

Circular No: BCA/GMIS-EB 2.0/2022-06-ES
Our Ref: BCA ID 98.4.3

CIRCULAR TO PROFESSIONAL INSTITUTES

Who should know

Building Owners, Architects, Engineers and Environmental Sustainability Design Consultants

Effective date

With effect from 30 Jun 2022 to 31 March 2027, or until the grant has been fully committed

2 GREEN MARK INCENTIVE SCHEME FOR EXISTING BUILDINGS 2.0

Objective

This circular provides details of the Green Mark Incentive Scheme for Existing Buildings 2.0 (“GMIS-EB 2.0” or the “Scheme”). The Scheme supports Building Owners (“Owners”) to achieve higher energy performance standards for their buildings by lowering the upfront capital costs of energy efficiency retrofits and improve the returns on investment.

Details of GMIS-EB 2.0

Background

- 1 Launched in March 2021, the Singapore Green Building Masterplan¹ (SGBMP) is our collective action plan that will guide Singapore’s transition towards a low-carbon built environment. The SGBMP is part of the Singapore Green Plan 2030, a whole-of-nation movement to advance Singapore’s national agenda on sustainable development and achieve our long-term net zero emissions aspiration by or around the mid-century.
- 2 Green buildings are key to Singapore’s effort to transit to a low-carbon and climate resilient future. Existing buildings due for retrofitting should strive to achieve the highest energy performance as feasible in their next retrofit and avoid missing the opportunity to unlock the full potential to reduce carbon emissions and maximise cost savings over the building’s lifecycle. Hence, the \$63 million GMIS-EB 2.0 has been introduced as part of the initiatives under SGBMP to raise the energy performance standards of existing buildings and step up the pace to green 80% of our buildings by 2030.

GMIS-EB 2.0

¹ BCA has co-created the next Singapore Green Building Masterplan (SGBMP) together with the Singapore Green Building Council (SGBC) and tripartite stakeholders. The SGBMP aims to deliver three outcomes, “80-80-80 in 2030”: 1) 80% of buildings by Gross Floor Area (GFA) to be green by 2030, 2) 80% of new developments by GFA to be Super Low Energy (SLE) buildings from 2030 and 3) 80% improvement in Energy Efficiency (EE) (compared to 2005 levels) for best-in-class green buildings by 2030 through Research & Innovation.

- 3 The GMIS-EB 2.0 is outcome-based where Owners can receive funding support based on the Green Mark certification rating and actual carbon abatement achieved through Energy Improvement Works (EIWs), subject to a funding cap as illustrated in Table 1 (“Funding Cap”).

Table 1: Funding Factor and Grant Cap

Qualifying Criteria	Funding Factor	Funding Cap
Green Mark Platinum	\$25/tCO ₂ e	\$600,000 or up to 50% of qualifying cost, whichever is lower
Green Mark Super Low Energy (SLE)	\$35/tCO ₂ e	\$900,000 or up to 50% of qualifying cost, whichever is lower
Green Mark Zero Energy (ZE)	\$45/tCO ₂ e	\$1,200,000 or up to 50% of qualifying cost, whichever is lower

- 4 Owners will have the flexibility to design and deploy a combination of the best energy efficient designs and technologies in their projects to meet the required energy efficiency standards under the BCA Green Mark Platinum/SLE/ZE certifications² and maximise energy savings and corresponding carbon abatement by carrying out the EIWs. A non-exhaustive list of eligible equipment which are eligible for funding under the Scheme can be found in Annex 1 of the terms and conditions of the Scheme (“T&Cs”).
- 5 As part of the Scheme requirements, permanent Measuring & Verification (M&V) instruments must be installed in respect of all EIWs for purposes of verifying and determining the actual energy savings attributable to such EIWs and hence the corresponding actual carbon abated (“Actual Carbon Abated”). Owners are also encouraged to actively engage their tenants to embark on energy efficiency retrofits and improve their building’s overall energy performance.
- 6 GMIS-EB 2.0 is applicable to the following types of privately-owned existing buildings with a GFA of at least 5,000m²:
- Commercial and institutional developments (e.g. hotels, office buildings, retail buildings, healthcare facilities, community institutions),
 - Light industrial buildings^{3 4}; and
 - Residential buildings⁵.

Grant Process (Appendix 1)

GMIS-EB 2.0 Scheme Application

² Under the new reinvented GM 2021, GM Platinum and GM SLE (including ZE) buildings need to achieve a minimum of 55% and 60% energy efficiency improvement over the 2005 levels respectively.

³ Only applicable to light industrial buildings where the company’s business activity is classified under building sector Singapore Standard Industrial Classification (SSIC) codes, beginning with 41-43, 46-47, 55-56, 59-62, 64-66, 68-75, 77-82, 84-88, 90-97 and 99.

⁴ Energy savings from manufacturing, industrial and commercial processes shall be excluded from the energy savings calculation.

⁵ Only energy savings from common areas/services shall be included in the energy savings calculation.

- 7 Owners who are interested to participate in the Scheme can apply via the [Application Form](#) and BCA will evaluate the Owner's application after it has been submitted. A complete application shall consist or contain the following documents/written information:
- a. GMIS-EB 2.0 Scheme Application Form;
 - b. Building Title Deed;
 - c. ACRA Bizfile;
 - d. a retrofit proposal endorsed by a third-party Qualified Professional⁶;
 - e. logged energy consumption data of all proposed EIWs performed for a minimal period of 2 weeks prior to the commencement of such EIWs; and
 - f. relevant sections of the contract document detailing the works and costs involved for the EIWs.
- 8 The maximum amount of grant that an Owner can receive under the Scheme shall be determined by the estimated carbon abated attributable to the EIWs, 50% of the estimated cost to be incurred by the Owner in relation to the purchase and installation of the EIWs and procurement of professional services for the project or the applicable Funding Cap for the project, whichever is lowest ("Maximum Grant Amount"). Please refer to Annex 3 of the attached T&Cs for an illustration on how the Maximum Grant Amount is to be calculated.
- 9 The carrying out of the EIWs, including but not limited to the demolition and installation works related to the EIWs that are proposed to be co-funded under the Scheme, shall only commence after the Owner's application has been approved by BCA.

Issuance of Letter of Acceptance

- 10 Applicants will be informed of the results of their application within 3 weeks from BCA's receipt of a complete application. If the application is approved, BCA will issue a letter of acceptance ("LOA") to the Owner, and such LOA will indicate the Maximum Grant Amount that the Owner is able to receive under the Scheme. A valid and binding agreement between the Owner and BCA based on the T&Cs (as set out in [Appendix 2](#) herein) will be concluded in respect of the Owner's development's participation in the Scheme upon the Owner's receipt of such LOA.

Disbursement Applications

- 11 The grant will be disbursed in two tranches:

First Tranche Application

- (i) Owners can submit the application for disbursement under the first tranche of the Scheme ("First Tranche Application") upon receiving the LOA from BCA and after the commencement of the EIWs. The quantum of the first tranche shall be determined based on the costs incurred by the Owner in relation to the purchase and installation of the EIWs, carrying out of building works relating to the conversion of air-conditioned spaces to naturally ventilated or mixed mode ventilation spaces and procurement of professional services for the project ("Actual Qualifying Costs") as at the date of the First Tranche Application and shall be subject to a maximum cap of 30% of the Maximum Grant Amount as indicated in the LOA. Supporting documents including but not limited to certified true copy invoices and signed payment receipts issued by the vendor/supplier must be provided for consideration.

⁶ A third-party Qualified Professional refers to Professional Engineer in the branches of mechanical or electrical engineering, Registered Energy Auditor with BCA or Green Mark Advanced Accredited Professional or Green Mark Advanced Accredited Professional (Facilities Management).

Second Tranche Application

- (ii) Owners can submit the application for disbursement under the second tranche of the Scheme (“Second Tranche Application”) after the completion of the EIWs and in any case no later than 36 months from the date of the LOA. At the point of application, the development shall have achieved the Green Mark certification and completed the Green Mark verification, where applicable. The quantum of the second tranche shall be calculated based on the (i) Actual Carbon Abated; (ii) 50% of the Actual Qualifying Costs incurred by the Owner for the project; or (iii) the applicable Funding Cap in Table 1, whichever is lowest, and shall not exceed an amount equal to the Maximum Grant Amount less the quantum of the first tranche. Supporting documents including but not limited to a retrofit report endorsed by a third-party Qualified Professional setting out updates on the technical details of the project and the Actual Carbon Abated attributable to the EIWs, certified true copy invoices and signed payment receipts issued by the vendor/supplier for costs incurred by the Owner for the period between the First Tranche Application and the Second Tranche Application must be provided for consideration.

12 More information can be found on the BCA website for [GMIS-EB 2.0](#).

Thank you.

Yours faithfully



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Grant Process for GMIS-EB 2.0

SCHEME APPLICATION Establishing expected carbon abatement		FIRST TRANCHE APPLICATION Mitigating upfront costs			SECOND TRANCHE APPLICATION Establishing realized carbon abatement		
Submit Application Form to BCA	BCA issues Letter of Acceptance (LOA)	Commencement of EIWs	Submit First Tranche Application Form to BCA	BCA approves First Tranche disbursement	Completion of EIWs	Submit Second Tranche Application Form to BCA	BCA approves Second Tranche disbursement
Applicants can apply for the scheme via FormSG		First Tranche Application can be made after commencement of EIWs.			Second Tranche Application can be made post-retrofit, after achieving Green Mark certification and completing verification, where applicable. Applicants are to submit the Second Tranche Application within 36 months from the LOA.		
<p>BCA will commence evaluation once Application is complete with the necessary documents, including but not limited to:</p> <ul style="list-style-type: none"> ▪ Application Form includes basic project details, to be submitted by the Owner ▪ Retrofit Proposal endorsed by a third-party Qualified Professional which includes technical details and Estimated Qualifying Costs of the EIWs, M&V methodology used to determine the Baseline Energy Consumption, proposed M&V methodology to determine the Actual Energy Consumption, and the Estimated Carbon Abatement from the EIWs, and the corresponding Maximum Grant Amount. ▪ 2 weeks of logged records containing the proposed EIWs' energy consumption pre-retrofit 		<p>BCA will commence evaluation once First Tranche Application is complete with the necessary documents, including but not limited to:</p> <ul style="list-style-type: none"> ▪ First Tranche Application Form includes basic project details, to be submitted by the Applicant ▪ Evidence of amount paid out (e.g. invoices and payment receipts) ▪ Evidence of BCA Green Mark application (e.g. Green Mark application form and acknowledgement receipt of Green Mark application) 			<p>BCA will commence evaluation once Second Tranche Application is complete with the necessary documents, including but not limited to:</p> <ul style="list-style-type: none"> ▪ Second Tranche Application Form includes basic project details, to be submitted by the Applicant ▪ Evidence of amount paid out (e.g. invoices and payment receipts) ▪ BCA Green Mark Letter of Award and Letter of Clearance ▪ Retrofit Report endorsed by a third-party Qualified Professional which includes updates to the information provided in the Retrofit Proposal, if any, photographic evidence of permanent M&V instrumentations installed for the EIWs, Actual Energy Savings from the EIWs and the corresponding Actual Grant Amount. ▪ 2 weeks of logged records containing the EIWs' energy consumption post-retrofit, after operations have stabilised 		
<p>If the Application is approved, BCA shall issue the LOA (which shall indicate the Maximum Grant Amount) to the Owner within 3 weeks from BCA's receipt of the complete application from the Owner.</p> <p>Note: Proposed EIWs can only commence after the LOA is granted by BCA.</p> <p>Applicants are advised not to issue Purchase Orders before receiving the LOA from BCA.</p>		<p>If the First Tranche Application is approved, BCA shall issue its approval to the Owner within 3 weeks from BCA's receipt of the complete First Tranche Application from the Owner.</p> <p>Applicants can expect to receive the disbursement amount credited into the bank account registered with Vendors@Gov within 3 months from the approval date.</p>			<p>If the Second Tranche Application is approved, BCA shall issue its approval to the Owner within 3 weeks from BCA's receipt of the complete Second Tranche Application from the Owner.</p> <p>Applicants can expect to receive the final disbursement amount credited into the bank account registered with Vendors@Gov within 3 months from the approval date.</p>		

TERMS AND CONDITIONS

- (A) BCA has implemented the Green Mark Incentive Scheme for Existing Buildings 2.0 (“**Incentive Scheme**”) with the aim of supporting Owners who want to achieve higher energy performance standards for their existing buildings. The Incentive Scheme is applicable to the following types of privately-owned existing buildings below which have a GFA of at least 5,000m²:
- (i) Commercial and institutional developments (e.g. hotels, office buildings, retail buildings, healthcare facilities, community institutions);
 - (ii) Light industrial buildings^{7 8}; and
 - (iii) Residential buildings⁹.
- (B) Under the Incentive Scheme, Owners can receive funding support based on the Actual Carbon Abated in their Developments through the carrying out of Energy Improvement Works, subject to the applicable Funding Cap for the Project or 50% of the Actual Qualifying Costs, whichever is lower.
- (C) The Owner is desirous of submitting the Application to BCA for purposes of obtaining the approval of BCA in relation to the Project’s participation in the Incentive Scheme.
- (D) BCA is desirous of providing its assessment of the Owner’s Application, and where appropriate, issue the Letter of Acceptance to the Owner for purposes of approving the participation of the Project in the Incentive Scheme.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. DEFINITIONS AND INTERPRETATION

1.1. In these T&Cs, the following words and expressions shall have the following meanings, except where the context otherwise requires:

“**Agreement**” means the whole agreement between BCA and the Owner in respect of the Project’s participation in the Incentive Scheme, comprising of the following documents:

- (i) the Application;
- (ii) the Letter of Acceptance; and
- (iii) these T&Cs,

“**Actual Carbon Abated**” means the carbon abated in respect of the Development attributable to the Energy Improvement Works which is calculated using the following formula:

$$\text{Actual Energy Savings (kWh/yr)} \times 0.408 \text{ kgCO}_2\text{e/kWh}^{10} \div 1000$$

⁷ Only applicable to light industrial buildings where the company’s business activity is classified under building sector Singapore Standard Industrial Classification (SSIC) codes, beginning with 41-43, 46-47, 55-56, 59-62, 64-66, 68-75, 77-82, 84-88, 90-97 and 99.

⁸ Energy savings from manufacturing, industrial and commercial processes shall be excluded from the energy savings calculation.

⁹ Only energy savings from common areas/services shall be included in the energy savings calculation.

¹⁰ Using 0.408 kgCO₂e/kWh as the conversion factor (CF) for this scheme on the average CO₂ emissions abated per kWh of electricity saved.

“Actual Energy Consumption” means the measured energy consumption of the building systems and areas of the Development as stated in the Retrofit Report after undergoing Energy Improvement Works;

“Actual Energy Savings” means the energy savings of the Development attributable to the Energy Improvement Works derived from the difference between the Baseline Energy Consumption and the Actual Energy Consumption;

“Actual Grant Amount” means the actual Grant amount determined based on (i) the Actual Carbon Abated; (ii) 50% of the Actual Qualifying Costs; or (iii) the applicable Funding Cap for the Project, whichever is lowest;

“Actual Qualifying Costs” means the actual qualifying costs (excluding GST) incurred by the Owner in relation to the following:

- (a) purchase of the Approved Equipment;
- (b) installation of the Approved Equipment;
- (c) carrying out of building works relating to the conversion of air-conditioned spaces to naturally ventilated or mixed mode ventilated spaces¹¹; and
- (d) Professional Services,

“Application” means the Owner’s application for the Project to be admitted into the Incentive Scheme and for such Project to be bound by these T&Cs;

“Application Form” means the application form found on [GMIS-EB 2.0 webpage](#), which is to be submitted by the Owner for participation in the Incentive Scheme;

“Approved Equipment” means the Eligible Equipment described in the Retrofit Proposal that are to be part of the Energy Improvement Works;

“Baseline Energy Consumption” means the current energy consumption of the building systems and areas of the Development prior to undergoing Energy Improvement Works as stated in the Retrofit Proposal;

“BCA” means the Building and Construction Authority, a statutory board established under the Building and Construction Authority Act 1999;

“Building Control Act” means the Building Control Act 1989;

“Business Day” means a day between Monday and Friday (both days inclusive), excluding any public holiday in Singapore;

“Completion Date” means the date falling 36 months from the date of the Letter of Acceptance;

“Development” means the site on which the Project is being carried out as described by the Owner in the Application;

“Effective Date” means the date on which the Letter of Acceptance is issued by BCA to the Owner;

“Eligible Equipment” means the non-exhaustive list of eligible equipment that are eligible for funding under the Incentive Scheme set out in Annex 1 hereto;

¹¹ This could include flooring, wall and/or partition, ceiling and lighting works, building services installation and dismantling works, where required.

“Energy Improvement Works” means the energy improvement works relating to the (i) installation of Approved Equipment, and (ii) redesigning and conversion of air-conditioned spaces to naturally ventilated or mixed mode ventilated spaces at the Development, for the purpose of improving the energy performance of the Development;

“Estimated Carbon Abated” means the estimated amount of carbon to be abated in respect of the Development attributable to the Energy Improvement Works which is calculated using the following formula:

$$(Estimated\ Energy\ Savings\ (kWh/yr) \times 0.408\ kgCO_2e/kWh^{12} \div 1000)$$

“Estimated Energy Consumption” means the estimated energy consumption of the building systems and areas of the Development as stated in the Retrofitting Proposal prior to undergoing Energy Improvement Works;

“Estimated Energy Savings” means the energy savings from the proposed Energy Improvement Works of the Development derived from the difference between the Baseline Energy Consumption and the Estimated Energy Consumption;

“Estimated Grant Amount” means the estimated grant amount determined based on the Estimated Carbon Abated;

“Estimated Qualifying Costs” means the genuine indicative estimate made and submitted by the Owner in the Application in relation to the estimated costs (excluding GST) to be incurred by the Owner for the following items:

- (a) purchase of the Eligible Equipment;
- (b) installation of the Eligible Equipment;
- (c) carrying out of building works relating to the proposed conversion of air-conditioned spaces to naturally ventilated or mixed mode ventilated spaces¹³; and
- (d) Professional Services,

“First Tranche” means the first tranche of the Grant which shall be subject to a maximum cap of 30% of the Maximum Grant Amount;

“First Tranche Application” means the application to be submitted by the Owner to BCA for purposes of claiming for the disbursement under the First Tranche;

“Funding Cap” means the funding cap amounts as set out in column (c) of Table 1 of Annex 2;

“Gross Floor Area” means the total area of covered floor space measured between the centre line of party walls including the thickness of external walls but excluding voids;

“Grant” means the monetary grant that the Owner may receive under the Incentive Scheme;

“Green Mark Rating” means the rating given pursuant to the Green Mark assessment conducted by BCA, based on the prevailing Green Mark criteria¹⁴;

¹² Using 0.408 kgCO₂e/kWh as the conversion factor (CF) for this scheme on the average CO₂ emissions abated per kWh of electricity saved.

¹³ This could include flooring, wall and/or partition, ceiling and lighting works, building services installation and dismantling works, where required.

¹⁴ The Green Mark 2021 (GM: 2021) is effective for all new applications from 1 November 2021. The criteria can be found at <https://www1.bca.gov.sg/buildsg/sustainability/green-mark-certification-scheme/green-mark-2021>.

“**GST**” means the tax chargeable in respect of the Approved Equipment and/or Professional Services, under the Goods and Services Tax Act 1993;

“**Incentive Scheme**” has the meaning ascribed to it in Recital (A) of these T&Cs;

“**Letter of Acceptance**” means the letter of acceptance issued by BCA to the Owner in respect of the Owner’s Application;

“**Maximum Grant Amount**” means the maximum Grant that the Owner can receive under the Incentive Scheme and is determined based on the (i) the Estimated Grant Amount; (ii) 50% of the Estimated Qualifying Costs; or (iii) the applicable Funding Cap for the Project, whichever is lowest, and which is to be calculated in accordance with formula set out in Annex 3;

“**Owner**” means the owner of the Development for whom or on whose behalf the Project is being carried out and who had submitted the Application in respect of the Project;

“**Parties**” means BCA and the Owner;

“**Professional Services**” means consultancy services on design and project management and other professional services engaged for or in connection with the Project;

“**Project**” means the carrying out of Energy Improvement Works at the Development as described by the Owner in the Application and the Retrofit Proposal;

“**Retrofit Proposal**” means the pre-retrofit proposal endorsed by a third-party Qualified Professional containing the following:

- (a) details of the Project;
- (b) technical details and Estimated Qualifying Costs of the Energy Improvement Works to be carried out in respect of the Development;
- (c) the Measurement & Verification (M&V) methodology used to determine the Baseline Energy Consumption;
- (d) the proposed M&V methodology to determine the Actual Energy Consumption; and
- (e) the Estimated Energy Savings of the Development.

“**Retrofit Report**” means a post-retrofit report endorsed by a third-party Qualified Professional containing the following:

- (a) updates to the information provided in the Retrofit Proposal, if any;
- (b) Actual Energy Savings; and
- (c) photographic evidence of all permanent M&V instrumentations installed for the Energy Improvement Works.

“**Second Tranche Application**” means the application to be submitted by the Owner to BCA for purposes of claiming for the disbursement under the Second Tranche;

“**Second Tranche**” means the second tranche of the Grant which shall be calculated based on the (i) Actual Carbon Abated; (ii) 50% of the Actual Qualifying Costs; or (iii) the applicable Funding Cap for the Project, whichever is lowest, and which shall not exceed an amount equal to the Maximum Grant Amount less the First Tranche amount;

“**Qualified Professional**” means a qualified professional holding at least one of the following certifications:

- (a) Professional Engineer in Mechanical or Electrical Engineering;
- (b) Registered Energy Auditor with BCA; or

- (c) Green Mark Advanced Accredited Professional or Green Mark Advanced Accredited Professional (Facilities Management).

“**T&Cs**” means the terms and conditions of the Incentive Scheme as contained herein.

2. APPLICATION PROCESS

- 2.1. Owners who intend to apply for the participation of the Project in the Incentive Scheme can apply via the Application Form.
- 2.2. The Owner shall submit the Application to BCA, which shall be accompanied by the following documents/written information listed below:
- (i) GMIS-EB 2.0 Scheme Application Form;
 - (ii) Building Title Deed;
 - (iii) ACRA Bizfile;
 - (iv) Retrofit Proposal;
 - (v) logged energy consumption data of all proposed Energy Improvement Works performed for a minimal period of 2 weeks prior to the commencement of such Energy Improvement Works; and
 - (vi) relevant sections of the contract document detailing the works and costs involved for the Energy Improvement Works.

3. BCA’S RIGHTS AND OBLIGATIONS

- 3.1. Upon receiving the Owner’s Application, BCA shall assess the Owner’s Application and be entitled to request for additional supporting documents and/or information from the Owner as it sees fit. Where BCA, in its sole discretion, accepts the Owner’s Application for the participation of the Project in the Incentive Scheme, BCA will issue the Letter of Acceptance to the Owner.
- 3.2. From the Effective Date until the date disbursements under the Second Tranche are paid to the Owner, BCA shall be entitled from time to time, through its authorised representatives which may include external auditors appointed by BCA, to conduct ad-hoc on-site and off-site audits to ensure that the terms and conditions of the Agreement, including these T&Cs are complied with, the Energy Improvement Works are being carried out, or have been carried out, in accordance with the Retrofit Proposal and that all reports and information submitted to BCA by the Owner are accurate, correct and not misleading. The Owner shall ensure that BCA’s authorized representatives are given full access to all accounts, records, documents, assets and the premises in connection with the Agreement, and shall provide BCA and its authorized representatives with all reasonable cooperation and assistance in connection with the audits. BCA shall bear its own costs and expenses incurred in respect of the audits performed under this clause, unless the audit identifies a material breach or default of the Agreement by the Owner, in which case the Owner shall reimburse BCA for all of BCA’s reasonable costs and expenses incurred in connection with the audit.
- 3.3. BCA shall determine, in its sole discretion, if the details contained in the Application are accurate. BCA shall be entitled to substitute its own calculations for those by the Owner if it is of the view that the Owner’s calculation(s) is / are not accurate. BCA’s determination of the Estimated Carbon Abated and the Estimated Grant Amount shall prevail and be conclusive.
- 3.4. BCA may:-

- (i) publish, in any manner and on any medium it deems fit, a list of projects including the Project that have or have not been accepted under the Incentive Scheme, withdrawal of the Letter of Acceptance and any statistical and/or other information in relation to the Project; and
- (ii) publish information in respect of the Project in any manner and on any medium it deems appropriate in so far as such publication is for the purposes of publicity of the Incentive Scheme.

3.5. If the Owner's Application is rejected by BCA, BCA shall be under no obligation to make available to the Owner the specific reasons for such rejection.

4. OBLIGATIONS OF OWNER

- 4.1. The Owner shall complete the Energy Improvement Works (including testing and commissioning works) by the Completion Date. If the Owner is unable to complete the Energy Improvement Works by the Completion Date, the Owner may send a written request to BCA at least 30 days prior to the Completion Date setting out the reasons for its inability to complete the said works by the Completion Date for BCA's consideration. BCA may, at its sole discretion, consent to an extension to the Completion Date by sending a written notice to the Owner, stipulating the extended Completion Date and any other terms and conditions that BCA may impose on the Owner in consideration of BCA granting the said extension. The said further extension to be granted by BCA (if any) is purely at BCA's sole discretion and nothing contained herein shall act to impose an obligation on BCA to agree to further extend the Completion Date.
- 4.2. The Owner shall install permanent M&V instrumentations for all the Energy Improvement Works performed at the Development for purposes of determining the Actual Carbon Abated.
- 4.3. The Owner shall only carry out the Energy Improvement Works after it has received the Letter of Acceptance from BCA.

5. DISBURSEMENT OF GRANTS

- 5.1. BCA shall have sole and absolute discretion to determine whether disbursements under the First Tranche and/or Second Tranche of the Grant are to be paid out to the Owner.
- 5.2. The Owner shall only be eligible for disbursements under the First Tranche of the Grant upon the satisfaction of the following conditions:
 - (i) the Owner submits the First Tranche Application after receiving the Letter of Acceptance from BCA and after commencement of Energy Improvement Works;
 - (ii) the First Tranche Application only contains claims for Actual Qualifying Costs already incurred by the Owner;
 - (iii) the First Tranche Application consists of the following documents/written information:
 - a. GMIS-EB 2.0 First Tranche Application Form;
 - b. summary of payments made by the Owner in respect of the Actual Qualifying Costs incurred by the Owner prior to the First Tranche Application;
 - c. proof that the Actual Qualifying Costs mentioned in paragraph b. above had been incurred by the Owner (i.e. certified true copy invoices and signed payment receipts issued by the vendor/supplier);
 - d. a copy of the Green Mark application form in relation to the Development which has been endorsed by BCA; and

- e. a copy of the Owner's details as approved under www.vendors.gov.sg which shall include the following details:
 - Vendor Name
 - Vendor ID
 - Bank Account Details
 - (iv) the Owner submits such other documents/written information as requested for by BCA.
- 5.3. The Owner shall only be eligible for disbursements under the Second Tranche of the Grant upon the satisfaction of the following conditions:
- (i) the Owner submits the Second Tranche Application after the completion of the Energy Improvement Works and in any case no later than the Completion Date;
 - (ii) the Development has achieved and completed the Green Mark certification and verification, where applicable;
 - (iii) the Second Tranche Application only contains claims for Actual Qualifying Costs already incurred by the Owner and which have not already been paid out in the First Tranche; and
 - (iv) the Second Tranche Application consists of the following documents/written information:
 - a. GMIS-EB 2.0 Second Tranche Application Form;
 - b. the Retrofit Report;
 - c. logged energy consumption data of all Energy Improvement Works for a minimal period of 2 weeks once the Energy Improvement Works have completed and the operation of the Development has stabilised (i.e. systems (e.g. chiller plant operations) are stabilized and optimized and building occupancy >60%);
 - d. summary of payments made by the Owner in respect of the Actual Qualifying Costs incurred by the Owner after the submission of the First Tranche Application and prior to the Second Tranche Application;
 - e. proof that the Actual Qualifying Costs mentioned in paragraph d. above had been incurred by the Owner (i.e. certified true copy invoices and signed payment receipts issued by the vendor/supplier); and
 - f. the Green Mark Letter of Award and Letter of Clearance.
 - (v) the Owner submits such other documents/written information as requested for by BCA.
- 5.4. BCA reserves the right to withhold the disbursement under the First Tranche or the Second Tranche if any of the conditions under Clause 5.2 or Clause 5.3 is not satisfied. In the event BCA exercises its right to withhold disbursement to the Owner under the First Tranche and/or the Second Tranche pursuant to this Clause 5.4 or elsewhere in these T&Cs and notwithstanding anything to the contrary contained herein, BCA shall not be held liable to the Owner under any circumstance whatsoever and howsoever arising.
- 5.5. If the Actual Grant Amount is less than the First Tranche already disbursed, the Owner:-
- (a) shall not be entitled to any disbursement under the Second Tranche; and
 - (b) shall pay to BCA the difference between the First Tranche and the Actual Grant Amount forthwith upon written demand as a debt within 3 months from the written notification.

6. LIMITATION OF LIABILITY

- 6.1. To the extent permitted under law, BCA and its directors, servants, agents, employees and authorized representatives shall not be liable for any and all direct and indirect loss, damage or claims arising from or in relation to the Agreement, including but not limited to the Letter of Acceptance.
- 6.2. To the extent permitted under law, BCA and its directors, servants, agents, employees and authorized representatives shall not be liable for any damage that arises from or relates to the Project or properties in the vicinity of the Project in the course of performing the Agreement.
- 6.3. The Owner shall fully indemnify, defend and hold harmless BCA and its directors, servants, agents, employees and authorized representatives from any loss, damage, costs or expenses (including legal costs on an indemnity basis) incurred or to be incurred by BCA and its directors, servants, agents, employees and authorized representatives by any third parties arising from or relating to the Agreement.

7. TERMINATION

- 7.1. Without prejudice to its rights under common law, BCA may, without any compensation to the Owner, terminate the Agreement and shall be under no obligation to make further payments which would otherwise be paid by giving the Owner a written Notice of termination, if:
 - (a) the Owner submits information and/or documents which are false, forged, fraudulent, misleading or reasonably suspected by BCA to be false, forged, fraudulent or misleading; or
 - (b) the Owner fails to comply with any terms and conditions of the Agreement, including any terms and conditions in these T&Cs, and the Owner fails to rectify the non-compliance within fourteen (14) days from the date of a written Notice of such non-compliance issued by BCA to the Owner in respect of the non-compliance.
- 7.2. In the event of termination of the Agreement pursuant to Clause 7.1 above, BCA shall be entitled to recover from the Owner part or all the monies that have been disbursed to the Owner pursuant to this Agreement.
- 7.3. Save as expressly provided for to the contrary, a termination of the Agreement will be without prejudice to the accrued rights, obligations and liabilities of BCA and the Owner under the Agreement.
- 7.4. Regardless of termination, discharge or expiry of the Agreement, the rights and obligations of BCA and the Owner under the Agreement which by their context, intent and meaning would reasonably be expected to survive the termination, discharge or expiry of the Agreement or any part thereof, shall so survive, including but not limited to Clauses 8 and 11.

8. DISPUTE RESOLUTION

- 8.1. In the event of a dispute arising from or in relation to the Agreement, Parties shall attempt in good faith to settle the dispute through mutual discussion within fourteen (14) days from the date of commencement of such mutual discussion or any other timeframe as may be agreed by the Parties. If the dispute remains unresolved within:
 - (i) fourteen (14) days from the date of commencement of such mutual discussion; or
 - (ii) any other timeframe as may be agreed by the Parties,

whichever is the latest, the Parties shall discuss the dispute with the senior management of BCA and use all reasonable endeavours to resolve the dispute:

- (i) within a further fourteen (14) days from the meeting with the senior management; or
- (ii) within any other timeframe as may be agreed by the relevant Parties; or
- (iii) if for whatever reason the meeting is not conducted within thirty (30) days from a Party's request to meet,

whichever is the latest.

8.2. In the event of a failure to resolve the dispute in accordance with Clause 8.1, the relevant Parties shall make reasonable efforts to resolve the dispute by mediation in accordance with the mediation procedure for the time being in force, of the Singapore Mediation Centre. One mediator shall be appointed by the Singapore Mediation Centre to facilitate the mediation. A Party who receives a notice for mediation from the other Party shall consent to and participate in the mediation in good faith in accordance with this Clause. The relevant Parties undertake to abide by the terms of any settlement reached at the mediation. The Parties hereby agree that there will be a minimum of one (1) full-day mediation session. Failure to comply with this Clause shall be deemed to be a breach of the Agreement.

8.3. If the dispute is not resolved by mediation under Clause 8.2 within sixty (60) days (or any other timeframe as may be agreed by the Parties) from the initiation of that mediation, the Parties irrevocably agree to refer the dispute to and have the dispute finally resolved by arbitration in Singapore in accordance with the Arbitration Rules of the Singapore International Arbitration Centre for the time being in force, which rules are deemed to be incorporated by reference. The venue and seat of arbitration shall be Singapore. The Tribunal shall consist of one (1) arbitrator and the language of the arbitration shall be English.

9. NO WAIVER

9.1. Any failure to exercise, or any delay in exercising, by BCA of any right or remedy under the Agreement shall not operate as a waiver of such right or remedy.

10. RELATIONSHIP

10.1. Nothing in the Agreement shall be construed as to create a partnership or joint venture of any kind between the Parties.

11. CONFIDENTIALITY

11.1. Each of the Parties shall at all times keep confidential (and procure that its respective representatives and nominees keep confidential) any confidential information in relation to the Incentive Scheme or to the other Party and its business and affairs which it or they may acquire in the performance of the Agreement and shall not use or disclose such confidential information except with the prior written consent of the other Party.

11.2. The provision of Clause 11.1 shall not apply in respect of: (a) any disclosure required by any law, regulation, order or directive of any governmental or regulatory body or court of competent jurisdiction in Singapore or elsewhere (including any recognized stock exchange); (b) any information disclosed by a Party to its representative or nominee for the purpose of the Agreement; (c) any information which comes into the public domain otherwise than by a breach of Clause 11.1 by a Party; (d) any information which is developed by a Party independently of the

confidential information disclosed by the other Party; or (e) any disclosure to a Party's financial or legal advisors.

12. WHOLE AGREEMENT

- 12.1. The Agreement sets forth the entire agreement and understanding between the Parties in respect of the subject matter hereof.
- 12.2. The Owner acknowledges that it has not been induced to enter into the Agreement by any representation, warranty or undertaking not expressly incorporated into the Agreement.

13. VARIATION

- 13.1. In the event any of the Parties seeks to vary the terms of the Agreement, the Parties must be in agreement regarding the variation, and no such variation of the Agreement shall be effective unless such variation is agreed to in writing and signed by all Parties.

14. ASSIGNMENT

- 14.1. The Owner shall not, without BCA's prior written consent, assign or otherwise transfer to any other party its rights, benefits and/or obligations under the Agreement.

15. THIRD-PARTY RIGHTS

- 15.1. A person who is not a party to the Agreement shall have no rights under the Contracts (Rights of Third Parties) Act (Cap. 53B) of Singapore to enforce or enjoy the benefit of any term of the Agreement.

16. NOTICES

- 16.1. Any notice or other communication in connection with this Deed (each, a "**Notice**") shall be:
- (i) in writing;
 - (ii) if applicable, legible; and
 - (iii) delivered by e-mail, hand, fax, pre-paid registered post or courier in accordance with this Clause 16.
- 16.2. A Notice to the Owner shall be sent to the address or e-mail address provided by the Owner under the "Project Team Details" section of the Application, or such other person or address as the Owner may notify in writing to BCA from time to time.
- 16.3. A Notice to BCA shall be sent to the following address or e-mail address, or such other person or address as BCA may notify in writing to the Parties from time to time:

BUILDING AND CONSTRUCTION AUTHORITY

Address: 52 Jurong Gateway Road
#11-01, Singapore 608550 (Above JEM)

E-mail: Jolene_CHONG@bca.gov.sg and Giselle_SEOW@bca.gov.sg

Attention: Administrator (Ms Jolene Chong/Ms Giselle Seow)
Green Mark Incentive Scheme for Existing Buildings 2.0
Environmental Sustainability Group - Green Building Policy Department

- 16.4. A Notice delivered in accordance with this Clause 16 shall be effective upon receipt and shall be deemed to have been received:
- (i) 2 days after posting, if delivered by pre-paid registered post;
 - (ii) at the time of delivery, if delivered by hand or courier;
 - (iii) at the time when receipt is confirmed, if delivered by fax to the specified fax number; or
 - (iv) at the time of transmission, if delivered by e-mail before 6pm on any Business Day, and on the following Business Day if sent after 6pm on any Business Day.

17. SEVERANCE

- 17.1. A court or administrative body of competent jurisdiction's determination that any provision of the Agreement is invalid or unenforceable shall not affect the other provisions of the Agreement, which shall remain in full force and effect. The Parties agree to substitute any invalid or unenforceable provision with a valid and enforceable provision which achieves similar effect as the invalid or unenforceable provision.

18. GOVERNING LAW

- 18.1. The Agreement is governed by and shall be construed in accordance with the laws of Singapore.

ANNEX 1
Eligible Equipment

S/N	Examples
1	Energy Efficient Lighting (e.g. LED)
2	High Energy Efficient Chillers
3	Chilled Water Pumps
4	Condenser Water Pumps
5	Cooling Towers
6	Chiller Plant Energy Optimization System
7	Chiller Auto Condenser Tube Cleaning System
8	Building Automation System (BAS)
9	Variable Speed Drives (VSD)
10	Air-conditioning Systems using Alternative Cooling Technologies (e.g. evaporative cooling)
11	Unitary Air-Conditioning System (e.g. 5-ticks VRV/VRF)
12	Efficient Air Handling Units (AHU) and Fan Coil Units (FCU)
13	CO2 Sensors for AHU System
14	CO Sensors for Carpark Ventilation Control System
15	Photo Sensors
16	Motion Sensors
17	Heat Pipe & Energy Recovery Wheel
18	Energy Efficient Lifts and Escalators
19	Regenerative Drives for Lifts
20	On-site Photovoltaics (PV) or other renewable energy sources

Note: Equipment not in the above list will be subject to review and approval from BCA.

ANNEX 2

Table 1 – Co-funding Rate per Project

(a) Qualifying Criteria	(b) Funding Factor	(c) Funding Cap
Green Mark Platinum	\$25/tCO ₂ e	\$600,000 or up to 50% of qualifying cost, whichever is lower
Green Mark (Super Low Energy)	\$35/tCO ₂ e	\$900,000 or up to 50% of qualifying cost, whichever is lower
Green Mark (Zero Energy)	\$45/tCO ₂ e	\$1,200,000 or up to 50% of qualifying cost, whichever is lower

ANNEX 3

Computation of Maximum Grant Amount

Example:

An office building, with a Gross Floor Area of 18,000 sqm, targets to achieve **Green Mark SLE** certification by retrofitting the following equipment:

Proposed Measure 1: Replacement of 2nos. of 400RT Chiller Plant System, Estimated Qualifying Cost \$1,800,000

Proposed Measure 2: Replacement of 23nos. of AHUs with VSD, Estimated Qualifying Cost \$1,400,000

Proposed Measure 3: Replacement to LED Lightings, Estimated Qualifying Cost \$70,000

Calculation of Maximum Grant Amount:

Based on scheme guidelines, the following applies for this project:

- Funding factor: \$35 / tonne
- Funding cap: \$900,000 or up to 50% of qualifying cost, whichever is lower

	A	B	C	D
Measures	Baseline Energy Consumption/yr based on energy audit (kwh/yr)	Estimated Energy Consumption/yr (kwh/yr)	Estimated Energy Savings/yr (kwh/yr) [A – B]	Estimated Carbon Abated/yr (tonnesCO ₂ e/yr) [C x 0.408*/1000]
1: Replacement of Chiller Plant	992,342	439,426	552,916	225.59
2: Replacement of AHU	839,098	225,908	613,190	250.18
3: Replacement of Lightings	53,453	5,880	47,574	19.41
*Using 0.408 kgCO ₂ e/kWh as the conversion factor (CF) for this scheme on the average CO ₂ emissions abated per kWh of electricity saved.			Total Carbon Abated/yr (tonnesCO₂e/yr)	495.18

$$\begin{aligned}
 \text{Estimated Grant Amount from Estimated Carbon Abated} &= \text{Sum of Estimated Carbon Abated for All Measures} \times \text{Funding Factor} \times \text{Equipment Useful Lifespan} \\
 &= 495.18 \text{ tonnesCO}_2\text{e/yr} \times \$35/\text{tonnes} \times 15\text{yrs} \\
 &= \$259,969.50
 \end{aligned}$$

$$\begin{aligned}
 \text{Total Estimated Qualifying Cost} &= \$1,800,000 + \$1,400,000 + \$70,000 = \$3,270,000 \\
 \text{50\% of total Estimated Qualifying Cost} &= \$1,635,000
 \end{aligned}$$

$$\begin{aligned}
 \text{Maximum Grant Amount} &= (\text{Estimated Grant Amount from Estimated Carbon Abated}) \text{ or } (50\% \text{ total Estimated Qualifying Cost}) \text{ or } (\text{Funding Cap of } \$900,000), \text{ whichever is lowest} \\
 &= \mathbf{\$259,969.50}
 \end{aligned}$$

Green Mark Incentive Scheme for Existing Buildings 2.0 (GMIS-EB 2.0)

Factsheet

13 To raise the energy performance standards of existing buildings and step up the pace to green 80% of our buildings by 2030, BCA has launch a \$63 million GMIS-EB 2.0 on 30 Jun 2022.

14 The scheme is outcome-based where Owners can receive funding support based on the Green Mark certification rating and Actual Carbon Abated achieved through Energy Improvement Works (EIWs), subject to a funding cap as illustrated in [Table 1](#).

Table 1: Funding Factor and Grant Cap

Qualifying Criteria	Funding Factor	Funding Cap
Green Mark Platinum	\$25/tCO ₂ e	\$600,000 or up to 50% of qualifying cost, whichever is lower
Green Mark Super Low Energy (SLE)	\$35/tCO ₂ e	\$900,000 or up to 50% of qualifying cost, whichever is lower
Green Mark Zero Energy (ZE)	\$45/tCO ₂ e	\$1,200,000 or up to 50% of qualifying cost, whichever is lower

15 Owners will have the flexibility to design and deploy a combination of the best energy efficient designs and technologies in their projects to meet the required energy efficiency standards under the BCA Green Mark Platinum/SLE/ZE certifications¹⁵ and maximise energy savings and corresponding carbon abatement by carrying out the EIWs. A non-exhaustive list of Eligible Equipment funded under the scheme can be found in [Appendix 1](#). As part of the Scheme requirement, permanent Measuring & Verification (M&V) instruments must be installed in respect of all EIWs for purposes of verifying and determining the actual energy savings attributable to such EIWs and hence the corresponding actual carbon abated.

16 GMIS-EB 2.0 is applicable to the following types of privately-owned existing buildings with a GFA of at least 5,000m²:

- d. Commercial and institutional developments (e.g. hotels, office buildings, retail buildings, healthcare facilities, community institutions);
- e. Light industrial buildings^{16 17}; and
- f. Residential buildings¹⁸.

¹⁵ Under the new reinvented GM 2021, GM Platinum and GM SLE (including ZE) buildings need to achieve a minimum of 55% and 60% energy efficiency improvement over the 2005 levels respectively.

¹⁶ Only applicable to light industrial buildings where the company's business activity is classified under building sector Singapore Standard Industrial Classification (SSIC) codes, beginning with 41-43, 46-47, 55-56, 59-62, 64-66, 68-75, 77-82, 84-88, 90-97 and 99.

¹⁷ Energy savings from manufacturing, industrial and commercial processes shall be excluded from the energy savings calculation.

¹⁸ Only energy savings from common areas/services shall be included in the energy savings calculation.

Grant Process (Appendix 2)

GMIS-EB 2.0 Scheme Application

- 17 Owners who are interested to participate in the Scheme can apply via the [Application Form](#) and BCA will evaluate the Owner's application after it has been submitted. A complete application shall consist or contain the following documents/written information:
- g. GMIS-EB 2.0 Scheme Application Form;
 - h. Building Title Deed;
 - i. ACRA Bizfile;
 - j. a retrofit proposal endorsed by a third-party Qualified Professional¹⁹;
 - k. logged energy consumption data of all proposed EIWs performed for a minimal period of 2 weeks prior to the commencement of such EIWs; and
 - l. relevant sections of the contract document detailing the works and costs involved for the EIWs.
- 18 The maximum amount of grant that an Owner can receive under the Scheme shall be determined by the estimated carbon abated attributable to the EIWs, 50% of the estimated cost to be incurred by the Owner in relation to the purchase and installation of the EIWs and procurement of professional services for the project or the applicable Funding Cap for the project, whichever is lowest ("Maximum Grant Amount"). Please refer to Annex 3 of the attached T&Cs for an illustration on how the Maximum Grant Amount is to be calculated.
- 19 The carrying out of the EIWs, including but not limited to the demolition and installation works related to the EIWs that are proposed to be co-funded under the Scheme, shall only commence after the Owner's application has been approved by BCA.

Issuance of Letter of Acceptance

- 20 Applicants will be informed of the results of their application within 3 weeks from BCA's receipt of a complete application. If the application is approved, BCA will issue a letter of acceptance ("LOA") to the Owner, and such LOA will indicate the Maximum Grant Amount that the Owner is able to receive under the Scheme. A valid and binding agreement between the Owner and BCA based on the T&Cs (as set out in [Appendix 2](#) herein) will be concluded in respect of the Owner's development's participation in the Scheme upon the Owner's receipt of such LOA.

Disbursement Applications

- 21 The grant will be disbursed in two tranches:

First Tranche Application

- (i) Owners can submit the application for disbursement under the first tranche of the Scheme ("First Tranche Application") upon receiving the LOA from BCA and

¹⁹ A third-party Qualified Professional refers to Professional Engineer in the branches of mechanical or electrical engineering, Registered Energy Auditor with BCA or Green Mark Advanced Accredited Professional or Green Mark Advanced Accredited Professional (Facilities Management).

after the commencement of the EIWs. The quantum of the first tranche shall be determined based on the costs incurred by the Owner in relation to the purchase and installation of the EIWs, carrying out of building works relating to the conversion of air-conditioned spaces to naturally ventilated or mixed mode ventilation spaces and procurement of professional services for the project (“Actual Qualifying Costs”) as at the date of the First Tranche Application and shall be subject to a maximum cap of 30% of the Maximum Grant Amount as indicated in the LOA. Supporting documents including but not limited to certified true copy invoices and signed payment receipts issued by the vendor/supplier must be provided for consideration.

Second Tranche Application

- (ii) Owners can submit the application for disbursement under the second tranche of the Scheme (“Second Tranche Application”) after the completion of the EIWs and in any case no later than 36 months from the date of the LOA. At the point of application, the Owner must procure that its development has achieved the Green Mark certification and completed the Green Mark verification. The quantum of the Second tranche shall be calculated based on the (i) Actual Carbon Abated; (ii) 50% of the Actual Qualifying Costs incurred by the Owner for the project; or (iii) the applicable Funding Cap in Table 1, whichever is lowest, and shall not exceed an amount equal to the Maximum Grant Amount less the quantum of the first tranche. Supporting documents including but not limited to a retrofit report endorsed by a third-party Qualified Professional setting out updates on the technical details of the project and the Actual Carbon Abated attributable to the EIWs, certified true copy invoices and signed payment receipts issued by the vendor/supplier for costs incurred by the Owner for the period between the First Tranche Application and the Second Tranche Application must be provided for consideration.

22 More information can be found on the BCA website for [GMIS-EB 2.0](#).

Eligible Equipment

S/N	Examples
1	Energy Efficient Lighting (e.g. LED)
2	High Energy Efficient Chillers
3	Chilled Water Pumps
4	Condenser Water Pumps
5	Cooling Towers
6	Chiller Plant Energy Optimization System
7	Chiller Auto Condenser Tube Cleaning System
8	Building Automation System (BAS)
9	Variable Speed Drives (VSD)
10	Air-conditioning Systems using Alternative Cooling Technologies (e.g. evaporative cooling)
11	Unitary Air-Conditioning System (e.g. 5-ticks VRV/VRF)
12	Efficient Air Handling Units (AHU) and Fan Coil Units (FCU)
13	CO2 Sensors for AHU System
1414	CO Sensors for Carpark Ventilation Control System
15	Photo Sensors
16	Motion Sensors
17	Heat Pipe & Energy Recovery Wheel
18	Energy Efficient Lifts and Escalators
19	Regenerative Drives for Lifts
20	On-site Photovoltaics (PV) or other renewable energy sources

Note: Equipment not in the above list will be subject to review and approval from BCA.

Grant Process for GMIS-EB 2.0

SCHEME APPLICATION Establishing expected carbon abatement		FIRST TRANCHE APPLICATION Mitigating upfront costs			SECOND TRANCHE APPLICATION Establishing realized carbon abatement		
Submit Application Form to BCA	BCA issues Letter of Acceptance (LOA)	Commencement of EIWs	Submit First Tranche Application Form to BCA	BCA approves First Tranche disbursement	Completion of EIWs	Submit Second Tranche Application Form to BCA	BCA approves Second Tranche disbursement
Applicants can apply for the scheme via FormSG.		First Tranche Application can be made after commencement of EIWs.			Second Tranche Application can be made post-retrofit, after achieving Green Mark certification and completing verification, where applicable. Applicants are to submit the Second Tranche Application within 36 months from the LOA.		
<p>BCA will commence evaluation once Application is complete with the necessary documents, including but not limited to:</p> <ul style="list-style-type: none"> ▪ Application Form includes basic project details, to be submitted by the Owner ▪ Retrofit Proposal endorsed by a third-party Qualified Professional which includes technical details and Estimated Qualifying Costs of the EIWs, M&V methodology used to determine the Baseline Energy Consumption, proposed M&V methodology to determine the Actual Energy Consumption, and the Estimated Carbon Abatement from the EIWs, and the corresponding Maximum Grant Amount. ▪ 2 weeks of logged records containing the proposed EIWs' energy consumption pre-retrofit 		<p>BCA will commence evaluation once First Tranche Application is complete with the necessary documents, including but not limited to:</p> <ul style="list-style-type: none"> ▪ First Tranche Application Form includes basic project details, to be submitted by the Applicant ▪ Evidence of amount paid out (e.g. invoices and payment receipts) ▪ Evidence of BCA Green Mark application (e.g. Green Mark application form and acknowledge receipt of Green Mark application) 			<p>BCA will commence evaluation once Second Tranche Application is complete with the necessary documents, including but not limited to:</p> <ul style="list-style-type: none"> ▪ Second Tranche Application Form includes basic project details, to be submitted by the Applicant ▪ Evidence of amount paid out (e.g. invoices and payment receipts) ▪ BCA Green Mark Letter of Award and Letter of Clearance ▪ Retrofit Report endorsed by a third-party Qualified Professional which includes updates to the information provided in the Retrofit Proposal, if any, photographic evidence of permanent M&V instrumentations installed for the EIWs, Actual Energy Savings from the EIWs to establish the Actual Carbon Abated and the corresponding Actual Grant Amount. ▪ 2 weeks of logged records containing the EIWs' energy consumption post-retrofit, after operations have stabilised 		
<p>If the Application is approved, BCA shall issue the LOA (which shall indicate the Maximum Grant Amount) to the Owner within 3 weeks from BCA's receipt of the complete application from the Owner.</p> <p>Note: Proposed EIWs can only commence after the LOA is granted by BCA.</p> <p>Applicants are advised not to issue Purchase Orders before receiving the LOA from BCA.</p>		<p>If the First Tranche Application is approved, BCA shall issue its approval to the Owner within 3 weeks from BCA's receipt of the complete First Tranche Application from the Owner.</p> <p>Applicants can expect to receive the disbursement amount credited into the bank account registered with Vendors@Gov within 3 months from the approval date.</p>			<p>If the Second Tranche Application is approved, BCA shall issue its approval to the Owner within 3 weeks from BCA's receipt of the complete Second Tranche Application from the Owner.</p> <p>Applicants can expect to receive the final disbursement amount credited into the bank account registered with Vendors@Gov within 3 months from the approval date.</p>		

Green Mark Incentive Scheme for Existing Buildings 2.0 (GMIS-EB 2.0)

Frequently Asked Questions (FAQs)

Eligibility

Q1. What types of buildings are eligible for the GMIS-EB 2.0 scheme?

- A. The scheme is applicable to the following types of privately-owned existing buildings with a GFA of at least 5,000m², and will be undergoing green retrofits:
- g. Commercial and institutional developments (e.g. hotels, office buildings, retail buildings, healthcare facilities, community institutions);
 - h. Light industrial buildings^{20 21}; and
 - i. Residential buildings²².

Privately-owned buildings that are fully or partially funded by the Government are not eligible for the scheme.

Q2. Are Data Centres eligible for the GMIS-EB 2.0 scheme?

- A. The GMIS-EB 2.0 Scheme will not be applicable for Data Centres.

Q3. Can buildings that are participating in other Government incentive schemes apply for GMIS-EB 2.0 concurrently?

- A. Buildings that have applied for GMIS-EB 2.0 are not allowed to apply for other sustainability-related incentive schemes funded by the Government (e.g. BCA's Green Building Innovation Cluster Demo funding (GBIC) or EDB's Resource Efficiency Grant for Energy (REG(E))). Building owners will be required to declare upfront during the application stage if their buildings had participated or is participating in any incentive schemes under BCA or other agencies.

Buildings that have benefitted from the previous Green Mark Incentive Schemes (GMIS), namely Green Mark Incentive Scheme for Existing Buildings (GMIS-EB) and Green Mark Incentive Scheme for Existing Buildings and Premises (GMIS-EBP) can apply for GMIS-EB 2.0. However, any scope of works previously funded under GMIS and still within the period of useful life at point of application for GMIS-EB 2.0, will be excluded in the determination of grant amount under GMIS-EB 2.0.

²⁰ Only applicable to light industrial buildings where the company's business activity is classified under building sector Singapore Standard Industrial Classification (SSIC) codes, beginning with 41-43, 46-47, 55-56, 59-62, 64-66, 68-75, 77-82, 84-88, 90-97 and 99.

²¹ Energy savings from manufacturing, industrial and commercial processes shall be excluded from the energy savings calculation.

²² Only energy savings from common areas/services shall be included in the energy savings calculation.

Q4. Would buildings that have an existing Green Mark rating be able to apply for the GMIS-EB 2.0 scheme?

- A. Buildings that have attained Green Mark Letter of Award for meeting Green Mark Platinum, Super low Energy, and Zero Energy standards under the Green Mark 2021(GM: 2021) criteria can apply for the GMIS-EB 2.0 scheme provided that the Letter of Award is still within its validity and the actual physical on-site works related to the proposed Energy Improvement Works have not commenced.

Building that have an existing Green Mark rating under the older criteria can apply for the GMIS-EB 2.0 scheme if the building is undergoing Energy Improvement Works to meet the qualifying criteria under the scheme and the actual physical on-site works related to the proposed Energy Improvement Works have not commenced.

Buildings that have already completed verification and attained Green Mark Letter of Clearance for meeting Green Mark Platinum, Super low Energy, and Zero Energy standards under the GM: 2021 criteria will not be eligible for the scheme.

Scheme Requirements

Q5. Which version of the Green Mark criteria will be used to evaluate applications under the GMIS-EB 2.0 scheme?

- A. Buildings under the GMIS-EB 2.0 scheme must be certified under the [Green Mark 2021 \(GM: 2021\)](#) criteria. Both GM: 2021 and GM: 2021 In-Operations are applicable. However, in the case where there are major retrofits or major energy use change that involve chiller replacement as part of the work scope, it will need to be assessed and certification under the main GM: 2021 criteria and GM: 2021 In-Operation will not be applicable.

If you have applied for Green Mark certification earlier and wish to make changes to the criteria category, please contact Ms Tracy Liu at [Tracy LIU@bca.gov.sg](mailto:Tracy_LIU@bca.gov.sg) or Ms Yeong Sok Ming at [YEONG Sok Ming@bca.gov.sg](mailto:YEONG_Sok_Ming@bca.gov.sg) to effect the changes. On the [Green Mark assessment fees](#), should the fees previously paid be lower than the new fees, the applicant will be required to top up the shortfall.

Q6. Would demonstrating the energy performance levels that is equivalent to Green Mark Platinum/ Super Low Energy/ Zero Energy be sufficient to qualify for the scheme?

- A. As part of the scheme requirement, the project would need to make application to Green Mark, attain the targeted Green Mark certification and complete the verification.

Q7. Which Energy Improvement Works (EIWs) would require Measurement & Verification (M&V)?

- A. Permanent M&V instrumentations must be installed in respect of all EIWs for purposes of verifying and determining the Actual Energy Savings attributable to such EIWs and hence the corresponding Actual Carbon Abated. This is also to allow building owners to monitor the building's energy performance and ensure their building continue to operate efficiently.

Application

Q8. How do building owners apply for the GMIS-EB 2.0 scheme?

- A. Owners who are interested to participate in the Scheme can apply via the [Application Form](#). As part of the application, applicants will be required to submit a list of documents including a Retrofit Proposal as endorsed by a third-party Qualified Professional²³. The Retrofit Proposal provides technical details of the proposed EIWs and Estimated Qualifying Costs of the EIWs, M&V methodology used to determine the baseline energy consumption, proposed M&V methodology to determine the Actual Energy Consumption, and the Estimated Carbon Abatement from the EIWs and the corresponding Maximum Grant Amount. More details on the documents required can be found on BCA's webpage for [GMIS-EB 2.0](#).

Applicants will be informed of the results of their application within 3 weeks from BCA's receipt of a complete application. If the application is approved, BCA will issue a letter of acceptance ("LOA") to the Owner.

Q9. We have just awarded a chiller replacement contract, but the work has not commenced, can we still apply for GMIS-EB 2.0?

- A. Yes, building owners can apply for GMIS-EB 2.0 prior to commencement of any physical on-site work related to the EIWs (including but not limited to the demolition and installation works related to the EIWs that are proposed to be co-funded under the Scheme). Applicants are advised not to issue Purchase Orders before receiving the LOA from BCA.

Establishing Grant Amount and Qualifying Cost

Q10. How do applicants compute the Maximum Grant Amount for their project?

- A. The maximum amount of grant that an Owner can receive under the Scheme shall be determined by the estimated carbon abated attributable to the EIWs, 50% of the estimated cost to be incurred by the Owner in relation to the purchase and installation of the EIWs and procurement of professional services for the project or the applicable Funding Cap for the project, whichever is lowest. BCA has prepared a Retrofit Proposal template to guide building owners in the determination of the Maximum Grant Amount. An example on how the Maximum Grant Amount is to be calculated can be found in [Appendix 1](#).

²³ A third-party Qualified Professional refers to Professional Engineer in the branches of mechanical or electrical engineering, Registered Energy Auditor with BCA or Green Mark Advanced Accredited Professional or Green Mark Advanced Accredited Professional (Facilities Management).

Q11. What scope of works are included under the GMIS-EB 2.0 scheme?

- A. Any works that improves the building's energy performance can be considered under the GMIS-EB 2.0 scheme. The grant amount is determined by the energy savings, and thus carbon abatement, attributable to these energy improvement works. Some examples include retrofits to cooling systems, conversion of air-conditioned areas to natural ventilation and installation of on-site photovoltaics. A non-exhaustive list of eligible equipment can be found in Appendix 2.

Q12. For light industrial buildings where the chiller plant system supplies to both production and space cooling, how do we account for the energy savings from retrofit works for the chiller plant system?

- A. In the event where the energy consumption used for production cannot be differentiated from those used for space cooling, the total energy savings from retrofitting of the chiller plant system can be proposed for the calculation of grant amount, subject to BCA's approval.

Q13. Do buildings need to achieve Green Mark Gold^{PLUS} SLE or Green Mark Platinum SLE to qualify for the GMIS-EB 2.0?

- A. As long as the building attains any form of SLE certification under Green Mark (i.e. Green Mark SLE, Green Mark Gold^{PLUS} SLE or Green Mark Platinum SLE), the building will be deemed to have met the Green Mark SLE criteria under the GMIS-EB 2.0 scheme.

Disbursement

Q14. How will the grant amount be disbursed in GMIS-EB 2.0?

- A. The grant will be disbursed in two tranches:

First Tranche Application: Owners can submit the application for disbursement under the first tranche of the Scheme upon receiving the LOA from BCA and after the commencement of the EIWs.

The quantum of the first tranche shall be determined based on the costs incurred by the Owner in relation to the EIWs of the project as at the date of the First Tranche Application and shall be subject to a maximum cap of 30% of the Maximum Grant Amount as indicated in the LOA. Supporting documents including but not limited to certified true copy invoices and signed payment receipts issued by the vendor/supplier must be provided for consideration.

If the First Tranche Application is approved, BCA shall issue its approval to the Owner within 3 weeks from BCA's receipt of the complete First Tranche Application from the Owner. Applicants can expect to receive the disbursement amount credited into the bank account registered with Vendors@Gov within 3 months from the approval date.

Second Tranche Application: Owners can submit the application for disbursement under the second tranche of the Scheme after the completion of the EIWs and in any case no later than 36 months from the date of the LOA.

At the point of application, the development shall have achieved the Green Mark certification and completed the Green Mark verification. The quantum of the second tranche shall be calculated based on the (i) Actual Carbon Abated; (ii) 50% of the Actual Qualifying Costs incurred by the Owner for the project; or (iii) the applicable Funding Cap, whichever is lowest, and shall not exceed an amount equal to the Maximum Grant Amount less the amount of the first tranche. Supporting documents including but not limited to a retrofit report endorsed by a third-party Qualified Professional setting out updates on the technical details of the project and the Actual Carbon Abated attributable to the EIWs, certified true copy invoices and signed payment receipts issued by the vendor/supplier for costs incurred by the Owner for the period between the First Tranche Application and the Second Tranche Application must be provided for consideration.

If the Second Tranche Application is approved, BCA shall issue its approval to the Owner within 3 weeks from BCA's receipt of the complete Second Tranche Application from the Owner. Applicants can expect to receive the final disbursement amount credited into the bank account registered with Vendors@Gov within 3 months from the approval date.

BCA has prepared a Retrofit Report template to guide building owners in the determination of the second tranche amount. More details on the documents required for First Tranche and Second Tranche Application can be found on BCA's webpage for [GMIS-EB 2.0](#).

Target ≠ Actual

Q15. What happens if a project is unable to meet their commitments of the scheme (i.e. Targeted Green Mark Rating or Estimated Energy Savings)?

- A. Building owners who are unable to attain the targeted Green Mark certification level or the Estimated Energy Savings will have their funding rate and Actual Grant Amount adjusted according to the actual Green Mark certification level and energy savings attained.

Building owners will be required to pay to BCA the difference between the First Tranche and the Actual Grant Amount if the Actual Grant Amount is less than the First Tranche already disbursed.

Q16. Would the funding rate and Maximum Grant Amount be adjusted if a project attains a higher Green Mark certification level or higher energy savings as compared to the estimated figure after completion of works?

- A. To facilitate grant management and ensure equal opportunities for other projects, the funding rate and Maximum Grant Amount will remain at the initial agreed upon figure as stipulated in the grant LOA. Nonetheless, when a project attains a better energy performance than the initial target, the building owner will be able to reap more savings through better energy performance from the retrofitted building over the building's life.

Q17. What if the realised carbon abatement is different from the expected carbon abatement?

- A. If realised \geq expected, the building owner will receive the Maximum Grant Amount, as stipulated in the grant LOA. The Second Tranche will be the Maximum Grant Amount less the First Tranche already paid out.

If realised $<$ expected, the Actual Grant Amount will be lower than the Maximum Grant Amount stipulated in the grant LOA as it will be adjusted based on the realised carbon abatement, subject to the Funding Cap or 50% of Actual Qualifying Costs, whichever is lower.

- If the Actual Grant Amount \geq First Tranche, the Second Tranche amount will be the Actual Grant Amount less the First Tranche already paid out.
- If the Actual Grant Amount $<$ First Tranche, the building owner will be required to pay to BCA the difference between the Actual Grant Amount and First Tranche already disbursed. The building owner will not be entitled to any further disbursements.

Q18. What if the Owner is unable to complete the EIWs within 36 months from the LOA (“Completion Date”)?

- A. Projects that encounter significant delays in the project timeline can appeal for a time extension providing the necessary justifications, subject to BCA’s approval. The Owner may send a written request to BCA at least 30 days prior to the Completion Date setting out the reasons for its inability to complete the said works by the Completion Date for BCA’s consideration. BCA reserves the right to withhold the disbursement under the Second Tranche or to terminate the Agreement if the Owner fails to comply with any terms and conditions of the Agreement. In the event of termination of the Agreement, BCA shall be entitled to recover from the Owner part or all the monies that have been disbursed to the Owner pursuant to this Agreement.

Others

Q19. What are the possible technologies that can help my building become a Super Low Energy Building (SLEB)?

- A. A list of such successful technologies is published and shared in the [SLEB Smart Hub](#) as part of the resources to facilitate gap analysis, benchmarking and adoption of these technologies. There are also smart tools in the webpage that would help analyse the energy impact of these technologies that building owners could consider and adopt to green their buildings.

Example:

An office building, with a Gross Floor Area of 18,000 sqm, targets to achieve **Green Mark SLE** certification by retrofitting the following equipment:

Proposed Measure 1: Replacement of 2nos. of 400RT Chiller Plant System, Estimated Qualifying Cost \$1,800,000

Proposed Measure 2: Replacement of 23nos. of AHUs with VSD, Estimated Qualifying Cost \$1,400,000

Proposed Measure 3: Replacement to LED Lightings, Estimated Qualifying Cost \$70,000

Calculation of Maximum Grant Amount:

Based on scheme guidelines, the following applies for this project:

- Funding factor: \$35 / tonne
- Funding cap: \$900,000 or up to 50% of qualifying cost, whichever is lower

	A	B	C	D
Measures	Baseline Energy Consumption/yr based on energy audit (kwh/yr)	Estimated Energy Consumption/yr (kwh/yr)	Estimated Energy Savings/yr (kwh/yr) [A – B]	Estimated Carbon Abated/yr (tonnesCO ₂ e/yr) [C x 0.408*/1000]
1: Replacement of Chiller Plant	992,342	439,426	552,916	225.59
2: Replacement of AHU	839,098	225,908	613,190	250.18
3: Replacement of Lightings	53,453	5,880	47,574	19.41
*Using 0.408 kgCO ₂ e/kWh as the conversion factor (CF) for this scheme on the average CO ₂ emissions abated per kWh of electricity saved.			Total Carbon Abated/yr (tonnesCO₂e/yr)	495.18

$$\begin{aligned}
 \text{Estimated Grant Amount from Estimated Carbon Abated} &= \text{Sum of Estimated Carbon Abated for All Measures} \times \text{Funding Factor} \times \text{Equipment Useful Lifespan} \\
 &= 495.18 \text{ tonnesCO}_2\text{e/yr} \times \$35/\text{tonnes} \times 15\text{yrs} \\
 &= \$259,969.50
 \end{aligned}$$

$$\begin{aligned}
 \text{Total Estimated Qualifying Cost} &= \$1,800,000 + \$1,400,000 + \$70,000 = \$3,270,000 \\
 \text{50\% of total Estimated Qualifying Cost} &= \$1,635,000
 \end{aligned}$$

$$\begin{aligned}
 \text{Hence, Maximum Grant Amount} &= (\text{Estimated Grant Amount from Estimated Carbon Abated}) \text{ or } (50\% \text{ of total Estimated Qualifying Cost}) \text{ or } (\text{Funding Cap of } \$900,000), \text{ whichever is lowest} \\
 &= \mathbf{\$259,969.50}
 \end{aligned}$$

Eligible Equipment

S/N	Examples
1	Energy Efficient Lighting (e.g. LED)
2	High Energy Efficient Chillers
3	Chilled Water Pumps
4	Condenser Water Pumps
5	Cooling Towers
6	Chiller Plant Energy Optimization System
7	Chiller Auto Condenser Tube Cleaning System
8	Building Automation System (BAS)
9	Variable Speed Drives (VSD)
10	Air-conditioning Systems using Alternative Cooling Technologies (e.g. evaporative cooling)
11	Unitary Air-Conditioning System (e.g. 5-ticks VRV/VRF)
12	Efficient Air Handling Units (AHU) and Fan Coil Units (FCU)
13	CO2 Sensors for AHU System
14	CO Sensors for Carpark Ventilation Control System
15	Photo Sensors
16	Motion Sensors
17	Heat Pipe & Energy Recovery Wheel
18	Energy Efficient Lifts and Escalators
19	Regenerative Drives for Lifts
20	On-site Photovoltaics (PV) or other renewable energy sources

Note: Equipment not in the above list will be subject to review and approval from BCA.