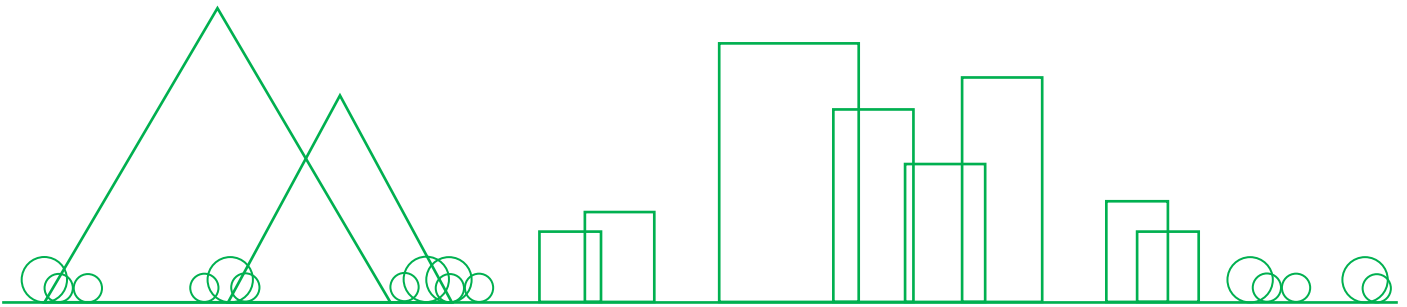


Prepared by

In Collaboration with



# CASBEE / Comprehensive Assessment System for Built Environment Efficiency

## ISKANDAR

### **Iskandar Malaysia Towards Smart City & Low Carbon Society Future**

In order to accelerate the realisation of smart city and low carbon society concepts in Iskandar Malaysia, the development of cities, neighbourhoods and buildings in the region would have to be more energy-efficient and development projects must be in harmony with the environment. Internationally recognised built environment assessment tools play an important role to encourage building owners and developers to go green. Well-known sustainable cities like Kyoto, Vancouver, Melbourne, Kitakyushu and Copenhagen are occupied with remarkable numbers of green certified buildings and neighbourhoods.

At present, among the prominent built environment assessment tools are Building Research Establishment Environmental Assessment Methodology (BREEAM), Leadership in Energy and Environmental Design (LEED) and Comprehensive Assessment System for Built Environment Efficiency (CASBEE). Among these, CASBEE is one of the best international built environment assessment tools recognised and promoted by Iskandar Regional Development Authority (IRDA) and its five city governments; Johor Bahru City Council (MBJB), Johor Bahru Tengah Municipal Council (MPJBT), Pasir Gudang Municipal Council (MPPG), Kulai Municipal Council (MPKu) and Pontian District Council (MDP) to encourage building owners, business enterprises and developers to go green.

An important milestone that was achieved upon completion of the CASBEE pilot project was the production of a set of CASBEE Iskandar assessment manuals that have been adapted and customised to suit our local tropical environment to serve Iskandar Malaysia and the rest of the nation. CASBEE Iskandar fully complements with other initiatives currently being undertaken by IRDA to contribute to greening the built environment, including the Building Energy Monitoring and Reporting System (BERMS) and Green Accord Initiative Award (GAIA).

Celebrating



ISKANDAR  
MALAYSIA  
2006 - 2016

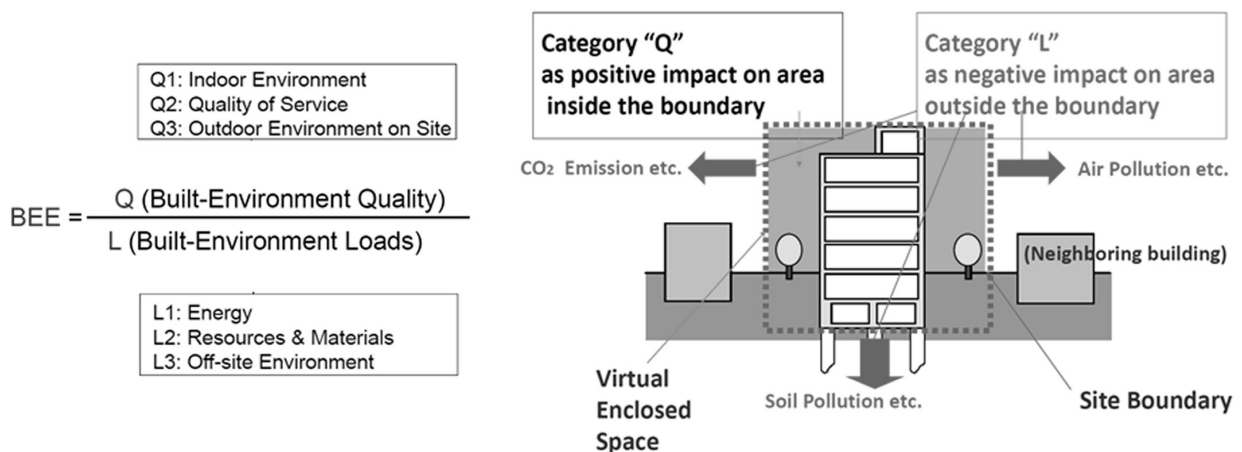


# A Unique Green Assessment Tool

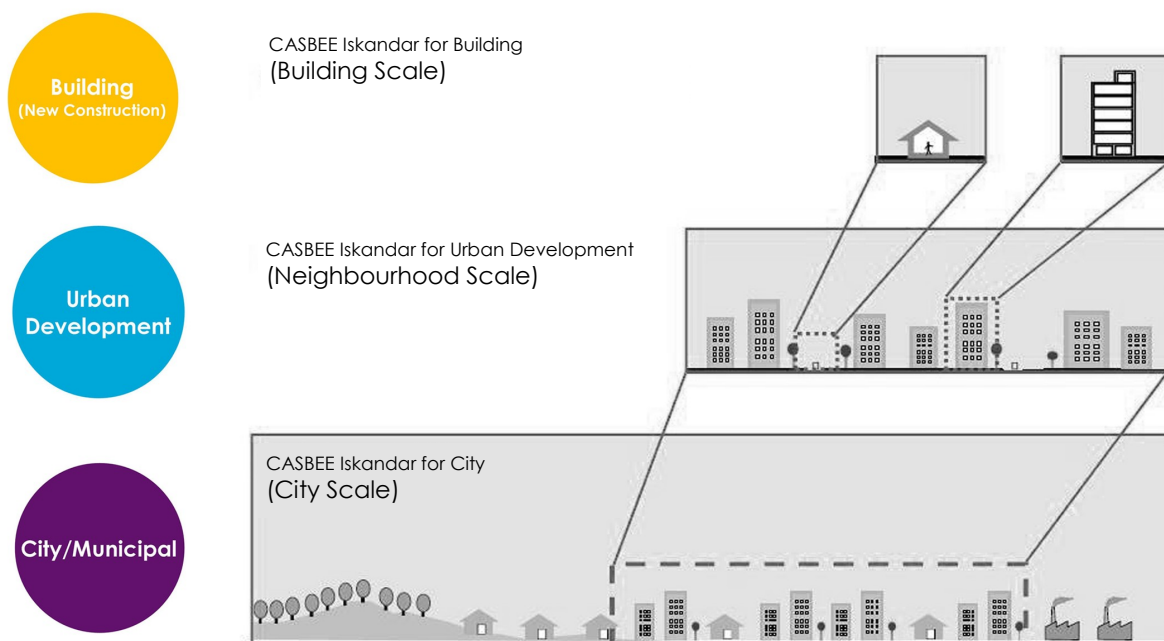
CASBEE Iskandar is an assessment tool to evaluate built environment efficiency performance. The CASBEE Iskandar assessment tools apply the innovative concept of eco-efficiency to its assessment in terms of built environment efficiency (BEE) formula, which takes into account the level of quality within the target built environment (Q = Quality), and the implication of the external environmental load from the target built environment (L = Load). A sustainable green development ideally should offer an environment of high quality of services with minimal negative impacts.

## Built Environment Efficiency, BEE

(Case of CASBEE Iskandar for Building)



CASBEE Iskandar comprises of a set of assessment tools designed to tailor the evaluation of different scales of built environment performance. It ranges from a single building (CASBEE Iskandar for Building) to a group of buildings/district/neighbourhood (CASBEE Iskandar for Urban Development) and the wider context of municipality environment (CASBEE Iskandar for City). Each of these CASBEE Iskandar tool has its own unique specific system and hence a different approach of assessment and parameter measurement.

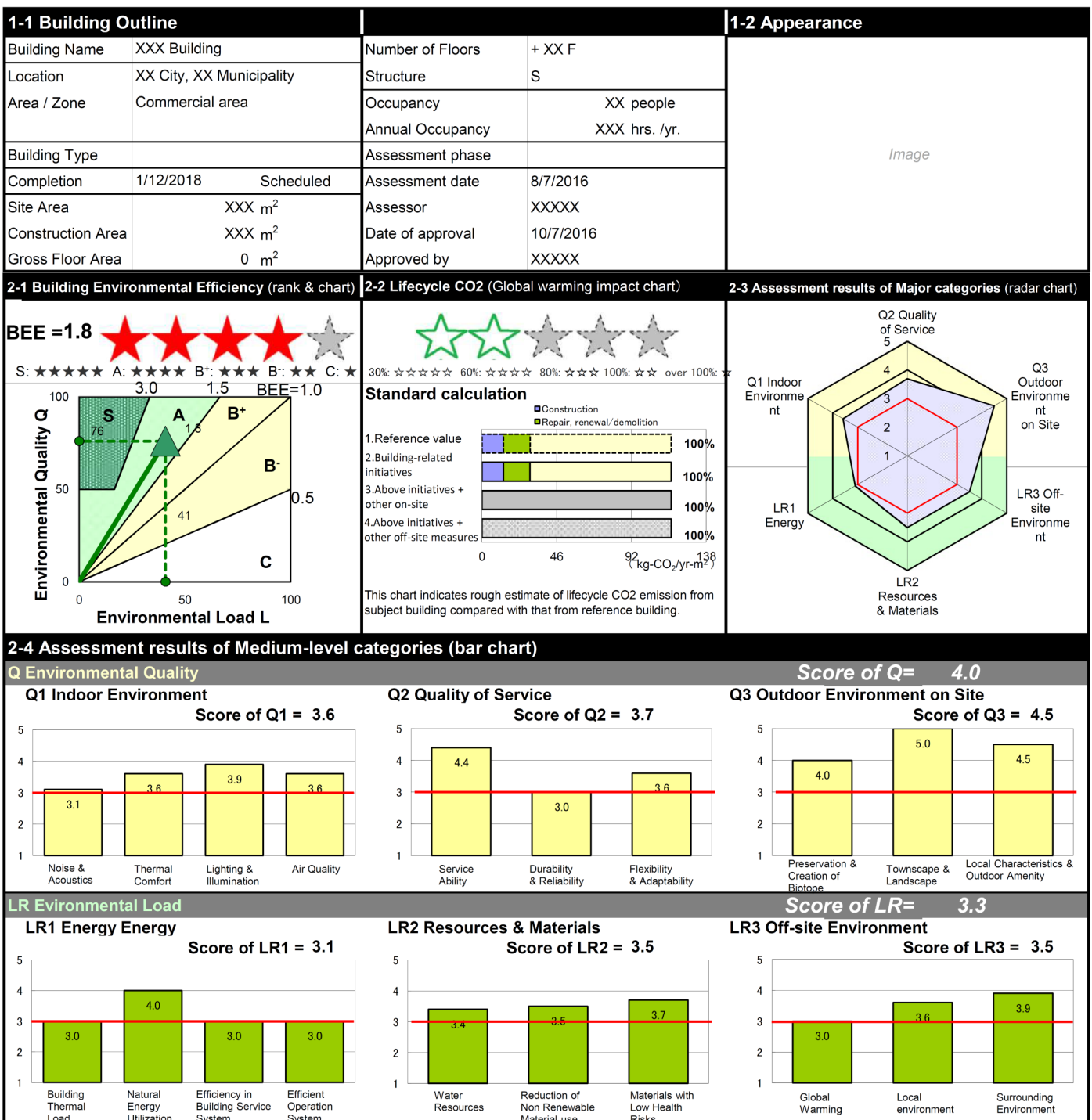


# Assessment Result of CASBEE Iskandar

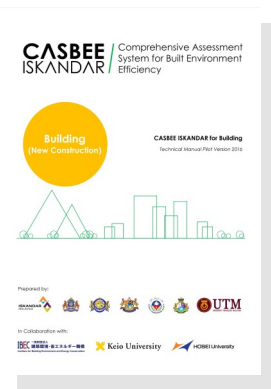
The assessment result of CASBEE Iskandar will be displayed and published as the diagram shown below. The green sustainability ranking of CASBEE Iskandar assessment result is categorised into five levels: Superior (Rank S, 5/5 Stars); Excellent (Rank A, 4/5 Stars); Good (Rank B+, 3/5 Stars); Poor (Rank B-, 2/5 Stars) and Bad (Rank C, 1/5 Stars) (See 2-1 Building Environmental Efficiency).

The summary of the overall performance on the environmental quality and load is illustrated via radar chart (See 2-2 Assessment Results of Major Categories) and the charts in section 2-4 Assessment Results of Medium Level Categories show more assessment details. By examining the results on the different elements of environment quality and load, it allow us to identify the strength, weakness and the potential area for improvement. Therefore, CASBEE Iskandar is not merely an assessment tool, as it may also guide building owners, developers and built environment professionals in the design process.

Assessment result of CASBEE Iskandar for Building

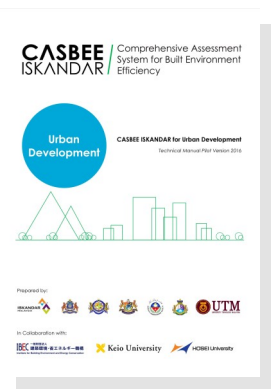


# CASBEE Iskandar Family



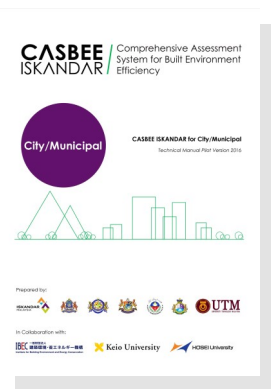
## CASBEE Iskandar for Building (New Construction) | Pilot Version 2016

CASBEE Iskandar for Building (New Construction) is a tool to evaluate the environmental performance of all types of new single buildings (residential, retail, office, factory and community facilities) and it is applicable for both single or multi-function building. The assessment of CASBEE Iskandar for Building (New Construction) covers indoor environment, quality of service, outdoor environment, energy, resource and materials and off-site environment.



## CASBEE Iskandar for Urban Development | Pilot Version 2016

CASBEE Iskandar for Urban Development is an assessment tool to evaluate the environment quality of a built environment beyond a single building; it is applied to a cluster of buildings, local areas of a district, neighbourhood or township. The key assessment of CASBEE Iskandar for Urban Development is based on the triple bottom-line approach (environment, society and economy) and should be used to complement low carbon initiatives implementation.



## CASBEE Iskandar for City | Pilot Version 2016

CASBEE Iskandar for City is an assessment tool developed for city scale/municipality assessment using triple bottom-line approach of environment, society and economy. The assessment of CASBEE Iskandar for City considers the UN's Sustainable Development Goals (SDGs), ISO 37120:2014 Sustainable Development of Communities for City Services and Quality of Life.

## Task Force

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