

**GREEN MARK INCENTIVE SCHEME FOR
EXISTING BUILDINGS 'HEALTH CHECK'**

APPLICATION GUIDELINES

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1.0 OBJECTIVE

- 1.1 The Green Mark Incentive Scheme for Existing Buildings 'Health Check' aims to help building owners understand the central air conditioning plant efficiency of their buildings.
- 1.2 Through this scheme, BCA seeks to allow building owners to conduct 'Health Checks' audits on their buildings at subsidized costs. The requirements for such 'Health Check' audits are detailed in the 'Health Check Audit Guideline' (marked 'Annex B').

2.0 ELIGIBILITY CRITERIA

- 2.1 Subject to paragraph 2.2 below, building owners will be eligible to apply for participation in this Scheme if the following conditions are met:
- a. the building for which the 'Health Check' is sought is an existing private commercial (non-residential) building with a Gross Floor Area¹ of at least 2,000 square meters and has a central chilled water air conditioning plant;
 - b. the building must have attained a Green Mark rating which is still in its validity period preceding the application; or the Building owner must, at the time of application, have applied for Green Mark certification and the Green Mark assessment has not commenced or been completed; or the Building owner must, at the time of application, be applying simultaneously for Green Mark certification in respect of the Building. This paragraph shall be read together with paragraph 4.4.
 - c. no similar incentives have been given by any other government agencies to the building owner in respect of the building for which the 'Health Check' is sought within the 1 year preceding this application.
- 2.2 BCA shall be entitled to reject any application at its discretion without assigning any reason.

¹ Gross Floor Area (GFA) means the Gross Floor Area which has been permitted Section 14 of the Planning Act (Cap 232) to be developed.

If BCA accepts the building owner's application, BCA will issue a formal letter of offer incorporating and/or amending the terms herein, and setting out further terms, by which BCA offers the building owner participation in the Scheme. If the building owner wishes to accept the offer, the building owner should sign and return the letter of acceptance appended thereto.

3.0 EFFECTIVE DATE

The Scheme is valid until 29 April 2019 or when the fund for Green Mark Incentive Scheme-Existing Building (as described on BCA's website) is fully committed, whichever is earlier. Participation in the Scheme will be on a first-come-first-served basis, subject to availability of the fund.

4.0 DETAILS AND CONDITIONS OF HEALTH CHECK INCENTIVE SCHEME

- 4.1 The building owner who participates in this Scheme may choose to either use BCA's appointed term contractor to carry out the 'Health Check' at a subsidized rate, or engage on his own an ESCO or M&E Professional Engineer or Registered Energy Auditor to carry out the 'Health Check' and thereafter receive a subsidy amount from BCA.

If the building owner chooses to use BCA's appointed term contractor to carry out the 'Health Check', the building owner shall pay upfront to BCA the subsidized rate, as determined by reference to Table 1 below, forthwith upon receipt of BCA's invoice. For the avoidance of doubt, if the building owner chooses this option of using BCA's appointed term contractor, no monies will be disbursed by BCA to the building owner.

If the building owner chooses to engage on his own an ESCO or M&E Professional Engineer or Registered Energy Auditor to carry out the 'Health Check', the building owner will be paid the subsidy amount, as determined by reference to Table 1 below, after the 'Health Check' is completed and the report complying with the 'Health Check Audit Guideline' has been submitted to and approved by BCA.

The subsidized rate to be paid by the building owner, or the subsidy amount to be paid to the building owner, shall be based on the number of chilled water and condenser water headers or branches, and the number of chillers in operation, (including those by rotation basis) during the period in which the 'Health Check' is to be / was carried out as reflected in Table 1 under page A – 6.

4.2 If the building owner engages on his own an ESCO or M&E Professional Engineer or Registered Energy Auditor, the builder owner shall ensure that the ESCO or M&E Professional Engineer or Registered Energy Auditor:-

- (a) carries out the 'Health Check'; and
- (b) submits the required report

all in accordance with the 'Health Check Audit Guideline'. In particular, measurements in the report must comply with ASHRAE Standard 22, AHRI Standard 550/590, SS 591 and BCA's Green Mark M&V standards. Whether or not the 'Health Check' and the report comply with the 'Health Check Audit Guideline' shall be determined solely by BCA. The subsidy amount will only be disbursed after the report has been submitted to and approved by BCA. Such disbursement shall amount to full discharge of BCA's obligations.

4.3 If the building owner uses BCA's appointed term contractor to carry out the 'Health Check', the builder owner shall do all things necessary to allow BCA's appointed term contractor to carry out the 'Health Check' in accordance with the 'Health Check Audit Guideline' at such date(s) as BCA may select at its discretion. BCA will deliver to the building owner the report after the completion of the 'Health Check'. Such delivery shall amount to full discharge of BCA's obligations.

4.4 In all cases, the building owner must apply for Green Mark certification in respect of the building on which the 'Health Check' has been carried out within 18 months of the date of BCA's letter of offer, failing which:-

- (a) where the 'Health Check' has been carried out by BCA's appointed term contractor, the building owner shall pay to BCA an amount equivalent to the subsidized rate upon BCA's demand; and
- (b) where the 'Health Check' has been carried out by an ESCO or M&E Professional Engineer or Registered Energy Auditor who was not the appointed term contractor of BCA, the building owner shall repay to BCA the subsidy amount upon BCA's demand.

4.5 Flowchart Figure A-1 illustrates the process which participation in the Scheme entails.

5.0 SUBMISSION PROCEDURES

- 5.1 All applications should be made in the prescribed format found in Annex B and sent to:

**Director
Green Building Policy Department
Green Mark Incentive Scheme for Existing Buildings 'Health Check'
c/o: Building and Construction Authority
52 Jurong Gateway Road, #11-01
Singapore 608550**

- 5.2 (a) All applications should be submitted with documentary evidence of building ownership.
- (b) Where the building owner wishes to engage an ESCO or M&E Professional Engineer or Registered Energy Auditor who is not the appointed term contractor of BCA to conduct the 'Health Check', he shall submit the following documents at the time of application in addition to documentary evidence of building ownership:-
- a. a copy of contract or purchase order and/or such other document(s) setting out his contractual relationship with the ESCO or M&E Professional Engineer or Registered Energy Auditor and the costs which will be charged to the building owner by the ESCO or M&E Professional Engineer or Registered Energy Auditor;
 - b. personal and professional details and curriculum vitae of ESCO or M&E Professional Engineer or Registered Energy Auditor who will be carrying out the 'Health Check'; and
 - c. a schedule stating when the 'Health Check' will be carried out and when the required report will be submitted.

If the building owner accepts BCA's offer to participate in the Scheme, the building owner shall ensure and procure that the ESCO or M&E Professional Engineer or Registered Energy Auditor adheres the strictly to schedule mentioned above.

6.0 DISCLAIMER

To the fullest extent permitted by law, BCA's liability and/or responsibility for any death, personal injury or damage to property howsoever arising from or in connection with the conduct of the 'Health Check' is excluded.

FIGURE A-1: FLOW CHART FOR GREEN MARK INCENTIVE SCHEME FOR EXISTING BUILDING 'HEALTH CHECK' PROCEDURE

(NOTE: - IN THE EVENT OF ANY INCONSISTENCY BETWEEN THE CONTENTS OF THIS FLOWCHART AND THAT OF THE APPLICATION GUIDELINE, THE LATTER SHALL PREVAIL.)

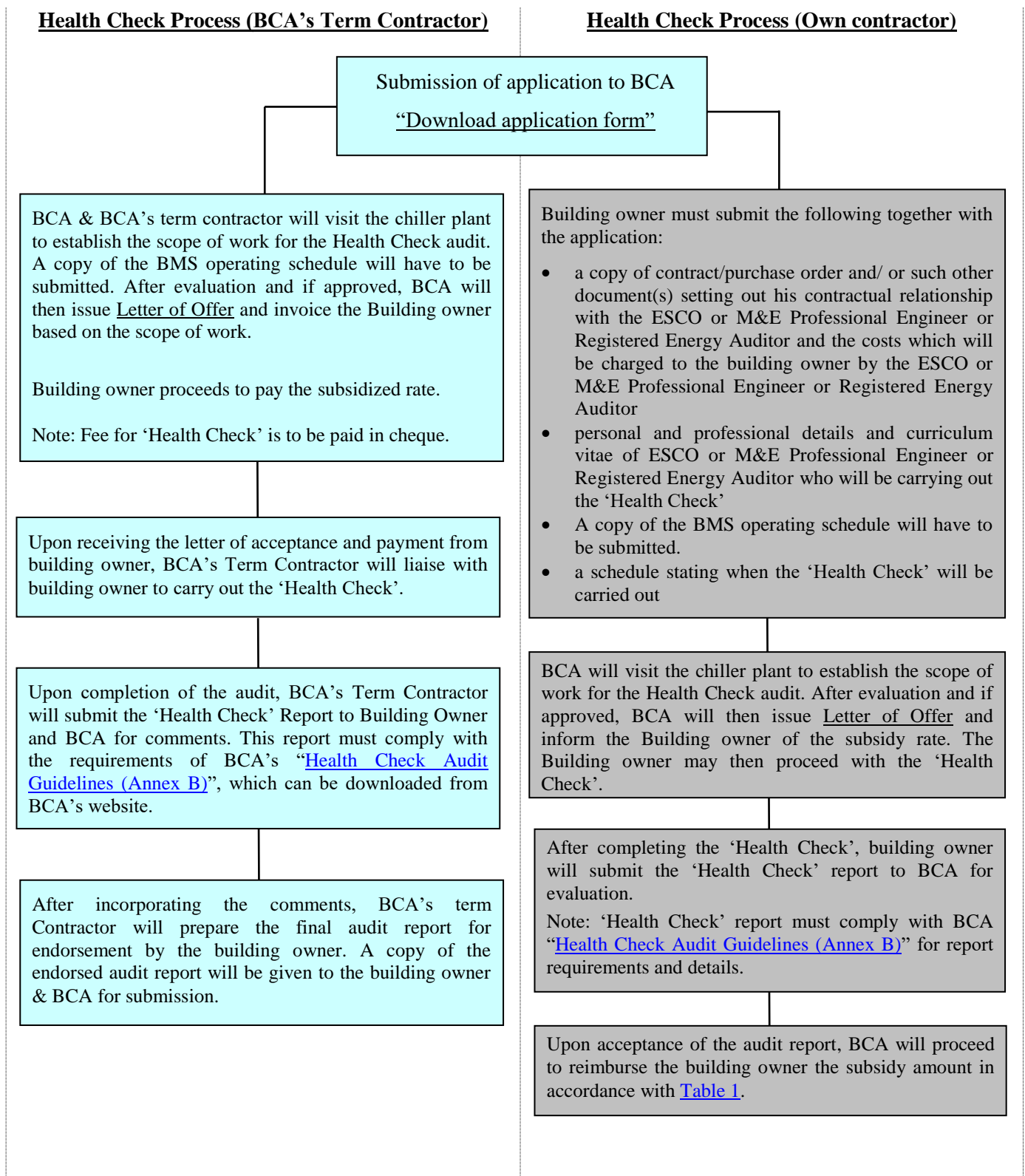


Table 1- Subsidized Rate and Subsidy Amount

S/n	Operating Chiller Plant Equipment (Chillers + chilled water pumps + condenser water pumps + cooling towers)	No. of pipes headers	No. of measuring instruments required				Subsidised Rate / Subsidy Amount (SGD\$) (Price excl. GST)
			Flow Meter	Temp Sensor	Power Meter	DP sensors	
1	2 sets of chiller plant equipment	1 no. chilled water pipe header + 1 no. condenser water pipe header	2	4	8	4	\$2,500
2	3 sets of chiller plant equipment		2	4	12	4	\$3,000
3	4 sets of chiller plant equipment		2	4	16	4	\$3,500
4	2 sets of chiller plant equipment	2 nos. chilled water pipe headers + 1 no. condenser water pipe header	3	6	8	6	\$3,250
5	3 sets of chiller plant equipment		3	6	12	6	\$3,750
6	4 sets of chiller plant equipment		3	6	16	6	\$4,250
7	2 sets of chiller plant equipment	3 nos. chilled water pipe headers + 1 no. condenser water pipe header	4	8	8	8	\$4,000
8	3 sets of chiller plant equipment		4	8	12	8	\$4,500
9	4 sets of chiller plant equipment		4	8	16	8	\$5,000