

## Last Minute News 1

October 3, 2016: The Global Alliance for Building and Construction (Global ABC) has joined the SBE Conference Series and becomes the fifth partner in the management of the series.

## Last Minute News 2

October 3, 2016: The international GHG reduction survey of individuals developed by iiSBE and its SBE partners over the last year will be presented at COP22 as a major 2016/17 project by the Global ABC. The survey is intended to identify diverse views from a large number of individual respondents of what might be the most effective actions within the built environment sector to control climate change

## iiSBE Annual Report for 2015-16

05 October, 2016

This annual report covers the period from October 2015 to October 2016. Summaries of activities follow:

### How iiSBE operates

iiSBE is a dispersed networking organization composed of building-sector researchers and professionals around the world. The organization is incorporated in Canada, which is the base of operations for the Executive Director (Nils Larsson), while President (Luis Bragança) is located in Portugal. There is no physical office and there are no paid employees.

### Membership

The organization has a paid membership that varies between 350 and 400 individuals, who have either joined directly or through one of the ten chapter organizations. The membership year runs from 01 November to 31 October of each year.

### Communications and websites

The primary website for iiSBE is found at [www.iisbe.org](http://www.iisbe.org), but there is very active e-mail communication with members and non-members. A consultant has informed us that the Drupal software that our website is based on, is now obsolete and no longer supported. They

have offered to re-write the website in the more recent Drupal (or WordPress) and also to make the site more user friendly, for a cost of \$1500 to \$2000 USD.

## Finances

iiSBE has two accounts at HSBC Canada, one in CAAD and the other in Euro. The balance in the Canadian account is currently \$4956, which is a typical balance, while the Euro account has a current balance of 7158 Euro, which is more than the typical level.

Income is derived from memberships and from occasional consulting income earned by the XD. There are no paid employees, and the XD is only compensated for direct expenses.

Two current contracts provide income as management fees: a total of 5,000 Euro from the SBE conference series and a total of \$4,000 USD from the contract with UNEP. Spreadsheets for all accounts are available.

## Our role in the SBE conference series

iiSBE is one of four international organizations that operate the SBE conference series. The series has a strong focus on sustainable building and construction, was launched in 2000 and operates on a three-year cycle. Four international organizations are co-owners of the series:

- *International Council for Research and Innovation in Building and Construction*, represented by Wim Bakens (CIB, [www.cibworld.nl](http://www.cibworld.nl)).
- *International Initiative for a Sustainable Built Environment*, represented by Luis Bragança (iiSBE, [www.iisbe.org](http://www.iisbe.org))
- *Division of Technology, Industry and Economics (DTIE) of the United Nations Environment Programme (UNEP-SBCI, Sustainable Building and Climate Initiative)*, represented by Curt Garrigan ([www.unep.org/sbcil](http://www.unep.org/sbcil))
- *International Federation of Consulting Engineers*, represented by François Baillon [www.fidic.org](http://www.fidic.org)

For the 2016-17 cycle, Nils Larsson represents all the partner organizations as manager of the series as a whole. Each participating conference is operated independently by the national research-based organizations that take responsibility for the events.

Agreements with all SBE16 conferences specify that a registration fee of 1000 Euro (500 for developing countries) must be paid, and that the travel expenses of the series manager and one more representative of the partners should be invited to attend (up to a limit of 2000 Euro per event). iiSBE maintains a separate Euro account that handles all income and expenses for the series.

## SBE 16 conferences

In 2016, 20 national / regional events are being held as part of the SBE conference series. As of the date of our AGM (22 October), 15 of these events will have taken place, with Chongqing, Sydney, Cairo, Malmö and Seoul remaining.

Jacob Halcomb, an iiSBE Board member, will represent the SBE partners at the Malmö SBE conference during 30 November to 02 December. Jacob Halcomb will be accompanied by François Baillon, who will represent the partners on behalf of FIDIC. At the Cairo conference, the partners will be represented by Dr. Wim Bakens of CIB. Nils Larsson will cover the other events to come this year.

We have issued a request for post-conference summary information from each of the event organizers, and an Excel file has been issued to record the information. The results will be made available to all organizers and will probably be most useful to colleagues working on WSBE17 in Hong Kong.

## **WSBE 17 Hong Kong**

The third year of each SBE cycle features a global event, and the event for 2017 will take place in Hong Kong, during 5-7 June and is being organised by the Green Building Council of Hong Kong. Strong links have been established between the WSBE17 and SBE16 events, with Hong Kong representatives attending many of the SBE16 events and with an arrangement to provide fast-track review of best SBE16 papers in the WSBE17 event.

All of the global events include a component called SBE Challenge, which is directly organized by iiSBE. This year we will have a half-day session on assessment of building projects, with a focus on comparing predicted performance at the design stage with actual performance during operations, along with the display of tools and methods related to that subject. The Buildings session will be under the technical direction of Dr. Mark Gorgolewski from the Canadian iiSBE team, which presented 9 projects on the same basis at Barcelona WSB14 (see also pg. 7)

Another half-day session will focus on discussion of the performance of small urban areas, to be technically led by Andrea Moro, head of iiSBE Italia, and including presentations on European and North American District 2030 projects.

iiSBE Board member Greg Foliente (Australia) is a jury member for the International Youth Competition (<http://www.wsbe17hongkong.hk/iyc.php>)

### **Breaking News: Meeting of SBE partners in Paris**

A meeting of the SBE Partners to discuss past activities and future plans has just been completed in Paris (October 3). Those attending included Wim Bakens and Chrisna du Plessis of CIB, Luis Bragança of iiSBE, Sharon Gil, representing UNEP, and François Baillon and Jean Félix of FIDIC. Nils Larsson, the series coordinator, presented summaries of activities to date and the proposed plans and management for the next 2019-20 cycle of conferences, along with a proposed RFP for the 2020 conference. He also provided an overview of the current and predicted financial situation (the SBE account is managed by iiSBE for the partners).

As reported in our headline news, Global ABC has now joined the series as a partner.

### **iiSBE participation in the Global Alliance**

On 18 April a two-day organizational meeting of the Global Alliance Buildings and Construction (Global ABC) began in Paris at the Ministry of Environment, Energy and the Sea. The Global ABC is a joint initiative of 19 Member Countries and 45 Partner Institutions under the Lima Paris Action Agenda that created a partnership to put the building sector on a 1,5-2°C pathway.

The Alliance is intended to facilitate the mobilisation of ambitious levels of international resources for efficient local operational solutions, aligning existing initiatives, commitments and programs to achieve greater scale, and catalysing greater pace and impact of climate action in the buildings and construction sector

iiSBE has become a member of Global ABC, and is probably the smallest international NGO to be represented in the organisation.

Primary organizers of the Alliance and of its inaugural meeting were UNEP and the French Ministry of the Environment, Energy and the Sea. Members of GlobalABC, who include governments, NGOs and private firms, were invited to send a single representative to the meeting. About 85+ representatives turned up for the meeting that was intended to define the structure of the organization, the best ways of working together and the scope of future work. The secretariat is led by Frédéric Auclair, who has been seconded to UNEP from the Ministry with support of other UNEP and Ministry staff.

## Major Working Groups in Global ABC

Focus area	Co-lead	Members
<b>WG1: AWARENESS AND EDUCATION</b>	Construction 21, Cooperative Research Council for Low Carbon Living (CRCLCL), Senegal and 10YFP	International Initiative for Sustainable Built Environment (IISBE); Investors Confidence Project (ICP), World Green Building Council, Royal Institution of Chartered Surveyors (RICS), World Business Council for Sustainable Development, Réseau Habitat et Francophonie, Global Buildings Performance Network (GBPN).
<ul style="list-style-type: none"> <li>Development of common narratives and key messages, including but not limited to: Importance of targets – need to raise the level of ambition; How to make the case for Finance/ Politics; Bringing out multiple benefits, with climate as the entry point How to increase demand for energy efficient buildings?</li> <li>Labelling schemes</li> <li>Training of building professionals</li> </ul>		
<b>WG2: PUBLIC POLICIES</b>	Mexico, France, Saint-Gobain and IEA	Morocco, Thermaflex, IFLD, Tunisia, Singapore, CRCLCL, Veolia, Lafarge-Holcim, Architecture 2030, The Prince of Wales's Corporate Leaders Group, Cameroun.
<ul style="list-style-type: none"> <li>Platform for countries to showcase their policies and peer-to-peer learning</li> <li>Capacity support through matchmaking of ongoing partner activities / development of new activities where priorities of partners align</li> <li>Cities and subnational policies as complementary</li> </ul>		
<b>WG3: MARKET TRANSFORMATION</b>	Tunisia, Lafarge-Holcim, and WBCSD	Véolia, Climate-KIC, Morocco, Saint-Gobain, RICS, Ukraine, Senegal, IFTD, INTA.
<ul style="list-style-type: none"> <li>Necessity of multiple partnerships and of a shared culture between private and public sectors, to facilitate market transformation. Voluntary arrangements to prepare regulation. How to spur innovation?</li> </ul>		
<b>WG4: FINANCE</b>	UNEP FI and IPEEC.	Singapore, Ukraine, Architecture 2030, INTA, Investor Confidence Project, Climate-KIC, UNEP, RICS, AFD.
<ul style="list-style-type: none"> <li>Importance of reliable information for investors to reduce risk and create value of more efficient buildings</li> <li>Need to reinforce access to funding and innovative finance tools, as well as access to Climate Finance.</li> <li>Need to fund the policies conception and engineering to conceive and implement</li> </ul>		
<b>WG5: MEASUREMENTS, INDICATORS AND ACCOUNTABILITY</b>	IEA and RICS	Members: Mexico, Ukraine, CSTB, CRCLCL, UNEP FI, ICP, WGBC, C2E2
<ul style="list-style-type: none"> <li>Need for clarity of metrics</li> </ul>		

Nils Larsson

## Notes on a Global ABC meeting in Singapore in early September

Greg Foliente represented iisBE, and he writes:

I've had a generally good series of meetings in Singapore for the GABC meeting. Discussion themes included:

- Introductions of represented institutions and what their progress and/or needs are – related to GABC goals
- Info/data collection (I highlighted the planned iisBE-led survey; RICS mentioned they also have a short survey about available data; desires for transparency and accountability, etc); info and ability to be able to compare apple w/ apple (a real issue here); harmonisation
- Existing buildings – the great opportunities and challenges
- Technical help / guidance / support for developing countries; addressing their capacity constraints; pointing out sources of support
- Policy, building codes/regulations
- Aim is to match “needs” with “offers” (esp. technical capability or experience; people/delegates were told not to ask for money)

- The second day was mostly about identifying specific actions that country representatives can do after the meeting, considering their national/local contexts

#### Opportunities and Challenges for iiSBE

- Bottom line: we need to be strongly engaged with GABC – for impact, relevance and network opportunities.
- GABC needs iiSBE as a trusted source of technical advice and expertise (with the right people), generally; and each country/institution needs specific expertise to address their own issues and opportunities (i.e. tailored solutions).
- The key challenge is how to do this when participation requires some base funding, and actual/specific projects requiring even more funding. There are possibly two general types of funding for iiSBE-led/driven projects that contribute to the GABC mission: (a) multi-lateral/international funding (such as The World Bank / IFC, The Asian Development Bank, the EU/EC, AID-type funding from donor countries such as USAID, GIZ Germany, CDKN UK, etc, the philanthropic foundations such as C40/Clinton Foundation, Rockefeller, Gates, HP/ClimateWorks, Volkswagen Foundation, etc); and (b) country-based and/or country-specific funding (e.g. government or scientific research grant). Thus, one option is for iiSBE to broker a GABC project and get a (small %) funding cut from the main proponent to support the common iiSBE-GABC activities, and/or to be the actual project lead and manager (i.e. directly accountable to the funding agency).
- From my own perspective, I can trial the latter approach in Australia (with a local institution or consortium), and possibly another country in Asia to follow (both subject to getting funding type a or b above).

Greg Foliente is an iiSBE Board member from CSIRO in Australia.

*Greg Foliente* <greg.foliente@csiro.au>

## Other iiSBE Activities

### *International Survey on GHG mitigation*

There is general agreement about the urgent need to reduce the emission of greenhouses gases (GHG) in order to slow the pace of climate change. COP21 agreed on a goal of 2°C maximum increase in global temperature, with an aspirational goal of 1.5°C. Many national and regional governments, and also major NGOs, have developed general strategies aimed at achieving these goals, with EU governments and IEA being at the forefront. Existing initiatives of this type tend inevitably to be broad and general.

An unresolved issue is how to turn strategies into tactics, specific policies and programs in individual regions and locations, especially outside EU countries. This reflects the fact that there is broad variation in geographic, climatic, as well as development status, as well as economic status and professional competencies in various locations. When we add the great variation in the performance of the existing building stock and performance requirements (and enforcement) for new buildings, it will be seen that there is a major need for a better understanding of the relative effectiveness of GHG-reduction action that may be launched in specific locations.

iiSBE takes the view that an international survey of individuals in major global regions who are active in the built environment sector will be valuable in eliciting a bottom-up view of effective actions, by individuals who are very familiar with their local or regional conditions, to complement current broad and top-down efforts.

In late October 2015, we prepared a pilot survey of people in its network to obtain a ground-level view of what might be the most effective actions within the built environment sector to control climate change, as an informal contribution to COP21. The pilot survey was carried out in an Excel format, and results were analyzed for 120 responses.

CIB, UNEP-SBCI, FIDIC and Global ABC have now joined the project so that we can carry out a much larger international survey, learning from the lessons of the pilot survey. The University of Malta, and the Malta iiSBE Chapter have agreed to develop the web-based version of the survey and to analyse the results.

A draft version of the international survey has now been prepared, and the proposed content has been examined in a series of workshops held in conjunction with several research-oriented conferences that are part of the Sustainable Built Environment (SBE) series. The survey feedback workshops were held at SBE16 events in Torino, Hamburg, Malta and Utrecht during the last four months, and valuable suggestions have influenced the final content of the survey. Members of the recently-launched *Global Alliance for Buildings and Construction* (Global ABC), of which iiSBE is a member, may support us in making the project known in many countries represented by their members.

A large response (>5,000) is required for the subsequent analysis to result in identification of actions considered to be effective to various degrees at general, urban and building-scale levels, in specific regions, and taking into account the type and experience of respondent. The survey is designed so that mitigation actions selected by individuals are weighted according to their perceived effectiveness. The target group of respondents is broad, reflecting the nature of the industry and also the wide range of regions to be included.

Work has now begun to transfer the contents to a web-based survey program, as this is the only platform that will be capable of handling the number of responses desired and expected. The work is being led by iiSBE, in close consultation with the partners and a group of advisors. We plan to publicly launch the survey at COP22 in Marrakesh (November 2016), in order to have the analysis and report released in early 2017.

Files for the Excel version can be obtained from iiSBE.

*Nils Larsson*

### *UNEP contract*

iiSBE has a contract to provide management support services to UNEP related to climate change activities. Most tasks have involved retaining consultants on short-term contracts to carry out work of interest to both UNEP and iiSBE. The contract also provides \$4,500 USD towards the cost of developing the international survey project, as well as a modest management fee for iiSBE for all activities.

### *iiSBE Canadian team launches a project on Building Performance Evaluation*

iiSBE Canada led a major effort to carry out BPE studies in nine Canadian case study projects, in time for the 2014 Barcelona conference. The project involved 3 Canadian universities and was fully funded by a national research agency.

There is a need to prepare a BPE session for the Hong Kong SBE17 conference. The BPE session will be under the general technical direction of Dr. Mark Gorgolewski from the Canadian iiSBE team. The Canadian project is directly led by Alberto Cayuela <alberto.cayuela@ubc.ca> of the iiSBE Canadian team and includes researchers from at least two other Canadian universities. As with the 2014 study, this project will involve the comparison of the performance predicted at the design stage with actual performance as determined after at least two years of operation.

The French-based *Environment21* group has expressed interest in participating, selecting some projects from their large database of European projects that have participated in their awards programs. Some of these will be selected for comparisons of predicted with actual performance levels. There may also be an entry from Tsinghua University.

Finally, there will be a series of projects presented that are part of the EU-funded CommONEnergy project. iiSBE Italia is participating in this project by organizing an award for the best European retrofitted shopping center based on SBTool. The leader of the shopping centre part of the project WG is Andrea Moro of iiSBE Italia, at <andrea.moro@iisbeitalia.org>. Nils Larsson will provide logistical support.

Staff

#### *A Peruvian project to develop a web-based version of SBTool*

A web-based version of SBTool is being developed by a team led by Dr. Yván Jesús Túpac Valdivia, Professor at the School of Computer Science at the San Pablo Catholic University (UCSP) in Arequipa, Peru. Dr. Valdivia wrote us in August:

Regarding the SB-Tool Arequipa tool, so far, we are working (almost finalized) on the implementation of the evaluation Web site, which is building based on several geo-referenced queries to facilitate the entering information for the user. For this, we were completed to define the site criteria for Arequipa and has harvested the necessary geo-referenced information to make these assessments:

- Risk map (shapefile)
- Zonation map land uses (shapefile)
- Location of primary and secondary schools (Peruvian Ministry of Education)
- Location of hospitals and health posts (Peruvian Ministry of Health).
- Location of facilities of culture, entertainment, sports, etc.
- Public transport routes of Arequipa (KMZ file)
- Thornthwaite climate classification of Arequipa Province (shapefile)
- Large retail centers (from Google and StreetMap)

Other more specific information will be input through an interactive information system. All this information is used to calculate distances and belongings with respect to the geographical location of the project to be evaluated, which is also entered using an interactive map. These data are used as measurements for calculating the assessments of the site criteria site based on measures, other criteria based on questionnaires are evaluated accord on respective questionnaire answers. Finally, the idea of SBTool Arequipa system is to facilitate as much as possible the interaction with the user. We still develop the design phase until the end of the project.

Yván Jesús Túpac Valdivia <ytupac@ucsp.edu.pe>

#### *SBTool version for hotels in historic buildings is being developed in Malta*

Ruben Paul Borg, head of the Malta iiSBE Chapter, is leading the development of a version of SBTool that will be suited to the assessment of hotel accommodation in historic buildings. This sounds excessively specialized, but remember that Malta has a large stock of very interesting historic buildings that are ripe for being converted to new uses. Two candidate projects have been identified and they will be pilot projects to test out the new system. Nils Larsson of iiSBE is providing support to this project.

#### *iiSBE advocates sustainable buildings and construction at Habitat III*

Working closely with the United Nations Environment Programme (UNEP), iiSBE pushed and continues to advocate for the inclusion of sustainable buildings and construction in the outcome document of the United Nations Conference on Housing and Sustainable Urban Development (Habitat III).

Several advocacy activities were conducted from 2015-2016 with this goal in mind. iiSBE co-organized a side event on urban metabolism in cities during the Asia Pacific Urban Forum in October 2015. It also supported UNEP in the review of technical documents throughout the Habitat III process by providing UNEP with relevant subject experts. iiSBE further contributed

by giving inputs to an expert paper on ecology and resilience, an activity that was co-led by UNEP and Rockefeller Foundation (RF) as part of the Habitat III process.

Member states have recognised the importance of sustainable buildings and construction in the current "Surabaya" draft of the outcome document (See: <https://www.habitat3.org>). Member state negotiations will continue during September.

*Sharon Gil*

### *New IEA Annex*

Thomas Luetzkendorf, one of our long-term members from Germany, has sent us an announcement of a new IEA Annex proposal, to be called *Assessing life cycle related environmental impacts caused by buildings*. The Annex will focus on the assessment of the primary energy demand, greenhouse gas emissions and environmental impacts of buildings during production, construction, use and end of life (dismantling), i.e. during the entire life cycle of buildings. The Annex will comprise the following five main subtasks.

- Subtask 1: Harmonised methodology guidelines
- Subtask 2: Building assessment tools
- Subtask 3: Case studies
- Subtask 4: Building sector LCA databases IEA EBC Annex Proposal: "Environmental Impacts caused by Buildings" 6
- Subtask 5: Dissemination

For more information, please contact Annika Messmer at <messmer@treeze.ch>.

*Thomas Luetzkendorf*

### *iiSBE involvement with 10YFP and CSC*

In early 2016, several iiSBE members, including the Executive Director, began providing direct technical support and input to two international efforts on the sustainable built environment. The first is the recently launched Ten Year Framework of Programmes on Sustainable Buildings and Construction (10YFP SBC). This multi-actor initiative is led by the Finnish Ministry of the Environment with support from Royal Melbourne Institute of Technology, the United Nations Environment Programme, and the World Green Building Council launched a call for proposals for small (150,000 USD) project in developing countries.

iiSBE director Jacob Halcomb helped to review and select the three recipients. He will now follow and support the delivery of a project on sustainable buildings and neighborhoods in five municipalities in Colombia. As a quick reminder, the goal of the 10YFP SBC programme is to promote resource efficiency, mitigation and adaptation efforts, and the shift to SCP patterns in the buildings and construction sector. Jacob is also supporting two efforts on improving the sustainability and eco-efficiency of the concrete and cement industry. The first effort is a report on current research for a potential breakthrough in low-cost, practical technologies that are capable of reducing CO2 emissions and increasing materials efficiency in the cement industry value chain. Jacob Halcomb also represented iiSBE and UNEP-SBCI during the Concrete Sustainability Council (CSC) meeting this past July in Gland, Switzerland. The CSC is working to develop and pilot a responsible sourcing scheme for concrete products and invited a number of environmental organisations to participate in a three-day workshop discussing key issues and opportunities for a potential concrete industry certification scheme.

*Jacob Halcomb*

### **Future Management of iiSBE**

Your current XD is Nils Larsson (NL), who has been playing this role since 2000. The job is unpaid and there is no staff support. NL enjoys the work but, from an organisational perspective, it would be desirable for a new and younger XD to take over the task. NL is willing

to play a transition role. If you can identify some candidates, please contact Bob Bach at <bbach@energyprofiles.com> and/or Greg Folients at <Greg.Foliente@csiro.au>.

## **A Strategic Reset for iiSBE?**

On 22 June, a meeting of some key iiSBE individuals was held in Prague, to discuss strategic issues and possible changes in in priorities.

Those attending included Ronald Rovers, Luis Bragança, Petr Hajek, Jiri Skopek and Nils Larsson. The starting point for discussion was a short paper prepared by Ronald Rovers some time ago that outlined ideas for shift our emphasis towards mainly academic membership and activities. The attached notes are a synthesis of these meetings and have no formal status.

### **Membership and Organization**

Currently, our membership and activities have been more general in nature, e.g. including both professional and academic members and projects. An example is iiSBE's leading role in the development and management of the SBE conference series, which includes scientific and professional papers and also a mix of professional and academic delegates.

Our membership is composed of a mix of professional and scientific members, but the total membership is not increasing. In the meantime, we have observed that organizations such as Green Building Councils have enlisted a large number of professionals, while academics in our field have no organization that represents their interests.

Our proposal, therefore, is to launch a new emphasis on attracting members from universities and research institutes in our field and to gradually change the nature of the organization to one that primarily represents the field of policy and technical research within sustainable built environment. We don't want to reject professional participation, but we want to make it clear that the organization intends to be primarily non-commercial in its orientation.

iiSBE tried to make such a shift some years ago, but the vehicle chosen (LinkedIn) proved to be unsuitable and the effort was abandoned.

### **Scientific Focus**

We agree that iiSBE must have clear and worthwhile goals that are directly related to the need to keep global warming to less than 2°C and to promote a sustainable built environment. Within that overall objective, we suggest the following key activity areas for the next 3 years.

1. International survey of effective means of GHG reductions (see Pg.6)
2. Develop zero lifecycle impact concepts

Many researchers refer to Zero or Nearly Zero energy or emission targets without clarifying that they are referring to the operating phase only. It is well established that considerable trade-offs may be made in the design phase to improve operating performance by placing more emphasis on high-performance construction materials. This results in more embodied energy and emissions over the total life cycle, which is a very undesirable result. A related factor is that an increased use of non-renewable materials will lead to depletion of such materials more rapidly. Some, but not all, of non-renewable materials can be replaced.

Ronald Rovers (Zuyd University, [r.rovers@sustainablebuilding.info](mailto:r.rovers@sustainablebuilding.info)) has done extensive theoretical and practical work on the life-cycle and depletion impacts of materials and he will lead this working group.

3. Synergy zones concept

Considerable improvements in energy, emissions and water performance can be achieved if use is made of the varied characteristics of a cluster or group of different buildings located in close proximity. In addition, if DC power is distributed in non-residential buildings in the zone, there is a potential to save at least 10% to 15% in energy conversion losses that would arise

from converting to AC and then back again as needed. This project has been proposed as a pilot project for 7 years, without any significant response, but we consider that it is still worth pursuing. Contact <larsson@iisbe.org>.

#### 4. Development of scientific weighting system for SBTool

All commercial rating systems (LEED, BREEAM etc.) use fixed weights to signify the relative importance of various major issue areas (e.g. energy, IEQ etc.). SBTool uses an algorithm to allocate weights at the lowest (criterion) level. This is better than the major commercial systems, but is still not wholly defensible. This working group will develop a weighting system for SBTool that is fully defensible in a scientific sense, using Analytic Hierarchy Process (AHP) as a mechanism. The WG is led by Nils Larsson.

#### 5. Work to broaden uptake of Building Performance Evaluation studies. (see also Pgs. 2 and 7)

#### 6. Performance assessment models for small urban zones

There is increasing interest in developing sustainability performance assessment models at the small urban scale. A 1/2 day session is devoted to this topic at the SBE Challenge session in Hong Kong SBE17. The session will allow various teams to present their models of how the performance of small urban areas should be assessed. Given the developmental nature of this work, it is likely that the session will be focused on comparative approaches. At the recent Prague SBE16 conference, a 3-hour session was held to discuss approaches and current knowledge. This work is being led by Andrea Moro of iiSBE Italia, supported by Serge Salat, Nils Larsson and 13 others.

#### 7. SBTool applied to urban and district scale

iiSBE Italia has an EU-funded contract with CESBA (Common European Sustainable Building Assessment) to develop a sustainability assessment model at the district scale (up to 500 km<sup>2</sup>), using SBTool as a basis. This work is beginning immediately, led by Andrea Moro and supported by Nils Larsson.

#### 8. Participation in EU proposal calls related to our technical interests.

Andrea Moro of iiSBE Italia has proposed that iiSBE establish a permanent working group that will maximize the chances of iiSBE to win EU-funded contracts within our field. This initiative reflects the increasing success that iiSBE Italia is having with this kind of activity. The WG would specifically accomplish the following:

- categorize iiSBE members by geographic area and type of organization
- monitor the EU calls
- manage the internal calls for new projects ideas
- select the best project ideas
- form the partnerships
- appoint the Lead Partner
- give advice and inputs during the preparation phase
- participate in the project development including participation in meetings
- create synergies with international initiatives and projects
- support the transfer and durability of project's outcomes

This WG will be established immediately. It will be led by Andrea Moro of iiSBE Italia and will include Luis Braganca, Petr Hajek, Thomas Luetzkendorf, Ronald Rovers, Ruben Paul Borg, Nils Larsson and others who wish to participate.

9. Continue our leading role in the SBE conference series.

The SBE conference series has been operational since 2000. The conference partners include iiSBE, CIB, UNEP-SBCI and FIDIC, and iiSBE takes a leading role in its management. In 2016 we will manage 20 national or regional events, to be followed by the global WSBE17 Hong Kong conference in 2017. A new cycle will be announced this Fall for 2019-20.

10. Continue membership in the Global Alliance of Building and Construction

The Global ABC organization was established through the efforts of the Government of France and UNEP and represents key international and national government and NGO organizations. iiSBE is a member and will use this position to gather information on R&D activities around the world and to participate in activities related to climate change.

Status and next steps

Documents with supplementary information are available for all of these activities on request. Please indicate your interest in actively participating in some of the working groups outlined here.

*That is the end of this 2015-16 Annual Report*