

**CITY UNIVERSITY OF HONG KONG**

**Establishing Buying Attributes of Environmental Insurance  
in China - A Study from Dongguang Industrial  
Organizations using Best Worst Scaling Method**

**建立環境保險在中國的購買屬性 -  
利用最大差異選擇方法向東莞工業公司的研究**

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## **Abstract**

This study focuses on finding the buying attributes of Pollution Liability Insurance (PLI) and their priority of preference from Chinese companies. The result helps in formulating the strategy of promoting PLI schemes either as 1) an environmental related service for Environmental Risk Management (ERM) role, or 2) an insurance product for risk transfer role.

China Ministry of Environmental Protection (MEP) has decided to promote PLI schemes on voluntarily basis at 14 pilot cities since 2008, and then followed by compulsory insurance on selected high-risk industries in 2015. Through the insurance mechanism, MEP hopes to achieve the dual purposes of enhancing ERM standard and risk transfer of pollution cost from the public to private sectors. However, the development of PLI has been slow due to a mismatch of demand needs from the polluting companies and supply offerings from the insurance companies.

Academics have been focusing on the study of (un)insurability of PLI due to technical and legal uncertainty of the polluting events. However, there are so far limited empirical studies on the buying behavior of these companies who have limited understanding, or sometimes misunderstanding, on the benefits of PLI because both environmental related service and insurance service are relatively new in China. The elicitation of main buying attributes of PLI equips all stakeholders to understand the demand of PLI with common understanding based on tangible services rather than vague concept of benefits offerings.

The research process adopts a mixed approach with interviews eliciting the main attributes, and then followed by surveys with Dongguan City companies using Best Worst Scaling (BWS) methodology. They are asked to evaluate the highest and lowest preference attributes among a set of four attributes with a total of 20 sets in one questionnaire. The survey result is further validated through focus group interviews.

The survey result indicates that cost is important, but the respondents still rank highest on the importance of satisfying the governmental needs. The perceived benefit of ERM is generally ranked much higher than the insurance coverage benefits and claims related issues. However, this overall preference does not apply to petro-chemical facilities and paper pulp factories, who are more concerned about the premium cost and insurance coverage respectively.

The survey reinforces the needs of government strong support in promoting PLI. The result is useful to the regulators and insurance market on more risk management focus rather than adopting the traditional actuarial approach in promoting the market.