







FACTORS AFFECTING THE IMPLEMENTATION OF GREEN BUILDING DEVELOPMENT PROJECTS AMONG HOUSING DEVELOPERS IN THE KLANG VALLEY, MALAYSIA

AINUL SAMIHAH BT ALBAHORI





Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah



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ABSTRACT

This research aims to study the factors affecting the implementation of the green building development project among housing developers in Malaysia. The objectives of this study are to identify how far the housing development in Malaysia has implemented the green building principles; to evaluate the factors affecting the implementation of the green building development, and to suggest a guideline to encourage the implementation of the green building development among housing developers in Malaysia. The methods used for this study are a combination of case study, quantitative and qualitative. A total of 234 housing developers returned a complete questionnaire. The results of the quantitative analysis were brought to two interview sessions in case study to verify the findings. This research found that there are five green building principles that are frequently being implemented by housing developers which are 'encouraging green design and innovation', 'water efficiency', 'energy efficiency', 'consumption of green materials and resources', and 'application of the green building certification'. The findings show that the external factors in the form of social and cultural factors affect green building implementation among housing developers. Therefore, to encourage the green building implementation, a guideline was suggested to tackle the social and cultural factors. The internal factors of attitude and value, as well as the external factor, namely the economic factor was also considered in the proposed guideline to facilitate the implementation of green 05-4506 building development. This research contributes to the body of knowledge by providing a useful basis for researchers to study factors affecting the implementation of green building among housing developers.













FAKTOR PERLAKSANAAN PROJEK PEMBANGUNAN BANGUNAN HIJAU DALAM KALANGAN PEMAJU PERUMAHAN DI LEMBAH **KLANG, MALAYSIA**

ABSTRAK

Kajian ini bertujuan untuk mengkaji faktor-faktor yang mempengaruhi perlaksanaan projek pembangunan bangunan hijau dalam kalangan pemaju perumahan di Malaysia. Objektif kajian ini adalah untuk mengenal pasti sejauh mana pembangunan perumahan di Malaysia telah melaksanakan prinsip-prinsip bangunan hijau, untuk menilai faktor-faktor yang mempengaruhi perlaksanaan pembangunan bangunan hijau, dan untuk mencadangkan garis panduan untuk menggalakkan pelaksanaan pembangunan bangunan hijau dalam kalangan pemaju perumahan di Malaysia. Kaedah yang digunakan untuk kajian ini adalah gabungan kajian kes, kuantitatif dan kualitatif. Sejumlah 234 pemaju perumahan telah mengembalikan borang soal selidik yang lengkap. Keputusan daripada analisis kuantitatif dibawa ke dua sesi temuduga dalam kajian kes untuk mengesahkan dapatan. Kajian ini mendapati bahawa terdapat lima prinsip bangunan hijau yang sering dilaksanakan oleh pemaju perumahan iaitu 'reka bentuk hijau dan inovasi', 'cekap air', 'cekap tenaga', 'menggunakan bahanbahan dan sumber hijau', dan 'permohonan sijil bangunan hijau'. Dapatan menunjukkan bahawa faktor luaran iaitu daripada aspek sosial dan budaya adalah

05-4506 faktor yang mempegaruhi perlaksanaan bangunan hijau dalam kalangan pemaju perumahan. Oleh itu, untuk menggalakkan pelaksanaan bangunan hijau, beberapa garis panduan dicadangkan dengan mempertimbangkan faktor-faktor sosial dan budaya. Faktor dalaman iaitu sikap dan nilai serta faktor luaran ekonomi juga dipertimbangkan dalam garis panduan yang dicadangkan bagi memudahkan pelaksanaan pembangunan hijau. Kajian ini menyumbang kepada ilmu pengetahuan dengan menyediakan asas yang berguna kepada penyelidik untuk mengkaji faktorfaktor yang mempengaruhi perlaksanaan bangunan hijau dalam kalangan pemaju perumahan.















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ABBREVIATION

	BCA	Building and Construction Authority
	CASBEE	Comprehensive Assessment System for Built Environment Efficiency
	CaGBC	Canada Green Building Council
	CIDB	Construction Industry Development Board
	CO ₂	Carbon dioxide
	CSR	Corporate social responsibility
	CVA	Certified Verification Assessment
	DoS	Department of Statistic
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	ERMS	Energy Management Systems
	ESCO	energy service companies
	GB	Green building
	GBCA	Green Building Council of Australia
	GBI	Green Building Index
	GEO	Green Energy Office
	GHG	Greenhouse gasse
	GREEN PASS	Green Performance Assessment System
	GreenRE	Green Real Estate
	INDC	Intended Nationally Determined Contribution
	IGBC	Indian Green Building Council
	KeTTHA	Ministry of Energy, Green Technology and Water



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	KRI	Khazanah Research Institute
	kW	Kilowatt
	LEAP	Long-range energy alternative planning system
	LEED	Leadership in Energy and Environmental Design
	LEO	Low Energy Office
	LCCF	Low Carbon City Framework
	MGBC	Malaysia Green Building Confederation
	MHLG	Ministry of Housing and Local Government Malaysia
	PEB	Pro-environmental behavior
	PH JKR	Penarafan Hijau, Jabatan Kerja Raya
	REHDA	Real Estate and Housing Developers' Association
	R&D	Research and design
	SPSS	Statistical Package for the Social Sciences
05-4506	UNFCCC pustaka.	United Nations Framework Convention on Climate Change
	USGBC	United States Green Building Council
	WTP	Willingness to pay
	ZEH	Zero Energy Houses



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LIST OF APPENDIXES

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