

## Factsheet on Built Environment Transformation Gross Floor Area (GFA) Incentive Scheme

- 1 The Built Environment Transformation Gross Floor Area Incentive Scheme is a collaboration between BCA and URA to drive transformation in the Built Environment (BE) sector. The scheme will support the Construction Industry Transformation Map (ITM), providing the impetus for our industry to adopt and deliver the ITM outcomes in the areas of digitalisation, productivity, and sustainability.
- 2 Under this scheme, developers / building owners can enjoy up to 3% additional GFA beyond the Master Plan Gross Plot Ratio (GPR) for delivering the stipulated ITM outcome requirements in their building development on private sites of at least 5,000 sqm GFA<sup>1</sup>. The BE Transformation GFA Incentive Scheme will be valid for a period of five (5) years from 24 November 2021 to 23 November 2026, unless otherwise extended.
- 3 The Incentive Scheme is also applicable to proposals for new developments on sites launched under the Government Land Sales (GLS) Programme on and prior to 31 March 2022<sup>2</sup>, for up to 2% bonus GFA above the Master Plan GPR if the superstructural works have not commenced.
- 4 The types of development that are eligible for this BE Transformation GFA Incentive Scheme are shown in the table below.

<b>Residential</b>	Condominium and Flat developments
<b>Non-Residential</b>	Commercial, Industrial and Institutional developments, such as office, retail, business parks, community building, hotel, hospital or white site developments
<b>Mixed use</b>	Any combination of the above
<b>Others</b>	To be assessed based on merits of proposal

- 5 The stipulated ITM outcome requirements include specific proven strategies in the three key areas mentioned and as summarised in the following chart and Table 1.

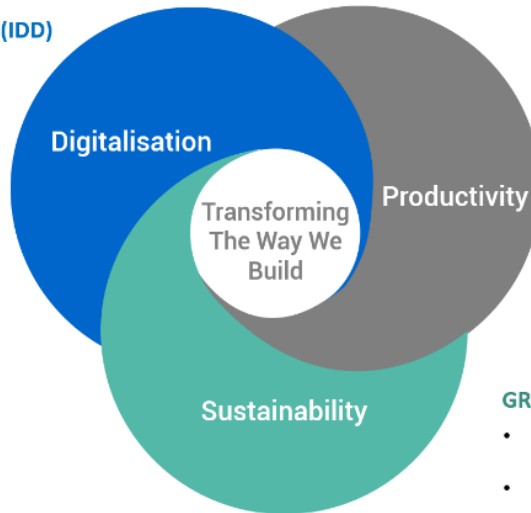
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<sup>1</sup> The qualifying criteria of 5,000 sqm in GFA considers the fact that larger developments tend to achieve sizeable productivity and sustainability outcomes. Smaller developments of less than 5,000 sqm GFA may be considered on a case-by-case basis on agencies' assessment. For avoidance of doubt, the BE Transformation GFA Incentive Scheme will not apply to public sector developments.

<sup>2</sup> There will be enhanced ITM outcomes mandated for developments on GLS sites going forward and hence, this scheme is not applicable to sites launched for tender after 31 Mar 2022.

**INTEGRATED DIGITAL DELIVERY (IDD)**

Enabled by Building Information Modelling (BIM), IDD fully integrates processes and stakeholders along the value chain through advanced info-communications technology (ICT) and smart technologies.



**DESIGN FOR MANUFACTURING & ASSEMBLY (DFMA)**

- Design upfront for ease of manufacturing and assembly
- Highly automated offsite production facilities
- Efficient and clean on-site installation process

**GREEN BUILDINGS**

- Design for high sustainability outcomes and performance
- Sustainable practices in operations and maintenance

**Table 1: Stipulated ITM Outcome Requirements under BE Transformation GFA Incentive Scheme**

Building Type	(A) Digitalisation <sup>3</sup>	(B) Productivity <sup>4</sup>	(C) Sustainability <sup>5</sup>
<b>Residential</b> <ul style="list-style-type: none"> <li>▪ Condominium</li> <li>▪ Flat Developments</li> </ul>	<ul style="list-style-type: none"> <li>• Minimum five (5) Integrated Digital Delivery (IDD) essential use cases covering three (3) stages of life cycle with at least one (1) use case per stage</li> <li>• Use of Common Data Environment (CDE) data standard and CDE compliant digital platform</li> </ul>	<ul style="list-style-type: none"> <li>• Minimum 65% Prefabricated Prefinished Volumetric Construction (PPVC)</li> <li>• Minimum 65% Prefabricated Mechanical Electrical &amp; Plumbing (Prefab MEP) systems</li> <li>• Minimum 70% System Formwork</li> <li>• Quality Mark (QM)</li> </ul> <p>OR</p> <p>Requirements stipulated for developments classified under Building Type - Others</p>	<p>Green Mark (GM) Platinum Super Low Energy (SLE) with Maintainability Badge*</p> <p><i>* exemplary performance (that is 10 out of 15 points) under the Maintainability Section in GM 2021 framework</i></p>

<sup>3</sup> More details at <https://www1.bca.gov.sg/buildsg/digitalisation/integrated-digital-delivery-idd/idd-implementation-plan> and <http://www1.bca.gov.sg/buildsg/digitalisation/integrated-digital-delivery-idd/cde-data-standard>

<sup>4</sup> More details at <https://www1.bca.gov.sg/buildsg/productivity/buildability-buildable-design-and-constructability/building-control-regulations>

<sup>5</sup> More details at <http://www1.bca.gov.sg/buildsg/sustainability/green-mark-certification-scheme/green-mark-2021>.

Building Type	(A) Digitalisation <sup>3</sup>	(B) Productivity <sup>4</sup>	(C) Sustainability <sup>5</sup>								
<p><b>Non-Residential</b></p> <ul style="list-style-type: none"> <li>▪ Commercial</li> <li>▪ Industrial</li> <li>▪ Institutional</li> </ul>	<ul style="list-style-type: none"> <li>• Minimum five (5) Integrated Digital Delivery (IDD) essential use cases covering four (4) stages of life cycle with at least one (1) use case per stage</li> <li>• Use of Common Data Environment (CDE) data standard and CDE compliant digital platform</li> </ul>	<p><u>Hotel</u></p> <ul style="list-style-type: none"> <li>• Minimum 65% PPVC</li> <li>• Minimum 65% Prefab MEP systems</li> <li>• Minimum 70% System Formwork</li> </ul> <p><u>Office</u></p> <ul style="list-style-type: none"> <li>• Structural Steel (SS) for minimum 80% of total office area</li> <li>• Minimum 65% Prefab MEP systems</li> <li>• Minimum 70% System Formwork</li> </ul> <p>OR</p> <p>Requirements stipulated for developments classified under Building Type - Others</p>	<p>GM Platinum SLE with Maintainability Badge*</p> <p><i>* exemplary performance (that is 10 out of 15 points) under the Maintainability Section in GM 2021 framework</i></p>								
<p><b>Mixed-Use Development</b></p> <ul style="list-style-type: none"> <li>▪ Combination of the above building types</li> </ul> <p><b>Others</b></p> <ul style="list-style-type: none"> <li>▪ Non-Residential development not specified above</li> <li>▪ Developments subject to review by URA's Design Advisory Panel<sup>6</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Minimum five (5) Integrated Digital Delivery (IDD) essential use cases covering <ul style="list-style-type: none"> <li>- Three (3) stages of project lifecycle for private residential sites</li> <li>- Four (4) stages of project lifecycle for private commercial/ industrial sites</li> </ul> </li> </ul> <p>with at least one (1) use case per stage</p> <ul style="list-style-type: none"> <li>• Use of Common Data Environment (CDE) data standard and CDE compliant digital platform</li> </ul>	<ul style="list-style-type: none"> <li>• Minimum 30% productivity improvement (compared to 2010 levels)</li> <li>• Minimum prefabrication levels to be adopted for the following systems:</li> </ul> <table border="1" data-bbox="778 1368 1042 1554"> <tbody> <tr> <td>Structural*</td> <td>65%</td> </tr> <tr> <td>Architectural</td> <td>80%</td> </tr> <tr> <td>Prefab MEP systems</td> <td>65%</td> </tr> <tr> <td>System Formwork</td> <td>70%</td> </tr> </tbody> </table> <p><i>*minimally Advanced Precast Concrete System to be adopted</i></p> <ul style="list-style-type: none"> <li>• QM for Residential Non-Landed component of the development.</li> </ul>	Structural*	65%	Architectural	80%	Prefab MEP systems	65%	System Formwork	70%	<p>GM Platinum SLE with Maintainability Badge* for the respective residential and non-residential component of the development, where relevant.</p> <p><i>* exemplary performance (that is 10 out of 15 points) under the Maintainability Section in GM 2021 framework</i></p>
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System Formwork	70%										

<sup>6</sup> Excludes development proposals submitted under the SDI/CBD incentive scheme. The required ITM outcomes for SDI/CBD incentive scheme development proposals will be separately assessed in relation to the context of the proposal, upon submission of the outline application for the SDI/CBDI development proposal.

## **FAQs: Built Environment Transformation Gross Floor Area (GFA) Incentive Scheme**

### **Q1 What is the BE Transformation GFA Incentive Scheme?**

The Built Environment Transformation Gross Floor Area Incentive Scheme allows developers / building owners to enjoy additional GFA beyond the Master Plan Gross Plot Ratio (GPR) for delivering the stipulated ITM outcome requirements in their building development on private sites, or Government Land Sales (GLS) sites launched on and prior to 31 March 2022, of at least 5,000 sqm in GFA.

This scheme will be open from 24 November 2021 for a five-year period till 23 November 2026, unless otherwise extended.

### **Q2 What is the eligibility and allowable Bonus GFA quantum that can be granted under this scheme. Is there a cap to the GFA quantum?**

Under this scheme, developers / building owners can enjoy up to 3% additional GFA allowed beyond the Master Plan Gross Plot Ratio (GPR) for delivering the stipulated ITM outcome requirements in their building development on private sites of at least 5,000 sqm GFA. This scheme is also extended to building developments on sites launched under the Government Land Sales (GLS) programme on or prior to 31 March 2022 for up to 2% bonus GFA above the Master GPR if the super-structural works have not commenced. Applicants who have obtained planning permission for their development proposals will need to submit an amendment or new application if they wish to apply for the BE Transformation GFA Incentive scheme, and their eligibility will be determined on a case-by-case basis.

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

<b>Residential</b>	Non-landed and others (approved case-by-case)
<b>Non-Residential</b>	Commercial, Industrial and Institutional developments, such as office, retail, business parks, community building, hotel, hospital or white site developments
<b>Mixed use</b>	Any combination of the above

### **Q3 When and how do developers/building owners submit their application for this scheme?**

Developers/Building owners who are interested in the BE Transformation GFA Incentive Scheme should submit the application early, prior to the development application for planning permission to URA. The application shall be submitted to BCA via [this form](#). Supporting documents such as the ITM Outcome Concept Plan<sup>7</sup> showing the proposed

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<sup>7</sup> ITM Outcome Concept Plan comprises project site plan and salient project details, IDD Implementation Plan, DFMA or Productivity Implementation Plan and Green Building Concept Plan.

ITM outcomes on digitalisation, productivity and sustainability for the development proposal will be required to assess the application.

**Q4 What do applicants need to do after the application for the scheme has been accepted?**

After the application for the BE Transformation GFA Incentive Scheme is endorsed by BCA, the qualified person can submit the Letter of Acceptance along with the BE Transformation GFA computation form and the development proposal to URA for planning approval.

When the additional bonus GFA quantum and usage of the Bonus GFA is formally approved by URA via grant of Written Permission, applicants will be required to raise and submit a Security Deposit (SD) in the form of performance bond or banker's guarantee that is equivalent to the market value<sup>8</sup> of the BE Transformation GFA approved by URA within one (1) month from the date of notice issued by BCA. The SD will be returned to the applicants when the ITM Outcome Requirements have been attained.

**Q5 How do applicants compute the Equivalent Market Value and Security Deposit?**

The method of determining the Equivalent Market Value (EMV) of the bonus GFA granted will be based on prevailing DC/DP rates. This is pegged to the date of planning submission to URA where the BE Transformation Bonus GFA is proposed and leading to a conveyance where the application is first endorsed by URA.

The Security Deposit will be the sum of 50% of the EMV of the BE Transformation GFA granted and to be calculated in accordance with Appendices 4 and 5 of the Circular issued.

**Q6 The BE Transformation GFA Incentive Scheme offers “up to 3%” (and “up to 2%” for sites launched for tender under the GLS Programme on and prior to 31 March 2022) bonus GFA for projects that have met the requirements under the scheme. How can projects attain the full 3% (or 2%) of bonus GFA?**

The total additional GFA allocated for the same development under the BE Transformation GFA Incentive Scheme and other Bonus GFA schemes applied by the developers will have to abide by the prevailing 10% cap for all Bonus GFA allowed over and above the Master Plan Gross Plot Ratio (MP GPR).

Where development proposals fall within areas with specific planning considerations (e.g. storey height controls) or are unable to fully accommodate the additional intensity due to on-site conditions (e.g. areas with traffic concerns), a lower quantum of BE Transformation GFA may be granted, and/or the bonus GFA may be limited to a particular use or uses. Applicants will be informed of any conditions on quantum and/or usage of the bonus GFA as part of the endorsement for the BE Transformation GFA Incentive Scheme application and incorporated as part of the planning approval from URA.

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<sup>8</sup> DP/DC rate is pegged to the date of planning submission to URA where the BE Transformation Bonus GFA is proposed and leading to a conveyance where the BE Transformation Bonus GFA is first endorsed by URA and BCA.

**Q7 Would redevelopment proposals granted bonus GFA under the Green Mark GFA Incentive Scheme be eligible for the BE Transformation GFA Incentive Scheme?**

Redevelopment proposals granted bonus GFA under the Green Mark GFA Incentive Scheme previously may be eligible for the higher bonus GFA quantum granted under BE Transformation GFA Incentive Scheme, provided that all the stipulated requirements and Terms and Conditions under the BE Transformation GFA Incentive Scheme are met and super-structural works for the redevelopment proposal have not commenced. Applicants are advised to submit an application to BCA for further assessment on the eligibility of the redevelopment proposal.

**Q8 What are the evidence required to demonstrate compliance with the stipulated ITM outcome requirements under this scheme?**

The evidence required for the fulfilment of ITM outcome requirements are largely based on verification of measures implemented on site, and assessments under the Green Mark Scheme and Quality Mark Scheme. As this scheme will involve improvements to the design and construction process of new developments, evidence of ITM outcome deliverables during the construction phase will be important. Applicants will be required to submit half yearly progress reports to track the progress of the deliverables. The specific outcome deliverables are detailed in Clause 4, 5 and 6 of the Terms and Conditions. Do refer to the progress report template available at BCA website as a guide to the deliverables and site progress/ assessment status required at different stages.

**Q9 What if a project does not meet the stipulated requirements under the BE Transformation GFA Incentive Scheme after completion?**

If a project fails to meet the stipulated requirements under the BE Transformation GFA Incentive Scheme, the applicant is liable to pay the "Termination Sum" or the sum equal to 100% of the Equivalent Market Value (EMV) of the BE Transformation Bonus GFA granted for the project. BCA will withhold the Security Deposit (SD) that was submitted to BCA and if there is a shortfall between SD and the Termination Sum, BCA will issue the Notice for "Balance Termination Sum" which is to be paid by the applicant.

**Q10 What is the difference between the BE Transformation GFA Incentive Scheme and other funding schemes driving ITM outcomes? Can developers tap on both schemes?**

The BE Transformation GFA Incentive Scheme aims to encourage private developers to incorporate technologies and practices to attain higher standards in the Construction ITM outcome areas: digitalisation (Integrated Digital Delivery), productivity (Design for Manufacturing and Assembly) and sustainability (including green buildings and facilities management), by granting bonus GFA above the Master Plot Ratio (MPR).

Other funding schemes may support firms in achieving transformation outcomes for projects that are equal to or higher than the standards set under the BE Transformation GFA Incentive Scheme for the ITM outcome areas.

Unless otherwise stated, projects that take up the BE Transformation GFA Incentive Scheme may be eligible for other funding schemes if the proposed ITM outcomes are higher than the stipulated ITM outcome under this scheme. However, the funding quantum for other scheme may be adjusted accordingly based on the improvements in the outcome deliverables to ensure there is no duplication in funding.

**Q11 Why is there a minimum size requirement imposed for the BE Transformation GFA Incentive scheme?**

The minimum size requirement of 5000 sqm in GFA was imposed as larger developments tend to achieve sizeable productivity and sustainability outcomes. Smaller developments of less than 5,000 sqm GFA may be considered for the BE Transformation GFA Incentive Scheme on a case-by-case basis on agencies' assessment. Applicants who are interested in the incentive scheme may apply to BCA with the requisite documents for assessment.