

A Study of Consumer Buying Behaviour in Solar Energy

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Abstract: *On the very first day of the internship, we had an induction program where we get all the information about the company like established year products offered journey of the company etc. Then we had a Q&A session regarding any queries or anything else. The reason for selecting the project named: "A STUDY OF CONSUMER BUYING BEHAVIOR IN SOLAR ENERGY IN SANCHAY SOLAR This study aims at studying consumer buying behavior of solar energy equipment's buyers and their responses towards it. Consumers' participation for the use of non-conventional energy sources is low in Maharashtra. Government too delivers grants and tax incentives for endorsing solar energy uses in India. So, in this study effort to assess the equal of consciousness for the solar energy in Maharashtra state, find out the insight for procurement of solar products with reference to numerous entities in Maharashtra state like Separate household, Industries, Hostel and hospitals. This study will be useful to comprehend the government to frame policies for promoting the solar energy products. It is valuable to understand the manufacturer of solar products for understanding the essential of the consumers The study is related to consumer buying behavior for solar energy equipment. This study highlights various facts about the consumer buying behavior and the responses of the consumers towards use of solar energy equipment. In this study, researcher had analyzed the causes of poor response to solar energy equipment, studied the reasons for failure of marketing communication in attracting consumers towards the solar energy equipment.*

Keywords: Solar Energy, Solar Power, Solar Panel, Solar Inverter, etc.

I. INTRODUCTION

Energy is basic need for economic growth of the country. Every subdivision like agriculture, industry, transportation, commercial, and domestic – wants energy in numerous procedures. With fast growths taking place, ingesting of energy in all forms has continued progressively raising all ended the country. This growing Ingesting of energy has also caused in the country becoming progressively reliant on fossil fuels such as coal, oil and gas. The frameworks of all these are reducing Rapidly and prices of oil and gas are increasing.

II. LITERATURE SURVEY

Extensive literature is available on residential solar roof top PV and its contribution in combating climate change, reduction of pollution, greenhouse gases and carbon emissions and on the technical aspects of solar PV development, levelized cost of electricity, net metering challenges, feed in tariff laws, financing options and support policies for solar PV in different countries. The barriers and uncertainties in adopting solar PV and the task of governmental PV cells are usually Made of silicon, an element that naturally Releases electrons when exposed to light. Number of electrons released from silicon Cells depend upon intensity of light incident on it. The silicon cell is covered with a grid of Metal that directs the electrons to flow in a Path to create an electric current. This current is guided into the wire that is connected to a Battery or DC appliance.

a. Solar Home Lighting System

This system consists of a solar panel, a battery; electronic system to operate Lights and fans (for AC appliances Inverter is used). This system is especially Useful for houses at remote places, farm houses etc.

b. Solar Street Lighting

This equipment is specially designed for outdoor uses. This is integrated unit consisting of one solar PV panel, lamp post, battery with housing attached to Pole, and lamp. This comes in the form of kit and can be installed at any place. Lights are automatically switched on and switched off depending on surrounding Light.

c. Solar Lanterns

This is a small portable No. device which looks like a lantern used in olden days. This unit consists of a small PV panel, battery (mostly sealed Maintenance Free) and electronic device with lamp. The light is sufficient to illuminate a small Room. This device is very popular among rural population.

d. Solar Water Pumps

In this system water pump is driven by the solar energy. This system consists of a array of PV panels mounted on a specially designed stand and motor pump. It can pump the water from bore well, open well and ponds etc.

e. Solar Fencing

This is recent development in the field of solar energy. Area where land, crops and housing colonies are under the threat of infiltration by wild animals such as wild boar, bear, deer and foxes; this system is installed. This fencing is powered Various topographies of solar energy make it good-looking and a sustainable option against the conventional energy sources, they are as follows:

Worldwide distribution. Pollution-free nature and environment-friendly. The virtually infinite supply. Recurrent. Obtainable locally and does not need intricate arrangements for transport. Usually modular in countryside, i.e., small-scale units and systems can be Almost by way of economical as important ones. Well right for decentralized applications and usage in remote area by solar energy and gives mild shock to the animals for a moment, intensity of Shock is well controlled and is not lethal.

f. Solar Traffic Lighting Systems

There are various applications in the traffic lighting system. Solar traffic lighting systems has varied range of products designed to fulfil the requirement of traffic systems lighting. It includes traffic signals, flashing lights at crossings or Dividers, lights, fans and public address system for traffic control booth. The Major advantage of this system is that it works during the power failure also. Consumers and Solar energy equipment's Basically, any new product or facility will be fruitful if it does a healthier job than current products at fulfilling the wants of a beleaguered client group. But rendering to dispersal philosophy, "doing a better job" really has four Consumers and Solar energy equipment's basically, any new product or facility will be fruitful if it does a healthier job than current products at fulfilling the wants of a beleaguered client group. But rendering to dispersal philosophy, "doing a better job" really has four Mechanisms.

If a new creation or facility can exceed current offerings, crossways all four of these mechanisms at once, then we can assurance that the targeted Client group will purchase it. The four mechanisms expressed in terms of solar power are: Solar must be less gratified than power from usefulness (lower price). Solar must deliver better topographies or functionality than power from Usefulness (better benefits). Solar necessity should not have any swapping or acceptance costs (easy to use). Solar must be willingly obtainable (easy to buy).

Customers aimed at whom all four circumstances apply determine acquisition of solar since there are only benefits and no barriers. Then the closer a solar Formation comes to following in all four dimensions, the better the chance that the formation will be an achievement. And, subsequently, the new solar product Will be a monetary achievement if these circumstances can be met at a profit.

III. IMPLEMENTATION

Planning to reach out the customers virtually Order on call facility Free installation for the corporate which will replace the traditional Electricity billing system. Planning to conduct weekly campaign about the promotional offers. Web magazines for customer service Conducting Webinars on monthly basis regarding financing, marketing, installing etc. to reach out more customers. The subject designates wide physical spread and national priority therefore it is Bound to have some limitation on investigation by an individual. Therefore, the Scope of the subject is restricted to selected sample size of respondents and their Categories. If there is any alteration in location and sample size, results may or May not vary.

Due to wide geographic feast of Maharashtra, researcher had gathered the Primary data from ten major cities where there is a scope for utilization of solar Energy. Rural area is not enclosed in terms of the separate houses but covered in Case any industry or group uses Non-Conventional Energy Resources. In rural Area max energy is used for agriculture purpose anywhere energy is obligatory for irrigation. SPV Water pump is the only product in solar group which at this Stage is very costly and cannot be afforded by Farmers. Due to its very Incomplete scope this is not considered by the researcher in while choosing Sample category.

IV. CONCLUSION AND DISCUSSION

In this study, researcher had analyzed the causes of poor response to solar energy equipment's, studied the reasons for failure of marketing communication in attracting consumers towards the solar energy equipment's. The study was limited to Maharashtra state but the suggestions offered may be useful to other places also. This chapter gives the outline of what was done to accomplish the objectives of this study and whether the hypotheses are proved.

Before putting up conclusions and recommendations the detailed outline of the study is summarized as follows:

Chapter I: In this chapter researcher had presented the area of study and brief review about the purpose of the study. The researcher had given introduction of non- conventional and renewable energy sources; the brief idea of the need of non-conventional energy sources, in rationale of the study researcher had discussed the reasons for taking up this study, in statement of the problem researcher had discussed the what is the view of this study has for finding certain solution, and chapter scheme for the thesis.

The consumers mainly focus on product attributes like economical, durable and high return on investments. The consumers giving more importance to the performance of the product than the price. The consumer who prefers the performance of the product indirectly prefer the durability of the product.

The consumer also prefer that the product should be more environment friendly and shall use latest and established technology.

REFERENCES

- [1] Renewable energy is on the international agenda and has become the priority in the country; various reports on renewable energy, non-conventional energy will be of use to get secondary data. Various other sources of information are-Newspapers and Magazines.
- [2] Company Literatures.
- [3] Reports and Publications of National and International organizations.
- [4] Reports of Government and NGOs.
- [5] Various Research Journals & Periodicals.
- [6] Various web sites on Internet.
- [7] E journals and reports available on Internet.

- [8] The secondary data had been collected from: 1. Government published magazines, publications of MEDA, IREDA /Associations, institutions. Reports published by various committees, Bureau of statistics etc. 2. Research papers published in various journal in print or online on the 3. The Journals, Magazine were used. 4. The researcher had reviewed necessary literature from various libraries; Researcher had visited the following – i. Jaykar Library, University of Pune, ii. M.G.V. IMR - Research Centre, Panchavai Nasik.
- [9] Various Research Journals & Periodicals.
- [10] Various web sites on Internet.
- [11] E journals and reports available on Internet.