

Promoting **Green Buildings** in Singapore

7th High Level Seminar on Environmentally Sustainable Cities

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**719
km²**

**Population
>5.5mil**

**Alternate
Energy-
Disadvantaged**

**High
Electricity
Consumption
Per Capita**

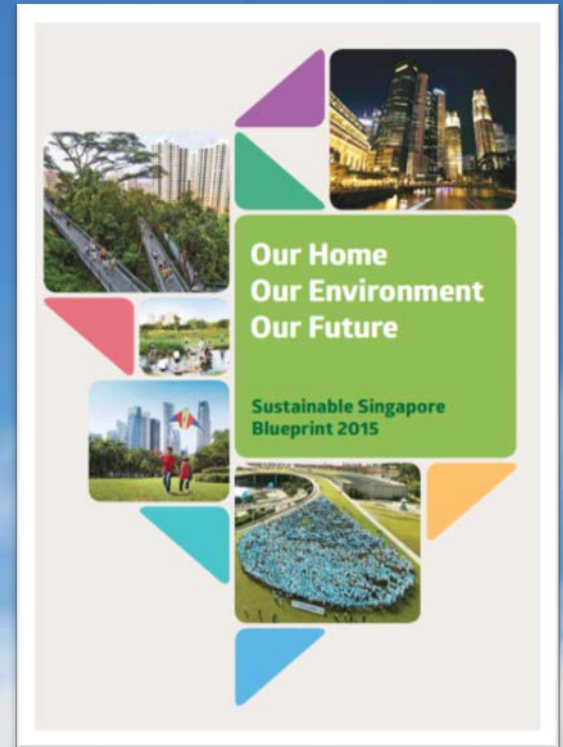
Heavily Dependent for Energy Needs



Resource Efficiency



80% OF ALL
BUILDINGS
'GREEN' by
2030



National Green Target



Global Leader
in green buildings with special expertise
in the tropics and sub-tropics



The Green Mark – Building Rating System for Tropics



New Buildings

Supermarket



Existing Buildings



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Public Sector Taking the Lead



Large Public Sector Buildings to meet higher GM rating

**New Buildings – Platinum
Existing Buildings - Goldplus**



Green Small and Medium Public Sector Buildings

To meet min. GM Gold rating



Government as Tenants

To lease from higher rating GM buildings upon lease renewal



Green Procurement

Host at GM certified venues



Government Land Sales (GLS) Projects

Key growth areas are stipulated with mandatory higher GM ratings



Building Control (Environmental Sustainability Measures for New Building) Regulations 2008



All new buildings are to required to meet a minimum standard equivalent to Green Mark certified level



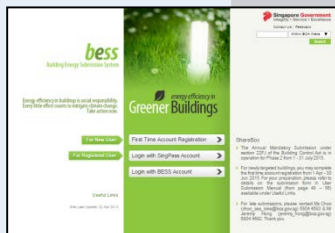
Building Control (Environmental Sustainability Measures for Existing Building) Regulations 2013



Existing buildings need to ***meet minimum standard*** when cooling systems are installed or replaced



Maintain performance through three-yearly Energy Audit on Cooling System & Compliance of Design System Efficiency



Track performance through annual submission of building information & energy consumption data

Lowering the Barriers for the Private Sector

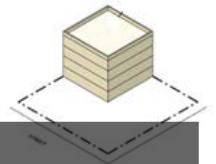


\$20 MILLION GREEN MARK INCENTIVE SCHEME FOR NEW BUILDINGS

Encourage adoption of integrated design approach and accelerate adoption of green building design, practices and technologies

\$100 MILLION GREEN MARK INCENTIVE SCHEME FOR EXISTING BUILDINGS

Push for greater adoption of energy efficient retrofitting design, practices and technologies to the large stock of existing buildings



\$5 MILLION GREEN MARK INCENTIVE SCHEME FOR DESIGN PROTOTYPE

Promote best practices at the early design stage to facilitate high performance buildings

Lowering the Barriers for the Private Sector



\$50 MILLION GREEN MARK INCENTIVE SCHEME FOR EXISTING BUILDINGS & PREMISES

Target SME owners & tenants to adopt energy efficiency improvements and measures

BUILDING RETROFIT ENERGY EFFICIENCY FINANCING (BREEF)

Provides credit facilities with a default risk sharing of 60%



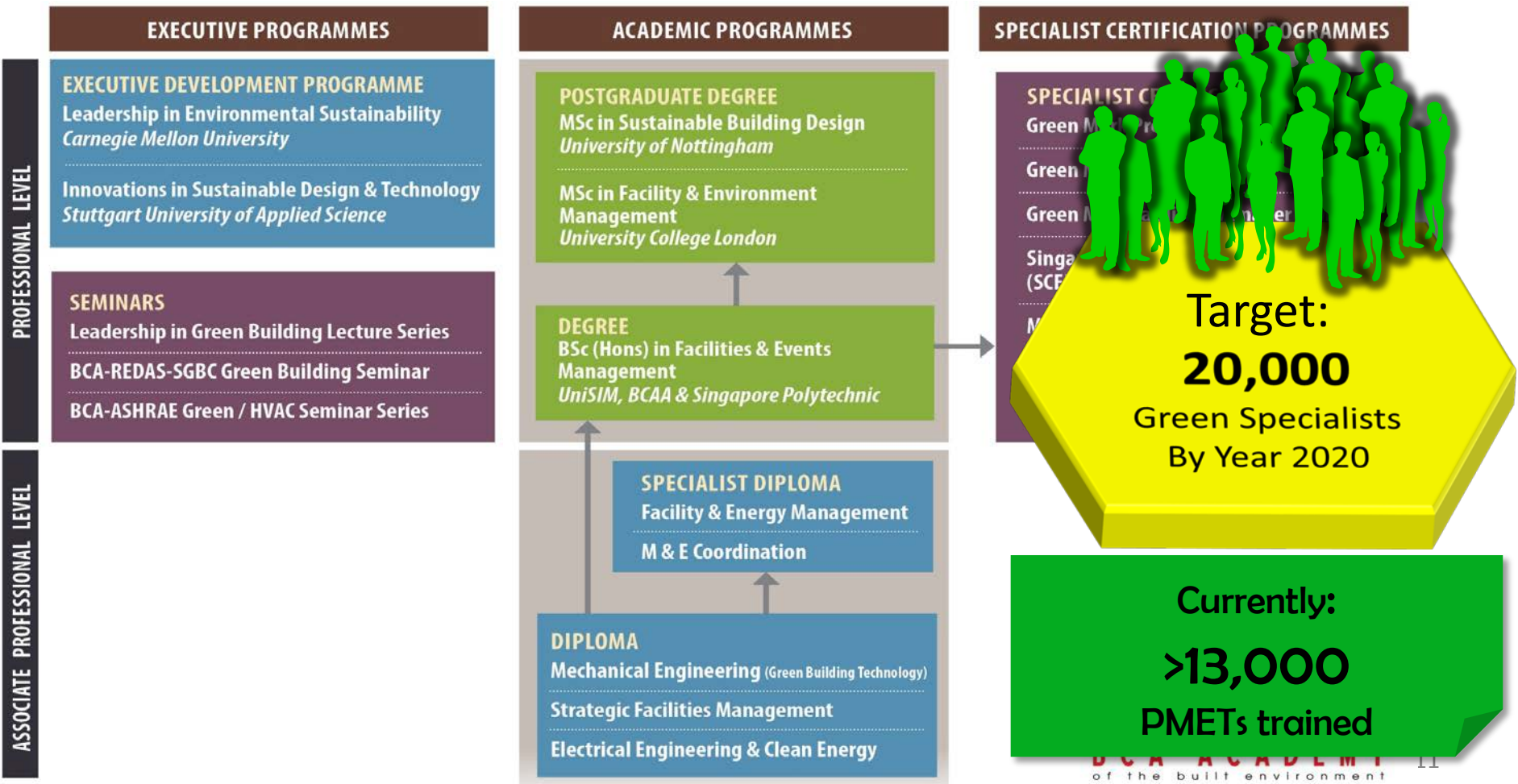
GREEN MARK GROSS FLOOR AREA INCENTIVE SCHEME (GM GFA)

Grants bonus GFA for buildings that strive for higher GM ratings

Grooming Green Specialists




Building a Green Collar Workforce through a Comprehensive Suite of Green Building Courses in BCA Academy

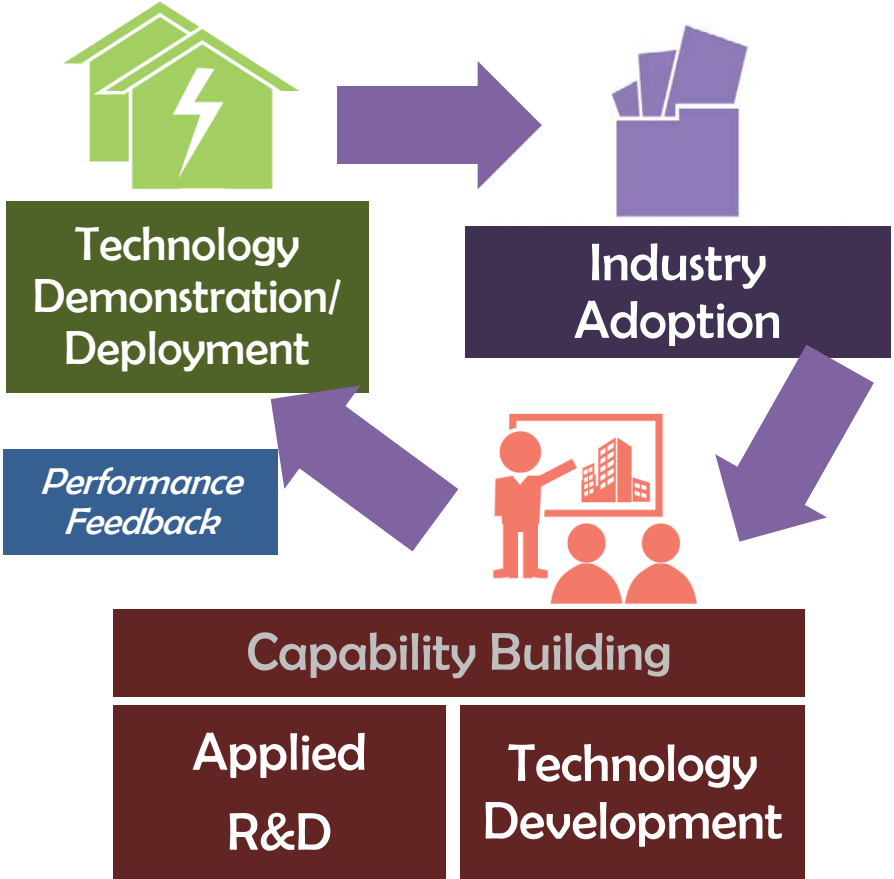


Pushing the Next Frontier



 **\$52 MILLION**
GREEN BUILDINGS
INNOVATION CLUSTER

 **SKY LAB**



In collaboration with the Lawrence Berkeley National Laboratory

Configurable test setup - Different orientations relative to the sun in tropical climatic conditions

Engaging the End-Users



Supermarkets Retails Restaurants Offices

>200

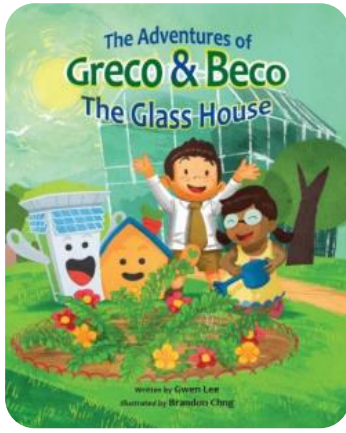
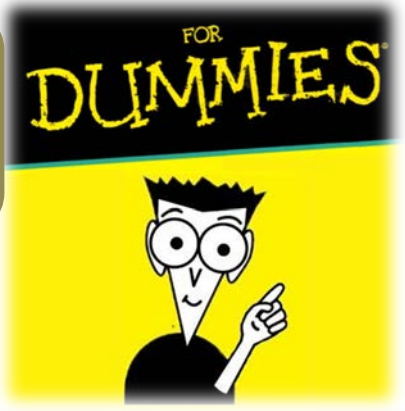
Occupant-centric projects

Green Partnership with Developers
Promoting Green to Tenants



BCA'S Dummies Guide for Restaurants & Retails

2nd BCA-SGBC Green Building Workshop for Building Owners





Profile Singapore as a leading Sustainable Hub in the tropics

Enhance Professionalism and Knowledge in Sustainable Development

Dedicated Certification Body for Green Building Products and Services



Sharing Best Practices Regionally & Internationally



IGBC - The Premier Green Building Event in Asia



7 - 9 SEPTEMBER 2016
MARINA BAY SANDS
SINGAPORE



**BUILD
GREEN
THE
NEXT
DECADE**

- What to anticipate at IGBC 2016:
- ❖ Envisaging Our Next Decade
 - ❖ A Bird's Eye View of the Sustainable Built Environment
 - ❖ Money Sense; Building Sense
 - ❖ Data Revolution of Cities and Buildings
 - ❖ Greening Inside-Out
 - ❖ Updates of Green Mark Schemes
 - ❖ Green Tours

Organised by



Strategic Partners

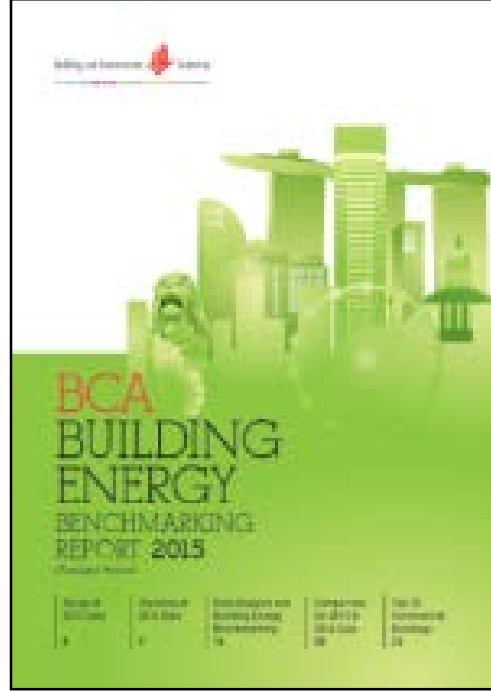
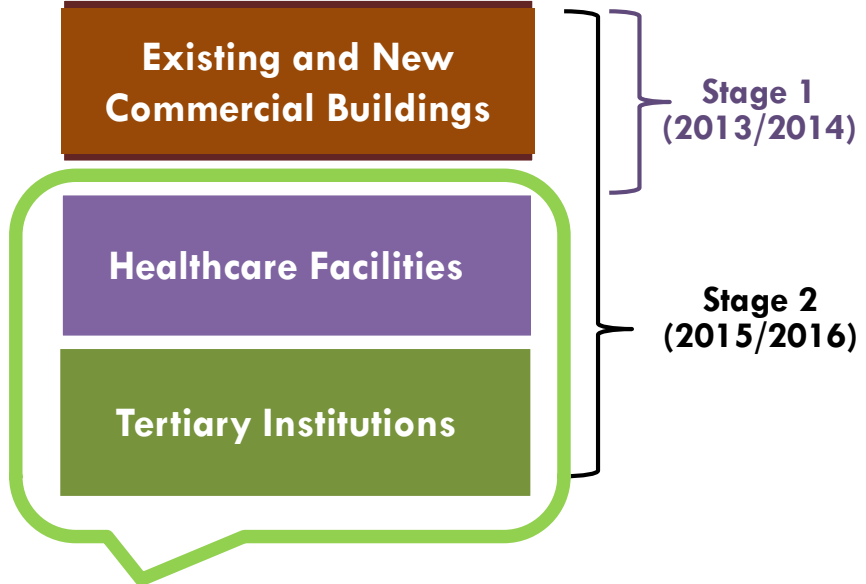


Co-Located Events

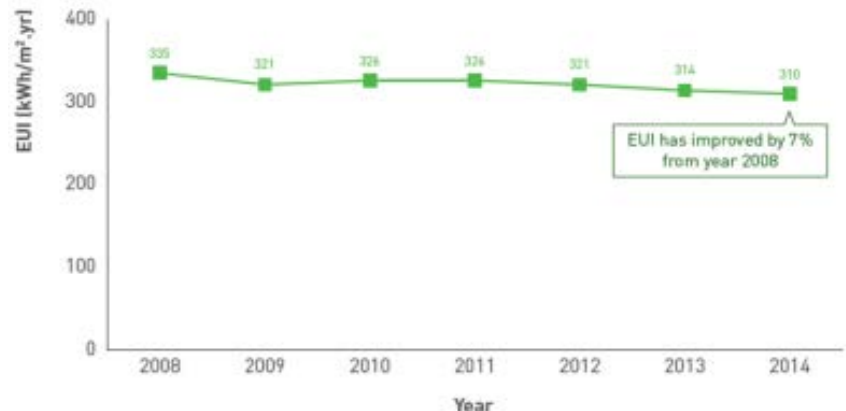
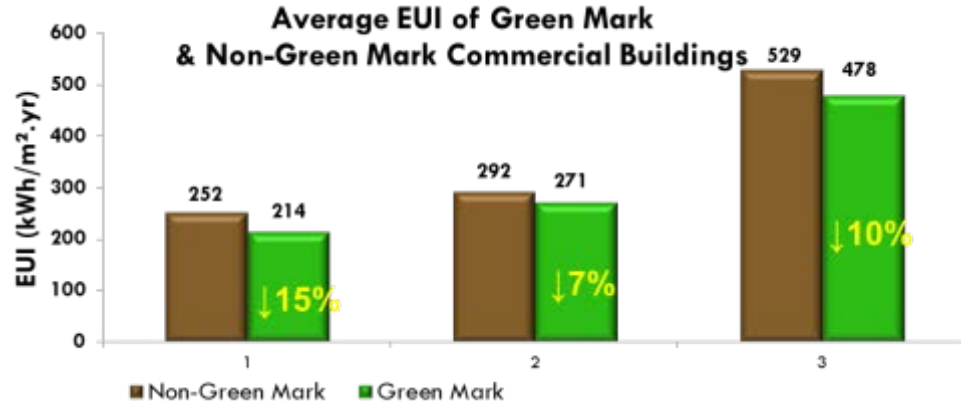


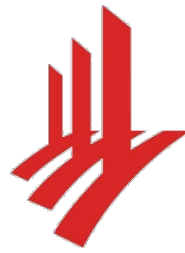
SGBW Official Website: <http://www.sgbw.com.sg>
SGBW Facebook page: <https://www.facebook.com/igbcsg>

Monitoring Building Performance through Annual Mandatory Submission

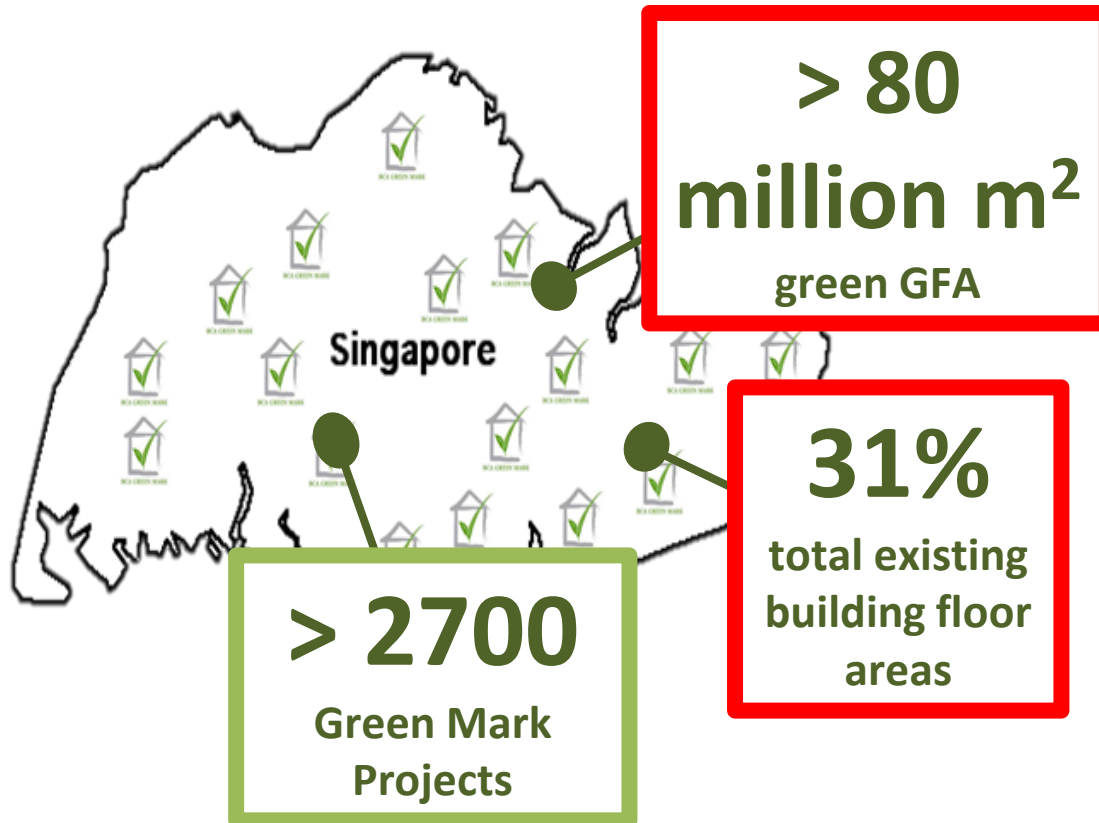


Expanded coverage of building types in FY15





Marking 10 years of Green Mark



Over a decade, the Green Mark Scheme has helped Singapore to become a hub for green buildings in the tropics/sub tropics, establishing a strong business case, through sustained high performance.

Thank You

