

SGBC-BCA Zero Capital Partnership Scheme & Standard EPC Template

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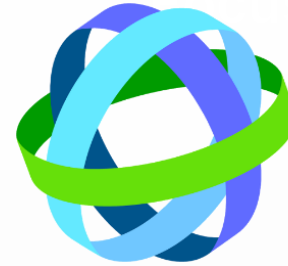
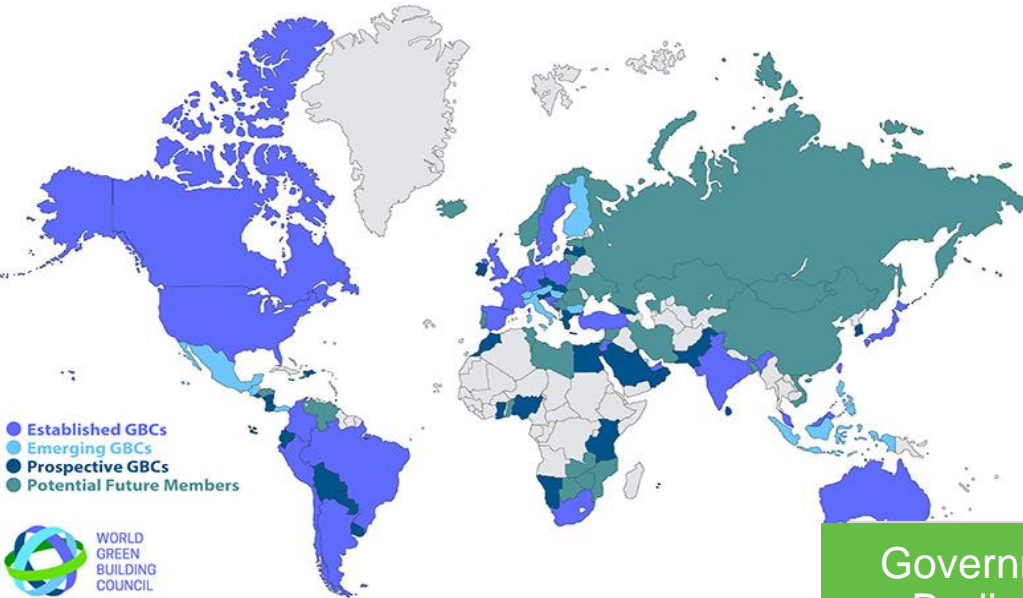
Established
Member
since 2010



About SGBC

Singapore Green Building Council

A Leading Hub for Sustainability



WORLD
GREEN
BUILDING
COUNCIL

Government
Bodies &
Institutions



Private
Companies



What We Do

KEY FOCUS AREAS



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

Product Certification Directory

Product Type

Brand or Model

Company

Quick Search



Architectural

Acoustic Panel Board
Block and Wall Panel
Bonding Agent
Carpentry
Ceiling Board
Cladding
Decorative Covering
Door System
Drymix
Floor Finish
Glazing
Insulation
Paints & Coatings
Panel Board
Playground Equipment
Raised Floor
Roofing
Space Division
Sun Shading Device
Tile
Waterproofing
Window System



Civil & Structural

Cement
Floor Slab
Formwork
Pre-cast Products
Ready Mix Concrete
Steel



Mechanical

ACMV
Actuators & Valves
Fire System
Indoor Air Quality
Pipes & Fittings
Plumbing & Sanitary
Waste Removal Equipment
Water Filtration System
Water Heater



Electrical

Cable
Hand Dryer
Lighting
Power Backup Equipment
Power Equipment
Security Access
Security System
Switchboard
Transformer
Vertical Transportation



Smart

Sensors
Solar Photovoltaic Modules
Solution



Landscaping

Drainage
Green Roof
Green Wall
Hardscape
Rainwater Harvesting
Termite Protection
Turf and Slope Stabilizer

**Over 950
Products
Certified**

Green Mark & SGBP



Green **building** rating system to evaluate buildings for their environmental impact and performance

Green **product** rating system to evaluate building products and materials for their environmental impact and performance

Enhancement 2: Optimisation

Energy improvement works need not necessarily include chiller replacement, **building optimisation works** will be funded under GMIS-EBP.

In order to ensure energy savings through this optimisation, building owner will be required to adopt Energy Performance Contracting (EPC), where EPC firms guarantee the committed energy savings.

INCENTIVE - BREEF

Eligibility for BREEF Scheme

Building Owners of a non-residential building

MCST for commercial and residential buildings

Energy Performance Contracting (**EPC**) firms accredited by SGBC

Energy Services Companies (**ESCO**) accredited by ESCO Accreditation Committee

Special Purpose Vehicles (**SPV**)

Where do I find **proven** service providers to carry out the energy efficiency works ?

I am really keen to carry out the energy efficiency works but I have **no capital**, how?

I am about to sign the contract document – is it a **fair contract**?



Where do I find **proven** service providers to carry out the energy efficiency works ?



SINGAPORE GREEN BUILDING SERVICES



The only organisation that certifies

Green Building Services.

SGBC Certified Services

Directory of **Certified Services**



Architecture



Quantity
Surveying



Environment
Sustainability
Design



Mechanical &
Electrical



Energy
Performance
Contracting

Guarantee energy savings for the building over a set of period of time,
either in monetary terms or savings percentage

SGBC Certified Services – EPC



Carrier Singapore Pte Ltd



Comfort Management Pte Ltd



Cushman & Wakefield Facilities & Engineering (S) Ltd



ENGIE Services Asia-Pacific Pte Ltd



Johnson Controls (S) Pte Ltd



Measurement & Verification Pte Ltd



Siemens Pte Ltd



TRANE Distribution Pte Ltd



Barghest Building Performance Pte Ltd



G-Energy Global Pte Ltd



Kaer Pte. Ltd



E2green Pte Ltd



Building System and Diagnostic Pte Ltd

SGBC Certified Services - EPC

EPC Accreditation	L1	L2	L3	L4
Financial Net Worth	$\geq \$50,000$	\$50,000 to \$500,000	\$500,000 to \$1,000,000	\$1,000,000 and above
Aggregate of EPC Project Amount	-	$> \$1,000,000$	$> \$3,000,000$	$> \$5,000,000$
Employed BCA Energy Auditor or SCEM	1	1	2	2
bizSAFE Accreditation	Level 1	Level 2	Level 3	Level 4 and above

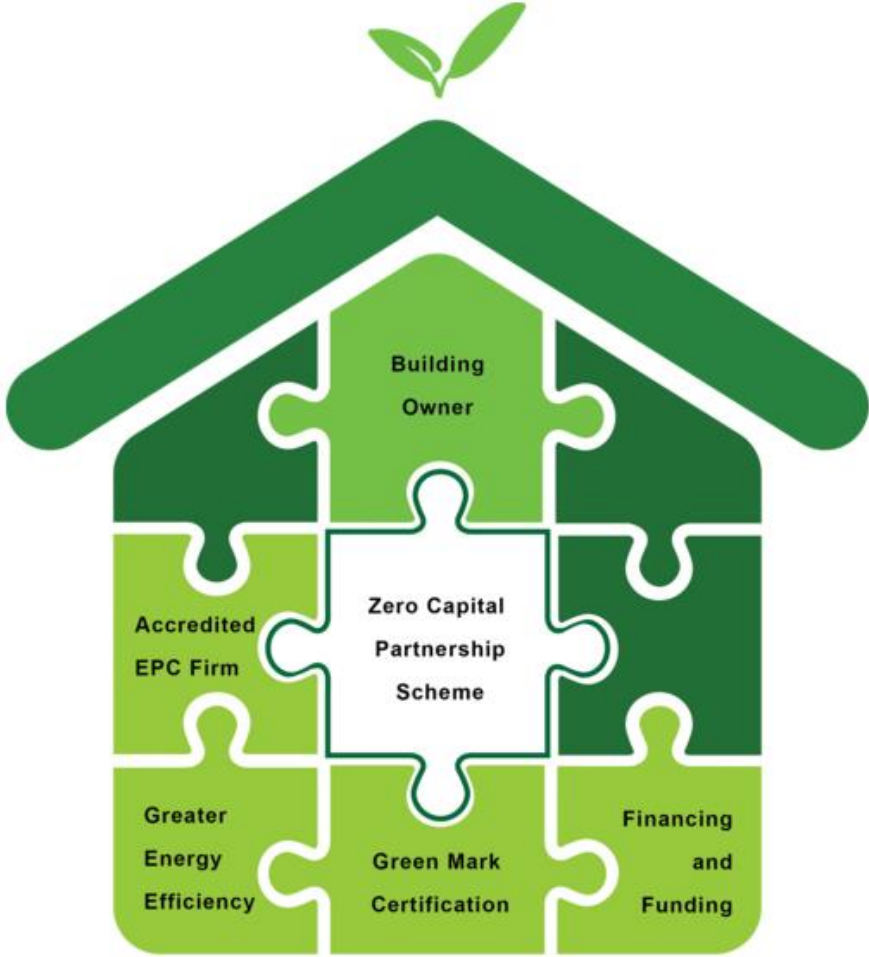
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BCA - SGBC Zero Capital Partnership Scheme

Singapore Green Building Council



Building owner can work with a **proven EPC firm** achieve greater energy efficiency with **zero capital outlay**.

SGBC Certified Services – EPC with ZCP

Directory of **Certified Services**



Architecture



Quantity
Surveying



Environment
Sustainability
Design



Mechanical &
Electrical



Energy
Performance
Contracting

Certified **Energy Performance Contracting**

All

L4

L3

L2

L1

ZCP

SGBC Certified Services – EPC with ZCP



Comfort Management Pte Ltd



ENGIE Services Asia-Pacific Pte Ltd



Johnson Controls (S) Pte Ltd



Measurement & Verification Pte Ltd



Siemens Pte Ltd



Barghest Building Performance Pte Ltd



G-Energy Global Pte Ltd



Kaer Pte. Ltd



E2green Pte Ltd

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Standard Energy Performance Contract

Singapore Green Building Council

The image shows the front cover of a document titled 'ENERGY PERFORMANCE CONTRACT for Buildings'. The title is in bold, black, sans-serif capital letters. Below the title, the words 'for Buildings' are in a smaller, regular, black, sans-serif font. On the left side of the cover, there is a vertical bar with a gradient from grey at the top to green at the bottom. In the bottom right corner, there is a logo for the Singapore Green Building Council, which consists of two green leaves above the text 'SINGAPORE GREEN BUILDING COUNCIL'.

ENERGY PERFORMANCE CONTRACT

for Buildings



A standard reference document for both sides of the industry: the building owners and the EPC firms when procuring energy efficiency retrofit or renewable energy installation works

Objective : accelerate the energy efficiency retrofits

Standard Energy Performance Contract

- Developed by the industry participants (EPC companies, building owners, BCA and SGBC)
- Drafted by a reputable legal firm, Bird & Bird ATMD
- Minimised legal terms for ease of understanding
- Consists of 2 parts
 - Contract Conditions
 - Annexes – sample energy efficiency calculation template

Examples of Clauses

3. PERFORMANCE OF THE WORKS

- 3.1 EPC shall be fully responsible for the suitability, adequacy, integrity, durability and practicality of the ECM to be implemented at the Site.
- 3.2 EPC shall design, execute, complete and perform the Works, and, EPC shall proceed to execute the Works after Client has given its authorisation. The Works shall be financed by EPC or financed by Client as specified in Schedule 1.
- 3.3 EPC shall, at its own cost, ensure that the Works comply with all legislation, subsidiary legislation, building codes, regulations and sustainability regulations, including, the Building Control Act (Cap. 29) and related subsidiary legislation (collectively, **Building Codes and Regulations**). However, in the event that the authorities require the other areas of the Site, and/or the building/s and equipment system/s thereon to be upgraded to meet current Building Codes and Regulations, Client shall be responsible for such compliance at its own cost.

Examples of Clauses

7. CLIENT OBLIGATIONS

7.1 Client will:

- 7.1.6 (unless comprehensive maintenance is provided by EPC as specified in Schedule 1) properly perform any and all maintenance on all ECM Equipment:
- (a) in an effective, efficient and safe manner;
 - (b) in compliance with all building codes and regulations;
 - (c) in compliance with all Additional Requirements;
 - (d) in accordance with the maintenance requirements for ECM Equipment as set out in Schedule 1;
 - (e) in accordance with Good Industry Practice;
 - (f) in compliance with relevant manufacturer's requirements; and
 - (g) in a good and workmanlike manner.

Examples of Clauses

- 3.10 EPC will notify Client of the date of completion of the Works (**Completion Date**) by issuing a certificate of completion.
- 3.11 Within **7 days** of receiving the certificate of completion, Client must notify EPC in writing whether the completion of the Works is accepted or unacceptable. If EPC is not so notified, the completion of the Works shall be deemed to be accepted.
- 3.12 Within **6 months** of the Completion Date, EPC must (i) rectify all punch list defects in the Works; and (ii) provide records and drawings of the Works, operation and maintenance manuals to Client.

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Standard Energy Performance Contract

- Encourage the industry to use the contract
- Feedback to SGBC of any improvements needed

Available online for Free at SGBC website

Beyond the existing Green Lease Toolkit²⁰ and user-centric Green Mark schemes, BCA will step up efforts to encourage the retrofitting of tenanted spaces with energy-efficient fittings, such as light fittings. To enhance current efforts to green existing buildings, BCA and Singapore Green Building Council (SGBC) have collaborated to develop the **Zero Capital Partnership²¹ scheme** which provides a “zero capital” solution for building owners to carry out energy efficiency retrofits for buildings. These efforts will contribute to Singapore’s aim of making 80 per cent of all buildings green by 2030.

Singapore unveils latest plans for addressing climate change

TAKE ACTION



FOR A CARBON-EFFICIENT SINGAPORE

**Singapore's Climate Action Plan:
Take Action Today, For a Carbon-Efficient Singapore**

Published By:

National Climate Change Secretariat
Prime Minister's Office, Singapore
www.nccs.gov.sg



7 - 9 SEPTEMBER 2016
MARINA BAY SANDS
SINGAPORE



Green Mark 10th Anniversary & Updates on Green Mark Scheme

**Updates from Asia Pacific
Region on Sustainable
Development, Green
Building Trends,
Technologies, Strategies**

Green Building Tours

**Held alongside BEX Asia
2016 and MCE 2016**

MORE THAN

50%
of the attendees
are from middle to
senior management

72%

rated IGBC
as a 'good'
or 'excellent'
event.

85%

would recommend
IGBC to their
colleagues

Organised by



*Strategic
Partners*



*Co-Located
Event*



Thank You



Now, your step towards sustainability
in the built environment www.sgbc.sg