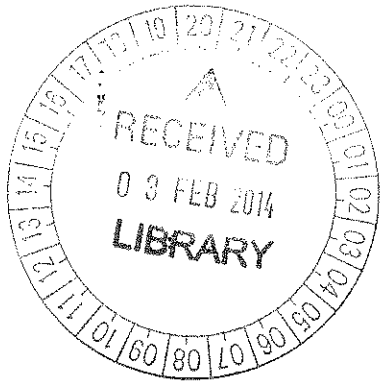
INTI INTERNATIONAL UNIVERSITY

MASTER OF BUSINESS ADMINISTRATION

A study of factors affecting Malaysian customers' purchase intention toward hybrid vehicle



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Abstract

The hybrid vehicles are becoming more popular in Malaysia. Although the sales of hybrid vehicles are getting increase, but the model of hybrid vehicles that draw into Malaysia's market are still limited. Automobile manufacturers are still monitoring the sales of hybrid vehicles in order to make decision in accessing Malaysia's hybrid vehicle's market. Thus, it is crucial to investigate about the factors that affecting the purchase intention toward hybrid vehicle among Malaysian, especially from the perspective of potential buyers. The findings of this research would provide a deeper insight on the factors that affecting purchase intention toward hybrid vehicle among Malaysian which above 25 years old. The model of 4 A's is included as factors in this study, where the derivation of the 4 A's are: availability, affordability, accessibility and awareness. Based on the research finding from 186 respondents, three (3) factors from the model shows significant in affecting purchase intention of hybrid vehicle, where the three (3) factors are acceptability, accessibility and awareness.

Keywords:

Purchase intention, Hybrid vehicle, Availability, Affordability, Accessibility, Awareness, Automobile Industry, Malaysia.

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SIOW KHIN SHIN

August, 2012

DECLARATION

"I hereby declare that this research project is of my own effort except for those summaries and information of which the sources are clearly specified"

10 August 2012

Siow Khin Shiun

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List of Abbreviations

BOP	-	Bottom of the economic pyramid
CO^2	-	Carbon dioxide
EV	-	Electric vehicle
GDP	-	Gross Domestic Product
ISO	-	International Organization for Standardization
MAA	-	Malaysian Automotive Association
MGTC	-	Malaysian Green Technology Corporation
PHV	-	Plug-in hybrid vehicle
ROI	-	Return on Investment
SIRIM	-	Standards and Industrial Research Institute of Malaysia

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CHAPTER I

INTRODUCTION

1 Chapter Summary

This chapter gives the readers a brief introduction of the background of the automobile industry and knowledge toward hybrid vehicles. The problem definition describes the issues that currently faced by Malaysian hybrid vehicle market and therefore the research objectives and research questions were developed.Lastly, the significance of study, assumptions, limitations and scope of the study will be further discussed in this chapter.

1.1 Background of the Study

The health and welfare of the environment have become an increasingly important public issue for consumers' nation and worldwide (Noblet, Teisl and Rubin, 2006) and the environmental concerns are continuously gaining in political and economic importance (Bleda and Valente, 2009).

Besides that, the environmental performance of finished goods has increasingly gained political attention and resulted in restrictions of certain substances, advance disposal fees, environmental surcharges, voluntary agreements and etcetera (Leire and Thidell, 2005).

According to Bleda and Valente (2009), the increase in importance of political consumerism and consumer responsibility-taking has led a shift in the focus of environmental policy from industrial pollution control towards the achievement of more sustainable consumption patterns. Therefore, eco-friendly labels have gained more and more relevance and becoming one of the high-profile market-based tools for the achievement of environmental objective.

Eco-friendly labels, also known as eco-labels, green labels and environmental labels, it basically acts as a guideline for consumers to aware and chooses products that are environmental friendly (D'Souza, Taghian and Lamb, 2006). In other words, the introduction of eco-friendly labels is to allow customers to

distinguish the products which are less harmful to the environment from other products (Grankvist, Dahlstrand, and Biel, 2004). This eco-friendly labeling schemes are particular cases of product information policy instruments and seals of environmental approval which awarded by public or private organization (Bleda and Valente, 2009).

From the business point of view, the eco-friendly labels are used as a symbol to differentiate their products from competitors and position their products at more environmentally friendly forms (D'Souza, Taghian and Lamb, 2006).

There are three (3) types of eco-friendly labels that used to indicate the environment-friendly products, and it has been established under monitor by ISO (International Organization for Standardization) (Dee, 2006; Morrison, 2000). The eco-friendly labels are not the certification standards by ISO 14000 series but it follows the guidance of ISO 14000 series.

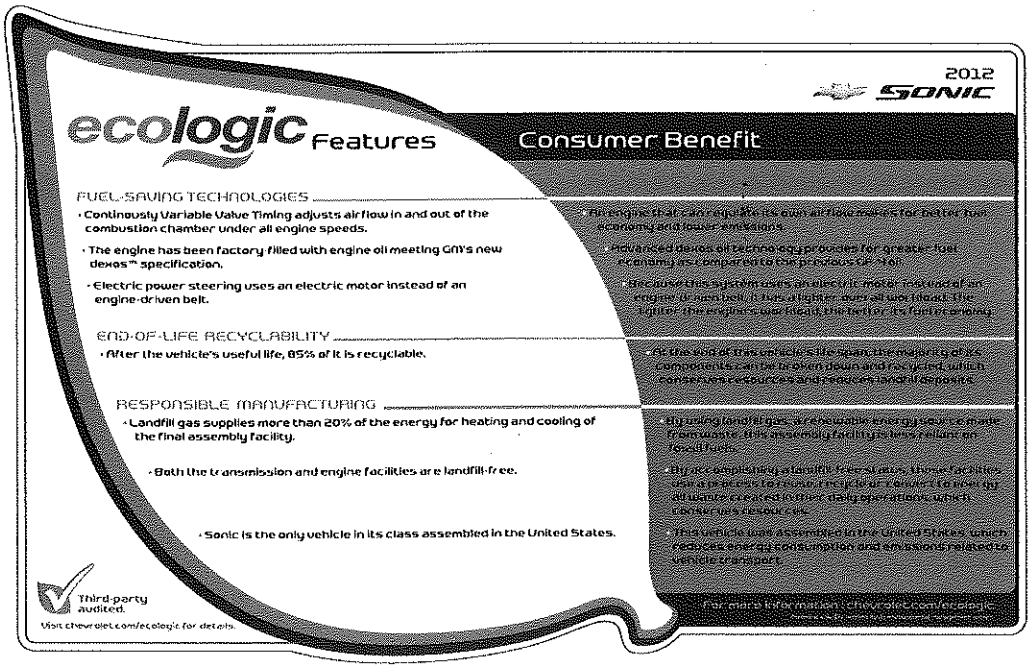
Table 1.1 - Type of eco-friendly Label

Type of eco-friendly label	Type I	Type II	Type III
Name	▸ Environmental labels	▸ Environmental labels (self-declared claims)	▸ Environmental Declarations
ISO Guideline	▸ ISO 14020*1 ▸ ISO 14024	▸ ISO 14020*1 ▸ ISO 14021	▸ ISO 14020*1 ▸ ISO 14025
Purpose (s)	▸ Aimed at identifying environmentally superior products	▸ Provide certainty for manufacturers contemplating export ▸ Assist consumers to understand what the claims on labels mean	▸ Provide data on key environmental aspects
Example (s)	▸ Environmental Choice (Canada) ▸ Eco-mark (Japan) ▸ European Eco-label (European Commission) ▸ Nordic Swan ▸ Blue Angel (Germany) ▸ Green Seal (USA)	▸ Ozone friendly ▸ 100% recycled paper ▸ Phosphate free ▸ Designed for disassembly ▸ Recyclable ▸ Totally eco-friendly	▸ Resources depletion ▸ Energy uses ▸ Air pollution ▸ Water pollution ▸ Solid waste

*1 - ISO 14020 is the guidance for all types of Eco labels.

General Motors' Chevy Brand has been granted with world first green label car in early of the year 2012, where Chevy has created an official green label for its car and roll out the sticker which contain of environmental data together with the 2012 Chevy Sonic while launching (Guevarra, 2012). The green label is known as "ecologic label", which will be affixed to the driver's side rear window of the Chevy Sonic model in the US market. Figure 1.1 below shows the sample of the ecologic label. Furthermore, this ecologic label from Chevy is the first voluntary and third-party certified label in automobile industry although environmental product labeling is becoming more prevalent nowadays (Guevarra, 2012).

Figure 1.1 - Green label for Chevy's Sonic (Guevarra, 2012)



1.1.1 Malaysia Automobile Industry

Malaysian automobile industry can be considered as a competitive market since there are a lot of players in the automobile market, such as Honda, Toyota, Proton, Perodua, Nissan and so on. In recent years, the sales of hybrid vehicles are increasing and indicate that Malaysian are becoming more environmentally conscious (Mansor, Yahaya, Nizam and Aman, 2011).

In August 2008, Prime Minister Abdullah Ahmad Badawi announced that the tax exemption of hybrid vehicles which below 2,000cc during Budget 2009 speech (Cheong, 2012). The tax exemption carry out for 2 years, then Abdullah Ahmad Badawi's successor - Prime Minister Datuk Seri Najib Tun Razak, who is also Finance Minister announced that the tax exemption have extended to 31 December 2011 and again, Datuk Seri Najib Tun Razak extended the incentive until 31 December 2013 during Budget 2012 (Tan, 2011). The only change made since the first introduce of the exemption is the amount of exemption. On Budget 2011, the exemption was increased to 100% exemption for both import duty and excise duty from 100% import duty and 50% excise duty exemption (Tan, 2011). In other words, there is full import duty and excise duty exemption for hybrid and electric cars and motorcycles which below 2,000cc from 1st January 2011 until 31th December 2013.

According to Star (2011), Malaysian government has announced the extended of full exemption (Included of import and excise duty) for hybrid and electric vehicles which below 2,000cc for two more years under Malaysia Budget 2012. The decision was made in order to promote the assembly of hybrid and electric cars in Malaysia and boost the country's economy at the same time. Besides that, it also promotes the environmental conscious practice to Malaysian where Houe and Grabot (2009) stated that the tax subsidy is significantly boosting the sales of hybrid vehicles.

1.1.2 Green Vehicle

It actually has a standard from Energy Bureau to determine the "eco' level of a vehicle (Fu, 2011). The examples of the standard are America Standard – FTP 75 and Europe Standard EC, both of the standards are basically based on vehicle capacity, which ranked from 'below 1,200c.c.' up to 'above 5,400c.c.'. By referring to the Table 1.2 below, the table shows the fuel consumption standard for FTP 75 and EC. Both of the standard have different requirement because the formula employs by both of the standard are different.

Table 1.2 - FTP 75 and EC Standard (Fu, 2011)

Capacity (cc)	FTP 75 (km/L)	EC (km/L)
Below 1,200	16.2	14.1
1,201 – 1,800	13.0	11.3
1,801 – 2,400	11.4	9.9
2,401 – 3,000	10.0	8.7
3,001 – 3,600	9.2	8.0
3,601 – 4,200	8.5	7.4
4,201 – 5,400	7.2	6.3
Above 5,400	6.5	5.7

Besides that, the hybrid vehicle model such as Toyota Prius, Honda Insight, Lexus CT200H, Lexus RX450h and Lexus LS600hL are meeting the requirement of those standard and entitled as a green vehicle (Fu, 2011).