

## HOUSING DEVELOPERS' INITIATIVE IN SUPPORTING SUSTAINABLE HOUSING DEVELOPMENT IN ISKANDAR MALAYSIA

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### Abstract

This paper attempts to discover private housing developers' initiatives in supporting the development of sustainable housing in Malaysia. A study has been conducted to identify the sustainable housing concepts in housing development, the location, type of house, and price. By utilizing the post-modern approach, this study examines the marketing brochures collected during the Malaysia Property Exhibition 2009 (MAPEX 2009). As many as thirty-one brochures were collected and analyzed using the content analysis approach. From the analysis, it is found that most developers build houses by applying sustainable urban housing concepts although without directly using the word "sustainable" in their marketing brochures. Secure house is the most prominent sustainable housing concept used by housing developers, mostly through the development of gated and guarded housing. The developments have been concentrated in Johor Bahru, and mostly in the form of double-storey houses with prices above RM 200,000. It shows that this concept is parallel to Iskandar Malaysia Sustainable Development Principle that is to provide safety and comfort to the communities. Although this study has several limitations, it is significant to provide a preliminary overview on the progress of sustainable housing in the study area.

**Keywords:** Sustainable housing, housing developers' initiatives, marketing brochures.

### 1.0 INTRODUCTION

'Sustainability' is often synonym to the development agenda introduced by the World Commission in the late of 1980s. The central recommendation by the World Commission through the Brundtland Report was to use an approach called 'sustainable development' as the way for environmental protection and economic development (Dresner, 2002). Under this agenda, sustainable development has been defined as the development that meets the needs of the present without compromising the ability of future generations to meet their needs. In the beginning, this approach has been prominently useful for environmental concerns due to development activities. Realizing its importance, it has been applied to consider quality of development in housing (Choguill, 2007). Sustainable housing is important in order to ensure a balanced consideration of social,

environment, and economic needs in the housing development sector.

For sustainable housing to be successful, a strong partnership between all players in the housing industry is a must. Sustainable housing should not only be one of the government's main development agenda, but should also be supported by the industry players including architects, planners, developers, as well as the society. Since housing developers are the final producers of house-building activities, it is of interest to investigate their initiatives in supporting the development of sustainable housing, particularly in urban areas. This study was carried out in Iskandar Malaysia, in the Southern Johor, Malaysia. Compared to other states in Malaysia, Johor ranked top in the list of housing accommodation business in this country

(NAPIC, 2008). This is mainly contributed by Iskandar Malaysia, where many of its main towns are located.

In an attempt to discover the developers' initiatives in developing sustainable housing, this study examined the marketing brochures collected from property exhibitions. The brochures were analyzed in order to identify the concepts of sustainable housing in every housing development involved, including the locations; type of houses; and prices. The findings would provide a view of the sustainable housing initiatives within the case study area.

## **2.0 SUSTAINABLE HOUSING CONCEPT**

The sustainable housing concept has been discussed within the circles of triple-bottom-line of sustainable development namely environmental, economic, and social. For example, Armstrong (2000) suggests that sustainable housing should combine the protection of environment, sensible use of natural resources, protection of economic growth, and social progress. The same concern has been highlighted by Choguill (2007 pp. 145) who suggests that, in order to be sustainable, housing initiatives must be economically viable, socially acceptable, technically feasible and environmentally compatible. The same general principle is also advocated by Hamid (2006, Chapter 7). Housing construction should then be translated into the six-stage product development, including the product themes (Hamid, 2002, Chapter 7).

However, Priemus (2005) claims that sustainable housing has been broadly defined and, thus, hardly measureable as it seems to mean everything. Therefore, in order to measure the sustainability of a dwelling, he proposes 'sustainability profile'. Sustainability profile is a multivariate yardstick on the sustainable

planning of land-use activities, subdivisions, and housing which is called 'SPLASH'.

SPLASH is a combined measurement of the environmental impacts and social and economic implications. This triple-bottom-line framework is important because according to Bergman et al. (2007), sustainable housing is not only about house design alone, but it is also inextricably related to the sustainability of communities. Sustainable communities concern the social, environmental, and economic sustainability of the built (residential) environment, including land use, transportation and connectivity, and satisfaction with neighbourhoods and communities. All of these elements are clearly integrated in SPLASH and they were themed as secure house, accessible house, healthy house, water-wise house, zero-waste house, site-sensitive house, energy-efficient house, quiet house, smart house and durable house. These themes are useful for this study in order to identify the possible sustainable housing concepts of housing development in the case study area.

## **3.0 THE CASE STUDY: ISKANDAR MALAYSIA**

Iskandar Malaysia is the main southern development corridor in Johor, Malaysia. Established on 30 July 2006, it was set to become the most developed region in Southern Peninsular Malaysia. By 2025, the population is expected to reach 3.0 million people (Maimunah, 2010). There are five Flagship Zones which covers 2,217 km<sup>2</sup> of land in Southern Johor that has been identified as the developmental focal points of Iskandar Malaysia (Maimunah, 2010). The following Table 1 briefly describes each of the flagship zones.

Table 1: The Flagship Zones in Iskandar Malaysia

Flagship Zone	Descriptions
Flagship Zone A (Johor Bahru City Centre)	Developments of a new financial district, the central business district, the waterfront city of Danga Bay, a mixed development in Tebrau Plentong and the Malaysia/Singapore Causeway.
Flagship Zone B (Nusajaya)	The new Johor state administrative centre, a medical hub, an educity, a resort for international tourism, and an industrial logistic cluster.
Flagship Zone C (Western Gate Development)	Includes the Port of Tanjung Pelepas (PTP), the second transportation link for Malaysia-Singapore, a free trade zone, the RAMSAR World Heritage Park, and Tanjung Piai.
Flagship Zone D (Eastern Gate Development)	Focuses on Pasir Gudang Port and industrial zone, Tanjung Langsat Port and Tanjung Langsat Technology Park.
Flagship Zone E (Senai-Skudai)	Covers the Senai International Airport, hubs for cargo and knowledge, a multimodal centre and the MSC Cyberport city.

Source: Khazanah Nasional (2006)

In Iskandar Malaysia, sustainable development approach is highly emphasized in its physical development through six main principles. These are equal distribution of economic opportunities; enhancement in quality of life; safety and comfort; conservation, rehabilitation and environmental management; diversity in cultural and heritage; and cooperation between local authorities, non-government bodies and the public (Maimunah, 2010). These sustainable development principles should also be considered in housing development activities.

The land use for housing development in Iskandar Malaysia is allocated according to the Johor Bahru District Local Plan, 2020 (Table 2).

Table 2: Southern Johor Land Use Based on Johor Bahru District Local Plan 2020

Type of Land Use	Hectare	(%)
Housing	50,623.86	27.85
Commercial	7,435.19	4.09
Industrial	12,523.62	6.89

Institution and Facilities	4,953.07	2.93
Recreational and Green Area	6,248.44	3.44

Source: Md. Nazri (2010)

Based on Table 2, it is identified that the highest percentage of land use in Southern Johor is allocated for housing (27.85%) compared to other land uses. This allocation is made based on the consideration of current and future housing needs, housing density, rezoning of housing areas, and new housing developments.

#### 4.0 DATA ANALYSIS AND FINDINGS

This study analyzed the housing marketing brochures, employing one of the post-modernist approaches. In the post-modernist tradition, research is done by examining images and texts in filmic, photographic, electronic formats, etc. (Esterberg, 2002). In this study, housing marketing brochure is considered the best printed material where general information of housing products needed for this study could be obtained. The concept of housing development, location, house type, and price could easily be identified from the marketing brochure distributed by housing developers to the public. Moreover, this study involved a number of housing developers in Iskandar Malaysia. Nevertheless, it was not easy to approach each housing developer, especially with the limited time and manpower. In order to avoid these obstacles, a close examination of publicly available marketing material like the housing marketing brochure is one of the best methods for data collection. The same approach has also been employed by other researchers (see Maxwell, 2004) to collect data with difficult access.

For faster data collection, the housing marketing brochures were collected in two series of Malaysia Property Exhibition 2009 (MAPEX 2009) held in Johor Bahru. MAPEX is a property road show organized by the Real Estate and Housing Developers' Association (REHDA) as a forum for housing developers to exhibit

their properties and for homebuyers to view the latest and available launches and property stock all under one roof (REHDA, 2010). In MAPEX 2009, more than 50 housing marketing brochures managed to be collected. The brochures presented both the newly launched and in-stock housing products, mostly from housing developments between year 2007 and 2009. However, it was found that brochures collected in the first road show (held in April 2009) were also found in the second road show (held in November 2010) of MAPEX 2009. It turned out that only 31 brochures were usable for this study. Figure 1 is an example of brochure that has been analyzed for this study in which, the concept of the development, house type, and house price could be identified (see the circled texts).

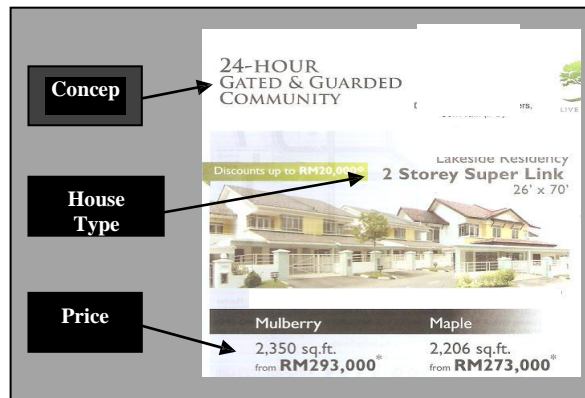


Figure 1: Example of Marketing Brochure

One technique that could be used to analyze any kind of text is content analysis (Esterberg, 2002). For this study, the content analysis focused on the straightforward contents – words or phrases appeared in the brochures that represent the concept of the housing development, location, house type, and price.

#### 4.1 The Sustainable Housing Concepts

In the beginning, the brochures have been sorted out by identifying which development offered products with sustainable housing concept. This identification was based on the sustainable housing elements integrated in SPLASH – secure house; accessible house; healthy house; water-wise house; zero-waste house; site-sensitive house; energy-efficient house; quiet

house; smart house; and durable house. It is found that the marketing phrases used in each brochure were not similar to SPLASH measurements, but they have the same meanings. Therefore, the marketing phrases were categorized according to SPLASH measurements (for this study, the measurements were called as sustainable housing concepts/themes). For example, phrases like ‘secured community’ and ‘gated and guarded community’ were put under the secure house theme.

Meanwhile, ‘blue skies and sunshine with refreshing outdoor atmosphere’ were categorized under the healthy house theme. However, ‘self-sustainable township’ phrase was also found in one of the brochures which mainly referred to its established infrastructure on accessibility. Therefore, it has been categorized under smart and accessible house themes. During the analysis, the number of housing developments has been counted according to the identified sustainable housing themes. Table 3 summarizes the findings.

Table 3: Sustainable Housing Concepts Initiated in Iskandar Malaysia

Sustainable Housing Theme	Example of Marketing Phrases	No. of Housing Development (Percentage)
Secure House	Comprehensive security system; secured community; safe environment; gated and guarded community; multi-tier security system; security with CCTV.	25 developments (68 %)
Healthy House	Greens and beautiful landscape; tropical heaven; natural landscaping; acres of greenery, blue skies and sunshine with refreshing outdoor atmosphere (park and lake); intimate and embrace by nature; nature next to spacious living; waterfront living;	10 developments (27 %)

	greenery every moment; garden homes	
Energy-Efficient House	Higher ceiling height; natural light and good air circulation	2 developments (5 %)
Smart House	Self-sustainable township	1 development (3 %)
Accessible House	Self-sustainable township	1 development (3 %)
-	No Sustainable Housing Theme	6 developments (16 %)

Based on Table 3, it is found that there were five sustainable housing themes initiated by housing developers for housing developments in Iskandar Malaysia. They were secure house; healthy house; energy-efficient house; smart house and accessible house. Amongst these themes, secure house was the most prominent sustainable housing concept used by housing developers, mostly through the development of gated and guarded housing. This was followed by healthy house, which emphasis on the greenery environment.

## 4.2 House Types and Prices

Further analysis on the brochures (with sustainable housing concepts) was done according to price, house type, and location of the developments. However, there were brochures which did not provide such information and, therefore, the calculation was based on the available information only. Table 4 shows the findings of the house types and prices.

Table 4: Types and Prices of Sustainable Houses in Iskandar Malaysia

House Types	No. of Development	Price Range (RM)
2 storey terrace	20	200,000 – 600,000
Cluster	5	200,000 – 450,000
Semi-detached	14	200,000 – 700,000
Bungalow	6	Not available
Condominium and Apartment	2	Above 200,000

Amongst the available information, the house prices were in the range of MR200,000 to MR 700,000 according to house type. Most developments were built as 2-storey terraced houses with the price ranging from MR200,000 – MR600,000. This was followed by semi-detached houses with the price range between MR200,000 and MR700,000. There were also high-rise residential units (apartment and condominium), bungalow, single-storey terraced and semi-detached houses, which were sold within the prices as stated in Table 4.

## 4.3 Location

These developments were scattered in both urban and suburban areas within the Iskandar Malaysia development region. To be more specific, we have categorized the location according to the flagship areas zoned by the Planning Authority as shown in Table 5.

Table 5: Location of Sustainable Housing in Iskandar Malaysia

Flagship	No. of Development
Johor Bahru City	14
Pasir Gudang and Tanjung Langsat	4
Senai-Kulai	4
Skudai	3
Nusajaya	6
<b>Total</b>	<b>31</b>

Based on Table 5, it was found that the development of sustainable housing in Iskandar Malaysia is concentrated in the Johor Bahru City areas. This was because the brochures collected were mostly obtained from these areas.

## 5.0 CONCLUSION

From the analysis, it was found that the private housing developers supported the sustainable development policy in Iskandar Malaysia. As shown, there were five sustainable housing themes initiated by housing developers in Iskandar Malaysia. They were secure house; healthy house; energy-efficient house; smart house and accessible house. Amongst these themes, secure house was the most prominent

sustainable housing concept used by housing developers, mostly through the development of gated and guarded housing. This concept was parallel to Iskandar Malaysia Sustainable Development Principle, that is, to provide safety and comfort to the communities. The developers offered mostly 2-storey terraced houses with prices above MYR200,000 per unit. However, the development of these sustainable housing was concentrated only in the Johor Bahru City areas, compared to other flagship zones of Iskandar Malaysia. Therefore, it is suggested that the government of Malaysia should impose a policy that would ensure sustainable housing concepts being extended evenly to all flagship zones of Iskandar Malaysia

This study however was conducted with a number of limitations. There was high possibility that the brochures collected did not represent all housing developments in Iskandar Malaysia. There might be developers who did not participate in MAPEX 2009, the property exhibitions where the brochures were collected from. In fact, not all data needed for this study especially on the house prices were stated in the brochures. Most importantly, the concepts gained from the marketing phrases of the brochure might have wider meanings than what were presented in this paper. Therefore, it is suggested that further studies be conducted by approaching each of the developers to find out the sustainable housing concepts in detail. However, this study in some way was significant to provide preliminary view and progress of sustainable housing in the case study area.

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