

GERMANY/HONG KONG JOINT RESEARCH SCHEME
THE PROJECT REPORT
(for Project Completion)

Project Number: G_HK034/11

Title

Identification of Barriers and Opportunities for Sustainable Building Development 對發展可持續建築的障礙及機遇的探討辨識

Particulars

	Hong Kong team				German team	
Name of Project Co-ordinator (with title)	Dr. C.K. Chau (<i>Dr CHAU Chi Kwan</i>)				Prof. Dr. Thomas Lützkendorf	
Name of Co-Investigator (if any)						
Institution or Institutional affiliation	<input type="checkbox"/>	CityU	<input type="checkbox"/>	HKU	<input type="checkbox"/>	University of _____
	<input type="checkbox"/>	CUHK	<input type="checkbox"/>	HKUST	<input type="checkbox"/>	
	<input type="checkbox"/>	HKBU	<input type="checkbox"/>	LU	<input checked="" type="checkbox"/>	Others: KIT - Karlsruhe Institut für Technologie _____
	<input type="checkbox"/>	HKIEd	<input checked="" type="checkbox"/>	PolyU	<input type="checkbox"/>	
Other project team members (if any)						

Funding Period

	1 st year	2 nd year (if applicable)
Start Date	1/1/2012	1/1/2013
Completion Date	31/12/2012	31/12/2013

Objective(s) as per original application

1. Identify the similarities and differences in the trends of sustainable building development in Germany and Hong Kong.
2. Identify a list of critical motivating factors and major barriers that influence the diffusion of the sustainable building certification schemes in Germany and Hong Kong.
3. Determine whether barriers and motivating factors are the same for places whose people have different degrees of environmental awareness, attitudes and culture.
4. Formulate a set of strategies for promoting the diffusion of sustainable building certification schemes in Germany and Hong Kong

Details of Report [Please attach relevant document(s)]

i) Outline of proposed research and results obtained

The proposed study was intended to identify the similarities and differences in barriers and opportunities between Germany and Hong Kong for promoting green and sustainable buildings. During the exchange visits, Dr. Chau and Prof Lützkendorf exchanged views on the barriers and opportunities of green/sustainable buildings in Germany and Hong Kong. It was found that the types of barriers and opportunities of green buildings varied with the degrees of environmental awareness, attitudes as well as culture of the nations. Barriers to green buildings can be classified into three groups: (i) Commodity-related Barriers, (ii) Process-related Barriers, and (iii) Organization and Personal Behavioral Barriers. Based on the barriers identified, a conceptual framework has been developed to promote green building development.

ii) Significance of research results

Having both barriers and opportunities identified for both Germany and Hong Kong, it is determined that some valuable insights can be drawn from the experiences in both places and the insights have been partially translated into a conceptual diagram which is believed to be the future model for promoting green/sustainable buildings in Hong Kong. Based upon the developed conceptual model, practical strategies can be formulated to overcome the barriers to green/sustainable buildings.

iii) Research output

The findings have been published in form of a conference paper. "Leung, T.M., Chau C.K., Lützkendorf T.P. and Balouktsi M., A Review on Barriers, Policies and Governance for Green Buildings and Sustainable Properties, *Sustainable Building 2013 Hong Kong Regional Conference, Urban Density and Sustainability*, 12 -13 September 2013" (see enclosed). In addition, some of the findings have also been shared in the CPD lecture and a graduate student class "Sustainability in the Built Environment delivered by Prof. Lützkendorf during his second visit to Hong Kong.

iv) Potential for or impact on further research collaboration

A journal paper 'Green Buildings: A Review on Barriers, Policies and Governance ' jointly written by C.K. Chau*, T.P. Lützkendorf, T.M. Leung*, M. Balouktsi will be submitted to a peer reviewed journal within two month time. This took longer time than originally expected. Further collaboration on studies on determining the effectiveness of the financial drivers for green buildings will be undertaken in the forthcoming two years.