

Маркетинг

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МАРКЕТИНГ ЗЕЛеной ЭНЕРГЕТИКИ

Аннотация

Предмет/тема. В настоящее время зеленые технологии становятся все более необходимыми не только для успешного функционирования экономики, но и для обеспечения благополучного будущего. Прежде всего потому, что спрос на энергию растет с каждым днем, в то время как природные ресурсы истощаются. Несмотря на то, что почти все понимают необходимость перехода на возобновляемые источники энергии, среди обычных людей все еще не так широко распространено использование зеленых технологий в своих домах и в быту. Автор рассматривает причины тенденции, когда люди, понимающие все преимущества "зеленых" технологий и готовые их использовать, до сих пор ими не воспользовались. Таким образом, процесс развития маркетинга в секторе возобновляемых источников энергии рассматривается как фактор, способствующий распространению зеленой энергии. Цель данной статьи - провести обзор рынка зеленой энергии и определить, чем маркетинг в этой сфере отличается от маркетинга в других сегментах экономики. Возможные барьеры были выявлены, полученный результат удивляет: в то время как процесс разработки и производства достаточно хорош, маркетинговая кампания таких компаний недостаточно сильна.

Цели/задачи. Целью настоящего исследования является выявление маркетинговых барьеров в области зеленой энергетики и внесение предложений по их преодолению.

Методология. Решение поставленной задачи осуществлялось на основе применения общенаучных методов исследования в рамках сравнительного, логического и статистического анализа.

Вывод. Сформулированная автором задача позволяет разрабатывать более эффективные маркетинговые стратегии в области зеленой энергетики, позволяющие находить потенциальных клиентов.

Ключевые слова: *возобновляемые источники энергии, зеленая энергетика, маркетинг, зеленый маркетинг*

Marketing

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GREEN ENERGY MARKETING

Abstract

Subject/Topic Nowadays green technologies are becoming more vital not only for the successful operation of the economy, but for prosperous future. First of all, because demand for energy rise from day to day simultaneously with depletion of natural resources. Despite of the fact that almost everyone understands the need for transition to renewable energy resources, it is still not so widespread among ordinary people to use green technologies in their homes and everyday life. The author considers the reasons of a trend when people, who understand all the benefits of green technologies and are willing to use them, have not used them yet. In this way, the process of marketing development in the renewable energy sector is regarded as a factor contributing to the spread of green energy. The target of this article is to give an overview of the green energy market and identify how marketing in this sphere differs from the marketing in the other segments of the economy. Possible barriers were observed, the obtained result is surprising: while the process of developing and production is quite good, marketing campaign of such companies is not strong enough.

Goals/Objectives The goal of this article is to identify marketing barriers of green energy and make suggestions on how they can be overcome.

Methodology The problem was solved on the basis of applying general scientific methods of research within the framework of comparative, logical and statistical analysis.

Conclusions and Relevance The task determined by the author allows to develop more effective marketing strategies in the field of green energy that help to meet potential customers.

Keywords: *renewable energy sources, green energy, marketing, green energy marketing*

In the value-driven era of marketing, the objective is to “make the world a better place”. One of the greatest concerns of our time is climate changes and thus, for many people, sustainability has become an important priority. More consumers aim to live a sustainable and environmentally responsible lifestyle and thus, there is a growing consumer interest in using eco-friendly technologies.

The global environmental issues have caused a shift in consumer’s consumption habits and demands; now the consumers want to make meaning of their consumption. They search for companies which address and act environmentally responsible, and which offer sustainable products and services. In the Table 1 you can have a closer look at how marketing was changing.

Table 1. Comparison of Marketing 1.0, 2.0, and 3.0

	Marketing 1.0 Product-centric	Marketing 2.0 Consumer-oriented	Marketing 3.0 Values-driven
Objective	Sell products	Satisfy and retain the consumers	Make the world a better place
Enabling forces	Industrial revolution	Information technology	New wave technology
How companies see the market	Mass buyers with physical needs	Smarter consumer with mind and heart	Whole human with mind, heart and spirit
Key marketing concept	Product development	Differentiation	Values
Company marketing guidelines	Product specification	Corporate and product positioning	Corporate mission, vision and values
Values propositions	Functional	Functional and emotional	Functional, emotional and spiritual
Interaction with consumers	One-to-many transaction	One-to-one relationship	Many-to-many collaboration

Now, we are experiencing Marketing 4.0, which is a branch of the previous era of marketing. The premise of this era is identical with Marketing 3.0 however, technology now plays an even more important role on the contemporary market.

The emergence of green consumers has paved the way for the marketing counterpart, green marketing. The concept of green consumption is “consumption that does not compromise the ability of future generations to meet their basic needs”.

Green marketing refers to the process of selling products and/or services based on their environmental benefits. Such a product or service may be environmentally friendly in itself or produced in an environmentally friendly way. Renewable energy technologies (such as solar panels and wind turbines) and renewable energy by itself are one of these green products.

Green marketing is not only about promoting products or services with environmental characteristics. It involves brand modification and changes in the manufacturing process. It's about taking a different perspective on marketing, considering the global consequences we have on environmental degradation. It's about a brand's ability to satisfy customer needs with minimum harm to the

environment. The difference between conventional and green marketing is shown in the Table 2.

Table 2. Comparison of conventional and green marketing

Issues	Conventional marketing	Green marketing
Consumers	Consumers with lifestyles	Human beings with lives
Products	Cradle-to-grave One-size-fit-all products	Cradle-to-cradle Flexible Services
Marketing and communication	Selling oriented End benefits	Education Values
Corporate	Reactive Independent departmentalized Short term oriented Profit maximizing	Pro-active Interdependent Co-operative Holistic Long term oriented Double bottom line

Source: J. Ottman Consulting, Inc

As public awareness of the environment and the need for its conservation increases, the demand for renewable energy sources also rises and the market is now experiencing significant growth.

This trend is reinforced by the United Nation’s Millennium Goal Number 7, which pursues ecological sustainability through the global reduction of CO₂, specifically regulated in the Kyoto Protocol guidelines for reduction of emissions by the industrial states [12]. In December 2015, the 21st Conference of the United Nations Framework Convention on Climate Change (UNFCCC) adopted the Paris Agreement for Climate Change, which replaced the Kyoto Protocol.

Renewable energy is generated from natural processes that are constantly replenished, including sunlight, geothermal heat, water, wind, tides, and various forms of biomass. Many nations across the globe have started using renewable energy for power production, owing to rise in the environmental issues such as climate changes and depleting ozone layer.

In recent years, the share of renewable energy in the global energy mix is on a continuous rise, with green energy reaching 1/3 of the total installed capacity in the world [11]. At the same time, hydropower is no longer the leading renewable energy sector, giving way to newer sources of energy, such as solar and wind. Over the past nine years, the share of hydropower has decreased by more than a third (from 80% in 2009 to 49% in 2019), while the share of solar and wind energy has tripled (from 14% in 2009 to 45% in 2019) [3, 4].

According to experts, in the next 30 years, renewable energy will be the fastest growing segment of the global energy sector, and by 2050 their share in the global volume of power generation is expected to grow significantly - from the current 10,6% to 62% [8].

European Union (EU) and China dominate the renewable energy market, accounting for the highest growth rate, owing to government initiative to use

renewable energy and stringent environmental policies imposed on companies in this region. About a half of the world total installed capacity is in these countries. The other leaders are USA, Germany, India, Japan and Great Britain. [11]

Also, competitiveness of renewables shows a positive trend over the last ten years. The main factor contributing to this is decreasing costs of electricity produced from renewable energy sources. Solar photovoltaic and wind energy have reached parity in both price and performance in many markets, and other renewables are predicted to reach this parity within a few years.

Between 2010 and 2018 the cost of solar and wind power has fallen sharply. At present, the weighted average cost of renewable electricity is within the range of costs for electricity generation from fossil fuels. [5]

It becomes obvious that it is possible to produce alternative electricity at a cost and level of efficiency equal to and less than traditional methods. The use of block-chain, artificial intelligence (AI) and other automation technologies makes RES self-optimizing, increasing their efficiency. Solar and wind power are already more efficient and cost-effective than traditional sources, and emerging technologies will further reduce prices and operating costs.

Ever-increasing demand for energy and continuous decrease of non-renewable sources of energy, such as petroleum, coal, and natural, drive the renewable energy market. Furthermore, increase in awareness about environmental safety and security and government initiatives has fueled the market growth. High cost of investment for the infrastructural setup restrains the market growth. However, increased government funding and development in the technologies present new opportunities for future growth.

There are many factors that lead to the successful development of alternative energy. The most important of them are environmental safety of renewables, the need to increase the reliability of energy supply and reduce dependence on fossil fuels (diversify energy portfolios), rapid development of green technologies, costs reduction and public support.

Public support is a powerful driver of change. Social movements are putting pressure on governments and companies to reduce their impact on the environment, especially due to growing public concern about greenhouse gas emissions and climate change.

Consumers become increasingly aware of the value and need for sustainable energy. There is a clear positive link between people's awareness and their willingness to act. Consumers are increasingly aware of the value and necessity of sustainable energy. There is a clear positive link between people's awareness and their willingness to act. People with sufficient information tend to start thinking more about the sustainability of their activities and opt for green products, consequently growing demand for green energy resources.

However, as more and more consumers consistently report a preference for energy produced from renewable energy sources, there is still a small number of

ones who really started to use them. People understand all the benefits, but do not act, they invariably fail to take noticeable steps towards energy efficiency.

Smart Power's findings concluded that there are four primary barriers to renewables market growth, and all four must be addressed to expand the market. those barriers include:

1. Cost. Consumers report high up-front and out-of-pocket costs and long payback periods deter them from installing green energy technology.

2. Reliability. The absence of green technologies in the public's eye and confusion about its performance and capabilities create concerns about the reliability; it is not perceived as up to the task of powering our energy needs.

3. Complexity. The time consuming and complex nature of purchasing and installing green energy systems discourages potential customers.

4. Inertia. The lengthy decision-making process and financial complexity of the green sale often result in consumer inertia.

Moreover, "environmental" message is no longer the answer to motivate consumers to purchase renewable energy technologies. Consumers already understand the environmental benefits of solar power, but those benefits have not been persuasive enough to broaden market adoption.

Thus, in addition to addressing barriers listed above, green energy programs also must create a connection with customers through marketing messages that are likely to enhance interest and lead to further inquiry. Messages that connect on a financial or value level are most likely to succeed.

A survey among people, who attended solar energy seminars, and found out that the single biggest barrier to purchasing solar panels was the high cost. Therefore, while many companies are putting financing programs in place to overcome the high cost of green energy, they also must ensure that consumers are aware of those financial offerings. Often these programs are available in small pilot programs or promoted through press releases and on the program website only. This approach may attract the well-informed, already-interested solar prospect waiting to take advantage of these offerings, but it cannot attract new customers. Company should try to change the public's perception about the affordability of green power, what will ultimately make the difference in consumer demand.

The decision-making process for installing green technologies can be lengthier and more complex than expected, and consumers often feel overwhelmed by the process. Is not viewed as a product that is easy for consumers to purchase and install.

Decisions are made within a decision environment, which consists of the collection of information, alternatives, values and preferences available at the time when the decision must be made. As the production market of green energy is quite developed now there is still not enough information available for consumers. Consumers find it difficult to find the right product or information, difficulties scare away customers. When looking for products, the law of least

resistance works. This law says that people almost always choose the least resistance, the easiest way to do something. When it comes to green technology, most consumers want to know how to start using renewable energy quickly and easily. Green companies need to make the buying process as easy as possible.

Moreover, there aren't currently any iconic brands for green energy products, leaving consumers to rely on producers for much of the information that they receive. This is much like asking a customer to buy an unknown brand of automobile, while relying on the car dealer as the sole source of information about the product's performance, reliability and price. To call potential consumers for action green energy companies should make them more aware of a product, let them feel like they know about a company for long time. Hopefully, nowadays spread of information is not a big deal as social media platforms (e.g. Facebook, Instagram, Twitter, VK etc.) allow to be as close to customer as never before. Social media platforms are the biggest marketing platforms in terms of the number of users on a global level. The best way to advertise on these platforms is to create a business profile and come up with a compelling and professional posts.

Also, as social media blogging becomes more popular, people tend to trust more people whom they are following. When it comes to buying, people are not always sure if they need this very product. They look at someone else's opinion, it could be an expert or a friend or a stranger. Social proof and support are crucial to faster the decision-making process. In this way, to reach out people who have no idea about green energy and how to start using it now, green companies may connect with potential customers through popular bloggers in the area.

Identifying creative ways to reach these new customers is not just the job of green energy installers and suppliers, state clean energy programs also are an important part of this outreach effort. Leveraging marketing resources at these target segments will yield results.

Although the potential of green energy market offers companies immense scope for success, it is not without its numerous risks. The seemingly inexhaustible capacity of the renewable energy playing field has attracted a myriad of companies, thus continually increasing the competitive pressure on this market. More and more companies around the world are voluntarily adopting emission reduction targets and climate change action plans and are actively buying or investing in independent renewable energy production.

For a company, investing in renewable energy can have several benefits. Renewable energy is an abundant and cost-efficient fuel and thus, it is economically beneficial. Furthermore, renewable energy can have strategic and competitive advantages. By using renewable energy, the company can promote their product's sustainable benefits and show by the example that everyone can use green energy.

Effective marketing guides - how, when, and where product information is presented to consumers, with the ultimate goal of persuading consumers to

purchase green energy systems. Understanding what problems need solving and how best to address them should be at the heart of every green energy marketing plan.

To sum up, I would like to list the main findings of this work:

- Environmental responsibility is a value, which many consumers demand;
- Demand for renewable energy sources rises and the market is now experiencing significant growth;
- Each green program has a prospective customer base that has not yet reached its potential to become new green energy customers;
- Four primary barriers to renewables market growth are cost, reliability, complexity and inertia.

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