



# **Case 1: Hannover social marketing for energy efficiency**

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*August, 2006*

Cultural Influences on *Renewable Energy Acceptance* and *Tools* for the development of communication strategies to promote ACCEPTANCE among key actor groups

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)

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## 1. Introduction

This case study describes social marketing campaigns for low-energy housing in the region of Hannover, Germany. The City of Hannover decided already in 1992 to aim for a reduction of 25% of its CO<sub>2</sub> emissions until 2010, compared to the 1990 level. The retrofitting of residential buildings with respect to energy efficiency is a key element of the City's climate protection strategy and offers also opportunities for local business development. The local utility, as well as the regional authority participate in these activities.

This case study is based on the review of documents, i.e. did not comprise any 'new' research. Still, interviews with local actors were carried out to include the latest developments.

The case study illustrates the efforts of a local community in transforming the market for energy-efficient technologies, in social and economical acceptance of energy modernisation as well as cooperating with different partners and participation of different actors.

## 2. Country overview: Energy efficiency in Germany

In the following, a brief description of the 'data background' for energy efficiency in German residential buildings is given<sup>1</sup>.

About 17.3 million residential buildings and some 1.5 million non-residential buildings exist in Germany, with 73% of these buildings being built before 1978. The building sector has a central relevance for efficient energy use, as the reduction potential from energy efficiency retrofitting is high.

The largest share of the German households' expenditures for living is represented by costs of heating and hot water. With rising energy prices, this share will increase further. In addition, security of supply concerns for oil and gas imports, and climate protection targets underline the necessity of energy efficiency in this sector.

Since 1990 when East and West Germany were reunited, the primary energy consumption was slightly reduced, and some oil was replaced by natural gas. Renewable energies slowly developed, mainly from biomass, and wind (see following table).

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<sup>1</sup> For more info on the energy system in Germany - including renewables - see OEKO (2006).

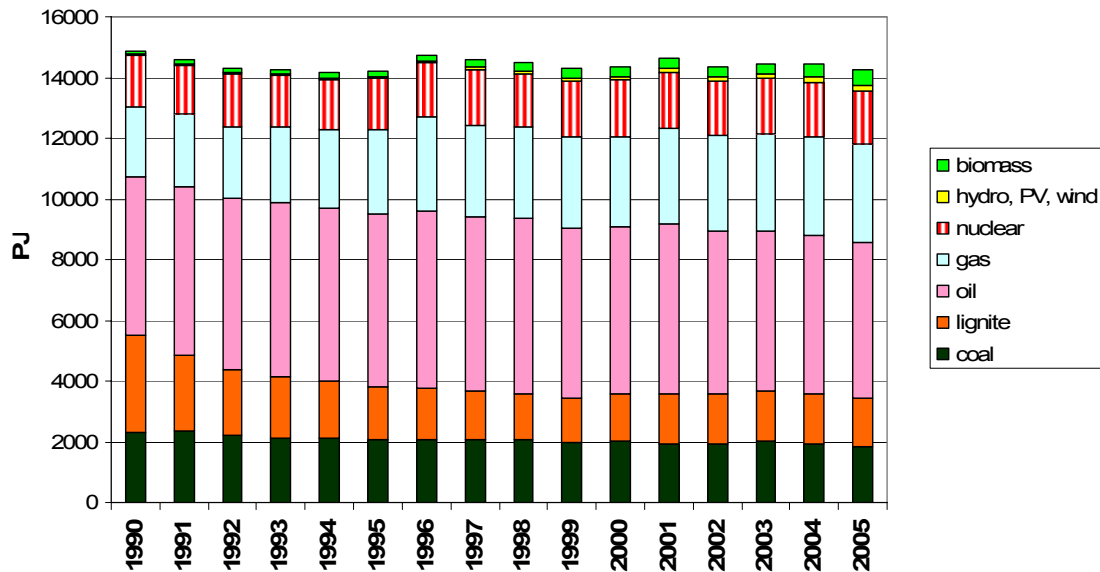


Figure 2.1 *Primary energy consumption in Germany*  
Source: StatBA (2006).

Between 1990 and 2005, the primary energy consumption changed considerably: The primary energy consumption decrease by about 3 percent, the share of industry decreased from about 3,000 PJ in 1990 to some 2,400 PJ in 2005. At the same time, the percentage for the private residential sector increased (from about 2,300 PJ in 1990 to some 2,600 PJ in 2005), as has the fuel consumption in road transports (from about 2,300 PJ in 1990 to some 2,500 PJ in 2005).

Similar to the primary energy, the final energy consumption decreased by about 3 percent. Figure 2.2 shows the development of the final energy consumption.

Residential households have the biggest part (some 30%), followed by transport (28%), and industry (25%). The industry sector continuously decreased its consumption through continuing efficiency improvements and structural changes (shifting from energy-intensive products towards services). In the transport sector, the increase is due to growth in numbers of vehicles.

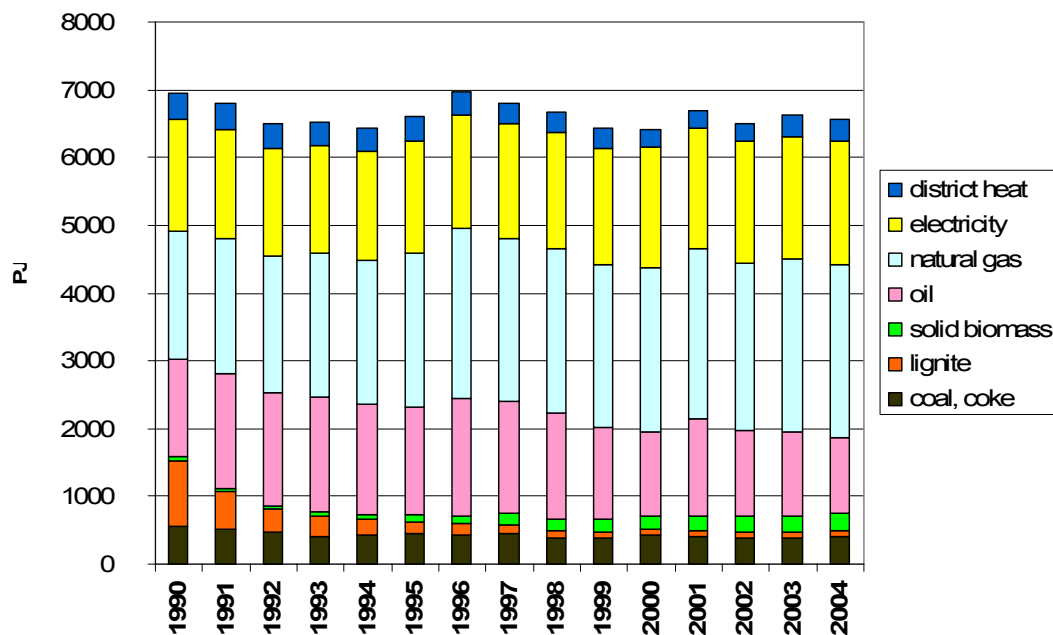


Figure 2.2 *End-Energy Consumption in Germany, 1990-2004*  
Source: StatBA (2006).

The share of space heat is about 76% of the final energy consumption, i.e. heating is the most significant end-use in Germany (BMWI 2006).

The Federal Government has made key decisions to its future energy-supply structures. These include decisions on an orderly termination of use of nuclear power, expansion of use of renewable energies, development of new energy technologies (such as fuel cells) and loan programmes for energy efficiency measures. Germany has completely liberalised its electricity market which led to lower electricity prices especially for the industrial sector, as well as to the provision of new energy products (e.g., 'green' electricity).

Germany already is a leading country in energy efficiency. In areas such as electricity generation, industrial processes, motor-vehicle engines, household appliances and structures, Germany has continually enhanced its energy efficiency over the past 25 years. Overall, Germany's per-capita energy consumption has decreased by 5.5% since the early 1990s. Energy input per unit of value added - i.e. energy intensity - decreased by 15.5% between 1991 and 2000. Whereas annual energy efficiency improvements in Germany amounted to some 2% per year between 1991 and 2000, for the EU overall they were only 1.1% p.a. (1991-1998). Germany has clearly decoupled the link between energy consumption and economic growth.

The potential for efficiency improvements in the building sector is very large. The Federal Ordinance on Energy Saving (Energieeinsparverordnung) came into force in 2002 to address this potential - it will considerably decrease energy consumption in new buildings from some 200 kWh/m<sup>2</sup>\*a to about 80 kWh/m<sup>2</sup>\*a. 'Zero energy' and 'passive' houses are still the exceptions, though there are financial incentives.

A CO<sub>2</sub> oriented building modernisation programme has been established with the aim of reducing CO<sub>2</sub> emissions by at least 40 kg per square meter and year. The programme comprises a number of measures packages and provides economic incentives to modernise heating systems in combination with insulation improvements or window replacements in buildings built in 1978 or earlier. This programme is expected to spark modernisation in some 330,000 residences in the next few years.

One important element of the Federal Government's climate protection programme in the building sector is a multi-year campaign to raise awareness and provide information.

Moreover the Ministry for Economy and Labour recently started several initiatives and demonstration projects to implement the EU-wide efficient buildings certificate.

### 3. Summary

Between 1994 and 1997, the municipal utility of Hannover - supported by the THERMIE Program of the EU - co-financed heat insulation in 26 apartment buildings where some 50% of the heat demand was saved. In 1999, another campaign called 'Haus-Partner Hannover' with the logo 'H)eissbär' started to offer consultancy and support owners of existing buildings in retrofitting<sup>2</sup>. In parallel, a so-called network of 'Haus-Partner' (house partners) was founded in Hannover in order to obtain additional participants for the campaign.

The aim of the 'Haus-Partner' campaign was to motivate house owners to combine the renovation of their houses with energy modernisation, especially retrofitting thermal insulation. The climate protection potentials identified in a building inventory were planned to be realised

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<sup>2</sup> 'H)eissbär' is a wordplay: The German 'heiss' (= hot) rhymes with 'Eis' (=ice), and the German name for polar bear is 'Eisbär'. The wordplay refers to global warming, and the bracketed 'h' is the equivalent to prevent (global) warming. Moreover, a real polar bear called Irma is one of the most beloved inhabitants of the Hannover Zoo.

through the campaign. The City of Hannover, the municipal utility of Hannover and proKlima developed an 'energy certificate' (Energiepass) which describes the current energy 'state' of a building. Furthermore, the energy certificate gives hints for retrofitting to house owners. Owners of the Heissbär logo received additional benefits like advisory service for energy savings, or thermographical analysis of their building.

In 2001, the climate change agency of the region Hannover was founded. The agency continued in promoting energy efficiency intensely.

The social marketing campaign activated successful house owners and key local actors. The energy certificate of the Hannover region was one of the first steps to inform house owners on the state of their building. The energy certificate was accepted positively and this acceptance resulted in increased measures of energy retrofits in buildings. Regional employment effects arose through the grant and loan programs.

The specific campaign 'Haus-Partner-Hannover' with the Heissbär logo ended after three years. The project's ideas and tools as such are still running in a modified manner and with the new label 'Gut beraten starten!' (Start with good counsel). The initial 'Haus-Partner' campaign developed a network of actors through successful communication tools. The marketing contributes to modernisation activities for energy conservation. This measure supported a reduction of CO<sub>2</sub> emissions in the region, as the program managers indicated. The project and campaign concept became popular and other municipalities tend to replicate the project in their own region.

#### 4. STEP ONE: Visions of the campaign

'No insulation without energy modernisation!' is the slogan of the campaign. This phrase has two meanings: it addresses people who already have decided to renovate but didn't implement energy modernisation yet and furthermore it should draw attention to the issue generally.

Climate protection is a central environmental challenge. Most of the old buildings in Hannover are consuming more energy for heating than necessary because of insufficient insulation, or old heating installations. A reduction of more than 50% of the heat demand is possible in existing buildings. In the process of retrofitting, the lack of knowledge on energy-optimized buildings seems to be one of the main problems. Information on the advantages - especially cost reduction through energy savings - need a wider distribution.

Given this, administration staff in Hannover started a discussion process after the conference of Rio de Janeiro in 1992. The initial point was a resolution of the council of Hannover to reduce 25% of its CO<sub>2</sub> emissions (compared to the 1992 level) by 2010.

In 1994, the City of Hannover implemented a central administrative body for environmental protection and energy (Energieleitstelle). The department planned climate protection programs, and participated in ICLEI's Local CO<sub>2</sub> Reduction Project, and the 'Climate Alliance of European Cities' (Amt für Umweltschutz Hannover, 2002).

A network was founded in 1998 with the support of the local administration and municipal utility. The main idea and vision was to promote more sympathy and interest for the issue of energy retrofitting, using a mix of marketing instruments. The campaign addressed house owners as well as craftsmen, planners, manufacturers and construction firms. The construction business was addressed with the aim to ensure quality and capacity building (more know-how on energy retrofits in buildings). Within this network, Agenda 21 groups and other partners motivated house owners to consider energy retrofits thus implementing the idea of social marketing by multipliers in private buildings.

Experiences of other communities and utility programs showed that public efforts in marketing, financial incentives, and federal law are not enough to 'reach' relevant segments of the efficiency potential in residential buildings. To be effective, values and behaviour of all process actors must be considered as well. This was the reason for initiating social marketing campaigns.

Climate protection by increasing energy efficiency of buildings in Hannover is based on the following four approaches:

1. In 1998, the climate protection fund 'proKlima - Enercity Fund' was founded by the Hannover utility, five cities from the region, as well as partners from business and civil society.
2. In 1999, the energy certificate of the Hannover region was implemented.
3. In 1999, the social marketing campaign 'Haus-Partner-Hannover' (HPH) - '(H)Eissbär' started. Numerous measures activated house owners. After three years of high visibility and sympathy by the public, the campaign ended because of the leave of the program manager.
4. In 2004, the social marketing campaign 'Gut beraten starten' was on the floor as a slightly modified follow-up of the 'Haus-Partner'.

All these efforts are part of a social marketing concept and aim at one key issue: to implement regional climate protection. The meaning of social marketing will be discussed in the following.

Climate protection is a long-term societal challenge. Therefore, climate protection should be addressed from a societal perspective. Furthermore, several approaches (e.g. the model of social diffusion: Prose et al., 2000) refer to the importance of social cohesion, neighbourhood or peer groups as role models and change agents. The city administration should serve as a moderator or an intermediary.

Social marketing is a matter of commercialisation of products similar to commercial marketing. Nevertheless, the product in social marketing is a socio-political idea or social behaviour. Strategies in social marketing are targeting behavioural changes of groups, social systems or individuals. Social marketing offers options: participation of citizens, social networking. An idea is distributed through social interaction. A target group gets information and conveys it to friends, colleagues, neighbours etc.. So, the participative aspect is of high importance.

The 'Haus-Partner' campaign was based on the question: What is necessary to link energy retrofitting to building renovation and modernisation?

In Hannover, good conditions for such an 'energy modernisation' exist: offers for consulting, good handcraft and planners, cooperative actors, availability of financial support, and media coverage. One of the major obstacles is the lack of knowledge by house owners. Environmental and climate aspects are abstract in understanding, and the issue 'energy saving' has a negative image. Energy saving still is associated with comfort reduction and restrictions. Professional communication offers the possibility to overcome these obstacles.

The campaigns for energy modernisation imply not only appeals and messages, but also support. The city assures substantial climate protection service offers and takes the role of a planner, coordinator and moderator of activities.

Climate protection on a regional level is an innovation process. This refers to the individual level as well as to organisations. The concept of the campaign considers and supports process-oriented learning. To show successful measures and proof saving effects an evaluation is recommended.

## 5. STEP TWO: What were the various expectations of the case?

Hannover addressed various actors with a similar expectation: energy retrofitting of residential buildings, i.e. energy saving through building insulation and modern heating technologies. The actors in the initial state of the project were the climate protection fund ‘proKlima’, the municipal utility of Hannover and the Hannover region. ProKlima, the ‘Energycity Fund’, offers financial support for projects and programs for climate protection. The Hannover Region Climate Protection Agency is bundling all competences concerning climate protection. The project team is coordinating the know-how of citizens, authorities and companies. The Hannover Region is the main shareholder of the Climate Protection Agency.

In addition to these actors, a long list of companies, organisations, associations and initiatives are part of the ‘House-Partner-Hannover’ network. Most of the involved companies work in the field of energy, renewable energy and housing technology but also in the financing and public transport sector. In the following table, selected network partners are shown.

Table 5.1 *Actors, Expectations and ‘Public’*

Actor	Expectation	Speaking for ‘publics’
Climate Alliance in the region of Hannover (Climate Agency)	Mainstream low energy-housing, Attainment of climate protection targets in the region	Promoting climate protection
Climate Protection Fund ‘proKlima - Energycity Fund’	Mainstream low energy-housing, local voluntary and cooperative implementation of climate protection targets	Promoting climate protection
Handcraft	Developing new income possibilities, employment effects	Energy efficiency technology, quality assurance, employment
Companies	Gain new competences, Create new product concepts, Gain market share	Ownership, managers, constructors, employment
Advisory council	Admission of new companies, Advancement of the campaign, represent their interest and expertise	Representative of a variety of actors with multiple experiences
Energy Consultant	Mainstream low energy housing through scientific consulting	Transfer of knowledge to support individual and societal learning, benefits of house owners
House owners Initiatives	Participation, competent consulting, voluntary decision, Decreasing of energy costs	Climate protection, support of local business
Public Services of Hannover	Implementation of self-commitment declaration	Climate protection, image improvement
The region of Hannover	Business development, new investment in the division of REG and energy saving technologies	Climate protection, business location, job effects, usage of tax yield in regional projects

As the above table indicates, there were many different expectations in the context of energy modernisation of residential buildings. On the other hand, the heterogeneity of actors has a functional meaning for a successful implementation of project targets because of different views and abilities to implement measures. Within a network, this is advancing the cooperation and the distribution of project ideas.

Primarily small and medium-sized businesses had a substantial interest in heating insulation measures - they looked forward to gaining market shares. Other companies like providers of insulation products expected to gain new competences and create new products for the profit of the entire Hannover region. Furthermore, an active business region offers impulses for new investors.



The table shows the key expectations: One was to reduce the CO<sub>2</sub> emissions, the other one to gain market shares. It is a strategy of the campaign to address different kind of target groups. Environmental and climate protection is part of a learning process. If the expectations of actors receive no consideration in the beginning, the learning process can not start.

## 6. STEP THREE: Understanding 'participatory' decision-making: negotiating expectations

The network action can be classified in three phases:

1. *Attention*: In both campaigns the Climate Protection Agency used different (emotional) marketing tools and local press contacts to get attention for energy efficiency measures in residential buildings.

2. *Information*: The Climate Protection Agency used different elements, like advertisements, door to door consulting, postcards, internet etc. to disseminate information on energy efficiency measures to the citizens and interested house owners, respectively. Experiences of the past years had shown that house owners have a demand for energy consulting. The consulting concept was adapted so that the consulting for private households consists of an initial information, followed by an intensive consulting. Short consulting contacts give the house owners an overview of retrofit options. Depending on the interest of the house owners, intensive consulting progressed to more detailed issues of building modernisation.

3. *Contact*: In individual meetings, energy consultancies and expert advisors supported house owners in product choice, as well as in the financing and implementation of energy efficiency measures.

Next to these three phases, two other instruments were used for implementation: participation and communication. Incentives for action and 'good examples' were added during the course of the campaign. The expectations were adapted to the requirements and expectations of all participants, especially the house owners. The founding of the Climate Protection Agency also influenced the expectations concerning the complexity, intensity and adoption of the measures.

*Participation*: The project was less participatory than communicative. Decisions were dealt between the Climate Protection Agency, and proKlima. Once a year both institutions met and planned the continuation of the campaign. Experiences of the past years led to modifications. The experiences of all partners were introduced in the communication concept. Twice a year, exhibitions were arranged, bringing all partners together - this was the only form of direct participation in the project.

*Communication*: All network partners took a specific role in the communication concept (see following table). The new campaign 'Gut beraten starten' started with a town hall event to which the Mayor invited manufacturers, trade, financial sector and other services. In the next step, house owners were informed by a letter from the Major.

Table 6.1 *Forms of Communication/Participation in the Project*

Type	Organizer	Involvement	Purpose
Town Hall event	Local authority, major	Handcraft, trade, banking sector, services of building sector, etc.	Presentation of the campaign, advice on marketing, information about subsidies
Letter of the Mayor	Mayor	House owner	Information about a free of charge energy consulting
Information booths	Climate Agency	People at the farmers market, at village fairs, etc.	Advertising for the campaign, scientific information, findings and experiences of consulting
House-to-house consulting	Climate Agency	House owner	Status quo of the old house, suggestions for energy efficiency
'VIP'-Consulting	Local Prominent person	Local public	Public consulting of the VIP house, attraction of the local media, example for local people to imitate
Customers Event	Climate Agency	Building exhibitions, industrial exhibitions, open Sunday, counselled house owners	Presentation of the campaign and all partners, presence of local companies, information on products, energy consulting
Model household	Climate Agency	Interested house owners	Cooperation with Climate Agency
Bonus	Climate Agency	Cooperative house owners	Compensation for cooperation and small financial support, Quality assurance, Attendance of the local press for publicity
Energy certificate (label)	Climate Agency, energy consultant	House owner	Instrument for information, motivation, communication, stimulation to invest
Subsidies	Enercity-Funds	proKlima, Region and City of Hannover, handcraft, companies, banks	Facilitation of investment, financial support
Counselling interview	Energy consultant	House owner	Information, communication, motivation
Lectures	Climate Agency	House owner, handcraft, planner, multiplier	Information, communication, motivation
Internet/mailings	Climate Agency, proKlima	House owner, interested public, planner, handcraft, partner, companies, banks	Information, communication, motivation over the whole federal territory
Information Telephone	Climate Agency	House owner, interested public, planner, handcraft, partner, companies, banks	Information, communication, motivation; procurement to special contact person or sending of information material per post
Folder	Climate Agency	House owners	Information about the campaign, energy retrofitting; advantages of heat insulation
Poster	Climate Agency	Public	Advertisement in street cars, at exhibitions and other local events
Advertising	Climate Agency	Public, house owner	Information, motivation

People from (rural) villages reacted very positively to the Mayors' letter. By contrast, people in larger cities did not react, as this target group is distrustful of door-to-door marketing. Employ-

ees of the Climate Agency with identification cards were necessary to contact house owners in cities.

Before the energy consulting started, information booths at farmers' markets or village fairs advertised for the campaign, in parallel, to ads in local newspapers and other media. At the beginning of the consulting, interviews were organised with VIPs on energy consulting. A consulting session was given to a local prominent person with the local press present, which generated publicity. The purpose of the VIP consulting was to motivate local house owners and provide an example for them to imitate. Some weeks after finishing the energy consulting phase, customer events took place. The Climate Agency presented itself and its partners. All house owners who had received intensive consulting were invited individually. The customer event offered the possibility for house owners to get in contact with products and suppliers. This helps to close the gap between consultation and implementation, which is seen as one of the biggest obstacles to realizing the energy savings potential.

The project gained visibility and attention in the local media and press. New media like the internet and mailing lists required a platform for new target groups, as internet pages are an important information source for a growing number of home builders and home owners. Forums provided information exchange between professionals and laymen or between laymen, and the internet as a medium allowed participation irrespective of time and place.

The campaigner appreciated the internet because of rapid updating. Systematic design and individual text for every target group facilitated the search for information.

## 7. STEP FOUR: From visions to reality

Initiated by the City of Hannover, the development of a regional energy certificate started in 1998. Promoting energy retrofitting of private buildings was the main target. A special request was the involvement of small and medium-sized enterprises (SME), as the implementation of building modernisation requires local craftsmen. The following partners supported the energy certificate:

- Environmental and Energy Department
- the municipal utility
- the 'proKlima - Enercity Fund'
- Chamber of Crafts
- Communal Association.

A *partnership contract* was the base of cooperation, which is a model for cooperative climate protection in a communal setting. The participation and financial sponsorship by the climate protection fund 'proKlima - Enercity Fund' as well as an innovative marketing campaign seem to have been very important. The innovative campaign was based on the concept of social marketing (proKlima, 2001). All activities and components were integrated in one common program.

The campaign successfully contributed to the initial vision of reducing 25% of the CO<sub>2</sub> emissions: In seven years, some 64,000 t of CO<sub>2</sub> emissions were avoided per year at a cost of 33 €/t (see following table).

Table 7.1 *Implementation of Climate Protection Measures (1998-2005)*

Category	Number of Applications	Grant Funds [€]	Avoided CO <sub>2</sub> emissions [t/a]	CO <sub>2</sub> reduction cost [€/t]
Energy Efficiency Retrofits	8,562	15,915,624	33,894	19
Efficient New Buildings	2,089	3,622,317	2,624	55
Supply-side Efficiency	38	4,987,023	16,652	11
Renewable energy	1,090	4,071,225	7,044	18
Others	272	1,952,830	3,101	33
<b>Total</b>	<b>12,055</b>	<b>30,671,019</b>	<b>63,589</b>	<b>19</b>

Source: proKlima (2006).

Grant money from the ‘proKlima - Enercity Fund’ was used to improve energy efficiency on the demand side as well as on the supply side (production), and for using renewable energies. Energy efficiency potentials from the demand side have the highest importance. The advanced measures can be quantified. House owners see the energy savings on their electricity and heating bill in the following years.

It is difficult to quantify the economic effects of the measures, though, as they depend on the conditions of the particular projects. Imported fossil energy resources were substituted through investment in energy efficiency or local renewable energies which had positive effects on the national and regional economy (proKlima, 2006).

The qualitative effects of the accelerated introduction of innovations also have an important meaning. On the one hand the qualifications of architects, manufacturer and planner in the field of energy efficiency are forcing the competition and are allowing professionals to start up new businesses. On the other hand, the innovation-oriented nature of the programme helps to avoid allocation errors or suboptimal use of public funds.

Indicators to assess the efficacy of projects and measures are still missing. The Climate Agency in cooperation with the Hannover University of Applied Sciences is researching procedures and indicators to quantify the effects of climate protection measures.

Periodic evaluations of the campaigns were implemented, which focused on measuring the change in attitudes concerning energy modernisation. At the beginning of the campaigns, only one press conference took place, while in the further process, the press activities had been extended. The word of mouth recommendations turned out to be an important aspect. All in all, the campaigns were known by about 25% of the house owners.

Today, house owner are getting their information from newspapers and about 80% know the campaign. This illustrates the efficacy of the accompanying press work.

At the beginning of the campaigns communication media like the Internet were in little demanded. Today, the internet has a use rate of 25%, even though it is still the least frequently used information source.

Twice a year, the Climate Agency tries to involve new business partners. Partners have produced new ideas, but they have not contributed money to the campaigns. Today, this approach has changed, as the campaigns need financial support. Without the sponsoring from business partners, energy efficiency projects could not be implemented.

Every year meetings with all actors are organised. On the one hand, the actors produce ideas, but on the other hand, actors from the business sector try to hide new ideas to safeguard their competitive position or their market shares.

## 8. Lesson learned

The Climate Agency and the campaign targets are known in the region. Climate protection is important, but only with loan programs or other financial incentives for private house owners. The amendment of the Federal Ordinance on Energy Saving will considerably improve the implementation of energy certificates all over the country. The acceptance of the price was about € 50 and is now about € 150. The vision of ‘no insulation without modernisation’ works, if modernisation is economically viable. Environment and climate protection are still seen as additional benefits. House owners insulate their buildings with respect to costs. This is not a disadvantage, but for the future the campaign is still working on its vision of a ‘natural’ attitude to climate protection and energy efficiency.

If the quality of products can be guaranteed and the process is managed effectively, than a successful implementation of the project can be assumed.

Social learning and innovation processes in organisations and administrations do offer a large potential to further energy savings. Energy efficiency and climate protection in a regional context need a coordinated and integrated procedure. This case study demonstrates how measures for energy efficiency can be implemented in a municipal setting.

The implementation of the process indicates some lessons learned, which are described in the following.

### 8.1 Socio-demographic development

Experiences of energy consulting from the last years showed that willingness for energy retrofitting of existing buildings depends on socio-demographic conditions. In districts with a higher quota of seniors (>60 years), the willingness for action is lower than in districts with a higher share of younger house owners (e.g. young families). Elderly people also mention financial aspects less frequently than younger families. The demographic ageing process is part of a systematic transformation of mentalities. This must be taken into account in the expectations on implementation in the future. The demographic development will be important for energy consultants and for regions, local communities or organisations who are interested in climate protection through energy modernisation. There is a need to design adapted alternatives and specific benefits for an elderly target group. Benefits could be: Heat insulation increases the quality of life, energy-efficient houses can decrease noise exposure. Improving the quality of long-term care in communal living and participation in a community are aspects to be discussed in the context of demographic ageing.

### 8.2 The role of ‘non-commercial’ marketing

In the long term, marketing campaigns are targeted on the successful implementation of energy efficient housing. Acceptance of energy modernisation should become ‘mainstream’, which needs sympathy and interest for energy saving to provide a base for changing consciousness. Word-of-mouth recommendation has a significant value, as a relationship exists between the talking persons or groups of persons. The person to person trust factor supports the interest and the willingness for action.

The Hannover experiences have shown that the customer acceptance of energy modernisation depends on information and partially on financial incentives. Through strategy elements like cooperation, communication, and activation, advances in the social and ecological acceptance in different target groups might be more likely.

### 8.3 Certification of measures

Experiences showed that instruments for certification of measures are necessary. The implementation of the Hannover project was based on the successful realisation of measures. Partners and house-owners need visible and measurable results for building up confidence and trust. Therefore, the Climate Agency, proKlima and House-Partner-Hannover were trying to find certification instruments. In cooperation with the Hannover University for Applied Science, the partners are searching for appropriate instruments and indicators.

### 8.4 Loan program

Financial incentives help to persuade house owners of energy retrofitting. Grant money has an important meaning as an incentive instrument to support modernisation measures. Furthermore, a circle of qualified consultants with different occupational backgrounds should be available to minimize the application phase and enable quick response to customer requests for support.

### 8.5 Public-private partnerships

The cooperation with local businesses has shown that about 80% of house owners contracted local craftsmen for the modernisation measures. Professional development guaranteed quality assurance. Persuasive and regular advertising offers new business areas and new application. This tends to result in more confidence in the work of local manufacturers and service providers.

The Climate Agency was confronted with the problem that business partners like product manufacturers had to be persuaded on the value added. They leave the project if they are unsatisfied. Planners and engineers also reject a project if they are not informed early. Therefore, the Climate Agency successfully started with town hall events to address local engineers and manufacturers.

### 8.6 Networking

In a process-orientated view, social systems are considered as social network where different actors support the common welfare (Prose, 2000). In this project the network is an important part of local climate protection. Through the communication channels, the group of actors will be stabilised. This is one reason for constantly working on the diversification of the network. The heterogeneity of the group furthered the mobilisation of communal climate protection measures.

### 8.7 Multipliers and promoters

A variety of actors on a local or regional level operate in climate protection network. Through a top-down concept, multipliers and promoters implemented the communication process. For example, the Climate Agency sent a letter from the Mayor to the households as a first step. Next, the Mayor introduced the project to interested house owners, manufacturer and financiers. This target groups distributed the information in their own environment or to their costumers. In the project, many of such connecting factors to involve and to use multipliers and promoters exist.

### 8.8 Target group specific instruments (media etc.)

The campaign should address individual conditions. All participants should gain an affiliation and identification with the campaign. The campaign contents are targeted to different groups with specific instruments. The individual benefit comes to the fore. The way in which the campaign was executed (Internet, Mailing List, messages etc.) advanced its recognition.

## 8.9 Evaluation

At regularly intervals, the project must be evaluated. Through experiences, the orientation of energy consultants, house owners etc. towards the project will change. The target oriented method implies periodical evaluations concerning to improvements in the campaigns. The evaluation is to be done through questionnaires or interviews by telephone. Furthermore, interested persons can communicate their opinions or questions direct to the Climate Protection Agency through the internet (Klimaagentur Hannover, Download as of 3.8.2006).

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