Case Study 14

Standby Campaign
'Off. Really off?

Germany

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Changing Behaviour

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Changing Behaviour

SEVENTH FRAMEWORK PROGRAMME

Work package 2
Development of the conceptual model: Analysis of success factors, underlying models and methods in target group interaction

Case Study 14:

Standby Campaign ‘Off. Really off?, Germany

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Content

Summary of the case

In 2000, the Energiestiftung Schleswig Holstein, in cooperation with a marketing agency and the Deutsche Bundesstiftung Umwelt (DBU), started a campaign to address stand-by consumption of household appliances that make a up a significant share of household electricity consumption. The campaign was called *Aus. Wirklich aus?* (Off. Really off?) and was meant to be a pilot project for a larger, country-wide campaign.

The project can be classified as an informational instrument and was based on a marketing approach. The campaign was based on a two-pronged strategy, based on mass media on the one hand and appliance retailers on the other hand. There was a mass media campaign, mainly in newspapers and radio spots, backed up by a cinema spot. More detailed information was available via the internet or through a brochure. The mass media campaign advised people to get in touch with their local retailer to find out more about how to reduce standby consumption. These were the second pillar of the campaign. Retailers should become aware of the increasing stand-by consumption and be able to advise their customers on this issue.

Especially using a mass media campaign for "energy saving" as a product was an innovative approach. The focus of the campaign was on the financial savings that could be achieved and psychological motives of consumers to be ‘in control’ of their consumption.

There was a detailed evaluation of the campaign. This came to the conclusion that the campaign was relatively effective, both in terms of awareness and action.

Step 1: Context of DSM programme

National context in general

The campaign was carried out on a state level in the German state of Schleswig-Holstein, but must be seen against the overall national debate on climate change and energy efficiency. Germany is one out of few Member States that will most probably reach its 2008/2012 Kyoto GHG reduction target (reduction target of 21% compared to base year 1990) and has also been a climate policy pioneer back in the 1990s, at least in terms of the political debate and the setting of reduction targets. Two out of three Germans believe that Germany should take a leading role in the international efforts to mitigate climate change. 96% of all Germans agree that consumer behaviour is an important driver for energy savings. 98% support the idea that the industry should be forced to offer more energy saving products. 84% claim that they pay attention to low energy consumption when buying household appliances (BMU 2006). The market penetration of efficient A/A+/A++-rated products is already today relatively high in Germany, in comparison to other countries.

The energy consumption per household in Germany (adjusted to the EU-27 average climate) is comparable to the EU-27 average. Whereas the energy consumption per capita is above the EU-27 average, the specific energy intensity (energy consumption per GDP) is below this average (BMWI 2008, Odyssee 2008).

In Germany an average household consumes around 3.620 kWh per year whereas the EU-27 average is 4.110 kWh. However, electricity consumption of private households is increasing to a larger extent than the overall electricity consumption of the country. Whereas the latter has increased by approx. 0.4 % per year between the years 2000 and 2006 (EU-27: 2.4 % per year) the annual increasing rate of the electricity consumption in the household sector was in the range of 1 %. This rise clearly implies that efficiency gains through technology development are overcompensated by augmenting equipment rates (e.g. tumble driers) and the trend towards larger appliances (e.g. larger TVs, refrigerators).

In recent years energy efficiency is gaining more and more attention in the political debate. As compared to the discussion on the support of renewable energy (especially wind energy), there seems to be a consensus across all political parties on the issue of energy efficiency.

Nevertheless there is still a lack of a regulatory framework to enable substantial cuts in the energy consumption in the household sector. There are no really ambitious command & control instruments and a strong emphasis on soft measures, e.g. informational instruments as in the case at hand. One reason may be that within the European Union, individual Member States have limited ability to implement regulatory policy options to drive the appliances market to more efficiency. The competence for regulation policies lies with the EU, whereas the Members States must to a large extent to rely on soft measures.

Other policies in Germany comprise energy taxes (e.g. posed on electricity, natural gas and liquid fossil fuels consumption), various energy labelling activities (including those following the Energy Labelling Directive 92/75/EEC, governmental activities such as the Blauer Engel label as well as private initiatives) and financial support schemes. In addition the debate on energy efficiency is rather technology orientated (e.g. efficiency standards, development of new technologies). Sufficiency aspects including questions about our lifestyle or our mobility behaviour are more or less left out of the discussion.

The campaign must also be seen against the background of the liberalisation of the German electricity market that started in 1998. The standby problem addressed by the programme is not directly linked to market opening, and a similar campaign could in principle have been launched before liberalisation. However, market opening has shed new light on the role of end users, as well as the need to address them through professional marketing.

Before the German electricity market was opened for competition several utilities operated efficiency programmes such as bonus schemes for A-rated appliances or energy consultancy. However, many of these

programmes have not been continued after liberalisation, so there was a need for new campaigns that fit into the liberalised environment.

As of today, electricity prices have increased since market opening in 1998, but the campaign coincided with a temporary price decline, which may have made the campaign less effective.

In the last 20 years several intermediaries such as energy agencies on the state level ("Bundesland") as well as the actors on the local/regional level have emerged and made energy efficiency in the household sector a core issue. As a result of this decentralised infrastructure, it has become possible to test different instruments and approaches on a local and regional, for example before they can gain a political majority on a national level.

Specific context of the project

In the general context of climate protection and energy efficiency efforts, the reduction of standby power represents an attractive no-regret strategy that is in most cases cost-effective, at least from societal point-of-view and be implemented in the short- to medium-term, in the sense that most appliances have relatively short lifetime and devices to switch appliances off can be installed instantly.

The need to tackle standby losses and its potential to contribute to energy efficiency and climate protection policy had been increasingly recognised in the late 1990s, both internationally and nationally. Internationally, a seminal activity was the “One Watt Initiative”, launched by the IEA together the US Lawrence Berkeley National Laboratory in 1999 to reduce standby load to 1 watt. The IEA started the Standby Power Initiative, providing a forum for international exchange and policy transfer and published the report “Things that go blip in the night” (IEA 2001).

At the European level, a projection of the European Union showed that in total nearly 100 TWh of electricity was wasted each year in households and offices within the EU in the form of standby losses. The resulting CO_2 emission in the European Union amounts to about 40 million tonnes, which roughly corresponds to Switzerland’s emission of CO_2.

The Group for Efficient Appliances (GEA), a forum of representatives from national energy agencies and governments working with industry on voluntary information activities to improve the efficiency of electronic products, mainly household appliances, addressed standby power consumption. The manufacturers had committed themselves voluntarily at the European level through the European Association of Consumer Electronics Manufacturers to reduce standby losses of TVs and video recorders. (Rath et al 1999).

On a national level, there was increasing political support to tackle the issue. The government supported “One Watt Initiative” and recommended the principle “off is off”. Yet these principles and objectives were not backed up by effective policy instruments. Some utilities mainly from the Association of Municipal Public Utilities for Energy Efficiency (ASEW) ran regular communication campaigns to the consumers’ attention to the standby power problem and there were even finanaciel awards for the purchase of appliances with low standby power losses. The GED (Gemeinschaft Energielabel Deutschland - German Energy Label Association) endorsed the GEA label and promoted this scheme throughout the country (IEA 2001).

The campaign described in this case study was a stand-alone project, but it was embedded in a wider context. Against the background described above, the federal environmental agency commissioned a study to analyse the potential savings, strategies and policy instruments in this area (Rath et al. 1999). The foundation that carried out the programme (Energiestiftung Schleswig-Holstein) had conducted the study for the federal environmental agency. The organisation then decided to use its capacities in a regional context and implement a regional pilot project itself, based on the results of its study and with the support of the national environmental foundation. This was the first project of this size it initiated.

For the organisation the campaign was attractive for different reasons (cf. Wortmann, Möhring-Hüser 2001):

- It could practically implement the results of the study conducted for the federal environmental agency and thus further promote the political process on the issue, including attempts on the European and national level to set target for low stand-by consumption of new equipment. The programme was designed to become a regional pilot project for a national campaign on energy efficiency.
- The Agency was interested to promote information campaigns as policy instruments in the field of environmental and energy efficiency policy.
- The pilot project could demonstrate the value of an independent energy agency following the Danish and British examples and thus promote the debate to set up such an agency on a federal level in Germany (The DENA- German Energy Agency was set up in 2000).
- There was a high consensus for such a campaign: Environmentalists as well as the manufacturing industry stated to support or at least to react positively to a campaign directed to consumers to reduce their stand-by-consumption. Given the consensus-building task of the Energy Foundation (mainly between the state and energy companies), this was another attractive feature.

The Energiestiftung was in a good position to carry out the project, because it was an independent organisation without any commercial interests in increasing the share certain appliances, so was more credible in that respect than electricity suppliers campaigning for energy efficiency. Yet at the same time, it had enough funding available to carry out such a major campaign (Wortmann, Möhring-Hüser 2001).

Concerning the availability technology, standby power per appliance can be reduced using available appliance technologies. According to the above mentioned study commissioned by the federal environmental agency, appliance with an average standby consumption could reduce standby consumption by 25 % if they were used all over the country. The most efficient appliances could even achieve a reduction of 60 %.

Step 2: Focus of DSM programme

General issues

The programme ran from November 2000 until April 2002. It had a budget of ca. 1m EUR. The campaign was planned during summer 2000. The official start was November, 8, 2000 with the so called retailers' "event". The advertising in newspapers, cinemas and the radio started in January 2001. The following illustrates the schedule of the campaign (and the follow-up campaign 'Clever light').

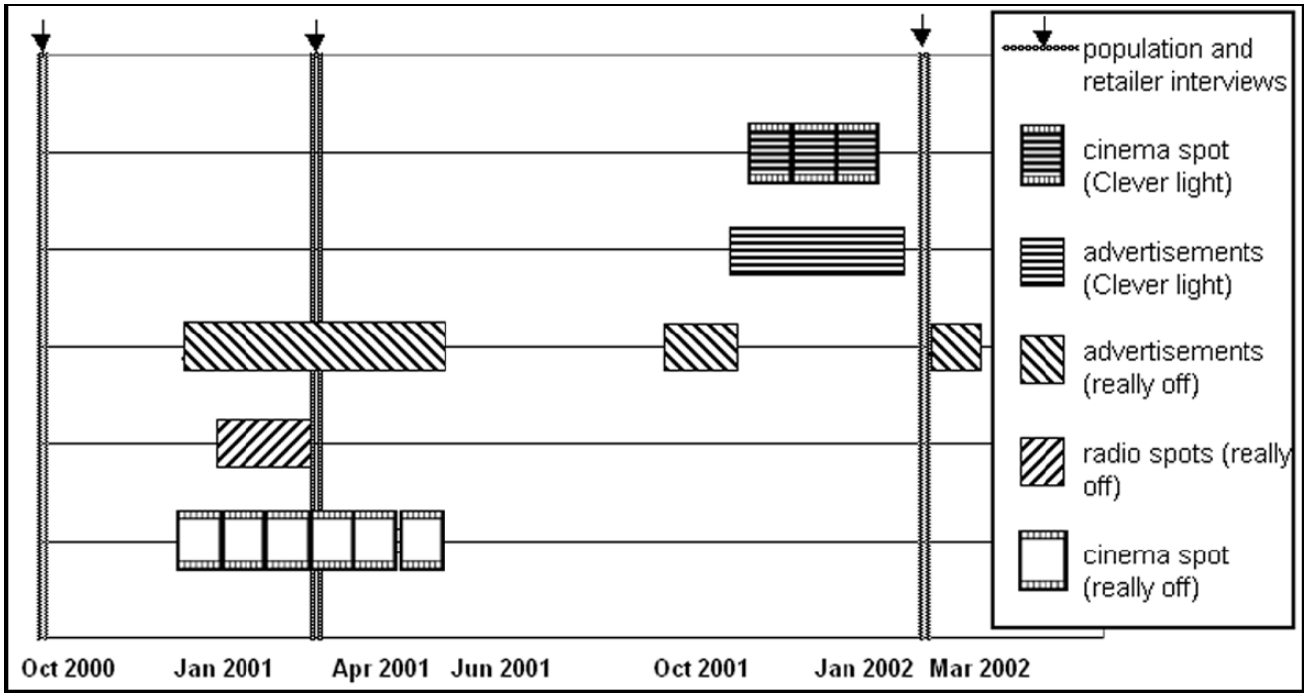

Figure 1: Schedule of the campaign

Source:(Wortmann, Möhring-Hüser 2003)

The programme can be called ambitious in that it targeted a relatively 'new' problem at the time. Also, it used a novel marketing approach to convey its message, which was rather unusual for energy efficiency programmes. In other words, it transferred marketing strategies from other products to energy efficiency.

Initiator and partners

The programme was initiated by the "Energiestiftung Schleswig-Holstein", a regional energy foundation in the state of Schleswig-Holstein set up to promote climate protection, energy efficiency, renewables etc.[1] Regional energy agencies can be said to have a good reputation to provide neutral advice on energy efficiency issues at low costs, but are not well known to a broad audience (IFEU 2006). A mass marketing campaign was therefore rather an unusual instrument for the organisation.

The most important partner in terms of financing was the Deutsche Bundesstiftung Umwelt (DBU, German Federal Environmental Foundation). It provided the funding for the evaluation of the regional campaign that was to be used for the design of a country-wide campaign. The campaign was developed in cooperation with

[1] The organisation is now part of the "Innovationsstiftung Schleswig-Holstein".

an advertising agency. The budget of the campaign ensured that it was attractive for high-profile agencies to apply. The evaluation was carried out by a polling institute.

The energy foundation financed the campaign through its own budget, while the DBU contributed funding for the evaluation.

Problem definition

The problem that was to be addressed by the programme was the no-load power consumption of electric appliances, i.e. electric power consumed by electronic appliances while they are switched off or in standby mode. No-load power consists to a large extent of electricity consumption of appliances in standby mode. Increasingly, many appliances cannot be switched off completely without being unplugged. An additional problem results from electrical appliances where the transformer still uses electricity although they seem to be turned off completely, because for cost reasons the switch is on the low-voltage side of the transformer. In this case, no-load power does no even lead to increased functionality as in the case of standby power (e.g. to remote control appliances.)

According to a definition by the IEA Standby Power Initiative[2] "at a minimum, standby power includes power used while the product is performing no function. For many products, standby power is the lowest power used while performing at least one function. This definition covers electrical products that are typically connected to the mains all of the time." Examples of no-load-power include TV sets in standby position, fax machines in ready position or transformers that cannot be disconnected from the power supply due to their particular design, e.g. in printers or audio systems.

Although appliances become more efficient also in terms of standby power the number of appliances that cannot be switched off has been increasing steadily. Although standby consumption can be as high as 15 or 20 watts, it is relatively low per appliance and even less 'visible' than the power consumption of appliance that are 'on'. Nevertheless it can add up to a relevant load in a household and contribute significantly to the overall power consumption.

An average standby power of 50 watts per household at a price of 0.16 Euros per kWh results in an electricity bill of about 70 Euros per household and year. At the upper end, households with a total no-load power requirement of 100 watts pay an extra 140 Euros per year. (Rath et al 1999). In a study conducted in 1999 just before the programme was initiated, no-load power consumption was found to amount up to 20 TWh per year, i.e. 4.4% of the total electricity consumption in Germany, causing some 14 million tons of CO_2 emissions.

Goals and objectives

The overall goal of the programme was to reduce standby losses of consumer electronics in private households. To that end, the programme pursued the objective to increase the awareness of standby losses and associated costs among consumers, thereby increasing consumer demand for appliances with low or no standby-consumption. At the same time, the project targeted retailers of consumer equipment in order to provide better information for consumers through this channel.

The goals and objectives were clearly formulated, not the least due the clear focus on standby power, albeit there was no quantitative target like reducing standby power by a certain percentage. Given the lack of a quantitative reduction the target, the programme was ambitious mainly in terms of methodological approach.

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[2] See http://standby.lbl.gov/Definition/IEATaskForce1.html

The targets and target group

The campaign addressed household electricity consumers in Schleswig-Holstein, a state with 2.8m inhabitants. This is obviously a very heterogeneous group. Within this broad group, the campaign specifically sought to target those consumers who want to be 'in control' and do not want to be charged for electricity consumption that does not have any benefit for them. At the same time, the campaign focused on predominant purchaser and user of consumer electronics. All in all, the main target group were young consumers, between 16 and 40 years old, with a focus on male consumers. The campaign thus did not target consumers that have a high affinity to energy efficiency issues, but rather a group of consumers that is generally not particularly open for energy efficiency issues, but plays an important role in buying and using consumer electronics. Despite this focus, it was one of the objectives to exclude none of the other consumer groups (Wortmann, Möhring-Hüser 2002).

The behavioural change targeted in the project involves both buying and using household appliances, so it covers both the technology and the way it is used. In order to reduce stand-by consumption, consumers need to buy appliance with low stand-by power consumption and install for example switchable multipoint connectors. At the same time, people need to use this equipment to switch of appliances to effectively reduce the standby-consumption.

Besides consumers, a second target group on the supply side of the market were retailers of electronic equipment. A core message of the consumer campaign was to ask retailers for advice about how to best reduce stand-by consumption and which appliances to use. Before the advertising campaign started, retailers had been comprehensively informed about the campaign. They could order a set of brochures (containing all relevant information) for the customers, and additional point-of-sale material like posters and stickers to recommend certain appliances in their shop. Moreover, each retailer was actively informed by mail and phone.

Whether or not retailers should be involved or whether an independent consumer advice organisation would be a better choice to back-up the media campaign and provide additional and more detailed information for consumers, was decided based on two criteria, namely their credibility and their centrality in the social network. Retailers tend to be perceived as biased and less credible by consumers. Nevertheless, due to their central position in the market, they play an important role in shaping purchasing decisions. It was therefore decided to involve retailers in the campaign. The cooperation between retailers and independent experts from a non-profit organisation is said to have increased the credibility of the retailers (IFEU 2006).

Step 3: Design of programme

What knowledge and ideas informed the design of the programme?

The following concepts informed the design of the programme:

1) Market transformation concepts, i.e. shift the focus from demand-side measures only to a market perspective and the interaction between supply and demand.
2) Liberalisation: Put the electricity user and his/her decision into focus.
3) Literature on communicating environmental issues (Wortmann, Möhring-Hüser 2003)
4) Marketing approach: Market energy efficiency like a product, with the help of an advertising agency and a professional campaign.
5) Psychological theories of consumer behaviour: the project coordinator refers to two theories (Wortmann, Möhring-Hüser 2003), the appraisal theory of emotions (Nerb,Spada & Lay, 2001) and the elaboration-likelihood-model of persuasion (Petty & Cacioppo, 1986). But this may be only an ex-post theorization to interpret the results for a scientific audience.

Research conducted on target group

As for the selection of the target groups, see step 2. There was no explicit research on the target group within this project, except that the attitude and level of knowledge of the target group was researched prior to the advertising campaign to establish a baseline for the ex-post evaluation.

Negative consequences that have been though of include possible effects on consumer groups that are not in the main focus of the campaign and potential negative effects on consumers by including retailers, as their may be a lack of credibility and trust from the consumer side.

What barriers, motives and capacities did the programme aim to target?

There are two barriers that represent the starting point of the campaign (Wortmann, Möhring-Hüser 2003). On the supply side, they are not enough incentives for producers and retailers to develop and offer highly efficient appliances, because there is not sufficient demand and because their additional costs would be penalised in a competitive market. This is due a lack of demand, which in turn can be explained by a lack of knowledge about standby consumption and ways to reduce it. Another reason may be that people generally mainly look at the investment costs when buying an appliance, while discounting the operating costs. In the case of no-load power, where reducing consumption can entail higher investment costs, this mechanism may be even more relevant, especially given that people are not fully aware of the additional operating costs due to no-load power.

In this context, the campaign mainly targeted the lack of information on the consumer side, with the aim to trigger a reaction on the retailer side. Retailers were integrated to improve knowledge on the consumer side, but with the side-effect of sensitising retailers to the issue and the opportunities arising for them.

As for the motives of consumers, with this campaign, consumers were not asked to save energy to reduce external costs such as environmental damage. Rather, the campaign targeted the self-interest of consumers. First of all, this includes economic incentives to reduce unnecessary energy costs. There were no rewards or financial incentives given by the programme, but the campaign emphasised the fact that there financial savings to be gained from a reduction of standby power.

Another, more subtle central theme of the communication strategy applied was ‘loss of control’ that people suffer from when appliances continue using electricity even after thy have been turned off, without being visible in many cases (Wortmann, Möhring-Hüser 2003). The programme thus conveyed the message that people could not only save money, but also regain control.

The programme targeted knowledge and motivation of consumers and through integrating retailers also improved the possibilities to buy appliances with low standby power consumption.

The intervention methods/instruments and activities used

The project can be classified as an informational instrument and was based on a marketing approach. The campaign was based on a two-pronged strategy, based on mass media on the one hand and appliance retailers on the other hand. First of all, there was a mass media campaign, where the project used a number of different communication channels, coordinated in an overall communication plan. The campaign issued newspaper adverts and radio spots, backed up by a cinema spot. The media campaign was reinforced by newspapers and radio reporting on the campaign. This can be seen as one of the reasons why the campaign has reached not just the core target group of young people, but also older people who have a higher affinity to energy saving (Wortmann et al. 2002).

A smaller reminder campaign with one additional mailing to retailers and five additional newspapers ads, but no cinema or radio spots was launched after half a year and one year.

While the mass media campaign aimed at getting people’s attention and make them aware of the issue, they also pointed at more detailed information that was provided through additional channels. This was available via a website set up for the campaign or through a telephone hotline that was provided for people to call and ask specific questions. There was also a brochure providing more details on standby power and how to reduce it.

The mass media campaign advised people to get in touch with their local retailer to find out more about how to reduce standby consumption. These were the second pillar of the campaign. First, their competencies and central position should be used, second, they served as a channel to distribute material like the brochure with more detailed information, and third the retailers themselves should be ‘educated’ and become aware of the increasing stand-by consumption and efficient appliances and be able to advise their customers on this issue, with support from the Energiestiftung. At the beginning of the campaign there was a workshop for retailers to get their attention and provide them with information.

It was the explicit aim of the campaign to go beyond the “’niche’ of ordinary ‘eco-marketing’” (Wortmann, Möhring-Hüser 2003) and contribute to capacity building for these kind of campaigns. The approach was chosen accordingly. As a consequence, the project did not target consumers that already have an affinity to energy efficiency, but sought to generate “new motivations for new target groups”.

The intervention was aimed at the micro-level of the behaviour of individual consumers. There was no long-term infrastructure built up on top the awareness and knowledge of consumers and retailers created.

The following figure summarises the various elements of the programme and how they were supposed to interact.

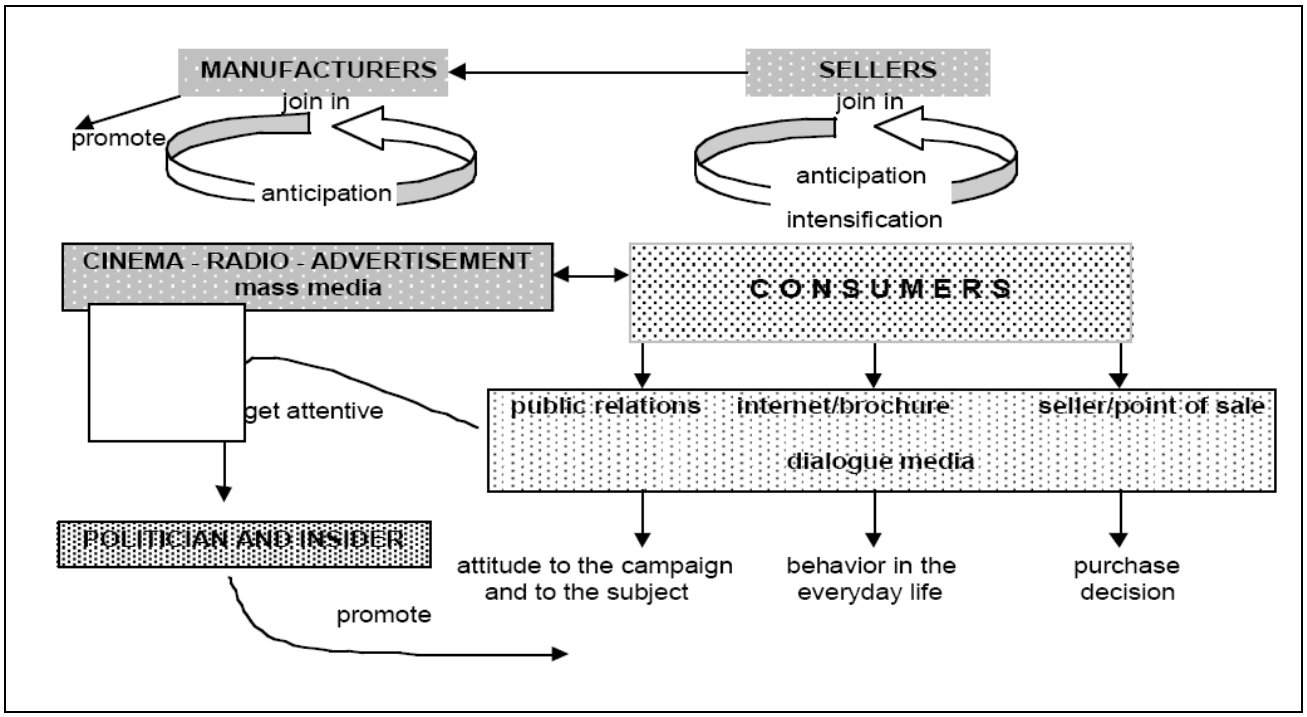

Figure 2: Strategic approach of the campaign

Source: (Wortmann, Möhring-Hüser 2001)

Participation

The campaign was to a large extent based on one-way communication from the Energiestiftung, in cooperation with a marketing agency, to the consumers and retailers, but there were also attempts to give the target group the possibility to give feedback, e.g. through a telephone, the internet and newspaper discussions (Wortmann, Möhring-Hüser 2002). The target group was not involved in the design of the programme and the programme did not explicitly work with the social environment of the target group. There was a detailed ex-post evaluation, but this was not fed back into the design of this campaign. The campaign started off with a "retailers' and VIP event" to get retailers on board before the advertising campaign for consumers started. The strategy to target both consumers and retailers (and originally also producers) can be seen as an attempt to align the interests of these stakeholders.

Commitment

The evaluation was co-financed by the Federal Environmental Foundation, because the results of the campaign were to be used to prepare a country-wide activity.

Communication

Communication was the core instrument of the programme. The communication campaign relied on a logo specifically designed for the campaign (see following figure).

Figure 3: Campaign logo

Source: (Wortmann, Möhring-Hüser 2001)

The campaign also relied on packaging the message with "fun and entertaining advertising", using a number of catchy and humorous pictures and slogans, as in the following example, displayed in adverts and posters. They questioned whether off was really off in different life contexts, e.g. relationships, fashion, food.

Figure 4: Poster used for the campaign

Source: (Wortmann, Möhring-Hüser 2001)

The campaign was tailored to the target group in that it tried to reach a broad audience through mass media and simply, catchy messages, but at the same time provided the necessary information for people who wanted to get more information on saving potentials and technologies available. The programme did not involve role models.

Learning, evaluation and monitoring

The project was to be a pilot project for larger, national follow-up campaigns and evaluation therefore played an important role and was an explicit part of the design. The evaluation was co-financed by the Federal Environmental Foundation, because the results of the campaign were to be used to prepare a country-wide activity. For a detailed description of the evaluation and the results see (Schötz et al. 2003).

The evaluation was based two representative samples of the population and specialist dealers for electrical equipment. Throughout the project, the target groups in Schleswig-Holstein, were the campaign was conducted (or more precisely the sample researched), were compared with a control group in the neighbouring state of Niedersachsen. This was done both for household customers and retailers. The sample groups were interviewed by phone before the launch of the campaign, at the peak of the advertising campaign and one year after (Wortmann, Möhring-Hüser 2003). The evaluation was carried out to learn for follow-up projects and the envisaged national campaign, but was not to be used to inform adaptations within the campaign itself, which as a pilot project was not running for such a long time anyway.

The evaluation focused on the outcomes of the projects rather than an evaluation of factors influencing success and failure the intervention.

Link to other programmes and policy

The programme was not designed to make use of existing policies and incentives. There were no parallel activities the programme was coordinated with. As for links with other programmes, see step 1 and 5.

Step 4: Process of programme

Interaction between the different participants

An important success factor that developed only in the process of the campaign was the large secondary coverage of the campaigns in newspaper and radio.

Besides consumers as the main target group and retailers, further up the supply chain, the campaign also sought to involve manufacturers of household appliances. However, they were less interested, arguing that a regional campaign was not attractive for them and that they would prefer to join a campaign on a national or even international level. Some companies were willing to support the campaign by providing some of their products for PR activities or recommend their sales agencies to support the campaign. The positive reaction by some companies, although rather moderate, was dependent on the fact that the campaign targeted consumers to promote certain products, rather than the political arena to promote certain policy initiatives (Wortmann, Möhring-Hüser 2001).

The energy foundation has argued that the product-related marketing approach has led to an alignment of interests, at lest between consumers and retailers, as this approach “makes it much easier for the average consumer to understand a campaign for energy efficiency as supportive for his/her personal advantage”, as compared to a more general energy saving campaign (Wortmann, Möhring-Hüser 2001). The same goes for retailers that probably would have been less interested if the campaign had addressed energy efficiency in general, rather than specific products that they can sell.

Concerning feedback to the target group the last advertising in March 2002 contained the message that on average, everyone in Schleswig-Holstein had saved almost seven kilograms of CO_2 (Wortmann, Möhring-Hüser 2003).

Reaction of the project manager to issues/problems

As for the logo mentioned in step 3, it was originally planned to make use of the already existing GEA label mentioned in step 1. However, as it turned out that this label did not have a broad enough circulation and only a few manufacturers were actually using it, it was decided that this was not an effective label to inform consumers looking for efficient appliances. The following logo was therefore designed specifically for this campaign, which was a variation of the logo of the energy foundation (Wortmann, Möhring-Hüser 2001). It was to be used by the retailers involved in the campaign. The new label was awarded based on the GEA criteria and an appliance database set up by the German GED.

Step 5: Outcome of process

Objectives/goals/outcomes

The project is generally deemed successful, both by the project coordinators and the specialised energy efficiency audience.

The evaluation of the campaign through the survey described in step 3 was to a large extent based on the AIDA model for analysing advertising impact. The four elements of the model are the consumer's *A*ttention, that has to be gained, his/her *I*nterest, that should increase, followed by a *D*esire to buy a product, which finally leads to a specific *A*ction. All four categories were evaluated only on the basis of what people reported. Additionally, awareness of the campaign and its main messages was measured separately. This model was applied both to consumers and retailers. The following table summarises the main results.

Table 1: Results based on the AIDA model

	Consumers	**Retailers**
Awareness of the campaign	After three months, slogan was known to 33 % of the population, i.e. 1m people; one year later 35 % remember the slogan.	Campaign known to 67 % of retailers Participation rate of more than 50%
Attention	Awareness of the problem during the campaign: 54 % as compared to 39 % in the control group. One year after the main campaign: 49 % to 43 %	Attention to the problem increased, association of 'standby' with wasting energy increased from 2 % before to 16 % after the campaign. As opposed to the consumers, the effect continued to increase after the campaign from 16 % to 25 %. (4 and 7 % in the control group).
Information[3]	Subjective level of information on electricity consumption in general and standby in particular decreased during the campaign. This is interpreted in the sense that the campaign has destroyed subjective certainties and has elicited a search for more information. However, similar developments in the control group. 80 % say that retailers are most important source of information.	Campaign has increased commitment to actively search for more information (26 % before, 47 % during and 42 % after the campaign (control group: 24, 30, 31 %)
Desire	Interpreted as "willingness to pay" and "intention to act" Willingness to pay more for energy efficient devices increased from 19 to 24 % during the campaign (17 to 20 % in the control group), but decreased again one year later to 13 %. This drop is explained by an economic downturn. Intention to buy a switchable power strip increased from 14 to 20 % during the main cam-	Interpreted as "intention to act": After the campaign, 39 % intended to engage in activities to support the campaign. During the campaign: 33 %

[3] For some reason, the ‚interest' category is interpreted as information.

	paign and to 21 % after the reminder campaign. However, same development in the control group Intention to buy power safers increased from 12 to 16 %, only in SchleswigHolstein.	
Action	Is the TV switched off via master switch: increase from 49 % to 58 % (unchanged at 58 % in the control group). Is the master switch used over night? Increase from 64 % to 66 % (control group from 71 % to 69 %) Are switchable plugs used? Increase from 36 to 44 %, same development in the control group	During the campaign, 13 % of the retailers changed their assortment of goods/ 26 % one year later to provide more devices that reduce standby power. No changes in the control group.

Source: Compiled from (Wortmann et al. 2002; Wortmann, Möhring-Hüser 2003)

The campaign stayed within the timeframe and budget.

In terms of an actual reduction of electricity consumption, the project can only rely on a model, as shown in the following figure.

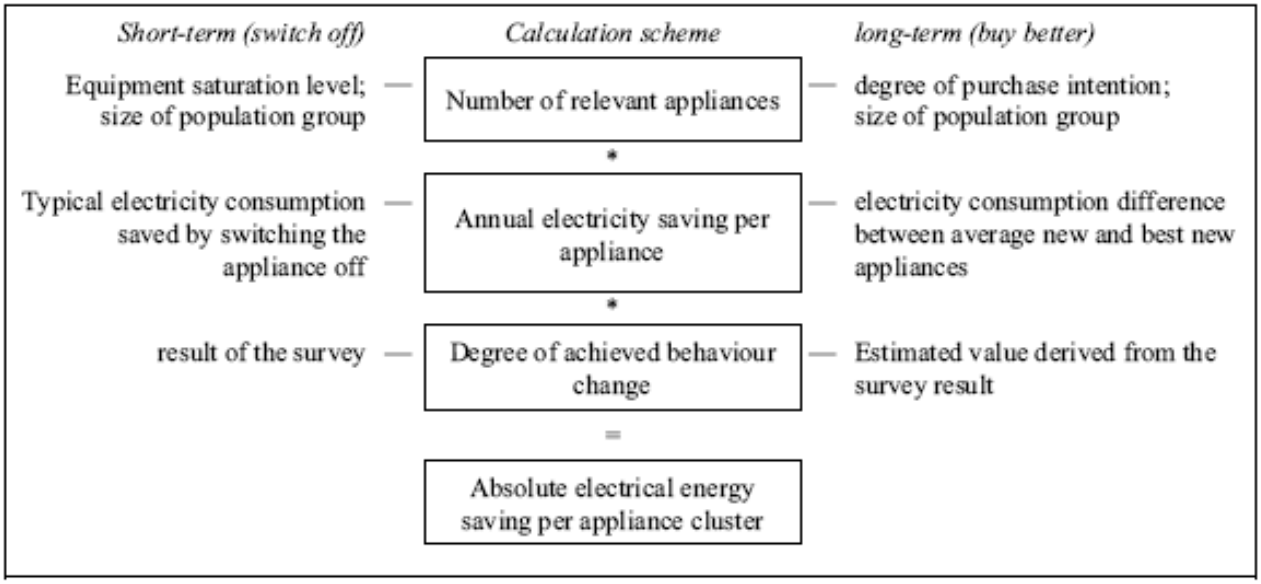

Figure 5: Calculation on short-term and long-term energy saving effects

Source: (Wortmann, Möhring-Hüser 2003)

Actual reduction of losses was not measured but only estimated, by the use of average values and assumptions, only partially directly based on the survey results. The following tables shows the yearly savings that have been calculated, both for behavioural changes in the short-term (i.e. switching off appliances) and changes in purchasing decisions that reduce the standby consumption of the appliances stock.

appliance	*equipment saturation*	*number of appliances*	*annual savings per appliance [kWh/a]*	*degree of behaviour change*	***energy savings [Mio kWh/a]***
TV sets	98%	1 274 000	25.0	8%	2.54
plug-in power supplies	100%	1 300 000	24.0	3%	0.94
complete hi-fi systems	90%	1 170 000	96.4	2%	2.25
computers & accessories	56%	728 000	55.4	4%	1.61
total					7.35

Figure 6: Annual energy savings through behavioural changes

Source: (Wortmann, Möhring-Hüser 2003)

appliance	*purchase intention*	*number of appliances*	*annual savings per appliance [kWh/a]*	*degree of behaviour change*	***energy savings [Mio kWh/a]***
computers & accessories	14%	182 000	29.0	5%	0.26
DVD-Players	11%	143 000	32.0	5%	0.23
mobile phones	10%	130 000	16.0	5%	0.10
cordless phone or phone sytems	7%	91 000	25.2	5%	0.11
TV sets	7%	91 000	12.2	5%	0.06
video recorders	5%	65 000	16.0	5%	0.05
complete hi-fi systems	4%	52 000	40.2	5%	0.10
fax machines	4%	52 000	34.7	5%	0.09
satellite receivers	3%	39 000	48.5	5%	0.09
answering machines	3%	39 000	12.1	5%	0.02
total					1.13

Figure 7: Annual energy savings through changes in the buying behaviour

Source: (Wortmann, Möhring-Hüser 2003)

Concerning the cost-effectiveness of the programme, the Energiestiftung calculates that the costs of saving one kilowatt hour through the campaign were 3.4 cent. This is similar to the electricity generation cost at the time and significantly below today's generation costs. This calculation is based on the assumption that a total of 26 m kWh were saved, assuming that the annual short-term savings calculate above last for two years, whereas the long-term savings last for ten years (Wortmann, Möhring-Hüser 2003).

Social learning

Learning that marketing campaigns for energy efficiency can be an effective tool and how to carry them out (e.g. involvement of retailers) was used in follow-up campaigns (see next section).

Follow-up of the programme

Within the programme there were 2 short reminder campaigns within one year.

Regarding the national follow-up activity that was envisaged, the German Energy Agency (DENA), together with energy companies, and the Federal Environmental Foundation launched the “Initiative Energieeffizienz” (“energy efficiency initiative”, www.initiative-energieeffizienz. de) at the end of October 2002, supported by the Federal Ministry of Economy and Labour. This campaign initially targeted stand-by as well as efficient lighting, and white goods. This campaign was also based on a marketing campaign using similar channels plus for example exhibitions. There were also brochures distributed via retailers.

On a regional level, the Energiestiftung launched a follow-up programme using a similar approach, called “Schlaulicht (“clever light”). It was using a similar approach, but was focusing on energy saving lamps. One of the objectives of this campaign is to build upon the first campaign and build up a regional brand for energy efficiency.

Step 6: analysis and conclusion

The most crucial factors shaping the outcome of the campaign in a positive way were the following:

1. The marketing approach:
    - The energy foundation cooperated with an advertising agency and the campaign was based on professional mass marketing,
    - The campaign went beyond the niche of eco-marketing, but aimed at selling efficiency like a product, focusing on economic and psychological aspects of standby-losses (Reducing stand-by-power can save money, people do not want their electricity consumption to be 'remote-controlled', but want to be in control) and using a ‘fun message’.
    - The success of the campaign can partly be attributed to the large secondary media coverage that was triggered by the campaign, thereby also enhancing the effect of a limited advertising budget. This shows that a customer campaign should not only directly address customers, but should also be made attractive for editorial staff in media.
    - There was a reminder campaign.
2. Clear focus and integrated approach:
    - The campaign focused on a specific problem, i.e. did not address climate change or energy efficiency in general, but standby power. This made it easier to convey the problem and possible solutions.
    - At the same time, within this focus area, the campaign used an integrated approach in the sense that it was based on a two-pronged strategy, targeting both consumers and retailers and coordinating different elements (marketing campaign, providing retailers with information)

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