



CIB NEWS ARTICLE

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Around the Task Groups and Working Commissions

W116 - Smart and Sustainable Built Environments

Report of the 3rd International Conference: Smart and Sustainable Built Environments, held in June 2009, Delft, the Netherlands



by

Andy van den Dobbelsteen

Background

The 3rd CIB International Conference on Smart and Sustainable Built Environments (SASBE2009), taking place at the Delft University of Technology on June 15-19, 2009, had a great selection of speakers. These lived up to the expectations and inspired the delegates (250-300 registrations) under the credo of 'building smartly in a changing climate'.

It is impossible to describe the rollercoaster of events in detail, so this is a personal report from the conference chair.

Account of the three main conference days

Time for students

Not the least feat of SASBE2009 was the presence of Crown Prince Willem-Alexander of Orange during the opening session on June 16th. The Prince wanted to talk to finalists of the CIB Student Competition and to deliver a speech himself, which does not often happen in the Netherlands. While in the Auditorium of the TU Delft Aula Conference Centre landscape architect Dirk Sijmons held a flaming plea for wind energy, the Crown Prince arrived and took his time to talk firstly to

the fifth Nuna team (the Delft Nuna team is four-time winner of the World Solar Challenge, next winter again taking place in Australia) and secondly to a member of Formula Zero (a race kart on fuel cells), before he headed for the five student teams of the competition. Under the eye of international press, Willem-Alexander spent a good deal of his time on thorough discussions with the teams, each of which had elaborated a plan for an energy-producing living environment.

A separate article about the SASBE2009 Student competition can be downloaded [here](#).



TU Delft Vice-Chancellor Jacob Fokkema and Prince Willem-Alexander Of Orange listen to Ken Yeang



Green Prince

After the coffee break of this Tuesday morning, the godfather of bioclimatic architecture, Ken Yeang, came with a convincing manifesto for 'green planning and design'. Sources mention that the Prince of Orange was impressed. He himself in his inspired speech emphasised the importance of an integrated approach to water management, climate adaptation and sustainable energy systems, surpassing scale and administrative layers. The Dutch have a green prince! After this speech Arjan van Timmeren handed the book "Smart Building in a Changing Climate" (Techne Press) to the Prince, on behalf of fellow editors Machiel van Dorst and myself. The book compiles the best conference papers on the theme and contains contributions by, for instance, Ken Yeang and John Worthington.

Invited speeches

The afternoon programme of Tuesday 16th of June consisted of parallel sessions, of which some were ignited by invited speakers such as Jón Kristinsson (on 'the Greenest Building in the Netherlands'), Nils Larsson (iiSBE, on climate change) and Thomas Rau (on 'One Planet Architecture'). The parallel sessions were filled with presentations of selected good-quality scientific papers.

17th of June: Sustainable Industry Day

With a special focus on the public and private market, Wednesday 17th of June was a conference day with a tint. The so-called Sustainable Industry Day (SID) embodied a new initiative, for which companies had been asked to come up with proposals for presentations, out of which the best 12 had been selected by the organisation of SASBE2009. It is sad however that apart from these many parties from the market, even those who had registered, didn't show up. Especially so since it would become a superb day in contents.

Goosebumps

The morning of June 17th commenced with a plenary session with a top line-up: led by the energetic chairmanship of Hans de Jonge, keynote speeches were subsequently given by Michael Braungart (supported by Desso CEO Stef Kranenburg), Wubbo Ockels and Sir David King. In terms of content as well as presentation these were of rare quality. Braungart could add some good practical examples to his already strong Cradle to Cradle story. Ockels convinced everyone with his inspired strife for sustainable innovation. The audience fell silent when he pinpointed the only useful and safe energy source: nuclear energy. What followed was a persuasive summary that almost seemed too positive but ended with a cheer from the hall. This happened when a slide of Ockels with the solution appeared: the sun. Goosebumps.

Amusing tableau

The discussion following led to an amusing tableau: Ockels on stage, questions from the audience and Braungart and Kranenburg alternately trying to interrupt. This while Braungart should have been long gone to Schiphol Airport. It demonstrated the quality of De Jonge that he could keep control of the discussion. SASBE's furious chauffeur Sebastiaan Hubar departed with only 64 minutes to go to the airport and rumor has that Braungart caught his flight after all.

Irreversible

After the coffee break the former Chief Scientific Advisor to the British government, Sir David King, had the stage. Although we already have become quite used to the messages of Al Gore and the film called *The 11th Hour*, Sir David presented even more convincing evidence that the situation is severe and that immediate action is needed to avoid conversion to a situation resembling a few hundred thousands years ago. In that period temperatures were extremely high, there was no ice on the planet and only the polar circles were liveable. The concentration of CO₂ has been around 300 ppm for a long time, but now we approach 400, and above 500 effects seem irreversible. King's plea: put a maximum target and act upon it. He indicated that solutions are already existing.

Interesting was the discussion that followed and that was predominantly conducted by British attendees: Sir David was made accessory of the fact that his government did not do what he advised...

Too much to choose from

For the number of remaining participants (150 – the weather was very fine outside...) the SID afternoon had too many sessions to choose from. In the Auditorium the Rotterdam Climate Session was held, including lectures by Sebastian Carney (Tyndall Centre) and famous Dutch architect Winy Maas, while several international working committees held open meetings and workshops. The programme also included two interesting scientific sessions (with an invited speech by industrial developer Han Brezet) and there were two special SID sessions with a.o. presentations by architect Paul de Ruiter, Sander Mertens of Ingreenious (wind energy technology), Dominique Vosmaer of NPSP (bio-composites), Freek Oranje of demolition company Oranje and László Vákár of Movares, with his plan for the sustainable motorway. A truly interesting programme that was visited by far too few people. Of 40 registrations from the Dutch Green Building Council (DGBC) only one company had turned up...

At ease

After the battle for participants during the SID, Thursday morning 18th of June brought some peace with 'normal' academic parallel sessions. Invited

speeches were by Jan Jongert (2012 Architects), Koen Steemers (PLEA), John Worthington (DEGW) and Jay Yang (Queensland University). As always after the conference dinner somewhat less people came to the conference venue, but the sessions went quite alright.

Stand-up comedy and dance

Thursday afternoon contained the closing session, which was preceded by keynotes by sustainable water management and planning expert Ronald Waterman and Dutch Chief Government Architect Liesbeth van der Pol. Waterman showed himself as an eloquent walking encyclopedia, who conveyed his enthusiasm for 'Building with Nature' with a lot of energy. Though amply over time Van der Pol expressed she wanted to hear more from Waterman. He came full circle as a stand-up comedian when he himself finally decided to stop his trip around the world, after which he zapped through at least 30 slides with water plans. Liesbeth van der Pol gave an enthusiastic presentation of what she considered sustainable direction: urban intensification, high architectural value and smart technology. Music was lacking, but else the chief government architect would have continued her cheerful dance on stage.

Algaetecture

An end comes to all good things, and also SASBE2009 had to confront this. On behalf of all PhD candidates Suzanne van Dijk presented their findings of the conference, there was a sneak preview of upcoming conferences (Sustainablaba, CIB2010, SB series and SB11, SASBE2012) and awards were given to the best paper, best poster, best presentation and the climax: the winner of the CIB Student Competition. This was the team of three students from Cambridge (UK) with their energy-producing algae dwelling ('algaetecture'); insiders know that this plan had the approval of the Prince of Orange.

Bikes, organic food and eco-cotton: SASBE2009 presents the norm

Those who were present know how special SASBE2009 was. Apart from the inspiring content, in other regards the conference was a good example of how things should be.



Free bikes at disposal during the welcome drinks

Biking lessons

The delegates arriving early on Monday 15th of June (after the reception at BK City, the new Faculty of Architecture in Delft) were treated on welcome drinks in the lovely Botanical Garden of Delft. During this event, with financial support from the City of Delft the organisation could present bicycles and bicycle taxis to be used for free by the participants. Thus attendants could get acquainted with these for Delft fastest and most sustainable means of transport. Many foreigners had to be pulled over the threshold but dared to join a biking lesson for beginners.

VIP transport by bike taxi

The personal bike initiative was received well, as demonstrated by good usage of the sixty bikes. Also the bike taxi drivers got ever busier throughout the week.

Bike taxis were used for the pick-up service of guests to and from railway station and hotel. It was a suitable test for the sincere intentions of the keynote speakers... And these were very positive about it: Sir David King was delighted to be picked up so from the station and Ken Yeang even had himself interviewed in a bike taxi, on his way to the Aula.

On water, rails and roads

SASBE2009 let the attendants adapt to a world with more water: the touristic Delft excursion (Tuesday), the conference dinner (Wednesday) as well as the excursion to Amsterdam (Friday) took place on a boat, entirely or partly.



The conference dinner was held on the historical paddle steamer De Majesteit (The Majesty), which sailed through the Rotterdam harbour area. Everything went fine on water, but travel to the conference was disturbed on Tuesday and Wednesday morning due to railway derangements, which ruined the good name that Dutch public transport had with foreigners. Nevertheless, Friday demonstrated that public transport was still quicker than cars: on the motorway to Amsterdam the excursion bus was halted for two hours because of an collision accident, under an aqueduct by the way...

Gadgets and SASBE Daily

SASBE2009 delegates received a conference bag made of eco-cotton, with an organically digestible pen and proceedings on memory stick. Issues of SASBE2009

were printed on paper from FSC-certified origins. Participants were woken up with the SASBE Daily, a newspaper with the highlights of the coming day and reports of events of the previous day, possibly even described until the early hours. The editors must have had little sleep, but it was fun to do so.



Organic dinner aboard the majestic paddle steamer in Rotterdam

Organic, considered and vegetarian

The conference organisation tried to be consequent (regarding sustainability) in all aspects. For the entire week, organic food had been arranged, with sufficient supply of considered fish and vegetarian food. On our over-populated planet the latter is perhaps the most effective solution for sustainable development. The caterer of the Aula as well as the kitchen team of the paddle steamer – who did not cook organic food beforehand – performed very well.

Evaluation

General impression

When taking into account the response we received, SASBE2009 was a big success. Delegates praised the good organisation, high-quality content and sustainable 'fit-out' of the conference. Especially the bikes apparently were something to be remembered. I think we could offer a very good price-quality ratio. This of course has to do with the organisation, which we did not take lightly, but also with the great response of keynote and invited speakers whom we asked for a contribution. In the programme we could offer seven keynote speakers and twelve invited speakers, many of whom required no payment apart from expenses. We are very grateful to our guest speakers, who significantly contributed to the success of SASBE2009.

Numbers

SASBE2009 had been organised with an intended number of participants exceeding 300, aiming at 500. As stated, we eventually had over 250 registered delegates, approximately 300 including the 40 participants of the DGBC (predominantly from private companies), of which 39 did not show up. As I understood from other conferences, this non-show-up tendency has been common since the start of the credit crunch. SASBE2009 was specially backdrawn by two simultaneous events: the International Building

Physics Conference (IBPC2009) in Istanbul, which had a similar theme, and foremost the Dutch real estate fair of Provada, taking place on exactly the same dates and also offering a three-day symposium on sustainable building, held by the DGBC. We tried to cope with this by arranging combined tickets, but this has not worked properly. The Provada certainly has cost us participants and sponsoring, as most of the Dutch building industry now focused on the fair in Amsterdam rather than SASBE2009 in Delft. What also didn't help was PLEA2009 in Quebec, occurring one week after SASBE2009. The final result is that SASBE2009 had a comparable number of attendees as SASBE2003 (Brisbane) and SASBE2006 (Shanghai), and regarding the difficult financial situation in the world, this is a good performance.

Scientific programme

For the scientific programme, we initially had around 250 abstracts, of which around 200 were preselected for a paper and 40 directly for a poster. Only about 160 papers were submitted eventually, of which – after two blind peer review rounds – approximately 110 were awarded an oral presentation and the others invited for a poster presentation. A little less than 100 orals made it to the programme.

At SASBE2009 30 posters were presented, not only on boards yet also in 3 minutes during a funny high-speed poster session led by Kees Duijvestein. It is sad that being awarded a poster presentation is considered an inferior outcome, as SASBE2009 demonstrated that poster nominees were given a rightful exposure and proper prize.

Sponsoring

First of all, the full support of CIB and our hosting TU Delft enabled a great event. Words of gratitude should also go to all people who had an active role in one of the SASBE2009 committees, which are acknowledged at the end.

It is a sign of the times that only one of our sponsors – mind, a smaller one – was a private company (BuildDesk). The DGBC can be considered a society of public and private parties. Hence, by far the predominant part of sponsoring came from public institutions: the Delft Environment Initiative (TU Delft), Rotterdam Climate Initiative (City of Rotterdam), Sustainable Urban Areas (also TU Delft) and City of Delft. So, with the world financially in crisis, it was difficult to get hold of companies, at home and abroad. We spent an enormous amount of time on writing, phoning and talking to companies. Despite the persistent promotion of SASBE2009, the invested time has not proven effective at all. I sincerely hope this financial situation will be different for upcoming conferences.

At the moment of writing I cannot say yet whether we financially ended positively or negatively.



Partners

Although sponsoring turned out hard, we found a lot of support from different partners, i.e. organisations that promoted SASBE2009 in various ways. This has certainly helped raising the number of participants, which after all is a form of sponsoring. SASBE2009 was promoted through various ways of media and spread among many parties throughout the world. Lack of exposure certainly cannot be a reason for the lagging funding and delegate numbers.

Promotion and media attention

Already soon after the selection of Delft to host SASBE2009 (decided upon during SASBE2006 in Shanghai) we started to promote the conference, supported by media advisor Ruder Smits, whose graphical designs could be recognised until the very last SASBE issues. CIB also widely promoted the conference among their network. To be honest, promotion by TU Delft itself came late, when the national press had already gotten scent of it, following the official announcement by the Central Office of Information of the Prince of Orange's presence. Before that we had already had close contact with the Prince's advisors and PA, as well as with the EVD, the governmental organisation for promotion of the Netherlands. EVD (Daniel van Vulpen) had planned an international press tour through the Netherlands, with sustainable building as the main focus, which coincided perfectly with SASBE2009. The tour took the journalists to Delft on Tuesday 16th of June, resulting in a lot of media attention and interviews with our special guests. In addition, there was national press present, among which a Dutch royalty TV programme. Afterwards there were several news items covering the conference nationally and internationally. An overview can be received on request.

Different next time: full programme

There are a few things I would probably do differently if there were a next time of organising a similar conference – which could be a recommendation to those who still are about to organise one. First, I think that we of the organising committee perhaps wanted to offer too many things at the same time. Next to the normal characteristics of academic sessions and keynote speakers, committee meetings, welcome drinks and conference dinner, in every aspect SASBE2009 offered more. The following could be seen as extra features: invited speakers, a PhD session, student workshop, student competition, the industry day, farewell drinks, newspapers, organic food, bikes and bike taxis. Perhaps apart from the industry day all of these were a success, but they cost us a lot of time, which in the light of the financial restrictions was less effective than planned. I believe next time I would keep it simpler. The special arrangements for food and transport however I would keep...

Different next time: fees

Also related to the credit crunch, I guess, are the troubles we had with people wanting to pay nothing or much less than what we had arranged for in our conference fees. This has been a returning issue every week, and costing us again a lot of time. I think SASBE2009 had a very fair price (550 euro, minus 10% for most of the delegates) and we thought to help master's and bachelor's students by asking a fee from them that only covered the expenses of food, drinks and printing work of the whole week (125 euro). There was a storm of PhD candidates' requests to be given access for this student price, and real students themselves still found the fee too much. In my opinion, travelling to conferences should be in the annual budget of PhD candidates and therefore no fee reduction is needed for them. I had rather offered extra fee reduction to the members of our technical committee. We had also wanted to offer special prices to people from developing countries, but this turned out impossible, as we had no funding for it. The range of fees (normal delegates or students, early, normal and late, with discount possibilities) often made it complicated to the ladies of Aula Conference Centre. Next time I would probably make this system simpler. We got the remark during the closing session that students and citizens should have had free access to the conference (because of which the numbers of attendance would have increased), but I think this would have us confronted with big financial problems. Everybody needs to be fed and given delegate items... And it would not have been fair to others who often contributed to the organisation.

Different next time: industry day

The special sessions of the Sustainable Industry Day (SID) were something new: normally you either have academic conferences without contents from the market, or a market conference with pre-fixed speakers, or conferences where companies can pay for their (advertisement) speech. The idea behind the SID was that best proposals from the market would be presented to the mixed audience, in order to add practical projects to predominant theoretical academic work. The idea was formed through talks with market parties. In particular the already mentioned Hans de Jonge, professor and CEO of a consulting company made early proposals in this directions, for which I am grateful to him.

As you have read, the Sustainable Industry Day on the one hand was a success (the plenary sessions were superb and the willingness to present sustainable initiatives by companies was great) but on the other hand failed as a result of short-falling numbers of attendees. A mistake I personally made was to only mention the presenters and companies in the day programme and not their presentation title. In spite of the SID failure I believe that the new concept of integrating the market in a predominantly academic conference is still promising and should be pertained in

a future occasion. SASBE2009 just had the sheer misfortune of a combination of crisis and a simultaneous real estate fair where companies in trouble could still network for assignments.

With one hundred extra delegates from the market or with less alternatives in the programme (we had eight parallel sessions, aiming at 300-500 attendees that afternoon, of which less than 150 showed up), the SID would have been a success, I think. A better network of companies related to e.g. CIB would also help in attracting parties from all over the world.

Since so few delegates went to the SID sessions, we decided to make a booklet of the 12 well-prepared company contributions, so that their effort does not remain unnoticed. This will be sent with more information (including the very last SASBE Daily) to all participants after the summer of 2009.

There are probably more issues that we would do differently next time, but over all I think we can look back upon one of the most pleasant and interesting conference from the last years, a memorable one.

Acknowledgements

SASBE2009 was organised by staff from the Delft University of Technology, Faculty of Architecture, under the auspices of CIB.

Partners

Partners of SASBE2009 were: PLEA, iiSBE, CABA, Provada, UrbanOrganism, and our media partners Techne Press, Arko Publishers and Holland Qualitime.

Sponsors

SASBE2009 was sponsored by the Delft Environment Initiative, the Rotterdam Climate Initiative, Sustainable Urban Areas, Dutch Green Building Council, the City of Delft and BuildDesk.

Supporters

SASBE2009 also had supporters who lightly promoted the conference in exchange for services. These were www.duurzaamgebouwd.nl, Earthscan, Emerald and Building Research & Information.

Organising Committee

Apart from us, the Organising Committee consisted of Andy van den Dobbelsteen, Arjan van Timmeren, Machiel van Dorst, Elma Durmisevic, Baldiri Salcedo Rahola, Siebe Broersma and Niek Stukje, Marcello Soeleman and Koen Kegel from Stylos, Tim Vermeend for external support, Rudger Smits for the great graphical design, the incredible Corry van der Drift and Els Bakker from Aula Conference Centre, and our inexhaustible student assistants Martine Verhoeven, Ronald Velner and especially Michiel Fremouw.

SASBE Daily team

Niek led the team of editors of the SASBE Daily, involving Ann Karina Lassen, Baldiri, Marcello and Michiel. Eric Philippa was the conference photographer.

Student Team

Siebe led a whole team (with the popular red shirts) of students or recently graduated students (in alphabetical order): Arend, Bob, Carlos, Fons, Juriaan, Koen, Laura K, Laura van S, Lotte, Martine, Pjotr, Ronald, Sebastiaan, and Xavier.

International Advisory Committee

Support and sympathy was given from the start by our International Advisory Committee: Jacob Fokkema (TU Delft Vice-Chancellor), Peter Barrett (CIB President), Ken Yeang (Llewelyn Davies Yeang, TR Hamzah & Yeang), Michael Braungart (EPEA Hamburg, University of Lüneburg, Erasmus University Rotterdam), Wubbo Ockels (TU Delft), Klaus Daniels (ETH Zürich, TU München, HL Technik) and Mels Crouwel (Bentham Crouwel Architects, former Dutch Chief Government Architect).

Steering Committee

Wise advice we received from the following members of the SASBE2009 Steering Committee: Jay Yang (QUT, CIB W116), Wim Bakens (CIB), Wytze Patijn (TU Delft), Jon Kristinsson (Kristinsson Architects and Engineers, TU Delft), and Anke van Hal (Nyenrode University, TU Delft).

We got empathetic support in our Steering Committee from our SASBE2009 Partners: Koen Steemers (PLEA), Nils Larsson (iiSBE), Ron Zimmer (CABA) and Heleen Gierveld of Techne Press, who enabled publication of the book *Smart Building in a Changing Climate*.

Scientific Board

We also like to thank our fellow SASBE2009 Scientific Board members, who with us were responsible for the reviewing process of scientific papers: Andy van den Dobbelsteen, Arjan van Timmeren, Machiel van Dorst, Elma Durmisevic, Frank Schultmann, Jeremy Gibberd, Vanessa Gomes Silva, and Jean-Luc Salagnac.

Technical Committee

And last but certainly not least we want to express special gratitude to the SASBE2009 Technical Committee, engaged in the blind reviewing process of initially 250 abstracts and eventually 160 papers: Ilker Adiguzel, Elisa Boelman, Jos Brouwers, Ellen van Bueren, Jean-Luc Chevalier, Abdol Chini, Derek Clements-Croome, Ype Cuperus, Jaap Dawson, Peter Erkelens, Ana Maria Fernandez Maldonado, Alex Fraaij, Rob Geraedts, Mark Gorgolewski, Johannes Halman, Gilli Hobbs, Frank van der Hoeven, Per Jostein Hovde, Edward Hulsbergen, Laure Itard, Tom Jefferies, Lutz Katzschner, Gregory Keeffe, Charles J. Kibert, Tillman Klein, Ulrich Knaack, Hedzer van der Kooi, Gijsbert

Korevaar, Katarzyna Kujawa, Stanley Kurvers, Jos Lichtenberg, Peter Luscuere, Ardeshir Mahdavi, Craig Martin, Peter Mensinga, Karel Mulder, Bjarne Olesen, Chrisna du Plessis, Jouke Post, Susan Roaf, Roberto Rocco de Campos Pereira, Ronald Rovers, Silvia de Schiller, Thorsten Schuetze, Sacha Silvester, John Storey, Rudi Stouffs, Peter Teeuw, Wim Timmermans, Bige Tuncer, Stefan Uhlenbrook, Jan Vambersky, Karel Vollers, Theo van der Voordt, Hans Vos, Martin de Wit, Tom Woolley, and Grietje Zeeman.

Thank you all for making SASBE2009 a memorable event.

Final word: wait no generation longer
It is difficult to summarise such an amount of information and all experiences. Therefore I restrict myself to the insight gained after all brilliant lectures: it is our generation that has to do it. Do what? Change the world. This may sound hopelessly naive, but SASBE2009 made clear that radical change is vital and possible. Perhaps this is generalising, but the generation with influence yet close to retirement (say 55+) does not commit itself enough to sustainable development. On the other hand, the next generation (say 20-) will come too late. It is therefore our generation in-between that bears the responsibility to create a sustainable world.
You know it now and you may do with it as you please: ignore it or do yourself this great honour and take action.

Proceedings

PS1 After the summer of 2009 the proceedings and accepted handouts will be available on the SASBE2009 website (www.sasbe2009.com). In the main time the proceedings are summarized in another section of this newsletter (see [here](#)).

PS2 The book Smart Building in a Changing Climate can be ordered through the website of Techne Press: www.technepress.nl.

Both the proceedings and the book are being published in another section of this newsletter (see [here](#) and [here](#)).

Additional Information

For further information about the Conference outcome, the proceedings and the book please contact Andy van den Dobbelsteen a.a.j.f.vandendobbelsteen@tudelft.nl and for photos' and illustrations Michiel Fremouw.



For additional information about the CIB W116 please contact the Coordinators: Andy van den Dobbelsteen a.a.j.f.vandendobbelsteen@tudelft.nl and Jay Yang j.yang@qut.edu.au.



You also can find more information on the activities of CIB W116 at www.cibworld.nl - Databases - select "Go to Database" - in the shown search engine: type W116 in the field "Commission number".

