

It is unusual for a product to be purchased without having prior knowledge about its origins and method of production. However, one important exception to this is electricity. Electricity is taken for granted when a machine is plugged in or a light is switched on. However, it is being bought when the machine or light is turned on, and most people know nothing about its origins. As more and more consumers become aware of the environmental issues related to electricity production and use, and the electricity market becomes more deregulated, consumers are likely to exercise their buying electricity and more "green electricity" (i.e. electricity that has been produced from renewable energy sources) will be demanded. Cities can play three roles in promoting green electricity: as consumers, as producers, and as promoters, incitors or legislative bodies. The utility, swb Enordia sells green electricity, thus promoting new renewable-source generating plants

GENERAL ASPECTS

The 'Free Hanse City' of Bremen, with roughly 550,000 inhabitants, together with the coastal town of Bremerhaven, forms the smallest State of the Federal Republic of Germany. Situated on both banks of the river Weser, it is Germany's second-largest port, after Hamburg. The city's main commercial activities are closely linked to the port, but Bremen has also become a service centre.

Climatic data:

Degree days (Basis 17 °C): 4,040
Annual mean temperature: 10.4 °C



CONTEXT

Stadtwerke Bremen AG, Bremen's municipal utility, had already earned itself a name in the Eighties as a service company committed to energy efficiency and climate protection. And it continues to adhere to this policy, despite the liberalization of energy markets, which exerts a strong cost pressure on the company. In order to survive in this competitive environment, the Stadtwerke were completely restructured in 1999, and divided up into several specialized companies, under the umbrella of a joint holding company, swb AG. One of these is swb Enordia GmbH, which offers services relating to electricity, natural gas, heat, and drinking water, including "Green Electricity". The goal of the City of Bremen and swb AG is to reduce the CO₂ on the local level by 25% from 1996 to 2010. An extensive action plan concerning energy production and consumption has been set up. Of the 24 projects on the demand side at present, those involving renewable sources of energy include:

- the Photovoltaik 2000 subsidy programme
- SONNEonline: ten solar-cell facilities for schools
- support for third-party wind-power plants, and erection of their own.

EXPERIENCE OF BREMEN

The idea of “Green Electricity”

As a customer-oriented company, swb Enordia keeps in close contact with its customers, so that the need to offer an entirely “ecological” electricity supply was recognized, and the development of a “green” electricity product begun, some time ago. Its concrete introduction to the market was under preparation since the summer of 1998, and was finally implemented in June 1999, as part of a modernized range of products, under the brand name “EnordiaStrom proNatur”.

And just what does “Green Electricity” really mean?

For swb Enordia, “natural electricity” does not mean that supply and demand are matched second by second. But it offers its customers the five following guarantees for EnordiaStrom proNatur:

- EnordiaStrom proNatur comes exclusively from renewable sources of energy in the Bremen region. In the initial phase, this comes from existing wind-power, photovoltaic, and biogas plants belonging to parties with whom swb AG has contracts, but as time goes by, this will be replaced by supplies from new facilities. The amount supplied each year is covered by such inputs.
- All revenues from the sales of proNatur are used only to operate additional renewable-source generating plants.
- The price of EnordiaStrom proNatur contains only the respective higher costs for electricity from renewable sources of energy.
- EnordiaStrom proNatur will be certified according to the criteria developed by the Öko-Institut in Freiburg. the appropriate use of the revenues will be monitored. The marketing and organizational costs are not financed by the revenues from EnordiaStrom proNatur, but are borne by swb Enordia as its contribution to the promotion of environmentally-sound generation of electricity.



The surcharge and what happens to the revenues

For each kilowatt-hour of EnordiaStrom proNatur sold, the customer pays a surcharge of not quite 0.04 euros. All the money from this surcharge is transferred by swb Enordia to the Ökobank in Frankfurt am Main, a bank which is trying to enable its customers to invest their money in environmentally compatible projects. For each kilowatt-hour purchased by its customers, swb Enordia transfers another 0.04 euros, which, like the interest earned, is to be employed specifically to finance the construction of further renewable-energy facilities.

The offer

swb Enordia GmbH offers its “green” electricity both to private and commercial customers. Commercial customers can order certain set percentages of their annual electricity consumption from renewable sources of energy. There are four options: 25%, 50%, 75% and 100%. This enables companies to purchase electricity from renewable sources of energy in accordance with their finances and ecological preferences. In addition, all commercial customers receive:

- the quarterly EnordiaStrom proNatur Newsletter (first issue Oct. 99)
- regular information on the subject of efficient utilization of energy
- a free energy check for the company
- the annual EnordiaStrom proNatur statement

Since electricity from renewable sources can also serve as a promotional measure for a company that wishes to draw attention to its environmental commitment, swb Enordia also offers its subscribers promotional materials (leaflets and stickers) which they can incorporate into their corporate strategy.



For domestic customers, on the other hand, the range on offer includes specific quantities of kilowatt-hours which the customer can purchase.

- The Basic Package comprises the one-time purchase of 300 kWh, for which a surcharge on the normal electricity rate of 11.20 euros is charged.
- The Refill Package provides another 300 kWh, which can be ordered at any time. Both offers must be paid in cash or by bank transfer, since they are one-time payments.
- Customers of the Subscription Package receive 300 kWh quarterly, the Newsletter, and various information material on saving energy. These customers continue to receive their normal electricity bill, but pay the fixed surcharge by bank transfer or direct debit.
- And finally, there is the possibility of switching over entirely to renewable sources of energy, with the Complete Package. In addition, each subscriber receives the quarterly Newsletter and a free energy-saving analysis. Furthermore, the proNatur electricity is itemized separately in the annual invoice.

With a gift package for Christmas suitable for advertising, and “sun dollars” as a receipt for 300 kWh, green electricity as a gift and its consumption were made real to people. For every 300 kWh, they received a “sun dollar”, and four sun dollars served to pay for a solar cell in the planned Civic Solar Power Plant.

EVALUATION AND PERSPECTIVES

Since June 1999, swb Enordia has been offering its customers green electricity. Advertisements were placed in the local daily newspapers for a short time, direct-mailing actions were carried out, and brochures and counselling were offered in the Customer Centre. To date, about 1% of the customers have expressed an interest in the "new" product, and at the end of 1999, roughly 270 customers (95% private customers and 5% commercial ones) had subscribed to proNatur. So in the first six months after the introduction of this offer, a good 100,000 kWh of green electricity had been sold. This does not seem much at first sight, but it conforms to the experience of other municipal utilities in Germany which are already offering green electricity.

Further mailings are planned in 2000, and an information stand to be set up at the weekly produce market or in shopping centres from time to time is being designed.



Customer loyalty and acquisition of new customers are top priorities in competition. Besides simple pricing competition, high-quality utility services (electricity, water, telecommunications) can create closer ties between a company and its customers, and give the customer the feeling of having chosen the right partner. "Green Electricity" is one of these services offered by swb Enordia.

FOR FURTHER INFORMATION

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