



**De La Salle University – Dasmariñas**  
**GRADUATE PROGRAM**

**ENERGY PERFORMANCE CONTRACTING GAINS:  
AN ENERGY SOLUTIONS  
BUSINESS MODEL ANALYSIS**

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By

**Ron Allan B. Go-Aco**

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**ABSTRACT**

**Title** Energy Performance Contracting Gains: An Energy Solutions Business Model

**Researcher** Ron Allan B. Go-Aco

**Adviser** Dr. Magno L. Torreja Jr.

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The purpose of this study was to determine the financial and qualitative gains of Energy Performance Contracting (EPC) as an innovative “energy solutions” business model amidst a difficult period of slow or even stagnant economy. On financial gains, it sought to determine whether EPC’s concept of introducing energy efficiency projects with “no cash outlay required on the end-user” could generate projects for MERALCO ENERGY, INC. (MEI). It also attempted to find out whether “buy-out” of EPC could occur to MEI’s advantage. It ascertained whether EPC results could bring about decision by end-users to engage in a “buy-out” scheme, thereby strengthening MEI’s financial position to reinvest in another EPC project and creating sustainability in the process. The study likewise tried to find

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out if EPC projects are financially viable. It evaluated whether EPC can bring about considerably better financial yields via cash flows in terms of capital budgeting criteria such as Net Present Value, Internal Rate of Return, and Profitability Index, as compared to the levels of profits under a traditional contracting with tough bidding competition. On qualitative gains, this study pursued to investigate whether the market cared about energy conservation. It also aspired to find out if top management of firms really advocated energy efficiency projects. Moreover, it investigated whether the market is interested on EPC. Finally, this study sought to find out the market's perception on electricity rates affecting their energy consumption in the future.

This study further aimed to introduce the concept of EPC applied within the local industry vis-à-vis the EPC experiences abroad. This study encompassed the various elemental components of EPC so as to understand how it works and how it can be best applied to local market conditions.

To date, there have been no local documentation regarding any success or failure of EPC in the Philippines. This study aims to find out whether EPC can really be a sound “energy solutions” business model most especially in the midst of a stagnant or even declining economy.



**Conclusions and Findings:**

The results indicated that despite difficult times and with limited number of commercial building or industrial plant construction projects, EPC is an innovative way of securing energy efficiency projects. The results showed that EPC's concept of "no cash outlay requirement on the end-user" generated projects and jobs for MEI. Empirical evidence also indicated that end-users could be attracted to engage into "buy-out" schemes of EPC, as long as the actual energy savings exceed expectations by at least 20% to 30%. The results indicated EPC financial gains to be "better than 20% yield" over highly competitive bidding requirements of traditional contracting. As shown by the various case studies, the average financial indicators on HVAC-related projects provided Profitability Index of 1.42 and IRR at 57.63%. On PFC-related projects, Profitability Index shows an average of 1.26 while IRR is high at 109%. Net Present Value for both appeared consistently positive.

This study subsequently verified that the market cares about their energy consumption. Furthermore, it revealed that top management of firms advocated energy efficiency projects. In addition, the study confirmed that the market is interested on EPC. Lastly, it demonstrated the general perception of the market that electricity rates will continue to rise affecting their energy consumption in the future.



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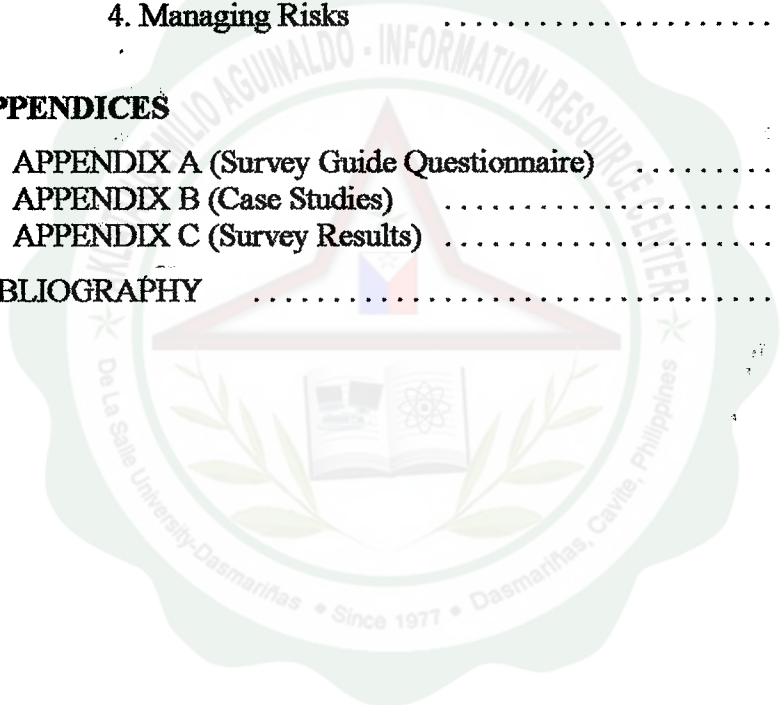
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