

We shape a safe, high quality, sustainable and friendly built environment

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# An Eye on Prospects Contributor: Chan Wing Wei



More than 400 representatives from the property and construction industry and the banking sector attended the BCA-REDAS Construction and Property Prospects Seminar this year, which was held on 14 January. Minister for National Development Mr Mah Bow Tan was the Guest-of-Honour at the event.

## Coming up for the Construction Industry

## Construction demand outlook in 2009

BCA forecasted that total construction demand in 2009 was projected to reach between \$22 billion and \$29 billion, with the public sector expected to be the key demand driver.

Public sector construction demand this year was anticipated to increase to between \$18 billion and \$20 billion. The figures were revised following Budget Speech 2009, during which it was announced that the government would advance \$1.3 billion worth of small and medium-sized public sector projects this year. This is largely fuelled by infrastructure projects such as major road projects and MRT projects (Downtown Line, North-South Line Extension and Jurong East Connection). Other major public sector projects to be awarded included new HDB flats to meet the ongoing demand for public housing, redevelopment of the Singapore General Hospital Pathology Education Research Building and National Heart Centre, and the new International Cruise Terminal.

Private sector construction demand, on the other hand, is projected to moderate significantly to between \$5 billion and \$9 billion in 2009 on account of the weakened economic outlook and property market sentiments. Nevertheless, higher demand for private institutional and other buildings would provide some support to the overall private sector construction demand.

## Construction demand outlook in 2010-2011

Based on BCA's Construction Demand Forecast Model, the average annual construction demand for the next two years is projected to range between \$20 billion and \$27 billion. This projection at the lower end figure of \$20 billion per annum for the next three years is at least 54% higher than the average annual construction demand of \$13 billion from 1998 to 2006. Similarly, the bulk of the new construction works, made up mainly of infrastructural works, new public housing and institutional projects would be driven by the public sector.







## Measures to Mitigate Impact of Global Financial crisis

To facilitate cash flow and liquidity of the construction industry, BCA has been actively working with various government agencies to adopt several measures to mitigate the impact of the global economic crisis. These are:

- More Frequent, Prompt and Full Payments and Lowering of Security Deposit Quanta for Public Projects
- More Flexibility and Choices in Obtaining Security Deposit
- Financial Assistance Schemes

Mr Mah Bow Tan, Minister for National Development, also announced that public sector projects in the pipeline, as well as projects that were earlier deferred, would be brought forward to help sustain the flow of jobs to small- and medium-sized construction firms. The government would also alleviate credit access and cash flow issues by enhancing business credit assistance schemes, lowering interest rates for bridging loans and decreasing the private sector's share of insurance premium under the Loan Insurance Scheme (LIS) from 50% to 10%

# BCA joins largest conference on sustainable and green buildings

Contributors: Grace Cheok / Nicholas Tan

BCA's Chief Executive Officer Dr John Keung led 37 participants, comprising developers, architects, mechanical and electrical consultants and government officers to attend the US GreenBuild International Conference and Expo 2008 in Boston in the United States. This was the largest-ever delegation led by BCA. The mission was to attend the world's largest conference dedicated to sustainable buildings and green building technologies.

The conference, organised by the US Green Building Council, had a record attendance of more than 28,000 participants, up 25% compared with the previous year, signifying the continual strong green building movement in the US. The GreenBuild Expo was the largest exhibition to date, with about 800 exhibitors providing leading-edge green products, systems and technologies.

In addition to attending GreenBuild, the delegation also participated in several visits and working meetings with state and city authorities, established architects and consultants. Site visits to exemplary green buildings were also organised.

## **GreenBuild Statistics for 2008**

28,224 registered participants from 85 countries 800 exhibitors in about 145,000 square feet of exhibition space 108 educational sessions over the 3-day event



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## Notes from the Delegation

"More than embracing Corporate Social Responsibility, we recognise that the building industry contributes more than 40% of the global carbon footprint. The US Greenbuild Conference and Expo in Boston was a timely platform for us to amass a critical knowledge base going forward on issues related to designing sustainable build form. The whole event was very professionally organised with different activities covering a huge variety of topics. All these, coupled with a professionally organised exhibition bringing about some of the most relevant and up-to-date building products and technological innovations to share with the 28,000 delegates."

## Mr Michael Ngu Managing Director Architects 61 Pte Ltd

"It was a really large-scale conference in terms of the size of exhibits and the number of educational sessions offered. I am impressed that they were all very well-organised. It was not at all chaotic considering that they had to meet the needs of more than 28,000 delegates. It was an eye-opener for me and I would like to thank BCA for organising the trip."

## Mr Park Eun Sik Project Director Hyundai Engineering & Construction Co. Ltd

"I must say that the Greenbuild Conference was very well-run with many good topics. It was great to have the first-hand opportunity to discuss directly with manufacturers and suppliers on their innovative technologies in the Expo. I have gained a greater understanding on legislative and enforcement issues relating to green buildings legislation which affect developers. Overall, I think the visits to state authorities in California were very beneficial to our learning."

## Mr Goh Chok Sin Joint Managing Director Davis Langdon & Seah Singapore Pte Ltd

"The Greenbuild Conference offered a great deal of interesting information on sustainable building design and technologies. I must say that the educational sessions and exhibits were of very high standards and professionally organised. I have picked up some new ideas and technologies."

## Mr Loke Kwong Yoon Director TEAM DESIGN Architects Pte Ltd

"The site visits organised were very educational as we got to see how their buildings were made energy-efficient with careful application of well-established technologies and maintenance/ operation regime. I was also impressed by how BCA engaged and understood its US counterparts during discussions. The knowledge acquired would enable me to contribute in making our business more environmentally friendly and more profitable."

Mr Gen Yasuda Director of Construction Kajima Overseas Asia Pte Ltd "It was encouraging to see people from 85 countries coming together to share the same philosophy, passion and common goals towards a green and sustainable environment. The lessons learnt in the educational sessions and green building tours were beneficial and relevant and will be of influence to others to go green."

## Ms Chang Yen Lin Director KPK Quantity Surveyor

"GreenBuild ranks as one of my highlight trips for 2008, coming together with like-minded people to learn, network and share insights on the green building movement. Being able to hear E.O. Wilson and Janine Benyus sharing how they came into this movement and their love for nature was special. Through attending Stefan Behnisch's sharing of his works at the talk enabled me to understand his much-acclaimed Genzyme Center when BCA organised a private tour the following day."

## Mr Cheong Yew Kee Principal 2B Architects

"We met people who were really passionate and sincere about saving the environment and saw the latest in innovative green technologies. We visited renowned green buildings such as Adobe building and Genzyme Center which allowed us to benchmark and improve on what we are doing in Singapore."

## Mr Tan Phay Ping Director Building System & Diagnostics Pte Ltd

"The trip offered excellent networking opportunities and a platform for delegates to learn and embrace the practices and principles of building green. BCA could also lead in sharing Singapore's achievements in green building on this international platform."

## Mr Ng Eng Kiong Managing Director Squire Mech Pte Ltd

"The event was well-organised and received remarkable publicity. There was much emphasis on the integrated design approach and passive design. Overall, it was a fruitful trip with many meaningful exchanges of ideas among the delegates which would foster closer working relationships as we strive to create a more sustainable built environment together."

Mr Liu Chi On Associate Director Meinhardt (Singapore) Pte Ltd







## Built Environment Scholarship, Training and Career Fair

Contributor: Tan Hoon Wee

More than 1,000 visitors converged at the first-ever dedicated career fair for the built environment held at the BCA Academy on 17 January. Graced by Senior Minister of State for National Development and Education Ms Grace Fu, the event demonstrated the close collaboration and partnership between BCA and 32 leading industry firms, Institutes of Higher Learning and related government agencies to attract and recruit talents into the industry. Here were the day's highlights.

It was a day of good news when Senior Minister of State for National Development and Education Ms Grace Fu, announced that the built environment industry is still hiring.

"In BCAs recent survey of about 1,500 firms, mainly contracting firms, half of them indicated that they are short of manpower," she said. "I am also pleased to note that since the launch of BCA's Building Careers website, more than 600 job vacancies have already been posted on the job portal."

In addition, 16 industry sponsors came forward to offer a total of 26 scholarships to outstanding graduating A-level and polytechnic students under the BCA-Industry Built Environment Scholarship programme. This scholarship programme would also be open to current undergraduates studying at the universities. This resounding support from the industry is a marked improvement from the 12 scholarships awarded by seven sponsors last year.

Together with the Singapore Workforce Development Agency and NTUC, BCA had also stepped up the pace of its Job Recreation Programmes. These programmes seek to train personnel to take on jobs in key demand areas and match them to the job vacancies available.

At the Open House held in conjunction with the career fair, BCA Academy showcased the wide range of training programmes it developed that could facilitate entry and career crossover into the industry, as well as upgrading at all levels, from tradesmen to supervisory to professional. BCA Academy had also put in place a comprehensive training programme to build up a 'green collar' workforce, targeting to train at least 8,000 specialists over the next five years.





## **A Day of Success**

"The fair brought to us a fresh wind of young and talented people who deserve a chance and should contribute to the strengthening of construction companies. The event should be renewed on a yearly basis in order to create a connection between job seekers and the industry regardless of the current economic situation."

Mr Frederic Perez, BCA Board Member and Project Director,

Dragages Singapore

"I am very encouraged by the turn-out at this inaugural career fair, especially the efforts put in for the showcase projects showing the physical and technological aspects of the industry. It shows that the building and real estate industry will continue to thrive steadily and progressively through different economic climates, striving to innovate and heighten the professional and knowledge level of industry individuals."

Mr Eugene Seah, Executive Director, Davis Langdon & Seah Singapore

See Page 10 for more on the BCA Academy Open House

## Opportunities at BCA Academy

Contributors: Kwang Chan Nam / Willie Lee

Scholarship and career opportunities in the built environment industry were highlighted for the first time at the BCA Academy Open House on 17 January.

This year, BCA Academy organised the event in conjunction with the inaugural Built Environment Scholarship, Training & Career Fair. Visitors were treated to career and scholarship talks by various organisations throughout the day. They also viewed exhibits on environmental sustainability, barrier-free accessibility as well as excellent project work by the Academy's design students, who also shared their learning experience at the Academy.

The day included a product talk for the alumni. Between talks, visitors looked on as Academy students took part in an exciting basketball tournament. Those who came also experienced the buzz of the campus by joining dedicated tour guides on tours of the cranes and excavators training ground, where they witnessed how trainees learnt to operate site equipment.

Overall, the event allowed visitors to interact with BCA Academy staff, alumni and students, while discovering the wide variety of programmes offered by the Academy.



## Geotechnical Challenges: The Way Forward Contributor: Mahaboob Khan

The issues on geotechnical design analysis, methodology and challenges in the construction and regulatory requirements for foundations were the focus of the one-day seminar organised by the BCA Academy in collaboration with the Geotechnical Society of Singapore.

The seminar on 'Challenges in the Design and Construction of Foundations' served as a platform for speakers from the industry and academic institutions to share their experiences on various topics related to foundation issues.

The Society's President, Professor CF Leung, noted that the inaugural joint seminar between both organisations on 'Soil and Rock Properties' in September 2008 had been a success. He said: "The Geotechnical Society of Singapore is pleased with BCA Academy's efforts in organising the second joint seminar successfully. We will continue to collaborate with BCA Academy in organising another geotechnical seminar in May 2009."

The seminar this time generated much interest once again, with the attendance of more than 200 geotechnical specialists, structural engineers, consultants and contractors from the construction industry. BCA Academy will continue to provide continuing education in the form of seminars and courses for the industry by collaborating with more professional associations.

## **Seminar Speakers**

- Prof I.H. Wong, MITIC Associates
- Prof Anthony Goh, Associate Professor, Nanyang Technological University
- Prof CF Leung, President, Geotechnical Society of Singapore
- Prof Phoon Kok-Kwang, National University of Singapore
- Dr Ng Tiong Guan, GeoEng Consultants
- Dr Yet Nai Song, Building and Construction Authority
- Mr John Hayes, LoadTest Inc.

# Workplace Safety & Health Certifications and Programmes

FOR THE FIRST TIME, BCA
COLLABORATED WITH THE WORKPLACE
SAFETY & HEALTH COUNCIL TO
ORGANISE A HALF-DAY SEMINAR
ATTENDED BY ABOUT 150
PROFESSIONALS, BUILDERS AND
WORKPLACE SAFETY AND HEALTH
PRACTITIONERS FROM THE CONSTRUCTION
INDUSTRY.

The 'Leveraging Workplace Safety & Health Certifications and Programmes to Improve Construction Safety' seminar on various workplace safety and health certification schemes and programmes. It also showcased best practices and case studies of construction firms which had successfully implemented these schemes.

Kicking off the seminar was Mr Hashim Mansoor, the Workplace Safety & Health Council's head of Enterprise Capability Building Branch. He gave a presentation on the bizSAFE programme, which had been gaining popularity in the construction industry as more public agencies and developers had been including it as a requirement in their project specifications. He also elaborated on how the OHSAS 18001 and SMC certified companies could implement the bizSAFE without incurring additional costs.

In another showcase of good workplace safety and health culture, Ms Audrey Perez from Dragages Singapore gave the participants a global perspective of how Bouygues Construction built up its workplace safety and health culture. The presentation also focused on how this culture evolved in Singapore's construction industry over the past 15 years.

Other speakers included Mr Yeo Kim Hock from Gammon Construction's Singapore Branch, Mr Ng Chooi Choon from NCC Management Consultants and Mr Lee Kah Bee from the Ministry of Manpower.



Contributor: Steven Cheona

# nd Green Building Masterplan



Riding on the green wave and the well-received initiatives in the 1<sup>St</sup> Green Building Masterplan, BCA has formulated the 2<sup>nd</sup> Green Building Masterplan to help deliver a sustainable built environment.

The 2<sup>nd</sup> Green Building Masterplan supports the Inter-Ministerial Committee for Sustainable Development's targets for the built environment. It recognises that sustainable development must take shape right from the planning stage to promote sustainable development and green

buildings. Besides new buildings, the masterplan focuses on the greening of existing buildings that form the bulk of floor areas of buildings in Singapore.

BCA recently held three focus-group meetings to discuss and gather feedback from the industry on the 2<sup>nd</sup> Green Building Masterplan. Almost 60 participants, representing professional institutions, developers, building owners, facilities management, suppliers, consultants and tertiary institutions provided constructive feedback.

**Undergraduates** 

## gogreen Contributor: Lam Fei Yen

More than 500 students and staff at the Nanyang Technological University learnt more about the features and benefits of a BCA Green Mark home at a greeNTU carnival.

Held from 29 to 30 January, greeNTU was organised by Earthlink NTU, the university's student environmental club. The event aimed to motivate students to make a difference and lead a more environmentally sustainable lifestyle.

Along with other environmentally conscious organisations, BCA set up a booth to raise awareness of the importance

of green buildings in a built-up city like Singapore. At the booth, visitors took part in an online contest on the BCA Green Mark portal where they learnt about the amount of savings brought about by living in a BCA Green Mark home.

"We never thought that there would be so much connection between a building structure and helping the environment!" remarked Ms Lee Hui Min, President of Earthlink NTU. "Through the BCA booth, we got to understand that even simple features in a building, such as sun shading, go a long way in helping the environment by reducing energy usage to cool a building."



participating organisations to

pledge their commitment to

To learn more about green buildings, visit the BCA Green Mark portal at www.greenmark.sg





The Building Control Act was passed by Parliament in September 2007. Taking into account current market conditions, the provisions were amended to reduce the impact of cost on businesses. These amended provisions are effective from 18 December 2008.

## Project cost for structural works supervision

Part-time supervision is now allowed for projects costing \$7.5 million or less. This amended provision for project cost corresponding to the minimum composition of the supervision team would apply to all projects, including ongoing ones..

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Project Cost		Full-Time Supervision Team
Before Amendment	After Amendment	Required
More than \$5 million but not exceeding \$10 million	More than \$7.5 million but not exceeding \$15 million	1 RTO
More than \$10 million but not exceeding \$20 million	More than \$15 million but not exceeding \$30 million	1 RE
More than \$20 million but not exceeding \$50 million	More than \$30 million but not exceeding \$75 million	1 RE + 1 RTO
More than \$50 million but not exceeding \$100 million	More than \$75 million but not exceeding \$150 million	1 RE + 2 RTOS
More than \$100 million	More than \$150 million	2 RES + 3 RTOS

## Project cost for accredited checkers

For projects with a value of \$15 million or less, the accredited checker can be one who is acting on his own behalf, without affiliation with an accredited checking organisation. The new provision would apply to all projects where the first submissions of structural plans (ST01) were made on or after 18 December 2008.

Project Cost		AC/ACO Required
Before Amendment	After Amendment	
More than \$10 million	More than \$15 million	ACO

## No planning approval for minor excavations

Planning approval is no longer required for any retaining wall or earth-retaining structure for supporting the face of an excavation made for the purpose of constructing any pile cap, footing, sump, lift pit or trench, provided that the size of the pile cap, footing, sump, lift pit or trench does not exceed 10 square metres in area and 2 metres in depth. These works were added to the list of "Insignificant Building Works" in the First Schedule of the Building Control Regulations from 1 October 2008. Such works are now exempted from the need to submit plan to BCA for approval.

For more information, please contact Mr Choong Teck Min at 6325-7587 or choong\_teck\_min@bca.gov.sg

## **Builders Licensing and Tradesmen Registration**

## Licensing of builders

The licensing of builders started on 16 December 2008, with the coming into effect of Part VA of the Building Control (Amendment) Act 2007 on Licensing of Builders. There is still a six-month grace period until 16 June 2009 for builders to apply for the licence. After 16 June 2009, all builders who have been granted or to be granted a permit to carry out building works, as well as builders carrying out work in six specialist work areas must possess a licence issued by the Commissioner of Building Control. A Class 2 licence restricts the holder to projects of not more than \$6 million in value.

Value of Building Works		Class of General
Before Amendment	After Amendment	Builder
Any amount	Any amount	Class 1
Less than \$3 million	Less than \$6 million	Class 2

## Construction Registration of Tradesmen (CoreTrade) Scheme

With effect from 16 June 2009, all Class 1 general builders undertaking projects worth at least \$20 million will need to deploy a minimum number of construction personnel who are registered under the CoreTrade Scheme.

Value of Building Works		Class of General
Before Amendment	After Amendment	Builder
More than \$10 million	More than \$20 million	Class 1

For more information, please contact Mr Choong Teck Min at 6325-7587 or choong\_teck\_min@bca.gov.sg



Date	Event	Contact
11, 12, 13 & 16 Mar 09	GMP Programme – CORE Module – Building Energy Modeling & Thermal Simulation	Marketing Dept DID: 62489843/824 Email: bca_academy@bca.gov.sg
16, 18, 23 & 25 Mar 09	Design of Deep Excavation Temporary Earth Retaining Structures	Marketing Dept DID: 62489843/824 Email: bca_academy@bca.gov.sg
19 Mar 09	CONQUAS Training (For Developer & Consultants)	Marketing Dept DID: 62489843/824 Email: bca_academy@bca.gov.sg
19, 20, 23, 24 Mar & 3 Apr 09	Certification Course for Green Mark Manager	Marketing Dept DID: 62489843/824 Email: bca_academy@bca.gov.sg
24, 27, 31 Mar & 2 Apr 09	Site Investigation for Engineers	Marketing Dept DID: 62489843/824 Email: bca_academy@bca.gov.sg
24 Mar ~ 8 May 09 (Tuesdays & Fridays)	Project Management for Professionals in the Building and Construction Industry	Marketing Dept DID: 62489843/824 Email: bca_academy@bca.gov.sg
Starting on 6 Apr 09	National Building Qualification in Project Supervision (2nd Run)	Marketing Dept DID: 62489843/824 Email: bca_academy@bca.gov.sg
Starting on 6 Apr 09	National Building Qualification in Supervision and Coordination of M&E Works (NEW)	Marketing Dept DID: 62489843/824 Email: bca_academy@bca.gov.sg
6 Apr 09	GMP Programme – Elective Module – Maximising Green Design through Building Automation	Marketing Dept DID: 62489843/824 Email: bca_academy@bca.gov.sg
9, 13 & 14 Apr 09	GMP Programme – Core Module – Energy Efficient Air-Conditioning for Commercial Buildings	Marketing Dept DID: 62489843/824 Email: bca_academy@bca.gov.sg
20 & 21 Apr 09	BMSMA for Buildings Management Personnels	Marketing Dept DID: 62489843/824 Email: bca_academy@bca.gov.sg
28 Apr 09	Good Industry Practices (Timber Flooring)	Marketing Dept DID: 62489843/824 Email: bca_academy@bca.gov.sg

## **Contest**

- 1. What is BCA's projection for total construction demand in 2009?
- 2. What is the number of industry sponsors and scholarships for 2009's BCA-Industry Built Environment Scholarship Programme?
- 3. In which city was the US GreenBuild International Conference and Expo 2008 held?

Please send in your entries by 15 March 2009 to Editor Pillars, Building and Construction Authority, 5 Maxwell Road, #16-00, Tower Block MND Complex, Singapore 069110. Or e-mail: bca\_enquiry@bca.gov.sg or fax to 63254800. Please indicate your name, designation, company, phone number and address. Selected entries will stand to win attractive shopping vouchers.

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