE17 Hong Kong offers ample networking and relationship building opportunities in different occasions:



Build Brand Awareness

Top-notch industry professionals from 50 countries will gather at WSBE17 Hong Kong. Your presence at WSBE17 Hong Kong is a golden opportunity to further enhance brand awareness and increase your profile visibility locally and globally.



Explore Fast-growing Asian Market

Hong Kong is a regional hub for international business and a major city in China, and thus a perfect location to bring your products and services into the emerging Asia, especially mainland China market. Moreover, there will be sessions focusing on this driving engine of sustainability featuring high level speakers, which set to provide valuable insight into the trend of sustainable development of the region.

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Silver Sponsors



Parallel Session Organisers



International Youth (IYC) Sponsor



Green Building Tour Sponsor



Volunteers' T-shirt Sponsor



Registration Form (After completion of the form, please submit to registration@wsbe17hongkong.hk.)

Registrants' Information

Title: Mr Ms Mrs Ir Prof. Dr Last Name: _____ First Name: _____

Job Position: _____ Organisation: _____

Email: _____ Phone No.: _____

Memberships

Please check the appropriate box below:

CIC Member HKGBC Member Supporting Organisation Member Non-Member BEAM Pro BEAM Affiliate None

HKGBC Membership Number: _____ BEAM Pro / BEAM Affiliate Number: _____

Contact Person

Title: Mr Ms Mrs Ir Prof. Dr Last Name: _____ First Name: _____

Job Position: _____ Organisation: _____

Email: _____ Phone No.: _____

Additional Information

What is your organisation's primary industry sector? _____

What is your primary job function? _____

How did you hear about WSBE17 Hong Kong? _____

Would you like to receive information on Business Matching opportunities for WSBE17 Hong Kong? _____

Would you want to appear on the official list of participants and other conference marketing collaterals? _____

Conference Package

	Early Bird Rate (in HK\$) <small>(on or before 30 Apr 2017)</small>	Regular Rate (in HK\$)
<input type="checkbox"/> 3-day Standard Package - Admission to 3-day Conference & Exhibition - Day 1 Networking Luncheon - Coffee Breaks - Conference Kit	\$4,800	\$5,800
<input type="checkbox"/> Day 2 Lunch		\$400
<input type="checkbox"/> Day 3 Lunch		\$400
<input type="checkbox"/> Gala Dinner	\$2,200 (per pax)	\$2,500 (per pax)
Total Fee	\$	

Meal Preference

Please indicate your meal preference.

General Vegetarian Halal No beef Others - Please specify: _____

Payment

Please select your payment options below:

<input type="checkbox"/> By Cheque (For Local Delegates Only): Please make the crossed cheque payable to Hong Kong Green Building Council Limited and completed the registration form, and send to the address below. Hong Kong Green Building Council Limited 1/F, Jockey Club Environmental Building, 77 Tat Chee Avenue, Kowloon Tong, Hong Kong Attention: World Sustainable Built Environment Conference 2017 Hong Kong	<input type="checkbox"/> By Bank Transfer: Please remit your payment to the following account and send your copy of bank transfer record with the registration form to registration@wsbe17hongkong.hk. Account Name: Hong Kong Green Building Council Limited Account No: 808-768949-292 Bank Name: Hong Kong and Shanghai Banking Corporation Limited (HSBC) Bank Address: 1 Queen's Road Central, Hong Kong Swift Code: HSBCHKHCHK
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For General Enquiries Tel: +852 3468 7670

For online registration, please visit: www.wsbe17hongkong.hk



REGISTER NOW