

Exploring Perceptions of Non-Energy Benefits and Energy Efficiency Investment in the Malaysian Industrial Sector

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Abstract : Energy management studies regarding energy efficiency investments in Malaysia has yet to address the lack of empirical research that examines pro- sustainability behavior of managers in the industrial sector and how it influences energy efficiency investment decision-making. This study adopts the Theory of Planned Behavior (TPB) to examine the relationship between personal attitude, subjective norms, and perceived behavioral control (PBC), the intention of energy efficiency investments, and how perceptions of Non-Energy Benefits (NEB) influence these intentions among managers in the industrial sector in Malaysia. Managers from various sub-sectors in the industrial sector were selected from a sample of companies that are participants of the Government-led program named the Energy Audit Conditional Grant (EACG) that aimed to promote energy efficiency. Data collection was conducted through an online semi-structured, open-ended questionnaire and then later interviewed. The results of this explorative sequential qualitative study showed that perceived behavioral control was a significant predictor of energy efficiency investment intentions as compared to factors such as attitude and subjective norms. The level of awareness and perceptions towards NEB further played a significant factor in influencing energy efficiency investment decision-making as well. Various measures and policy recommendations are provided together with insights on factors that influence decision-makers intention to invest in energy efficiency, whilst new knowledge on NEB perceptions will be useful to enhance the attractiveness of energy-efficient investments.

Keywords : energy efficiency investments, non-energy benefits, theory of planned behavior, personal attitude, subjective norms, perceived behavioral control, Malaysia industrial sector

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