



ASSOCIATION FOR CONSUMER RESEARCH

Labovitz School of Business & Economics, University of Minnesota Duluth, 11 E. Superior Street, Suite 210, Duluth, MN 55802

Are We “Green”? an Empirical Investigation of Renewable Electricity Consumption

Angela Paladino, The University of Melbourne, Australia

Julien Baggiere, The University of Melbourne, Australia

Mounting environmental concerns are prompting consumers to consider the purchase of green electricity. Using the Theory of Planned Behavior, this study explores the effects of environmental knowledge, altruism, political orientation, locus of control, involvement and environmental concern on attitudes, intentions and behaviors towards green electricity purchase. Using regression, the findings indicate that the purchase of green electricity can be explained by environmental knowledge, altruism, environmental concern, involvement in electricity purchases and social influence. Results suggest that to increase the uptake of green electricity, marketers should increase product involvement, appeal to consumer’s environmental concern and altruism, increase consumer’s level of environmental knowledge and encourage word-of-mouth communications. Theoretical and managerial implications are discussed.

[to cite]:

Angela Paladino and Julien Baggiere (2007) , "Are We “Green”? an Empirical Investigation of Renewable Electricity Consumption", in E - European Advances in Consumer Research Volume 8, eds. Stefania Borghini, Mary Ann McGrath, and Cele Otnes, Duluth, MN : Association for Consumer Research, Pages: 340-341.

[url]:

<http://www.acrwebsite.org/volumes/13893/eacr/vol8/E-08>

[copyright notice]:

This work is copyrighted by The Association for Consumer Research. For permission to copy or use this work in whole or in part, please contact the Copyright Clearance Center at <http://www.copyright.com/>.

Are We 'Green'? An Empirical Investigation of Renewable Electricity Consumption

Angela Paladino, The University of Melbourne, Australia

Julien Baggiere, The University of Melbourne, Australia

EXTENDED ABSTRACT

Widespread deregulation in the electricity sector has paved the way for competition and service differentiation in alternative electricity generation methods. The production and marketing of green electricity presents significant challenges to providers. For technological reasons it is generally more expensive to produce (Green Power 2004). Marketers understand little of the green electricity consumers' attitudes and norms (Minton & Rose 1997; Pollard, Kalafatis, East and Tsogas 1999). Only through a greater understanding of the green electricity consumer can marketers effectively target potential green electricity customers, who are willing to pay this price premium. While some consumers are generally skeptical of green claims, those who are concerned with environmental issues create a potentially profitable market.

Much research has focused on general green behavior, such as recycling (Diamantopoulos et al. 2003; Minton et al. 1997; Paladino 2005; Pickett, Grove and Kangun 1993; Yam-tang and Chan 1998). Moreover, comparable research has measured intentions to purchase green products and not actual purchase behavior (Laroche, Bergeron and Barbaro-Forleo 2001; Pollard et al. 1999; Roberts 1996). With reference to green electricity, many studies have focused on an intention or a stated willingness to pay a price premium (Batley, Colbourne, Fleming and Urwin 2001; Rowlands, Parker and Scott 2002; Rowlands et al. 2003). Given that the relationship between intention and behavior is affected by a number of factors, there exists a strong justification for further research which assesses the relationships between attitudes, subjective norms and green purchase behavior (Roberts 1996; Rowlands et al. 2003). This paper seeks to contribute to this body of work.

The purpose of this study is to further our understanding of the reasoning behind consumers' purchase of green electricity. Specifically, the study extends the Theory of Planned Behavior to explore the effects of environmental knowledge, altruism, political orientation, locus of control, involvement and environmental concern on attitudes, intentions and behavior. These variables form the antecedents of a causal model, based on the framework of Ajzen's (1991) Theory of Planned Behavior.

Mounting environmental concerns are prompting many consumers to consider green electricity in their homes. Most studies that analyze attitudes and behaviors have taken place in the 1990s. The attitudes of many consumers towards green goods have changed dramatically in the past few years, particularly with the emergent challenges presented by climate change. As a result, there is a need for these 'new' attitudes to be assessed together with their impact on behaviors. Using Ajzen's (1991) Theory of Planned Behavior as the basis for analysis, this study explores the effects of environmental knowledge, altruism, political orientation, locus of control, involvement and environmental concern on attitudes, intentions and behaviors towards green electricity purchase. This study examines residential electricity customers.

A seven-page questionnaire was sent to a random sample of households. A final response rate of 72% was achieved after accounting for unusable surveys. To determine the suitability of factor analysis the Bartlett test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy were applied to each scale. Each scale was significant on the Bartlett test and exhibited a KMO measure of ≥ 0.6 . The items were subsequently subject to factor and reliability analysis, meeting the requirements of conver-

gent and discriminant validity as well as suitable reliability. A five-point Likert scale was used to measure all items.

Regression, using SPSS, was applied to test the variables. In general, the results support the hypothesized model. The findings indicate that the purchase of green electricity can be explained by environmental knowledge, altruism, environmental concern, involvement in electricity purchases and the social influence of friends. The mediating influence of attitudes was also assessed. Findings showed attitudes to fully mediate the relationships between behaviors and knowledge and between behaviors and altruism. Environmental knowledge had the strongest direct explanatory power over behavior.

The results suggest that marketers should seek to increase product involvement, appeal to consumer's environmental concern and altruism, increase consumer's level of environmental knowledge and encourage word-of-mouth communications in order to increase the adoption of green electricity. Given the importance of product involvement, communications should also emphasize the importance and ramifications of making the right choice when contemplating the purchase of green electricity. A high level of involvement in electricity means that consumers are willing to expend a high degree of mental effort in decision making. This allows marketers the possibility of using more detailed and complex arguments, which tend to be more persuasive for high involvement products. This could mean including facts or scientific predictions of environmental degradation that provide a rational basis for purchasing green electricity. Lastly, the strong influence of friends presents an opportunity to enhance the adoption rate of green electricity. Marketers should seek to encourage the word-of-mouth activities of current green electricity customers. Further theoretical and managerial implications are discussed in the paper.

References

- Ajzen, I (1991) The theory of planned behavior. *Organizational Behavior and the Human Decision Process*, 50: 179
- Batley, SL; Colbourne, D; Fleming, PD; Urwin, P (2001) Citizen versus consumer: challenges in the UK green power market. *Energy Policy*, 29: 479
- Diamantopoulos, A; Schlegelmilch, BB; Sinkovics, RR; Bohlen, GM (2003) Can socio-demographics still play a role in profiling green consumers? A review of the evidence and an empirical investigation. *Journal of Business Research*, 56 (6): 465.
- Green Power (Dec 2004) National Green Power Accreditation Program Annual Audit. [Online] Available: http://www.greenpower.com.au/images/dl/ComplianceAuditReport_Dec04_1.pdf
- Laroche, M; Bergeron, J; Barbaro-Forleo, G (2001) Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18 (6): 503.
- Minton, AP; Rose RL. (1997) The effects of environmental concern on environmentally friendly consumer behavior: An exploratory study. *Journal of Business Research*, 40: 37.
- Paladino, A; (2005) Understanding the green consumer: An empirical analysis. *Journal of Customer Behavior* 4(1), March: 69-102.

- Pickett, GM; Grove, SJ; Kangun, N. (1993) An analysis of the conserving consumer: a public policy perspective. *AMA Winter Educators' Conference Proceedings*, American Marketing Association, Chicago, IL, 3: 151.
- Pollard, M; Kalafatis, SP; East, R; Tsogas, MH. (1999) Green marketing and Ajzen's theory of planned behavior: a cross-market examination. *Journal of Consumer Marketing*, 16 (5): 441.
- Roberts, J.A (1996) Green consumers in the 1990s: Profile and implications for advertising. *Journal of Business Research*, 36: 217.
- Rowlands, IH; Parker, P; Scott, D (2002) Consumer perceptions of green power. *Journal of Consumer Marketing*, 19 (2/3): 112.
- Rowlands, IH; Parker, P; Scott, D (2003) Consumers and green electricity: profiling potential purchasers. *Business Strategy and the Environment*, 12: 36.
- Yam-Tang, EPY; Chan RYK (1998) Purchasing behaviors and perceptions of environmentally harmful products. *Marketing and Intelligence Planning*, 16(6): 356.