

An analysis of search strategies for EPC online matching platforms

ABSTRACT

Energy Performance Contracting (EPC) is a mechanism which is widely used in energy conservation project. The low matching efficiency between ESCO and EU limits the performance of the EPC market which is an urgent problem. Solving this problem can significantly improve the efficiency of energy saving industry. It is of great significance to environmental protection. Online matching platforms can significantly improve the search efficiency in the matching process which is important in improving the performance of EPC market. This paper analysis the interplay between ESCO, EU and the online matching platform, using game theoretic models. We examine whether the online matching platform should target both H-type and L-type match-seekers or an exclusive H-type match-seekers group and how the platform should price the search services. Our research provides meaningful insights for online matching platform about the relationship between the matching effectiveness and search fee, guidelines for the pricing and positioning search service. Furthermore, we find that the price of platforms for search service can impact the decisions of each match-seekers which in turn affect the performance of the hole EPC market. Results from this study provide basic guides to develop EPC online matching platform.