

## Joint Media Release

### **GREEN SPARKS TO ENHANCE ENERGY EFFICIENCY OF EXISTING BUILDINGS UNVEILED**

*- NUS team beats 19 others to emerge as champion of the inaugural BCA-CDL Green Sparks Competition*

1 “Green Wednesday”, a team from the National University of Singapore (NUS) outshined 19 other teams from five tertiary institutions to clinch the top prize at the finals of the BCA-CDL Green Sparks Competition 2010 held at BCA Academy on 31 August 2010. The second and third prizes were awarded to “Team GBS” and “Earthlink” from Temasek Polytechnic respectively.

2 The inaugural competition was aimed at engaging our local tertiary students in the national effort to green the built environment. One of the greatest challenges the built environment faces is the need to reduce the carbon footprint of existing buildings by adopting innovative green building features that are cost effective and energy efficient. As such, the participants were tasked to submit a proposal to improve the energy efficiency of Fuji Xerox Towers so that it could qualify for the Green Mark Platinum rating. The 38-storey office building, owned by City Developments Limited (CDL), had attained the Green Mark Gold rating in 2008.

3 The competition, which is the first public-private initiative by the Building and Construction Authority (BCA) and CDL, was well-received. A total of 20 teams, made up of 152 students, submitted their proposals, out of which, eight teams were selected for the final round by a pre-judging panel from BCA and CDL. Participating

institutions include NUS, Nanyang Technological University, Ngee Ann Polytechnic, Singapore Polytechnic and Temasek Polytechnic.

4 All eight shortlisted projects were showcased at the BCA Academy. As part of the requirements, the teams presented their proposals to a panel of five judges made up of experts from the industry. The judges were Er Lee Chuan Seng and Mr Tai Lee Siang from the Singapore Green Building Council, Mr Tan Tian Chong from BCA, Mr Lim Tow Fok from CDL, and Mr Vincent Low from G-Energy Global.

5 The winning team from NUS stood out with their insightful and comprehensive presentation. They had proposed a detailed plan and analysis of viable and practical green building solutions for Fuji Xerox Towers, which takes a holistic life-cycle approach, from the implementation of energy efficient infrastructure such as regenerative motors for lifts to sustainable building management practices and stakeholder engagement initiatives, such as a green portal for tenants. Apart from practical solutions, interesting innovative ideas were also proposed by the other winning teams, which include the use of vertical axis wind turbines to leverage on the building's orientation and unblocked facing.

6 Chief Judge Er Lee Chuan Seng said, "All the teams have shown commendable efforts and enthusiasm in the research of sustainable solutions for Fuji Xerox Towers. However, the winning team displayed a keen awareness of innovative and practical ideas that were also cost-effective and suitable for real life application. Their proposal was clear and well thought-out, reflecting the maturity of their understanding towards the green cause."

7 "As part of our ongoing commitment to enhance the energy efficiency of our existing buildings, we monitor closely their environmental performance with a view of implementing infrastructural enhancements or engagement initiatives to further improve their efficiency. Many of the green features proposed by the participating teams are refreshing, and we will conduct feasibility studies for the most viable ideas with our consultants, for possible implementation as part of our retrofitting plans for

Fuji Xerox Towers,” said Mr Lim Tow Fok, CDL’s General Manager, Property & Facilities Management.

8 Mr Tan Tian Chong, Director of Technology Development, BCA added, “We are impressed with the proposals submitted and encouraged by the strong support to this inaugural green competition. This proves that our youth share our conviction on the need to create a more sustainable built environment. I hope the valuable experiences gained from this competition would spur these students to join us in our green building journey in the near future.”

9 The winners received their prizes from Guest of Honour, Dr Mohamad Maliki Bin Osman, Parliamentary Secretary for National Development, during the prize-giving ceremony on the same day. The top team took home S\$10,000 cash and a plaque while the rest of the teams were awarded plaques and certificates with cash prizes of between S\$1,000 and \$7,000.

10 The BCA-CDL Green Sparks Competition 2010 was initiated in April this year to raise awareness of best green building practices and solutions amongst future practitioners. After the competition was introduced to the local tertiary institutions, three site briefings were conducted in April and May to allow the students to better understand the requirements and the energy performance of Fuji Xerox Towers.

11 The competition was designed to be in line with BCA’s 2<sup>nd</sup> Green Building Masterplan which places special emphasis on the greening of existing buildings. As existing buildings consume a third of our national end-use electricity, building owners could do their part to minimise the impact on our environment by adopting best practices and retrofitting the buildings with energy saving features. Besides reducing energy consumption and lowering the carbon footprint, these initiatives could also translate into greater cost savings for the building owners.

### **About the Building and Construction Authority (BCA)**

The Building and Construction Authority (BCA) of Singapore champions the development of an excellent built environment for Singapore.

BCA's mission is to shape a safe, high quality, sustainable and friendly built environment, as these are four key elements where BCA has a significant influence. In doing so, it aims to differentiate Singapore's built environment from those of other cities and contribute to a better quality of life for everyone in Singapore. Hence, its vision is to have "the best built environment for Singapore, our distinctive global city".

Together with its education and research arm, the BCA Academy of the Built Environment, BCA works closely with its industry partners to develop skills and expertise that help shape the best built environment for Singapore.

For more information, visit [www.bca.gov.sg](http://www.bca.gov.sg).

### **About City Developments Limited (CDL)**

As Singapore's property pioneer, CDL is a listed international property and hotel conglomerate with an impressive track record of over 22,000 luxurious and quality homes to its name.

Beyond shaping the cityscape with award-winning architectural icons such as The Sail @ Marina Bay, The Oceanfront @ Sentosa Cove and St. Regis Residences, Singapore, over the past four decades, CDL has been leading the industry with green building innovation since the 1990s.

Testament to its commitment towards sustainable development and exceptional contributions towards Singapore's built environment, CDL was awarded the BCA Green Mark Champion Award in 2008 and the BCA Built Environment Leadership Platinum Award in 2009 respectively.

In championing the green cause, CDL not only focuses on engaging its stakeholders and the wider community through various platforms – but also in cultivating environmental consciousness and action amongst the next generation.

For more information, visit [www.cdl.com.sg](http://www.cdl.com.sg).

### **About the 2nd Green Building Masterplan**

In support of the Inter-Ministerial Committee on Sustainable Development and BCA's mission, BCA has formulated the 2nd Green Building Masterplan. It is a roadmap that sets out specific initiatives to achieve a truly sustainable built environment in Singapore by 2030.

Following the successful implementation of the 1st GB Masterplan – formulated in 2006 to spearhead the delivery of Green Buildings with emphasis on new buildings and those undergoing major retrofitting, the 2nd Green Building Masterplan focuses on existing buildings. With the large existing building stock consuming a third of our national end-use electricity, BCA's 2nd Green Building Masterplan places special emphasis on 'greening' existing buildings. The 2nd Green Building Masterplan is available on the BCA website.

## **About the BCA Green Mark Scheme**

The BCA Green Mark Scheme was launched by the Building and Construction Authority (BCA) in January 2005 as a green building rating system to evaluate buildings for their environmental impact and performance, with emphasis on energy efficiency. It aims to promote a sustainable built environment by incorporating best practices in environmental design and construction, and the adoption of green building technologies.

For more information, visit [www.greenmark.sg](http://www.greenmark.sg).

### **The BCA Green Mark Scheme**

The BCA Green Mark Scheme is a green building rating system to evaluate buildings' environmental impact and performance. The Green Mark assesses five key areas:

- Energy Efficiency
- Water Efficiency
- Sustainable Operation and Management
- Indoor Environmental Quality
- Other Green Features

Green Mark for Non-residential Existing Buildings Criteria (Ver. 2.1) can be downloaded from:  
[http://www.bca.gov.sg/GreenMark/others/GM\\_NREB\\_V2.1.pdf](http://www.bca.gov.sg/GreenMark/others/GM_NREB_V2.1.pdf)

### **Panel of Judges for the Final Round**

#### **Chief Judge**

- Er Lee Chuan Seng, President, Singapore Green Building Council

#### **Judges**

- Mr Tan Tian Chong, Director, Technology Development Division, Building and Construction Authority
- Mr Lim Tow Fok, General Manager, Property & Facilities Management, City Developments Limited
- Mr Tai Lee Siang, 1<sup>st</sup> Vice-President, Singapore Green Building Council
- Mr Vincent Low, Director, G-Energy Global

### **Results of the Competition**

**First Prize:** Green Wednesday (NUS)

**Second Prize:** Team GBS (Temasek Poly)

**Third Prize:** Earthlink (Temasek Poly)

**Merit Prizes (in no particular order):**

- Archians (Singapore Poly)
- Footprint (NUS)
- Green Face (Ngee Ann Poly)
- Green Platform (NUS)
- Think Green (NUS)

**Other Participating Teams (in no particular order):**

- Better Greenery (NTU)
- Green 10 (NTU)
- Green Addition (Singapore Poly)
- Green Flames (Ngee Ann Poly)
- Green Reality (Ngee Ann Poly)
- Green Village (NTU)
- Penta-Green (NUS)
- Team Ngee Ann (Ngee Ann Poly)
- Team SDE (NUS)
- Team Wally (NTU)
- TEF (Singapore Poly)
- ZeroKelvin Consultants (NUS)

**Prizes**

First Prize	S\$10,000 cash and plaque
Second Prize	S\$7,000 cash and plaque
Third Prize	S\$5,000 cash and plaque
5 Merit Prizes	S\$1,000 cash and certificate of participation

Photos of the BCA-CDL Green Sparks Competition

1) Champion – Green Wednesday (NUS)



Dr Maliki (centre in green), Mr Benedict Tan (centre in white), Managing Director of BCA Academy, Mr Lim Tow Fok (fourth from the left), General Manager, Property & Facilities Management, CDL, and the winning team from NUS.



“Green Wednesday” from NUS

## 2) 1<sup>st</sup> Runner-up – Team GBS (Temasek Polytechnic)



Dr Maliki (centre in green), Mr Benedict Tan (fifth from the right), Managing Director of BCA Academy, Mr Lim Tow Fok (fifth from the left), General Manager, Property & Facilities Management, CDL, with “Team GBS” from Temasek Polytechnic.

## 3) 2<sup>nd</sup> Runner-up – Earthlink (Temasek Polytechnic)



Dr Maliki (centre in green), Mr Benedict Tan (fifth from the right), Managing Director of BCA Academy, Mr Lim Tow Fok (fourth from the left), General Manager, Property & Facilities Management, CDL, with team “Earthlink” from Temasek Polytechnic.

#### 4) Other photos of the event



A member of team “Green Face” explaining their proposal to Dr Maliki.



A member of “Team GBS” showing Dr Maliki how their green feature works.

## 5) Fuji Xerox Towers

