



CLIMATE.CITY.CAMPUS.

ISCN 2017

Main Conference

June 26-28, 2017

University of British Columbia

Vancouver, Canada



ISCN
International Sustainable Campus Network



**THE UNIVERSITY
OF BRITISH COLUMBIA**

CLIMATE.CITY.CAMPUS.

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THE MANY FACES OF ISCN 2017



CONFERENCE PROGRAM

DAY 1: 26 June 2017	DAY 2: 27 June 2017	
<p>7:00 – 7:30: Optional walk or run</p> <p>7:30 – 9:00: Breakfast, registration and poster displays</p> <p>9:00-10:35: Main conference opening remarks</p> <ul style="list-style-type: none"> - Zena Harris - Welcome to the Longhouse - James Tansey - Andrea Reimer - Charles Holmes <p>10:35 - 11:15: Facilitated conversations</p> <p>11:15 – 12:00: Conference wellbeing and sustainability overview</p> <p>12:00 – 14:00: Engage with UBC and lunch</p> <p>14:00 – 15:30: Leadership and systems thinking</p> <ul style="list-style-type: none"> - Peter Senge - John Robinson <p>15:30 - 16:45: Working groups</p> <p><i>WG1: Buildings and their sustainable performance</i></p> <ul style="list-style-type: none"> - Ying Hua - Bart Meehan <p><i>WG2: Strategic planning and target setting</i></p> <ul style="list-style-type: none"> - Heather Henriksen - Eugenio Morello <p><i>WG3: Integration of research, teaching, and facilities</i></p> <ul style="list-style-type: none"> - Maki Ikegami - Julie Newman - Patrick Jiranek - Zoe Robinson - L.A. (Leendert) Verhoef <p><i>WG4: Corporate-University dialogue</i></p> <ul style="list-style-type: none"> - Gavin McCormick - Conor Kelly - Shana S. Weber <p>16:45 – 21:00: Salmon BBQ buffet dinner and Museum of Anthropology tours</p>	<p>7:00 – 7:30: Optional walk or run</p> <p>7:30 – 9:00: Breakfast and poster displays</p> <p>9:00-11:00: City-Campus strategic relationships armchair discussion</p> <ul style="list-style-type: none"> - Brad Badelt - Fletcher Beaudoin - Brianne Mullen - James Tansey - Michael White <p>11:00 - 12:45: Greenest City Scholars and UBC Sustainability Scholars Ideas Lab</p> <ul style="list-style-type: none"> - Bruce Duong - Emma Luker - Celia Winters - Marjan Navab Tehrani - Jessica Hayes - Christina Treleaven - Sara Thiessen - Ryan Voon <p>12:00 – 14:00: Lunch</p> <p>14:00 – 15:30: City tours</p> <p>15:30 – 21:00: Connecting and reflecting reception at Big Rock Urban Brewery and choose your own dinner</p>	<ul style="list-style-type: none"> - Ryan Jin Zhanhe - Takayuki Nakamura - Tim Lang - Alison Greig - Paul Wolff - Filipa Ferraz <p>9:15 - 9:30: Welcome and review of day</p> <p>9:30 – 11:00: Case study presentations</p> <ul style="list-style-type: none"> - Göran Finnveden - Paulo Ramísio - Bojan Baletic - Claudia Mac-lean - Dan Garofalo - Pornchai Mongkhonvani & Chanita Rukspollmuang - Carlos Mataix & Julio Lumbreras - Sakiko Okayama, Kohei Mine, Kaori Inoue, Yukina Shintani <p>11:00 – 11:15: Group photo</p> <p>11:15 – 12:45: Case study immersion and lunch</p> <p>12:45 – 14:15: Keynote</p> <ul style="list-style-type: none"> - Suzanne Simard <p>14:15 – 15:35: Co-creating the future of ISCN</p> <ul style="list-style-type: none"> - Bernd Kasemir - Heather Henriksen - Melissa Goodall - Holly Moynahan <p>15:35 – 17:00: Reflections, feedback, and free time</p> <ul style="list-style-type: none"> - Charles Holmes - Zena Harris <p>17:00 – 21:00: Reception and ISCN award gala</p> <p><i>Awards Presenter:</i></p> <ul style="list-style-type: none"> - Heather Vickery <p><i>Winners:</i></p> <ul style="list-style-type: none"> - National University of Singapore - Trier University of Applied Sciences - Swarthmore College - Chiba University
	DAY 3: 28 June 2017	
	<p>7:00 – 7:30: Optional walk or run</p> <p>7:30 – 9:15: Breakfast and extended poster session</p> <ul style="list-style-type: none"> - Anders Bøving Møller & Jacob Steen Møller - Aurora Winslade & Larry Eighmy - Baiduri Widanarko - Dano Weisbord - Federico Delfino - Heather Vickery & Holly Moynahan - Jiong Yan - Julio Lumbreras - Massimiliano Rossetti - Michael Bossert - Michiel Scherrenburg - Prinya Thaewanarumitkul & Chanan Phonprapai 	

EXECUTIVE SUMMARY

Globally, climate change is a key challenge; regionally, cities can make a huge difference in how to address it; and locally, campuses are test beds for learning and mitigating impacts. Working together between these levels is essential. The ISCN 2017 conference, *Climate. City. Campus.*, was co-hosted by the University of British Columbia and the City of Vancouver in a collaborative manner that was truly a model for universities and cities to emulate.

Our conference took place on the expansive UBC campus and in the Olympic Village, a neighborhood in Vancouver, one of the greenest cities in the world. Both UBC and Vancouver have sustainability initiatives to be proud of, including the Center for Interactive Research on Sustainability (CIRS), the Greenest City Action Plan, and the successful university-city collaboration through the Greenest City Scholars program, whereby graduate students work with city officials to research and recommend solutions to pressing local and global issues.



Conference participants emphasized that in universities, cultural change is the slow but central variable to achieving true progress. Part of enabling such change is an ethos of collaboration and immersion, which were also central themes in how we conducted the conference this year.

In our increasingly fractured world, our goal for the conference was to engage participants and appeal to their sense of connection. This meant providing the opportunity to strengthen relationships and actively participate in the knowledge-sharing amongst constituents rather than only providing information that is passively absorbed. We took the traditional one-way presentation style conference model experience and re-engineered it into a variety of experiences whereby participants were engaged with each other, immersed in the topics, and received the opportunity to exchange ideas in a guided manner.

Furthermore, the Board and Advisory Committee meetings we hosted focused on the future of our network as we look ahead another 10 years. We are indeed in a transition to adapt the ISCN's Charter to reflect the evolution of campus sustainability and higher education's position in the global sustainability conversation. Echoing our commitment to the future of the ISCN, the Board, Advisory Committee, and conference participants all expressed enthusiasm for a bold next decade for the network. The conference discussions made clear that understanding and strengthening universities' role in the global Sustainable Development Goals will be an important aspect of our future work.

The value of relationships, connection, engagement, and systems thinking to elevate society and increase learning were all highlighted in the conference by our speakers, John Robinson, Peter Senge, and Suzanne Simard, and shone through in projects presented. We will remain steadfast in these values as we plan our course forward.

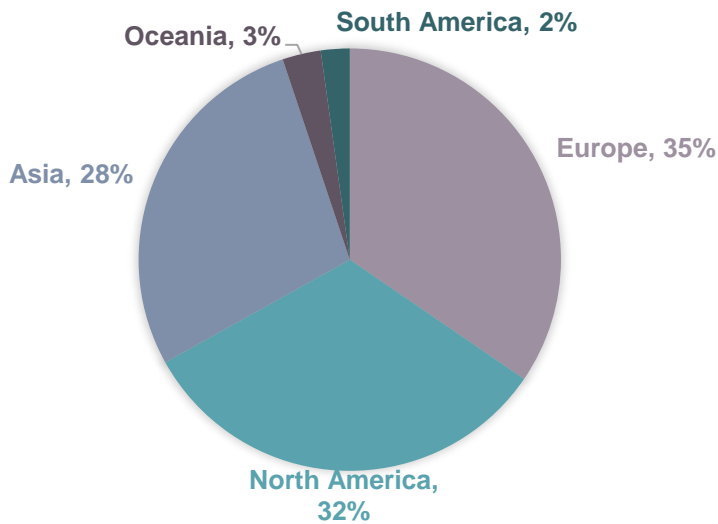
We invite you to engage in the ISCN throughout the year and utilize the power of the network as a resource for your work. Next year's conference will have us gather in Stockholm, Sweden, to explore KTH Royal Institute of Technology and your projects so we may exhibit sustainable development in action even further.

Zena Harris
Executive Director, ISCN

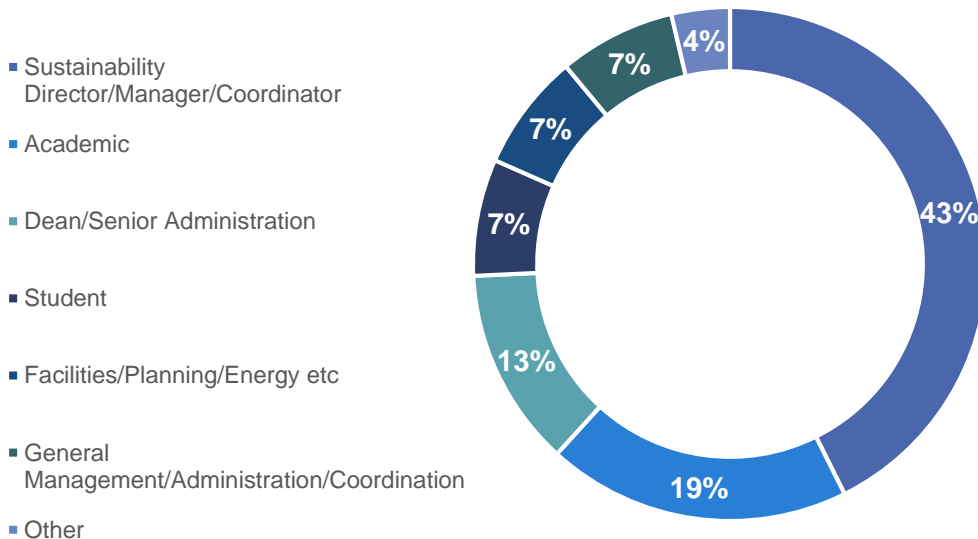
ISCN 2017

130+ PARTICIPANTS
30 COUNTRIES
81 INSTITUTIONS

ISCN 2017 REGISTRANTS BY REGION



ISCN 2017 REGISTRANTS BY ROLE



MISSION

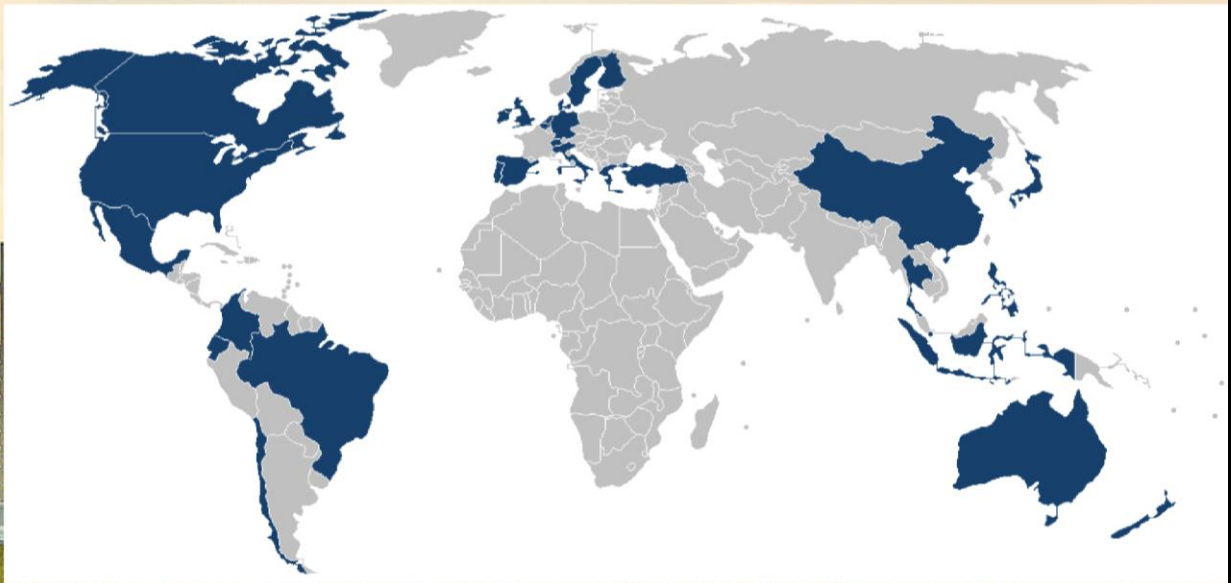
The mission of the International Sustainable Campus Network (ISCN) is to provide a global forum to support leading colleges, universities, and corporate campuses in the exchange of information, ideas, and best practices for achieving sustainable campus operations and integrating sustainability in research and teaching.

11th ANNUAL CONFERENCE

9th ANNUAL AWARDS CEREMONY

4 WORKING GROUPS

DELEGATES FROM ACROSS THE GLOBE



Australia	Finland	Philippines
Belgium	Germany	Portugal
Brazil	Hong Kong	Singapore
Canada	Indonesia	Spain
Chile	Ireland	Sweden
China	Italy	Switzerland
Colombia	Japan	Thailand
Croatia	Mexico	Turkey
Denmark	Netherlands	United Kingdom
Ecuador	New Zealand	United States

ISCN 2017 CARBON FOOTPRINT

Throughout ISCN 2017, the UBC Conference Planning team, together with the support of the ISCN Secretariat, collected carbon footprint information on all attendees. Below is the collective carbon footprint from the conference.

TOTAL CONFERENCE CARBON FOOTPRINT – CLIMATE IMPACT

Category	Emissions (kg CO2e)	Emissions (t CO2e)
Travel (to Vancouver and during conference)	21,0487	210
Food	2,340	2.3
Accommodation	3,254	3.3
Waste	5.4	0.005
Total	216,086	216

TRAVEL CARBON FOOTPRINT – TRAVEL TO VANCOUVER

Mode	Distance (km)	Emissions (kg CO2e)	Emissions (t CO2e)
Bike	50	1	0.0
Car	13,984	1,906	1.9
Plane	1,595,400	205,807	205.8
Transit	527	527	0.5
Coach	-	-	-
Total	1,609,961	208,240	208

TRAVEL CARBON FOOTPRINT – TRAVEL DURING CONFERENCE

Mode	Distance (km)	Emissions (kg CO2e)	Emissions (t CO2e)
Bike	60	1	0.0
Car	977	2,079	2
Plane	-	-	-
Transit	900	107	0.1
Coach	50	61	0.1
Total	1,987	2,247	2

TRAVEL CARBON FOOTPRINT – TOTAL TRAVEL FOR THE CONFERENCE

Mode	Distance (km)	Emissions (kg CO2e)	Emissions (t CO2e)
Bike	110	1	0.0
Car	14,961	3,985	4.0
Plane	1,595,400	205,807	206
Transit	1,427	633	0.6
Coach	50	61	0.1
Total	1,611,948	210,487	210



PRE-CONFERENCE MEETING

Overview

The ISCN 2017 conference included several “firsts” for ISCN, one of which was a joint half-day ISCN Board and Advisory Committee meeting. On the day preceding our main ISCN 2017 conference, the ISCN Board and Advisory Committee were welcomed by **René Schwarzenbach**, ISCN Board President, who joined us via Skype to provide opening remarks and inspire a group discussion on strategic direction of the ISCN, our value proposition, and the future of the ISCN-GULF Sustainable Campus Charter. In his remarks, he highlighted one of ISCN’s values, that of a close community which can draw on each other’s expertise, learn, and help each other advance. He noted that ISCN is one of the only networks with this close “family” relationship between members, which is special for a global network. The groups split into their respective meetings for the afternoon and then came together for a roundtable discussion. In this closing plenary, the relationship, continuity, and vision of the Board and Advisory Committee provided for rich discussion and a robust vision for the ISCN’s future.

Board Meeting

The ISCN Board held its quarterly meeting and annual General Assembly meeting in which they discussed formal matters including the ISCN’s financial status, the Secretariat renewal, ISCN Conferences, and overall strategic direction of the network. Meeting minutes from the June 25th meeting have been circulated to the Board.

In attendance:

- René Schwarzenbach, President of the Board – via Skype
- Steve Cannon, Vice President of the Board, EVP, The University of Hong Kong
- Göran Finnveden, VP for Sustainable Development, KTH Stockholm
- Yong Kwet Yew, VP Campus Infrastructure, NUS
- Etienne Marclay, VP for Human Resources and Operations, EPFL
- Nilesh Jadhav, Program Director EcoCampus, Energy Research Institute, NTU
- Claus Nielsen, University Director, Technical University of Denmark
- *From the ISCN Secretariat:*
 - Bernd Kasemir, ISCN Board Secretary and Partner at Sustainerv, Inc.
 - Zena Harris, ISCN Executive Director and Consultant at Sustainerv, Inc.

Unable to attend:

- Reto Knutti, Professor, ETH Zurich, as he is on sabbatical
- James Tansey, Executive Director of UBC Sustainability Initiative (guest member for 2016/2017 year)

Advisory Committee Meeting

In parallel to the Board meeting, the ISCN Advisory Committee held a workshop-style discussion on the afternoon of June 25, 2017. Advisory Committee co-chairs, **Heather Henriksen**, Director, Office for Sustainability, Harvard University and **Melissa Goodall**, Associate Director, Office of Sustainability, Yale University, planned and organized this half-day workshop with support from **Victoria Smith**, Director, Communications and Community Engagement, UBC Sustainability Initiative, and **Zena Harris**, Executive Director, ISCN. The group discussion was facilitated by **Charles Holmes**, Facilitation Consultant.

The group engaged through a variety of interactive exercises focused on the values, benefits, relevance, and future of the ISCN. For example, using a variety of different images, each Advisory Committee member picked a photo symbolic of what the ISCN means to them as an educator and a member of the ISCN, and this exercise sparked insightful conversations on how the ISCN brings value to the ISCN community and higher-education sustainability efforts as a whole. Ultimately, lively discussions followed by close-knit circular brainstorming sessions led to conclusions that supported the idea that the ISCN is a community that harnesses innovations in higher-education sustainability through global connectivity.

Key topics included:

- A review of what was discussed at the 2016 Advisory Committee meeting in Siena, Italy and meetings throughout the year, including a survey that was distributed
- A discussion of the ISCN's value proposition, including the relevance, value, and differentiation the ISCN offers its members
- A review and evaluation of the ISCN-GULF Charter and opportunities to expand upon it in ways that serve the ISCN community

In attendance:

- Philippe Vollichard, Head, Sustainable Campus, EPFL
- Amy Ho, Director, Office of Environmental Sustainability, National University of Singapore
- Ann Kildahl, Sustainability Manager, The University of Hong Kong
- Bart Meehan, Visiting Fellow at the Fenner School of Environment and Society, Australian National University
- Kristina Von Oelreich, Environmental Manger, KTH Royal Institute of Technology
- Patrick Jiranek, Project Manager, sitting in for Christine Bratrich, Director of Sustainability, ETH Zurich
- Eugenio Morello, Assistant Professor, POLIMI
- Heather Henriksen, Director, Office for Sustainability, Harvard University
- Julie Newman, Director, Office of Sustainability, Massachusetts Institute of Technology
- Maki Ikegami, Coordinator, Hokkaido University
- Ying Hua, Assistant Professor, Cornell University
- Melissa Goodall, Associate Director, Office of Sustainability, Yale University

- John Spengler, Akira Yamaguchi Professor of Environmental Health & Human Habitation, Harvard School of Public Health
- Victoria Smith, Director of Communications and Community Engagement, University of British Columbia
- Shana Weber, Director, Office of Sustainability, Princeton University
- Roberta Consentino Kronka Mülfarth, Professor, Deputy Superintendent of Environmental Agency - SGA USP, University of Sao Paulo
- Andreas Wanke, Coordinator for Sustainability, Freie Universität Berlin
- Gonca Ongan, Managing Director of Koç University Social Impact Forum (KUSIF), Koc University
- Alison Greig, Director, Education for Sustainability, Anglia Ruskin University
- *From the ISCN Secretariat:*
 - Holly Moynahan, ISCN Communications Manager and Consultant at Sustainserve, Inc.
 - Heather Vickery, ISCN Network Relations Manager and Consultant at Sustainserve, Inc.

Unable to attend:

- Ahlava Antti, Vice President and Professor of Department of Architecture, Aalto University
- Awangku Hassanal Bahar Bin Pengiran Bagul, Senior Lecturer at Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah
- William H. Clune, Policy Director, Sustainable Earth Office, Nanyang Technological University
- Ariane Koenig, Head of Sustainable Development and Senior Researcher, University of Luxembourg
- Chiara Mio, Full Professor of Sustainability Management, Università Ca'Foscari Venezia
- Jacob Steen Moeller, Director of Facilities, DTU, Technical University of Denmark
- Eddi Omrcen, Environmental Manager, University of Gothenburg
- Jessica Prata, Assistant Vice President, Office of Environmental Stewardship, Columbia University

ON THE ISCN'S VALUE PROPOSITION:

“The Advisory Committee meeting illustrated ISCN’s dedication to evolve. We reflected the needs of present and incoming interested actors. Accordingly, discussing values ISCN can create for new members and critically reviewing the ISCN charter were part of this fruitful process. Both in this meeting and at the conference I enjoyed the network’s open-minded spirit. It initiates goal-oriented dialog regarding sustainability at higher education institutions and yet stimulates my daily work.”

- **Patrick Jiranek, Project Manager, ETH Zurich Seed Sustainability**



MAIN CONFERENCE MEETING

Overview

At a global level, climate change is one of the biggest sustainability issues of our time. At a regional level, cities create huge impact—both positive and negative. At a local level, campuses are a test bed for learning and scalable impact reduction. The ISCN 2017 conference at UBC interwove each of these elements to embody its theme, *Climate.City.Campus*.

This year marked our 11th annual conference and we were honored to collaborate with the University of British Columbia and the City of Vancouver to give conference participants the opportunity to experience the collaboration and sustainability in practice on campus and in the city.

This year we hosted a three-day conference with participants gathering on day 1 at UBC to kick off the event, learn about place and system change, and dive into intimate discussion in working groups. On the second day, we shifted the setting to Vancouver's Olympic Village for the opportunity for city-sustainability immersion—via talks and tours—with insights from city officials, graduate students, and UBC faculty and operations staff for the spectrum of university-city collaboration. To close the conference on day 3, we were back at UBC for case study immersion, learning from colleagues from around the world and UBC advances, and broadening our minds by learning more about interconnectedness and the parallels between nature and organizations such as ISCN.

Day 1: The University of British Columbia

Welcome and Opening Remarks

After a gracious welcome from the ISCN's Executive Director, **Zena Harris**, **Owen Bedard**, student at the University of British Columbia, provided a warm introduction by paying homage to the traditional, ancestral, and unceded territory of the Musqueam land in which UBC is located. Referencing the intricate heritage instilled in the beautiful First Nations Longhouse, ISCN 2017 delegates were familiarized with the Musqueam First Nation.

James Tansey, Executive Director of the UBC Sustainability Initiative, referenced the dedication UBC has had to sustainability over time, referencing its growth and success in innovative and collaborative initiatives with the City of Vancouver.



Opening Keynote Address

We were fortunate to have **Andrea Reimer**, Councillor for the City of Vancouver, as our opening keynote speaker. Councillor Reimer echoed the opening sentiments and elaborated upon the importance of acknowledging the history and heritage of the First Nations in the City of Vancouver region.

She further described the power of collaboration between campuses and cities, highlighting the relationship between UBC and the City of Vancouver, and the strides Vancouver has made with sustainability endeavors—particularly through its Greenest City Action Plan.

With a goal of becoming the world’s greenest city by 2020, Andrea expanded upon the ways in which Vancouver focuses on innovations and efficiencies for its Greenest City Action Plan. These efforts revolve around water use, land use, community development, tree coverage, employment, community engagement and dialogue, and education, among other initiatives. UBC’s collaboration with the City of Vancouver plays a huge role in the success of these efforts.

This year the ISCN and UBC invited expert facilitator, **Charles Holmes**, to help interweave the sessions and conversations throughout the conference. Following Councillor Reimer, Charles set the stage for the rest of the conference by engaging the whole group with a discussion around hopes and intentions for what delegates would take away from ISCN 2017.



TESTIMONIALS

“Thanks so much to the University of British Columbia, the City of Vancouver, and the ISCN board for such an amazing conference! I’m prepared to say it’s the best conference I have ever been to—content, format, setting, catering, networking, ‘vibe,’ the works!”

Many thanks and regards, and congrats to all for the conference.”

Clare Walker

**Associate Director
of Sustainability**

**The University of
Melbourne**

Wellbeing

UBC prides itself on wellbeing for faculty, staff, students, and community members. We must work together, embracing wellbeing in our campus culture, promoting and supporting wellbeing in both large and small ways, and helping one another address challenges. **Matt Dolf**, Wellbeing Strategic Support Director, UBC, provided an overview of how this works in practice on campus and how we might think about it during the conference.

Engaging with UBC Sustainability Staff

As we transitioned to our next venue, lunch was upon us. In this session, we took the opportunity to introduce conference participants to the many staff that are involved with sustainability at UBC. Booths were set up and informational posters provided the basis for an engaging lunch and learn session.



Engagement on topics including:

- Climate & Energy
- Recycling & Waste
- Water
- Wellbeing
- Student & Faculty Engagement
- Transportation

Leadership and Systems Thinking

It was an honor and privilege to host two of the greatest minds in leadership and systems thinking for our first plenary session at ISCN 2017. Joining us via Skype was **Peter Senge**, Senior Lecturer, Leadership and Sustainability, MIT Sloan School of Management and on stage was **John Robinson**, Professor at the Munk School of Global Affairs, and the School of the Environment, University of Toronto. Our conference facilitator Charles Holmes guided the discussion between Peter and John who brought up interesting points and wisdom that was bar none.

Both have been part of the campus sustainability movement for years and have witnessed the transformation in operations, teaching, and overall systems thinking. Notably, institutional culture change is the slow variable; integrating operations with academics in a deep way is the core challenge and greatest opportunity for higher education institutions.

John Robinson mused on the pyramid and the plane whereby the pyramid is operations (i.e., bosses, hierarchy) and faculty is the plane. When the operational side connects with faculty, what can happen is remarkable: operations become the core agenda of the university.

The key to success, Robinson notes, is to make sustainability the core of the institution. Sustainability is a stance, an ethos, a way of being; it's human and environmental wellbeing. It is fundamentally about the core identity of the institution. Framing and building connections is key. The university needs a process that enables a sense of unity and identity, and sustainability is the conduit.



When asked about how universities can work together more effectively, rather than constantly trying to steal the “greenest” ranking from one another, Senge advised that they must understand the relationship/dynamic between competition and collaboration. One cannot see them as either/or. Competition is a great starting vehicle, but not one for sustaining deep change. Deep change must come from doing things we just really want to do, even if there is no competition. Networks of collaboration are stronger sources to sustain the innovation that is needed. Learning to collaborate and build effective teams is not an easy endeavor.



Both agreed that engaging students is important. The common message is that we do not learn from listening, we learn through doing. The process of reflecting, adjusting, and practice, practice, practice is where learning takes place. Their advice: engage students through practice and weave in lectures around the practice. The key challenge in this approach is connecting content through practice, but if faculty care about learning, they can and will do this.

This was indeed an inspiring session and one that is sure to be remembered for years to come.

Working Group Sessions

This year we hosted four working group sessions to give conference participants the opportunity to dive into relevant topics and learn from each other’s experiences.

Working Group 1: Buildings and their sustainable performance

The session was facilitated by ISCN Working Group 1 Co-Chairs, **Ying Hua**, Assistant Professor, Cornell University, and **Bart Meehan**, Visiting Fellow at the Fenner School of Environment and Society, Australian National University. The theme of this session was, “Smart Building. Smart People.” Smart Building is about automating systems inside and outside of a building, whereas smart people is the process of making users accustomed to these systems.

Key point to the discussion:

- 1) There is a dilemma of automation of building systems and educating occupants about the automation of systems. When people get used to automated systems, they tend to forget or become unaware of tasks such as turning off lights when in spaces that are not automated.
- 2) Human productivity is believed to be increased by some automation measures such as controlling temperature, fresh air, and humidity. Although with that comes energy consumption. This is why reducing energy consumption and lowering carbon emissions are key factors for consideration in building automation systems.

3) To make people smart first, thorough research and surveys should be conducted to understand people's awareness of their surroundings and on-spot interaction with modern technologies. Second, different behavioral programs should be considered. There should be two parts in a behavior and awareness program: a) behavior of occupants toward the technology used in the building (i.e., behavior of occupants before smart building), and b) behavior or interaction of occupants after smart building.

4) To achieve sustainability in a building considering the relationship and interaction between occupant and smart building is important. The key for a smart and sustainable building is to make people knowledgeable about technologies rather than just installing them.

Working Group 2: Strategic planning and target setting

Working Group 2 was facilitated by ISCN Working Group 2 Co-Chairs, **Heather Henriksen**, Director, Office for Sustainability, Harvard University, and **Eugenio Morello**, Assistant Professor in Urban Design, POLIMI. Each presented an example from their campus to spur conversation among conference participants.

Morello focused his presentation on mapping the implementation of the SDG at POLIMI, and reporting to bring about awareness and knowledge exchange. At POLIMI, the implementation of SDG connects four different aspects:

- Research – Academics
- Education – Students
- Partnership – Stakeholders
- Management – University Staff

To map the SDG implementation at POLIMI involves a campus-wide survey that collects information on:

1. Engagement
 - a. *research* → projects
 - b. *education* → courses, theses
 - c. *institutional activities* → operations, offices, data analysis and interpretation
2. Communication – such as a one-day event for exhibition: research (projects), education (courses), and institutional activities (operations, offices, projects)
3. Action – empowering stakeholders to better integrate SDG into research (projects), education (courses), and institutional activities (operations, offices, projects)

The projects are mapped according to each SDG indicator and department.

Following the discussion on the SDGs, Henriksen shared Harvard University's framework for Healthier Buildings Healthier People. Embedded in the Harvard University Sustainability Plan is the framework:

- Research
- Educate and Empower
- Institutionalize
- Amplify Impact
- Learn It. Live it.

A priority is to invest in research in all departments and all aspects of university operations. This might mean funding student projects, reports, and/or research. By doing this, they've found that 90% of the building cost, for example, lies with people and 10% of the cost is the building itself. They have also noticed gaps in research such as the actual effect of chemicals used on buildings (e.g., the effect of individual materials).

As a means of engaging and empowering, the university has a partnership with Google, Genentech, Perkins and Will, Facebook, The Durst Organization Inc., and others with the intention of creating a standard and working toward effective, consolidated implementation.

Engaging the leaders for the university is key to institutionalizing any concept such as sustainability and this was reinforced in this discussion as well.

Working Group 3: Integration of research, teaching, and facilities

Facilitating ISCN Working Group 3 were co-chairs, **Maki Ikegami**, Coordinator, Hokkaido University, and **Julie Newman**, Director, Office of Sustainability, MIT. This session provided the opportunity for three different perspectives of living labs from **L.A. (Leendert) Verhoef**, Scientific Coordination Officer, TU Delft, **Patrick Jiranek**, Project Manager, ETH Seed Sustainability, and **Zoe Robinson**, Director, Education for Sustainability, Keele University.

At TU Delft, it was noted that the university is committed to the idea of living labs. These are defined by their scope beyond research, user/stakeholder interaction, and organization. As living labs have been refined, they now sustain themselves without intervention by the sustainability office. One critical component for a successful living lab is financing. At TU Delft, a professor guides student projects and sustainability coordinators are identified and trained in each department. External stakeholders such as local politicians participate in living lab projects to foster regional connections.

At ETH Zurich, sustainability involves research, education, campus, and dialogue and the living labs criteria consist of:

- Stakeholder ownership
- Scientific evidence (control vs. treatment cases to produce publishable data that incentivizes faculty involvement)
- Recommendations (feasibility)
- Awareness (visibility)
- Institutionalized label (symbolism)

An example of a living lab project is the Sustainable Catering Program. This is a relevant project because approximately 20% of the university's emissions are from food. In this living lab, the university and catering company work together to develop a partnership to focus on carbon dioxide reduction, water consumption, fair wages, health, and more.

As with any initiative, communication is important for the project to be effective, and successful means of communications at EHT Zurich are through the website, print media, off-campus informational events and volunteer engagement.

Zoe Robinson shared Keele University's context for living labs. Unlike TU Delft and ETH Zurich, they do not have a formal sustainability office, but rather a couple part-time staff. With that comes weaknesses such as:

- The educational element is limited to a small number of students
- There is a limited link to curriculum (generally only some subjects or angles)
- Many developments are invisible to the users
- The assumption that faculty are well-educated and only students need to be educated (we must educate everyone)
- Educational targets are often overlooked

Robinson suggested a few improvements that need to be made to living labs:

1. Focus on energy literacy—people need strong energy literacy to make good decisions
2. Focus on learning-based outcomes—a mixture of formal (curriculum) and informal (user interaction/visible/volunteer) outcomes
 - Formal credit gives depth, but limited number of students
 - Volunteer work educates many students, but limited depth
3. Rewrite curriculum in ways that are not obviously connected to the project, but still relevant
4. Benchmark energy literacy, hard communication, energy conversations, and educational strategy
5. Recognize CO₂ reduction through behavior change, in addition to technological advancements

A key question to ask is: How do we ensure that the whole university community is educated by living lab projects?

Following these presentations, the group discussed the nuances of living labs:

- Defining living labs:
 - Context of other people: research, surveys, communication, etc.
 - We are the experiment—the lab rats
 - Everyone can have two roles—you can be the researcher *and* the researched
 - User interaction
 - Education
 - Scientific research/evidence
- Necessary components of living labs:
 - Programmable structure
 - To oversee project structure (e.g., a Seeds Sustainability program)
 - To make sure project lives on over time, even though projects may come and go
 - To extract new value across different parties
 - To allow for evolution over time to support relevant projects
 - The programmatic structure usually develops later on (after some projects have already been initiated) to maximize the potential of current and potential projects
 - Criteria for operation
 - To guide the projects and deliver results
 - To create consistency among projects at an institution
 - A sustainability office
 - To set up and coordinate departmental sustainability programs and create sustainability champions in each sector of the university
 - To facilitate transactions such as connecting operations, academics, and industry

- Must be flexible—sometimes let the project run through the unit/department; other times work together to oversee
- A definition of success
 - To recognize that education might not lead to direct/measurable outcomes, but is still valuable
 - To ease conflict between different parts of the university (some may value concrete outcomes while others may value education)
 - To find common ground

Working Group 4: Corporate-university dialogue

Our Working Group 4 was focused on corporate innovation and a solution for carbon tracking. **Göran Finnveden**, WG4 Co-Chair, facilitated the discussion with **Gavin McCormick**, Executive Director, WattTime, **Conor Kelly**, Software Engineer, Sustainability Technology, Microsoft, and **Shana S. Weber**, Director, Office of Sustainability, Princeton University.

The topic of the session was energy management using carbon tracking software with input on software from WattTime and Microsoft and description of how it plays out in practice at Princeton University.

Central questions to consider: Where does the power come from? How does one trace energy consumption?

Technology now makes it easy to answer these questions. Timing is key for the use of cleaner electricity. Emissions and carbon impact changes with consumption, weather, and human behavior. Therefore, information provided by carbon tracking software gives flexibility to consumption behaviors by sourcing the cleanest electricity based on timing.

What we learned: Bursts of electricity required to maintain infrastructure demands can be timed to have not only a lower financial impact but also a lower carbon impact based on electrical grid demands. Through automation systems, information from the grid can be managed to utilize power required when it influences the “cleanest” power available on the grid with no negative consumer impact.

Microsoft is developing a program called *Azure* (cloud-based software) that tracks historical data between weather and past emissions. This information helps to inform automation for future emissions reduction and backs up verification of carbon reduction management.

Reality check: Princeton University is taking a multi-strategy approach to reducing absolute emissions in their operations, with no purchase of carbon offsets. The use of software allows for the sourcing of more renewable energy on the grid to include in the Princeton energy portfolio to help lower greenhouse gas emissions. This in effect increases demand in the marketplace for renewable energy.

The use of technology to reduce emissions is not a new concept, and corporations such as Microsoft are working on solutions to continually adapt to the shifting landscape of energy consumption, portfolio, and technology advances. ISCN Working Group 4 focuses on the corporate-university dialogue, application and influence of each sector on each other and our leaders of tomorrow.

Museum of Anthropology

To conclude our first day of the conference, our opening night dinner was at the stunning Museum of Anthropology on the UBC campus.

Participants enjoyed museum tours to learn about the First Nations people who lived on the West Coast of North America and feasted on traditional salmon with the ocean and city as the backdrop.



Day 2: City of Vancouver

We took to the City of Vancouver for a different setting for our sustainability discussion. In addition to the change in setting, we endeavored to engage attendees in a different sensory manner—the BMO Theatre Centre in Olympic Village was a black box with no windows or natural light.

City-Campus Strategic Relationships

Our new aesthetic setting allowed for participants to engage perhaps different emotions or senses for the session to come. Charles Holmes opened by playing music and asking attendees to reflect on their learnings thus far and set their intention for the day to come. The combination of simplicity of setting and music set a powerful tone of focus as our panel commenced.

Panelists:

Brad Badelt, Assistant Director of Sustainability, City of Vancouver

Fletcher Beaudoin, Assistant Director, Institute for Sustainable Solutions, Portland State University

Brianne Mullen, Urban Sustainability Program Associate, Yale Office of Sustainability

James Tansey, UBC Sustainability Initiative

Michael White, Associate Vice-President, Campus + Community Planning, UBC

Each panelist started by describing a bit about their work and their relationship with their city or local university. Interestingly, the relationships with their respective cities described by panelists from universities varied along a spectrum. Brianne described Yale University's relationship with the City of New Haven as trying in some circumstances given the complexity of demographics and breadth of the city setting; Fletcher shared about a more open and responsive relationship with the city of Portland; and James and Michael echoed the open relationship and added *strong* and *longstanding* to the description. This started us off on a quest to understand why, how, and what we can learn from each of these. Common elements for strong university-city relationships include: context, city-university partnership/program, openness, common goals, and student involvement. From the city's perspective, having partners with common goals or those who can help the city work toward its goals for climate change mitigation matters. Ultimately, the panel capped off with the idea that maintaining city-campus strategic relationships benefits all parties involved in the long-run.

Scholars Idea Lab

The Greenest City and UBC Sustainability Scholars programs are part of a collaboration between UBC and the City of Vancouver that places UBC graduate students with the city to work on sustainability projects in support of the Greenest City 2020 Action Plan. It is a paid internship and open to all UBC graduate students. This program could be replicated and positioned as the initial bridge between campuses and cities around urban sustainability, and a clear starting point for foundation requests. At ISCN 2017, we featured Greenest City Scholars and UBC Sustainability Scholars, **Bruce Duong, Emma Luker, Celia Winters, Marjan Navab-Tehrani, Jessica Hayes, Christina Treleaven, Sara Thiessen, Ryan Voon**, and the work they are undertaking on the following topics:

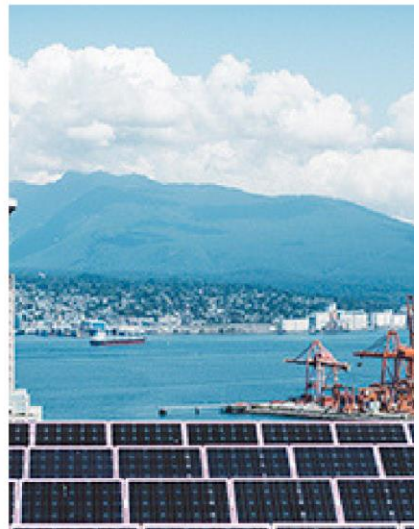
- Embedding sustainability in organizational culture
- Developing a community solar garden
- Developing a kindness week action plan
- Taking a portfolio approach to retrofit financing in industrial areas
- Enhancing the resilience of people with access and functional needs after a disaster
- Exploring the reallocation of parking to support public and semi-public use to enliven Vancouver communities and streets
- Lessons learned from rainwater management strategies used in Olympic Village, Vancouver
- Community-based research on poverty reduction initiatives: community engagement and advocacy



City Tours

Day 2 of the conference took place in Olympic Village, a neighborhood in the City of Vancouver, so it was fitting to show participants around so they could get acquainted with the many sustainability projects underway. Tours also offered the opportunity to get some exercise and move about by walking or biking to take in the sites like a local. Tours included:

1. **Southeast False Creek:** A model of sustainable development built for the Vancouver 2010 Olympic and Paralympic Winter Games. Designed as a mixed-use community, nearly 11,000 people will be housed in high-performance buildings, with goods and services in walking distance, and jobs that are accessible by transit.
2. **Neighbourhood Energy Utility:** Uses thermal energy from sewage to provide space heating and hot water to nearby buildings, eliminating over 60% of the greenhouse gas emissions from space heating. NEU currently serves over 44 million square feet of residential, commercial, and institutional space, with further expansions planned.
3. **CityStudio:** An experimentation hub for the City of Vancouver and post-secondary institutions where staff, students, and community members design and launch projects on the ground. Visit the Studio and key locations where CityStudio student projects have come to life on the streets of Vancouver.
4. **Food Security:** Supporting sustainable food systems and ecosystems are key Greenest City priorities for the City of Vancouver. Community-led initiatives that address food insecurity and promote environmental stewardship were part of a biking tour around the city.
5. **Renewable City Transportation:** In 2015, Vancouver Council committed to becoming a city powered only by renewable energy before 2050. A renewable city is for everyone and requires understanding and participation of residents, businesses, and visitors alike to make it a reality. This bike tour discussed what a renewable city means for how we move around.
6. **Tour the Flats:** A bike tour of Vancouver's industrial core where we explored how businesses, students, and government are working together to improve the sustainability of Vancouver. The tour included stops at local businesses, short presentations by students outlining their sustainability projects in the area, and an overview by the Vancouver Economic Commission of the partnerships between academia and industry that are helping to shape sustainable development in the Flats.
7. **Cities Taking Action on Climate Change:** Vancouver is part of a movement of cities taking action to reduce greenhouse gas emissions, increase the use of renewable energy, and demonstrate climate leadership. Vancouver's Renewable City Strategy commits to eliminating its dependence on fossil fuels before 2050. Representatives from the City of Vancouver discussed the role of cities and the path toward a future without fossil fuels.



Connecting and Reflecting

After the afternoon of city sustainability immersion, conference participants made their way back to Olympic Village and gathered at [Big Rock Urban Brewery](#) to share experiences of the afternoon and reflect on the ways to integrate sustainability into the city scene.

Day 3: The University of British Columbia

On day 3 of the conference we were back on campus at UBC for our final day of engagement, immersion, and knowledge sharing. The first part of the day was case studies from around the world and examples from UBC. We concluded the day with a closing keynote highlighting the theme “interconnection” and our own members and conference participants sharing ideas for the future of the ISCN. To punctuate the day and the conference, we held the ISCN Sustainable Campus Excellence Awards ceremony to inspire participants.

Poster Session

This year we offered the opportunity for participants to share their campus projects via poster. While these posters were available to view each day, we dedicated time for a poster session to engage fully on these projects. Posters were presented by:

- **Anders Bøving Møller & Jacob Steen Møller**, DTU, Technical University of Denmark
- **Aurora Winslade & Larry Eighmy**, Swarthmore College
- **Baiduri Widanarko**, University of Indonesia - UI Greenmetric
- **Dano Weisbord**, Smith College
- **Federico Delfino**, The University of Genoa
- **Heather Vickery & Holly Moynahan**, ISCN Secretariat
- **Jiong Yan**, Sichuan University
- **Julio Lumbreras**, Technical University of Madrid
- **Massimiliano Rossetti**, University of Milano-Bicocca
- **Michael Bossert**, Stuttgart University of Applied Sciences
- **Michiel Scherrenburg**, Utrecht University
- **Prinya Thawananarumitkul & Chanan Phonprapai**, Thammasat University
- **Ryan Jin Zhanhe**, Nanyang Technological University
- **Takayuki Nakamura**, National Institute of Technology, Fukushima College
- **Tim Lang**, University of Toronto Scarborough
- **Alison Greig**, Anglia Ruskin University
- **Paul Wolff**, Massachusetts Institute of Technology
- **Filipa Ferraz**, Dublin Institute of Technology

Case Study Presentations

In addition to the poster presentations, eight projects were selected for short power presentations: seven-minute, high-energy talks on projects making a difference in Sweden, Portugal, Croatia, Chile, USA, Thailand, Spain, and Japan, for a truly international snapshot of campus sustainability.

Presenters were:

- **Göran Finnveden**, KTH Royal Institute of Technology
- **Paulo Ramísio**, University of Minho
- **Bojan Baletic**, University of Zagreb
- **Claudia Mac-lean**, University of Chile
- **Dan Garofalo**, University of Pennsylvania
- **Pornchai Mongkhonvani & Chanita Rukspollmuang**, Siam University
- **Carlos Mataix & Julio Lumbreras**, Technical University of Madrid
- **Sakiko Okayama, Kohei Mine, Kaori Inoue & Yukina Shintani**, Chiba University



UBC Tours

Immersion was one goal for conference participants at ISCN 2017. Following our case study posters and presentations, participants had the opportunity to learn about campus sustainability by touring projects at UBC. Tours included:

- **Centre for Interactive Research on Sustainability – General and Technical:** UBC's first LEED Platinum certified building, CIRS models regenerative design as it relates to environmental and human wellbeing. The building features wood sourced from pine beetle-affected forests and includes a seasonally responsive living wall, solar panels, radiant panel heat ventilation, a green roof, and a Solar Aquatics bio-filter wastewater treatment lab.
- **Campus Energy Centre & Bioenergy Research and Demonstration Facility:** The Campus Energy Centre (CEC) is UBC's \$24 million state-of-the-art hot water boiler facility. Located in the heart of the 1,000-acre campus, the facility is capable of meeting all of UBC's heating requirements. The CEC is the primary energy source for its [new hot water district energy system](#), which began producing thermal energy (hot water) by the fall of 2015. Using renewable fuels, BRDF produces steam, electricity, and hot water that is then distributed for use in campus buildings. BRDF was the first project in North America of this scale capable of generating both clean heat and power using biomass, a plant-based, carbon neutral alternative to fossil fuels. Research aimed at reducing GHG emissions and fossil fuel consumption is also conducted on site. BRDF has been a key contributor in helping UBC reach its 2015 Climate Action Goal, reducing campus emissions by 14%.



Centre for Interactive Research on Sustainability



UBC Campus Energy Centre



UBC Campus

- **SEEDS Sustainability Program:** The SEEDS Sustainability Program advances campus sustainability by creating partnerships between students, operational staff, and faculty on innovative and impactful research projects. [More info here.](#)
- **Art, Culture and Wellbeing:** A talk that explored some of the art and culture on campus. In addition, it included a visit to some of the best places to take a break and relax.
- **Green Labs Presentation:** With over 400 labs across campus, UBC's research activities require a significant amount of energy, water, and materials. In fact, campus buildings with labs consume the most energy and water and generate the most hazardous waste.



Green Labs at UBC

Closing Keynote

Looking at a topic through a different lens quite often leads to new insights and inspirations. Our Keynote speaker, **Suzanne Simard**, Professor, Faculty of Forestry, UBC shared her research on forests and the vast networks, interconnections, and relationships between trees to support the health of the forest. With her insights, conference participants could draw parallel insights about sustainability networks and the importance of contributing knowledge for the good of the network and the sector of higher education more broadly.

Suzanne shared the concept of the “Mother Tree,” one that is the center of a vast network, supporting other trees with nutrients to allow them to thrive. “Forests are built on relationships that form networks,” said Suzanne, “they trade nutrients for mutual benefit.”

One of the key messages that Suzanne stressed is that connections are essential to wellbeing, whether in forests or amongst our peers. She echoed what we heard from Peter Senge and John Robinson about systems: that being connected and working together benefits everyone.

To learn more about Suzanne’s work you can watch her TED talks.



[How Trees Talk to Each Other](#)



[The Networked Beauty of Forests](#)



[Nature's Internet: How Trees Talk to Each Other in a Healthy Forest](#)

Co-creating the Future of ISCN

Inspired by our keynote, we moved to a discussion about co-creating the future of ISCN. This year we did not have a “members’ only” session but rather engaged all conference attendees.

Heather Henriksen and **Melissa Goodall**, Advisory Committee Leadership, and **Bernd Kasemir**, Secretary of ISCN Board, facilitated the discussion around the future of ISCN, our value as a network, and ways we can strengthen our organization and knowledge sharing both internally and globally.

The value of ISCN lies with our members and their experiences, relationships, and commitment to collaboration to elevate the higher education sector as a role model for sustainable development.

The future of ISCN looks inclusive and diverse. Presently our member institutions are in 30 countries and on campuses that teach over two million students annually. Sustainability knowledge is shared by senior administrators, sustainability practitioners, staff, faculty, and increasingly students through the ISCN. This diversity and reach, and the inclusion of more students, is what conference participants want to see as we take ISCN into the future.

Additionally, engagement is one of the valued aspects of the ISCN and one that we will work to continuously improve. Participants suggested several ways for engaging throughout the year, such as webinars and peer review to strengthen relationships, provide support, and exchange knowledge and expertise.

The ISCN-GULF Sustainable Campus Charter is a focal point of our network and endorsement is a shared act between all ISCN members. The Charter was a first for sustainability in higher education and as the work in the field of sustainability has evolved, so must our Charter. Participants expressed interest in assisting in various ways to refresh the Charter to guide the network another ten years.

There is a lot of work to do and we appreciate the discussion and bold ideas. As we look to the future we value the input of our membership and those who have been with us on our journey to further sustainability in higher education.

TESTIMONIALS

“Just to add on to the many appreciative feedback that you heard at the Conference, thank you again for its excellent curation and execution, as well as the hospitality and professionalism that really made this Conference stand out. It was an enriching experience for me, and for many others, I’m sure.

Congratulations!”

Amy Ho

Director

**Office of
Environmental
Sustainability**

**National University
of Singapore**

Thoughts and Thanks

Holly Moynahan, Communications Manager of the ISCN, took the stage to describe the importance of communication both within the ISCN network and for higher education sustainability. After engaging with conference delegates throughout the three-day event, she pointed out in her remarks how creating relationships and sharing stories furthers the impacts we make with sustainability. She quoted Henry Adams, “a teacher affects an eternity. He [or she] can never tell where his [or her] influence stops,” stating that higher education sustainability plays that same role. Students absorb the values they see and experience in their institutions. Making sustainability a priority and communicating those efforts to a broad audience helps spread awareness and impact beyond campus borders as students graduate and take their knowledge and experiences with them. To highlight this further, she described how even within the conference alone, innovative ideas, best practices, challenges, and success stories were shared amongst constituents, and those same individuals brought what they learned back to their respective universities across the globe. To encourage further engagement, Holly described the ISCN’s various engagement platforms—[Twitter](#), [LinkedIn](#), the [ISCN Members-Only LinkedIn page](#), the ISCN Members-Only Listserv for announcements, the [ISCN’s Youtube Channel](#), and the [resource](#) and [news](#) pages of the ISCN’s website—as tools for ISCN members and non-members to use to strengthen and spread their messages. Holly closed with the declaration that efforts for sustainability in higher-education need to be heard—and the ISCN encourages everyone to connect with others and communicate sustainability stories. *Please contact Holly Moynahan, Communications Manager of the ISCN, if you have ideas for better ways to communicate and create relationships within the ISCN: holly.moynahan@isc-network.org.*

As we concluded our sessions of the main conference, thanks were in order. **Zena Harris**, Executive Director, ISCN thanked the organizers at UBC, City of Vancouver, our facilitator, Charles Holmes, and all staff and volunteers involved with conference planning and execution. ISCN 2017 represented a reimagined conference model focused on engagement, and the planning process prioritized inputs from the ISCN Board, Advisory Committee, Secretariat, and the co-hosts to make this a truly unique experience.

Sustainable Campus Excellence Awards



Day 3 of the conference ended with the 2017 Sustainable Campus Excellence Awards Ceremony. **James Tansey**, UBC Sustainability Initiative, welcomed the group to the ISCN's ninth annual gala. Presenting the awards this year was **Heather Vickery**, Network Relations Manager of the ISCN, on behalf of the international awards jury.

These awards recognize universities for exceptional sustainability efforts in campus planning, integration with academics, student leadership, and exemplary building projects.

The winners of the 2017 ISCN Sustainable Campus Excellence Awards are:

- *Building and Innovative Infrastructure Award*: **National University of Singapore (NUS), Singapore**
- *Campus Planning and Management Systems Award*: **University of Applied Sciences Trier, Germany**
- *Innovative Collaboration Award*: **Swarthmore College, United States**
- *Student Leadership Award*: **Chiba University, Japan**

On the last evening of the conference, each award winner presented an overview of their winning project.

Excellence in Building and Innovative Infrastructure

Winner: University Town, National University of Singapore (NUS)

U-Town is described as a sandbox for sustainability practices. Designed as a “work-live-play” sustainably built precinct, it is home to about 15,000 undergraduate and graduate students, staff, and researchers. It has four residential colleges and one student residence, an education resource center, a sports facility, and a research and development complex. It is a first-of-its-kind precinct to integrate natural and

mixed mode ventilation at this scale in a tropical climate, is certified as a Singapore Building and Construction Authority Green Mark district, and has resulted in almost 3.8 million kWh of electricity savings when compared to traditionally built campuses.



Excellence in Campus Planning and Management Systems

Winner: Environmental Campus Birkenfeld, University of Applied Sciences Trier

What started as a former US Military Hospital, has now, over 24 years later, become a state-of-the-art campus combining solar energy systems and innovative buildings where international study programs are offered and research institutes are located. By embodying the values that they teach, the University of Applied Sciences Trier is able to educate their students in how to be responsible and innovative members of the global community. They have implemented life cycle thinking into the campus and these principles are integrated into the educational programming for the students. They live and learn on a campus that is truly a living laboratory.



Excellence in Innovative Collaboration

Winner: Carbon Pricing at Swarthmore College

Swarthmore College talked about Changing Lives and Changing the World, and this project showed one way that they are doing just that. Carbon pricing is a hot area of discussion around the world these days, but only a few institutions have figured out how to do so in a way that really works. Carbon pricing is a way to make clean energy more competitive by ensuring that the real, full cost of carbon emissions are included in energy pricing. Swarthmore has not only adopted an approach to carbon pricing through an internal carbon charge, but has also committed to advocating for such a scheme at the national level.



Excellence in Student Leadership

Winner: Student-Led Environmental Management System, Chiba University

Established all the way back in 2003, the student EMS committee has led the charge at Chiba for the University and its campuses to have certification according to the ISO14001 guidelines. As part of the whole Plan-Do-Check-Act process that is central to the ISO framework, this student group participates in creating and executing action plans for setting targets, monitoring and measurement, performing internal audits, and working with external auditors. In addition to the formal certification/EMS work, the student group also supports awareness and educational activities and charity work in Japan. They also prepare the University's annual environmental report.



Closing Remarks

The ISCN was fortunate to have both UBC and the City of Vancouver as co-hosts of ISCN 2017 *Climate. City. Campus*. The ability to work collaboratively with our co-hosts provided the opportunity for participants to engage and learn not only from peers around the world on campus sustainability but also with those engaged with sustainability at UBC and in the City of Vancouver.

To close out ISCN 2017, **James Tansey**, Director, UBC Sustainability Initiative, raised a glass to toast the exciting learnings, engagement, and relationships gained at the conference.

As we look ahead to our next conference at KTH Royal Institute of Technology in Stockholm, Sweden, **Göran Finnveden**, VP for Sustainable Development, KTH Stockholm, shared a few words about KTH and this [video](#) for inspiration. We look forward to seeing you all in Stockholm, Sweden in 2018!



Post Conference Events

This year attendees had the opportunity to stay on campus longer and take in a bit more to inspire and motivate.

Living Lab Meeting

Following the main conference, participants gathered in a packed room to discuss “Living Labs,” a session organized by **Julie Newman**, Director, Office of Sustainability, MIT and **Leendert Verhoef**, Sustainable Innovation Program Developer, TU Delft.

The group discussed emergent and active living lab models and experiences on campus and opportunities for collaboration, advancement, and exchange between annual ISCN gatherings.

There is strong belief that Living Lab approaches are effective and will lead to facilities, students, and research with better/greater impact on our common future. However, being academic institutions, we should define the desired impacts overall, monitor the successes (and failures) of all approaches, and analyze, understand and falsify the factors behind these successes. Only in that way, recommendations for continuation have value beyond our own experiences.

Follow up work includes the investigation and discussion of a more intense knowledge collaboration between universities to rigorously explore and analyze university Living Labs for Sustainability by structuring, comparing, and monitoring university campus transformational processes, and using the lessons learned actively to help modify and strengthen operations in our own and other campuses.

UBC Tours

To give participants a bit more of an immersive experience, there was an opportunity to do extended tours of some of the sustainability aspects of UBC discussed during the conference. Additional tours included:

- Centre for Interactive Research on Sustainability
- Pacific Spirit Regional Park led by conference keynote Suzanne Simard
- UBC Farm

“Thanks again for the wonderfully coordinated and very well executed conference.

I believe the ISCN family has had an even greater bonding opportunity at this conference and the momentum was accelerated even further.”

Nilesh Jadhav

**Program Director
EcoCampus
Nanyang
Technological
University (NTU
Singapore)**

APPENDIX 1: REGISTRATION LIST

Surname	First Name	Job Title/Position	University/ Organisation	Country
Abraham	Joe	Sustainability Institute Director	Willamette University	USA
Acuna	Francisco	CEO	InTrust Global Investments	Mexico
Agbelusi	Olayinka	Student	University of California, Los Angeles	USA
Amisola	Dante Jose	President & Chancellor	De La Salle Lipa	Philippines
Baletic	Bojan	University professor	University of Zagreb	Croatia
Beaudoin	Fletcher	Assistant Director	Portland State University	USA
Berry	Jessica	Sustainability Manager	Brown University	USA
Bisaillon	Véronique	Sustainable Development Pedagogical Advisor	Université de Sherbrooke	Canada
Boivin	Audrey	Coordinator, Sustainability	Université Laval	Canada
Bossert	Michael	Managing Director Research	Stuttgart University of Applied Sciences	Germany
Brown	Michelle	Head of Social Responsibility & Sustainability Programmes	University of Edinburgh	UK
Brylinsky	Sarah	Sustainability Communications & Integration Manager	Cornell University	USA
Capuloy	Arnold	Chief Strategy & Advancement Officer	De La Salle Lipa	Philippines
Cardinal	Enid	Senior Sustainability Advisor to the President	Rochester Institute of Technology	USA
Chaisawadi	Suchada	Assistant Professor	King Mongkut's University of Technology Thonburi	Thailand
Chapman	M. Virginia	Director, Office of Sustainability	Yale University	USA
Charmondusit	Assoc. Prof. Kitikorn	Acting Vice President for Environment and Sustainable Development	Mahidol University	Thailand
Chirapornchai	Thanitsorn	Vice President for Planning and Information	King Mongkut's University of Technology Thonburi	Thailand
Chubb	Simon	Environment Manager	Anglia Ruskin University	UK
Clavijo	Carlos	Director of Facilities and Operations	Universidad del Norte	Colombia
Costa	Hélder	Executive Director	University of Minho	Portugal

da Rocha Brando Fernandez	Fernanda	Professor and Technical Advisor	University of São Paulo	Brazil
Dalton	Chelsea	Environmental/Sustainability Coordinator	University of Toronto Mississauga	Canada
Delfino	Federico	Full Professor, Head of the Savona Campus	The University of Genoa	Italy
Demoustiez	Alexandra	Sustainability Director	Université Libre de Bruxelles	Belgium
Diamond	Joan	Chair, Holland College Green Machine	Holland College	Canada
Dolf	Matt	Director, Strategic Support for Wellbeing	The University of British Columbia	Canada
Donnellan	Erin	Academic and Student Engagement Coordinator	Brown University	USA
Egan	Erica-Dawn	Project Coordinator	KTH Royal Institute of Technology	Sweden
Eighmy	Lawrence B	Managing Principal	The Stone House Group	USA
Eriksson	Sara	Project Manager	KTH Royal Institute of Technology	Sweden
Ferguson	Grant	Assistant Director of Estates (Head of Operations)	University of Edinburgh	UK
Fernández	Marcelo	Chancellor	Universidad Internacional del Ecuador	Ecuador
Ferraz	Filipa	Researcher	Dublin Institute of Technology	Ireland
Finnveden	Göran	Vice President for Sustainable Development, Professor	KTH Royal Institute of Technology	Sweden
Foster	Kent	University Relations Lead	Microsoft	USA
Fultz	Karl	Database Administrator	Thompson Rivers University	Canada
Garofalo	Daniel	Sustainability Director	University of Pennsylvania	USA
Glassman	Elise	Project Manager	University of Washington	USA
Goodall	Melissa	Associate Director, Office of Sustainability	Yale University	USA
Gordon	James	Environmental Programs and Research Coordinator	Thompson Rivers University	Canada
Gorman	Dave	Director of Social Responsibility & Sustainability	University of Edinburgh	UK
Greig	Alison	Director of Education for Sustainability	Anglia Ruskin University	UK

Harris	Zena	Executive Director	ISCN Secretariat / Sustainerv	Canada
Helling	Klaus	Prof. Dr.	Umwelt-Campus Birkenfeld, University of Applied Sciences Trier	Germany
Henriksen	Heather	Director, Harvard Office for Sustainability	Harvard University	USA
Ho	Amy	Director, Office of Environmental Sustainability	National University of Singapore	Singapore
Holmes	Charles	Facilitator	CEHolmes Consulting	Canada
Hrabal	Eva	Sustainability and Ethics Coordinator	Stuttgart University of Applied Sciences	Germany
Hua	Ying	Associate Professor	Cornell University	USA
Iglecias	Patricia	Head of Environmental Affairs	University of São Paulo	Brazil
Ikegami	Maki	Associate Professor	Hokkaido University	Japan
Inkarojrit	Vorapat	Assistant to the President	Chulalongkorn University	Thailand
Innes	Trina	Chief Sustainability Officer	University of Alberta	Canada
Inoue	Kaori	Student	Chiba University	Japan
Jadhav	Nilesh	Director, EcoCampus	Nanyang Technological University	Singapore
Jin	Zhanhe, Ryan	Programme Coordinator, EcoCampus Initiative	Nanyang Technological University	Singapore
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ABOUT THE ISCN

The International Sustainable Campus Network (ISCN) is a nonprofit association of globally leading colleges and universities representing over 30 countries and working together to holistically integrate sustainability into campus operations, research, and teaching.

The ISCN is governed by the ISCN Board, composed of senior representatives of the ISCN co-host member universities. The Board is supported by an ISCN Advisory Committee that includes representatives elected by the ISCN network universities.

Execution of the ISCN's strategic goals is supported by the ISCN Secretariat, operated by Sustainerv, Inc., and led by the Executive Director of the ISCN. The Secretariat supports and manages member relations, network development and outreach, resource materials, and strategic program management activities.

The ISCN has instituted working groups to explore critical issues and facilitate the development of resources related to the three ISCN-GULF Sustainable Campus Charter principles. These working groups are led by experienced faculty and staff from institutions that participate in the ISCN network and are located all over the world.

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