

MEDIA RELEASE

SINGAPORE CELEBRATES 1000TH BCA GREEN MARK BUILDING PROJECT

- Pasir Ris residents 'Walk the Green Talk' to celebrate Pasir Ris Sports and Recreation Centre's achievement on being Singapore's 1000th green building.

26 February 2012 (Sunday) - Singapore has reached a new milestone in its green building journey - the 1000th green building since the Building and Construction Authority's (BCA) Green Mark Scheme was introduced in 2005. The 1000th placing goes to Pasir Ris Sports and Recreation Centre (SRC), which has achieved the BCA Green Mark Gold^{Plus}, the second highest rating under the green building rating scheme.

2. To mark this special milestone, about 500 residents from Pasir Ris-Punggol Group Representation Constituency (GRC) participated in a 'Walk the Green Talk' event this morning. Led by Deputy Prime Minister (DPM) Teo Chee Hean, who was accompanied by other Members of Parliament from Pasir Ris-Punggol GRC and Punggol East SMC, the walk began at Pasir Ris Elias Community Club and ended with a memorable award ceremony at Pasir Ris SRC. DPM Teo, together with Singapore Sports Council's (SSC) Chief Executive Officer (CEO) Mr Lim Teck Yin, received the Green Mark Award from Mr Quek See Tiat, Chairman of BCA and Dr John Keung, CEO of BCA.

3. Commenting on the achievement, DPM Teo Chee Hean said, "Pasir Ris residents and grassroots leaders were actively involved in shaping the design of the Pasir Ris Sports and Recreation Centre, and I am delighted that the Centre is now the 1,000th Green Mark building project. This is a significant milestone in the building and construction industry's efforts to incorporate green design and practices in new

and existing buildings in Singapore. This will also help to mitigate climate change as the building sector contributes 16% of Singapore's total carbon emissions. Indeed, the BCA Green Mark scheme is an integral part of our national efforts to reduce emissions, contribute to global climate change mitigation efforts, and create a sustainable living environment for our future generations.”

4. Pasir Ris SRC is the first-of-its-kind eco-friendly SRC designed with green features to complement the natural surroundings of the adjoining Pasir Ris Town Park. An interactive public display system located at the foyer of the SRC allows visitors to learn more about the Centre’s green initiatives, as well as keep track of the building’s energy consumption. The building is fitted with water and energy efficient features such as LED lighting and incorporates passive design to enhance daylighting and natural ventilation in common areas. In addition, louvers acting as sunshading screens are installed on the building’s façade to prevent heat gain into the building. These wooden louvers were recycled from timber seats at the old National Stadium and given a new lease of life.

5. As a Green Mark Gold^{Plus} certified building, the SRC is 25% more energy efficient than an average building without green features. The Centre also boasts an impressive 170kWp photovoltaic system on its rooftop, which is expected to generate about 207,380 kWh of electricity each year to support up to 12% of its annual energy consumption. This is equivalent to the amount of energy used to power up 45 four-room HDB flats and will help the Centre save about \$57,000¹ annually. Another interesting feature that patrons to the gym could look out for is a human powered exercise bicycle that allows the user to generate electricity while shedding some pounds. The electricity generated from the bicycle could be stored to power up the television in the gym for more than 8 hours.

6. “We are delighted to receive the Green Mark accolade as it recognises the deliberate effort that we have taken to create a user-friendly and eco-friendly Pasir Ris SRC. The ‘sports in a park’ concept with green designs and environmentally

¹ Based on estimated tariff rate of \$0.276/kWh

friendly features, as well as the seamless connection to the neighbouring park and water body, will not only increase the awareness of environmental sustainability among Singaporeans, but also create a conducive place for families to bond and enjoy sports,” said Mr Lim Teck Yin, CEO of SSC. “Our Vision 2030 recommendations called for greater access and more innovative placemaking for sport in Singapore. Pasir Ris SRC is a fine example of our direction for future development of sports facilities.”

7. Dr Keung, CEO of BCA added, “We are glad that more and more building owners and developers are coming forward to ‘green’ their buildings, even beyond the minimum mandatory standards, as they are becoming more aware of the benefits of providing an eco-friendly environment for the occupants. Moving forward, we also want to reach out to building occupants or the consumers, to encourage them to ‘walk the green talk’ and follow the government’s lead in creating the demand for more environmentally friendly buildings in the near future. In fact, our latest Green Mark schemes, which assess office interiors, schools and restaurants, are part of BCA’s plan to place more emphasis on users’ behaviour and cultivate them to play a greater role in Singapore’s green building movement. ”

8. Since 2005, the number of Green Mark building projects in Singapore has increased exponentially from only 17 in the first year to 1,000 today. Singapore is well on target to ‘green’ at least 80% of all its buildings by 2030. At present, about 13% of the buildings in Singapore have achieved the BCA Green Mark standard, translating to a gross floor area of 29 million square meters.

9. The BCA Green Mark scheme is supported by a host of incentives, including the \$100 million Green Mark Incentive Scheme for Existing Buildings (GMIS-EB), the Green Mark Gross Floor Area (GM-GFA) Incentive Scheme and the latest Building Retrofit Energy Efficiency Financing (BREEF) scheme.

Issued by the Building and Construction Authority on 26 February 2012.

About Building and Construction Authority

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

For more information, visit www.bca.gov.sg.

Annex A: About the BCA Green Mark

The BCA Green Mark scheme was launched in 2005 as a key strategic programme to raise the awareness of sustainable and environmentally friendly buildings. It evaluates buildings for their environmental impact and performance. The benefits of Green Mark buildings include cost savings from efficient use of key resources such as energy and water, leading to lower operation and maintenance costs. Other less tangible benefits include enhanced occupant productivity and health due to good indoor environmental quality. The BCA Green Mark schemes now include the following:

BCA Green Mark Schemes for Buildings

- BCA Green Mark for Non-Residential Buildings (New and Existing)
- BCA Green Mark for Residential Buildings (New and Existing)
- BCA Green Mark for Landed Houses
- BCA Green Mark for Existing Schools

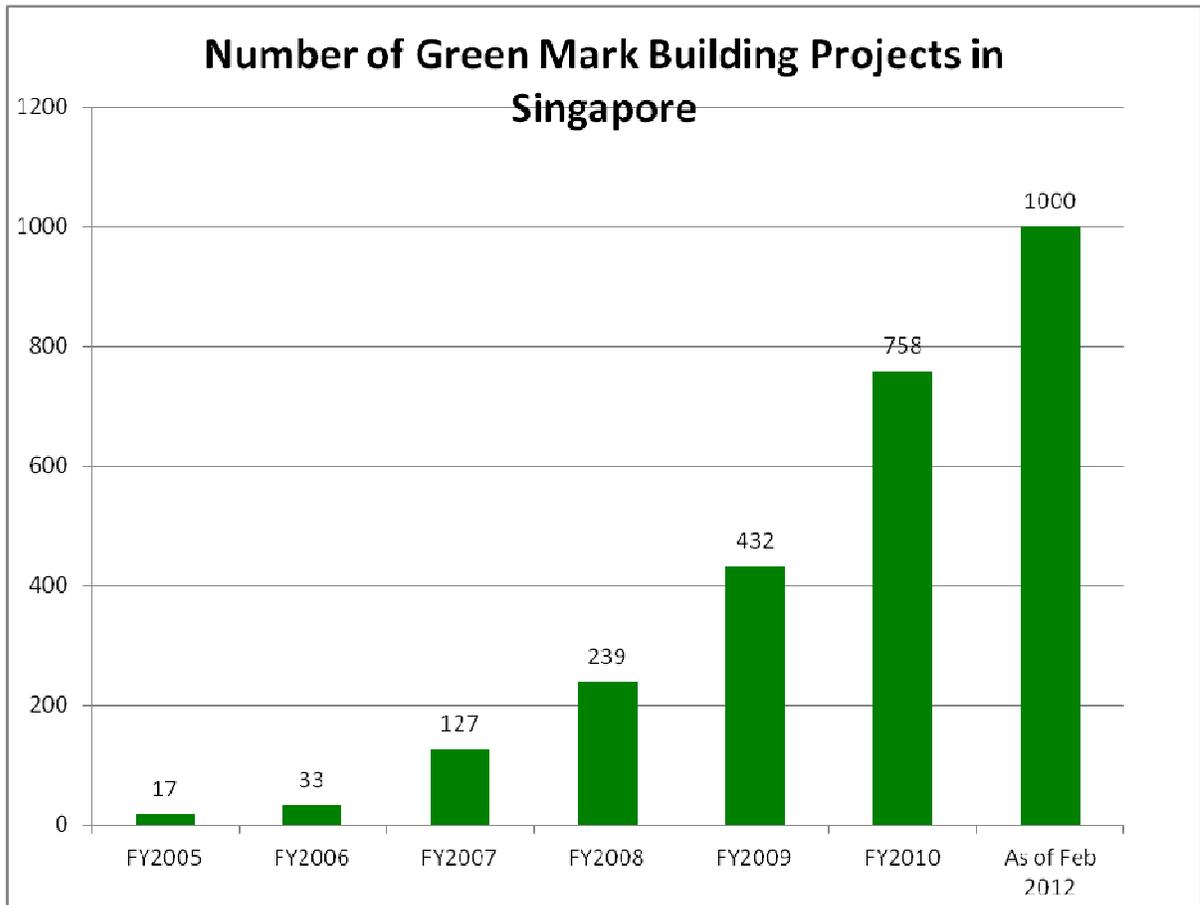
BCA Green Mark Schemes (Beyond Buildings)

- BCA-NParks Green Mark for Existing Parks
- BCA-NParks Green Mark for New Parks
- BCA-LTA Green Mark for Rapid Transit System
- BCA Green Mark for Infrastructures
- BCA Green Mark for Districts

BCA Green Mark Schemes (Within Buildings)

- BCA Green Mark for Restaurants
- BCA Green Mark for Office Interiors

Annex B: Number of Green Mark Building Projects since 2005



Annex C: Key p

Gold^{Plus} (New Non-Residential Building)



Client / Developer	Singapore Sports Council
Project Manager	CPG Consultants Pte Ltd
Architect	CPG Consultants Pte Ltd
M&E Engineer	CPG Consultants Pte Ltd
Structural Engineer	CPG Consultants Pte Ltd
Quantity Surveyor	CPG Consultants Pte Ltd
Main Contractor	Quek Hock Seng Construction Pte Ltd
ESD Consultant	CPG Consultants Pte Ltd
Acoustic Consultant	CCW Pte Ltd

Estimated energy savings: **711,440 kWh/yr**

Estimated water savings: **27,948 m³/yr**



Energy and water efficient fittings

- Extensive use of energy efficient LED lighting that are of longer life span, in key areas such as the foyer, offices, meeting rooms and corridors
- Majority of the water efficient fittings were selected from the Water Efficiency Labeling Scheme (WELS)



Ventilation in common areas

- The building was designed to reduce reliance on air-conditioning by having most of the common areas naturally ventilated

	<p>Irrigation system</p> <ul style="list-style-type: none">• Rainwater is harnessed to irrigate the landscaping, therefore reducing consumption of potable water
	<p>Greenery</p> <ul style="list-style-type: none">• Extensive use of greenery to reduce heat island effect. At the same time, the greenery provides a seamless transition to the adjoining Pasir Ris Town Park



Rain garden for storm water management

- Rainwater run-off from the tennis courts and driveway is channelled into the rain garden. The rain garden acts as a natural filter prior to releasing the water into the public drainage network



Photovoltaic system

- Installation of about 2,400m² of solar energy (photovoltaic) panels on the roof to tap on the sun's energy



Human powered energy

- Active engagement of community – gym equipment allows gym users to generate energy to power up the television



Sunshading

- Materials reclaimed from the old National Stadium's timber seats are recycled as louvers, acting as sunshading feature on the external façade