

Pillars

WE SHAPE A SAFE, HIGH QUALITY, SUSTAINABLE AND FRIENDLY BUILT ENVIRONMENT | ISSUE 04/AUG-SEP 2011



PIONEERS OF A

GREEN ERA

Pillars

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BCA wishes to apologise for the error on page 9 of Pillars Issue 3 (June-July 2011). City Developments Limited is a Gold sponsor of the International Green Building Conference 2011, instead of a Silver sponsor as printed.

BUILDING UP TO A GREEN FUTURE

Dear Readers,

The month of September has been a hectic, challenging, yet exciting time for all of us here at BCA. As many of you would know, our second International Green Building Conference (or IGBC for short) was recently held as part of the Singapore Green Building Week from 12 to 16 September 2011. It was a week of extensive sharing, learning and collaborating for many green building experts and practitioners who gathered here in Singapore for this event, and I have to say I am extremely honoured to be part of this congregation. I shall not go much into details for now, but do stay tuned to the next issue of Pillars for more coverage of the entire week.

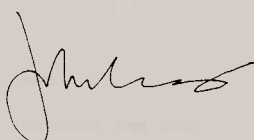
This issue's cover takes on a very bold look, which I feel is apt for the four winners of the BCA Green Building Individual Award 2011 winners who have showcased strong leadership qualities in their efforts to propel environmental sustainability within their respective award categories of Green Architect, Green Engineer, Green Advocate and Green Innovator of the Year 2011 to greater heights. They are role models in our industry and we certainly need more of such committed individuals to share their expertise with the industry to spur on the green building movement and efforts in Singapore. I would like to congratulate our four inaugural winners of this award, and at the same time encourage more professionals in the industry to step up as leaders to blaze the trail towards our national target of greening at least 80% of Singapore's built environment by 2030.

In this issue we also see BCA's Built Environment Scholarship Programme setting several new records. This year, out of 260 applicants, 55 scholarships were given out to our young talents, an increase from the 34 given out last year. The number of industry sponsors that participated also rose from 20 last year to 33 this year. It is indeed a bumper-crop year for the joint scholarship programme between BCA and the industry.

The records do not stop there. We also saw the largest batch of graduating scholars in the history of the BCA-Industry Built Environment Scholarship Programme this year, which will inject a breath of fresh air to the construction industry. It is extremely heartening to see our youths' growing awareness and enthusiasm towards career options in the built environment, as well as to see the increasing support from the industry sponsors of this scholarship in attracting talents.

On such a good note, I hope you will enjoy this issue of Pillars packed with an optimistic outlook for the built environment.

Have a good read. 



Dr John Keung
Chief Executive Officer



PIONEERS OF A



RECOGNISING TALENT
IN SINGAPORE'S
BUILT ENVIRONMENT.



“Tackling the environmental problems to bring about a greener built environment requires the expertise and passion of talented professionals in the building industry. The introduction of the BCA-SGBC Green Building Individual Awards is testament to the firm commitment of government and industry stakeholders to recognise the contributions of these outstanding individuals in green buildings and responsible practices. It is also our ardent wish to encourage talented individuals to aspire to even greater heights in creating a sustainable global city by illuminating the achievements of their predecessors.”

MR TAI LEE SIANG, PRESIDENT OF THE SGBC.

BCA and the Singapore Green Building Council (SGBC) recognised four outstanding individuals within the building industry for their continual contributions towards the sustainability of Singapore's built environment. They were the first to receive the inaugural BCA-SGBC Green Building Individual Awards at the BCA Awards night held in May 2011. The winners emerged tops from a selection of 35 candidates for four award categories – Green Architect, Green Engineer, Green Advocate and Green Innovator.

This year, the four winners stood out because they showed strong commitment, conviction and achieved significant milestones in propelling environmental sustainability within their respective areas.

► Green Architect of the Year 2011

Mdm Vivien Heng Cheng Sim

Director

RSP Architects Planners & Engineers (Pte) Ltd

As a BCA-Certified Green Mark Manager, Vivien brings with her some 28 years of experience as a Registered Architect in the design and project management of a wide range of developments.

Vivien is fascinated by the many innovative solutions and green strategies in our building technologies today, which makes it fitting that she is both a Project Director in RSP as well as the Environment and Quality Assurance Director, leading the firm's Environmental Sustainability Unit.

Vivien spearheads her agenda for sustainability in all her building projects. For example, with Caterpillar's Remanufacturing Facility, she championed innovative yet practical and cost-effective initiatives which introduced green materials, optimal daylighting and natural ventilation, and thus reduced reliance on air-conditioning and artificial lighting. Supported by and operating upon these green design principles, the Facility designed by Vivien went on to achieve Caterpillar's Global Gold Environmental Excellence Award 2010 in the category of Energy / Water / Recycling / Waste Control and also subsequently a prestigious 5-Star Contamination Control Award.

Vivien shares that as Architectural Project Director for the new Woh Hup Building, she was fortunate to work with like-minded clients like Woh Hup Pte Ltd, as well as the specialist team to realise many new green ideas through the Design Charette principles, such as pre-and post-occupancy evaluation of users' well-being, productivity and behaviour – a first in Singapore. Simulations also helped determine the facade and sunshade design, and secured maximum views while achieving glare control and good daylighting within this office building.

Her passion for the green cause, and especially her enthusiasm in engaging the design and building community in green issues have set her apart as a role model and Green Architect.

“We must seize all opportunities to create long-term value in our environment. Our buildings need to be adaptive, innovative and respectful of nature – most importantly, they should inspire environmental understanding and a meaningful change in our behaviour.”



Left | The recently completed Caterpillar Remanufacturing Facility at Tukang Innovation Park.



Middle | Vivien and her Green Mark Manager course team discussing collaborative Green Building design strategies.



Right | Vivien explaining the concepts of Green Architecture to an inspired group of students at a recent NUS Networking session.

“Through Green Design, we enter into a better understanding of our relationship with our environment within this increasingly carbon-constrained world. Every one of us possesses the potential to create value for a sustainable future, so our work must always intuitively reflect the competency and creativity to meet this enormous challenge.”

VIVIEN HENG, ON CREATING BUILDING DESIGNS THAT REFLECT HER PASSION AND ENTHUSIASM FOR THE GREEN CAUSE.

► **Green Innovator of the Year 2011**

Dr Ho Nyok Yong

Director cum Technical Director
Samwoh Corporation Pte Ltd

Dr Ho, both a Director at the company as well as the Technical Director in charge of Research and Development, has more than 20 years of diversified experience in civil & environmental engineering. He delved into research on recycling materials and green technologies in a big way after realising that Singapore had no natural resources. His recent high-profile research project on the use of recycled materials for buildings produced innovative research findings that were applied to the construction of the Samwoh Eco-Green Building. This building structure, a first in the region to be constructed using up to 100% recycled concrete aggregate, is a prime example of reducing Singapore’s dependency on raw materials imported from foreign markets and has been awarded the BCA’s Green Mark Platinum Award.

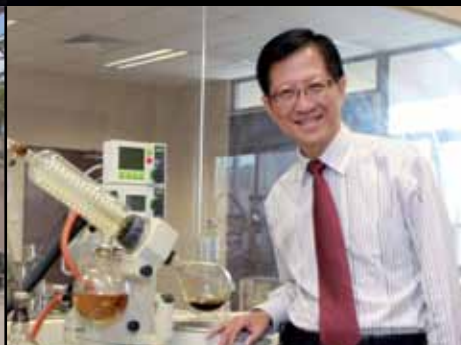
Dr Ho has also spearheaded several other ground-breaking research projects in green innovation and development works, several of which are funded by government agencies. These include the development of a recycling technique that uses asphalt waste for road and airfield constructions (thereby easing the demand for natural aggregate and bitumen), use of incinerated bottom ash derived from refuse incineration for construction applications, carbon footprint assessments for green products, as well as the recycling of rubber tyres for asphalt mixes.

Besides his research activities, Dr Ho is also actively involved in many professional bodies. He is currently the President of Singapore Contractors Association (SCAL) and has received a number of other awards in recognition of his meritorious contributions to the projects that he was involved in.

“I’ve been actively involved in R&D of waste materials and green technologies for more than 20 years, and I don’t think I’ll ever stop campaigning for the green cause!”



Left | The Samwoh Eco-Green Building.



Middle | Laboratories in Samwoh where research and development for many of Dr Ho’s projects take place.



Right | Dr Ho was invited to share his extensive experiences on green innovation in conferences.

“I was born in a Kampong where trees and plants were aplenty, surrounding my home. Hence, I appreciated the ‘greens’ and believed the environment had cultivated my love for nature. When I was very young, I felt sad whenever I saw the damage done to nature due to urbanisation... That triggered me to dream of doing something meaningful to help to conserve the environment for the future.”

A TRUE TESTAMENT TO BEING AWARDED THE GREEN INNOVATOR OF THE YEAR, DR HO SPEAKS OUT ON HIS PASSION FOR ALL THINGS ‘GREEN’.

► Green Advocate of the Year 2011

Mr Allen Ang Aik Leng

Deputy General (Projects) and Head (Green Building)
City Developments Limited (CDL)



Since joining CDL in 2003, Allen has excelled at driving CDL's green innovation in commercial and residential developments. He is also instrumental in helping to champion CDL's successful three-pronged strategy for sustainability – develop quality and eco-friendly properties, manage properties in a cost-effective and energy efficient way, and influence the community positively.

The Green Advocate of the Year 2011's passion for green innovation has helped his company to garner several prominent accolades. A fine example would be his leadership in the development of City Square Mall – the first commercial development in Singapore to receive the prestigious BCA Green Mark Platinum Awards. Beyond his work, he has served at the grassroots as Chairman of the Green Committee, where he shares his views on green issues and raises awareness amongst the youths on important environmental concerns.

With today's heightened awareness of climate change issues, Allen advocates that going green is about being considerate for others, taking ownership of the environment and keeping our country clean and green. Other than stepping up efforts to build our green infrastructure, he recommends that creating sustainable development requires a multi-stakeholder approach which involves a community-wide movement in schools, workplaces, homes and communities. He also suggests that mindset changes need to be encouraged to allow for a sustained adoption of more environmentally-friendly habits while raising awareness of recycling and waste reduction can significantly contribute to a greener, cleaner and healthier environment that all can be proud of.

“Green buildings are more than a fashion statement. As we move into an era of advanced technology and more expensive natural resources, developers can't afford not to develop green.”



Left and Middle | Allen participating in various green events such as the biannual networking session with Green Club for youths and World Environment Day 2010.
Right | Allen flagging off the Eco Trail @ North West 2011 for young participants of the North West Green Clubs.

“The hardest thing about being an advocate is to influence our stakeholders and the community at large in Singapore to practice green. Despite the strong push by our government, demand for green products, or what I called ‘green consumerism’, is still weak compared with countries like Germany and Japan, which have a more ingrained green culture that has been developed over a longer period of time, and also known for their reputation in striving for product quality.”

ALLEN ANG, ON THE HARDEST CHALLENGE OF BEING AN ‘ADVOCATE’.

► **Green Engineer of the Year 2011**

Er Tan Kiat Leong

Executive Director

Beca Carter Hollings & Ferner (S.E. Asia) Pte Ltd

As a Mechanical Professional Engineer and a BCA-registered Green Mark Manager, Er Tan has been actively involved in Green and Sustainability-related work throughout his established career. Currently heading the Environmentally Sustainable Design team and the Centre of Excellence in Beca Carter, he is also involved in M&E engineering design review, energy audits, environmentally sustainable design and associated computer modelling for several major projects in Singapore and the region.

Er Tan always strives to reduce the energy demand through integrated and whole-system designs, careful selection of low carbon materials, use of renewable energy sources and highly energy efficient equipment. He feels immense satisfaction when the projects receive recognition, achieving high Green awards and enjoy substantial energy savings during operation, indicating that he has contributed positively in carbon reduction.

In his relentless pursuit for highly effective green engineering solutions, Er Tan's keen attention for details and uncompromising attitude towards quality in his projects spanning his 20-year career, impressed the judges. His remarkable design involvement of Singapore's first Zero Energy Building at the BCA Academy demonstrated outstanding engineering capabilities, for which he also received the Prestigious Engineering Achievement Award from the Institution of Engineers Singapore as well as the Minister for National Development's R&D Award 2011 (Distinguished Award).

“After twenty years' working in this sector, I am as excited today as I was at the beginning of my career, and I am very proud that the legacy of my hard work has contributed positively to the world.”



Left | Er Tan inspecting a chiller plant at the ZEB@BCA Academy.

Middle | The facade of the ZEB, showcasing its vertical greenery and thin film amorphous BIPV on sunshades.

Right | The viewing gallery, where solar PV is installed with capacity of 190kWp and energy output of 207,000kWhr/year.

“The project of which I am most proud is the Zero Energy Building, which we believe is the first retrofitted building in Southeast Asia to achieve net zero energy consumption. My building colleagues in Australia and New Zealand told me they are frequently called upon to talk about the ZEB in their presentations to clients and industry groups, and we have received recognition from around the world.”

ER TAN KIAT LEONG, ON THE AWARD-WINNING PROJECT HE IS MOST PROUD OF.



SINGAPORE-CHINA PLANS FOR NEW ECO-CITY

PARTNERSHIP TO GREEN THE BUILT ENVIRONMENT.

On 8 August 2011, BCA officers, led by Mr Choo Whatt Bin, Executive Director of BCA, attended the BCA-Changzhi Municipal People's Government Signing Ceremony in Taiyuan, the capital city of Shanxi Province, China. Mr Choo delivered a speech about BCA's roadmap in greening the built environment and its collaboration with Changzhi to build an Eco-City and Eco Media Cultural Park (EMCP).

After the signing ceremony, Mr Choo led the delegation to visit the Changzhi EMCP site. Ms Song Li, the developer of EMCP, introduced the conceptual planning of the start-up area which was done by JURONG Consultants and BCA officers. **P**



Above | Mr Choo Whatt Bin (right) representing BCA in signing the MOU.

Right | Ms Song Li, the developer of EMCP, introducing the conceptual planning of the start-up area.





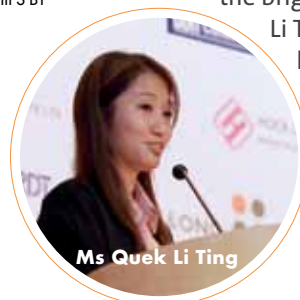
A NEW RECORD SET

THE BCA-INDUSTRY BUILT ENVIRONMENT SCHOLARSHIP AWARD CEREMONY HELD ON 5 AUGUST 2011 SAW A RECORD NUMBER OF SCHOLARSHIPS BEING GIVEN AWAY.

Launched in 1993 by BCA, the BCA-Industry Built Environment Scholarship Programme is a partnership between BCA and leading firms in the industry to provide scholarships to outstanding youths who aspire to lead and shape the future of Singapore's built environment.

"This scholarship programme provides an effective platform for talent attraction and development in the industry. This in turn helps the companies in their leadership renewal efforts. We hope to groom these scholars to become leaders in the near future."

MR CHAN SUI HIM, CHAIRMAN OF DP ARCHITECTS. (DP ARCHITECTS HAS AWARDED SEVEN SCHOLARSHIPS THIS YEAR, WHICH IS A RECORD NUMBER OF SCHOLARSHIPS BY A SINGLE SPONSOR)



Ms Quok Li Ting

This year's event saw 55 young talents receiving scholarships, a substantial increase from the 34 given out in 2010. At the event, MOS Tan Chuan-Jin also announced that BCA would be introducing a new Apprenticeship Programme, which will rejuvenate the construction workforce and ensure effective leadership renewal at the foreman level.

BUILT ENVIRONMENT SCHOLARSHIP PROGRAMME – A RECORD-SETTING YEAR

Besides the record number of scholarships given out, this year also saw the highest number of industry sponsors, up from 20 last year to 33. The number of bright new students who applied for the scholarship also went up from about 230 the previous year to 260 this year. This positive increase is indicative of BCA's success in attracting talents through strong partnerships with industry, as well as students' growing awareness of the meaningful and rewarding career options available in the built environment. It also reflects their strong interest in playing an active role in shaping Singapore's urban landscape.

The year also ushered in the largest batch of graduating scholars in the history of the BCA-Industry Built Environment Scholarship Programme. The 23 graduating scholars will provide a timely rejuvenation to the construction industry. One of the bright young sparks to look out for is graduating scholar Ms Quok Li Ting. The award of the scholarship two years ago had spurred her on to do well in her studies, which in turn has led to her garnering several awards. She was conferred First Class Honours in Project and Facilities Management from NUS, the Lee Kuan Yew Gold Medal, the Singapore Institute of Surveyors and Valuers (SISV) Gold Medal and the Singapore Contractors Association Limited (SCAL) Gold Medal.



“While we enhance the quality of our construction workforce at the professional level, we must not forget the importance of leadership renewal at the technical and supervisory levels. Why is this important? We are faced with an ageing local workforce, where half the workforce at the technical and supervisory levels is likely to retire in 10 to 15 years’ time. We need to build up a pipeline to replenish this retiring pool and rejuvenate the workforce.”

MINISTER OF STATE FOR NATIONAL DEVELOPMENT AND MANPOWER
BG (NS) TAN CHUAN-JIN, ON THE IMPORTANCE OF THE NEW
APPRENTICESHIP PROGRAMME.

THE NEW APPRENTICESHIP PROGRAMME

The introduction of the Apprenticeship Programme serves to nurture local craftsmen at the foreman level. The Programme will target ITE students and mature job seekers in two stages. Stage 1 will leverage on ITE’s existing traineeship programme where students are sponsored by industry firms to undergo a part-time study and work programme. At the end of Stage 1, the students will graduate with both NITEC qualification and a BCA skill certification, which will qualify them as registered CoreTrade Tradesmen.

Stage 2 serves as a continuation for the ITE graduates of Stage 1. It will also facilitate the entry of other job seekers and upgrade the current pool of relatively new local tradesmen. By completing BCA’s part-time Trade Diploma courses, local apprentices will upgrade their skill levels and qualify as registered CoreTrade Foremen. This, in turn, will open doors to higher appointments and higher salaries. **P**



Above | A group photo of the scholars.

Left | A proud moment for scholars and their families.

DESIGN. CONNECTED. FOR ALL.

BRINGING FOCUS TO INTEGRATED AND RESPONSIBLE DESIGN.

The Universal Design Seminar & Site Tour 2011 was held on 5 August 2011, with a turnout of over 200 industry professionals and students. Themed 'Design & Regulations. Community & Connectivity', the seminar is a joint effort between BCA and the Singapore Institute of Architects (SIA), and aims to promote the adoption and execution of an inclusive approach to design. It proved to be a positive platform for discourse, with the sharing of best practices among architects, building owners and managers.

The seminar kicked off with a presentation of the Khoo Teck Puat Hospital, the first local hospital to clinch a Gold in the BCA Universal Design Awards 2011. The CEO of Alexandra Health, Mr Liat Teng Lit, shared insights into the developer's determination to have a healthcare institution that embraced modern design amidst lush greenery, and which promoted an open and healthy environment. He fondly shared that his inspiration stemmed from the 'kampung environment' he grew up in. The project architect, Pauline Tan, VP (Architecture) of CPG Consultants, then further elaborated on how she took her cue from the design brief.

After the seminar, participants were taken on a site tour of the award-winning Golden Jasmine project – a HDB precinct that successfully pioneered a housing type specifically designed for independent living for the elderly. The tour presented a good opportunity to stress the importance of taking measurements for accessibility clearances from finished rather than structural levels. Ms Goh Siam Imm, Deputy Director of BCA, shared examples of common errors arising from the misinterpretation of the Accessibility Code. The project designer, Mr Jorge Low, AVP of Surbana International, also shared his insights on the landscaping and external facilities, which were designed to create a user-friendly and stimulating environment for elderly residents.







Left to Right | Mr Ahn Kook Jin, Managing Director of SsangYong Engineering and Construction Co. Ltd, Mr Ludwig Reichhold, Managing Director of Dragages Singapore Pte Ltd, Mr Kwek Leng Joo, Managing Director, City Developments Limited, BG (NS) Tan Chuan-Jin, Minister of State for Manpower and National Development and Mr Pek Lian Guan, Managing Director, Tiong Seng Contractors (Pte) Ltd.

CDL CROWNS ITS STARS

WINNERS OF CDL 5-STAR ENVIRONMENTAL, HEALTH AND SAFETY EXCELLENCE AWARD

A) CDL 5-STAR ENVIRONMENTAL, HEALTH AND SAFETY EXCELLENCE AWARD – AWARD CERTIFICATE

- SsangYong Engineering & Construction Co. Ltd for W Singapore Sentosa Cove
- Tiong Seng Contractors (Pte) Ltd for Shelford Suites

B) CDL PRODUCTIVITY EXCELLENCE AWARD

- Dragages Singapore Pte Ltd for The Arte
- Tiong Seng Contractors (Pte) Ltd for Parc Emily

RECOGNISING EXEMPLARY BUILDERS IN ENVIRONMENTAL HEALTH AND SAFETY.

On 18 August 2011, City Developments Limited (CDL) presented its 7th CDL 5-Star Environmental, Health and Safety (EHS) Excellence Awards to builders at an award ceremony. For the first time, a new category – the CDL Productivity Excellence Award – was introduced. The inaugural award recognises concerted efforts to drive productivity onsite through the adoption of technology, innovative methods of construction and efficient designs. This signals a new sustainability milestone in the company's focus towards promoting higher productivity at its worksites.

The Guest-of-Honour, BG (NS) Tan Chuan-Jin, Minister of State for Manpower and National Development attended the event which was held at the H2O Residences showflat. This year's winners include SsangYong Engineering & Construction Co. Ltd, Tiong Seng Contractors (Pte) Ltd and Dragages Singapore Pte Ltd. **P**

"For the Government, I see two roles for our authorities – to facilitate, and to incentivise. BCA has implemented the enhanced Buildability Framework which incorporates a new constructability appraisal system to provide greater impetus for designers and builders to improve their designs and adopt labour saving construction methods. MND has also set up the Inter-Agency Buildings Innovation Panel to facilitate expedient multi-agency evaluation and approval of innovative construction methods, processes and materials... I strongly urge all of you to actively participate in, and be fully committed to this productivity drive for the construction industry."

BG (NS) TAN CHUAN-JIN, IN HIS OPENING SPEECH AT CDL'S AWARD CEREMONY.

"When we first started the CDL 5-Star EHS Assessment System a decade ago, it was a truly revolutionary step for the local industry. We strived, together with our builders and consultants, encouraging them to improve their EHS performance. This has led to the introduction of innovative building designs, technology and construction methods, which have resulted in a marked improvement in our EHS performance. This collaborative effort has led to the development of a CDL signature programme and has raised the EHS standards for the construction industry as a whole."

MR KWEK LENG JOO, CDL'S MANAGING DIRECTOR.

STEELING THE FUTURE



Above | The BCAA-SSSS International Symposium was well attended by structural designers and practitioners.

LAYING SOLID FOUNDATIONS IN SUSTAINABLE CONSTRUCTION.

When we talk about sustainable construction and construction productivity, steel buildings have more advantages as compared to concrete buildings. The high recyclability of steel materials promotes sustainable construction, while the modular design and prefabricated form of steel construction improves productivity.

The 3rd International Symposium on Innovative Design of Steel Structures addresses new global developments in the areas of design methodology, the use of sustainable low carbon steel materials, and efficient construction technologies to erect complex steel buildings. Jointly organised by BCA Academy and Singapore Structural Steel Society (SSSS), the symposium was held on 28 June 2011 at Hotel Furama RiverFront Singapore and was attended by over 140 industry practitioners.

Serving as a platform to showcase the latest advances in the design and construction of steel and composite structures, the event attracted world-renowned experts from Australia, China, Hong Kong, Singapore, UK and US, and prominent local design practitioners in related areas to share their ideas and expertise. There were also presentations on the challenges in the construction and design of the Marina Bay Sands Integrated Resorts and SuperTrees at Gardens by the Bay, adding a local perspective to the event.

The Hong Kong Polytechnic University, the University of Hong Kong, and the Hong Kong Institute of Steel Construction jointly organised the same symposium in Hong Kong two days later on 30 June 2011. **P**

SINGAPORE SYMPOSIUM HIGHLIGHTS:

Ultra-high Strength Composite Columns for High-rise Buildings and Recent Code Development

*Prof. Richard Liew,
National University of Singapore,
Singapore*



New Trends for Seismic Engineering of Steel and Composite Structures

*Prof. Jerome F Hajjar,
Northeastern University,
USA*



Second-Order Analysis for Sustainable Design of Steel and Composite Structures

*Prof. S L Chan,
Hong Kong Polytechnic University,
Hong Kong*



Low and Zero Carbon Steel Buildings

*Prof. David Moore,
British Constructional Steelwork
Association (BCSA), UK*



Marina Bay Sands® Integrated Resort – Understanding and Overcoming the Challenges in the Structural Design

*Er Wijaya Wong,
Arup Singapore Pte Ltd*



Recent Australian Innovations in the Application, Design and Research of Constructional Steel

*Prof. Brian Uy,
University of Western Sydney, Australia*



Bolted Connections of Light Gauge Steel at High Temperatures

*Prof. Ben Young,
University of Hong Kong,
Hong Kong*



Challenging Problems in Fire Protection of Steel Structures

*Prof. Guo-Qiang Li,
Tongji University,
China*



Design of Support Formwork Systems by Advanced Structural Analysis

*Prof. Kim Rasmussen,
University of Sydney,
Australia*



Construction of SuperTrees at Garden by the Bay

*Dr Ng Yiau Heong,
TJ Design and Engineering Pte Ltd,
Singapore*





A LUNCH CONNECTION

THE CEO OF BCA GETS TO KNOW THE FACES OF FUTURE INDUSTRY LEADERS AT A SPECIAL NETWORKING LUNCH SESSION.

On 22 July 2011, 18 young industry leaders gathered for a networking lunch with Dr John Keung, CEO of BCA at BCA Academy. Joined by the pioneer batch of the Young Leaders Programme (YLP) from 2009, the latest batch showed the same enthusiasm in finding out what the YLP entails for them professionally.

The attendees were treated to a presentation which gave an overview of the YLP, including a recap of past events, and a preview of more upcoming networking events and other professional development opportunities for them to look forward to. They also gained an insight into the importance of the Construction Productivity Roadmap where their views on raising productivity, technology adoption and capability improvement were actively sought.

Dr Keung then shared the inspiration behind the YLP with the young leaders, which is to identify, nurture and retain young professionals for leadership renewal by providing them with a networking platform and opportunities for their professional development. Apart from grooming new leaders, Dr Keung also encouraged feedback to help build capability and improve productivity in the industry.

After lunch, the young leaders went on a guided tour around the Zero Energy Building. Food for fuel was followed by food for thought as the young leaders digested the green innovations behind the first building in Southeast Asia that achieved net zero energy consumption. **P**

THE YLP NETWORK



Since the launch of the YLP, the network has expanded to include 73 industry young leaders and 25 BCA young leaders. Since its inception, the young leaders have been engaged in different networking events. With regards to professional development, technical site visits were organised to facilitate knowledge sharing among the young leaders. They also gained international perspectives at major BCA-organised industry events, such as the International Panel of Experts to review the industry's productivity strategies. Occasionally, the young leaders also receive invites to speak at schools and career fairs to promote their professions. With so many exciting programmes, the YLP network is shaping up to be a rich source of talent for the building industry.

A GREEN MARK FOR SCHOOLS

RAFFLES INSTITUTION IS THE FIRST SCHOOL TO ATTAIN A BCA GREEN MARK GOLD^{PLUS}.

Existing schools can be green too. BCA has worked closely with the Ministry of Education (MOE) to develop the new BCA Green Mark for Existing Schools. This new scheme places strong emphasis on raising the awareness amongst students and educating future generations on the importance of environmental sustainability and conservation.

Among the six pioneer schools, Raffles Institution is the only school to have clinched the Gold^{Plus} award, the second highest Green Mark rating under the BCA Green Mark for Existing Schools. Rulang Primary School and Paya Lebar Methodist Girls' Secondary School both clinched the BCA Green Mark Gold Award, while Stamford Primary School, Tampines North Primary School and Innova Junior College attained the basic Certified level.

The Gold^{Plus} Award for Raffles Institution was the result of efforts by its students. It took the students six months and three meetings weekly in the initial stage to kickstart the project. Besides having energy efficient air-conditioning, lighting, solar water heaters and extensive greenery within the school premises, RI also adopted a comprehensive four-pronged approach to strive for energy efficiency and environmental friendliness. Outstanding student involvement and active engagement in environmental sustainability was also displayed through its One Earth Club and other community involvement projects.

Commenting on the efforts by the Raffles Institution students, Dr John Keung, BCA's CEO said, "The level of participation by the students is indeed commendable. They have clearly shown exemplary leadership and drive in environmental sustainability. It is also the first time we see such strong motivation and participation by the users (the students) in driving the certification for Green Mark. We hope their story will inspire more schools to come on board this green building journey. BCA will continue to work closely with the schools to achieve the desired highest level of Green Mark rating possible."

BCA has formulated a Green Building Masterplan that sets out specific initiatives to achieve the national target to green at least 80% of the buildings in Singapore by 2030. Its current focus is on greening existing buildings, such as schools. Under the second Green Building Masterplan, all old and new public buildings owned by government agencies have to attain the Green Mark Gold^{Plus} standard by 2020. To help schools achieve the award and certification, BCA has developed the new criteria to include school policies, initiatives and facilities so that the criteria suit the operational characteristics of schools. **P**

"The BCA Green Mark scheme has come a long way in helping Singapore achieve environmental sustainability since 2005. Singapore's green building movement has evolved to a point where we now place more emphasis on users' behaviour and how they play an integral part in keeping buildings green. In this regard, we are glad to extend the BCA Green Mark scheme to existing schools and recognise those who have made an effort in environmental sustainability."

DR JOHN KEUNG, CEO OF BCA.



From Top to Bottom | Raffles Institution clinched the Gold^{Plus} award, while Rulang Primary School and Paya Lebar Methodist Girls' Secondary School achieved the BCA Green Mark Gold Award.

CALLING FOR THE BEST OF THE BEST

ENTER THE HUNT FOR 2012 LEADERS IN THE BUILT ENVIRONMENT.

Call for Nomination:

CONSTRUCTION PRODUCTIVITY AWARDS 2012

BCA is now inviting nominations for the Construction Productivity Awards (CPA) to recognise outstanding firms and industry practitioners for going the extra mile to achieve productivity improvements at the firm and project levels.

The Awards aim to:

- Recognise built environment professionals, consultants and builders for their achievements in improving productivity.

- Promote productivity in the industry.
- Serve as a platform to measure productivity in the industry.

There are three categories under the Construction Productivity Awards: CPA – Projects, CPA – Best Practices and Innovations and CPA – Value-Added Productivity.

For more information on the various award categories as well as the application and eligibility criteria of the CPA 2012, please visit www.bca.gov.sg or contact:

CPA – Projects

Mr Lu Ming Xuan at 6325 5091 or email: lu_ming_xuan@bca.gov.sg

CPA – Best Practices and Innovations

Mr Zeng Han Jun at 6325 5053 or email: zeng_han_jun@bca.gov.sg

CPA – Value-Added Productivity (VAP)

Ms Siti Aloyah at 6325 5195 or email: siti_aloyah_ishak@bca.gov.sg

Call for Nomination:

CONSTRUCTION EXCELLENCE AWARDS 2012 (CEA 2012)

BCA is now inviting nominations for CEA 2012 Award! The BCA Construction Excellence Awards accord recognition to construction projects that have demonstrated the highest standards of construction excellence in Singapore.

The Awards aim to:

- Spur builders operating in Singapore to pay particular attention to high standards of project management, technical inputs and workmanship in their projects.

- Enhance competition for work excellence in the construction industry.

Since 2006, participation in the BCA Quality Mark for Good Workmanship Scheme has been taken into consideration for all private residential and mixed development projects nominated for the BCA Construction Excellence Awards. Bonus points will be awarded for projects that have successfully completed the Quality Mark assessment, as they demonstrate a higher consistency in quality achievement.

The deadline for nominations is **14 October 2011**. For more information on the criteria of the BCA Construction Excellence Awards, please visit www.bca.gov.sg or contact Mr Ken Ho at ken_ho@bca.gov.sg.

Call for Nomination:

DESIGN & ENGINEERING SAFETY EXCELLENCE AWARDS 2012 (DESEA 2012)

The BCA Design & Engineering Safety Excellence Awards 2012 give recognition to the Qualified Person for Structural Works, his firm and the project team for ingenious design processes and solutions in overcoming project challenges to ensure safety in design, construction and maintenance of building and civil engineering projects locally and overseas.

The Awards aim to:

- Inculcate a strong safety culture among building professionals in developing our built environment.
- Give recognition to QP(ST)s, their firms and the project teams for engineering achievements.

- Provide an avenue through which competition for work excellence can be enhanced.

Award Categories:

The Awards will be given out for the following categories:

- Residential
- Commercial
- Institutional and Industrial
- Civil Engineering
- Overseas

Nominations will open in **mid-October 2011** and will close on **3 January 2012**. For more information on the eligibility and criteria of DESEA 2012, please visit www.bca.gov.sg or contact Mr Ng Kay Beng at ng_kay_beng@bca.gov.sg.

EVENT LINE UP

Tsinghua University-
BCA Advanced
Management Programme:
Real Estate Development &
Management in China
10-15 OCT

Certification Course in
BIM Management
17-20 OCT

Certification Course for
Structural Steel (StEr) based
on Eurocodes 3 & 4
18 OCT-2 DEC (EVENINGS)

BCA-REDAS Quality and
Productivity Seminar 2011
18 OCT (PM)

BCAA-SISV Joint Seminar
2011 – Exploring Alternative
Procurement Systems
19 OCT



HFT Stuttgart-BCA Executive
Development Programme 2011:
Innovations in Sustainable
Design & Technology
24-28 OCT

Certification Course
in Construction
Productivity Management
25 OCT-2 DEC (EVENINGS)

Workshop on
Material Recycling for
Sustainable Construction
01 & 02 NOV

Internal Audit (QEHS)
Course based on Quality
ISO 9001, Environmental
14001 & Health & Safety
OHSAS 18001
**01, 03, 08, 10, 15 & 17 NOV
(EVENINGS)**

Behavioural Safety for the
Construction Industry
03 & 04 NOV

Pile Foundations Design and
Construction for Engineers
**08, 10, 15 & 17 NOV
(EVENINGS)**

Contract Drafting – The
Technicalities and Legalities
10 NOV

Workshop on Preparing
and Defending Loss and
Expense Claims
10 NOV

Civil Defence Shelter
Technical Seminar 2011 –
Design, Construction and
Commissioning of Household
and Storey Shelters
11 NOV (AM)

Certificate in
Concrete Technology
**11, 15, 18, 22 & 25 NOV
(EVENINGS)**

CONQUAS Training for
Developers & Consultants
15 NOV

Design & Installation
of Electrical Installation
Complying With CP5 & CP88
15 & 16 NOV

Geotechnical Instrumentation
for Engineers
**16, 18, 23 & 25 NOV
(EVENINGS)**

Essential Knowledge in
Construction Regulations &
Management for Licensed
Builders (Mandarin)
21, 22 & 23 NOV

Site Investigation
for Engineers
**22, 24, 29 NOV & 01 DEC
(EVENINGS)**

Understanding the Green
Mark Criteria for Existing
Building and Office Interior
23 NOV (AM)

Requirements for
Environmental Sustainability
in Buildings and The Green
Mark Scheme
25 NOV

Essential Knowledge in
Local Regulations and
Construction Practices
28, 29, 30 NOV

Project Management
01 & 02 DEC

Code of Practice on
Buildable Design
02 DEC

CONTACT:
**BCA ACADEMY – BUSINESS
DEVELOPMENT UNIT**
DID: 6248 9843/824
EMAIL: bca_academy@bca.gov.sg



ADVANCE WITH WORLD CLASS EDUCATION

Master of Science in
**FACILITY &
ENVIRONMENT
MANAGEMENT**

2012 Intake

DISTINGUISHED FEATURES

The BCA Academy has partnered with University College London (UCL), which is ranked 4th in the world, to deliver the first global postgraduate Master of Science degree in Facility and Environment Management in Singapore.

The primary aim of the programme is to enable participants to achieve an integrated understanding of the basic knowledge and operational skills required for the good management of buildings, their environments, facilities and support services. The programme focuses on effective planning, design, management, maintenance and adaptation of buildings, to ensure they function appropriately and efficiently to meet specified needs.

REGISTRATION & SUBSIDY Registration starts in Dec 2011 and subsidy will be available. Look out for more details in late November 2011 at: <http://www.bcaa.edu.sg/MScFEM.aspx>.

For more details, please call 6248 9824 or visit www.bcaa.edu.sg/MScFEM.aspx.

BCA ACADEMY
of the built environment