

Consumers' Purchase Intention towards Green Energy: The Role of Green Perceived Value and Government's Legislation

Xin Ying Chua^a, Nabsiah Abdul Wahid^b, Shaizatulaqma Kamalul Ariffin^c

^{a,b,c}Graduate School of Business, Universiti Sains Malaysia, Malaysia
^bnabsiah@usm.my

Article Info

Volume 83

Page Number: 4035-4043

Publication Issue:

May - June 2020

Abstract

Despite the government's effort to shift the country's adoption towards green energy such as solar energy, the use of green energy is still sluggish in Malaysia. This study investigates the role played by green perceived value and government's legislation in influencing Malaysian consumers' intention to purchase green energy. To achieve the objectives, an online survey was carried out on 271 convenience samples and data was analysed using Partial Least Square- Structural Equation Modelling (PLS-SEM). The study found that for green perceived value, except for social value, the other values, namely, functional value, conditional value, emotional value, and environmental value show positive effects towards consumers' purchase intention; in addition, conditional value shows the strongest effect towards green energy purchase intention. Government's legislation however did not show any significant effects on consumers' purchase intention of green energy. The study's findings have contributed towards expanding our understanding on green marketing; marketers and the government in particular, they have insights on the different values that Malaysians weigh when deciding on their intention of purchasing green energy as well as identifying conditional value as the most upheld value for Malaysians. The study suggests that under certain circumstances, incentives and subsidized rate given to the customers can be some of the future activities in attracting Malaysians to purchase and adopt green energy mainly because customers that adopt green energy were not influenced by peer influence or the government's legislation.

Article History

Article Received: 19 November 2019

Revised: 27 January 2020

Accepted: 24 February 2020

Publication: 12 May 2020

Keywords: Consumer's intention to purchase, green perceived value, conditional value, social value, functional value, emotional value, environmental value, government legislation

1. Introduction

Green energy (GE) is energy that results from natural resources and those produced from technology which is renewable. Examples include sunlight, wind, rain, photovoltaic solar panels, biomass projects and geothermal projects. The beauty of green energy lies in the fact that electric generated from it would emit zero greenhouse gas emission to the atmosphere; meaning that it offers the planet with a long-lasting solution in

combating the climate change issue compared to electric generated from non-renewable energy like fossil fuels that emits destructive greenhouse gases such as carbon dioxide, methane and nitrous oxide to the environment. Today, the topic of green energy has been attracting significant research attention around the globe (Sangroya & Nayak, 2017).

In Malaysia, the country's Economic Data Analysis (2010 – 2015) on electricity demand per capita shows an

ascending trend. In Peninsular Malaysia alone, the profile shows that out of a total of 7.8 million of electricity users, 82% comprises of domestic users, 17% commercial users, 0.4% industrial users while 0.6% is made of the other users (Rahman et al., 2017). Noting the unsustainable practice and diminishing supply of fossil fuel energy resources, the authority is switching and diversifying the energy mix with greener energy such as solar and mini hydro in line with Malaysia's motives to move itself towards a greener energy policy which proves to be popular (Ali et al., 2012). The 11th Malaysia plan has mapped the government's efforts towards developing and increasing the country's growth of the green energy market and industry by year 2020. For instance, a 40% reduction of the greenhouse gases (GHGs) production intensity of the country's Gross Domestic Product (GDP) target has been set to be achieved by 2020. Other efforts in the plan include Feed in Tariff, Net Energy Metering (NEM), tax exemption and incentives which are introduced via Tenaga Nasional Berhad as ways to encourage green energy adoption for the residential and commercial sectors. Abdul Aziz et al. (2017) identified solar energy as the best option from all other available green energy alternatives in Malaysia as the country manages to produce an average solar emission of 400 – 600 MJ/m² per month. They also noted low public acceptance of solar energy adoption making it still to be at the infancy stage in the country. Public's low acceptance of solar energy has been linked to the excessive cost of photovoltaic (PV) cells and high solar electricity tariff rate (Mekhilef et al., 2012). Lack of awareness, lack of social acceptance towards green energy, less perception of government policy, perceived high cost, perceived risk, residential users' lifestyle, and low environmental concern have also been identified from past research as reasons contributing towards the low intention to purchase and use of green energy (Abdul Aziz et al., 2017; Jayaraman et al., 2017; Alam et al., 2016; Chen & Chang, 2012; Ghani et al., 2019).

This study attempts to investigate the consumers' green energy purchase intention issue by exploring their determinants using variables from the value theory and government's legislation factor. Here, the roles played by green perceived value and government's legislation will be investigated as determinants of the Malaysian consumers' intention to purchase green energy. The green energy industry in Malaysia could expand itself further using the consumers' value and government's legislation insights provided from the study findings.

2. Literature Review

2.1 Customer Purchase Intention of Green Energy and Value Theory of Consumption

Green purchase intention of green energy can be explained as consumer's tendency to choose environmental friendly products over the conventional products in their decision making process (Abdul Aziz et al., 2017). In green consumerism, intent is important as it serves as a start towards consumers' action of consuming

green products. Many studies investigating consumer's purchase intention of products have used value theory of consumption and its identified variables, namely, functional, social, emotional, and conditional values) as determinants of such behaviour. For green product studies, another value variable, namely, the environmental value has been added to the set of exiting values (e.g. Khan and Mohsin, 2017; Muhammad-Sukki, 2011).

Value is an important concept in social sciences including sociology and psychology (Turaga et al., 2010). Value concept has been used in the past to describe social organization and personal organization that are associated with change (Schwartz, 2012). According to Schwartz and Bilsky (1987), value refers to the concept based on individual's beliefs about the desired end behaviours over specific situations, the evaluation of behaviours and events, and on the fact that value resulted in people making decisions ordered by relative priorities. Values that consumers have will thus, influence their behaviour; in other words, consumers will evaluate judgements and make preferences based on the values they have (Goncalves et al., 2016). This means that values should also exist and would play their roles in the context of green energy issues.

Despite the importance of values, no commonly accepted definition on it has been concluded by past researchers (Goncalves et al., 2016). The literature acknowledged the concept of value can be unidimensional and multidimensional; however, the multidimensional consumers' values has been shown to have more predictive ability towards the consumer's repurchasing intention compared to the one-dimensional approach (Leroi-Werelds, 2014).

Value theory of consumption is leveraged in this study to be supporting of individuals' pro-environmental behaviour, namely, in intending to purchase green energy. The use of value theory to investigate pro-environmental behaviour has been observed popular and beneficial in the past. For instance, value theory was applied to analyse individual's spending on green energy program – the results showed that both warm and glow effects, as well as individual's philanthropic motivations were identified as determinants of individual's spending on green energy; individual's purely egoistic motivations was found to not show any influence over the pro-environmental behaviour (Oberholzer-Gee, 2001 c.f. Larsen, 2017). The findings of this study imply the importance of perceived value; for instance, values that individuals hold tight within themselves will affect their belief. Ultimately, the value or values would determine how the individuals would be behaving or would be performing specific action(s) they consider important and of value to them. Since value spectrum is broad, green perceived value is comprised of functional value, conditional value, social value, emotional value and environmental value.

In terms of consumers embracing green perceived value, it can then be related to how they evaluated the benefits they gained from consuming the product or services. In other words, as per Chen and Chang's (2012)

definition, green perceived value refers to the overall customer satisfaction of the benefits they received and perceived to be given by the product based on consumer's environmental desires, sustainable expectations and green needs.

2.2 Functional Value and purchase intention

Sheth et al. (1991) define functional value as the observed utility one acquired from an alternative's capacity in terms of practical, utilitarian or physical performance. The estimation of functional value can be known after the consumer carried out a rational analysis that involves the weighing of various costs and benefits factors that accompanies the purchase of a product or service. In general, it is usual for consumers to prefer purchasing products or services that they can acquire at a minimal cost but the purchase also provide them with the maximum benefits. Examples of functional value are product's price, quality, value for money, and other intangible or subjective benefits (e.g. the product provides a good source of green energy, the product has the ability to reduce pollution, the product provides exceptional performance, reliability).

Taking the example of price further, although product's price can be considered as one of perceived functional values, its role however has been inconclusive. Price was found to show both significant and insignificant importance in past pro-environmental behaviour studies. Catoiu et al.'s (2010) study for instance found that consumers' purchase intention to be highly dependent on their perceived value of the product's price. Selling green products at an expensive price then would be the determining factor preventing consumers from having the intention to purchase and/or use the product. In short, consumers will not have any interest to purchase green products if the price is perceived to be expensive. A study by Lin and Huang (2012) however reported that certain consumers were willing to pay more for environmentally friendly products. In this case then, functional value (measured via price) is shown to have no significance on consumer's choice when deciding on a green purchase. Another study shows that where environmental attributes of green energy is perceived to be important, green consumers showed the tendency to pay a higher price so that they can consume and use the green energy (Kaenzig, 2013). The supports from the literature thus lead to hypothesis 1:

H1: Functional value is positively related to consumer's purchase intention of green energy.

2.3 Conditional Value and purchase intention

Conditional value refers to perceived utility attained by an alternative due to specific or a set of conditions faced by the decision makers (Sheth et al., 1991). Thus, conditional value is the effectiveness gained by consumers from an arising situation. For instance, government's incentives or tax exemption may enhances consumers towards using green energy (Sovacool, 2012). In theory, when the value is strongly related to the product or services used in a context, the conditional value will rise. Results from study conducted by Lin and

Huang (2012) found conditional value to be influential on the green consumers' behaviour on various physical and environmental contingencies. Furthermore, in one of the studies conducted by Biswas and Roy (2015) in India, conditional value was found to show a significant effect over consumers' behaviour in consuming sustainable products. Based on these findings, the following hypothesis 2 is proposed:

H2: Conditional value is positively related to consumer's purchase intention of green energy.

2.4 Social Value and purchase intention

Social value is defined as the perceived utility that results from the product or services associated with one or more social groups like from demographic, socio-economic, and cultural factors. Social value thus, refers to individual's perception on what the society thinks on them if they purchase a particular product or services. Status seeking in society is found to be one of the objectives on why the consumer choose to purchase or use a particular product or services (Sangroya & Nayak, 2017). Awuni and Du (2016) reported on how young adults in China to be highly influenced by social value when it comes to green purchase intention. In addition, Ek and Matti (2014) reported on how populations at northern Sweden viewed others who invested in green energy as to have higher positive self-image than other people. Another study performed by Masini and Menichetti (2013) identified peer influence as one of the factors that will cause consumers to concentrate their investment on green energy technologies. These literature support then leads to hypothesis 3:

H3: Social value is positively related to consumer's purchase intention of green energy.

2.5 Emotional Value and purchase intention

Emotional value is defined as the perceived utility obtained from an alternative capacity to cause the increase in interest, provide novelty and suit a desire for knowledge (Sheth et al., 1991). The feelings and emotions that a consumer experienced while using a product is referred to as emotional value. Based on the study conducted by Hartmann and Apaolaza-Ibanez (2012), emotions play a larger role compared to individual's own functional value when the consumer decided to purchase a product. As such, consumers will feel a sense of deep well-being due to the moral satisfaction gained by giving back to the environment. Akgun et al.'s (2013) study for instance found that emotions to be strongly built and a factor that connects end consumers and product brands. The findings indicate that if consumers believe in the information source, they would show positive emotional responses in return. Furthermore, consumers who have stronger emotional value were found to identify themselves as environmental defenders and pro-environmentalist individuals (Lin and Huang, 2012). The importance of emotional value leads to hypothesis 4:

H4: Emotional value is positively related to consumer's purchase intention of green energy.

2.6 Environmental Value and purchase intention

Environmental value refers to the measurement of a consumer's attitude towards environmental matters; like on issues of pollution, energy conservation, waste as well as the toxic agents on the atmosphere and natural habitats (Khan & Mohsin, 2017). Studies have shown of a substantial positive relationship that exist between individual's environmental value and their environmentally friendly behaviour. For instance, consumers tend to adopt green consumption if they are concerned about the environment (Khan & Mohsin, 2017). In addition, environmental value is found to have a positive relationship with consumers' sustainable products consumption in India (Biswas and Roy, 2015). This leads to the development of hypothesis 5:

H5: Environmental value is positively related to consumer's purchase intention of green energy.

2.7 Government's Legislation and purchase intention

Government's initiative, in general refers to the initiatives taken up by the federal government or local authorities. For instance, the role taken by the government in supporting environmental protection is valid (Ooi et al., 2012). According to Ooi et al. (2012), the government should walk the talk. Being the role model of the people in their country, the government should have formed and executed environment sustainability programs. Examples of efforts taken to implement green consumerism in Malaysia by the federal government include the launch of various programs such as the Feed-in Tariff, Net Energy Metering, in promoting green energy usage in the country while the local authorities have been supporting car-pooling and provided incentives to green products producers in the states (Ooi et al., 2012). In Taiwan, local authorities provided financial incentives for residences who use solar water heaters which had resulted the driving force for their local solar water heater market expansion (Chang et al., 2011). Ooi et al.'s (2012) study on the experience of green purchase intention among Malaysians reported that government legislation plays a crucial role in influencing the intention to purchase green products among the customers. This shows that the government plays a crucial role in walking the talk where green energy is concerned. Other studies by Abdul Aziz et al. (2017) and Qader and Zainuddin (2011) however found otherwise; as government legislation did not show any significant relationship with consumers' purchase of the green energy. These lead to this hypothesis 6:

H6: Government legislation is positively related to consumer's purchase intention of green energy.

2.8 Research Framework

The value theory of consumption provides the basis of the study's model. As has been explained in earlier section of 2.1, value's importance as a concept has been acknowledged in past pro-environmental studies, and as such, its selection as the underlying theory for this study is considered a good choice.

In the model, five independent variables representing five different values of consumers' green perceived value,

namely, consumers' functional (H1), conditional (H2), social (H3), emotional (H4) and environmental (H5) green perceived values were hypothesized as determinants on the dependent variable investigated in the study, i.e. consumers' purchase intention towards green energy. The model also proposed government legislation as independent variable and determinant (H6) for Malaysian consumer's purchase intention towards green energy.

3. Research Methodology

In this study, the green energy context investigated is scoped to solar energy. The choice to investigate solar energy is due to it being identified the best option of green energy that Malaysia as a country has. As explained by Abdul Aziz et al. (2017), Malaysia has been emitting an average solar emission of 400 – 600 MJ/m² per month; a reliable and potential source of green energy to be explored.

Convenience sampling, a type of non-probability sampling method was used for selection of respondents and that online survey was chosen for data collection purposes. Survey questionnaires blasted from August 2018 to October 2018 managed to secure 271 usable responses for analysis. According to Hair et al. (2009), multivariate data analysis requires a sample size between 200 to 500. The responses collected were within Hair et al.'s (2009) suggestion.

Section 1 of the survey's questionnaire was focused on getting respondents' background information, Section 2 on items measuring respondents' green perceived values (functional, conditional, social, emotional, environmental) on green energy while the last section contained questions on respondents' purchase intention towards green energy. The items measuring the green perceived values variables were adapted from Sangroya and Nayak (2017) and from Kahn and Mohsin (2017); while items measuring government legislation variable and consumers' purchase intention were adapted from Abdul Aziz et al. (2017). A five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used to evaluate the different factors measured in the study. This study used SPSS 20.0 for descriptive analysis. Data analysis for the measurement model assessment to determine direct relationships between the independent variables and the dependent variable hypothesized was carried out using Smart PLS 3.2.7.

4. Results

4.1 Respondents' Profile

The total respondents for the study was 271 people representing the Malaysian population. The demographic profile of the respondents shows that majority of the respondents (39.5%) were from Penang (respondents from Wilayah Persekutuan/Kuala Lumpur were second highest with 15.9%); were dominated by the female gender (62.7%); were from the Chinese ethnic group (83.4%), came from the range of income group of

between RM3501 – RM5000 (39.5%), and were in the age category of between 30-50 years old (67.2%).

4.2 Assessment of the Measurement model

Composite Reliability (CR) was used as a measurement for internal consistency reliability whereby CR for all constructs must be higher than 0.7 to be regarded as satisfactory for advanced stage of research (Hair et al., 2017). Convergent validity was tested via outer loadings of the indicators and the average variance extracted (AVE) in order to determine whether a specific indicator correlated absolutely with the alternative indicator of the same construct. Based on Hair et al. (2009), outer loadings should be above 0.50 and AVE should be more than 0.50. Table 1 shows all indicators on outer loadings were above 0.5 and the AVE of the constructs were above 0.5. Therefore, all the latent variables explained at least 50 percent of each indicators' variance.

Table 1: Result of measurement model (n = 271)

Latent variable	Item	Loading	AVE	Composite Reliability
Functional value (FV)	FV1 consistent quality of GE	0.771	0.569	0.867
	FV2 GE well made to reduce environmental	0.806		
	FV3 GE at acceptable quality standard	0.845		
	FV4 GE value for money	0.664		
	FV5 GE good source of energy	0.666		
Conditional value (CV)	CV1 discount/promotion incentives	0.867	0.674	0.891
	CV2 subsidized rate	0.864		
	CV3 easily available	0.859		
	CV4 unsustainable env. condition	0.678		
Social value (SV)	SV1 feel accepted by others	0.932	0.867	0.963
	SV2 improve way perceived by others	0.945		
	SV3 make good impression on others	0.936		
Emotional value (EV)	EV1 enjoy the use of GE	0.891	0.762	0.927
	EV2 want increase of GE	0.868		
		0.832		
		0.898		

Environmental value (ENV)	business EV3 feel relaxed about using GE		0.688	0.868
	ENV4 feel good about using GE			
	ENV1 environmental pollution threat	0.799		
	ENV2 approach limit Earth can sustain	0.827		
	ENV3 would choose product less harmful to the environment and Earth	0.861		
Government legislation (GL)	GL1 unclear GE regulations	0.908	0.803	0.891
	GL2 not enough initiatives taken on GE	0.884		
Purchase intention (PI)	PI1 likely will purchase GE in future	0.902	0.871	0.953
	PI2 intend to use GE in future	0.953		
	PI3 predict GE usage in future	0.943		

Based on Fornell and Larcker (1981), AVE comparison with each construct with the shared variance between the constructs model was used to identify discriminant validity. If AVE of each construct is greater than its shared variance with any other construct, discriminant validity is supported. Thus, based on results presented in Table 2, discriminant validity is confirmed.

It is important to note that the Heterotrait-Monotrait (HTMT) ratio of correlation can also be used to determine discriminant validity. Based on Kline's (2011) suggestion, the value of HTMT ratio should be less than 0.85; whereas Gold et al. (2001) mentioned that the HTMT value can be less than 0.90. Therefore, as can be seen from the results shown in Table 2, it can be seen that none of the confidence interval exceeded 0.90. Thus, discriminant validity is also confirmed.

Table 2: The result of discriminant validity of measurement model (n = 271)
Fornell and Larcker

Construct	CV	EV	ENV	FV	GL	PI	SV
CV	0.821						
EV	0.493	0.873					
ENV	0.450	0.476	0.829				
FV	0.32	0.45	0.28	0.75			

	2	1	6	4			
GL	0.11	0.16	0.23	0.07	0.89		
	2	8	4	4	6		
PI	0.57	0.57	0.50	0.52	0.19	0.93	
	4	8	6	0	0	3	
SV					-	0.14	0.93
	0.17	0.34	0.05	0.31	0.08	7	1
	7	7	1	4	2		

Heterotrait-Monotrait Ratio (HTMT)

Constru ct	CV	EV	EN V	FV	GL	PI	S V
CV							
EV	0.56						
	2						
ENV	0.53	0.56					
	4	6					
FV	0.37	0.51	0.31				
	4	4	7				
GL	0.14	0.20	0.29	0.13			
	6	4	7	2			
PI	0.64	0.62	0.58	0.55	0.19		
	3	8	7	6	0		
SV	0.20	0.38	0.06	0.38	0.09	0.15	
	2	6	6	0	7	4	

4.3 Assessment of structure model

According to Hair et al. (2013), there comprised of three criteria in order to test for the significance of all structural model relationships: t-value, p value and bootstrap confidence intervals. The significance of the paths was assessed by using subsamples of 5,000 and applying the one tailed test for examining the direct effects. Result showed that 55.8 percent of Malaysian consumers' green energy purchase intention was influenced by the measured influencing factors. Significant effects specified by the research model were evaluated and the results revealed that the effect of conditional value to green energy purchase intention ($\beta = 0.281$, t-value = 5.621, $p < 0.001$), emotional value to green energy purchase intention ($\beta = 0.199$, t-value = 3.689, $p < 0.001$), environmental value to green energy purchase intention ($\beta = 0.181$, t-value = 3.402, $p < 0.001$), functional value to green energy purchase intention ($\beta = 0.258$, t-value = 4.68, $p < 0.001$) were positive and significant except for social value to green purchase intention which was negative and insignificant ($\beta = -0.042$, t-value = 0.094, $p > 0.001$). Thus, based on the results of the structure model, except for social values (H3), all the other green perceived values (H1, H2, H4, and H5) are supported. In addition, government legislation is shown to be not supported in having influential effect towards purchase intention on green energy ($\beta = 0.054$, t-value = 1.176, $p > 0.05$). Therefore, hypothesis H6 is rejected.

Effect size denoted by f^2 where sample size was not taken into consideration with condition of $f^2 > 0.02$

indicate small or near to no effect, $f^2 > 0.15$ indicate medium effect and $f^2 > 0.35$ indicate large or strong effect within two variables. In this study, functional value shows the strongest or having the largest relationship effect with Malaysian consumers' purchase intention of green energy while the weakest relationship is found to be between social value with consumers' purchase intention. The summary of results is presented in Table 3.

Table 3: Significance of direct effects-path coefficient (n =271)

Hypo theses	Relati onship	Be ta- va lu e	Stan dard erro r	t- valu e	p- va lu e	f^2 (Ef fec t Siz e)	Deci sion
H1	FV → PI	0.258	0.055	4.68***	0	0.107 (S)	Supp orted
H2	CV → PI	0.281	0.051	5.621**	0	0.102 (S)	Supp orted
H3	SV → PI	-0.042	0.074	0.094	0.183	0.003 (N E)	Not supp orted
H4	EMO V → PI	0.199	0.054	3.689**	0	0.046 (S)	Supp orted
H4	EMO V → PI	0.199	0.054	3.689**	0	0.046 (S)	Supp orted
H5	ENV → PI	0.181	0.053	3.402**	0	0.049 (S)	Supp orted
H6	GL → PI	0.054	0.046	1.176	0.12	0.006 (N E)	Not Supp orted

Note: * $p < 0.05$ ($t > 1.645$), ** $p < 0.01$ ($t > 2.33$), *** $p < 0.001$ ($t > 3.09$)

4.4 R^2 value and predictive relevance (Q^2)

The current study revealed R^2 value for purchase intention of green energy to be 0.558. In general, high R^2 value and majority of significance hypotheses testing suggested that this model is suitable to explain the factors influencing purchase intention towards green energy. In addition, through the blindfolding procedure, Q^2 is used for the predictive validity of a model using PLS. Fornell and Cha (1994) found that the value of Q^2 should be higher than zero, which displayed a predictive significance of the exogenous constructs for the endogenous construct. The Q^2 purchase intention ($Q^2 = 0.446 > 0$) revealed a good predictive relevance of the model.

Table 4: R^2 and predictive value (n = 271)

Endogenous variable	R ²	Q ²
Purchase Intention	0.558	0.446

5. Discussion and Conclusion

This study investigated the role of green perceived value factors and government legislation as determinants of Malaysian consumers' purchase intention towards green energy. The relationships between independent variables and the dependent variable, as stated in the research hypotheses were inspected through evaluation of the beta value for each predictor variable. Results showed that conditional value having the most impact on consumer purchase intention towards green energy, followed by functional value and emotional value. However, social value and government legislation to play no role in determining consumers' purchase intention of green energy. Conditional value's status as the most influential factor towards purchase intention of green energy in Malaysia may be due to its association with specific circumstances when dealing with green energy. This result is found to be aligned with previous studies conducted on green products, for instance, by Goncalves et al.'s (2016) study in Portugal and Biswas and Roy (2015) in India; where certain conditions such as obtaining information regards to global warming or threats to the environment were very influential. The current study's finding suggests that Malaysian consumers will have tendency to purchase green energy under the circumstances where they are aware of the environment threat happening at the globe, and they are aware that incentives or the benefit that they will obtain such as saving electricity cost in the long run with adopting the green energy usage.

Functional value factor was the second most influential factor towards green purchase intention in Malaysia's context. This is in line with Khan and Mohsin (2017) and Biswas and Roy (2015), where they found that consumers will evaluate the functional value in terms of quality, before deciding whether to consume or not for green products, and the findings shown that functional value is significant towards consumer purchase intention on green products. In Malaysia then, the finding suggests on the importance of quality of green energy to be considered as an attraction of the product; as once the customers are confident about the quality of GE, the intention to purchase it will increase. Results indicating the importance of emotional value as a determinant in this study is aligned with studies by Lin and Huang (2012) and Hartmann and Apaolaza-Ibanez (2012) which suggests that consumer psychological benefits can be enhanced using green energy marketing activities. As for environmental value, the significant result was expected as consumers who are concerned about current environment issues such as global warming would show increased intention to opt for green alternatives as also shown in previous studies (Khan and Mohsin, 2017; Biswas and Roy, 2015; Hussain et al., 2017). This finding

supports further the suggestion on using the benefits perceived to be gained from improving the environment sustainability to motivate consumers to have intention to purchase GE in future. Government legislation however was found to be statistically insignificant and the finding is aligned with Abdul Aziz et al.'s (2017) study on Malaysian consumers adopting solar panel in Malaysia. As they reported, despite the incentives given by the government to motivate public interest on green energy, the schemes were considered unattractive compared to other investments they can make causing non-adoption (Abdul Aziz et al., 2017). Social value insignificance is similar to past studies (e.g. Biswas and Roy, 2015; Kalafatis et al., 1999; Hussain et al., 2015). Reasons may be due to consumers sticking to their own personal factors such as attitude and belief, rather than following social pressure.

In conclusion, the issue of green energy is important to be explored as the insights on what determines consumers' intention to purchase it are useful for the government and the industry. The issue was explored in this study from the perspective of value theory. The study has identified specific values, namely, functional, conditional, emotional, and environmental values that Malaysian consumers consider significant in influencing their purchase intention of green energy. These values can be explored when the government is planning for activities or incentives to help the public to embrace the idea of consuming green energy so that instead of GE 'stuck' at the infancy stage and limited adoption of GE, it can now move towards growth stage following other developed countries around the globe.

6. Limitation and Future Research

There are several limitations in this study which can be considered for future research. This research can further improvise by integrating value theory with any other theory or theories to further investigate the factors influencing customer purchase intention towards green energy. In addition, consumers' knowledge about green energy could be added as possible determinant in future study as the result may provide insight for stakeholders to understand the relationship between knowledge of green energy and purchase intention of green energy as well.

Acknowledgement

This study acknowledges the financial assistance provided by Universiti Sains Malaysia under the GOT grant.

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