



How to Increase Business Demand for Green Energy



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Introduction

Green electricity marketing has not yet succeeded, let's be honest. That is unless levels of green electricity adoption ranging from almost nothing to a few percent of customers can be considered a success.

Can we however, ever expect large numbers of electricity customers to buy green electricity at premium prices simply for the benefit of their conscience or the general public's well being? Well perhaps not, but major pan-European research at the Nordic Centre for Expertise in Energy & Utilities Marketing (VaasaEmg) has recently indicated that there is a huge un-tapped potential to sell value adding green electricity to businesses, often in ways and for reasons which have never really been explored by marketers of green electricity. The research indicates however, that the psychology and processes which determine businesses' green energy considerations and actions are far more complex than has previously been taken for granted. It is not surprising therefore, that success to date has been so limited.

The research in question – 'Green by Demand' set out to understand the reasons why some businesses have purchased green energy and others have not; their motivations and decision processes; the marketing conditions prevailing during the lead-up to purchase and non-purchase; post-purchase satisfaction and tangible benefits; and whether green buyers represent a small segment or the tip of the iceberg. Ultimately however, the objective of the research was to find ways to stimulate demand for green energy.

Wiser et al. (2001) have long since argued that business customers are an attractive market for green energy for many reasons, not least because they are efficient to market to because of the scale of their usage, but also for instance because they are more accustomed to exercising their right to choose between energy supply alternatives. They also have many more potential reasons for purchasing green electricity. In fact there are already many very large users of green electricity. Research by Greenprices.com has identified some of these users in Europe including Dutch Railways, ABN Amro, Body Shop, Bank of Scotland, the Co-operative Bank and Procter & Gamble. The largest known single user is Swedish Railways which purchases approximately one and a half billion kWh of green

electricity per year, equivalent to the yearly consumption of well over 100.000 households. Even companies such as NAM, a Dutch oil company purchases one million kWh of green electricity by simply incorporating 0.2% of green energy into its energy portfolio. In the USA meanwhile, Toyota Motor Sales USA purchases about 38 million kWh of green electricity per year and various estimates and claims put the percentage of non-household green electricity demand at between 20-40% in California and Pennsylvania (Swezey & Bird, 2001), depending on what is defined as 'green'.

The potential value of success in the marketing of green electricity to such users is undeniable. In addition to the competitive and financial advantages for electricity suppliers and the industry as a whole, the value to the environment would also be great. One estimate by the WWF¹ has argued that carbon savings of 56m tons would be generated if just 10% of European business energy consumption and 30% of public authority energy consumption met its relatively strict Eugene² renewable electricity criteria.

The research methodology

The research conducted by VaasaEmg took place in five countries within Europe, namely Germany, Great Britain, Finland, Sweden and the Netherlands, always in the native language of the countries concerned. All five researched markets are deregulated for green electricity.

The research comprised two components. Firstly, 92 in-depth telephone interviews were conducted with representatives of businesses (mainly) and other non-residential electricity users that purchase green electricity. These subjects represented a broad selection of users from all five countries. Interviews were conducted with the most relevant and knowledgeable person / people within the subject user, ranging from energy buyers to PR representatives and even managing directors.

The second component of the research was based on the analysis of 1103 responses to a questionnaire. Questionnaire responses were fairly evenly received from each of the five countries concerned. The sample contained only businesses and in particular those businesses with over 20 employees ranging up to many thousands of employees. 1042 of these (postal) respondents were non-green electricity users and just 61 (internet questionnaire respondents - as many as could be found) were buyers of green electricity.

Some Key Research Findings

Likelihood to buy green electricity

According to the findings of the research, over 33% of those businesses which do not currently purchase green electricity feel that they are quite or very likely to do so in the near future. In fact in the Netherlands the number is approximately 50% and in Britain 25% feel it is very likely that they will do so. Naturally, the linkage between actions and intentions or expectations can be distant, but the linkage can be strengthened if the incentives and barriers which drive and inhibit behaviour are understood, measured and managed. In fact, in the British electricity market following deregulation, pre-deregulation predictions (based on marketing research) of customer switching rates were accurate to within a few percentage points and if anything underestimated future switching.

Green electricity as added value

Whilst understandably most businesses do not wish to pay more for green electricity, 38% of businesses which feel likely to buy green electricity in the near future consider price not

¹ Source: www.greenelectricitynetwork.org (2002)

² Eugene criteria set conscientious ground rules and standards for the certification of green electricity.

to be particularly or at all important. Considering the lack of understanding and awareness by many businesses of the whole issue of green electricity, this seems to be a high number.

Among the many potential reasons why a business might purchase green electricity at an added value price, it can be postulated that one key motive is the enhancement of corporate image. The research findings indicate that whilst this is true (it is given as one of the key motivators by both businesses which buy green electricity and those which expect to) it is a severe and dangerous simplification of the added value issue. Many businesses do indeed consider that their image is important, that environmentalism is a key component and that the purchase of 'green electricity' can be used as a tool for publicly complying with the environmental component requirement. However for many businesses, especially those which have already actively taken the decision to purchase green electricity, a broader sense of corporate ethics (Swezey & Bird 2001) seems to pervade all consideration of the role of green electricity. In other words, green electricity is not purchased in isolation from factors such as fairness, equality, sustainability and social responsibility. Nor is it purchased for its own sake. Rather, it is purchased for what it represents and in order to achieve or retain a certain consonance within the cognitions and actions of the business. *The business not only wants to look right, but it also wants to feel right.* This objective need not conflict with commercialism, however. In fact businesses often aim to be "commercially successful in ways that demonstrate respect for ethical values, people, communities and the environment" (Swezey & Bird, 2001).

The consequences of this holistic role are extensive. It means that the added value of green electricity is seen within a broader added value context of the business' ethical stance. Therefore, the importance (described by financial commitment) given to ethics by a business sets the outer boundaries for the importance of green electricity. Since each business will place a unique importance on the issue of ethics and will place different priorities on the various ethical components and tools, the actual added value of green electricity becomes a highly individual and conditional judgement. This situation is further complicated by the fact that the combinations of ethical components and tools which are salient in the minds of business decision makers may be as unique as the businesses themselves. In fact these salient alternatives are therefore effectively the competitors for green electricity when it comes to the added value stakes.

Green electricity marketers therefore have the task of convincingly presenting green electricity in its role as an appropriate shining star within the league of alternatives which can assist a business in its road to ethics. If possible a marketer might even, on occasion attempt to increase a business' belief in ethics itself. Furthermore, pricing of green electricity must be flexible enough to match, as closely as possible, the expected added value which the business ultimately perceives. Interviews with businesses which buy green electricity clearly indicated that satisfaction with the price paid for green electricity has little to do with the added cost of the green electricity and more to do with the perceived benefit of the green electricity purchase. Analysis of those businesses which do not yet purchase green electricity showed a correlation between the perceived benefits of green electricity and the willingness to pay more.

Commonly, businesses which have found real competitive benefit from their actions are those which seem to have managed to combine the various added value benefits under one ethical and publicly known umbrella. For such businesses which consider their ethics to be a corporate and competitive corner stone, the purchase of green electricity seems to be a natural step, but one which will only be taken if both the provider of the electricity and the source of the electricity are sufficiently ethically sound. In such situations they are quite willing to pay significantly more (commonly around 20%) for their green electricity on the premise that the commercial benefits (added value) outweigh the added costs.

Mass Customization Opportunities

Of course most businesses are not like those mentioned above. In fact most businesses are altogether more fickle and less focused on ethics. Whilst they may find some added value in green electricity, they may be motivated by only one or a few of the potential motives which can be attributed to the purchase of green electricity. Such businesses tend to be willing to pay little or no extra for their green electricity. Such businesses also tend to be

less demanding about the source of the electricity and the nature of the supplier but, as is true to some extent for all businesses, there can be substantial variation in what they deem as 'green'. Figure 1 illustrates these differences and shows that what is very green for some can be the opposite for others.

These businesses also seem more concerned with what others think about their environmental actions than they are with the integrity of their actions. Therefore, whilst they may only be concerned with the fact that they purchase green electricity no matter what its origin, they may consider the branding and certification of the green electricity to be the only assurance of integrity which they require.

Businesses however, are individual and can range infinitely between the extremes described here. For instance, based on qualitative analysis of businesses which already purchase green electricity, it can be seen that some businesses seem to be concerned more with environmentalism than with broader ethical issues. These can vary from for instance a chemicals manufacturer with the aim of limiting the image of its unavoidably damaging impact on the environment, to a restaurant which sees green electricity as a great way to stand out from the rest as well as well as to do its bit for the environment. The first business may just buy a small amount of green electricity from where it is cheapest and mention its actions within its annual accounts. The second business may prefer to pay a little more for certified and branded wind electricity which can be safely promoted within its marketing without claims of misleading advertising. Therefore, once again the key to realising the full value of green electricity lies in understanding the personality, complexity and variability of the business and its consequential orientation towards the product alternatives and the branding that goes with it.

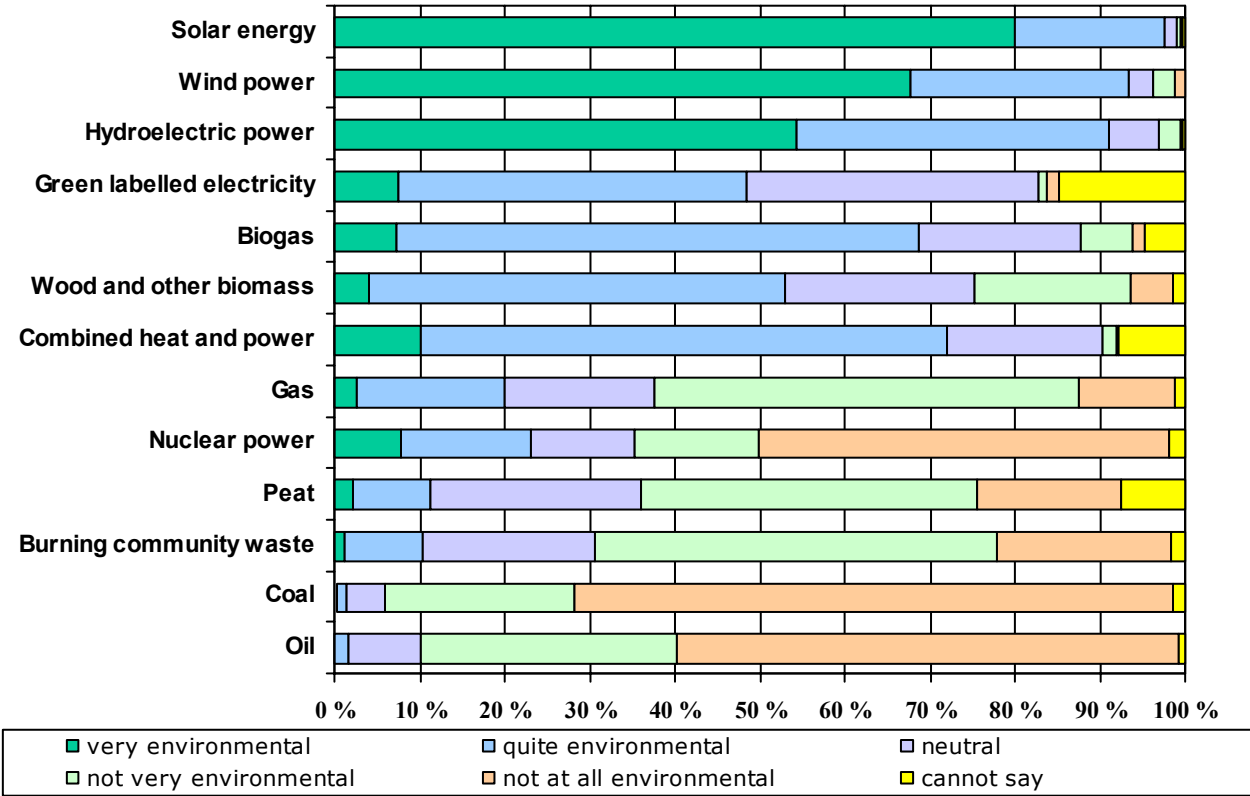


Figure 1. Perceptions by business customers (non green users) of the environmental image of various sources of electricity (Source: VaasaEmg 2002: Green By Demand report)

Price Discrimination Opportunities

Because there is great variation in the nature of the added value which different businesses perceive concerning the green electricity offering and since less than one third of businesses that buy green electricity consider price competitiveness to be very important, there should be an opportunity to extensively apply price discrimination to the green electricity product. Not only do 60% of businesses currently purchasing green electricity already pay significantly more (commonly around 20% more) for their green electricity than they do or would for standard electricity, but quantitative and qualitative evidence has enabled a clearer picture of which businesses appear to be less price sensitive.

Although, the ultimate solution would be that an individual offering should be offered to each individual business, this is naturally not an efficient way to market electricity, even to businesses. Suppliers of green electricity rarely have access to sufficient quantities of electricity from a wide variety of sources, and even if they did it would be difficult to efficiently manage the supply of that electricity. Therefore, there is a need to categorise, in some way, the supply alternatives and estimate the types of customer appropriate to each category. Four electricity categories were identified within the research as a possible starting point for price discrimination and as an alternative to the over simplistic black/green view that is often presented within the electricity industry. These categories can be very simply described as Really Green, Quite Green, Grey and Black, but to add more mass-customization, price discrimination and balancing efficiency into the equation for instance, a default 'green electricity mixture' could be offered whilst allowing customers to omit (within limitations) the energy source(s) which do not suit them.

Active Individuals

One of the most striking findings of the research has been that businesses and other organizations, which currently buy green electricity, place surprisingly little importance on electricity companies' marketing in relation to their decision to buy green electricity. In fact some respondents have even scorned the lack of effort that green sellers have made, sometimes because they feel that no sellers came to them personally, or because of the lack of clarity of the offer or the green information. This is not to say that green electricity marketing has been poor, but it is a reflection of the fact that much of the motivation and impetus behind the actions of many green electricity purchasers has come from within. Whilst knowledge of the existence of green energy may be promoted widely, and whilst detailed information and offers may be available somewhere, the search and decision-making workload is often placed primarily on the backs of the user. Of course this is not always the case, and the opposite sometimes occurs, but where the more placid marketing environment prevails it seems hardly surprising that only a small, motivated segment of customers choose the green option.

Not surprisingly therefore, it was also found that there often tends to be a key actor or actors within the green electricity customer (business or organization), a person or people who for whatever reason is/are more motivated, in terms of pro-environmental activity, than the majority of those around them. These people transpose their personal intentions upon the business by influencing the other decision makers or peers within the business. These people generally appear to be motivated by their own moral values, but in some cases by a sense of their role as ethical leaders within the business. In the case of Edinburgh University for example, the executive head of the university at the time of the university's decision to purchase green electricity, was a keen environmental enthusiast who personally strongly supported pro-green activity. In the case of one business, on the other hand, the key force behind the decision was the head of ethics within the business, a person who whilst mentally relatively environmentally oriented, was focusing primarily on the business' interests when making the decision. In that case it made sound business sense, within the context of that business' strategic marketing positioning to opt for green electricity.

For actors who were driven by personal environmental motives, it is apparent that they can be appealed to in much the same way as with individual household customers. They can be

motivated by the realization that their actions will help to minimize environmental harm and thereby fulfill their self-perception as an environmentally friendly individual. They may also be motivated by a desire to do their individual bit, thereby sufficiently reducing their feelings of dissonance resulting from their realization that their actions are unnecessarily harmful to the environment, and that they could and should at least do something about it. Furthermore, they may be motivated by the dissonant knowledge that they are a relatively environmentally friendly individual within a relatively un-environmentally friendly organization. Finally they may be motivated by a desire to be recognized within or beyond their organization as an environmentally friendly individual, or at least not a particularly un-environmental one.

Arguably, since such motivation levels are unlikely to exist in many businesses, strategies to take advantage of such actors and their individual motivations are likely to have a very limited potential, though should nevertheless be applied. After all, as we know, not only is the number of strongly motivated environmentalists rather limited, but the number of those few who really take action, even on a personal scale, is even fewer. Furthermore, it was also found to often be the case that in organizations that purchase green electricity, there coincided more than one pro-active actor of the kinds described above. This does not mean that without such coincidence green electricity purchasing will not happen, but it does indicate that there is evidence of the significance of persuasive strength in numbers.

Multiple Decision Makers

Even if the key actors(s) are in favour of purchasing green electricity, then there are nevertheless usually many others still to convince. The number of actors involved in the decision appears to vary greatly, but in the case of businesses it may commonly include for example the electricity buyer and or whoever is responsible for energy issues (especially in larger businesses); public relations managers; ethics managers (where they exist); finance managers or directors; managing directors / CEOs; employee representatives; outside advisors relating to advertising, PR or energy issues; politicians and co-operative pressure groups and official environment related organizations. Any one or combination of these actors may be the key actor(s) and all may play a significant role within the decision making process, though the initiation of the process of consideration appears to be commonly limited to one or two individuals. The ultimate decision maker in most cases is nevertheless, as might be expected, the managing director.

It should additionally be noted that each of the actors in the process tend to have very different motives and therefore, not only is it likely to be necessary for many individuals to be convinced in order to make the ultimate decision, but each of these individuals need to be convinced in a different way using different persuasive argumentation. The concept of multiple actors within a business purchasing decision is of course well known. However, the complexity of the decision making process for an ambiguous environmental energy product that does not save money and is linked to a variety of complex and debatable options, benefits, drawbacks and complications, is extreme. If an electricity seller does not appreciate the complexity and requirements of this decision making process, it is unlikely to succeed in its attempts to obtain a favourable outcome. This is certainly likely to be the case without the presence of a highly effective and motivated key actor within the user. For sure, it is not sufficient for a green electricity seller to promote its offering only or primarily to the electricity buyer within an organization. In fact of all the actors mentioned above, the electricity seller may be the least persuasive, influential or motivated.

To make the scenario even more complex, the sum of green electricity related promotion by the market of green electricity sellers and producers, and protective marketing by non-green producers and suppliers can also have an impact on decision making. For example, in Finland the recent intensive campaigning by some interest groups for the development of additional nuclear capacity, has resulted in large quantities of apparently independent evidence, contradicting some of the logic behind, for example, investment in wind-based electricity for the purpose of national sustainable development.

Some Key Barriers to Adoption of Green Electricity

Even if those issues already mentioned in this article are considered, there remain many additional factors which appear to act as barriers to the adoption of green energy by businesses.

For instance, there is all too often a lack of consensus, customization and pragmatism concerning the definitions of what green energy is. The more that different factions and suppliers express their unique opinions, certifications, brands and offerings, the more confused customers become about what is 'green' and 'the right thing to do'. What's more, in an attempt to be 'right', these factions and suppliers often forget that all energy sources have drawback and limitations and business customers have unique opinions about those drawbacks and limitations. Consequently for instance, of the businesses surveyed 34% feel that they do not purchase green electricity because (partly) they do not trust the labeling.

Other factors which act as barriers are many including: an enormous lack of awareness and understanding (even misunderstanding) among businesses; too much focus by the industry on single sources of green electricity such as wind power, as well as misdirected and uninspiring imagery and communication; a lack of communication of the commercial benefits of purchasing green electricity; the impatience suppliers; insufficient direct marketing, targeting and opportunism; insufficient pooling of green electricity reserves. However, if one piece of information is truly surprising it is this, that 64% of the businesses surveyed have not purchased green electricity because (partly or largely) no supplier has even offered it to them. In fact 20% of businesses say it is because they have not even known about the possibility.

Summary

If the above findings are accepted and supported, then they present some explanation for the lack of success of green electricity marketing so far. The complexity of the decision making process and the plethora of other barriers to success must be thoroughly understood and considered before expecting to sell green electricity to substantial numbers of businesses whilst maximizing the added value for all concerned. With these requirements in mind, efficient marketing could reveal and encourage a hitherto unrealized demand for green electricity.

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