

Notes from the Tokyo SBE19 conference

Built Environment in an Era of Climate Change: How can cities and buildings adapt?

Basic information

The conference consisted of 3 elements: the *Student Ideathon*, held during 3-6 August; the main Tokyo SBE19 conference, which took place on 6-7 August; culminated by the Tokyo Site Visit on 8 August.

The Ideathon was held at the Youth Education National Olympics Memorial Youth Centre, while the main conference took place at the University of Tokyo Komaba Campus, Meguro City, Tokyo.

The event attracted a total of 294 participants, whose origins were as follows,

Japan	148
Hong Kong / China	45
South Korea	17
Taiwan	16
USA	7
UK	6
Vietnam	6
Thailand	6
Other countries	38

The main conference themes included:

- 1: New Idea for Policy Design Toward Adaptation and Mitigation
- 2: Integrated Urban Strategies
- 3: Measures to Prevent and Face Disasters
- 4: Building Design Strategies and Building Operation
- 5: The Role of Building Occupants and Urban Residents in Affecting Energy Demand
- 6: Challenges in Growing Countries

Keynote speakers included Hiroko Kuniya (Member of Board of Trustees, to the Tokyo University of the Arts) and Peter Head (well known engineer with UK and international experience)

Presentations included 114 Oral presentations and 19 posters. All papers underwent a double blind peer review process.

Measures taken to reduce environmental impact of the event

- Event held at center of Tokyo, accessible by public transportation
- Reduction of waste during preparation of event and beyond
- No conference bags, only program were printed
- Waste recycle and separation
- Catering aimed to reduce plastic waste, paper cups recycled, no cutleries were used
- Networking party prepared with local sourcing



Roundtable sessions

Roundtable Session 1

SDGs for cities: the interaction of each target and the pathways to achieve sustainable society

- Peter Head (The Ecological Sequestration Trust)
- Shun Kawakubo (Hosei University)
- Ben Leibowicz (The University of Texas at Austin)
- Katsumasa Tanaka (National Institute for Environmental Studies)
- Yasuhiko Hotta (Institute for Global Environmental Strategies)
- Guest speaker: Christian Haessler (Covestro, Germany)

Roundtable Session 2

The SBE Urban Challenge 2020: Summary of SBE Urban Challenge and SNTool, Assessment for neighborhood

- Noriyoshi Yokoo (Utsunomiya University)
- Nils Larsson (iiSBE)
- Kisa Fujiwara (Utsunomiya University)
- Yuko Nishida (Renewable Energy Institute)
- Yuichi Nakagawa (Nihon Sekkei, Inc.)
- Kazunari Ueda (Utsunomiya City)

Roundtable Session 3

Building Energy Epidemiology: Energy and stock data analysis and modeling

- Ian Hamilton (University College of London, Energy Institute)
- Hiroto Takaguchi (Waseda University)
- York Ostermeyer (Chalmers University of Technology)
- Yujiro Hirano (National Institute for Environmental Studies)
- Rajat Gupta (Oxford Brookes University)
- Kohei Kawai (Xymax Real Estate Institute Corporation)
- Beth Massey (International Energy Research Centre)

Roundtable Session 4

Initiatives and Platform Toward Decarbonized/ Carbon Free Society

- Hiroshi Yoshino (Council of Promotion for Low Carbon Society)
- Ben Nakamura (Council of Promotion for Low Carbon Society)
- Stephen Siu Yu Lau (National University of Singapore)
- Kristina Mjörnell (Lund University)
- Nils Larsson (iiSBE)
- Koji Itonaga (Council of Promotion for Low Carbon Society)

Student Ideathon

The Architectural Legacy of the Olympics

Students from following universities participated.

Institut Teknologi Bandung, Khon Kaen University, Mahasarakham University, Meiji



University, Tokyo Institute of Technology, The University of Architecture of Ho Chi Minh City, The University of Tokyo, Utsunomiya University and Waseda University.

Session Summaries

We asked all the moderators of parallel and roundtable sessions to send in bullet point slides and to present a short summary of each session at the end of the conference. This proved to be highly beneficial and practical way to summarize the conference.

Publications

Full Papers were published @ <<https://iopscience.iop.org/issue/1755-1315/294/1>>

Photos (not edited): <http://bit.ly/sbe19tokyo-photos>

Slides from the Overall Session: <http://bit.ly/sbe19tokyo-overall>

Outstanding Contributions / Awards

Student Ideathon: Best Presentation Award

Resilient Transit Space for Pedestrian and Bike User (Group 5: Jakkrewan Benjawong, Dang Quang Luan, Shabrina Alyani, and Haruka Kobayashi)

Student Ideathon: Best Idea Award

Facilities to be Placed Around the 2020 Olympic Venues (Group2: Yuri Koketsu, Satoshi Inaba, Yulita Hanifah, and Duyen My Vu)

Best Poster Award

Y Fang (P16)

Best Oral Presentation Award

G Miyazaki (1B-3), M Martin (2A-5), D Lee (4A-6), W Zhang (4B-1), A Sarkar (4D-4), R Li (4E-1), A Miyamoto (4F-2), H Imagawa (5A-6), H A Sani (6C-4)

Best Paper Awards

1 L Romanovska, "Urban green infrastructure: perspectives on life-cycle thinking for holistic assessments" (1B-2)

2 M Martin, "Impact of retro-reflective glass façades on the surface temperature of street pavements in business areas of Singapore and Tokyo" (2A-5)

3 A Kamari, "Development of a rating scale to measuring the KPIs in the generation and evaluation of holistic renovation scenarios" (4F-5)

4 T Tanaka, "A study toward the realization of net zero energy building in urban areas" (4G-7)

Thank you all for kind support and participation toward successful conference that will extend our global friendship.

On behalf of the SBE19Tokyo Organizers

Tomonari Yashiro, Chair of the SBE19Tokyo Organizing Committee



Informal notes by N. Larsson, SBE Coordinator

These notes were written the day after the conference ended August 7.

- * There were just under 300 delegates, about half from outside Japan;
- * HKG had a large delegation here, as well as Benny Chow and Ms. Wang who are in leading roles to organize the Shenzhen event in early December. Informal discussions showed that Shenzhen is being treated as a major opportunity by China, with about 40 Chinese universities sitting on the organizing committee.
- * Kisa Fujiwara (on the Tokyo organizing committee and a Professor at Utsunomiya University) organized an *Ideathon* for about 30 design students from southeast Asian countries. The design challenge was to develop ideas for the pedestrian route that will connect two stadia being used for the 2020 Olympics. The results were presented at the conference.
- * The main event was very well organized while maintaining enough informality to be fun.
- * There were 4 roundtable sessions in which presentations were made by panellists, followed by discussion and comments. This is a good way to ensure that plenary presentations are grouped within broad topics and to obtain a high level of audience participation.
- * One of the roundtable sessions was focused on SDGs applied to cities, and that session (main presenter Peter Head) made it evident that SDGs are being taken very seriously and are being integrated into program designs.
- * Roundtable 2 was focused on neighbourhood performance Urban Challenge and SNTool, and I outlined SNTool, while Kisa Fujiwara presented an overview of her work in three neighbourhoods in the small city of Utsunomiya. Discussion brought out the possibility of participation in this work by Peter Head and his organization, The Ecological Sequestration Trust (<https://ecosequestrust.org/>).
- * The third Roundtable was titled “Building Energy Epidemiology”, and notes will be provided on that session by Prof. Yu..
- * A fourth Roundtable covered issues related to bringing Japan (and other countries) to a state of zero carbon. Presenters included Kristina Mjörnell from Chalmers and me.
- * A final Closing session added a very useful element to the conference, since each panel and session chair was asked to provide a short summary of what happened in that component. This is a very useful way of making sure that all delegates are made aware of what happened in the whole conference, and we recommend it strongly for consideration by other organizers.

A more complete report will come from the organizers. Finally, congratulations to Tomonari Yashiro, Yu Morishita, other staff and student volunteers for their good organization and hard work in the wilting summer heat.

Nils Larsson, FRAIC
Representative of the SBE series co-owners
CIB, iiSBE, UN Environment and FIDIC

Email: larsson@iisbe.org larsson.iisbe@gmail.com

