PROPOSAL FOR GREEN INCENTIVES AND IMPLEMENTATION & OPERATIONAL ASPECTS OF CASBEE ISKANDAR

January 2024

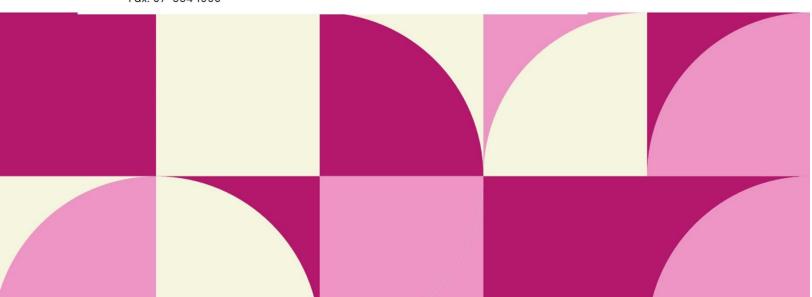


PREPARATION OF
MANUAL AND TEMPLATE
FOR CASBEE ISKANDAR
AND PROPOSAL FOR
GREEN INCENTIVES
IN THE MBJB AREA

Submitted by:



Uni Technologies Sdn Bhd Level 2, Industry Centre Building Technovation Park, UTM, 81310 Skudai, Johor. Tel: 07–558 1990 Fax: 07–554 1990



PROJECT TEAM

Prof. TPr Dr. Ho Chin Siong TPr Chau Loon Wai Ts. Dr. Mohd Hamdan Ahmad Ts. Dr. Gabriel Ling Hoh Teck Ts. Dr. Leng Pau Chung Assoc. Prof. TPr Dr. Siti Hajar Binti Misnan Assoc. Prof. Ar. Dr. Lim Yaik Wah Prof. Ir. Dr. Haslenda Binti Hashim Assoc. Prof. Ts. Dr. Ho Wai Shin Dr. AK Mohd Rafiq AK Matusin LAr. Ts. Dr. Nurzuliza Jamirsah Dr. Abdul Rahim bin Ramli Rohayu Abdullah Aw Siew Bee Nurul Binti Abdul Shukor Toh Sing Yee Ahmad Shuib Yahya





TABLE OF CONTENT

Chapte	r 1.0 Proposal for Green Incentives in the MBJB Area	4
1.1	Improvement Service Fund (ISF)	4
1.2 Buildi	Assessment of Applicability of Rebate of Improvement Service Fund in the MBJB ing Approval Process	7
1.3 Paym	The Basic Calculation of Rebate Incentive and Refund (reimbursement) of ISF	9
Chapte	r 2.0 Implementation And Operational Aspects Of Casbee Iskandar	.13
2.1 Reim	Implementation and Application Process for Assessment, Rebate Incentives, and bursement Incentives for ISF Payment for Green Buildings	.13
2.2 Fund	Provision of Rebate and Reimbursement Incentives from the Improvement Service (ISF) as a Green Incentive in Development within the MBJB Administrative Area	.15
2.3	Operationalise CASBEE Iskandar	.21
2.4 (Build	Overall Framework of implementation and operationalism of CASBEE Iskandar	.23

CHAPTER 1.0 PROPOSAL FOR GREEN INCENTIVES IN THE MBJB AREA

1.1 Improvement Service Fund (ISF)

In Malaysia, the total development costs of a housing project consist of three major elements:

- i. land cost
- ii. construction cost
- iii. soft cost (refers to architectural, engineering, financing, compliance, and legal fees, as well as other pre- and postconstruction expenses)

Under soft cost, there are capital contributions and compliance costs which are imposed on the developer. The capital contributions include contributions to TNB, SKMM, Telco etc., while compliance costs include development charges, ISF payment, infrastructure contributions, planning authorities etc. Both capital contributions and compliance costs have a significant impact on the project's feasibility, especially for developments under affordable housing schemes.

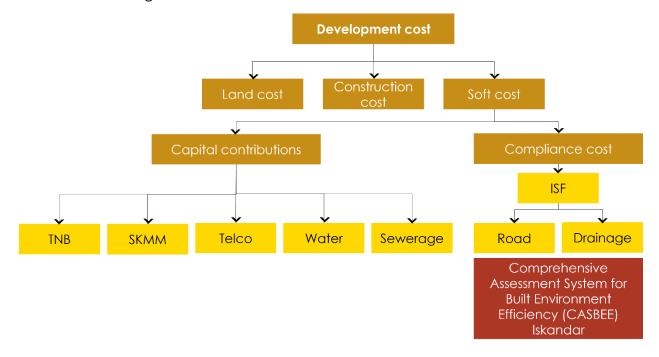


Figure 1: Capital contributions and Compliance cost

Among the compliance costs, the Improvement Service Funds (ISF) is a fund established in each local authority to collect funds for the beautification, construction or laying out of any street, drain, culvert, gutter or watercourse in their jurisdictions, according to the Street Drainage and Building Act 1974 (refer to Figure 2). There are several purposes of ISF, including (i) upgrading and beautifying existing roads and back alleys, (ii) building and improving access roads, (iii) building and upgrading intersections, (iv) constructing or arranging ditches, sewers, canals or waterways, (v) paying compensation to obtain land for road widening, (vi) paying compensation to obtain land for the upgrading of ditches and sewers, (vii) repairing and stabilising the slope, and (viii) upgrading and maintaining the landscape along the road reserve.

In the development process, ISF payment is required after the approval of a Building Plan Approval (BP) (refer to Figure 3). The ISF payment rate is different according to development type, which includes residential, commercial, complex, golf course, and industrial.

Improvement Service Fund

- 132. (1) There shall be established for the purpose of this Act in each local authority a fund to be known as the "Improvement Service Fund" into which shall be paid all moneys that may from time to time be paid to a local authority for the purposes of carrying out the provisions of this Act, all moneys recoverable by the local authority from any person under this Act or any by-laws made thereunder and any contributions from any person towards the beautification, construction or laying out of any street, "drain, culvert, gutter or water-course.
- (2) The Improvement Service Fund shall be administered by the local authority at its absolute discretion.
- (3) Without prejudice to the generality of paragraph (2) the local authority may pay out from the Improvement Service Fund any expenses which may be incurred in carrying out the provisions of this Act.

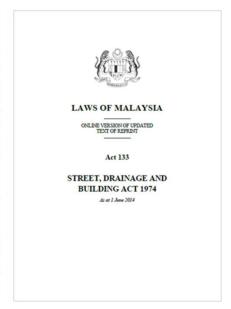


Figure 2: Section 132, Street Drainage and Building Act 1974

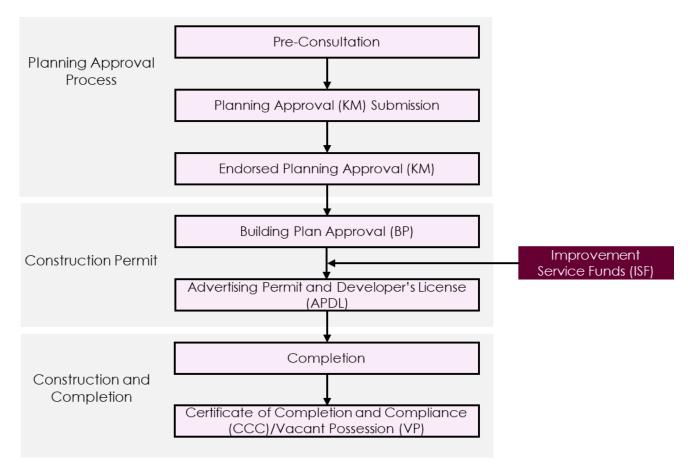


Figure 3: ISF in development process

In current practice, capital contributions and compliance costs can amount to 6% to 7% of the GDV, which has an adverse impact on house buyers. The passing-on of these to new homeowners is expected to directly contribute to reduced housing affordability.

As the leading and most rapidly developing local authority in Iskandar Malaysia, MBJB has been earmarked to lead the adoption and adaptation of the CASBEE Iskandar as a means of encouraging more green buildings to be constructed in Johor Bahru. This can be done by implementing CASBEE as one of ISF payment hence motivate developers to adopt CASBEE into their development in the future.

1.2 Assessment of Applicability of Rebate of Improvement Service Fund in the MBJB Building Approval Process

The formula used for the assessment of rebate of ISF in the MBJB building approval process is commonly charged based on GDV / selling price. For example, ISF for Government Residential Schemes (RMMJ, RMBJ, PRIMA, PPAM, and equivalents) is charged RM500 per unit for housing priced at RM100,000.00 and below and RM 1,000 per unit for housing priced exceeding RM100,000.00. (refer to Table 1). This effectively means the ISF payment is parallel to an increase in selling prices irrespective of what the actual costs for the upstream work developers are paying for.

For illustration, an example of a development project comprising 300 units of Government Residential Schemes (RMMJ, RMBJ, PRIMA, PPAM, and equivalents) for housing priced at RM100,000.00 and below per unit will attract an ISF payment of RM150,000. A similar development of 300 units of Government Residential Schemes (RMMJ, RMBJ, PRIMA, PPAM, and equivalents) for housing prices exceeding RM100,000.00 will pay ISF totaling RM 300,000 (refer to Table 3).

Meanwhile, an example for non-residential development (refer Table 2) comprising of 10,890 sqft of industrial plot development will attract an ISF payment of RM 2,000.00 for every sqft. This means the total ISF will be RM 21,780.00 (refer Table 3). These ISF payments must be paid directly to the local authority for specific purposes in complying with regulatory requirements and applicable guidelines.

Table 1: The amount of ISF	contribution p	payment for residential	development.

No.	Type of Development	The Contribution Rate Per Unit
1.	Residential	
	a. Development in the CentralDistrict/International Zone	RM 3,000.00
	b. Johor Bahru City Council Area	RM 2,500.00
2.	Government Residential Schemes (RMMJ, RMBJ, PRIMA, PPAM, and equivalents) a) RM100,000.00 and below	RM 500.00
	b) Exceeding RM100,000.00	RM 1,000.00

Remarks

- * Schedule is referred to the latest MBJB ISF policy
 - For residential houses not built by developers, the ISF payment is set at a rate of RM 1,000.00 per unit.
 - SOHO, SOVO, and SOFO are not categorized as residential properties.
 - Any changes to the addition of units must submit an additional ISF payment.
 - Any reduction in changes cannot be claimed.

Table 2: The amount of ISF contribution payment for non-residential development.

No.	Type of Development	The Contribution Rate Per Unit
1.	a. Development in the Central District/International Zone.	RM 3,000.00
	b. Johor Bahru City Council Area.	RM 2,500.00
2.	Industrial Development	RM2,000.00
3.	Golf course/theme park development excluding building	Rm5,000.00

Remarks:

- The floor area of parking spaces is not included in the calculation of floor area for determining the contribution rate for the Kumpulan Wang Perkhidmatan Kemajuan.
- Any increase in floor area must submit an additional payment for the ISF.
- Any reduction in floor area cannot be claimed.

Table 3: Example of ISF payment calculation

No.		Unit	Payment rate	Total payment rate				
Gov	Government Residential Schemes (RMMJ, RMBJ, PRIMA, PPAM, and equivalents)							
1.	RM100,000.00 and below	300	RM 500.00	RM 150,000.00				
2.	Exceeding RM100,000.00	300	RM 1,000.00	RM 300,000.00				
			Total	RM 450,000.00				
Resid PPAI price Total	nple of ISF payment for Government Schemes (RMMJ, RMI) M, and equivalents) for housed at RM100,000.00 and below I unit = 300 tribution rate = RM 500.00 per = 300 x RM 500 = RM 150,000.0	BJ, PRIMA, ing ow. er unit	Example of ISF payment for Government Residential Schemes (RMMJ, RMBJ, PRIMA, PPAM, and equivalents) for housing priced exceeding RM100,000.00. Total unit = 300 Contribution rate = RM 1,000.00 per unit = 300 x RM 1,000.00 = RM 300,000.00					
	Non-Residential Developm	ent						
1.	Industrial Plot Development	10,890 Sqft	RM 2,000.00 per sqft	RM 21,780.00				
			Total	RM 21,780.00				
Example of ISF payment for industrial plot development Total sqft = 10,890 Contribution rate = RM 2,000.00 per sqft = 10,890/1000 = 10.89 x RM2000.00 = RM 21,780.00								

^{*} Schedule is referred to the latest MBJB ISF policy

1.3 The Basic Calculation of Rebate Incentive and Refund (reimbursement) of ISF Payment

The basic calculation method for claiming the proposed rebate incentive and ISF refund allows applicants/owners to claim a rebate incentive ranging from 10 percent (%) to a maximum of 40 percent (%) of the ISF payment imposed on each application, from the approval of the development project up to the completion and operational stages. Claims for this incentive can refer to Calculation Examples in Scenario 1, 2, 3, and 4 (Tables 2, 3, 4, and 5) as shown in the table below:

SCENARIO 1

Table 4: Scenario 1 Incentive Provision - 2-Star Rating, *minimum ISF payment complies with MBJB policy

ISF Payment	ISF payme	ent stages	Reb	ate Incentiv	/e	Payment by Stages	
(RM)		a (RM)	b Star Rating	c %	d Notes (RM)	e= (a-d) (RM)	Notes
	1(B)	10% 10,000	2	10	1,000	9,000	1 (B) Approved stamped plan stage
100,000	2(A)	90% 90,000	-	-	-	90,000	Stage 2(A) full payment of the remaining ISF funds must be settled before the issuance of Notice Form B – Notice to Commence Work on Site.
	2(B)	90% 90,000	2	10	9,000	-	Claimed after obtaining the CASBEE Iskandar certificate
	Total Reb	ate Incentive (Obtained		RM 10,000	Total percentage (%) compared to ISF payment	10% (RM10,000/ RM 100,000 X 100%)

SCENARIO 2

Table 5: Scenario 2 Incentive Provision - 3-Star Rating, *minimum ISF payment complies with MBJB policy

ISF Payment	ISF paymo	ent stages	Rebate Incentiv		/e	Payment by Stages	
(RM)		a (RM)	b Star Rating	c %	d Notes (RM)	e= (a-d) (RM)	Notes
	1(B)	10% 10,000	3	20	2,000	8,000	1 (B) Approved stamped plan stage
100,000	2(A)	90% 90,000	-	-	-	90,000	Stage 2(A) full payment of the remaining ISF funds must be settled before the issuance of Notice Form B – Notice to Commence Work on Site.
	2(B)	90% 90,000	3	20	18,000	-	Claimed after obtaining the CASBEE Iskandar certificate
	Total Reb	ate Incentive (Obtained		RM 20,000	Total percentage (%) compared to ISF payment	20% (RM20,000/ RM 100,000 X 100%)

SCENARIO 3

Table 6: Scenario 3 Incentive Provision - 4-Star Rating, *minimum ISF payment complies with MBJB policy

ISF Payment	ISF payment stages		Reb	ate Incentiv	/e	Payment by Stages	
(RM)		a (RM)	b Star Rating	c %	d Notes (RM)	e= (a-d) (RM)	Notes
	1(B)	10% 10,000	4	30	3,000	7,000	1 (B) Approved stamped plan stage
100,000	2(A)	90% 90,000	-	-	-	90,000	Stage 2(A) full payment of the remaining ISF funds must be settled before the issuance of Notice Form B – Notice to Commence Work on Site.
	2(B)	90% 90,000	4	30	27,000	-	Claimed after obtaining the CASBEE Iskandar certificate
	Total Reb	ate Incentive	Obtained		RM 30,000	Total percentage (%) compared to ISF payment	30% (RM30,000/ RM 100,000 X 100%)

SCENARIO 4

Table 7: Scenario 4 Incentive Provision -5-Star Rating, *minimum ISF payment complies with MBJB policy

ISF Payment	ISF payme	ent stages	Rebate Incen		/e	Payment by Stages	
(RM)		a (RM)	b Star Rating	c %	d Notes (RM)	e= (a-d) (RM)	Notes
	1(B)	10% 10,000	5	40	4,000	6,000	1 (B) Approved stamped plan stage
100,000	2(A)	90% 90,000	-	-	-	90,000	Stage 2(A) full payment of the remaining ISF funds must be settled before the issuance of Notice Form B – Notice to Commence Work on Site.
	2(B)	90% 90,000	5	40	36,000	-	Claimed after obtaining the CASBEE Iskandar certificate
	Total Reb	ate Incentive (Obtained		RM 40,000	Total percentage (%) compared to ISF payment	40% (RM40,000/ RM 100,000 X 100%)

To ensure the success of the CASBEE Iskandar – MBJB program, all development projects are required to submit applications directly to the Building Department (until the full online CASBEE Iskandar – MBJB system is fully operational). This serves as an additional requirement for the approval of Building Plan applications, which will be harmonized with the OSC 3Plus system application.

CHAPTER 2.0 IMPLEMENTATION AND OPERATIONAL ASPECTS OF CASBEE ISKANDAR

2.1 Implementation and Application Process for Assessment, Rebate Incentives, and Reimbursement Incentives for ISF Payment for Green Buildings

As part of the CASBEE Iskandar – MBJB program, no fees or charges are applied, as applications will often be made online via OSC for building plan applications. The stages involved in the CASBEE Iskandar – MBJB program are as follows:

- 2.1.1 Stage 1(A) Registration process with MBJB.
- 2.1.2 Stage 1(B) Submission of Preliminary Design Assessment (PDA).
- 2.1.3 Stage 2(A) Submission of Design Assessment (DA) and the Provisional CASBEE Design Assessment Certification.
- 2.1.4 Stage 2(B) Completion & Verification Assessment (CVA) and the CASBEE Iskandar certificate from the CASBEE Accreditation Panel.

At Stage 1(A), all applicants are required to fill out and provide additional information to be registered in MBJB's Green Building inventory data, alongside the application for building plans at OSC. The registration form will be filled by the applicant/consultant directly in the building department (if a system is provided, applicants can register online).

Meanwhile, at Stage 1(B), applicants must submit a complete Preliminary Design Assessment (PDA). At this stage, applications will be evaluated with a basic score and the decision on score achievement allows applicants to gain incentives from the ISF Fund payment (10% based on MBJB's rate) before the Building Plan is approved/stamped.

At Stage 2(A), applicants are required to submit a Design Assessment (DA) before the construction phase begins. At this stage, the design evaluation process will be reviewed, and the achieved scores enable the applicants to claim incentives for the remaining payment from the ISF Fund that must be settled (the remaining 90%) before the submission of Form B or the Notice to Start Work at the construction site. Incentive claims are based on the score achieved by the applicant from the design evaluation/Design Assessment submitted. At this stage, the Provisional CASBEE Design Assessment Certification with the achieved score will be issued.

Next, at Stage 2(B), if the applicants wish to claim additional incentives, they must submit the Completion & Verification Assessment (CVA) and complete the CASBEE Iskandar template to be reviewed by the CASBEE Certifier (complying with the CASBEE Iskandar process). However, this stage can only be performed after 12 months from the date of issuance of the Certificate of Completion and Compliance (CCC) or after half of the building occupancy has been used or operational. This is to enable the Completion & Verification Assessment (CVA) evaluation process to be conducted by a qualified CASBEE Certifier.

As a continuation, the final score obtained from the CASBEE Certifier enables the CASBEE Accreditation Panel to issue the CASBEE Iskandar – MBJB Certificate to the applicant. The assessment and final score obtained allow the applicant to claim an incentive for the refund of the ISF payment previously made to MBJB by submitting a claim application along with a copy of the CASBEE Iskandar certificate and relevant supporting documents to the Building Department, MBJB. The Star Rating / Score Table and the corresponding percentage (%) of incentives obtained (Table 8) will be awarded as follows:

Table 8: Number of Scores and Incentive Percentage

	NUMBER OF STARS / CASBEE ISKANDAR - MBJB SCORE	INCENTIVE GRANT PERCENTAGE – REBATE & REFUND OF ISF PAYMENT (%)
1	\Rightarrow	-
2	$\Rightarrow \Rightarrow$	10
3	$\Rightarrow \Rightarrow \Rightarrow$	20
4	$\Rightarrow \Rightarrow \Rightarrow \Rightarrow$	30
5	$\Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow$	40

2.2 Provision of Rebate and Reimbursement Incentives from the Improvement Service Fund (ISF) as a Green Incentive in Development within the MBJB Administrative Area

The proposed incentive claim payment for the CASBEE Iskandar – MBJB programme will allow applicants to claim a rebate and reimbursement of between 20% to 40% of the ISF payment made to MBJB. The stages involved in the claim process are as follows:

2.1 Stage 1(B) – Submission of the Preliminary Design Assessment (PDA). 2.2 Stage 2(B) – Submission of the Completion & Verification Assessment (CVA) and issuance of the CASBEE Iskandar Certificate by the CASBEE Accreditation Panel.

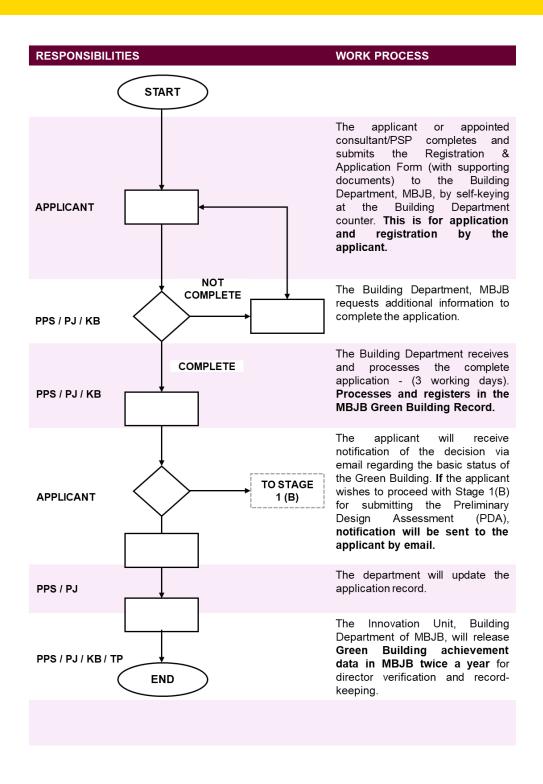
At Stage 1(B), applicants can submit a claim for the first rebate incentive during the first ISF payment (10% of the total ISF payment, based on MBJB's ISF policy), which must be paid before the Building Plan is approved by MBJB. The deduction/rebate is based on the score achieved in the Preliminary Design Assessment (PDA) submitted at this stage. Applicants may refer to the workflow for Stage 1(A) and 1(B) for further details.

At Stage 2(B), the applicant will submit the Completion & Verification Assessment (CVA) for evaluation by the CASBEE Certifier. The CASBEE Iskandar Certificate will only be issued after the assessment is conducted by the CASBEE Certifier and the certificate is released by the CASBEE Accreditation Panel (refer to the CASBEE Iskandar process). At this stage, the applicant can submit a claim for the reimbursement of the ISF payment, referring to the score achieved, along with a copy of the CASBEE Iskandar certificate and relevant supporting documents, to MBJB for processing the refund of the ISF payment already made. The ISF refund process will follow the procedures in the Building Department and the Treasury Department (refer to the Workflow and Flowchart of the Departments). The score achieved can be referred to in Table 8, and a summary chart can be seen in the Summary Chart bel

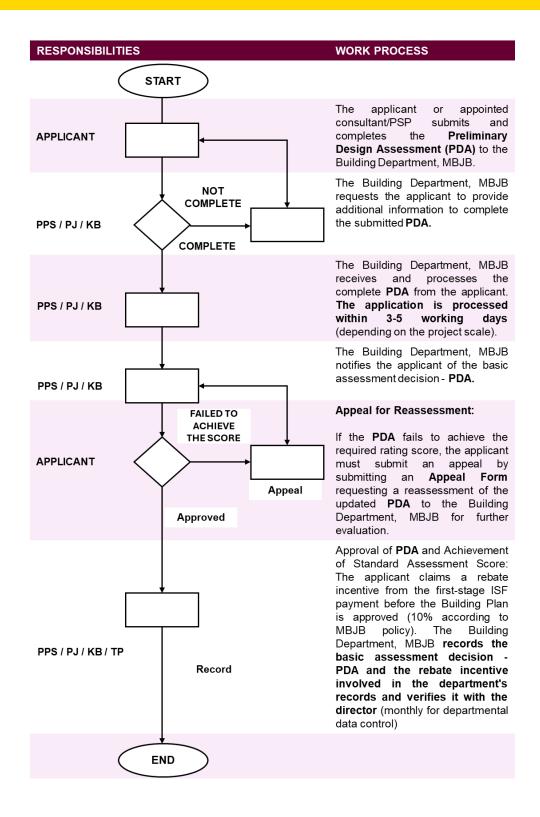
CASBEE ISKANDAR - MBJB STAGE 1(A) STAGE 1(B) STAGE 2(A) STAGE 2(B) Submission of Application and Submission of Preliminary Design Submission of Design Assessment Submission of Completion Assessment (PDA) & related Project Registration at the Building (DA) & related documents. Verification Assessment (CVA) & Department counter through self documents. related documents. key-in, alongside the Building Plan Achieve standard score – No claim application in OSC or after Achieve standard score – eligible to and the Provisional CASBEE Achieve standard score – assessment submitting the hard copy at the claim rebate incentive. Design Assessment Certification / by the CASBEE Certifier and the OSC counter. CASBEE Iskandar - MBJB Design CASBEE Accreditation Panel issues Applicant submits incentive claim & Assessment Certificate is issued. the CASBEE Iskandar Certificate to Data Recording and ISF Payment. pays ISF (10% of ISF amount or the applicant. according to MBJB's policy), before Clear the remaining ISF balance the development plans are (90% remaining - or according to ■ Incentive claim in the form of approved - Building Plan. MBJB's policy). reimbursement from the applicant to MBJB, along with the relevant · Record Data, Incentives, and ISF Submit Form B - Notice of supporting claim documents. Balance. Commencement in OSC - Begin construction until the Certificate of Department prepares the ISF Refund Completion and Compliance (CCC) Claim Document for the ISF payment is issued. already made by the applicant for submission to the Finance and Record Data, Incentives, and ISF General Affairs Committee, MBJB. Balance. Approval of the claim document – proceed with the ISF incentive claim along with the related documents to the Treasury Department (following the claim process of the Treasury Department). Record Data, Incentives, and ISF Balance. **INCENTIVE CLAIM INCENTIVE CLAIM** Rebate of 10% of the ISF Reimbursement of the ISF payment payment that must be made that has been made after the before the Building Plan is CASBEE Iskandar Certificate is approved - claim based on the issued - claim based on the achieved score (refer to Table 8). achieved score (refer to Table 8).

Figure 4: Summary Chart

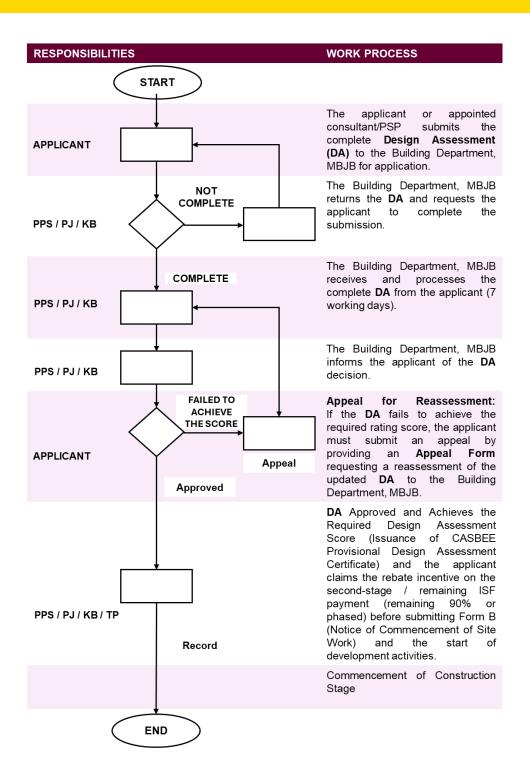
Stage 1 (A) Application & Registration to comply CASBEE Building MBJB Standard



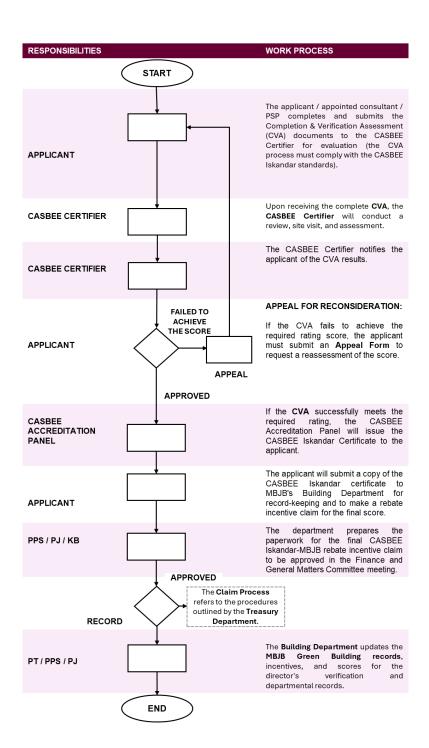
Stage 1 (B)
Preliminary Design Assessment (PDA) by MBJB



Stage 2 (A) Design Assessment (DA) by CASBEE Certifier



Stage 2 (B) Completion & Verification Assessment (CVA) by CASBEE Certifier To obtain CASBEE Iskandar Certificate and rebates



2.3 Operationalise CASBEE Iskandar

In order to operationalise CASBEE Iskandar, an organisation needs to be set up. CASBEE Iskandar Organisation is separated into three (3) tiers. At the highest level is the CASBEE Accreditation Panel, the independent regulatory body for CASBEE accreditation. At the intermediate level are the CASBEE Certifiers, consisting of experienced professionals that conduct the assessment and accreditation of project submissions. On the front-end level are the CASBEE Facilitators, professionals who together with clients and the design team enhance their projects to meet or exceed CASBEE rating system requirements (refer to Figure).

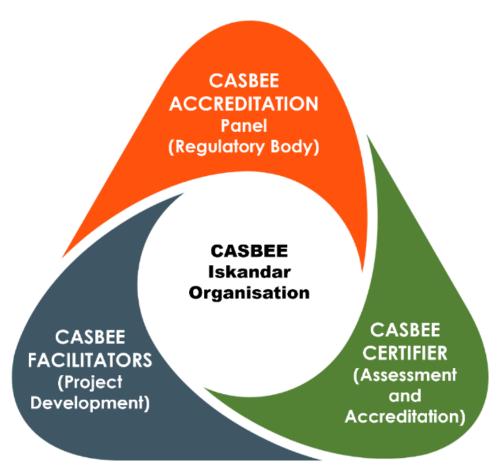


Figure 5: CASBEE Iskandar Organisations

2.3.1 CASBEE Certifiers and Facilitators Prerequisites

2.3.1.1 CASBEE Certifiers

The roles and responsibilities of CASBEE Certifiers are to perform the detailed assessment of building projects submitted to the CASBEE Accreditation Panel for CASBEE Certification. The prerequisites to be appointed as a CASBEE Certifier are as follows;

- Professional Architect registered with the Board of Architects or Professional Engineer registered with the Board of Engineers;
- Minimum 7 years relevant working experience;

AND

Registered CASBEE Facilitator.

Interested individuals who meet these conditions 1 to 3, may approach CASBEE to be invited to serve in the CASBEE Technical Committee to understand the responsibility and commitment required as well as gain the necessary exposure and experience. Selected candidates will then undergo mentorship on assessment of projects. Upon the recommendation of his/her mentor and with approval of the CASBEE Accreditation Panel, he/she will then be appointed as a CASBEE Certifier.

2.3.1.2 CASBEE Facilitators

The roles and responsibility of CASBEE Facilitators are to provide services to enable building projects to achieve CASBEE accreditation. The prerequisites to take the CASBEE Facilitator examinations are as follows:

 Registered Ar. with the Board of Architects, or Ir. with the Board of Engineers, or Sr. with the Board of Quantity Surveyors;

OR

 A recognised degree in architecture, engineering, quantity surveying or other buildingrelated disciplines as approved by the CASBEE Accreditation Panel; and with a minimum of 3 years relevant working experience acceptable to the CASBEE Accreditation Panel;

OR

 Other Building practitioners with a minimum of 5 years relevant working experience acceptable to the CASBEE Accreditation Panel;

AND

Undergone the CASBEE Facilitator course.

Upon compliance with items 1 to 4, the individual may sit for the CASBEE Facilitator examinations. Upon passing he/she can be registered as a CASBEE Facilitator.

2.4 Overall Framework of implementation and operationalism of CASBEE Iskandar (Building)

Towards enabling the CASBEE Iskandar (Building) manual and assessment template to be implemented and effectively used for new non-residential and residential development in the MBJB area, a basic framework for their implementation needs is developed (refer to Figure 12).

Apart from the production of the revised CASBEE Iskandar (Building) Manual – 2023 Version for implementation in the MBJB area, with the Malaysian Standard MS 1525:2019 (Energy Efficiency and Use of Renewable Energy for Non-Residential Buildings – Code of Practice), MS ISO 37122:2019 (Sustainable Cities and Communities – Indicators for Smart Cities), Uniform Building By-Laws (Amendment) 2021 (UBBL 34A & 38A and MS2680:2017 (Energy Efficiency and Use of Renewable Energy for Residential Buildings – Code of Practice) elements incorporated, a correspondingly updated CASBEE Iskandar (Building) Assessment Template (Microsoft Excel template) and CASBEE Iskandar (Building) Assessment Capacity Building Module are also delivered.

A benchmarking and comparative study of existing mainstream green building assessment systems and processes with that of CASBEE Iskandar is also included. Coupling this to the current Building Control process in MBJB as well as exploring potential forms and mechanisms of green building incentives, a general institutional framework for streamlining and operationalising the CASBEE Iskandar (Building) assessment manual and template into MBJB's Building Control process may be proposed. Recommendations were also put forth on the potential form of green incentives to be offered at appropriate stages of the Building Control process for the consideration of MBJB's Building Control Department. The implementation of CASBEE Iskandar (Building) should eventually lead to an increase in the proliferation of low carbon green buildings in the MBJB area.

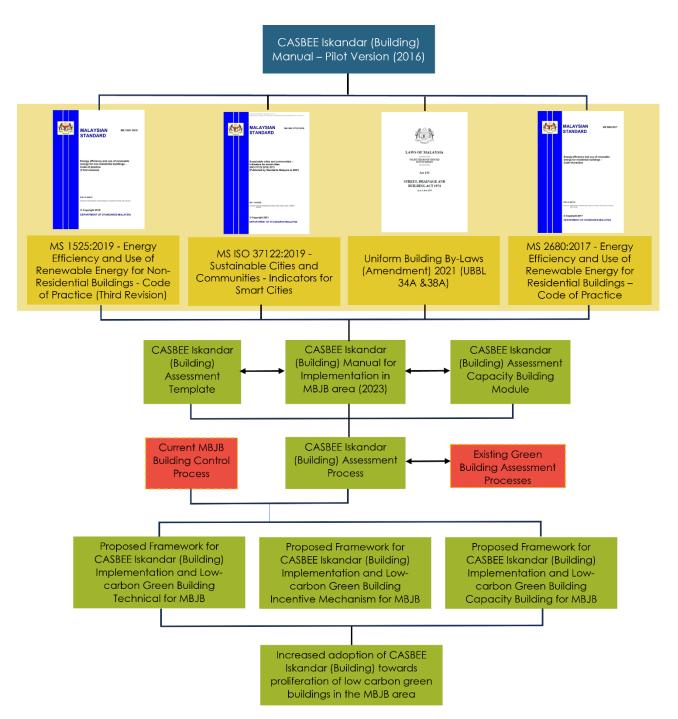


Figure 6: Framework for enabling the use of CASBEE Iskandar (Building)