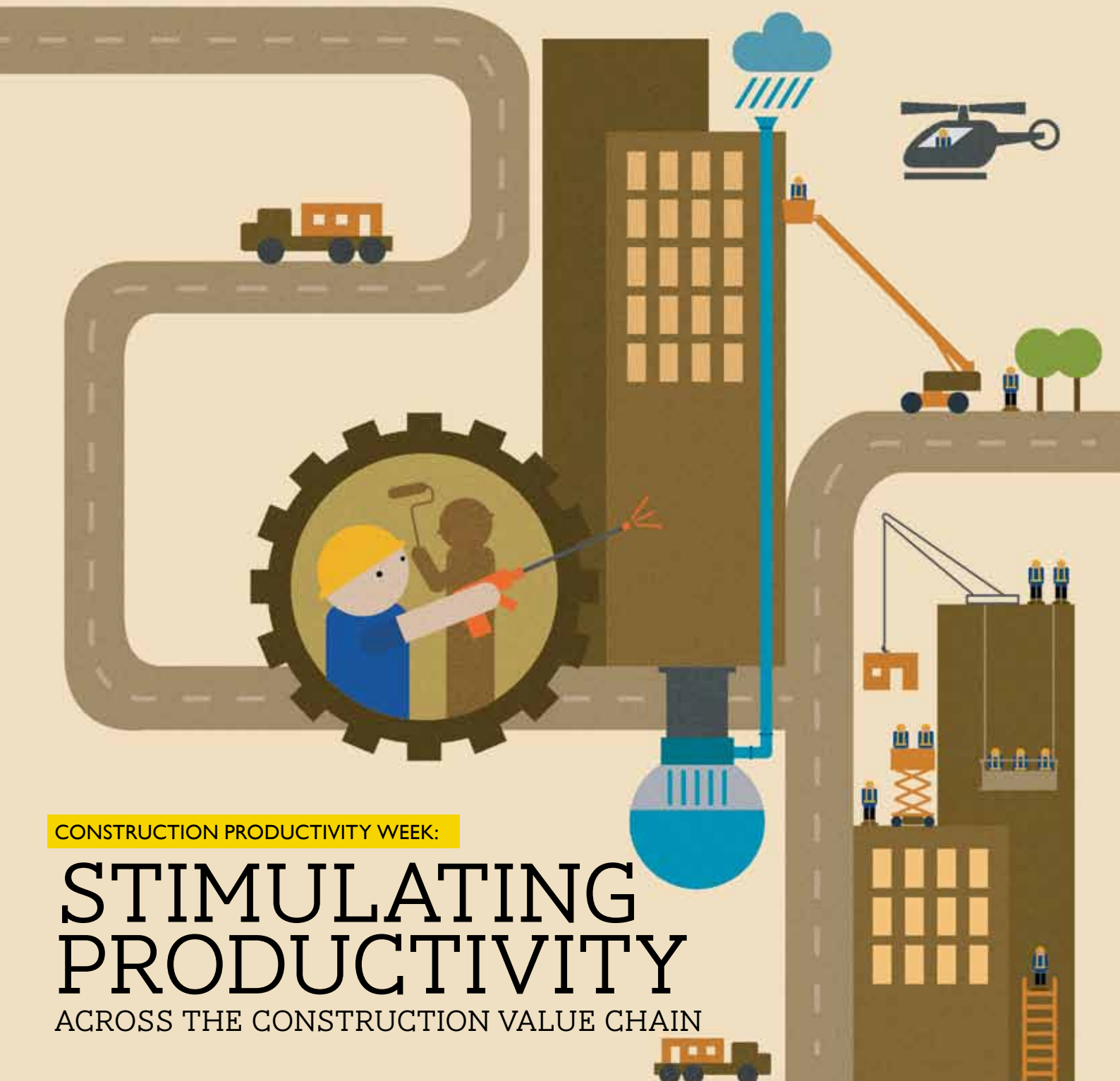


Pillars

WE SHAPE A SAFE, HIGH QUALITY, SUSTAINABLE AND FRIENDLY BUILT ENVIRONMENT | ISSUE 02/2011



CONSTRUCTION PRODUCTIVITY WEEK:

STIMULATING PRODUCTIVITY

ACROSS THE CONSTRUCTION VALUE CHAIN

Pillars

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CHANGE FOR THE BETTER

Dear Readers,


Welcome to the first issue of the new-look Pillars magazine. I am sure you have already noticed that our magazine has undergone some pretty significant changes. As the saying goes, "Nothing endures but change", and I think you will agree that some of the changes we have planned for the magazine will improve your reading experience.

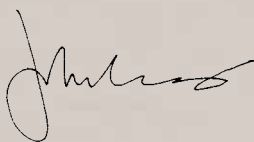
Starting from this issue, Pillars will be delivering its signature news and event coverage in a sleek and visually-appealing format. Although the look is new, our bi-monthly publication will continue to be filled with rich content. The new editorial emphasis is on giving our readers value-added content with insightful perspectives and commentary that goes beyond just the basic news.

The highlight for this issue is the inaugural Singapore Construction Productivity Week, one of BCA's recent milestone events, held from 25 to 29 April, in collaboration with industry stakeholders. The main aim of the Week was to raise industry awareness of enhancing productivity and to encourage industry players to build smart. The Week saw industry leaders and practitioners coming together to share and exchange best practices and technologies to reinforce their own skills for productivity and also provided a platform to showcase many of the exemplary projects which have successfully adopted productive methods of construction. I am pleased to say that the Week was a huge success, with active industry participation and sponsorships as well as receiving positive industry feedback and media coverage. The Build Smart Conference and BuildTech Asia Exhibition saw approximately a total of 5,000 participants and visitors, while the Building Information Modelling (BIM) Competition was met with an overwhelming response of 47 teams comprising about 140 participants, including students from our tertiary institutions and industry professionals, signing up to pit their BIM skills against one another. It was a fun and enriching learning week and I hope you were there to catch these exciting activities in action.

Not long after, BCA also celebrated a night of recognition for excellence in the built environment during our annual BCA Awards Night on 19 May at Resorts World Sentosa. This year, we had by far the largest ever gathering of the Awards in its history to date, with a record-breaking total of 261 awards given out in various categories for safety, quality, sustainability and universal design and productivity and a record attendance of more than 2,000 industry leaders and practitioners. The Construction Productivity Awards is the latest addition to our series of BCA Awards to complement our national drive for productivity. A total of 31 Construction Productivity Awards were given out to recognise outstanding firms and industry practitioners in their productivity achievements.

I would like to extend my heartiest congratulations to all the award winners for their achievements and contributions in Singapore's built environment. I urge all winners, as well as future potential winners, to continue their pursuit for excellence and to strive for greater heights.

Last of all, I hope you will enjoy this fresh new series of Pillars. Do keep an eye out for the e-version of the magazine, a new addition with the new Pillars, for more convenient reading on-the-go. 



Dr John Keung



BOOSTING CONSTRUCTION PRODUCTIVITY



A WEEK OF PRODUCTIVITY FOR THE CONSTRUCTION INDUSTRY.

The inaugural Singapore Construction Productivity Week (SCPW) happened from 25–29 April 2011. This inaugural event is aimed at:

- Raising awareness in enhancing productivity and encouraging industry players to build smart.
- Providing a platform for sharing best practices and new technologies.
- Showcasing exemplary projects which have successfully adopted productive methods of construction.
- Presenting opportunities for tradesmen to reinforce key skills for productivity gains.



“I would like to encourage all stakeholders in the construction value chain to step up your efforts to boost construction productivity. The productivity journey is long and arduous. However, I am confident that once we get the momentum going, we will be able to transform our industry to achieve better integration and higher productivity.”

MS GRACE FU, FORMER SENIOR MINISTER OF STATE FOR NATIONAL DEVELOPMENT & EDUCATION, AT SCPW'S OPENING CEREMONY ON 25 APRIL 2011.



“The number and quality of visitors for the BuildTech Asia Exhibition are better than earlier trade shows in Vietnam and Indonesia.”

MODERN (SINGAPORE) ACCESS & EQUIPMENT PTE LTD

“All the efforts by BCA have paid off. The industry is starting to gain prominence and the image of construction is evolving. Great work!”

MR PEH KE PIN, BCA'S PRODUCTIVITY AMBASSADOR

Above | Ms Grace Fu, Guest-of-Honour, at the event viewing the competition that was ongoing at the BCA academy.



The week's highlights:

- Skilled Builder Competition and Building Information Modelling (BIM) Competition.
- Build Smart Conference.
- BuildTech Asia 2011 Exhibition.
- Build Smart Site Tours.

SCPW kicked off with the challenging and exciting Skilled Builder and BIM competitions aimed at highlighting the importance of using the right skills and technology to increase construction productivity. A total of 47 teams comprising 140 participants faced off in the two-day BIM competition to pit their BIM skills against one another.

The Build Smart Conference and BuildTech Asia Exhibition opened at Singapore Expo two days later, sharing best practices and showcasing exemplary projects that had successfully adopted productive methods of construction. Refer to Build Smart Magazine Issue 6 (June issue) for more in-depth coverage on the Singapore Construction Productivity week. **P**

BUILD SMART CONFERENCE

600 participants

180 companies/ organisations represented

27 papers presented on construction productivity

BUILDTech ASIA EXHIBITION

4,300 visitors including **500** from overseas

160 exhibitors

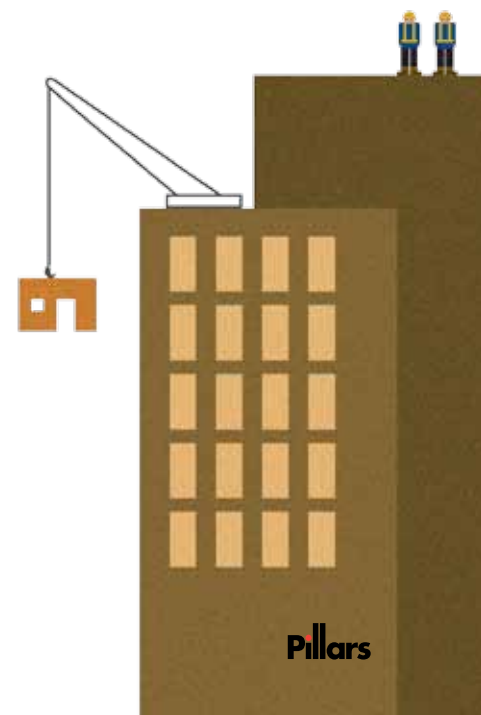
BIM COMPETITION

47 teams, **140** participants

SKILLED BUILDER COMPETITION

104 participants

Above Left | (Top) Ms Grace Fu trying her hand at operating a crane simulator. Left | The opening ceremony of the Build Smart Conference and BuildTech Asia Exhibition, where buildings were lighted up against the backdrop of Singapore's skyline.



CELEBRATING BUILT ENVIRONMENT'S BEST

A GATHERING OF THE BEST IN THE BUILT ENVIRONMENT ON BCA AWARDS NIGHT 2011.

The biggest gathering of over 2,000 professionals and practitioners from the construction industry celebrated their achievements and contributions to the built environment at the Resorts World Sentosa on 19 May 2011. A total of 261 awards were given out for the various categories this year.

"Overall, the construction industry has done well. Some of you (award winners) are trailblazers, setting good examples for the rest of the industry. But construction productivity and the green building movement are both long and arduous journeys. We cannot afford to slow down or change course. We must press on, with a strong partnership amongst all the industry players and the Government."

MR MAH BOW TAN,
FORMER MINISTER FOR NATIONAL DEVELOPMENT,
GUEST-OF-HONOUR FOR BCA AWARDS 2011



Momentous night for the industry:



"I would like to take this opportunity to thank the industry for your strong support of the BCA Awards. When we first conceived the idea of awarding accolades to the building and construction industry to cast a spotlight on exemplary practices, there were only two categories of awards – quality and buildable design. Since then, the BCA Awards has not only grown in size, but in stature and recognition."

MR QUEK SEE TIAT,
CHAIRMAN, BCA

"I would like to extend my heartiest congratulations to all the award winners for their achievements and contributions in Singapore's built environment. I urge all winners, as well as future potential winners, to continue their pursuit for excellence and to strive for greater heights."

DR JOHN KEUNG,
CEO, BCA





Above | The Sail @ Marina Bay, one of the Platinum Winners for the inaugural Construction Productivity Award under the mixed development building category. Left | City Developments Ltd, the first winner of the BCA Green Mark Platinum Champion Award since it was launched in 2008. Below | Some winners of the inaugural Construction Productivity Award, a new series of awards added on to the list of existing award categories starting from this year.





261 AWARDS

8 Design Engineering
Safety Excellence
Awards

28
Construction
Excellence Awards

162
Green Mark Awards,
1 Green Mark Champion
and 1 Green Mark
Platinum Champion

10
Green & Gracious
Builder Awards

4 BCA-SGBC
Green Building
Individual Awards

13
Universal Design Awards
for the Built Environment

3 Built Environment
Leadership Awards

Inaugural award – **31**
Construction Productivity
Awards

Stay tuned to subsequent issues of Pillars for more in-depth coverage of individual award winners as well as Build Smart for coverage on the first winners of the Construction Productivity Awards!

SITE VISIT TO NV RESIDENCES

THE NATIONAL PRODUCTIVITY AND CONTINUING EDUCATION COUNCIL (NPCEC) DELEGATION LEARNS ABOUT BUILDABILITY AND CONSTRUCTABILITY.

The delegation visited the project site on 28 March 2011 to observe its key buildable features like its drywall and prefabricated bathroom units (PBU). It was led by NPCEC Chairman, DPM Teo Chee Hean and 10 NPCEC members – Mrs Lim Hwee Hua, Ms Grace Fu, Mr Lee Yi Shyan, Mr Abdul Subhan, Mr Stephen Lee, Mr Aaron Boey, Mr Liew Mun Leong, Mr Douglas Foo, Mr Simon Lam and Mr Pek Lian Guan.

The visit kicked off with a welcome address and introduction on the visit programme by BCA, followed by a presentation by Singapore's leading developer, City Developments Limited (CDL), on its strategy for production. CDL shared that it has focused on environment, health and safety aspects since year 2000 and has built a strong green corporate culture, which in turn helped CDL to raise the standard of quality, safety and productivity. >



Top | BCA's CEO, Dr John Keung welcomes NPCEC Chairman, DPM Teo Chee Hean to the NV Residences project site.

Above | The NPCEC delegation takes a closer look at the final product of the PBU.

Left | The site visit kicks off with a presentation by the NV Residences project team.



Left | The first stop was the mock up unit. The delegation was briefed on the buildable features of drywall and shown the different stages of installation. They were also briefed on how these features reduced the amount of wet trades on site before they viewed the final PBU product.

CDL has also influenced their consultants and builders to incorporate innovative solutions which enhance production and quality. The architect for the project, Architect 61, next briefed the delegation on how productivity was achieved through conceptualising easy-to-construct design such as the drywall and PBU. Hyundai Engineering & Construction Co. Ltd (HDEC), shared its experience in striving for better constructability.

A short discussion followed the presentation. The delegation then toured the site to view the mock up and final product of the PBU and drywall. P



Left | The delegation then proceeded to a completed unit at the Adjacent Development, Livia Condominium, to observe the quality of the completed condominium. Also built by HDEC, the development used the same concepts of buildable design.



Left | The NPCEC delegation took a group photo with the project team before ending the site visit.

LET'S TALK ABOUT... GEOTECHNICAL ENGINEERING



REGIONAL EXPERTS GATHERED FOR A THREE-COUNTRY SEMINAR SERIES ON GEOTECHNICAL ENGINEERING.

Sustainable development issues in underground construction are usually not discussed as widely as compared to the superstructure construction of buildings. Geotechnical engineering has a huge potential to improve the sustainability of projects in earlier stages of the decision-making process. Recent new developments in geotechnical engineering offer innovative solutions and contribute to the sustainable development and construction of underground structures.

Regional ASEAN geotechnical and engineering organisations, which include the Association of Geotechnical Societies in South East Asia (AGSSEA), Geotechnical Society of Singapore (GeoSS), Geotechnical Division of the Hong Kong Institutions of Engineers, Hong Kong Geotechnical Society (HKGS) and Geotechnical Engineering Technical Division of The Institutions of Engineers of Malaysia, organised an international seminar series titled "Engineering a Sustainable Development: Role Played by Geotechnical Engineering". This

series was organised and presented in Hong Kong, Kuching and Kuala Lumpur in Malaysia, and Singapore in February 2011.

For the Singapore leg, BCA Academy collaborated with GeoSS and other supporting organisations to organise the seminar on 25 February 2011. Representatives from supporting organisations participated and addressed the audience on new sustainable developments in geotechnical engineering in the region and around the world.

In the seminar, internationally renowned geotechnical experts from Singapore, Hong Kong and Malaysia presented a variety of topics related to sustainable development, including green solutions for ground improvements, application of soil bioengineering in slope stabilisation as well as geosynthetic technology.

BCA Academy and GeoSS have previously collaborated to organise many geotechnical seminars and workshops on a range of useful topics such as geotechnical instrumentation, soil modelling, Eurocode-7, pile foundation design and deep excavation construction that benefited over 1,000 professionals. The industry can look forward to another useful joint seminar themed "Soft ground engineering" in August

THE SEMINAR'S HIGHLIGHTS:

Research on New Solution for Sustainable Development in Construction
Assoc Prof Chu Jian, Nanyang Technological University, Singapore



Use of Bioengineering (Live Pole) for Mitigation of Slope Failures
Prof Bujang Huat, University of Putra, Malaysia



Ground Improvement: A Green Solution
Dr Leong Kam Weng, Keller Foundations (S.E.Asia) Pte Ltd, Singapore



Engineering a Sustainable Development through Geosynthetic Technology
Ir Dr Loke Kean Hooi, TenCate Geosynthetics Asia Sdn Bhd, Malaysia



Sustainable Slope Stabilisation: Application of Soil Bio-engineering
Mr Mark Wallace, Arup, Hong Kong



Ground Source Energy – Experiences and Prospects
Ir Freda Chu, Arup, Hong Kong





BUILDING FOR SUSTAINABILITY

THE BCA-REDAS-SGBC GREEN BUILDING SEMINAR 2011 RAISES ISSUES FOR A GREENER AND MORE SUSTAINABLE BUILT ENVIRONMENT.

Conducted at the BCA Academy on 7 March 2011, the annual seminar attracted about 360 participants. This year, professionals from consultants, academics, developers, building owners to Energy Service Company (ESCO) representatives were invited to share on the recent advancements in green building and sustainable development, as well as the successful business cases that shapes a greener and more sustainable built environment.

At the seminar, Associate Professor Yu Shi-Ming, Head of Real Estate Department from NUS and Dr Chua Yang Liang, Head of Research and Consultancy from Jones Lang LaSalle shared some of their interesting research findings with participants. In particular, Associate Professor Yu shared that the presale and resale average unit price (in \$ per sqm) of Green Mark condominiums are generally higher than 'non-green' ones.



Above | Privé and The Canopy, among the few condominiums that are Green Mark Gold Plus Certified.

Based on findings of cash flow simulation done for a new hypothetical office building in the Central Business District (CBD), Dr Chua shared that BCA Green Mark (GM) GoldPlus yields the highest internal rate of return (IRR) premium at all rental levels as compared to other Green Mark schemes.

The afternoon session focused on successful building case studies from the public sector, mixed retail and office and Management Corporation Strata Title (MCST). The PoMo and Golden Mile Tower (MCST) were among a few that had benefitted from the Green Mark Incentive Scheme for Existing Building (GMIS-EB) on their greening journey. At the dialogue session chaired by Mr Tan Tian Chong, BCA's Director of Technology Development, the speakers also exchanged their concerns and difficulties in convincing building owners to take on green retrofitting.

To tackle this issue, 20 million dollars has been set aside since 2006 under the 'Green Mark Incentive Scheme' to offer cash incentives for developers, building owners, project architects and M&E Engineers to adopt environmentally-friendly Green Building technologies and building design practices. 



"As the number of Green Mark buildings in Singapore grows, it is good to see the research being done to ascertain the positive impact on values. This will help developers and other real estate players to make better informed investment decisions."

MR LEE CHUAN SENG
PRESIDENT, SGBC (2009 TO MAR 2011)

"The case studies presented at the seminar will spur representatives from developers to think about the various possibilities within their portfolio."

MR WONG HEANG FINE
PRESIDENT, REDAS CEO, CAPITALAND
RESIDENTIAL SINGAPORE PTE LTD



"The sharing of successful case studies provides valuable insights and experiences on how green retrofitting can transform different categories of existing buildings into green and energy efficient ones."

MR TAN TIAN CHONG
DIRECTOR OF TECHNOLOGY
DEVELOPMENT, BCA

TOPICS SHARED AT THE SEMINAR:

Singapore Green Building Product Certification
Er Ng Eng Kiong, Honorary General Secretary, SGBC

Innovative Green Building Concepts in Europe and their Application in the Tropics
Mr Willi Krebsler, Chief Engineer, EnEd Asia Pte Ltd

Impact of BCA's Green Mark on Residential Property Values
Assoc Prof Yu Shi-Ming, Head of Dept of Real Estate, NUS

A Preliminary Analysis of the Benefit of 'Green Marking' a Development
Dr Chua Yang Liang, Head of Research & Consultancy, Singapore, Jones Lang LaSalle

Energy & Sustainability Projects and their Competitive Value Proposition
Dr Richie Lee, Executive Director, Energy & Sustainability – Asia, CB Richard Ellis Asia

Ministry of Manpower's Journey Towards Attaining Green Mark Platinum
Mr Noel Chin, Senior Assistant Director, National Human Resource Division, MOM

Green Retrofitting – A Responsible Investor's Perspective
Mr Mann Young, Head of Sustainability, Asia, Lend Lease

Greening of Strata-Titled Commercial Buildings in Singapore
Mr Patrick Foong, Managing Director, Equation Energy Pte Ltd



Above | From left: Mr Willi Krebsler, Assoc Prof Yu Shi-Ming, Er Ng Eng Kiong, Dr Richie Lee and Dr Chua Yang

THE FUTURE OF FACILITY MANAGEMENT

THE SECOND BCAA-IFMA REGIONAL CONFERENCE 2011 FOCUSES ON THE FUTURE OF SUSTAINABLE FACILITY MANAGEMENT (FM).

Following the success of the inaugural conference last year, the BCAA-IFMA Regional Conference returned in 2011 with more to offer on FM productivity. The event, jointly organised by BCA Academy and the International Facility Management Association, Singapore Chapter (IFMA-SC), was held from 31 March to 1 April 2011.

With the theme 'Heighten productivity, optimise efficiency, facility management (FM) for the future', the

conference focused on current and future FM needs such as workplace productivity, sustainability, industry best practices, relevant case studies and future trends.

The conference provided participants with opportunities to gain up-to-date information of the FM industry, learn from the experts about achieving FM sustainability, be aware of the challenges facing building owners, design teams and facility managers as well as network with regional participants.

Participants at the conference came from various industries and included developers, educational institutions, government agencies, architectural firms and commercial institutions keen to adopt green initiatives for sustainable facility management. **P**

HIGHLIGHTS OF THE 2-DAY CONFERENCE

Day 1 – The Seminar



Above | BCA CEO, Dr John Keung opens the conference with a welcome speech.



Above | Hari Gunasingham presents Singapore's case study on the topic, "Transformations of Facilities Management in Business Processes".



Above | A presentation on the "FM Exemplar Project: Sydney Opera House – FM as a Business Enabler" by Stephen Ballesty.



Above | Dr Oscar Chan shares the asian perspective on "Future Challenges in Property and Facilities Management".

Day 2 – The Workshop And Site Tours



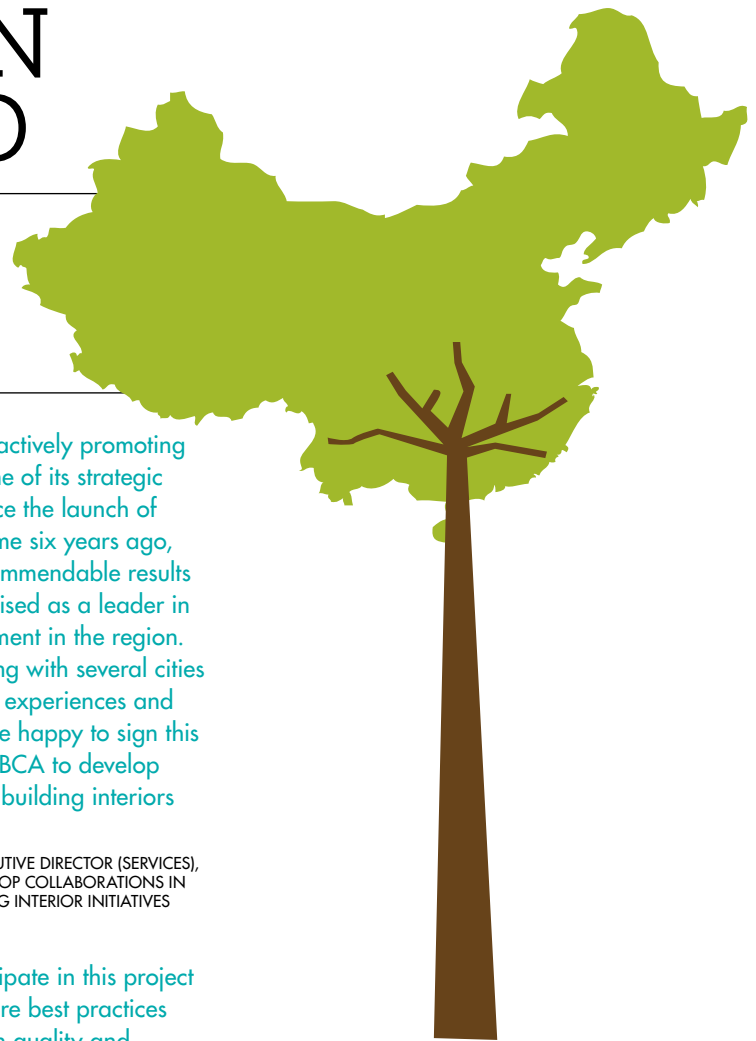
Above | Workshops let participants learn from the best.



Above | Seeing it first hand with site tours to Khoo Teck Puat Hospital.

CHINA'S GREEN WAY FORWARD

CEMENTING COLLABORATIONS WITH CHINA TO DEVELOP GREEN BUILDING INTERIORS AND A GREEN LAB FOR URBAN SOLUTIONS.



BCA signed two Memorandums of Understanding in China – one with the Beijing Construction Decoration Association (BCDA) to explore collaborations in various green building interiors initiatives, and another with Sino-Singapore Tianjin Eco-city and IE Singapore to jointly develop a ‘Low Carbon Living Lab’ within the Eco-Business Park.

The MOU between BCA and BCDA will include collaborations in developing a Green Building Interior Standard for the Beijing interior decoration and construction industry, as well as green building training by BCA for Beijing interior constructors and consultants. It will also help improve business opportunities between Singapore and the Beijing building industry in China.

Through the ‘Low Carbon Living Lab’, BCA will showcase Singapore’s best practices in delivering quality and sustainable urban solutions, including putting in place requirements to meet good CONQUAS, Buildability and Constructability scores, as well as Green Mark Platinum certification requirements. **P**

“Singapore has been actively promoting green buildings as one of its strategic national policies. Since the launch of its Green Mark Scheme six years ago, BCA has achieved commendable results and has been recognised as a leader in green building movement in the region. We have been working with several cities in China to share our experiences and best practices. We are happy to sign this MOU with BCDA for BCA to develop a standard for green building interiors in Beijing.”

MR CHOO WHATT BIN, EXECUTIVE DIRECTOR (SERVICES), BCA, ON THE MOU TO DEVELOP COLLABORATIONS IN DEVELOPING GREEN BUILDING INTERIOR INITIATIVES

“BCA is glad to participate in this project to showcase Singapore best practices in the delivery of high quality and sustainable urban solutions. Over the years, BCA has worked closely with industry partners to build up expertise and R&D in green building technologies and services, as seen by the success of the BCA Green Mark schemes. We even went on to develop our very own Zero Energy Building by retrofitting an existing building, which will serve as an excellent role model for the development of the Low Carbon Living Lab, and further push the boundaries for low carbon emission buildings.”

DR JOHN KEUNG, CEO, BCA ON THE MOU TO JOINTLY DEVELOP A LOW CARBON LIVING LAB WITHIN THE ECO-BUSINESS PARK


Below | The signing of the three-party MOU was witnessed by Singapore’s Senior Minister Goh Chok Tong and Mr He Lifeng, Party Secretary of the Tianjin Binhai new area. Mr Choo Whatt Bin is the fourth person from the right.



LET'S GO GREEN

THE GREEN BUILDING EXHIBITION MAKES LEARNING ABOUT GREENING THE BUILT ENVIRONMENT FUN AND EFFECTIVE.

This time, BCA's sixth Green Building Exhibition, held from 1 to 3 April 2011 at Plaza Singapura, included an adventurous new technology – the Quick Response (QR) code – on top of its usual outreach methods to inspire and empower Singaporeans with the message that everyone plays an important part in the green building movement.

Let's see what took place at the launch of the exhibition over the weekend! 



Above | Exhibition staff use decorated bicycles to create more buzz for the exhibition happening indoors.



Above | Mr Baey Yam Keng, Member of Parliament for Tanjong Pagar GRC and Guest-of-Honour for the exhibition, being taken on a tour of the exhibits.

Using technology to learn, have fun and win prizes!



Above | (Left) Shoppers hunt for QR code stickers planted at various locations within the exhibition grounds and (right) look out for staff walking around Plaza Singapura carrying QR code-printed sandwich boards. Upon 'scanning' these codes using their smartphone applications, shoppers stand a chance to win themselves a free eco bag.

The QR code is a 2D matrix barcode that encodes information in the form of text, URL or data, and is readable by QR readers and camera phones. Although this technology has seen a good adoption rate in Japan and South Korea, it is the first time that it is being showcased in Singapore at the Green Building Exhibition.



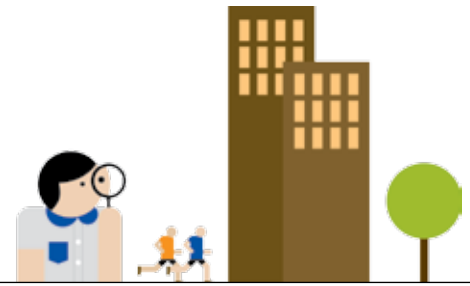
A Trophy Design competition was opened to all tertiary students in Singapore in search of the best creative ideas for a trophy design that could potentially be adopted for the inaugural BCA-Singapore Green Building Council Green Building Individual Awards.



Above | Something for everyone: reaching out to the public using (top) new media platforms such as Facebook and (bottom) print media.



Top five winners for the Trophy Design competition receiving their awards from Guest-of-Honour, Mr Boey Yam Keng.



GREENSPOTTING

JC STUDENTS RACED AMONGST THEMSELVES IN A HUNT FOR GREEN MARK BUILDINGS.

As part of the Green Building Exhibition, BCA also organised its very own version of the “Amazing Race”. This race gathered 17 student teams from nine junior colleges and sent them on a hunting trip for green features in Green Mark buildings around Singapore. 📍



Above | Teams putting their heads together to unravel the building clues.

Location 1: **Singapore Polytechnic InnoVillage**
Green features:



Sunpipes



Eco-kiosk



Green car

Location 2: **313 Somerset**
Green features:



Natural skylight



Big fan at discovery walk

Their Mission

To search for three Green Mark Platinum buildings and their green features.

“Sustainability holds the key to a better future.”

CATHOLIC JC
(1st place)

“We can make a difference in creating a greener Singapore by taking the lead in promoting eco-friendliness and environmental sustainability.”

DUNMAN HIGH
(2nd place)

Location 3: **National Library Board**
Green features:



Sunshade



Windy open plaza

“We learnt simple and practical solutions that engineers come up with to save energy in buildings. What’s interesting is that these solutions can be easily duplicated in our daily lives.”

RAFFLES INSTITUTION JC
(3rd place)



Left and below | BCA's CEO and senior management donning aprons and rolling up their sleeves to serve lunch at the dining area, in an effort to 'walk the talk' in providing service excellence to internal customers – BCA's staff.



SERVICE EXCELLENCE

THE DAY WHEN STAFF OF BCA SHOWED THEY C.A.R.E.

BCA celebrated its Service Excellence Day on 18 February 2011 at the BCA Academy. Into its fifth year, Service Excellence Day highlights and charts BCA's progress in its service excellence journey, which is important to help BCA stay on course towards achieving its mission of shaping a safe, high-quality, sustainable and friendly built environment.

All staff are encouraged to apply the core values – *We Care* – to achieve and maintain a high standard and quality of service to the public. **P**

C.A.R.E. stands for a Competent, Accessible, Responsive, and Empathetic BCA and its officers.

“We have expanded quite rapidly, taking on many new functions, many of which have a strong service element. All these developments mean that service excellence is no longer just confined to our frontline services.”

DR JOHN KEUNG
CEO, BCA

✓ Over the past two years, BCA's ranking in the public sector Pro-Enterprise Ranking Survey has improved to fourth out of 26 agencies in 2010. However, recognising that there is still room for improvement, BCA has recently formed an 'Accessibility Task Force' to look into improving the accessibility of BCA officers to its customers, with the aim of identifying problem areas and bottlenecks, as well as fine-tuning existing processes. The team comprises BCA staff from various service-oriented divisions.



Above | BCA's deputy directors taking a turn at frontline customer service to external customers, with assistance from BCA's counter colleagues.

GREENING EXISTING RESIDENTIAL BUILDINGS



TOWN COUNCILS JOIN IN THE SUSTAINABILITY BUZZ TO GREEN ESTATES.

Existing residential buildings are the latest to be certified 'green' by BCA under the new Green Mark for Existing Residential Buildings Scheme. In a pilot project by BCA and Housing & Development Board (HDB), selected town councils and a managing agent, seven HDB precincts and a private development underwent assessments to be rated for their overall environmental performance.

Of the eight projects, two precincts under Jurong Town Council and Aljunied Town Council were awarded the second highest BCA Green Mark GoldPLUS rating, while the other precincts under Tampines, Ang Mo Kio-Yio Chu Kang and Holland-Bukit Panjang Town Councils were given the BCA Green Mark Gold rating. Ardmore Park, the only private development in this pilot project, was conferred the Green Mark certified rating. The highest rating for BCA Green Mark is Platinum.

The new Scheme was introduced by BCA to recognise the eco-conscious efforts of town councils and managing agents in reducing the energy consumption and environmental footprint of their buildings. It also

recognises the collective efforts of residents who had participated actively in the green initiatives within their estates, especially since residents' behaviour and consumption are crucial in improving the overall environmental sustainability of the buildings.

From this pilot batch of Green Mark existing residential buildings, BCA will continue to work with HDB, town councils and managing agents to explore extending the new Scheme to other HDB estates and private residential developments. As existing residential buildings contribute to more than half of the total Gross Floor Area in Singapore, the implementation of the BCA Green Mark for Existing Residential Buildings Scheme is a timely one to help improve the environmental performance of these buildings. This is also in line with the national target to green at least 80% of Singapore's buildings by 2030, with an emphasis on the existing building stock. **P**

"We hope this Award will spur our residents and everyone involved in the project to work even harder to support the Green initiatives. We must do what is necessary to reduce our carbon footprint, make our homes and buildings more energy efficient, and conserve Mother Earth for the future generations."

MADAM CYNTHIA PHUA,
CHAIRMAN OF
ALJUNIED TOWN COUNCIL

"The introduction of the various energy-saving initiatives to existing HDB flats is a significant step towards making our public estates more energy efficient and conserving our precious natural resources. I would like to acknowledge the contribution of HDB and Jurong Town Council in transforming Jurong East."

MS GRACE FU,
ADVISOR TO YUHUA
GRASSROOTS ORGANISATIONS

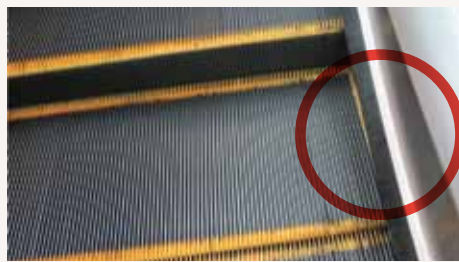
ANNOUNCEMENTS/CIRCULARS

DEFLECTOR DEVICES ON ESCALATOR SKIRTINGS TO PREVENT INJURIES

Due to many incidences of children's toes being injured at the sides of escalators, CP 15:2004 (Code of Practice for Installation, Operation and Maintenance of Escalators and Passengers Conveyors) has been amended to improve the safety of escalators. Suitable deflector devices such as double lined brushes shall be permanently installed on escalator skirtings to prevent accidents due to the gap between the skirting and moving steps. All building owners who have not installed the deflector devices are advised to do so for safety purposes. **P**

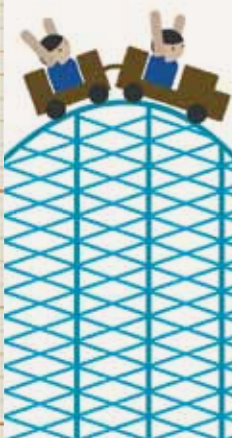


Left | Close-up of an escalator with no deflector devices.
Bottom Left | Close-up of brushes.



BCA TAKES OVER REGULATORY FRAMEWORK FOR AMUSEMENT RIDES

With the passing of the new Amusement Rides Safety Act in Parliament on 11 February 2011, BCA will take over the regulation of amusement rides safety from the Public Entertainment and Liquor Licensing Unit of the Singapore Police Force. To administer the new Act, BCA has set up a new Amusement Ride Engineering Department under the Building Plan and Management Division. To gear up more Qualified Persons (QP) for performing technical duties, BCA worked with the Professional Engineers Board to establish the Specialist Professional Engineers (PE) in Amusement Ride Engineering. In March 2011, the first batch of 14 Specialist PEs in Amusement Ride Engineering was inaugurated.



As a regulatory framework, three permits for installation, modification and operation are issued for the various stages of a ride's lifecycle. All rides are classified using a risk-based approach, with higher risk and safety profile rides classified as major rides. Certification of rides are done by a QP who is a registered professional engineer specialising in amusement ride engineering under the Professional Engineers Act. For major rides, the QP is required to appoint and consider the opinion and advice of a Conformity Assessor. Statutory responsibilities go to the ride operator, the QP and the ride manager for proper safety accountability. Parties found contravening the Act and Regulations is an offence and penalties will be imposed. During the operation, rides should be covered by a public liability insurance of minimum S\$1 million for each ride each time it is operated.

This more comprehensive and structured regulatory framework for amusement rides safety is augmenting public safety, making the thrills and spills of amusement rides a joy for all in Singapore. **P**

EVENT LINE UP

Delivering Winning Presentations for Building Professionals
13 & 14 JUN

NEW

Certification Course for Green Mark Facilities Manager
27 JUN-10 AUG

The 3rd International Symposium on Innovative Design of Steel Structures
28 JUN

NEW

Workshop on Indoor & Outdoor Lighting with Light Emitting Diode
30 JUN & 1 JUL

NEW

Good Industry Practices (Painting)
2 JUL

Good Industry Practices (Waterproofing for Internal Wet Areas)
5 JUL

Energy Efficient Air-Conditioning for Commercial Buildings
7, 8 & 11 JUL

Certified Risk Evaluator in Amusement Rides
11, 12, 13 & 14 JUL

NEW

Workshop on Managing Project Teams Effectively
13 & 14 JUL

NEW

Workplace Safety and Health Management System (BizSAFE Level 4)
13, 14, 20 & 21 JUL

NEW

Essential Knowledge in Construction Regulations & Management for Licensed Builders (Mandarin)
18, 19 & 20 JUL (MANDARIN)

Energy Management & Audit
18, 19, 22 & 23 AUG

Workshop on Site Management of Precast Concrete Construction
18, 21 & 25 JUL

Essential Knowledge in Local Regulations and Construction Practices
25, 26 & 27 JUL



HFT Stuttgart-BCA Executive Development Programme 2011: Innovations in Sustainable Design & Technology (2nd Intake)
25-29 JUL

Good Industry Practices (Aluminium Window)
26 JUL

Supervision of Piling Works for Engineers and Supervisory Personnel
26, 28 JUL, 2 & 4 AUG

Understanding the Green Mark Criteria for Existing Building and Office Interior
27 JUL

Workshop on Design of Concrete Structures using Eurocodes 0, 1 & 2
3, 4 & 5 AUG

NEW

Master of Science in Facility and Environment Management by University College London (2nd Intake)
STARTING IN SEP
(REGISTRATION CLOSES ON 10 JUN)

Master of Science in Sustainable Building Design by The University of Nottingham (3rd Intake)
STARTING IN SEP
(REGISTRATION CLOSES ON 17 JUN)

CONTACT:
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HFT Stuttgart - BCA Executive Development Programme 2011 Innovations in Sustainable Design & Technology

The HFT Stuttgart-BCA Executive Development Programme: Innovations in Sustainable Design & Technology is designed to provide a strategic platform for leading building professionals in the area of green building design and technology.

The 5-day intensive programme conducted in Germany is:

- Presented by **Stuttgart University of Applied Sciences (HFT Stuttgart)**, which is one of the most renowned institutes for applied research and development in building acoustics, heat insulation, thermal building physics and the utilisation of solar energy;
- In collaboration with and delivered by professionals and experts from the following leading universities and institutions:
 - **Centre for Applied Research – Sustainable Energy Technology, Stuttgart University of Applied Sciences (zafh.net)**
A research institute which focuses on development of intelligent buildings that could be climate-controlled using resources.
 - **Centre for Renewable Energy, Albert-Ludwigs University of Freiburg (ZEE)**
A research centre of a prestigious university in Europe which focuses on solar energy, biomass, geothermal energy, energy efficiency and new energies.
 - **Fraunhofer Institute for Solar Energy Systems (ISE)**
The largest solar energy research institute in Europe.

Collaborators:



Course Duration

25 - 29 July 2011

**REGISTRATION
NOW OPEN**

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for more details