

**PILOT BUILDING RETROFIT ENERGY  
EFFICIENCY FINANCING (BREEF) SCHEME  
FOR EXISTING BUILDINGS**

**APPLICATION GUIDELINES**

# **GUIDELINES FOR APPLICATION OF BUILDING RETROFIT ENERGY EFFICIENCY FINANCING (BREEF) SCHEME FOR EXISTING BUILDINGS**

## **1.0 OBJECTIVE**

- 1.1 The Building Retrofit Energy Efficiency Financing (BREEF) Scheme for Existing Buildings (the “Scheme”) aims to encourage building owners to undertake energy efficient retrofits by providing financing for building owners, Management Corporations, Energy Performance Contracting firms (EPCs), Energy Services Companies (ESCOs) and Special Purpose Vehicles to ease upfront cost issues.

## **2.0 DEFINITIONS**

In these Guidelines:-

‘Approved Equipment’ shall mean the equipment set out in Annex C hereto.

‘Building’ shall refer to the building in which Upgrading or Retrofitting works are to be carried out.

“Chilled Water Plant” shall mean centralized air conditioning system which makes use of chilled water as the medium for removing the heat from the building. This includes the chillers and its ancillary equipment, including pumps and cooling towers where applicable.

“Energy Audit” shall mean an audit on the Operating System Efficiency of a Chilled Water Plant.

“Energy Auditor” shall mean a competent person registered with BCA to conduct the Energy Audit.

“Facilities” shall mean the Credits which comply with the terms of this Agreement and which the PFI has granted or agreed to grant to QBs with the approval of BCA, to the extent not excluded by BCA.

‘Projected Energy Savings’ shall mean the anticipated energy savings derived from the Energy Utilisation Index (EUI) computations before the Upgrading or Retrofitting Works, and Energy Utilisation Index (EUI) computations which are anticipated to be made after the Upgrading or Retrofitting Works.

“QB (Qualifying Borrower)” shall mean:-

- (i) an owner or joint owners of a non-residential building in Singapore who is party / are parties to an energy performance contract which fits the description set out in Annex 1 of the BREEF Scheme Operating Guidelines with an EPC firms who has received and has in effect accreditation from the Singapore Green Building Council (SGBC) or ESCO who has received and has in effect accreditation from the National Environment Agency (NEA) under the ESCOs Accreditation Scheme;; or

- (ii) a management corporation constituted under the Land Titles (Strata) Act (Chapter 158) in respect of a parcel comprised in a strata title plan for a residential or non-residential building which is a party to an energy performance contract which fits the description set out in Annex 1 of the BREEF Scheme Operating Guidelines with an EPC firms who has received and has in effect accreditation from the Singapore Green Building Council (SGBC) or ESCO who has received and has in effect accreditation from NEA under the ESCOs Accreditation Scheme;; or
- (iii) an ESCO who has received and has in effect accreditation from NEA under the ESCOs Accreditation Scheme, or an Energy Performance Contracting Firm accredited by the Singapore Green Building Council, and who is a party to an energy performance contract which fits the description set out in Annex 1 of the BREEF Scheme Operating Guidelines and which pertains to residential or non-residential buildings; or
- (iv) a Special Purpose Vehicle.

'Upgrading or Retrofitting Works' in relation to a Building shall mean upgrading or retrofitting works involving the installation of Approved Equipment and aimed at improving the energy efficiency of the Building.

### **3.0 APPLICATION REQUIREMENT**

- 3.1 To qualify for the loan, QB must complete the application forms, and accompanied by the following documents and written information:
- (a) A table showing the details of the proposed Upgrading or Retrofitting works, Projected Energy Savings (in kWh and \$), price of the Approved Equipment proposed to be installed, costs of installation of the said Approved Equipment, other ancillary costs, the cumulative total of the aforesaid three sets of costs, and the payback period. The scope of works shall be endorsed by a Professional Engineer (PE) (Mechanical), and/or PE (Electrical) and/or PE (Structural), where applicable.
  - (b) A detailed calculation of the Projected Energy Savings for each of the Approved Equipment to be installed.
  - (c) A table showing the current and Upgraded or Retrofitted chiller plant system efficiency.
  - (d) For non-residential buildings, energy audit report- the energy audit shall be performed by a BCA registered Energy Auditor or a Professional Engineer (PE) (Mechanical).
  - (e) Quotations, tender or contract documents and such other documents showing the price of the Approved Equipment proposed to be installed, and the costs of installation of the said Approved Equipment.
  - (f) Schedule or timelines for the Upgrading or Retrofitting Works.
  - (g) Green Mark Certification Application Form and commitment letter to achieve minimum Green Mark Certified award.
  - (h) A copy of the energy performance contract to which the loan applicant is a part of.
  - (i) Last 3 years' audited financial statements of the borrower with the last financial statement prepared not be more than 6 months before the application date.

- (j) Interim management accounts of the borrower (if the last audited financial statement was prepared more than 6 months before the application date).
- (k) If the applicant is an individual or a group of individuals (two or more individuals), copies of the individual's / individuals' identification documents.
- (l) If the applicant is a management corporation, a copy of its certificate of constitution issued pursuant to the Land Titles (Strata) Act (Chapter 158).
- (m) If the applicant is a foreign registered, constituted, and / or incorporated entity, copies of documents showing its registration, constitution or incorporation.
- (n) If the applicant is an Energy Services Company (ESCO), documents showing its accreditation by the NEA under the ESCOs accreditation scheme, and a copy of the energy performance contract to which it is party.
- (o) If the applicant is an Energy Performance Contracting firm, documents showing its accreditation by the Singapore Green Building Council (SGBC), and a copy of the energy performance contract to which it is party.

Items (a) to (d) must be endorsed by a BCA Registered Energy Auditor or a Professional Engineer (PE) (Mechanical).

- 3.2 BCA and the participating Financial Institution (FI) shall be entitled to reject any application at its discretion notwithstanding the QB's compliance with this paragraph 3.0 without assigning any reason.

If the loan application is accepted, the relevant FI will issue a formal letter of offer incorporating and / or modifying the terms herein and / or setting out further terms, and by which BCA or the FI offers the applicant participation in the Scheme. If the applicant wishes to accept the offer, the applicant should sign and return the letter of acceptance appended to FI's letter of offer within a month from the date of FI's letter of offer. Please refer to Annex B for the relevant submission and evaluation process.

#### **4.0 OBLIGATIONS**

- 4.1 Within six (6) months of the date of the letter of offer, the QB shall procure and / or ensure that the Building becomes BCA Green Mark certified under the BCA Green Mark scheme for non-residential existing buildings in accordance with the prevailing criteria for the respective building types published on BCA website at [https://www.bca.gov.sg/GreenMark/green\\_mark\\_criteria.html](https://www.bca.gov.sg/GreenMark/green_mark_criteria.html). The QB shall access the said website from time to time to find out the prevailing criteria and shall be deemed to have notice of such criteria.
- 4.2 The QB shall within 12 months of the letter of offer, purchase one or more of the equipment set out in Annex C hereto, install the purchased equipment in:-
- (i) where the QB is an owner or joint owners of a building in Singapore, in the said building it owns / they own;
  - (ii) where the QB is a management corporation, the building in the parcel comprised in a strata title plan in respect of which the QB is constituted; and

(iii) where the QB is an ESCO or an Energy Performance Contracting firm (EPC), in the building to which the energy performance contract relates, and procure the commissioning of the purchased equipment.

4.3 The QB shall procure and / or ensure that, after the obligation set out in paragraph 4.1 above has been discharged, for the remaining tenure of the Facility, the Building remains BCA Green Mark certified under the BCA Green Mark scheme for non-residential existing buildings in accordance with the prevailing criteria for the respective building types published on BCA website at [https://www.bca.gov.sg/GreenMark/green\\_mark\\_criteria.html](https://www.bca.gov.sg/GreenMark/green_mark_criteria.html). The QB shall access the said website from time to time to find out the prevailing criteria and shall be deemed to have notice of such criteria.

4.4 From the time that the Upgrading or Retrofitting Works commence until the expiry of 12 months from the date of the testing and commissioning reports, the Building owner shall permit BCA's designated staff to enter the Building for the purposes of inspecting the Upgrading or Retrofitting Works or the installed Approved Equipment, provided that BCA shall give 1 week's written notice of its intention carry out such inspection.

4.5 After the abovementioned documents have been submitted, BCA shall determine at its sole discretion if the calculations by the QB of the Energy Utilisation Index (EUI) and the Actual Energy Savings, and the chilled water air conditioning plant system efficiency as stated in the energy audit report, are accurate. BCA shall be entitled to substitute its calculations for those by the QB if it is of the view that the QB's calculation(s) is / are not accurate. BCA shall also be entitled to substitute the EPC or ESCO's determination of the chilled water air conditioning plant system with its own if it is of the view that the chilled water air conditioning plant system figure(s) as stated in the energy audit report is not accurate.

## **5.0 LOAN DETAILS**

5.1 Facilities granted under the Scheme shall be up to an amount of SGD 4,000,000 or 90% of the total cost of supply and installation of the equipment set out in Annex C and professional services fee, whichever is lower, per building.

5.2 The tenure of the Facilities granted under the Scheme shall not exceed five (5) years.

5.3 Please contact the participating Financial Institutions (FIs) for interest rate and repayment schedule.

## **6.0 SUBMISSION PROCEDURES**

6.1 All applications should be made in the format found in Pilot Building Retrofit Energy Efficiency Financing (BREEF) Scheme for Existing Buildings - Application Form and sent to BCA.

## **7.0 MISCELLANEOUS**

7.1 The Annexes hereto form an integral part of these Guidelines. In the event of any inconsistency between the contents of the Annexes and the contents of this main document, those of this main document shall prevail.

7.2 Without prejudice to the rights of BCA at common law, in the event:-

- (a) of any failure by the QB to discharge its obligations set out in paragraph 4 above; or
- (b) that BCA shall determine, at any time after the QB has accepted the FI's offer for participation in the Scheme, that any information supplied to the FI by the QB arising from or in connection with the QB's participation in the Scheme, whether in the application form or elsewhere, is false or misleading, then the participating FI/ BCA shall be entitled to recover from the QB all monies disbursed.

7.3 The QB shall not, unless BCA otherwise permits, assign its rights or delegate or transfer its obligations in connection with the Scheme.

7.4 For the purposes of the Contracts (Rights of Third Parties) Act (Chapter 53B), any agreement between BCA and the QB is not intended to, and does not, give any person who is not a party to it any right to enforce any of its provisions.

## **8.0 ENQUIRIES**

For enquiries on the application, please contact us through our online feedback form (<https://www.bca.gov.sg/feedbackform/>) or call 1800 342 5222.

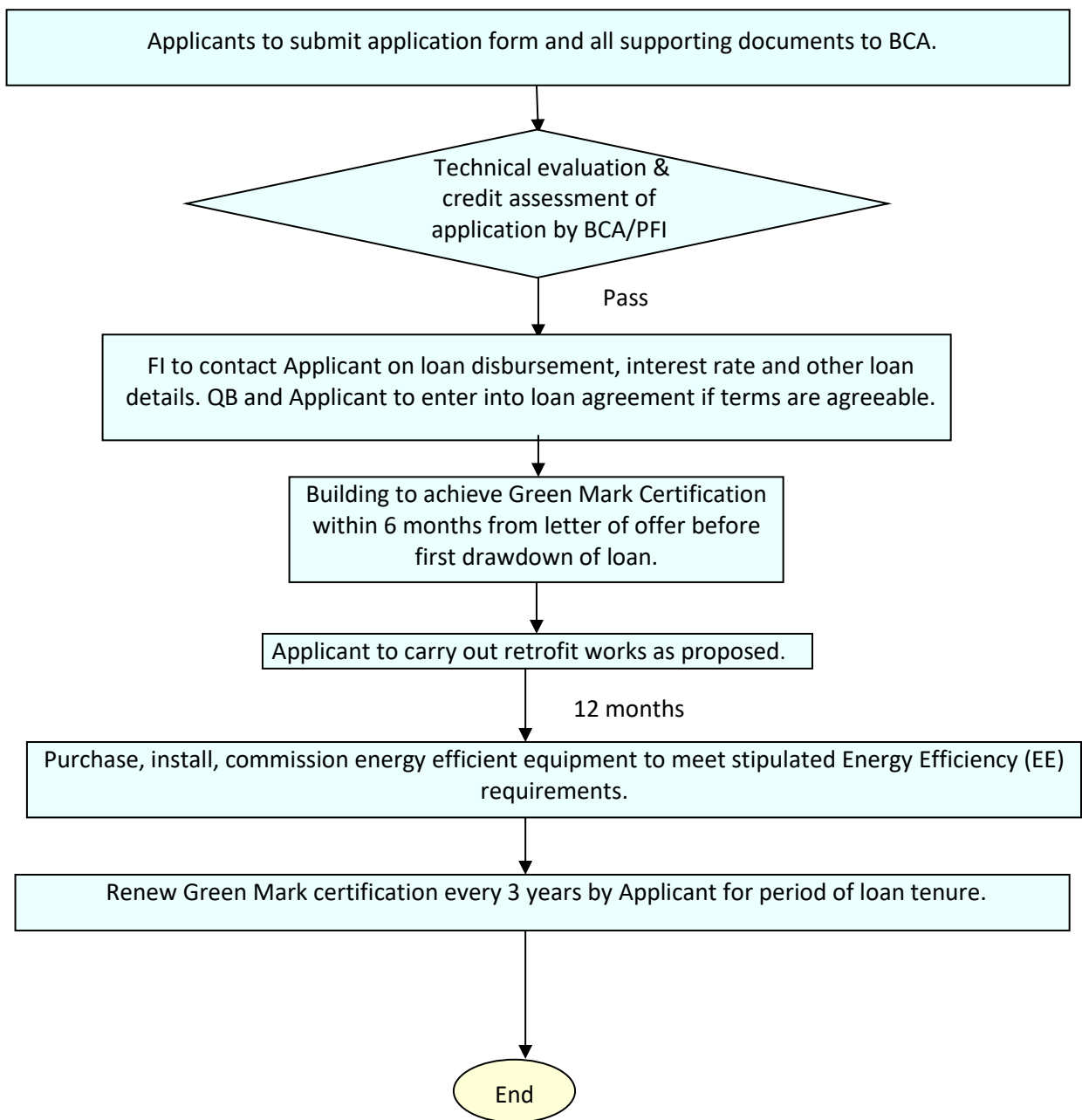
## **ANNEX A- DESCRIPTION OF ENERGY PERFORMANCE CONTRACT (EPC)**

For the purposes of the Agreement, the Energy Performance Contract shall include (on a non-exhaustive basis) provisions pursuant to which:-

- (a) the ESCO/ EPC firm is to propose and tailor for a building owner or management corporation of a residential or non-residential building a comprehensive set of energy savings- related measures to fit the needs of the building- these may include energy efficiency measures, and renewable energy measures;
- (b) the ESCO/ EPC firm provides to a building owner or management corporation of a residential or non- residential building a guarantee that the savings produced by the measures will be sufficient to cover the cost of implementing the measures.

## ANNEX B - FLOWCHART FOR BCA PILOT BREEF SCHEME PROCESS

Note:- The following diagram is for illustrative purposes only. In the event of any inconsistency between the contents of the following diagram and the contents of paragraphs 1 to 6 of the Guidelines, the contents of paragraphs 1 to 6 of the Guidelines shall prevail.





## ANNEX C- LIST OF APPROVED EQUIPMENT

- Variable Speed Drives (VSD)
- Chillers
- Chilled Water Pumps
- Condenser Water Pumps
- Cooling Towers
- Chiller Plant Energy Optimization System
- Chiller Auto Condenser Tube Cleaning System
- Building Automation System (BAS)
- Energy Efficient Lightings e.g. T5, LED, etc.
- Electronic Ballast
- Lighting Control System
- Light Emitting Diodes (LED) Lightings
- Energy Saving Lighting Controllers
- CO2 Sensors for AHU System
- CO Sensors for Car park Ventilation Control System
- Photo Sensors
- Motion Sensors
- Heat Pipe & Energy Recovery Wheel
- Energy Efficient lifts and escalators
- Regenerative drives for lifts
- Solar Energy or other renewable energy sources
- Solar Film
- Building façade/envelope that improves the Envelope Thermal Transfer Value (ETTV)
- Permanent Measurement & Verification instrumentations which complies with the requirements set out in the prevailing Green Mark for Existing Non-Residential Buildings criteria set out in [https://www.bca.gov.sg/GreenMark/green\\_mark\\_criteria.html](https://www.bca.gov.sg/GreenMark/green_mark_criteria.html)
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