



ICESD 2014: February 19-21, Singapore

Evaluating the Role of Energy Efficiency Label on Consumers' Purchasing Behaviour

Norzalina Zainudin^{a,*}, Chamhuri Siwar^b, Er Ah Choy^c and Norshamliza Chamhuri^d

^a *Selangor International Islamic University College, Malaysia*

^b *Institute for Environment and Development, National University of Malaysia*

^c *Faculty of Social Sciences and Humanities, National University of Malaysia*

^d *Faculty of Economics and Management, National University of Malaysia*

Abstract

This paper was designed to explore the influence of energy labelling toward the consumer purchasing behaviour. Based on information from a total of 117 samples, this paper finds mean correlations between consumers' awareness, knowledge, attitude, social norm and energy efficiency labels with purchase intention. Energy labelling shows a negative correlation with green purchasing behaviour. This finding demonstrates that energy labelling was fruitless to deliver a good message in encouraging consumer buying decision. Energy labels have to be understood, trusted and valued as a tool for consumers' decision making. It is believed that the use of energy labels alone is not considered enough to protect the environment. Thus, all the stakeholders should enhance some other factors as a complementary to the energy labelling programs.

© 2014 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/3.0/>).

Selection and peer review under responsibility of Asia-Pacific Chemical, Biological & Environmental Engineering Society

Keywords: Consumers' behavior, purchasing, energy efficiency label, Theory of reasoned action

1. Introduction

Presently, rapid urbanization and population growth has raised the demand for electricity in many developing countries. International Energy Agency (IEA) estimated the percentage of consumption of

* Corresponding author. Tel.: +6-038-925-4251; fax: +6-038-926-8462.

E-mail address: norzalina@kuis.edu.my

electricity in overall energy consumption has rapidly increased in recent 30 years among the world (IEA, 2010). The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), 2011 also revealed that the world's primary energy demand is expected to account for around 87% of the growth by 2030. The fact that more electricity is required to be generated is placing increasing pressure on upstream energy resources such as crude oil, coal and natural gas, the reserves of which are being depleted. According to many recent studies, a key driver in energy consumption by the households in developing countries is the fact that people in these countries can now live in a comfortable life, using new home appliances such as heaters and air-conditioners (Gleneagles, 2005; Tucker et al., 2008). ERA Consumer Malaysia (2002) stated one of the crucial areas that reflect the changing consumption pattern is the demand for energy. Household electricity consumption has continued to grow with increasing per capita income, resulting in the ownership of household appliances like air-conditioners, refrigerators, dishwashers, microwave ovens, washing machines and television sets. A study on household energy consumption in Johor, Malaysia found high ownership level of household appliances such as television (100%), refrigerator (99%), washing machine (96%), rice cooker (95%) and ceiling fan (93%) (Kubota et al, 2011).

IEA reported that the consumption and generation of electricity not only put pressure on the energy resources but on the other hand emit greenhouse gases (GHG) such as carbon dioxide (CO₂), carbon monoxide (CO) and nitrogen oxide compounds (NO_x). Energy sectors are responsible for approximately 65% of GHG emissions generated by human activities (IEA, 2009). As a part of GHG reduction program, energy efficiency policy is now being promoted worldwide. Since the 1990s, some programs to improve energy efficiency have been conducted in developing countries. Malaysia, through Ministry of Energy, Green Technology and Water (MEGTW) and Energy Commission (EC) of Malaysia in 2005 has introduced the energy efficiency and labeling program in an effort to promote culture of voluntary improvement amongst manufacturers. This action is supported by introducing the eco-labeling programs called ENERGY STAR rebate program in 2011. This program is initiated to improve energy efficiency in the country. In relation with the programs, the forth schedule of Malaysia Electricity (amendment) regulation 2013 has mentioned about the minimum energy performance standards (MEPS) for the purpose of energy efficiency use should be at least 2 star MEPS's value. Until now, this standard is applicable to refrigerator, air conditioner, television, domestic fan and lighting.

The energy labelling plays a significant role in shaping consumers' choice for energy efficient products and appliances since it provides consumers with additional information on products characteristics. Thus, labelling instruments are a crucial tool to ensure that the producers for energy efficient products to increase their market share. However not many studies have been done on how consumers' purchasing behaviour for energy efficient products is actually affected by the information available in energy labelling programs. Thus, the main focus of this study is to understand consumer attitude and behaviour related to the energy efficient products and appliances. This is accomplished by applying the theory of reasoned action in the context of energy efficient products purchases. The ultimate goal of this study is to further understand how the energy labelling program would influence consumer knowledge, awareness and purchasing behaviour.

2. Theoretical framework

The theory reasoned action (TRA) posits that the strongest predictor of individual's behavior is one's behaviour intention (Fishbein and Ajzen, 1975). Behavioral intentions are thought to be the result of both an individual influence and a normative influence. The individual influence on intention is a person's attitude toward performing the behavior. The normative influence on intention is referred to as one's subjective norm. This theory may be particularly useful for predicting behavior in the energy-saving industry because in this context consumers often decide to perform behaviors that they can associate with the desired outcome (Bang

Download English Version:

<https://daneshyari.com/en/article/676224>

Download Persian Version:

<https://daneshyari.com/article/676224>

[Daneshyari.com](https://daneshyari.com)