

MEDIA RELEASE

Sustainable “Mushroom Community Campus” design wins BCA-SIA-SGBC International Tropical Architecture Design Competition

Singapore and Australian team clinches coveted top prize for creative integrated campus design

SINGAPORE – 12 September 2013 – A three-member team from the National University of Singapore and University of Melbourne has won the **International Tropical Architecture Design Competition 2013 for Institutes of Higher Learning** for its entry on “Mushroom Community Campus”, the Building and Construction Authority of Singapore (BCA) announced today. The competition, a co-located event of **International Green Building Conference (IGBC) 2013**, was opened to architecture students from institutes of higher learning around the world and focused on tropical green architecture and sustainable building design solutions.

2. The competition aims to nurture future architects and leaders in tropical green building designs and to promote awareness of the need for sustainable living in the region. A total of 19 teams from five countries including China, India, Indonesia, and Vietnam submitted entries for this year’s competition, themed “Live, Study, Play – Our Green Campus”. Five teams from Singapore and Australia (joint submission), India, Indonesia and Vietnam were shortlisted for the final judging, which was held on Tuesday, 10 September 2013 during the 2013 Singapore Green Building Week.

3. In its third year running, the competition was initiated by BCA, the Singapore Institute of Architects (SIA) and the Singapore Green Building Council (SGBC) in 2011. It is supported this year by main sponsor Surbana International Consultants Pte Ltd and supporting sponsor ADDP Architects LLP.

4. “Because of rapid population growth and climate change, Asia faces looming urban and environmental challenges. With this competition, we want to encourage young architects and designers to start thinking and designing from a sustainable standpoint. We are pleased with the entries received and impressed with the overall quality of thinking and design

shown. In particular, the “Mushroom Community Campus” entry was a standout and a deserved winner,” said Mr Tan Tian Chong, BCA’s Group Director for Technology Development, who was one of the judges on the five-member panel.

5. “Our aim is to promote green building design, practices and technologies, and drive environmental sustainability in the building and construction industry. We are happy to see young contestants from around the world taking this challenge to heart through this competition, and the creativity and intelligence they have exhibited in their entries. We applaud their efforts and eagerly look forward to their contributions when they eventually enter the building and construction industry,” said Er. Ng Eng Kiong, President of SGBC, a member of the judging panel.

6. The winning entry, the “Mushroom Community Campus”, is a joint submission by Pham Huu Loc (Team Leader) and Ng Pui Shan from the National University of Singapore and Hoang Van Anh from the University of Melbourne. The “Mushroom Community Campus” envisions a vocational education, training and research centre, specialising in environment, agriculture, forestry, education and sustainability management, in Sapa, Vietnam.

7. Based on a biophilic design concept of using fresh air, daylight and water features, the campus design utilises natural resources such as an innovative earth-air tunnel that helps to reduce the energy required for conditioning the air by using the thermal properties of the earth as heat exchanger. Other features such as photovoltaic panels, solar water heating and rainwater harvesting further enable the campus to be almost completely self-sustainable and reduce energy consumption net carbon dioxide emission by more than 70 percent. The resultant design was an integrated one which included inputs from more than one discipline, and showed a good match between design and site context, resulting in a unique form which interested the judges.

8. “Excellence in architecture and the built environment requires technical ability, creativity, and sensitivity to sustainability concerns. We are pleased to see these qualities demonstrated in the entries received. These students are still developing their ideas but the high quality of submissions we received gives us reason to be optimistic about the future of sustainable architecture design in Asia,” said fellow judge Mr Kuan Chee Yung, council member of SIA.

9. The full list of winning projects is as follows:

Award	Country	School	Project Title	Prize
1st	Singapore and Australia	National University of Singapore and University of Melbourne	Mushroom Community Campus	S\$3,000
2nd	India	National Institute of Technology, Tiruchirappalli	Our Green Campus	S\$2,000
3rd	Indonesia	Parahyangan Catholic University	Cipadung Green School	S\$1,000
Merit	Vietnam	Ho Chi Minh City University of Architecture	Green Campus on the Wetlands	S\$500
Merit	Indonesia	Parahyangan Catholic University	Green Community – Green Shortcut	S\$500

10. The competition was open to all university and polytechnic students in the architectural and building design fields. Contestants could enter as teams comprising a maximum of five members, with a strong preference for multidisciplinary teams, or as individuals.

11. The judging panel included representatives from BCA, SIA, SGBC and sponsors Surbana International Consultants Pte Ltd and ADDP Architects LLP.

12. With the theme "Live, Study, Play – Our Green Campus", contestants had to demonstrate the essentials and key constituents of a green campus and submit a design for one component or building of a campus. Entries had to be applicable for the tropical climate and showcase innovative and sustainable designs. Entries also had to show how the proposed building would integrate with the other functional spaces and buildings in a campus. The entries also had to focus on incorporating both active and passive design strategies, renewable energy (if applicable) and other ecological features; ensure that the design concept allows end-users; cultivate behaviours or actions that would keep the campus community sustainable in the tropical climate; highlight how to reduce carbon

footprint; be based on a green assessment tool of choice to validate the sustainable design concepts; and include a degree of feasibility based on resources available in the present day.



From left: Mr Quek See Tiat, Chairman of the Building and Construction Authority with Ng Pui Shan and Pham Huu Loc both from the National University of Singapore.

Caption: Champion team of the International Tropical Architecture Competition 2013 is all smiles as they receive their award from Chairman of the Building and Construction Authority, Mr Quek See Tiat. Their “Mushroom Community Campus” idea stood out for its biophilic design concept that showed a good match between design and site context, resulting in a unique form.

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About the Building and Construction Authority

The Building and Construction Authority (BCA) of Singapore champions the development of an excellent built environment for Singapore. At BCA, our mission is to shape a safe, high quality, sustainable and friendly built environment, as these are four key elements where BCA has a significant influence. In doing so, we aim to differentiate Singapore's built environment from those of other cities and contribute to a better quality of life for everyone in Singapore. Hence, our vision is to have "the best built environment for Singapore, our distinctive global city". BCA works closely with its education hub, the BCA Academy of the Built Environment, and industry partners to develop skills and expertise that help shape the best built environment for Singapore. For more information, visit www.bca.gov.sg.

Factsheet: BCA-SIA-SGBC International Tropical Architecture Design Competition

What

The design competition aims to raise the awareness of the green building movement and initiatives amongst the younger generation and encourage them to become future architects and green experts in tropical green designs.

The competition was first launched in 2011 and jointly organised by the Building and Construction Authority (BCA), Singapore Institute of Architects (SIA) and Singapore Green Building Council (SGBC). The theme for this year's competition is "Live, Study, Play – Our Green Campus".

Sponsors

This year's competition is supported by main sponsor Surbana International Consultants Pte Ltd and supporting sponsor ADDP Architects LLP.

Number of entries received/shortlisted

A total of 19 entries from five countries (China, India, Indonesia, Vietnam and Singapore) were received. Five finalists were shortlisted.

Eligibility

Open to institutes of higher learning (IHLs) globally, either teams or individuals.

Criteria for entries

This year's theme seeks for entries that demonstrate the essentials and key constituents of a green campus through adoption of innovative and sustainable designs. Entries are judged based on a set of criteria including design concept and creativity, relevance to theme and tropical context, use of passive design/renewable energy and design for behavioural change and social capital.

Judging criteria and scoring

1	Design Concept & Creativity (20%)
2	Relevance to tropical context (20%)
3	Relevance to theme (20%)
4	Feasibility in current context (15%)
5	Design for behavioural change and social capital (15%)
6	Presentation (5%)
7	Reference to green rating (5%)

Judging panel

Building and Construction Authority	Mr Tan Tian Chong	Group Director (Technology Development)
Singapore Institute of Architects	Mr Kuan Chee Yung	Council Member
Singapore Green Building Council	Mr Ng Eng Kiong	President
Surbana International Consultants Pte Ltd	Mr Owen Wee	Asst Vice President (Architecture)
ADDP Architects LLP	Mr Alex Tang	Principal Architect

Winners

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