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 URA/PB/2009/04-DCG 6227 4792 (URA)
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CIRCULAR TO PROFESSIONAL INSTITUTES

Dear Sir

GREEN MARK GROSS FLOOR AREA INCENTIVE SCHEME FOR PRIVATE DEVELOPMENTS THAT ACHIEVED HIGHER-TIER GREEN MARK RATINGS

Objective

This circular gives the details of the Green Mark Gross Floor Area (GM GFA) incentive allowed beyond the Master Plan (MP) Gross Plot Ratio (GPR) for developments that achieved higher-tier Green Mark ratings of Platinum and Goldplus. The incentive is given to encourage greater adoption of green building technologies and building design practices that will contribute to the sustainable development of Singapore.

This circular should be read in conjunction with the overall 10% bonus GFA budget in URA's Circular No: URA/PB/2009/03-DCG dated 29 April 2009 on "Framework for Managing Bonus Gross Floor Area Incentives".

Effective date

With effect from 29 Apr 2009 for a period of 5 years with a mid-term review after 2 years of implementation.

Who should know

Building owners, developers, architects, M&E engineers and Green Building Technologies specialists.

Details of GM GFA Incentive Scheme

Background

1. In January 2005, BCA launched the Green Mark (GM) Scheme to promote the sustainable development of Singapore's built environment. The scheme encourages the adoption of an integrated design approach, incorporating passive design and various green building technologies to achieve greater energy efficiency and a more sustainable built environment.

GM GFA Incentive Scheme

2. To accelerate the adoption of environmentally-friendly green building technologies and building design practices that will contribute to the sustainable development of Singapore, BCA and URA have jointly released a set of GM gross floor area (GFA) incentives. For buildings that achieve higher-tier GM ratings of Platinum and Goldplus, developers / building owners (referred to as the "applicant") can enjoy additional GFA allowed beyond the Master Plan GPR.
3. Buildings that achieve GM Platinum can qualify for up to 2% additional GFA (subject to a cap of 5,000sqm) while those achieving GM Goldplus can qualify for up to 1% additional GFA (subject to a cap of 2,500sqm).

Green Mark Rating	GM GFA Incentive Scheme
Platinum	Up to 2% additional GFA beyond Master Plan GPR (subject to cap of 5,000sqm)
Goldplus	Up to 1% additional GFA beyond Master Plan GPR (subject to cap of 2,500sqm)

4. The approval of the additional GM GFA is subject to:
 - a) endorsement of the green building design concept by the Green Mark Incentive Committee (GMIC) of BCA;
 - b) achievement of stipulated GM standard assessed by BCA under the prevailing BCA's Green Mark Assessment criteria;
 - c) compliance with all other planning and urban design requirements for the site; and
 - d) payment of Development Charge (DC) or Differential Premium (DP), whichever is applicable.
5. The additional GM GFA will not form the new prescribed maximum Gross Plot Ratio (GPR) for the site upon redevelopment.

Eligibility

6. The types of development that are eligible for this GM GFA Incentive Scheme are shown in the table below.

Residential	Non-landed, Mixed commercial & residential development and others (approved case-by-case)
Non-Residential	Commercial, office, retail, business parks, industrial, institutional, community building, hotel, hospital, white site development and others (approved case-by-case)

7. The GM GFA Incentive Scheme will apply to all new private¹ developments, redevelopments and reconstruction developments² submitted on or after the effective date. Developments which have obtained planning approval but have not commenced construction of the superstructure works on site may also be considered for the GM GFA Incentive Scheme. For such cases, the applicant should obtain BCA's endorsement for the GM proposal before making an amendment or fresh submission to URA to include the additional GFA.
8. The GM GFA Incentive Scheme will also apply to Government Land Sale (GLS) sites, except for sites in which the GM Platinum or Goldplus standards are mandated as part of the sales condition³. For sites in which the Goldplus standard is mandated, the developer can still qualify for an incremental GFA incentive if the developer chooses to attain the higher GM Platinum standard⁴.
9. Applicants who take up the GM GFA Incentive Scheme **will not** be eligible for the Green Mark Incentive Scheme (GMIS)⁵.

Submission and evaluation process

10. Appendix 1 shows the flowchart for the submission and evaluation process for the GM GFA Incentive Scheme.
11. Applicants who are interested in the GM GFA Incentive Scheme must first submit an application form (attached in Appendix 2) to BCA and obtain BCA's

¹ For avoidance of doubt, the GM GFA incentive scheme **will not** apply to public sector developments.

² Reconstruction developments include major additions and alterations to existing building and major retrofitting to existing buildings as deemed suitable for the GM GFA incentive scheme at BCA's sole discretion.

³ Generally, sales sites located within new strategic growth areas, which include Marina Bay and Downtown Core, Jurong Gateway in Jurong Lake District, Kallang Riverside and Paya Lebar Central will be required to achieve the GM Platinum or GM Goldplus in the sales conditions.

⁴ Incremental incentive is the difference between the GFA incentives for GM Platinum and GM Goldplus.

⁵ Project consultants (i.e. Architect and M&E Engineers) whose developments meet the criteria would still be eligible for GMIS till the expiry of this scheme.

- endorsement before including the additional GFA in a planning submission to URA. This application must indicate the GM rating that the applicant has set out to achieve and provide details of the green building design concept proposal to demonstrate how that GM rating can be attained. BCA's GMIC will evaluate the application based on the prevailing Green Mark Assessment criteria before endorsing the application (more information can be obtained from http://www.bca.gov.sg/GreenMark/green_mark_criteria.html). With BCA's endorsement, the applicant can then proceed to plan and design the development with the additional GM GFA.
12. Following this, the applicant will submit the GM GFA computation form (attached in Appendix 3) and a copy of BCA's endorsement together with the development application incorporating the additional GFA to URA for planning approval. The GM GFA computation form must also be copied to BCA.
 13. The quantum of allowable GM GFA is based on the equivalent value of the green premium⁶ incurred for attaining the higher tier of GM and computed using the prevailing DC or DP rate, whichever is applicable. The prescribed Green Premium rates (see Appendix 3-1 for the set of Green Premium rates that will be effective from 29 Apr 09) and DC/DP rate to be used for computing the GM GFA will be pegged to the date of planning submission to URA where the GM GFA is proposed and leading to a conveyance where the GM GFA is first endorsed by URA and BCA. This would facilitate the applicants to do their feasibility studies and GM GFA computations by using the prevailing prescribed Green Premium and DC/DP rates at the point of the submission. The computation will be accepted if URA grants in-principle approval for the additional GFA through a planning conveyance, which could be a Provisional Permission (PP) or Written Direction (WD). For avoidance of doubt, URA will state clearly in the PP / WD that the proposed additional GM GFA (with exact GFA amounts) under the GM GFA Incentive Scheme is endorsed. Examples of how to compute the GM GFA is shown in Appendix 3-2.
 14. For mixed used developments, the applicant should ensure that the total proposed GFA, inclusive of the additional GM GFA, adheres to the use quantum requirements under the corresponding MP land use zone or any specific land sales requirement applicable to the site.
 15. Upon verification that the GM GFA computation is in order, URA will proceed with processing the development application while BCA will require the applicant to raise a security deposit (SD)⁷ within a stipulated period. To ease the financial burden on the applicant during this economic downturn, the SD required will be initially set at 50% of the market value of the full quantum of allowable GM GFA for a period of 2 years only (see Appendix 4 for an

⁶ Green premium is defined as the additional cost for the development to achieve the higher GM standard. BCA will review the prescribed Green Premium every 6 months (on 1 March and 1 September) and publish the same on its website: www.bca.gov.sg/sustain/sustain.html.

⁷ DP/DC rate is pegged to the date of planning submission to URA where the GM GFA is proposed and leading to a conveyance where the GM GFA is first endorsed by URA and BCA.

example on SD computation). For the avoidance of doubt, although the applicant need only provide a SD amount equal to 50% of the market value of the full quantum of allowable GM GFA, the applicant shall be liable for the full 100% of the market value of the additional GFA which has been approved and granted to the applicant should he fail to meet the stipulated GM standard and performance when the project is completed.

Consequences for non-compliance

16. Where the applicant has failed to meet the stipulated GM standard and performance, the applicant shall pay to BCA the amount(s) in the manner set out in Appendix 5. Where applicable, the said amount(s) shall be deducted from the SD. If the amount in the SD is insufficient, the applicant must pay to BCA the applicable shortfall sum on demand.

17. Checks for compliance will be done by BCA at 2 stages:

Stage 1: Before Temporary Occupation Permit (TOP) Stage

18. The applicant is required to apply to BCA for GM assessment and submit documentation that demonstrates achievement of the stipulated GM rating before Temporary Occupation Permit (TOP) stage. Clearance for TOP will be withheld if the applicant fails to submit evidence of achieving the intended GM rating.

19. If the applicant still has not submitted the evidence of achieving the intended GM rating after a reasonable grace period, and as such has failed to comply with the terms and conditions of the GM GFA Incentive Scheme, the applicant shall pay to BCA the amount(s) in the manner set out in Appendix 5 and clearance for TOP will be released. The said amount will be deducted from the SD. If the amount in the SD is insufficient, the applicant must pay to BCA the applicable shortfall sum on demand.

Stage 2: One Year after TOP Stage

20. One year after the issuance of TOP, BCA will assess the building performance for actual operation. Performance will be demonstrated through BCA Green Mark site validation and energy savings⁸, if applicable. The criteria of performance will be based on the prevailing BCA's Green Mark Assessment criteria.

21. Failure to achieve the required performance will result in the withholding of the SD. The applicant will be given up to one additional year to prove that the GM performance requirements are met. If the GM performance requirements are still not met after one additional year, the applicant shall pay to BCA the amount(s) in the manner set out in Appendix 5. The said amount will be deducted from the SD. If the amount to be deducted exceeds the amount of

⁸ The minimum energy savings requirements are only applicable for air-conditioned buildings (exclude residential buildings). The energy saving must be demonstrated by energy modeling and validated on completion.

- the SD or the available balance, the applicant shall pay to BCA the shortfall sum on demand.
22. Such amount collected at both stages will go to a fund that will be dedicated to supporting market adoption of green buildings and to other GM incentive schemes.
23. We would appreciate it if you could convey the contents of this circular to the relevant members of your organisation. If you or your members have any queries concerning this circular, please do not hesitate to contact BCA's hotline at Tel: 6325 5400 (email: bca_enquiry@bca.gov.sg) or URA's DCD Enquiry Line at Tel: 6223 4811 (email: ura_dcd@ura.gov.sg). We would be pleased to answer queries on this. For your information, the past circulars to the professional institutes are available from our websites <http://www.bca.gov.sg/greenmark/gmqfa.html> and <http://www.ura.gov.sg>.
24. Thank you.

Mr Tan Tian Chong
Director
Technology Development Division
Building and Construction Authority

Mr Han Yong Hoe
Group Director
Development Control
Urban Redevelopment Authority

Flowchart for GM GFA Incentive Scheme

Procedures	Forms/ documents	Parties Involved
<pre> graph TD StartA[Start A] --> Step1[Applicant submits GM GFA application to BCA before any planning submission to URA] Step1 --> Step2[Assess eligibility of project under GM GFA Incentive Scheme] Step2 --> Decision1{Is project eligible?} Decision1 -- No --> InformRejection[Inform applicant of rejection] Decision1 -- Yes --> Step3[BCA endorses application - informs applicant of endorsement - extends Letter of Offer] Step3 --> Step4[Applicant submits GM GFA computation and BCA's endorsement as part of DA involving bonus GFA to URA and copies BCA the GM GFA computation] Step4 --> Decision2{Bonus GFA correct?} Decision2 -- No --> InformRecompute[Inform applicant to re-compute] Decision2 -- Yes --> Step5[a. Applicant raises security deposit to BCA within BCA's stipulated period b. URA proceeds with processing DA involving additional GFA and grants approval] Step5 --> Step6[a. Applicant applies for GM assessment before TOP b. BCA conducts assessment] Step6 --> Step7[Applicant submits document of achievement of GM rating before TOP application] Step7 --> Decision3{Does project meet GM rating?} Decision3 -- Yes --> InformRecompute Decision3 -- No --> EndB[B] </pre>	<p>GM GFA Application Form</p> <p>Letter of Offer</p> <p>GM GFA Computation Form</p> <p>Security Deposit</p> <p>GM Application Form</p> <p>GM Letter of Award</p>	<p>Developer</p> <p>BCA</p> <p>BCA</p> <p>BCA</p> <p>Developer</p> <p>BCA/ URA</p> <p>Developer/ BCA/URA</p> <p>Developer/ BCA</p> <p>Developer</p> <p>BCA</p>

Flowchart for GM GFA Incentive Scheme (Cont'd)

Procedures	Forms/ documents	Parties Involved
<pre> graph TD B[B] --> A[BCA withholds clearance for TOP] A --> C{Project meets GM req. before or at the expiry of the grace period} C -- No --> D[Applicant pays BCA the amount(s) in the manner set out in Appendix 5. This amount will be deducted from the security deposit and TOP will be released] C -- Yes --> E[Release TOP] D -.-> E E --> F{Project meets performance at operation stage? (1)} F -- Yes --> G[Release security deposit] F -- No --> H[BCA withholds security deposit (2)] H --> I{Project meets performance after 1 yr?} I -- Yes --> J[Release security deposit] I -- No --> K[Applicant pays BCA the amount(s) in the manner set out in Appendix 5. This amount will be deducted from the security deposit, where applicable] K --> L[End] </pre> <p>The flowchart details the process from BCA withholding clearance to the final release of TOP and security deposit, contingent on performance metrics and payment of amounts.</p>	<p>TOP</p> <p>TOP</p> <p>Security Deposit</p> <p>Security Deposit</p>	<p>BCA</p> <p>BCA</p> <p>BCA</p> <p>BCA</p> <p>BCA</p>
<p>Note</p> <ol style="list-style-type: none"> 1. Validation of Green Mark performance one year after TOP includes site validation and energy modeling (if applicable) to ensure stipulated energy savings are achievable at operation. 2. Applicant will be given up to another year to carry out another validation exercise over the next 12 months to prove the minimum energy consumption savings meet the GM requirements. 		

Green Mark Incentive Committee
c/o Building & Construction Authority
5 Maxwell Road #17-00
Tower Block MND Complex
Singapore 069110

**APPLICATION FORM FOR GREEN MARK GFA INCENTIVE FOR ATTAINING
 HIGHER GREEN MARK RATING FOR PRIVATE DEVELOPMENTS**

PART 1 PARTICULARS OF PROJECT			
Development Name			
Description of Project			
Location			
Geographical Sector (as in URA's DC Table)		TS/MK No	
Development Type: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential (non-landed) <input type="checkbox"/> Mixed use development <input type="checkbox"/> Hotel <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Healthcare <input type="checkbox"/> Others _____ (please specify)			
Has Provisional Permission (PP) / Written Permission (WP) been obtained for the development? If yes, please attach a copy of the Grant of PP/WP			<input type="checkbox"/> Yes <input type="checkbox"/> No
Ref No		Decision No	
If PP / WP has been obtained, has works on the superstructure commenced?			<input type="checkbox"/> Yes <input type="checkbox"/> No
Targeted GM rating for the development		<input type="checkbox"/> Platinum	<input type="checkbox"/> Goldplus
Is the development under Government Land Sale site that incorporated mandatory minimum GM standard of Goldplus or Platinum		<input type="checkbox"/> Yes (<i>attach copy of the sales agreement</i>) <input type="checkbox"/> No	If Yes, rating required: <input type="checkbox"/> Platinum <input type="checkbox"/> Goldplus
Has the development obtained BCA GM rating before?		<input type="checkbox"/> Yes (<i>attach copy of the GM Letter of award</i>) <input type="checkbox"/> No	If Yes, rating obtained: <input type="checkbox"/> Platinum <input type="checkbox"/> Goldplus <input type="checkbox"/> Gold or below
PART 2 PARTICULARS OF THE APPLICANT (DEVELOPER / OWNER)			
Name of Firm			
Address			
Tel No		Fax No	
Name of person for contact			

PART 3 PARTICULARS OF THE QUALIFIED PERSON			
Name of Firm			
Address			
Tel No		Fax No	
Name of person for contact			
PART 4 PARTICULARS OF THE PROFESSIONAL M&E ENGINEERS			
Name of Firm			
Address			
Tel No		Fax No	
Name of person for contact			
PART 5 DESCRIPTION OF GREEN BUILDING CONCEPT PROPOSAL			
<p><i>Applicant shall indicate the energy-efficient, water-efficient and environmentally-friendly design, technologies and practices in the concept design proposal such that the development can achieve a high Green Mark rating with respect to BCA's Green Mark assessment criteria. Please include a separate detailed write-up and any other supporting materials, documents or information, e.g. site plans, past Green Mark projects and awards, detailed models, etc that you deem will help to illustrate and support your proposal. The attached submission must include the following:</i></p> <ul style="list-style-type: none"> <i>i) Concept of green building designs;</i> <i>ii) Energy / water saving targets and proposed plan to meet the targets;</i> <i>iii) Proposed green features and innovations;</i> <i>iv) Site layout plans and other drawings;</i> <i>v) Project team structure</i> 			
PART 6 AGREEMENT TO TERMS & CONDITIONS			
<p>I/We hereby confirm that I/we have read, understood and expressly agree to accept all the Terms and Conditions of this Application and the contents of the appendices. The Terms and Conditions are annexed hereto as Appendix 2-1.</p>			
_____		_____	
Name & Signature of Applicant (Developer/Owner)		Date	
PART 7 DECLARATION			
<p>I/We certify that the particulars and the information given in this application are true and correct.</p>			
_____		_____	
Name & Signature of Applicant (Developer/Owner)		Date	

ANNEXURE TO APPLICATION FORM FOR GREEN MARK GFA INCENTIVE FOR ATTAINING HIGHER GREEN MARK RATING FOR PRIVATE DEVELOPMENTS

TERMS AND CONDITIONS

1. Notwithstanding any other provision in the Green Mark GFA Incentive Scheme documents and any figure or information submitted by the applicant, the following will be evaluated, assessed, verified and / or determined by BCA at its sole discretion:-
 - (a) the eligibility of the project or building for the Green Mark Gross Floor Area Incentive Scheme (the “GM GFA Incentive Scheme”);
 - (b) the merits of the green building design concept proposal;
 - (c) the full quantum of allowable Green Mark Gross Floor Area (GM GFA);
 - (d) the equivalent market value of the additional Gross Floor Area for the purposes of determining the amount for which the applicant is liable to pay;
 - (e) the amount to be deducted from the security deposit and (where applicable) the amount of shortfall to be paid for not attaining the stipulated / targeted higher Green Mark rating;
 - (f) the Green Mark rating attained at the Temporary Occupation Permit Stage, and the building performance based on actual operation of the building at the one year after Temporary Occupation Permit Stage, as mentioned in paragraphs 18 to 21 of circular no. BCA/GM GFA/2009-04-TD1 (the “Circular”);
 - (g) the amount to be deducted from the security deposit and (where applicable) the amount of shortfall to be paid for not achieving:
 - i) before Temporary Occupation Permit stage, the stipulated Green Mark rating;
 - ii) one year after Temporary Occupation Permit stage, the site validation and / or energy savings target (where applicable);
 - (h) the accuracy of the contents in the application form;
 - (i) the authenticity of the documents submitted with the application form; and
 - (j) any non-compliance with the procedure set out in Appendix 1 of the Circular.
2. The applicant understands, agrees to and accepts all the contents of the Circular and its appendices and BCA’s Green Mark Assessment criteria.

3. BCA shall not be liable to the applicant for any loss, damage, delay or prejudice suffered by the applicant due to any non-compliance by the applicant with the procedure set out in Appendix 1 of the Circular.
4. (a) The applicant shall, within [14] days from in-principle approval given in the Provisional Permission or Written Direction (whichever is applicable) (“Stipulated Time”)(to be done in accordance with the procedure set out in Appendix 1 of the Circular), pay to BCA a security deposit in the manner and amount specified by BCA.

(b) If the security deposit is not paid within the Stipulated Time, BCA may at its sole discretion cancel the letter of offer for the GM GFA Incentive Scheme, and the application for the GM GFA Incentive Scheme shall be void and the applicant shall not be entitled to any benefit under the GM GFA Incentive Scheme.

(c) The applicant and BCA hereby expressly agree and accept that the amount payable for the additional GFA calculated in the manner as set out in Appendix 4 and Appendix 5 is a genuine pre-estimate of the market value of the additional GFA.
5. The applicant shall submit evidence to BCA showing that the targeted Green Mark rating has been achieved no later than 21 days prior to submitting the application for clearance for Temporary Occupation Permit by BCA.
6. In the event that the applicant is unable to meet the targeted Green Mark rating as agreed:-

(a) the applicant shall be allowed a grace period determined by BCA at its sole discretion (“the said period”) to comply and submit the evidence of having met the Green Mark rating as agreed; and

(b) during the said period, the applicant agrees and accepts that BCA shall have the right to withhold clearance for Temporary Occupation Permit.
7. If the applicant does not submit the evidence of attainment of the targeted Green Mark rating within the said period, or BCA finds, in its sole discretion, that the evidence submitted does not indicate attainment of the targeted Green Mark rating as agreed:

(a) the applicant shall pay to BCA the amount(s) in the manner set out in Appendix 5 of the Circular and BCA shall have the right to forthwith deduct from the security deposit the said applicable amount(s); and

(b) clearance for Temporary Occupation Permit will be issued after the expiry of the said period.

For avoidance of doubt, if the amount to be deducted exceeds the amount of the security deposit or the available balance, the applicant shall be liable to pay to BCA the shortfall thereof on demand.

8. One year after the issuance of Temporary Occupation Permit, BCA will assess building performance based on actual operation of the building. Building performance will be demonstrated through BCA Green Mark site validation and energy savings (if applicable). BCA's prevailing Green Mark Assessment criteria will be adopted for the purposes of the aforesaid assessment.
9. If BCA finds, pursuant to the assessment and at its sole discretion, that the site validation and energy savings (if applicable) have been achieved, then BCA shall refund the security deposit or balance thereof to the Applicant within [3] months from the time the formal assessment report is made.
10. If BCA finds, pursuant to the assessment and at its sole discretion, that the site validation and energy savings (if applicable) have not been achieved, the applicant will be allowed a further period of up to 1 year from the date of the finding (the "Further Period") to submit evidence to BCA's satisfaction that site validation and energy savings (if applicable) have been achieved. For avoidance of doubt, during the Further Period, the security deposit or balance thereof shall remain with BCA.
11. Within reasonable time after the expiry of the Further Period, BCA shall (again) determine, at its sole discretion, if the required site validation and energy savings (if applicable) have been achieved. In the event that BCA finds that the said targets have been fully achieved, BCA shall refund the security deposit or balance thereof. If the applicant fails to meet the site validation and energy savings targets (if applicable) after the expiry of the Further Period, the applicant shall pay to BCA the amount(s) calculated in the manner set out in Appendix 5. BCA shall deduct from the security deposit the said applicable amount(s). If the amount to be deducted exceeds the amount of the security deposit or the available balance, the applicant shall pay to BCA the shortfall thereof on demand. The calculation of the shortfall sum shall be pursuant to the formula in Appendix 5 and shall be provided to the applicant in writing. This written calculation shall be conclusive of the amount of the shortfall sum owed by the applicant to BCA. Any failure by the applicant to pay the shortfall sum shall be a breach of these terms and conditions.

BCA shall keep the applicant informed of any deduction from the security deposit.

12. The GM GFA computation shall be based on the equivalent value of the additional cost / green premium to be incurred for attaining the targeted tier of Green Mark and computed using the Development Charge (DC) or Differential Premium (DP) rate, whichever is applicable, in accordance with Appendix 3-2 of the Circular. The prescribed Green Premium and DC/DP rate to be used for computing the GM GFA shall be pegged to the date of planning submission to URA where the GM GFA is proposed and leading to a conveyance where the

GM GFA is first endorsed by the Urban Redevelopment Authority (URA) and BCA.

13. The applicant may choose not to take up the full quantum of allowable GM GFA under this GM GFA Incentive Scheme. In such a circumstance, the applicant will have to compute the security deposit based on the full quantum of allowable GM GFA applicable for the application and payable to BCA using the formula as stated in Appendix 4. BCA reserves the right to review the applicant's computation and, at BCA's sole discretion, where applicable and appropriate request for a revised sum of the security deposit.
14. The GM GFA incentive shall be subject to caps / limits as set out / exemplified in paragraph 3 and Appendix 3-2 of the Circular.
15. For the avoidance of doubt, grant of the GM GFA incentives shall be subject to:-
 - a. the endorsement of the green building design concept by the Green Mark Incentive Committee (GMIC) of BCA;
 - b. the achievement of stipulated Green Mark ratings / standards, such achievement to be determined solely by BCA in accordance with BCA's prevailing Green Mark Assessment criteria;
 - c. compliance by the applicant with all planning and urban design requirements as may be imposed by any statutory authority or under law in respect of the site; and
 - d. payment of Development Charge (DC) or Differential Premium (DP), whichever is applicable.
16. The GM GFA Incentive Scheme, this document, the Circular, and their respective appendices shall be governed by and construed in all respects in accordance with Singapore Law.
17. Any dispute between BCA and the applicant arising out of or in connection with the GM GFA Incentive Scheme, this document, the Circular, or their respective appendices, including any question regarding their existence, validity or termination, shall be referred to and finally resolved by arbitration in Singapore in accordance with the Arbitration Rules of the Singapore International Arbitration Centre ("SIAC Rules") for the time being in force, which rules are deemed to be incorporated by reference in this clause. The Tribunal shall consist of 1 arbitrator to be appointed by the Chairman of the SIAC. The language of the arbitration shall be English.
18. The security deposit shall be in the form of cash, a banker's draft, a performance bond or banker's guarantee in the terms and form set out in the Specimen Performance Bond and Specimen Banker's Guarantee.

GM GFA COMPUTATION FORM

COMPUTATION OF GM GFA	
Proposed development GFA (subject to MP allowable GPR) [G]	sqm
Prescribed Green Premium* [P] <i>* unit rate of prescribed Green Premium is pegged to the date of planning submission to URA where the GM GFA is proposed and leading to a conveyance where the GM GFA is first endorsed. The rate is available at BCA website: http://www.bca.gov.sg/greenmark/gmgfa.html</i>	\$ /sqm
Development Charge (DC) or Differential Premium (DP) Sector and Rate* <i>* DP/DC rate is pegged to the date of planning submission to URA where the GM GFA is proposed and leading to a conveyance where the GM GFA is first endorsed.</i>	Sector: — \$ /sqm
Land Value [V] = Development Charge (DC) or Differential Premium (DP) Rate / 0.7* <i>* formulae is based on DC / DP rates at 70% of the enhancement in land value</i>	\$ /sqm
EQUIVALENT BONUS GFA [(G x P) ÷ V]	sqm
% of Bonus GFA = (Equivalent Bonus GFA / G) x 100%	%
% CAP ON BONUS GFA	
Is the % of Bonus GFA more than cap of 2% of MP allowable GFA for GM Platinum or 1% of MP allowable GFA for GM Goldplus?	
If no, Bonus GFA = Equivalent Bonus GFA calculated	sqm
If yes, Bonus GFA = 2% of MP allowable GFA for GM Platinum or 1% of MP allowable GFA for GM Goldplus	sqm
ABSOLUTE CAP ON BONUS GFA	
Is the Equivalent Bonus GFA more than absolute cap of 5,000 sqm for GM Platinum or absolute cap of 2,500 sqm for GM Goldplus?	
If no, Bonus GFA = Equivalent Bonus GFA calculated	Sqm
If yes, Bonus GFA = 5,000 sqm for GM Platinum or 2,500 sqm for GM Goldplus	Sqm
Full quantum of allowable GM GFA (smallest of the above % and absolute caps)	Sqm

Note: GLS development that has incorporated mandatory GM Goldplus standard as sales condition but has opted for GM Platinum, will be entitled to Incremental incentive that is the difference between the GFA incentives for GM Platinum and for GM Goldplus.

PRESCRIBED GREEN PREMIUM RATES

Latest rate of Prescribed Green Premium with effect from 29 April 2009:-

Classification	Prescribed Green Premium
Residential Platinum	\$ 123/sqm
Residential Goldplus	\$92/sqm
Non-Residential Platinum	\$182/sqm
Non-Residential Goldplus	\$ 92/sqm

COMPUTATION OF GM GFA

The method of determining the GM GFA is based on the equivalent value of the additional cost [or green premium] incurred for attaining the higher tier of Green Mark:

$$\text{Equivalent Bonus GFA} = \frac{\left[\begin{array}{c} \text{Proposed GFA (sqm)} \\ \text{(subject to MP allowable GPR)} \end{array} \right] \times \left[\begin{array}{c} \text{Prescribed Green} \\ \text{Premium (\$/sqm)} \end{array} \right]}{\text{Land Value (\$/sqm) (determined by proxy using DC/DP rates)}}$$

The prescribed Green Premium and DC/DP rates used for computing the GM GFA will be pegged to the date of development application to URA where the GM GFA is proposed and leading to a conveyance where the GM GFA is first endorsed.

Example 1

Private commercial development at Marine Parade (Sector 94) with proposed GFA of 50,000 sqm, targeting for GM Platinum rating.

DC Rate (at Mar 09): \$3,360 / sqm
 Land Value: \$4,800 / sqm (derived from DC rates X 10/7)
 Prescribed Green Premium for Commercial GM Platinum (wef 29 Apr 09): \$182/sqm

$$\begin{aligned} \text{Equivalent Bonus GFA} &= (\text{Proposed GFA} \times \text{Prescribed Green Premium}) / \text{Land Value} \\ &= (50,000 \times 182) / 4,800 \\ &= 1,895.83 \text{ sqm or } 3.8\% \text{ bonus GFA} \end{aligned}$$

Full quantum of allowable GM GFA = **1,000 sqm (Cap at 2% bonus GFA)**

Example 2

Private residential development at Marine Parade (Sector 94) with proposed GFA of 280,000 sqm, targeting for GM Platinum rating.

DC Rate (at Mar 09): \$3,850 / sqm
 Land Value: \$5,500 / sqm (derived from DC rates X 10/7)
 Prescribed Green Premium for Residential GM Platinum (wef 29 Apr 09): \$123/sqm

$$\begin{aligned} \text{Equivalent Bonus GFA} &= (\text{Proposed GFA} \times \text{Prescribed Green Premium}) / \text{Land Value} \\ &= (280,000 \times 123) / 5,500 \\ &= 6,261.82 \text{ sqm or } 2.2\% \text{ bonus GFA} \end{aligned}$$

Full quantum of allowable GM GFA = **5,000 sqm (Cap at 5,000 sqm)**

Example 3

Private residential development at Jurong Gateway (Sector 112) with proposed GFA of 50,000 sqm under the GLS sites that incorporated mandatory GM Goldplus standard as sales condition but has opted for GM Platinum rating.

DC Rate (at Mar 09): \$2,450 / sqm
Land Value: \$3,500 / sqm (derived from DC rates X 10/7)
Prescribed Green Premium for Residential GM Platinum (wef 29 Apr 09): \$123/sqm
Prescribed Green Premium for Residential GM Goldplus (wef 29 Apr 09): \$92/sqm

The Equivalent Bonus GFA for GM Platinum

$$\begin{aligned}\text{Equivalent Bonus GFA} &= (\text{Proposed GFA} \times \text{Prescribed Green Premium}) / \text{Land Value} \\ &= (50,000 \times 123) / 3,500 \\ &= 1,757.14 \text{ sqm}\end{aligned}$$

Full quantum of allowable GM GFA = **1,000 sqm (Cap at 2% bonus GFA)**

The Equivalent Bonus GFA for GM Goldplus

$$\begin{aligned}\text{Equivalent Bonus GFA} &= (\text{Proposed GFA} \times \text{Prescribed Green Premium}) / \text{Land Value} \\ &= (50,000 \times 92) / 3,500 \\ &= 1,314.29 \text{ sqm}\end{aligned}$$

Full quantum of allowable GM GFA = **500 sqm (Cap at 1% bonus GFA)**

Incremental allowable GM GFA for GLS site that incorporated mandatory GM Goldplus standard as sales condition but has opted for GM Platinum rating
= Full quantum of allowable GM GFA (Platinum) - Full quantum of allowable GM GFA (Goldplus)
= 1,000 sqm - 500 sqm = **500 sqm**

COMPUTATION OF SECURITY DEPOSIT

Equivalent market value (EMV) of additional GFA is calculated as:

EMV of additional GFA = Land Value (\$/sqm) x Full quantum of allowable GM GFA (sqm)

where

Land Value [V] = Development Charge (DC) or Differential Premium (DP) Rate* / 0.7

* DP/DC rate is pegged to the date of planning submission to URA where the GM GFA is proposed and leading to a conveyance where the GM GFA is first endorsed.

Example

Private commercial development at Marine Parade (Sector 94) with GFA of 50,000 sqm, targeting for GM Platinum rating.

DC Rate: \$3,360 / sqm

Land Value: \$4,800 / sqm (derived from DC rates X 10/7)

Prescribed Green Premium for Commercial GM Platinum (wef 29 Apr 09): \$182/sqm

Equivalent Bonus GFA = (50,000 x 182) / 4,800
= 1,895.83 sqm or 3.8% bonus GFA

Full quantum of allowable GM GFA = **1,000 sqm (Cap at 2% bonus GFA)**

EMV of additional GFA = Land Value x Full quantum of allowable GM GFA
= 4,800 x 1,000
= \$4,800,000

Security Deposit to be raised is **50%** of EMV = **\$2,400,000**

Note: Full quantum of allowable GM GFA is the allowable GM GFA under the GM GFA Incentive Scheme

CALCULATION OF THE PAYABLE AMOUNT TO BE IMPOSED FOR NON-COMPLIANCE

Payable Amount For Not Attaining The Stipulated Higher GM Rating Before TOP (Deductible From The Security Deposit)

Should the developer fail to achieve the targeted GM rating before TOP, the developer shall pay a said amount of the Equivalent Market Value (EMV) of the additional GM GFA granted according to table below. The amount will be deducted from the security deposit. In any event that the amount to be deducted exceeds the amount of the security deposit or the available balance, the applicant shall pay to BCA the shortfall thereof on demand.

Targeted	Platinum	Goldplus
Attained		
Goldplus	50% of EMV	-
Gold or below	100% of EMV	100% of EMV

Example 1

Private commercial development at Marine Parade (Sector 94) with GFA of 50,000 sqm, targeting for GM Platinum rating.

Additional GM GFA granted: 1,000 sqm
DC rate: \$3,360 / sqm

Land Value* = $3.360 / 0.7 = \$4,800 / \text{sqm}$

* formulae is based on DC rate at the point of planning submission to URA where the GM GFA is proposed and leading to a conveyance where the GM GFA is first endorsed.

EMV of additional GFA = Land Value x Additional GM GFA granted
= $\$4,800 \times 1,000$
= $\$4,800,000$

If the development attained GM rating of Goldplus instead of the targeted GM Platinum, the payable amount shall be based on table above (i.e. 50% of EMV) and deducted from the security deposit.

Thus, payable amount to be deducted from the security deposit for not attaining the required GM Platinum rating = $50\% \times \$4,800,000 = \mathbf{\$2,400,000}$

Note: Additional GM GFA granted is the additional GM GFA applied for, approved and granted.

Payable Amount For Not Achieving Energy Savings Target After TOP (Deductible From The Security Deposit)

The payable amount for not achieving the targeted energy saving required under GM requirement at operation stage shall be based on table below. This payable amount will be deducted from the security deposit, where applicable. In any event that the amount to be deducted exceeds the amount of the security deposit or the available balance, the applicant shall pay to BCA the shortfall thereof on demand.

Targeted	Platinum <i>(at least 30% energy saving)</i>
Achieved energy savings	
27.5% to less than 30%	10% of EMV
25% to less than 27.5%	30% of EMV
Less than 25%	50% of EMV

Targeted	Goldplus <i>(at least 25% energy saving)</i>
Achieved energy savings	
22.5% to less than 25%	10% of EMV
20% to less than 22.5%	30% of EMV
Less than 20%	50% of EMV

Example 2

Using the same example above, as the development has attained GM Goldplus rating, the GM Goldplus criteria on performance on achieved energy saving shall apply.

If the development achieved only 23% of energy saving (instead of 25% for GM Goldplus), the payable amount to be deducted from the security deposit for non-performance is as follow:

$$\begin{aligned}
 \text{Payable amount (deductible from the security deposit)} &= 10\% \text{ of EMV}^* \\
 &= 10\% \times \$4,800,000 \\
 &= \mathbf{\$480,000}
 \end{aligned}$$

** formulae is based on DC rate at the point of planning submission to URA where the GM GFA is proposed and leading to a conveyance where the GM GFA is first endorsed*

Thus, payable amount to be deducted from the security deposit for not achieving the energy savings performance is **\$480,000**.

If the payable amount (\$480,000) exceeds the amount of the security deposit or the available balance, the applicant shall be liable to pay to BCA the shortfall thereof on demand.

With effect from 29 April 2014, this new appendix replaces Appendix 5 in its entirety. This revised Appendix 5 shall apply to projects already existing as at 29 April 2014 and all new projects after 29 April 2014.

CALCULATION OF THE PAYABLE AMOUNT TO BE IMPOSED FOR NON-COMPLIANCE & FALSE DECLARATION

i. Payable Amount For Not Attaining The Stipulated Higher GM Rating Before TOP or unable to clear GM verification stage 1 (site validation) after TOP (Deductible from the Security Deposit)

Should the developer fail to achieve the targeted GM rating before TOP or is unable to clear GM verification stage 1 (site validation) after TOP, the developer shall pay a said amount of the Equivalent Market Value (EMV) of the additional GM GFA granted according to table below. The amount will be deducted from the security deposit. In any event that the amount to be deducted exceeds the amount of the security deposit or the available balance, the applicant shall pay to BCA the shortfall thereof on demand.

Targeted \ Attained	Platinum	Goldplus
Goldplus	50% of EMV	-
Gold or below	100% of EMV	100% of EMV

In addition, these developers shall also not be considered for same or similar GM GFA incentive schemes offered by BCA for up to 2 years from the date the applicant is not able to receive the targeted Green Mark Rating.

Example 1

Private commercial development at Marine Parade (Sector 94) with GFA of 50,000sqm, targeting for GM Platinum rating.

Additional GM GFA granted: 1,000 sqm

DC rate: \$3,360 / sqm

Land Value* = $3.360 / 0.7 = \$4,800 / \text{sqm}$

* formulae is based on DC rate at the point of planning submission to URA where the GM GFA is proposed and leading to a conveyance where the GM GFA is first endorsed.

EMV of additional GFA = Land Value x Additional GM GFA granted
 = \$4,800 x 1,000
 = \$4,800,000

If the development attained GM rating of Gold^{PLUS} instead of the targeted GM Platinum, the payable amount shall be based on table above (i.e. 50% of EMV) and deducted from the security deposit.

Thus, payable amount to be deducted from the security deposit for not attaining the required GM Platinum rating = $50\% \times \$4,800,000 = \mathbf{\$2,400,000}$

Note: Additional GM GFA granted is the additional GM GFA applied for, approved and granted.

(ii) Payable Amount For Not Achieving Energy Savings Target After TOP (Deductible from the Security Deposit)

The payable amount for not achieving the targeted energy saving required under GM requirement at operation stage shall be based on table below. This payable amount will be deducted from the security deposit, where applicable. In any event that the amount to be deducted exceeds the amount of the security deposit or the available balance, the applicant shall pay to BCA the shortfall thereof on demand.

Targeted	Platinum <i>(at least 30% energy saving)</i>
Achieved energy savings	
27.5% to less than 30%	10% of EMV
25% to less than 27.5%	30% of EMV
Less than 25%	50% of EMV

Targeted	Goldplus <i>(at least 25% energy saving)</i>
Achieved energy savings	
22.5% to less than 25%	10% of EMV
20% to less than 22.5%	30% of EMV
Less than 20%	50% of EMV

In addition, applicants who are required to pay more than 10% of the EMV as a result of non-attainment of the targeted Green Mark Rating shall also not be considered for same or similar GM GFA incentive schemes offered by BCA for up to 2 years from the date the applicant is not able to receive the targeted Green Mark Rating.

Example 2

Using the same example above, as the development has attained GM Gold^{PLUS} rating, the GM Gold^{PLUS} criteria on performance on achieved energy saving shall apply. If the development achieved only 23% of energy saving (instead of 25% for GM Gold^{PLUS}), the payable amount to be deducted from the security deposit for non-performance is as follow:

$$\begin{aligned}
 \text{Payable amount (deductible from the security deposit)} &= 10\% \text{ of EMV}^* \\
 &= 10\% \times \$4,800,000 \\
 &= \mathbf{\$480,000}
 \end{aligned}$$

** formulae is based on DC rate at the point of planning submission to URA where the GM GFA is proposed and leading to a conveyance where the GM GFA is first endorsed*

Thus, payable amount to be deducted from the security deposit for not achieving the energy savings performance is **\$480,000**. If the payable amount (\$480,000) exceeds the amount of the security deposit or the available balance, the applicant shall be liable to pay to BCA the shortfall thereof on demand.

(iii) Penalty for False Declaration

BCA and its employees reserve the right to contact references and other sources to verify the information and documents submitted by each applicant. The applicant understands that the information and contents in documents submitted may be disclosed to third parties in the course of verification checks conducted by BCA and its employees.

BCA may, in addition to reporting the applicant to the relevant authorities for legal action, take the following courses of action if any information and/or documents submitted are false, forged, fraudulent, misleading or reasonably suspected by BCA to be false, forged, fraudulent or misleading:

- (a) Forfeit the entire Security Deposit amount and claim 50% of the Equivalent Market Value from the applicant as a debt if the GM GFA has already been utilised for the building/project; or
- (b) Withdraw the GM GFA incentive that has been allocated but remains unutilised for the building/project provided that BCA also does not forfeit the Security Deposit amount; or
- (c) Claim 100% of the Equivalent Market Value from the applicant as a debt should the security deposit already have been released to the applicant.

GM GFA utilised	Security Deposit collected	Course of Action to be taken by BCA
Yes	Yes	Forfeit SD (50% of EMV) and claim remaining 50% of EMV from Applicant
No	Yes or No	Withdraw Incentive
Yes	Collected and returned to Applicant	Claim 100% of EMV from Applicant

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