



Sustainable Built **Environment Conference** 

**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



Organisers

















## **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 2002 2005 2008 2011 2014 Barcelona



## **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 **over 55 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 55+ countries











### **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

#### **Speakers Session Chair**



Mr Curt GARRIGAN

Mr WONG Kam-sing Ms Christiana FIGUERES Ms Jennifer LAYKE







Mr Gregor HERDA



Mr John DULAC



Mr Nils LARSSON





Mr Roland HUNZIKER



Ms Christine LOH

#### Roundtable 1 -**Emerging Perspectives for Transforming the Build Environment**

### **Session Chair**



Prof. Thomas LÜTZKENDORF



**Speakers** 

Ar. TAI Lee-siang



Prof. WANG Youwei China Green Building Council



Prof. Serge SALAT



Prof. Arno SCHLUETER Professor, Architecture and Building Systems ETH Zurich;



Ar. Bryant LU Vice Chairman, Ronald Lu and Partners

#### Roundtable 2 -Leadership Driving for the Sustainable Built Environment

#### **Session Chair**



Ms Christine LOH Government of the HKSAR



**Speakers** 

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



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



Prof. Greg FOLIENTE



Mr TAN Tian-chong Enterprise Protesson,
University of Melbourne;
Regional Director in Asia-Pacific, iiSBE;
and Innovation Institute,
and Innovation Institute,
Building and Construction Authority



Mr Lincoln LEONG



# CONFERENCE PROGRAMME

## **Day 1 • 5 June 2017** (Mon)

08:00 - 09:00	Registration				
09:00 - 10:00	Opening Ceremony Welcome Remark Ir Conrad WONG, Chairman, WSBE17 Hong & Opening Remark Hon. LEUNG Chun-ying, Chief Executive, Hor Dr QIU Baoxing, Representative of The Ministr Office of the State Council of the PRC	ng Kong Spec		Counsellor's	
10:00 - 10:30 Convention Hall	Keynote 1: Mr Matthew CHEUNG Kin-chung, Chief Secretary for Administration, Government of the HKSAR				
10:30 - 11:00 Convention Hall	Keynote 2: Mr SU Yunshan, Director-General, Ministry of Housing and Urban-Rural Developm		of Science & Technology and Energy Saving on Republic of China	Buildings,	
11:00 - 11:20	Coffee Break				
11:20 - 11:50 Convention Hall	Keynote 3: Ms Christiana FIGUERES, Vice-chair, Global Covenant of Mayors for Climate & Energy				
11:50 - 12:00 Convention Hall	Platinum Sponsor's Sharing - Mr Sean CHIAO, President, Asia Pacific, AECOM				
12:00 - 13:30	Networking Luncheon (Grand Hall, Level 3, Hong Kong Convention and Exhibition Centre) For registered guests only				
13:30 - 15:00	Parallel Session 1				
		Venue		Venue	
	Mainland China Session - The Comprehensive Scheme on Green Retrofitting and Performance Enhancement of Existing Buildings in China	Level 1 - Convention Hall	Regional Session - Czech Republic, Italy,     Sweden and Switzerland	Level 1 - Theatre 1	
	1.3 Advanced Building Elements	Level 1 - Theatre 2	Practices Review of High-Performance Green Buildings	Level 2 - S221	
	1.5 SBE Assessments - Green Neighbourhoods (1)	Level 4 - S428	Innovations Driving for Greener Policies and Standards - Microclimate	Level 2 - S223	
	Vision-led Sustainable Neighborhoods: Myths and Musts	Level 2 - S224 & 225	1.8 Innovations for Occupant Wellbeing (1)	Level 4 - S426 & 427	
	Practices & Methodologies for Green Building Management (1)	Level 2 - S228	1.10 Green Infrastructure in SBE - Hong Kong     Cases	Level 4 - S423 & 424	
	1.11 Processes, Design, Tools and Methodologies in SBE (1)	Level 4 - S421	1.12 Regenerating Urban Space in Neighbourhoods	Level 4 - S425	
	1.13 Healthy and Sustainable Building for Resilient Future	Level 2 - S226 & 227			
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#### 15:20 - 16:20

#### Roundtable 1: Emerging Perspectives for Transforming the Build Environment

#### Convention Hall

#### 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, 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

Parallel Session 2				
		Venue		Venue
2.1	Mainland China Session - Green Building Design and Technological Challenges of Eco Skyscraper in China	Level 1 - Convention Hall	L.E riogional coccion. rankoy, arccoc, mana and	Level 1 - Theatre 1
2.3	Advanced Building Systems	Level 1 - Theatre 2	zi i didice ici i iigii i diletinanee di con Zananige	Level 2 - S221
2.5	SBE Assessments - Green Neighbourhoods (2)	Level 2 - S222	2.0 Innovations Briving for Growner Foliolog and	Level 2 - S223
2.7	Deep Energy Saving and Other Innovative Green Measures for Commercial Buildings in Hong Kong, Mainland China and Overseas	Level 2 - S224 & 225	2.8 Innovations for Occupant Wellbeing (2)	Level 4 - S426 & 427
2.9	Practices & Methodologies for Green Building Management (2)	Level 2 - S228	2.10 Transforming CD2 Fractions Energy	Level 4 - S423 & 424
2.11	Processes, Design, Tools and Methodologies in SBE (2)	Level 4 - S421	2.12 Processes of Urban Regeneration	Level 4 - S425
2.13	Powering Up Smart City	Level 2 - S226 & 227	of Green-Public Procurement Based on the	Level 4 - S428

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## **Day 2 • 6 June 2017** (Tue)

08:00 - 09:00	Registration					
09:00 - 11:50	Plenary Session on Climate Change and Sustainable Development					
Convention Hall	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 & 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  Mr Roland HUNZIKER, Director, Sustainable Buildings & Cities, World Business Council for Sustainable Development  Ms Christine LOH, Under Secretary for the Environment, Government of the HKSAR					
1:50 - 12:00 Convention Hall	Platinum Sponsor's Sharing - Dr Raymond YAU, General Manager, Technical Services & Sustainable Development, Swire Properties Ltd.					
12:00 - 13:30	Lunch Break (Cafe Renaissance, M/F, Renaissance Harbour View Hotel) For registered guests only					
3:30 - 15:00	Parallel Session 3					
		Venue		Venue		
	3.1 Mainland China Session - Turning Green to Gold – State of Green Finance to Drive Sustainable Low-Carbon Urban Development in China	Level 1 - Convention Hall	3.2 International Youth Competition (1)	Level 1 - Theatre 1		
	3.3 Advanced Building Systems - Energy Generation (1)	Level 1 - Theatre 2	3.4 Policies for High-Performance Green Buildings (2)	Level 2 - S221		
	3.5 Performance Review of Green Buildings (1)	Level 2 - S222	3.6 Innovations Driving for Greener Policies and Standards - Practices Review	Level 2 - S223		
	3.7 High Performance Transportation Hubs: Their Critical Role and Requirements?	Level 2 - S224 & 225	3.8 Innovative Practices for Occupant Wellbeing - Bioclimatic Design	Level 4 - S426 & 427		
	3.9 Practices & Methodologies for Green Building Management (3)	Level 2 - S228	3.10 Transforming SBE Practices - Energy Management (2)	Level 4 - S425		
	3.11 BIM for Sustainability (1)	Level 4 - S421	3.12 Emerging Practices in Sustainable Built Environment	Level 4 - S423 & 424		
	3.13 Community Empowerment (1)	Level 2 - S226 & 227	3.14 Environmentally Responsive Buildings and Human Interactions	Level 4 - S428		
15:00 - 15:20	Coffee Break					
5:20 - 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					
	Mr Douglas WOO, Chairman & Managing Dire Prof. Greg FOLIENTE, Enterprise Professor, U Director, nBLue Pty Ltd.	ector, Wheelo Jniversity of Moor, Built Environ	Melbourne; Regional Director in Asia-Pacific, iiSB onment Research and Innovation Institute, Buildin	E; Founding		

16:30 - 18:00	Parallel Session 4				
		Venue		Venue	
	4.1 Mainland China Session - The Development Framework and Professional Best Practices of Healthy Buildings in China	Level 1 - Convention Hall	4.2 International Youth Competition (2)	Level 1 - Theatre 1	
	4.3 Advanced Building Systems - Energy Generation (2)	Level 1 - Theatre 2	4.4 Processes of High-Performance Green Buildings	Level 2 - S221	
	4.5 Performance Review of Green Buildings (2)	Level 2 - S222	4.6 Green Construction Technologies (1)	Level 2 - S223	
	4.7 The Secret Ingredients of Sustainable Real Estate Development	Level 2 - S224 & 225	4.8 Innovative Biophilic Design for Wellbeing	Level 4 - S426 & 427	
	4.9 A Collaborative Approach in Delivering Low Carbon Living	Level 2 - S228	4.10 Transforming SBE Practices - Energy Management (3)	Level 4 - S425	
	4.11 BIM for Sustainability (2)	Level 4 - S421	4.12 Healthy Building, Human Comfort & Wellbeing	Level 4 - S423 & 424	
	4.13 Community Empowerment (2)	Level 2 - S226 & 227	4.14 PolyU Green Deck: A Catalyst for a Green and Vibrant Community	Level 4 - S428	
18:30 - 19:00	Pre-Dinner Cocktail	Venue: Concord and Oasis Room, Level 8, Renaissance Hong Kong Harbo View Hotel, 1 Harbour Road, Wanchai, Hong Kong (For registered guests only)			
19:00 - 22:00	Gala Dinner			Harbour	

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## CONFERENCE PROGRAMME

## **Day 3 • 7 June 2017** (Wed)

08:00 - 09:00	Registration				
09:00 - 09:30 Convention Hall	Keynote 4: Prof. Peter GUTHRIE, Director, Centre for Sustainable Development, University of Cambridge				
09:30 - 10:00 Convention Hall	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				
		Venue		Venue	
	5.1 Regional Session - Canada, Brazil-Portugal, The Netherlands, Germany and Tallinn- Helsinki	Level 1 - Convention Hall	5.2 High Performance Buildings and Sustainable Neighbourhoods in Sweden	Level 1 - Theatre 1	
	5.3 Smart Initiatives in SBE (1)	Level 1 - Theatre 2	5.4 Deep Renovations - Policies & Standards	Level 2 - S221	
	5.5 SBE Assessments - Green Building Policies	Level 2 - S222	5.6 Green Construction Technologies (2)	Level 2 - S224 & 225	
	5.7 Innovations Driving for Greener Policies and Standards - Assessment, Analysis and Modelling (1)	Level 2 - S223	5.8 Sustainable Neighbourhoods - Case Study Review (1)	Level 4 - S426 & 427	
	5.9 Transforming Green Market - Green Economics (1)	Level 2 - S228	5.10 Zero Energy	Level 4 - S423 & 424	
	5.11 Processes, Design, Tools and Methodologies in SBE (3)	Level 4 - S421	5.12 Occupants' Evaluation of Green Buildings	Level 4 - S425	
	5.13 Stakeholder Collaboration	Level 2 - S226 & 227	5.14 Smart and Digital Transformation for Sustainable Living	Level 4 - S428	
12:00 - 13:30	Lunch Break (Cafe Renaissance, M/F, Renaiss For registered guests only	ance Harboui	r View Hotel)		
13:30 - 15:00 Parallel Session 6					
		Venue		Venue	
	Regional Session - Australia, Mainland China,     Singapore, South Korea and Philippines	Level 1 - Convention Hall	SBE Urban Challenge: Assessment Protocol and Case Studies	Level 1 - Theatre 1	
	6.3 Smart Initiatives in SBE (2)	Level 1 - Theatre 2	6.4 Deep Renovations - Practices & Performance Review	Level 2 - S221	
	6.5 SBE Assessments - Design Processes	Level 2 - S222	6.6 Green Construction Materials (1)	Level 2 - S224 & 225	
	6.7 Innovations Driving for Greener Policies and Standards - Assessment, Analysis and Modelling (2)	Level 2 - S223	6.8 Sustainable Neighbourhoods - Case Study Review (2)	Level 4 - S426 & 427	
	6.9 Transforming Green Market - Green Economics (2)	Level 2 - S228	6.10 Innovative Practices to Transform SBE (1)	Level 4 - S423 & 424	
	6.11 Processes, Design, Tools and Methodologies in SBE (4)	Level 4 - S421	6.12 Green Buildings - Occupants' Perspectives	Level 4 - S425	
	6.13 Place-making - Integrative Design Processes	Level 2 - S226 & 227	6.14 BEAM Plus Neighbourhood: From Theory to Praxis	Level 4 - S428	
15:00 - 15:10	Coffee Break				

15:10 - 16:40	Parallel Session 7				
		Venue		Venue	
	7.1 Education and Training for Transforming SBE	Level 4 - S428	7.2 SBE Buildings Challenge: Assessment Protocol and Case Studies	Level 1 - Theatre 1	
	7.3 Smart Initiatives in SBE (3)	Level 1 - Theatre 2	7.4 Deep Renovations - Processes & Methodologies	Level 2 - S221	
	7.5 SBE Assessments - Practices Review	Level 2 - S222	7.6 Green Construction Materials (2)	Level 2 - S224 & 225	
	7.7 Innovations Driving for Greener Policies and Standards - Smart Initiatives	Level 2 - S223	7.8 Sustainable Neighbourhoods - Processes and Application	Level 4 - S426 & 427	
	7.9 Transforming Green Market - Supply Chain	Level 2 - S228	7.10 Innovative Practices to Transform SBE (2)	Level 4 - S423 & 424	
	7.11 Processes, Design, Tools and Methodologies in SBE (5)	Level 4 - S421	7.12 Multi-facet Considerations of Urban Regeneration Policies	Level 4 - S425	
	7.13 Place-making - Practices Review	Level 2 - S226 & 227			
16:50 - 17:20 Convention Hall	Keynote 6: Dr Raymond COLE, Professor, So University of British Columbia	chool of Archit	ecture and Landscape Architecture,		
17:20 - 18:00 Convention Hall	Closing Ceremony  Speech by Mr Eric MA, Secretary for Develor Presentation of International Youth Competit Announcement of Host of WSBE2020 by Mr Closing Remark by Ir Conrad WONG, Chair	ion Awards Nils LARSS	ON, Representative of SBE Co-owners		

#### Day 4 & 5 • 8 - 9 June 2017 (Thu-Fri)

Green Building Technical Visits & Eco Tours

Remark: The Organisers reserve the right to update or change the programme content, session and paper allocation as well as venue without prior notice.

Speakers and delgates are recommended to check constantly the Conference App to observe the latest programme and venue.

## Day 1 • 5 June 2017 (Mon) • Parallel Session 1 • 13:30 - 15:00

Session 1.1 - Session Organiser: China Academy of Building Research Mainland China Session - The Comprehensive Scheme on Green Retrofitting and Performance Enhancement of Existing Buildings in China Level 1 - Convention Hall	Session 1.2 Regional Session - Czech Republic, Italy, Sweden and Switzerland Level 1 - Theatre 1
Session Chair: YIN Bo Director, Division of Science and Technology, China Academy of Building Research	Session Chair: François BAILLON  Board member, SBE series; Senior Adviser, FIDIC; Treasurer, Business and Climate Summit Association; Founder, Ideagrama Consultant
The Roadmap on the Development of Comprehensive Scheme on Green Retrofitting and Performance Enhancement of Existing Buildings in China YIN Bo, Director, Division of Science and Technology, China Academy of Building Research The Appropriate Technologies and Practical Case Study on Green Retrofitting the Residential Dwellings in the Severe Cold Climatic Zone in China JIANG Yiqiang, Professor, School of Municipal and Environmental Engineering, Harbin Institute of Technology  The Appropriate Technologies and Case Studies on Green Retrofitting the Healthcare Facilities in China  DI Yanqiang, Head of Division, Division of Construction Technologies, China Building Technique Group Co., Ltd.  The Case Studies and Technology Advancements on Green Retrofitting the Office Buildings in China  ZHAO Li, Deputy Head, Division of Research and Development, China Academy of Building Research  The Study of Energy Efficiency and Retro-Commissioning for Existing Large-scale Public Buildings  ZHU Neng, Professor, School of Environmental Science and Engineering, Tianjin University	SBE16 Prague Antonin LUPISEK, Head of Department, Architecture and the Environment, Czech Technical University, Czech Republic SBE16 Torino Andrea MORO, President, iiSBE Italia, Italy SBE16 Malmö Roland ZINKERNAGEL, Lund University, Sweden SBE16 Zurich Guillaume HABERT, Professor, ETH Zurich, Switzerland
Session 1.5 SBE Assessments - Green Neighbourhoods (1) Level 4 - S428	Session 1.6 Innovations Driving for Greener Policies and Standards - Microclimate Level 2 - S223
Session Chair: John NG Chairperson, BEAM Society Ltd.; Honorary Professor, Department of Urban Planning and Design, University of Hong Kong, Hong Kong SAR	Session Chair: Otto POON Chairman, ATAL Engineering Ltd., Hong Kong SAR
LEED Certification and the New Standard of Sustainable Construction in Colombia Andres PELAEZ, Architect, Universidad Pontificia Bolivariana, Colombia Comparison Study of China's Eco-City Key Performance Indicator Systems DENG Wu, Assistant Professor, University of Nottingham Ningbo China, Mainland China 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 Reducing He Impacts of the Built Environment on the Environment through the Integration of Socio-economic Indicators in Certification Standards Francesco CAPPAI, Civil Engineer, GRIDD-ÉTS École de technologie supérieure, Canada 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	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 Building Envelopes and Their Impact on Our Urban Thermal Environment MAING Minjung, The University of Hong Kong, Hong Kong SAR Urban Geometry and Wind Simulation Studies for Comfort in Bangkok Street Canyon Pattaranan TAKKANON, Professor, Kasetsart University, Thailand 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 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

Session 1.3 Advanced Building Elements Level 1 - Theatre 2	Session 1.4 Practices Review of High-Performance Green Buildings Level 2 - S221
Session Chair: Jian-lei NIU Chair Professor of Building Environment and Energy, Associate Head of Department, and Director - Research Centre for Building Environmental Engineering Department of Building Services Engineering, The Hong Kong Polytechnic University; Editor-in-chief, Energy and Buildings Journal, Hong Kong SAR	Session Chair: Phil JONES  Chair of Architectural Science, Welsh School of Architecture, Cardiff University, United Kingdom; Visiting Research Professor, Faculty of Architecture, University of Hong Kong, Hong Kong SAR
Filter Facade Ferdinand OSWALD, Institute of Architecture Technology, Graz University of Technology, Austria 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 Climate-Adaptive and Optimized Building Envelope Designs in East Asia Kevin WAN, Engineer, Arup, Hong Kong SAR Folded Cardboard Sandwiches for Load-bearing Architectural Components Stephan SCHÜTZ, Research Assistant, Architect, Bauhaus-Universität Weimar, Germany Multistorey Frame System for Energy Efficient Buildings Vlastimil BILEK, ZPSV a.s., Uhersky Ostroh, Czech Republic	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 Insights into Green Hotels: Case Studies Duygu ERTEN, Principal, TURKECO Consulting, Turkey 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 An Elemental Approach for Predicting Embodied Carbon of Office Buildings Srinath PERERA, Professor of Built Environment & Construction Management, Western Sydney University, Australia Exploring Risks and Rewards Associated with High Performance Manufactured Buildings Karlson Charles HARGROVES, Senior Research Fellow, Curtin University, Australia
Session 1.7 - Session Organiser: AECOM Vision-led Sustainable Neighborhoods: Myths and Musts Level 2 - S224 & 225	Session 1.8 Innovations for Occupant Wellbeing (1) Level 4 - \$426 & 427
Session Chair: WONG Chi-chung Executive Vice President, Asia; Global Head, Chinese Overseas Investment (COI) Program, AECOM, Hong Kong SAR	Session Chair: Tony IP Deputy Director of Sustainable Design, Ronald Lu & Partners, Hong Kong SAR
Albert KB CHAN, Director of Development Planning & Design, Shui On Land Belinda YUEN, Professorial Fellow and Research Director, Lee Kuan Yew Centre for nnovative Cities, Singapore University of Technology and Design, Singapore Claire BONHAM-CARTER, Principal and Director of Sustainable Development, Design and Planning, AECOM, United States of America Raymond LEE, Director of Planning, Planning Department, Government of the HKSAR	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 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 Outdoor Lighting Quality and Glare Rating Evaluation of Night-time Community Parks KUO Poyen, Associate Professor, Department of Architecture, Chaoyang University of Technology, Taiwan Better Places for People: Health and Wellbeing Measurement Methods in Workplaces Maíra DE MACEDO, Architect – Institutional and Governmental Relations Coordinator, Green Building Council Brazil, Brazil Development of a Home Indoor and Outdoor Environment Visualization System Yusuke NAKAJIMA, Professor, Kogakuin University, Japan

## Session 1.9 Practices & Methodologies for Green Building Management (1)

Level 2 - S228

Session Chair: WONG Wai-kwong

Chief Building Services Engineer/2, Architectural Services Department, Government of the HKSAR, Hong Kong SAR

Incorporating Sustainability Criteria in Commercial Workplace Fit-out Guidelines for a Banking Operation

James WONG Pow-chew, Program Manager, RMIT University, Australia

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

Project Management Strategies for Green Business Parks: Critical Success Factors, Barriers and Solutions

SHAN Ming, National University of Singapore, Singapore

Smart, Green + Productive Workplace Simone SKOPEK, JLL, Canada

## Session 1.10 Green Infrastructure in SBE Hong Kong Cases

Level 4 - S423 & 424

**Session Chair: Samuel KWONG** 

Group Sustainable Development Manager, John Swire & Sons (H.K.) Ltd., Hong Kong SAR

Implementing the Beautification and Sustainable Designs for the Harbour Area Treatment Scheme (HATS) Stage 2A

Andrew LAI, Resident Engineer, Arup, Hong Kong SAR
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

Integrating Water Management Facilities Into The Built Environment - A Smart Green Resilient Approach

Kenneth KWOK, Associate Director, Arup, Hong Kong SAR

Driving Innovations For Green Infrastructure Components

Nicholas AU, Hong Kong Housing Authority, Government of the HKSAR, Hong Kong SAR

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

# Session 1.13 - Session Organiser: Link Asset Management Ltd. / Nan Fung Development Ltd Healthy and Sustainable Building for Resilient Future

Level 2 - S226 & S227

Session Chair: Chris KWAN

Senior Project Manager, Project & Planning, Link Asset

Management Ltd., Hong Kong SAR

Green Buildings - The Foundation for Sustainable Development
Calvin Lee KWAN, General Manager- Sustainability, Link Asset Management Ltd., Hong
Kong SAR

Nan Fung's Corporate Initiative for New and Revitalization Development Samuel WONG, Deputy General Manager, Project Dpt., Nan Fung Development Ltd., Hong Keng SAB,

Leading Edge Trend for Resilient Future Building Design

Vincent CHENG, Director of Building Sustainability, Arup, Hong Kong SAR

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

Level 4 - S421 Level 4 - S425 Session Chair: Chimay J. ANUMBA Session Chair: Thomas TANG Sek-khuen Dean & Professor, University of Florida, United States of America Managing Director, Kuala Lumpur Centre for Sustainable Innovation, Malaysia Cultivating a Village Impulse in the Midst of Warsaw, the Jazdów Settlement of Finnish Does the Sequence Matter? - Investigating the Impact of the Order of Design Decisions on the Life Cycle Performance Julia TSCHETWERTAK, Bauhaus-University Weimar, Germany Dariusz ŚMIECHOWSKI, Senior Lecturer, Academy of Fine Arts in Warsaw, Poland Rethinking Architectural Passive Cooling Strategies in New Zealand's Non-residential Productive Transforming of the Urban Traffic Space HAN Dan, Tianjin University, Mainland China Lesley METIBOGUN, School of Architecture, Victoria University of Wellington, New Zealand Nature-based Urban Space Transformation **Building in Existing Contexts - Densification** Kristin BARBEY, Lecturer, Karlsruhe Institute of Technology, Germany Paul FLOERKE, Associate Professor, Associate Chair, Department of Architectural Science, Historic Relationship Between Urban Dwellers and the Tomebamba River Ryerson University, Canada M. Augusta HERMIDA, Professor, Universidad de Cuenca, Ecuador Problems and Prospects of Urban Compaction-A Case of Jaipur City Transformation from River Channelisation to River Revitalisation Sakshi BANSAL, Urban Planner, Malaviya National Institute of Technology Jaipur, India Richard LEUNG Wah-ming, Senior Engineer, Drainage Services Department, Government Where Planning Regulations and Development Practice Collide; the Multi-storey of the HKSAR, Hong Kong SAR Apartment Building in SubTropical Brisbane Australia Rosemary Jean KENNEDY, Queensland University of Technology, Australia

Session 1.12

Neighbourhoods

Regenerating Urban Space in

Session 1.11

Processes, Design, Tools and

Methodologies in SBE (1)

## Day 1 • 5 June 2017 (Mon) • Parallel Session 2 • 16:30 - 18:00

Session 2.1 - Session Organiser: Shanghai Research Institute of Building Sciences Mainland China Session - Green Building Design and Technological Challenges of Eco Skyscraper in China Level 1 - Convention Hall	Session 2.2 Regional Session: Turkey, Greece, Malta and Egypt Level 1 - Theatre 1
Session Chair: XU Qiang Chief Engineer, Shanghai Research Institute of Building Sciences (Group) Co., Ltd.	Session Chair: Wim BAKENS Secretary General, International Council for Research and Innovation in Building and Construction
Evaluation of Green Skyscraper Buildings in China SONG Ling, Deputy Director, Center for Science and Technology & Industrialization Development, Ministry of Housing and Urban-Rural Development of the P.R. China (MOHURD) Energy Saving Potential of Air-conditioning System with Low-Grade Energy Bus in Skyscrapers LI Xianting, Professor, School of Architecture, Tsinghua University In Pursuit of Excellence: Sustainable High-performance Skyscrapers ZHANG Bolun, Director, East China Architectural Design and Research Institute Green Design and Facility Management Systems in Shanghai Tower YANG Jianrong, Deputy Director, Shanghai Research Institute of Building Sciences (SRIBS)	SBE16 Istanbul Aygen ERKAL, Secretary General, Türkiye İMSAD- Association of Turkish Construction Material Producers SBE16 Thessaloniki Aikaterini TSIKALOUDAKI, Associate Professor, Aristotle University of Thessaloniki SBE16 Malta Ruben Paul BORG, University of Malta SBE16 Cairo Wafaa NADIM, Architecture Program, German University Cairo, Egypt
Session 2.5 SBE Assessments - Green Neighbourhoods (2)	Session 2.6 Innovations Driving for Greener Policies
Level 2 - S222	and Standards - Carbon Assessment Level 2 - S223

Session 2.3 Advanced Building Systems Level 1 - Theatre 2	Session 2.4 Policies for High-Performance Green Buildings (1) Level 2 - S221
Session Chair: Lloyd Martin SCOTT  Dublin Institute of Technology, Ireland	Session Chair: Richard LORCH Editor-in-Chief, "Building Research & Information" Journal, United Kingdom
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  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 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 Evaluation of Saving Energy with SOFC and Battery Combined System Takeshi SASE, Cooperative Researcher, Building Research Institute, Japan  Session 2.7 - Session Organiser: Swire Properties Ltd.  Deep Energy Saving and Other Innovative Green Measures for Commercial Buildings in Hong Kong, Mainland China and Overseas  Level 2 - S224 & 225	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. 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 How Sustainable are the Quality Control Procedures for Constructions in Europe? Frits MEIJER, Senior Researcher, TU Delft / Faculty of Architecture and the Built Environment, The Netherlands Policy Scenarios of Zero Carbon Building for Hong Kong: To Survive or To Lead? PAN Mi, The University of Hong Kong, Hong Kong SAR 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  Session 2.8 Innovations for Occupant Wellbeing (2) Level 4 - S426 & 427
Session Chair: Benny AU Sustainable Development Manager, Swire Properties Ltd., Hong Kong SAR	Session Chair: Srinath PERERA Professor of Built Built Environment & Construction Management, Western Sydney University, Australia
Sustainability Strategies on Deep Energy Saving and Energy Management of Property Developer Raymond YAU, General Manager, Technical Services & Sustainable Development, Swire Properties Ltd.  Overview of Building Energy Efficiency in China and the Upcoming Trend WEI Qingpeng, Building Energy Research Center, Tsinghua University, Beijing 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 YKK80 High Efficiency Building - Radiant Control Both Outside and Inside Kitaro MIZUIDE, General Manager, M&E Design Department of NIKKEN SEKKEI, Japan 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	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 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, Vice Chairman, Ronald Lu and Partners (Hong Kong) Ltd., Hong Kong SAR Occupant-Related Energy Use: A Qatar Office Case Study Chimay J. ANUMBA, Dean & Professor, University of Florida, United States of America Purifying City Air in Densely Urban Environment Jimmy CK TONG, Associate & East Asia Energy Skill Leader, Arup, Hong Kong SAR A Healthy and Sustainable Living Environment – LOHAS Josh CHENG, Building Sustainability Consultant, Arup, Taiwan

Session 2.9 Practices & Methodologies for Green Building Management (2) Level 2 - S228	Session 2.10 Transforming SBE Practices - Energy Management (1) Level 4 - \$423 & 424
Session Chair: POON Chi-sun Chair Professor of Sustainable Construction Materials, Department of Civil and Environmental Engineering, The Hong Kong Polytechnic University, Hong Kong SAR	Session Chair: Tim HILL Research Director, Eco-business Research, Singapore
Green + Smart Buildings Jiri SKOPEK, Managing Director, JLL, Canada; 2030 Districts  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 Daniel NG, Contract Manager, Guardian Property Management Ltd., Hong Kong SAR The Perceptible Impacts of Building Envelope on Other Green Building Features: "A Review" Salisu Gidado DALIBI, Business School of Hohai University Nanjing, Mainland China Investigating Critical Safety Performance Factors in Green Building Construction Projects: The Case of Singapore SHAN Ming, National University of Singapore, Singapore Green Interior Renovation by Architectural Services Department Vetus LAU, Director, Llewelyn Davies Hong Kong Ltd., Hong Kong SAR	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 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 A Case Study to Automate Demand Response on a University Campus Thomas Mark LAWRENCE, University of Georgia, United States of America Short-term Load Forecasting Model with Predicted Weather Data ZHU Guangya, City University of Hong Kong, Hong Kong SAR
Session 2.13 - Session Organiser: CLP Power Hong Kong Ltd. Powering Up Smart City Level 2 - S226 & 227	Session 2.14 - Session Organiser: Division Sustainable Building, Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR), Germany Sustainability Assessment of Buildings as Part of Green-Public Procurement Based on the German BNB-System Level 4 - S428
	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
Powering Up for Brighter Tomorrows Eric CHEUNG, Senior Director - Customer & Business Development, CLP Power (Hong Kong) Ltd., Hong Kong SAR Big Data Era for Building Management Amen TONG, General Manager, Technical Services, Airport Authority Hong Kong Smart Power Control for Peak Load Compensation Clement WONG, Head of Facility Management Hong Kong Science and Technology Parks Corporation 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.	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 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 Natural Resources and Sustainability Eike ROSWAG-KLINGE, Ziegert Roswag Seiler Architekten PL-E-N-AR Planning Aid for Energy Efficient and Sustainable Architecture Günter LÖHNERT, sol-id-ar planungswerkstatt, Germany Panel Discussion

Session 2.11 Processes, Design, Tools and Methodologies in SBE (2) Level 4 - \$421	Session 2.12 Processes of Urban Regeneration Level 4 - \$425	
Session Chair: Andrea MORO President, iiSBE Italia, Italy	Session Chair: Edward NG Professor of Architecture, School of Architecture, The Chinese University of Hong Kong, Hong Kong SAR	
Decision Making in the Pre-design Stage of Building Renovation Projects Anne N. NIELSEN, University College of Northern Denmark, Aalborg University, Denmark A Holistic Thriving Design Approach Dennis LEE, Managing Director, Architecture: Innovative Limited, Hong Kong SAR 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 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	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 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 Creating Methods, Procedures and Tools for a More Sustainable Neighbourhood Development – Experiences from Germany Maria BALOUKTSI, Karlsruhe Institute of Technology (KIT), Germany How Can We Assess the Achievement of the Sustainable Development Goals? – A Review of Indicators and Their Application at the City Level	
Embodied Energy Versus Building Height, The "Premium" of Building Tall Rolf André BOHNE, The Norwegian University of Science and Technology, Norway	Roland ZINKERNAGEL, Lund University, Sweden	

## Day 2 • 6 June 2017 (Tue) • Parallel Session 3 • 13:30 - 15:00

Session 3.1 - Session Organiser: Shenzhen Green Building Association and Shenzhen Institute of Building Research Mainland China Session - Turning Green to Gold - Green Practices for Urbanization in China Level 1 - Convention Hall	Session 3.2 International Youth Competition (1) Level 1 - Theatre 1
Session Chair: YE Qing Director, The Shenzhen Institute of Building Research Ltd and the President of Shenzhen Green Building Association	Session Chair: Edward NG Chairman, International Youth Competition Sub-committee, WSBE17 Hong Kong Scientific Committee; Professor of Architecture, School of Architecture, The Chinese University of Hong Kong, Hong Kong SAR
QIU Baoxing, Counsellor of Counsellor's Office of the State Council, PRC TANG Jie, Professor, School of Economics and Management, Harbin Institute of Technology (Shenzhen)  ZHANG Xuefan, Director, Bureau of Housing & Construction of Shenzhen Municipality WANG Yun, Vice President, China Vanke Co., Ltd.  Kevin MO, Managing Director, Paulson Institute Representative Office Ying HUA, Associate Professor, Department of Design and Environmental Analysis, The Cornell University	Presentation of 8 Shortlisted Teams  Q & A  Final Judging by International Jury Panel  Thomas AUER, Managing Director, Transsolar; Professor, Building Technology and Climate Responsive Design, Technical University of Munich  George BAIRD, Emeritus Professor of Building Science, School of Architecture, Victoria University of Wellington  Greg FOLIENTE, Enterprise Professor, University of Melbourne; Regional Director in Asia-Pacific, iiSBE; Founding Director, nBLue Pty Ltd  Peter GUTHRIE, Professor, Engineering for Sustainable Development, University of Cambridge  Deborah KUH, Head of Greening, Landscape and Tree Management Section, Government of the HKSAR  Christine LOH, Under Secretary for the Environment, Government of the HKSAR  Serge SALAT, President, Urban Morphology & Complex Systems Institute  Arno SCHLUETER, Professor, Architecture and Building Systems ETH Zurich; Principal Investigator, Future Cities Laboratory, Singapore ETH Centre
Session 3.5 Performance Review of Green Buildings (1) Level 2 - S222	Session 3.6 Innovations Driving for Greener Policies and Standards - Practices Review Level 2 - S223
Session Chair: Srinath PERERA Professor of Built Built Environment & Construction Management, Western Sydney University, Australia	Session Chair: Richard LORCH Editor-in-Chief, "Building Research & Information" Journal, United Kingdom
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 A Baseline Study on Thermal Performance of Prefabricated Modular Buildings in Australia Sareh NAJI, The University of Melbourne, Australia Energy Saving Potential of Thermal Broken Aluminum Frames in Hot Climate Areas Simon WONG, Technoform Bautec Hong Kong Ltd., Hong Kong SAR 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 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	Leap forward or Snail Speed? Examining Radical Sustainable Innovation Christian KOCH, Chalmers University of Technology, Sweden 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 Evaluation of Using BEAM-PLUS to Facilitate Waste Reduction in Building Construction Lara Celine JAILLON, City University of Hong Kong, Hong Kong SAR 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 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

Session 3.3 Advanced Building Systems - Energy Generation (1) Level 1 - Theatre 2	Session 3.4 Policies for High-Performance Green Buildings (2) Level 2 - S221
Session Chair: Phil JONES  Chair of Architectural Science, Welsh School of Architecture, Cardiff University, United Kingdom; Visiting Research Professor, Faculty of Architecture, University of Hong Kong, Hong Kong SAR	Session Chair: Lloyd Martin SCOTT  Dublin Institute of Technology, Ireland
Analysis of Fourth-Generation District Energy Systems with Renewable Energy Cogeneration by Using Rational Exergy Management Model Birol KILKIS, Baskent University, Turkey 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 Building and Community Energy Retrofit Housing in Wales LI Xiaojun, Research Associate, Cardiff University, United Kingdom Geothermal District Heating Investigation of Retired Oil/Gas Wells as Higher- temperature Renewable Heat Sources GUO Hongshan, Princeton University, United States of America	Baseline and Water Efficiency for Green Building in Taiwan CHENG Cheng-II, Dean of Design College; President of AIT, National Taiwan University of Science and Technology, Taiwan 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 Using Supply Chain Management for Sustainable Public Procurement Johannes WALL, Graz University of Technology, Austria 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 Energy Efficiency for a Sustainable Built Environment in Nigeria Susanne GEISSLER, SERA energy & resources, Austria
Session 3.7 - Session Organiser: AECOM High Performance Transportation Hubs: Their Critical Role and Requirements? Level 2 - S224 & 225	Session 3.8 Innovative Practices for Occupant Wellbeing - Bioclimatic Design Level 4 - \$426 & 427
Session Chair: Sylvester Timothy WONG Vice President, Strategies + Development, Buildings + Places, Asia; Head of Buildings + Places, Philippines & Emerging Markets, AECOM, Philippines	Session Chair: Clinton ANDREWS Professor of Urban Planning & Policy Development, Rutgers University, United States of America
Marc COLELLA, Industry Director, Building Structures Practice Lead, Australia and New Zealand, AECOM, Australia  (evin POOLE, Executive Director, Third Runway, Airport Authority Hong Kong, Hong Kong SAR  Tony ARMSTRONG, Asia Pacific Representative, International WELL Building Institute	Bringing Sustainable Neighbourhood Design into Reality–Case Sharing by Brickell City Centre, Miami Benny AU, Sustainable Development Manager, Swire Properties Ltd., Hong Kong SAR On the Study of Thermal Comfort and Temperature Enhancements by Park Features CK CHAU, The Hong Kong Polytechnic University, Hong Kong SAR Passive Design Strategies for Building Envelopes in Different Orientations Elizabeth PARRA, PVG Arquitectos, Colombia An Integrated Urban Microclimate and Building Energy Model for Early Stage Design HUANG Jianxiang, The University of Hong Kong, Hong Kong SAR Re-Thinking Courtyard Housing: Development of Traditional Islamic Courthouses into Zero-Energy Buildings Osama Mohamed OMAR, Assistant Professor of Architecture, Beirut Arab University, Lebanon

Session 3.9 Practices & Methodologies for Green Building Management (3) Level 2 - S228	Session 3.10 Transforming SBE Practices - Energy Management (2) Level 4 - S425
Session Chair: Thomas LÜTZKENDORF Director, Centre for Real Estate; Head of Chair, Sustainable Management of Housing and Real Estate, Karlsruhe Institute of Technology, Germany	Session Chair: Tim HILL Research Director, Eco-business Research, Singapore
Life Story of the Repurposed Shipping Container Alice LF YEUNG, Chief Architect, Architectural Services Department, Government of the HKSAR, Hong Kong SAR Factors Influencing Human Capability to Practice Sustainability in Facilities Management (FM) – A Review Fathima Sabrina NAZEER, University of Moratuwa, Sri Lanka 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 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 Development of MERIT and Normalization Factor for Different Operating Hours for Building Energy Intensity (BEI) Kevin HOR, Edgenta Energy Services PLC, Malaysia	Dynamic CO2 and occupancy modelling for predictive control Alexandros PANTAZARAS, National University of Singapore, Singapore 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 Study of Chiller Part Load Values for Hong Kong and Subtropical Climate LEUNG Wai-ho, Senior Engineer, Arup, Hong Kong SAR 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 Optimizing Energy Efficiency for a High Rise Office Tower in Tropics NG Yong-kong, NYK Engineering and Trading Sdn Bhd, Malaysia
Session 3.13  Community Empowerment (1)  Level 2 - S226 & 227	Session 3.14 - Session Organiser: Somfy Asia-Pacific Co. Ltd. Environmentally Responsive Buildings and Human Interactions Level 4 - S428
Session Chair: Tony IP Deputy Director of Sustainable Design, Ronald Lu & Partners, Hong Kong SAR	Session Chair: Anders HALL International Business Development, Somfy International; Chairman, Marketing & Communication, ES-SO (EU Solar Shading Organisation)
The Strategy of Launching Rural Regeneration in Pingtung County Government HUNG Chieh-jen, Pingtung County Government, Taiwan  2030 Districts: Putting Ideas into Action LI Jiexin, China Lead, 2030 Districts Jiri SKOPEK, Managing Director, JLL, Canada; 2030 Districts  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  Retrofit or Behaviour Change? Which Has the Greater Impact on Energy Consumption in Low Income Households?  Melissa JAMES, Senior Experimental Scientist, CSIRO, Australia  Towards a Holistic Methodology: A Practical Approach to Local Energy Planning Thomas SCHLUCK, Senior Scientist, Hochschule Luzern, Switzerland	Research and Experiences on Sustainability by ES-SO Anders HALL, Somfy International; Chairman, Marketing & Communication, ES-SO 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 Case Study - Understanding the key learnings from the use of Automated Solar Shading in Sustainable Buildings Alistair GRICE, Commercial Specification Manager, Somfy Oceania Connected Homes: A More Comfortable, Secure and Sustainable Life in the Future Jean-Pierre DUMAS, Managing Director, iHome Systems Panel Discussion

Session 3.11 **Session 3.12 - Session Organiser: BIM** for Sustainability (1) **Allied Environmental Consultants Ltd. Emerging Practices in** Level 4 - S421 **Sustainable Built Environment** Level 4 - S423 & 424 Session Chair: Paul HO **Session Chair: Grace KWOK** Director, Professional Green Building Council, Hong Kong SAR Managing Director, Allied Environmental Consultants Ltd. BIM Based Deep Building Renovation Optimization for Sustainability HUANG Lizhen, Associate Professor, Norwegian University of Science and Technology, Acoustics and Lighting Design for Green Building Henry Chan Chi-kee, Associate Director, Allied Environmental Consultants Ltd. Norway Showcase of Green Campus Development in Hong Kong – A Case Review of Hang Integrating BIM for Sustainable Planning, Design, Construction and Facility Seng Management College's Master Campus Expansion Plan Management for Hong Kong's Public Housing Development Danica CHAN, Environmental Consultant, Allied Environmental Consultants Ltd. Lawrence KW CHUNG, Assistant Director of Housing (Development and Construction), Hong Kong Housing Authority, Government of the HKSAR, Hong Kong SAR Drive towards Sustainable Development and Management: Case Study on International Commerce Centre
Andy LAI, Senior Consultant, Allied Environmental Consultants Ltd. BIM Enabled Life Cycle Environmental Analysis for a Small Scale Zero Energy House LI Qiyuan, School of Architecture, Tianjin University, Mainland China Intelligence, Collaboration, Continuity – A Case Study of Improving the Environmental The Use of FTA (Fault Tree Analysis) to Evaluate the Contribution of BIM Platform to Performance of an Office Building the Environmental Quality on Rehabilitated Buildings

Monica Santos SALGADO, Federal University of Rio de Janeiro, Brasil Lewis LAM, Assistant General Manager (Property Management), Kai Shing Management Services Ltd. Sustainability Strategies in Towngas Headquarters Building
Nelson LO, Property Management Manager, The Hong Kong and China Gas Company Ltd. Sustainable Buildings with BIM Peter KONCZ, Sales Manager, GRAPHISOFT Asia Ltd., Hong Kong SAR

## Day 2 • 6 June 2017 (Tue) • Parallel Session 4 • 16:30 - 18:00

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 Level 1 - Convention Hall	Session 4.2 International Youth Competition (2) Level 1 - Theatre 1
Session Chair: MENG Chong Deputy Director, Green Building Research Centre, Chinese Society for Urban Studies, China	Session Chair: Edward NG Chairman, International Youth Competition Sub-committee, WSBE17 Hong Kong Scientific Committee; Professor of Architecture, School of Architecture, The Chinese University of Hong Kong, Hong Kong SAR
Water is the Essence of Healthy Building ZENG Ji, Deputy Director, Architectural Design Institute, China Academy of Building Research The Control and Prevention of Indoor PM2.5 against the Health Risks of Occupants ZHANG Yinping, School of Architecture, Tsinghua University, China 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 Technological Innovations and Best Practices of Healthy Buildings JIA Yan, Founder & CEO, First Human Environmental Technologies (Beijing) Co., Ltd., China	Presentation of 8 Shortlisted Teams Q & A Final Judging by International Jury Panel Thomas AUER, Managing Director, Transsolar; Professor, Building Technology and Climate Responsive Design, Technical University of Munich George BAIRD, Emeritus Professor of Building Science, School of Architecture, Victoria University of Wellington Greg FOLIENTE, Enterprise Professor, University of Melbourne; Regional Director in Asia-Pacific, iiSBE; Founding Director, nBLue Pty Ltd Peter GUTHRIE, Professor, Engineering for Sustainable Development, University of Cambridge Deborah KUH, Head of Greening, Landscape and Tree Management Section, Government of the HKSAR Christine LOH, Under Secretary for the Environment, Government of the HKSAR Serge SALAT, President, Urban Morphology & Complex Systems Institute Arno SCHLUETER, Professor, Architecture and Building Systems ETH Zurich; Principal Investigator, Future Cities Laboratory, Singapore ETH Centre
Session 4.5 Performance Review of Green Buildings (2) Level 2 - S222	Session 4.6 Green Construction Technologies (1) Level 2 - S223
Session Chair: Lan DING Senior Lecturer, Faculty of Built Environment, University of New South Wales, Australia	Session Chair: Guillaume HABERT Professor, ETH Zurich, Switzerland
The Importance of Understanding The Material Metabolism of The Built Environment Danielle DENSLEY TINGLEY, Lecturer in Architectural Engineering, The University of Sheffield, United Kingdom  Net Environmental Loads of Mineral Admixtures and Portland Blended Cements Marcella Ruschi SAADE, University of Campinas, Brazil  Embodied Energy and Global Warming Potential in Construction – Perspectives and Interpretations  Maria BALOUKTSI, Karlsruhe Institute of Technology, Germany  Study of Human Embodied Energy for Masonry Work During Building Construction Sivakumar PALANIAPPAN, Assistant Professor, Indian Institute of Technology Madras, India The Life Cycle Cost-Energy Relationship Of Buildings  WANG Jie, The University of Hong Kong, Hong Kong SAR	Watering Type and Water Consuming Assessment of the Green Construction Fence in Taichung City, Taiwan CHEN Chen-chun, Feng Chia University, Taiwan 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 Use of Incineration Bottom Ash for Road Construction in Singapore Kelvin LEE Yang-pin, Senior Technical Manager, Samwoh Innovation Centre, Singapore Exploring the Relationships between Construction Phases and Sustainable Construction Principles Olabode Emmanuel OGUNMAKINDE, University of Newcastle, Australia

Session 4.3 Advanced Building Systems - Energy Generation (2) Level 1 - Theatre 2	Session 4.4 Processes of High-Performance Green Buildings Level 2 - S221
Session Chair: Wafaa NADIM Associate Professor, The German University in Cairo, Egypt	Session Chair: Ron WAKEFIELD  Head of the School of Property, Construction and Project  Management (PCPM) and Deputy Pro Vice Chancellor International,  RMIT University, Australia
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 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 Study on the Potential of Converting Former Military Bunkers into Energy Storage Facilities Joachim SCHULZE, Research Assistant, Architect M.Sc., Technical University Darmstadt, Germany An Evaluation of Building Integrated Wind Energy Mehmet Koray PEKERICLI, METU, Turkey	What Are The Most Effective Drivers of Sustainable Development in The Decision Making Process Hanne Tine Ring HANSEN, Sustainability Engineer, Søren Jensen Consulting Engineers, Denmark 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 How Actors Can Implement in Practice the General Principles of Sustainability in Their Buildings and Civil Engineering Projects Thomas LÜTZKENDORF, Director, Centre for Real Estate; Head of Chair, Sustainable Management of Housing and Real Estate, Karlsruhe Institute of Technology, Germany 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 Analysing the Reference Flows for Energy Efficient Retrofit of Typical Residential Building in Tianjin, China LIU Lu, School of Architecture, Tianjin University, Mainland China
Session 4.7 - Session Organiser: Swire Properties Ltd. The Secret Ingredients of Sustainable Real Estate Development Level 2 - S224 & 225	Session 4.8 Innovative Biophilic Design for Wellbeing Level 4 - \$426 & 427
Session Chair: Ashley HEGLAND Consultant, Swire Properties Ltd.	Session Chair: Alan FOGARTY Sustainability Partner, Cundall, Hong Kong SAR
Themes/Trends of Sustainable Urban Planning and Sustainable Built Environment Christopher LAW, Founding Director, Oval Partnership, Hong Kong SAR Ingredients of Sustainable Real Estate: Criteria, Transparency, Engagement Ruben LANBROEK, Head of Asia Pacific, GRESB, Singapore Climate Change and Sustainable Real Estate: The Environmental, Social, and Economic Implications Liam SALTER, CEO, RESET Carbon Swire Properties' Approach to Sustainable Real Estate Raymond YAU, General Manager, Technical Services & Sustainable Development, Swire Properties Ltd.	System Ecology as a Design Tool for Water Resources and its Environmental Education DAY Yeong-tyl, Associate Professor, Chung Yuan Christian University, Taiwan Sustainable Neighbourhood of Shek Wu Hui Sewage Treatment Works Echo LEONG I-man, Executive Director, AECOM Asia Company Ltd., Hong Kong SAR Biophilia and Nature-based Features to Support Stress Reduction in Knowledge Workers Ann CALLAGHAN, Conestoga College, Canada; Algonquin College, Canada 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 Foster a Healthy Community through Active Design & Biophilic Design WANG Hong, Executive Director, AECOM Asia Company Ltd., Mainland China

Session 4.9 - Session Organiser: Arup A Collaborative Approach in Delivering Low Carbon Living Level 2 - S228	Session 4.10 Transforming SBE Practices - Energy Management (3) Level 4 - S425
Session Chair: Jimmy CK TONG Associate & East Asia Energy Skill Leader, Arup, Hong Kong SAR	Session Chair: Clinton ANDREWS Professor of Urban Planning & Policy Development, Rutgers University, United States of America
Beyond Energy and Resource Efficiency: Sustainable Building in Digital Transformation Vincent CHENG, Director of Building Sustainability, Arup, Hong Kong SAR 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 Creation of Green Neighbourhood Edwin CHAN, Project Director, New World Development Company Ltd., Hong Kong SAR Tall Buildings and Sustainability Florence CHAN, Director, Kohn Pedersen Fox Associates PC, Hong Kong SAR	Energy Data Transparency Benefits to Drive Down of Energy Consumption in A Green Hote Antonio CM CHAN, REC Engineering Co., Ltd., Hong Kong SAR  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  Low-Carbon Building Environment Adaptation Countermeasures of Pingtung County CHEN Ping-hung, Pingtung County Government, Taiwan  Impact of Energy Recovery Ventilation on The Ventilation and CO2 Concentration in One Bedroom Condominium in Thailand  Daranee JAREEMIT, Associate Dean for Academic Affairs, Faculty of Architecture and Planning, Thammasat University, Thailand  Panpisu JULPANWATTANA, Senior Sustainable Designer, Magnolia Quality Development Corporation Ltd., Thailand
Session 4.13 Community Empowerment (2) Level 2 - S226 & 227	Session 4.14 - Session Organiser: The Hong Kong Polytechnic University PolyU Green Deck : A Catalyst for a Green and Vibrant Community Level 4 - S428
Session Chair: LEUNG Man-kit  Director of Sustainable Design, Ronald Lu & Partners (Hong Kong)  Limited, Hong Kong SAR	Session Chair: Alex LUI Chun-wan Chairman, Green Deck Task Force, The Hong Kong Polytechnic University, Hong Kong SAR

Session 4.11 BIM for Sustainability (2) Level 4 - S421	Session 4.12 Healthy Building, Human Comfort & Wellbeing Level 4 - S423 & 424
Session Chair: Paul HO Director, Professional Green Building Council, Hong Kong SAR	Session Chair: Holger WALLBAUM Full Professor in Sustainable Building, Chalmers University of Technology, Sweden
Assessment of Different Data Collection Methods for the Creation of BIM Models for Existing Buildings Bjoern Arild GODAGER, Assistant Professor, Norwegian University of Science and Technology, Norway Boost Sustainability Certification by Using BIM Heinz J. BERNEGGER, Zurich University of Applied Sciences ZHAW, Institute of Facility Management, Switzerland LCA Integration in BIM Through The Use of Integrated Dynamic Models Marios TSIKOS, Civil Engineer, Burohappold Engineering, United Kingdom 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	Healthy Buildings & Energy Performance – A Balancing Act Eriko TAMURA, Assistant Engineer of Building Sustainability, Arup, Hong Kong SAR 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 Radon Infiltration in Existing Rented Accommodation Torben Valdbjørn RASMUSSEN, Danish Building Research Institute, Aalborg University, Denmark 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 Research on the Strategies and Methods in Productive Green Renovation of Existing Urban Communities
Lifecycle Evaluation of Building Sustainability Using BIM ZHANG Cheng, Assistant Professor, Xi'an Jiaotong-Liverpool University, Mainland China	DING Xiaoying, Tianjin University, Mainland China

### Day 3 • 7 June 2017 (Wed) • Parallel Session 5 • 10:30 - 12:00

Session 5.1 Regional Session - Canada, Brazil- Portugal, The Netherlands, Germany and Tallinn-Helsinki Level 1 - Convention Hall	Session 5.2 - Session Organiser: Sweden Green Building Council High Performance Buildings and Sustainable Neighbourhoods in Sweden Level 1 - Theatre 1	Smart Initiatives in SBE (1) Level 1 - Theatre 2	Session 5.4  Deep Renovations - Policies & Standards  Level 2 - S221
Session Chair: Luis BRAGANÇA University of Minho, Portugal	Session Chair: Bengt WÅNGGREN CEO and Founding Chairman, Sweden Green Building Council; Member of the Board, World Green Building Council		Session Chair: Kenneth CHAN Director, BEAM Society Limited, Hong Kong SAR
SBE16 Toronto Harry Robert BACH, Secretary Treasurer, iiSBE Canada; Director and Treasurer, iiSBE International; Director and Treasurer, Sustainable Buildings Canada SBE16 Brazil-Portugal Cristina Engel ALVAREZ, Professor/Coordinator, Laboratório de Planejamento e Projetos, Universidade Federal do Espírito Santo, Brazil SBE16 Hamburg Thomas LÜTZKENDORF, Director, Centre for Real Estate; Head of Chair, Sustainable Management of Housing and Real Estate, Karlsruhe Institute of Technology, Germany SBE16 Tallinn-Helsinki Pekka HUOVILA, Coordinator, 10YFP Sustainable Buildings and Construction (SBC) Programme SBE16 Utrecht Ivo OPSTELTEN, Professor, University of Applied Sciences Utrecht	Five Cases of Best Practice High-Performance Buildings in Sweden LIDL Växjö Johan AUGUSTSSON, Property Director, LIDL Sweden Greenhouse Augustenborg Jenny HOLMQUIST, Environmental Strategist, MKB Fastighet Solallén Björn BERGGREN, Senior Consultant/Phd Student, Skanska/Lund University BRF Viva Charlotta SZCZEPANOWSKI, Sustainability Director, Riksbyggen Anders JOHANSSON, Project Manager, Riksbyggen. IKEA Hubhult Bengt WÅNGGREN, CEO and Founding Chairman, Sweden Green Building Council; Member of the Board, World Green Building Council Three Projects for Sustainable Neighbourhoods in Sweden Citylab Tomas GUSTAFSSON, Program Director for Citylab Action, Sweden Green Building Council C/O City Emilie ZETTERSTRÖM, Communications officer, Sustainability and Innovation, The City of Stockholm Decode Åsa NORMAN, Sustainability Consultant, Tyrénd Sarah BRAGÉE, Department Manager of Strategic Analysis, Tyréns	The New Smart Cities I Cities Built from Scratch and Old Cities Transformed into Smart Cities. Sustainable Growth Ana Claudia Figueiredo OLIVEIRA, Lisbon Faculty of Architecture, Portugal Enhanced Engineering Services for Electrical & Mechanical System via Integrated Building Management System, Remote Monitoring Unit, and Geographic Information System  LEE Che-kit, Chief Engineer, Electrical and Mechanical Services Department, Government of the HKSAR, Hong Kong SAR  Decarbonising the City: Micro Energy Grids Richard WANG, Sustainability Consultant, Arup, Hong Kong SAR  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  Sy(e)nergies between Mega Event Buildings and the Surrounding Neighbourhoods Simone MAGDOLEN, Munich University of Applied Sciences, Germany	Small, Beautiful, Yet Difficult: Energy Plus Renovation in Small Social Housing Companies Christian KOCH, Chalmers University of Technology, Sweden Deep Renovation as Tool for Active Protection of Modern Heritage: The Case of Architecture for The Service Sector Claudia CALICE, University of Rome, Italy Future Challenges for Renovation as Experienced by Housing Companies Liane THUVANDER, Chalmers University of Technology, Sweden 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 The Development and Practice of Existing Buildings Green Retrofitting in China WANG Qingqin, China Academy of Building Research, Mainland China
Session 5.5 SBE Assessments - Green Building Policies Level 2 - S222	Session 5.6  Green Construction Technologies (2)  Level 2 - S224 & 225	Innovations Driving for Greener Policies	Session 5.8 Sustainable Neighbourhoods - Case Study Review (1) Level 4 - S426 & 427
Session Chair: Antonin LUPISEK  Head of Department, Architecture and the Environment, Czech Technical University, Czech Republic	Session Chair: Andrew LEUNG Emeritus Professor, City University of Hong Kong; China Green Building (HK) Council, Hong Kong SAR		Session Chair: Ellie TANG  Head of Sustainability, New World Development Company Limited, Hong Kong SAR
From Research to a National Standard: SBTool and Protocollo ITACA Andrea MORO, President, iiSBE Italia R&D, Italy 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, Head of Division Sustainable Building, Federal Institute for Research on Building, Urban Affairs and Spatial Development, Germany 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 CESBA: Together to a Harmonized Built Environment Assessment Markus BERCHTOLD-DOMIG, Spatial Planner, Heimaten, Austria LEED CS in Brazil: Discussing the Validity of the Method for the Improvement of Environmental Quality on Buildings Monica Santos SALGADO, Professor, Federal University of Rio de Janeiro, Brazil	Innovative Building Technologies Towards Sustainable Construction – A Comparative LCA and LCC Assessment Alexander PASSER, Assistant Professor, Graz University of Technology, Austria 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 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 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 Mongolia's First Cooperative Transformation Attempt on Built Environment through Greening Kindergarten Building Nergui DORJ, Founder and BOD member, Mongolia Green Building Council, Mongolia	European Horizontal Standardized Methods for the Assessment of the Sustainability Aspects of Construction Works Ari ILOMAKI, Senior Adviser, Confederation of Finnish Construction Industries, Finland Life Cycle Energy and GHG Emissions Reductions of Retrofit Options for Existing Dwelling Stock Greg FOLIENTE, Enterprise Professor, University of Melbourne; Regional Director in Asia- Pacific, iiSBE; Founding Director, nBLue Pty Ltd 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 Geo-dependent Heat Demand Model of the Swiss Building Stock Stefan SCHNEIDER, University of Geneva, Switzerland Quantitative Impact Assessment of SEAP Measures Implementation on Several Districts in the City of Donostia-San Sebastian Xabat OREGI, Tecnalia Research & Innovation, Spain	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 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 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 Development Strategies for the Green Industry in Pingtung County KUO Wu-wei, Executive officer, Pingtung County Government, Taiwan Strategic Planning for Sustainable Neighbourhoods: A Case Study from Palestine Sameer ABU-EISHEH, Professor of Civil Engineering, An-Najah National University, Palestine

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Session 5.9 Transforming Green Market - Green Economics (1) Level 2 - S228	Session 5.10 Zero Energy Level 4 - \$423 & 424
Session Chair: Tim HILL Research Director, Eco-business Research, Singapore	Session Chair: Ron WAKEFIELD  Head of the School of Property, Construction and Project  Management (PCPM) and Deputy Pro Vice Chancellor International,  RMIT University, Australia
Stakeholders View on Commercial Benefits for Energy Neutral Refurbishment of Let Properties Angela GRECO, Delft University of Technology, The Netherlands How a Changing Socioeconomic Context Affects the Demand for High-performance Buildings Clinton ANDREWS, Rutgers University, United States of America Green Lease Insight - Integrated Approach Andrew NICHOLSON, Executive Managing Director, Head of Asset Services, Asia Pacific, CBRE, RICS, Hong Kong SAR How Sustainable Planning Increases Real Estate Property Value Serge SALAT, President, Urban Morphology and Complex Systems Institute, France Responsible Investing in Green Buildings and Portfolios Ruben LANGBROEK, Head of Asia Pacific, GRESB, Singapore	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  Life Cycle Greenhouse Gas Emissions of Material Use in the Living Laboratory Marianne Rose KJENDSETH WIIK, SINTEF, Norway  Paradoxical Feasibility of High-rise Zero Carbon Buildings PAN Wei, Associate Professor, The University of Hong Kong, Hong Kong SAR  Studies of Energy-Efficient Measures and Building Integrated Photovoltaic Toward Net Zero Energy Building LOU Siwei, City University of Hong Kong, Hong Kong SAR  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
Session 5.13 Stakeholder Collaboration Level 2 - S226 & 227	Session 5.14 - Session Organiser: Sino Group Smart and Digital Transformation for Sustainable Living Level 4 - S428
Session Chair: Thomas NG Professor (Construction Engineering and Management), The University of Hong Kong, Hong Kong SAR	Session Chair: Jimmy CK TONG Associate & East Asia Energy Skill Leader, Arup, Hong Kong SAR
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  Collaboratoire Montreal: Living Experiments for Climate Change Awareness  Carmela CUCUZZELLA, Design and Computation Arts, Concordia University, University Research Chair IDEASBE, L.E.A.P, Canada  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 Gamification as A Means to User Involvement in Decision-making Processes for Sustainable Buildings  Hanne Tine Ring HANSEN, Sustainability Engineer, Søren Jensen Consulting Engineers, Denmark 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	Sino's Smart Initiative  Eugene LEUNG, Director, Sino Investment, Hong Kong SAR  Artificial Intelligence in Built Environment Samson TAI, CTO, IBM Hong Kong, Hong Kong SAR  Smart Eco Home - Project Moses Andy ANN, CEO, NDN Group, Hong Kong SAR  Policy, Design, and People: Developing a Sustainable East Asia Vincent CHENG, Director of Building Sustainability, Arup, Hong Kong SAR

Processes, Design, Tools and Methodologies in SBE (3)	Occupants' Evaluation of Green Buildings
Level 4 - S421	Level 4 - S425
Session Chair: Kazuo IWAMURA Japan GreenBuild Council, Japan	Session Chair: Henk VISSCHER Professor, Delft University of Technology-Faculty of Architectuyre and the Built Environment, Germany
Assessing Sustainable Urban Densification Using Geographic Information Systems M. Augusta HERMIDA, Professor, Universidad de Cuenca, Ecuador	Users' Perceptions of Building Performance - An Analysis of the Occupants' Comments George BAIRD, Emeritus Professor of Building Science, Victoria University of Wellington
Traffic Quality Index to Intersections Considering Fuel Efficiency  Marta Monteiro da Costa CRUZ, Professor, Federal University of Espírito Santo, Brazil	Cooperative Research for High Performance Buildings Herbert Claus LEINDECKER, University of Applied Sciences Upper Austria, Austria
A Simulation-Based Method to Assess 3D Urban Noise Environment in High-Density Cities GUO Mengdi, The University of Hong Kong, Hong Kong SAR	The Role of Perceived Social and Physical Environments on Older Adults Social Interactions  Piret VEEROJA, University of Melbourne, Australia
Real Coded Quantum-Inspired Evolutionary Algorithm Applied to Sustainable Building Omar QUISPE POLANCO, Universidad Catolica San Pablo, Arequipa-Peru Sustainable Neighborhood Regeneration: Holistic Decision Support Methodology	Every Breath We Take – Transforming The Health of China's Office Space WU Xuchao, Associate Director of Energy & Sustainability Services, JLL, Mainland China Louie CHENG, President, PureLiving China, Mainland China
Supported by a Software Tool  Paul MITTERMEIER, Munich University of Applied Science, Germany	Are Patterns of Use The Key to Resource Efficiency in Office Buildings? Ken DOOLEY, Granlund Consulting, Finland

Session 5.11

Session 5.12

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## Day 3 • 7 June 2017 (Wed) • Parallel Session 6 • 13:30 - 15:00

Session 6.1 Regional Session - Australia, Mainland China, Singapore, South Korea and Philippines Level 1 - Convention Hall	Session 6.2 - Session Organiser: iiSBE SBE Urban Challenge: Assessment Protocol and Case Studies Level 1 - Theatre 1
Session Chair: Greg FOLIENTE Enterprise Professor, University of Melbourne; Regional Director in Asia-Pacific, iiSBE; Founding Director, nBLue Pty Ltd	Session Chair: Andrea MORO President, iiSBE Italia, Italy
SBE Sydney Deo PRASAD, Scientia Professor, CRC for Low Carbon Living SBE Chongqing Andrew BALDWIN, Chongqing University SBE Singapore Selvam VALLIAPPAN, Senior Manager, Green Building Research, Built Environment Research and Innovation Institute (BERII), Building and Construction Authority, Singapore SBE Seoul SHIN Sungwoo, Division of Architecture and Architectural Engineering at Hanyang University ERICA SBE Manila Fernando GERMAR, Chairman of Scientific Committee	A New SBE Challenge Process for a Transnational Generic Framework at Urban Scale Andrea MORO, President, iiSBE Italia, Italy Nils LARSSON, Executive Director, International Initiative for a Sustainable Built Environment 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 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 Case Study - Asia: China's KPIs for Sustainable Cities Cast Study - North America: DISTRICT 2030 Jiri SKOPEK, Managing Director, JLL, Canada; 2030 Districts
Session 6.5 SBE Assessments - Design Processes Level 2 - S222	Session 6.6 Green Construction Materials (1) Level 2 - S224 & 225
Session Chair: Natalie ESSIG University of Applied Sciences Munich (MUAS), Germany	Session Chair: Alexander PASSER Assistant Professor, Graz University of Technology, Austria
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 Contribution of Knowledge in Sustainable Building Design in Emerging Markets— A Case of Vietnam CHIH Ying-yi, The Australian National University, Australia 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 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	Naturally Ventilated Earth Timber Constructions Andrea KLINGE, Senior Architect, Roswag Architekten, Germany The Study on Durability Testing of Heat-insulation Coating CHEN Chien-fu, National Cheng-Kung University, Taiwan Utilizing Palm Rachis for Eco-Friendly and Flexible Construction in Egypt Eman Atef DARWISH, Demonstrator, Department of Architecture, Ain Shams University-Cairo, Egypt Bamboo for The 21st Century Martin TAM Tin-fong, Founder and CEO, Able Mart Ltd., Hong Kong SAR "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

Session 6.3  Smart Initiatives in SBE (2)  Level 1 - Theatre 2	Session 6.4  Deep Renovations - Practices & Performance Review  Level 2 - S221
Session Chair: Antonio FRATTARI Full Professor, University of Trento, Italy	Session Chair: Antonin LUPISEK  Head of Department, Architecture and the Environment, Czech Technical University, Czech Republic
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 Meter Online - Information Drives Behavioural Change to Save Building Energy Simon TSUI, CCE Manager - Commercial Accounts, CLP Power Hong Kong Limited, Hong Kong SAR 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 Interactive Building-user Systems for Positive Behavioral Change by Enhancing E-participation of Building Occupants ZHANG Clanning, Research Scholar, National University of Singapore, Singapore Review on Demand Control Ventilation ZHENG Caidan, Faculty of Urban Construction and Environmental Engineering, Chongqing University, Mainland China; National Centre for International Research of Low-carbon and Green Buildings, Ministry of Science & Technology	The Verification and Implementation of Practical Renovation for net-ZEB Office Hiroaki TAKAI, Design Department Head Office, Principal Engineer(Environment), Takenaka Corporation, Japan Humid Wall: Causes and Solutions Mohamad KHARSEH, Chalmers University of Technology, Sweden Improving the Market Up-take of Energy Producing Solar Shading: Experiences from Three Cases of Retrofit Paula FEMENIAS, Chalmers University of Technology, Sweden 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 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
Session 6.7 Innovations Driving for Greener Policies and Standards - Assessment, Analysis and Modelling (2) Level 2 - S223	Session 6.8 Sustainable Neighbourhoods - Case Study Review (2) Level 4 - \$426 & 427
Innovations Driving for Greener Policies and Standards - Assessment, Analysis and Modelling (2)	Sustainable Neighbourhoods - Case Study Review (2)

Session 6.9 Transforming Green Market - Green Economics (2) Level 2 - S228	Session 6.10 Innovative Practices to Transform SBE (1) Level 4 - \$423 & 424
Session Chair: Thomas TANG Sek-khuen  Managing Director, Kuala Lumpur Centre for Sustainable Innovation, Malaysia	
Economic and Sensitivity Analysis of Net Zero Energy Refurbishment of Terraced Houses Angela GRECO, Delft University of Technology, The Netherlands Finding the Value in Deep Energy Retrofits James Scott BREW, Senior Sustainability Architect, Nikken Sekkei, Japan Productive Green Roofs Matthew PRYOR, Associate Professor (Teaching), The University of Hong Kong, Hong Kong SAR Sustainable Buildings – Impacts on Cash Flow and Business Case Analysis Thomas LÜTZKENDORF, Director and Head of Chair, Karlsruhe Institute of Technology, Germany Business for Sustainability: Market Incentives for the Better Thomas SCHLUCK, Senior Scientist, Hochschule Luzern, Switzerland	Comparative Analyses: Urban Quality, Living Standard, Sustainability. Modernist Housing Estates vs 21st Century City Aleksandar TEPAVCEVIC, University Assistant, Graz University of Technology, Austria Build Less and Make Cities Smarter by Unleashing Potential of Vacant Spaces CHAN Lai-kiu, arQstudio Ltd, Hong Kong SAR 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 Shaping Energetic Neighbourhoods: A Dynamic Approach for a Future Proof Urban Energy Planning Jürgen KNIES, Jade University of Applied Sciences, Germany Building Drives for Behaviour Change - Role Model of Sustainability Tony LAM, Senior Engineer, Arup, Hong Kong SAR
Session 6.13 Place-making - Integrative Design Processes Level 2 - S226 & 227	Session 6.14 - Session Organiser: Hong Kong Green Building Council BEAM Plus Neighbourhood: From Theory to Praxis Level 4 - S428
Session Chair: Roland ZINKERNAGEL Lund University, Sweden	Session Chair: Larry POON Convener of BEAM Plus Neighbourhood Steering Committee/ Roll-out Taskforce, Hong Kong Green Building Council Ltd., Hong Kong SAR
Integrated Design Guidance for the Early Process Phase Günter LÖHNERT, Sol-id-ar Planungswerkstatt, Germany 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 Conceptualising Sustainable Neighbourhoods Through Collaborative Place-making Solomon ADEWUMI, University of Dundee, United Kingdom 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 From Environmental to Social and Cultural Sustainability Peter YAM, Ronald Lu & Partners (Hong Kong) Ltd., Hong Kong SAR	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 Subsidised Sale Flats Development at Fat Tseung Street West Ada FUNG, Deputy Director of Housing (Development & Construction), Hong Kong Housing Authority, Hong Kong SAR Transformation of EMSD Headquarters into a Green Building Antony HO, Arup, Hong Kong SAR West Kowloon Cultural District William CHAN, Chief Operating Officer, West Kowloon Cultural District Authority, Hong Kong SAR Lessons learnt from BEAM Plus Neighbourhood Pilot-testing

Session 6.11 Processes, Design, Tools and Methodologies in SBE (4) Level 4 - S421	Session 6.12 Green Buildings - Occupants' Perspectives Level 4 - S425
Session Chair: Andrew LEUNG Emeritus Professor, City University of Hong Kong; China Green Building (HK) Council, Hong Kong SAR	Session Chair: Kevin EDMUNDS Senior Manager - Sustainable Development, Hong Kong Science & Technology Parks Corporation, Hong Kong SAR
Evidence-Based Approach to Calibration of Whole Building Energy Model Adrian CHONG, Carnegie Mellon University, United States of America; National University of Singapore, Singapore  International LCA Data Network - Demonstration Project for an Open International Online Database Structure  Hildegund FIGL, IBO Austrian Institute for Building and Ecology, Austria  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  The Failures of Initial Commissioning, and its Impacts on Overall Building Performance Madeline Kathleen PARROTT, British Columbia Institute of Technology, Canada  Heating and Cooling Loads of a Poultry Shed in Central Coast, NSW, Australia ZHOU Yu. The University of Melbourne, Australia	Sculpting Socially Sustainable Neighbourhoods Franklin YU, Singular Studio Ltd., Hong Kong SAR Thermal Comfort Based Occupancy-driven Building Energy Saving Control Strategies ZHANG Cheng, Assistant Professor, Xi'an Jiaotong-Liverpool University, Mainland China The Effect of Occupant Behaviour on Real-time Electricity Consumption in Canadian School Spaces Mohamed H. ISSA, University of Manitoba, Canada Deep Green Approach to Create Sustainable Built Environments and Neighborhoods - Case Study of Lumpini Place Rama 4 - Ratchada Project Panita VARA-URAIRAT, Director of Sustainable Development Department, Wisdom Consulting and Solution Co., Ltd., Thailand M+, Sustainable Design for a Contemporary Art Museum in Hong Kong Mark RICHARDSON, Senior Engineer of Building Sustainability, Arup, Hong Kong SAR

## Day 3 • 7 June 2017 (Wed) • Parallel Session 7 • 15:10 - 16:40

Session 7.1 Education and Training for Transforming SBE Level 4 - S428	Session 7.2 - Session Organiser: iiSBE SBE Buildings Challenge: Assessment Protocol and Case Studies Level 1 - Theatre 1	
Session Chair: Samuel KWONG Group Sustainable Development Manager, John Swire & Sons (H.K.) Ltd., Hong Kong SAR	Session Chair: Nils LARSSON  Executive Director, International Initiative for a Sustainable Built Environment	
Private Public Partnership Energy Efficiency Assessment Program at Hong Kong Aircraft Engineering Company, Xiamen Facility, China Samuel KWONG, Group Sustainable Development Manager, John Swire & Sons (H.K.) Ltd., Hong Kong SAR  Leveraging the Power of Story to Achieve Greater Sustainability James Scott BREW, Senior Sustainability Architect, Nikken Sekkei, Japan  Embedding Sustainability in Higher Education Course Content: An Industry Perspective  Lloyd Martin SCOTT, Dublin Institute of Technology, Ireland  Importance of Built Heritage for World Sustainable Build Environment  Shahid Ahmad RAJPUT, COMSATS Institute of Information Technology, Pakistan  Developing A Conceptual Framework for Integrating Project Risk Management and Sustainability Objectives  Timothy ROSE, Queensland University of Technology, Australia	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 Green and Monitoring in Holiday Inn Express SoHo Hong Kong Antonio CM CHAN, REC Engineering Co., Ltd., Hong Kong SAR The 2014 CanTeam Evaluation of 9 Case Studies Gordon SHYMKO, President, G.F. Shymko & Associates Inc., Canada Current Proposal for New Canadian Work Gordon SHYMKO, President, G.F. Shymko & Associates Inc., Canada UNSW BPE for 50 Dwellings Lan DING, Senior Lecturer, Faculty of Built Environment, University of New South Wales, Australia Panel Discussion	
Session 7.5 SBE Assessments - Practices Review Level 2 - S222	Session 7.6 Green Construction Materials (2) Level 2 - S224 & 225	
Session Chair: Antonin LUPISEK  Head of Department, Architecture and the Environment, Czech	Session Chair: Kevin EDMUNDS Senior Manager - Sustainable Development, Hong Kong Science & Technology Parks Corporation, Hong Kong SAR	
Technical University, Czech Republic		

Session 7.3  Smart Initiatives in SBE (3)  Level 1 - Theatre 2	Session 7.4  Deep Renovations - Processes & Methodologies  Level 2 - S221
Session Chair: Vincent CHENG Director of Building Sustainability, Arup, Hong Kong SAR	Session Chair: Antonio FRATTARI Full Professor, University of Trento, Italy
Using Advance Thermodynamics and Online Big Data Analytics to Maximize the Chiller Plant Performance Glen ANDERSON, Vice President, ETC Group, Macau SAR 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 Telecommunications Infrastructure for High Performance Buildings Philip TAI, Telecommunications Manager, Swire Properties Ltd., Hong Kong SAR 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	Towards a Holistic Methodology in Sustainable Retrofitting: Theory, Implementation and Applications Aliakbar KAMARI, Department of Engineering, Aarhus University, Denmark A Multidimensional Optimisation Approach to Refurbishment Design on a Multi-Building Scale Claudio NÄEGELI, Chalmers University of Technology, Sweden Development of Regenerative Design Principles for Building Retrofits William James CRAFT, University of New South Wales, Australia Passive Building: Energetic Refurbishment of a Secondary School Antonio FRATTARI, University of Trento, Italy Factors Affecting High Performance Building Designs in Nigeria's Built Environment: "The Architects Perception" Abubakar Yahaya MUHAMMAD, Lecturer, Abubakar Tafawa Balewa University, Nigeria
Session 7.7 Innovations Driving for Greener Policies and Standards - Smart Initiatives Level 2 - S223	Session 7.8 Sustainable Neighbourhoods - Processes and Application Level 4 - \$426 & 427
Session Chair: Shengwei WANG Chair Professor of Building Services Engineering, The Hong Kong Polytechnic University, Hong Kong SAR	Session Chair: Phil JONES  Chair of Architectural Science, Welsh School of Architecture, Cardiff University, United Kingdom; Visiting Research Professor, Faculty of Architecture, University of Hong Kong, Hong Kong SAR
Smart Cities: Selection of Indicators for Vitória Cristina Engel ALVAREZ, Professor/Coordinator, Laboratório de Planejamento e Projetos, Universidade Federal do Espírito Santo, Brazil 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 PLUSQUA: Potential of Neighbourhoods to Reduce Thermal and Electrical Loads Matthias SULZER, Professor, Swiss Federal Laboratories for Materials Science and Technology; Head Swiss Competence Center for Energy Research - Future Energy Efficient Buildings & Districts, Switzerland Adoption of Smart Initiatives in Developing Anderson Road Quarry Site Towards A Sustainable and Green Living Area Michael LEUNG Chung-Iap, Deputy Project Manager (New Territories East) 1, Civil Engineering and Development Department, Government of the HKSAR, Hong Kong SAR PT Roadmap Towards Operational Energy Neutral Sewage Treatment Works Valeria ALVARADO, Civil and Environmental Engineering, The Hong Kong Polytechnic University, Hong Kong SAR	Current Challenges of Urban Energy Planning in A Norwegian Municipality Eirik RESCH, Norwegian University of Science and Technology, Norway Citylab Action: Guiding Sustainable Urban Development Jonas LIND, Licentiate Candidate, KTH Royal Institute of Technology, Sweden; Project Coordinator, Sweden Green Building Council, Sweden The Break-Even Point: Impact of Urban Densities on Value Creation, Infrastructure Costs and Embodied Energy Serge SALAT, President, Urban Morphology and Complex Systems Institute, France Barriers and Needs for Energy-efficient Refurbishment at District Level Tarja HAKKINEN, Senior Principle Scientist, VTT Technical Research Centre of Finland Ltd., Finland 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

# Session 7.9 Transforming Green Market Supply Chain

Level 2 - S228

**Session Chair: Amie SHUTTLEWORTH** 

Global Head of Sustainability Amie Shuttleworth, Cundall, Hong Kong SAR

New Visitors? Small European Companies Entering the Chinese Sustainable Building Market

Christian KOCH, Chalmers University of Technology, Sweden

Sustainable Electrical and Mechanical Services - Vision with Action CHAN Ming-yee, Senior Engineer / Business Planning, Electrical and Mechanical Services

Department, Government of the HKSAR, Hong Kong SAR

Project Manager's Role in Sustainable Building Projects: A Case Study in Canada
Ricardo Ferreira LEOTO, Architect and Sustainable Building Consultant, Faculté de

A Study on Green Industrial Project Construction Experience

l'Aménagement, Université de Montréal, Canada

**ZHANG Wei**, Vice President - Engineering & Innovation, Bulter (Shanghai) Inc., Mainland China

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

#### Session 7.10 Innovative Practices to Transform SBE (2)

Level 4 - S423 & 424

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

Nearly Zero-Energy Care Home Design in Cold Climate in China HOU Shan-shan, Research Associate, Cardiff University, United Kingdom

Preliminary Study on Natural Ventilation Efficiency in School Stadium by Different Opening Patterns

LI Yenyi, Associate Professor, ShuTe University / TSSBE (iiSBE-Taiwan), Taiwan

Quantifying and Improving Environmental and Human Sustainability in Remote-Region Health Clinics, Australia

Steve BURROUGHS, University of Canberra, Australia

Soaring of Urbanisation - Optimised Approaches through Adaptive and Sustainable Masternlanning

Antony HO, Associate, Arup, Hong Kong SAR

## Session 7.13 Place-making - Practices Review

Level 2 - S226 & 227

Session Chair: Wafaa NADIM

Associate Professor, The German University in Cairo, Egypt

From Icon to Community: Repositioning the Image of the Modern Mega-Tower
Bryant LU, Vice Chairman, Ronald Lu and Partners (Hong Kong) Ltd., Hong Kong SAR

Do We Design Our Cities?

Eugenio Maria FONTAN YANES, Director – Architect – BIM Implementation, Enzyme Apd, Hong Kong SAR

Sustainable Residential Building Developments towards Neighbourhood Level – From a Hong Kong Private Developer Perspective

Edward CHAN, Henderson Land Development Co. Ltd., Hong Kong SAR

New Exposition of Sustainability – Linking People, Building and Community Gary CHEUNG, Consultant of Building Sustainability, Arup, Hong Kong SAR

Sustainable Workplaces in High Density of Urban Areas

Ryusuke KOJIO, Architect, Takenaka Corporation, Japan; General Manager, Design, Takenaka Europe GMBH, Germany

#### Session 7.11 Session 7.12 Processes, Design, Tools and **Multi-facet Considerations of** Methodologies in SBE (5) **Urban Regeneration Policies** Level 4 - S421 Level 4 - S425 Session Chair: Kazuo IWAMURA **Session Chair: Thomas NG** Professor (Construction Engineering and Management), The Japan GreenBuild Council, Japan University of Hong Kong, Hong Kong SAR The Role of Stakeholders in Masterplan Regeneration Decisions Measuring Sustainability in Buildings Using Construction Materials Database Based on Life Cycle Information in Turkey Hannah BAKER, University of Cambridge, United Kingdom ilker KAHRAMAN, Yaşar University, Turkey Effect of Residential Tower Geometries on Urban Wind Environment When Digital Fabrication Provides Environmental Benefits: Study of Complex Structures Ruffina THILAKARATNE, Associate Professor, Chu Hai College of Higher Education, Hong Isolda AGUSTÍ-JUAN, Scientific Assistant, Chair of Sustainable Construction, ETH Zurich, Switzerland Health Co-benefits of Low Carbon Policies in the Built Environment: An Australian Sustainable Building Design for Enhancement of Street Ventilation and Air Quality Investigation into Local Government Co-benefits Policies Sardar Masud KARIM, The University of New South Wales, Australia Improvement Karl AN, The Hong Kong University of Science and Technology; AECOM Environment, Hong Bai Wan Zhuang, A Beijing Community at The Crossroads - An Analysis About the Kong SAR Sustainable Update of Chinese Old Distinctive Residential Areas Applicability of Maturity Assessment for Sustainable Construction WANG Liang, CAUPD, Mainland China Marco SCHERZ, Scientific Assistant, Graz University of Technology - Institute of Technology Methodology for a Sustainable Urban Regeneration: Urban Cell as Dissemination Unit and Testing of Building Materials - Working Group for Sustainability Assessment, Austria Miguel AMADO, Instituto Superior Tecnico, Portugal Development of a Rotatable Outdoor Testbed and the Testing of an Integrated Autodimming 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

### **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 Existing Buildings in** China

Session Organiser: China Academy of Building Research (CABR)



Turning Green to Gold - Green Practices for Urbanization in China

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



**Green Building Design and Technological** Challenges of Eco Skyscraper 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
C Turkey	(*) Canada	Australia	Czech Republic
Greece	Brazil-Portugal	Korea	Switzerland
<b>Egypt</b>	Netherlands	Singapore	Ireland
United Arab Emirates	Germany	Philippines	<b>()</b> 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.



#### **Exhibition Packages**

#### Standard 9m<sup>2</sup> Booth with

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

To secure you booth today, please visit:





#### **EXHIBITORS**

































































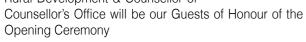




## **OPENING CEREMONY**

(5 June 2017)





 Top leaders from the Government and the industry will gather and witness the opening of the global conference, WSBE17 Hong Kong



(7 June 2017)



- Mr Eric MA, Secretary for Development, Government of the HKSAR, will be our Guest of Honour of the Closing
- 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 celerate the achievements of green and sustainable developments around the globe.





#### **INTERNATIONAL YOUTH COMPETITION (IYC)** Smart micropower generation



 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

Ms Deborah KUH

Tree Management Section, Development Bureau,

Government of the HKSAR



Ms Christine LOH Under Secretary for the Environment, Head of Greening, Landscape and Government of the HKSAR



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



Regional Director in Asia-Pacific, iiSBE, Founding Director, nBLue Pty Ltd.



Renovation

Green procurement

ics Climate change Water Hall Specific Climate Change High-performance Building

Waste management Education and training

Community

aluation Empowerment

Centre for Sustainable Development. University of Cambridge



Prof. Serge SALAT Complex Systems Institute

Sustainable 1

Neighbourhood I



President, Urban Morphology and



**Prof. Arno SCHLUETER** Professor, Architecture and Building Systems ETH Zurich nvestigator, 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 kevs 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..."

The Green - Blue City - Amazon

"Being a project that is in immediate contact

between three rivers and the city, it can be seen from

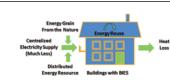
an essentially landscape and environmental angle for a new Amazon Referent and Green-Blue City'

Referent @



#### 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!"

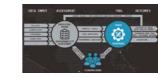


The Application of Building Integrated

#### **Energy System in Hong Kong: SOFC-Based Multi-Generation Using Bio-gas** from Waste 🕝 🥘

limited space."

"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



#### Urban Framework

global south, where many countries lack resources to counteract the negative side-effects. We attempt to



"The fastest urban growth happens mostly in the 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.

8. Kai Tak Development on

and modest vet practical design

**Department Headquarters** 

Achieved BEAM Plus Provisional Platinum rating

9. Electrical and Mechanical Services

Showcase of sustainable development through

terminal building into an office-cum-workshop

Hong Kong's first low carbon temporary office

with the use of a raft of integrated green building

Adopted series of renewable energy technologies

10. Energizing Kowloon East Office

technologies and features

11. Trade and Industry Tower

12. Yau Lai Estate Phase 5

Sustainable public housing estate

renovation of the old structure of a former air cargo

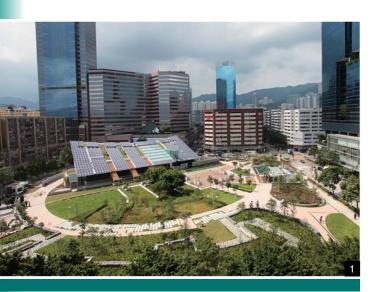
and focused on building community, sustainability,

3 Muk Chui Street

#### **Core Technical Visit Location**

1. CIC ZCB

First zero carbon building in Hong Kong







14. Hang Seng Management College Post Secondary College, environmentally responsive and infused innovative environmental

#### 15. Hong Kong Science Park -

Conservation in 2016

"Living laboratory" where the buildings are designed on sustainability principles

Futuristic waste treatment facility that fires up Hong

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

18. Shenzhen Institute of Building Research (IBR)

A National 3-Star green building incorporating more than 40 sustainable technologies

19. Shenzhen International Low Carbon City A pioneer in forming a climate-friendly city

20. Tianan Cloud Park

An industry community focusing on cloud computing, networking, smart grid and other new generation information technologies

## **TOUR 1: Hong Kong Island Kowloon** Tour (2 routes)

- 2. Chai Wan Factory Estate conversion Public Housing Estate, converted from H-shaped Chai Wan Factory Building
- 3. 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)
- 4. Hysan Place

BEAM Plus Final Platinum project and first LEED Platinum certified composite vertical mall/ office in Greater China

5. 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

6. PMQ

Transformed from residential units built in 1951 into design studios, shops and offices for creative enterprises and places for organising exhibits

7. 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:** Tour (2 routes) Tour (2 routes)

13. Green Hub (Old Tai Po Police Station) Recognised with an Honourable Mention in the 2016 UNESCO Asia-Pacific Awards for Cultural Heritage

ideas in the building design

Phase 3a+3b & Green 18

16. 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

17. T • PARK

Kong's "waste-to-energy" and resource recovery



### Hong Kong Eco Tour (9 June 2017)

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

21. 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

22. Lai Chi Wo Eco and Cultural Tour

A traditional Hakka village established as early as 1670s and being revitalised since 2013





### **SPONSORSHIP OPPORTUNITIES**

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.

### **SPONSORS**

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#### **Silver Sponsors**











#### **Parallel Session Organisers**













International Youth (IYC) Sponsor



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

	First Name:		
ob Position: Organisation:			
mail:	Phone No :		
lemberships			
lease check the appropriate box below:			
CIC Member ☐ HKGBC Member ☐ Supporting Organisation Member ☐ Non-Member	☐ BEAM Pro ☐ BEAM A	Affiliate □ None	
HKGBC Membership Number:	BEAM Pro / BEAM Affiliate Number:		
Contact Person			
itle:   Mr   Ms   Mrs   Ir   Prof.   Dr   Last Name:	First Name:		
ob Position: Organisation:			
Email:	Phone No :		
Additional Information			
Vhat is your organisation's primary industry sector?			
That is your organisation of primary modelity coolers.			
/hat is your primary job function?			
low did you hear about WSBE17 Hong Kong?			
Vould you like to receive information on Business Matching opportunities for WSBE17 Hong Kong?	·		
Nould you want to appear on the official list of participants and other conference marketing collater	als?		
Conference Package			
	Early Bird Rate (in HK\$)	Regular Rate (in HK\$)	
3.day Standard Package	(on or before 30 Apr 2017)		
,		Regular Rate (in HK\$) \$5,800	
□ 3-day Standard Package  - Admission to 3-day Conference & Exhibition  - Day 1 Networking Luncheon	(on or before 30 Apr 2017)		
- Admission to 3-day Conference & Exhibition	(on or before 30 Apr 2017)		
- Admission to 3-day Conference & Exhibition - Day 1 Networking Luncheon	(on or before 30 Apr 2017)		
Admission to 3-day Conference & Exhibition     Day 1 Networking Luncheon     Coffee Breaks     Conference Kit	(on or before 30 Apr 2017)		
- Admission to 3-day Conference & Exhibition - Day 1 Networking Luncheon - Coffee Breaks - Conference Kit  Day 2 Lunch	(on or before 30 Apr 2017)	\$5,800	
- Admission to 3-day Conference & Exhibition - Day 1 Networking Luncheon - Coffee Breaks - Conference Kit  Day 2 Lunch  Day 3 Lunch	(on or before 30 Apr 2017)	\$5,800 \$400	
- Admission to 3-day Conference & Exhibition - Day 1 Networking Luncheon - Coffee Breaks - Conference Kit  Day 2 Lunch  Day 3 Lunch  Gala Dinner	(on or before 30 Apr 2017) \$4,800 \$2,200 (per pax)	\$5,800 \$400 \$400	
- Admission to 3-day Conference & Exhibition - Day 1 Networking Luncheon - Coffee Breaks - Conference Kit  Day 2 Lunch  Day 3 Lunch	(on or before 30 Apr 2017) \$4,800 \$2,200 (per pax)	\$5,800 \$400 \$400	
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- Day 1 Networking Luncheon - Coffee Breaks - Conference Kit  Day 2 Lunch  Day 3 Lunch  Gala Dinner  Total Fee  Meal Preference  Please indicate your meal preference.	(on or before 30 Apr 2017) \$4,800 \$2,200 (per pax)	\$5,800 \$400 \$400	
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For online registration, please visit: www.wsbe17hongkong.hk

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