

Case Study 16

Climate Watch programme

Hungary



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Changing Behaviour



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

Case Study 16:

Climate Watch programme, Hungary

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Summary of the case

The Climate Watch programme was designed, initiated and implemented by the National Society of Conservationists (NSC) in Hungary. The organisation is the local member of Friends of the Earth.

NSC is a not-for-profit and non-governmental organisation that was established in 1989 with the overall objective to “protect nature as a whole and to promote the implementation of sustainable development”¹. NSC works closely with its members, both organisations and individuals. Additionally, it also works with researchers (e.g. the Hungarian Academy of Sciences - its former president is the honorary president of NSC), policy makers, primary and secondary schools, all kinds of community groups as well as other NGOs that are not its members. Its individual members and numerous volunteers also contribute to the success of its activities.

The aim of the **Climate Watch** project was to increase the knowledge of primary and secondary school pupils on energy efficiency and energy saving. Thus, with the involvement of its local member associations as well as the media, NSC aimed at reaching and involving schools. The project was started in September/October 2007 and was very successful as 52 school teams including teachers and more than 200 students registered to participate, and then completed the programme. School groups received information (in the form of a booklet) on the basis of which they observed and evaluated energy use in their schools, and came up with suggestions and proposals to make it more efficient. Best efforts were awarded at a public ceremony held in the Natural History Museum in Budapest at the end of the project (held on the day of the 3rd anniversary of the Kyoto Protocol entering into force). The project was a follow-up of a pilot project implemented in the 2006/2007 academic year, and is also going to be continued in 2008 (starting in the autumn) and will be focusing more clearly on behaviour change.

¹ Source: http://www.mtvosz.hu/index_en.php (consulted on 22 July 2008)

Step 1: Context of the Climate Watch programme

National context in general²

The Climate Watch programme is implemented in Hungary, member of the European Union since 2004. Thus, energy related policies and programmes are largely influenced by EU directives, guidelines and targets.

In the EU, Hungary is the country where the population has the smallest per capita ecological footprint. Still, just the energy-related footprint in the country is larger than the world average available biocapacity (based on 2001 data, WWF et al., 2005).

The Hungarian economy, similarly to the neighbouring post-communist regimes, has been undergoing significant structural changes. The country has engaged in privatization and liberalization of - among others - the energy sector during the 1990s and 2000s respectively (INFORSE-Europe, 2006, Urge-Vorsatz et al., 2003). Key characteristics of the energy supply in Central Eastern Europe (CEE), thus in Hungary, are the low source diversity, high dependence on monolithic fuel mix, large share of nuclear energy, and particularly high level dependence on Russian energy imports. At the same time, the result of the Soviet energy policy is a well-developed district heating system and similarly developed gas-distribution system, which allows these countries to use one of the least polluting fossil fuel sources in a large share (almost half of the energy supply in Hungary is natural gas). Legacies from the socialist era are both positive and negative; however, the most problematic area is the wasteful energy production and use as a result of the socialist attitude (Molnar, 2004; Urge-Vorsatz et al., 2003). The change of regime had significant positive impacts on energy use in terms of environmental impacts and energy efficiency.

EU membership has had further positive impacts on the energy sector (liberalization, prioritizing energy efficiency, RES targets, strategic thinking as few examples), and the obligation to meet the EU political agenda is straightforward. However, the effective and true implementation of the EU agenda poses significant financial, political and social challenges (Urge-Vorsatz et al., 2003).

Energy dependence in Hungary is significant (71%), as only 19% of the gas and 26% of the oil is produced in the country. The situation is better in the case of coal, of which 85% is domestic. Thus, in order to satisfy growing needs (i.e. increasing consumption) as well as to reduce the dependence on imports, there is need for a more sustainable energy policy (GKM, 2005; INFORSE-Europe, 2006; Tihanyi et al., 2006).

The Hungarian national target is 3.6% of electricity production from renewable sources by 2010, and it was already achieved in 2005, and is expected to reach 5.8% by the target date (INFORSE-Europe, 2006; Energia Klub, 2006). Estimations for the RES potential in the country range between 10-250% of the current energy consumption (Energia Klub, 2006).

Public awareness

In the past, the Hungarian public was repeatedly found to be little interested in environmental problems compared to other countries. In the early 1990 surveys, it was demonstrated that Hungarians cared the least about environmental problems among the 22 surveyed countries (Dunlap et al., 1992; Dunlap, 1994). The situation changed somewhat during the 1990s. In 1996, Hungarians underlined a number of environmental problems as serious (Meszaros, 1996), nevertheless,

² This chapter was prepared based on Vadovics and Kiss, 2006

environmental problems without direct immediate impacts on the respondents were not considered to be grave.

News and information about the environment started to attract the attention of the public after 2000. In 2001, a Eurobarometer survey was conducted in the Accession Countries regarding their attitudes to the EU and issues related to the EU and the EU decision-making, such as the environment (EC 2002). Almost half of the New Member States' respondents (48%) declared to be interested in environmental news, however, other issues took precedence. One year later, another Eurobarometer survey showed that environmental developments were the top interest issues (61%) in Hungary (Hungarian Gallup Organization 2003).

An ALTENER project in 2002, the 4CE (Consumer Choice and Carbon Consciousness for Electricity) survey analysis found that concern about the impacts of electricity is rather high in Hungary, above European average (Palmer, 2003; Kiss, 2005). In 2004, in the scope of the special Eurobarometer survey 32% of Hungarians chose climate change as one of 5 most important environmental problems that they were worried about (EC, 2005a).

Energy saving awareness is significant in Hungary. The recent surveys (e.g. the special Eurobarometer EC, 2006; Valko, 2003) have shown that over 50-60% of the population pays particular attention to environmental/energy saving information on a product when shopping. Energy saving is among the top priorities that Hungarians actually do as environmentally friendly behaviour (Lang, 2000). Valko (2003) found that respondents prioritize energy saving measures as means to reduce environmental impact.

Policy framework and support schemes

Currently, energy policy in Hungary is determined by global, EU and Hungarian policies and guidelines. At the global level, the most important agreement from the point of view of energy policy is the Kyoto Protocol. Satisfying the requirements of the Protocol is embedded into both EU and Hungarian policies and guidelines.

The EU adopted the Green Paper on Energy Efficiency in 2005, which aims at reducing costs in the energy sector and promoting energy efficiency. It observes that increasing demand for energy cannot solely be met by renewable energy sources but have to be supplemented with measures for high efficiency in production and use. The Green Paper on Energy Efficiency sets the target of reducing energy use by 20% solely through efficiency measures. To comply with the guidelines and targets laid, member states need to draw up national energy efficiency strategies and action plans (Hungary's plan is in the process of being adopted; GKM, 2008), inform households, improve the energy efficiency of buildings, adjust taxes on energy so that they reflect real pollution levels, and introduce appropriate fiscal measures. (Tihanyi et al., 2006)

The EU and member states financially support the achievement of the above-mentioned aims from five basic sources, through:

- the EU community programmes such as the research framework programmes, the Intelligent Energy for Europe programme, etc.;
- the applications and tenders relating to the Hungarian National Development Plan and the Cohesion Fund;
- Hungarian national funding;
- national financial support mechanisms such as feed-in tariffs, purchase obligations, guaranteed prices, etc.; and
- other sources, for example bank loans, International Financial Institutions, initiating and encouraging private sources. (EC, 2005b; Tihanyi et al., 2006)

Although the aims and objectives in terms of more sustainable energy production and use are clearly stated in various policy documents, the amount of funding available, for example for renewable energy sources, does not necessarily reflect them unfortunately.

At the same time, there are several important sustainable energy production and consumption support mechanisms in Hungary that need to be mentioned. First of all, the Electricity Act (VET 2001 CX) introduced a feed-in tariff system for renewable electricity from January 2003 (INFORSE-Europe, 2006). Secondly, the government has been operating a National Energy Efficiency Programme since 2000 introduced by a governmental decree. The National Energy Efficiency Programme had support programmes in eight different areas, offering part-financing for households, local authorities, homesteads, SMEs, etc. It has been found, however, that the funding available in the frame of these programmes was less than there would be demand for (Fodor et al, 2005).

In 2005 the National Energy Efficiency Programme was stopped due to lack of resources, and was re-opened again in 2006 for households for a very short period of time (ten days!), during which an overwhelming number of applications were handed in supporting our claim above that households would indeed be ready to change to renewable energy sources and more energy efficient solutions should the supporting funding and infrastructure be available. In 2008, the programme is going on again, but with less favourable funding opportunities.

Besides, in 2008 new funding has been made available for financing sustainable consumption campaigns targeting different groups of the population, however, as the calls are still open, no results are available yet.

Scenarios and projections for the future

Based on a study conducted for the Ministry of Economy and Transport (GKM) in Hungary as a background for the preparation of the new energy policy and strategy, demand for energy is projected to increase in the next couple of decades. The increase, based on preliminary data, is calculated to be between 0.4 and 1% for primary energy, and between 1 and 3% for electricity (GKM, 2005). For the time being, growth in GDP is decoupled from growth in CO₂ emissions (Archibald et al., 2004), partially due to the restructuring of the industry. However, CO₂ emissions are projected to start rising again (EEA, 2005).

There is still a huge potential for energy efficiency improvement in Hungary, one of the largest (30%) for the household sector (Energia Klub, 2006; Nilsson, 2006). With this, and the European Union target of 20% energy saving potential in mind it should be possible to substantially increase the amount of energy saved, or in other words Hungary has a significant ‘megajoule’ potential (Energia Klub, 2006).

Local context

The Climate Watch programme has been provided at the national level, so there is no specific local context. However, it needs to be noted that climate change and energy issues have been discussed and debated increasingly in the media at both the national and local levels. In addition, the energy efficiency action plan (GKM, 2008) and energy policy (GKM, 2007) of the country have both been on the agenda and the general public has been invited to participate in the debate and provide comments. The Hungarian Academy of Sciences in cooperation with the Ministry of Environment and Water has also been running a widely communicated research and awareness raising programme for several years³.

³ More information on this programme can be found at <http://www.vahava.hu>.

Specific context of the project

NSC is quite a large NGO which has 113 associations and more than 30,000 individuals as its members in all the different regions of Hungary. Some of the member association operating in different cities and towns of Hungary took part actively in the promotion and implementation of the programme.

In the field of climate change, NSC has been running several programmes. One of these, the **Climate Deal Campaign**, might have contributed to the success of the Climate Watch programme as it was a large awareness raising campaign during which NSC cooperated successfully with its various member organisations in different parts of the country, primary and secondary schools, and mobilised about 80 volunteers and the general population in 12 of the larger Hungarian settlements. The outcomes and results of the Climate Deal Campaign were presented to policy makers both at the national and international level, accompanied by numerous media representations (news articles, interviews, etc.).

It also needs to be mentioned that there is a very successful eco-school network⁴ (coordinated by the National Institute for Public Education) operating in Hungary since 1986. At the moment, there are 353 schools that are members of the network, which provides training, teaching materials, best practice example and assistance for its members and also manages the annual eco-school award. The success and popularity of the network as well as the training programmes and competitions it organises means that a great number of schools (and teachers!) are already open to participation in programmes such as the Climate Watch competition. Furthermore, some schools participated in the Climate Watch programme because they believed it would help them gain the eco-school status.

Finally, there are an increasing number of programmes at the national level targeting primary and secondary schools and offering various pieces of information, teaching materials and competitions for them⁵.

⁴ Further information on the eco-school network can be found at <http://www.okoiskola.hu>

⁵ Examples include the Energy School organized by ELMŰ, one of the utility companies (<http://www.energiasuli.hu>), the Green Pack managed by the Regional Environmental Centre (<http://www.rec.org/REC/Programs/Greenpack/>) or several programmes organized by the Energy Club (www.energiaklub.hu).

Step 2: Focus of DSM programme

General issues

The idea for the first (pilot) Climate Watch programme came from the international 'The Bet' campaign of Friends of the Earth (FoE)⁶ in which school children across Europe bet and challenged their officials that they could achieve the 8% reduction in emissions (the EU target at the time) a lot earlier than undertaken in official agreements. With this, FoE aimed to lobby decision makers to take more urgent action.

The Climate Watch programme is the up-dated, slightly modified and adapted (to Hungarian circumstances) version of 'The Bet' campaign. The pilot programme in Hungary was organised in the 2006/2007 academic year in 3 schools. Based on the experience of this, NSC modified the programme and decided to implement it at the national level during the 2007/2008 academic year. The most important modification was that they basically removed the betting component as it was very difficult to get officials to visit the schools (especially given that officials change and newly appointed ones do not wish to fulfil commitments made by their predecessor), and accurate metering also posed problems.

The Climate Watch programme was organized in the autumn of 2007 for schools / groups of pupils at schools who had to collect information about energy use and efficiency in their institutions for 8-10 weeks, and then prepare a report with proposed action for increasing efficiency. The awarding ceremony was held in February 2008, the anniversary of the Kyoto Protocol entering into force.

Because of the success of the programme and also because based on its mission NSC would like to continue working with school children, the programme is going to be continued in 2008, the time schedule fitting well the general schedule of the academic year.

Initiator, main partners and target group

The initiator of the programme was NSC, which is an association of more than a hundred local organizations and numerous individuals. Its local member organization took part actively in the implementation of the programme, especially in its promotion and acting as local contact, information and expert points. 14 local member organizations took up this role, and they also acted as the jury evaluating the reports and action plan proposals handed in by the 52 participating teams.

Groups of pupils in two age groups (primary - age 10-14 - and secondary - age 15-18 -schools) volunteering to take part in the programme were led by teachers working in their schools - so the role of teachers as facilitators, motivators and as sources of information was very important for the success of the Climate Watch programme.

Pupils from the best performing teams were also invited to take part in a summer camp while best schools were awarded with an exhibition and presentations on climate change.

⁶ More about The Bet can be found in http://www.foe.co.uk/resource/newsletters/cyw_46.pdf (consulted on 29 August 2008)

Financing

The programme had limited financing from the 'Zöld Forrás' [Green Spring] programme of the Ministry of Environment and Water in Hungary. Any other necessary resources were provided by the organisation (i.e. NSC).

Because of limited funding, NSC was not able to provide financial resources for schools to implement some of the actions proposed in the reports prepared by school, which originally they had hoped to be able to do.

Problem definition, goals and objectives

The Kyoto Protocol came into force on February 16, 2005. However, NSC believes that the actions required by and guidelines provided in the Protocol will not be sufficient for stopping climate change and mitigating/overcoming its negative impacts. For this reason, NSC undertook to initiate and implement programmes to lobby and convince policy makers to take more ambitious steps and initiate more ambitious measures. Additionally, NSC also believes that it is the responsibility of every one of us to take steps to reduce our energy consumption. For this reason, the organization also initiates and implements programmes to educate and raise the awareness of the larger population - including school children, and involve everyone in the fight against climate change.

The main objectives of the Climate Watch programme have been to

- Educate children on climate change related issues;
- Teach children about the environmental impacts of energy production and consumption;
- Increase school children's knowledge on energy efficiency and energy saving; and based on this increased knowledge:
- Involve children in studying and observing energy use and consumption in their schools (for 8-10 weeks), and the drawing up of plans on how energy could be saved and used more efficiently in their schools.

Step 3: Design of programme

As explained above, the design of the programme was influenced by ‘The Bet’ campaign of FoE. However, the original idea was modified to fit Hungarian circumstances.

As far as we are aware, no specific research was conducted to inform the design of the programme, thus, it is not based on any one theory of sustainable consumption or behaviour change. However, some points need to be considered in relation to this:

- As NSC had implemented numerous programmes in the field of environmental education and had been working with both teachers and school children for a long time, it had considerable experience in the field as well as knowledge about pupils’ background knowledge about energy issues and climate change.
- The theory of *active learning* and *participation* have been important for the design of the programme. NSC wanted to involve young people in observing energy use in their schools and coming up with their own ideas for changing them. NSC believes that young people learn most by doing.

The programme was planned to:

1. take advantage of individual and team initiative (i.e. teams entered the programme absolutely voluntarily), and a spirit of competition;
2. educate volunteering teams so that they can do their tasks effectively (but, in the meanwhile, they learn a great deal about climate change and energy consumption as well as the environmental impacts of their everyday activities);
3. involve school teams actively in learning about energy use in their school - this often meant initiating a dialogue with school management, maintenance teams, other teachers and students, etc. Schools were advised to inform the management about the program, to involve them at least in data collection and also discuss outcomes with them (i.e. present the report to them, too).
4. involve school teams in coming up with energy saving and energy efficiency advice for their own school and summarize them in reports; and
5. award best performance as well as publish especially creative ideas about changing (i.e. lowering) energy consumption.

Table 1: Programme structure, participants and outcomes

Programme stage and description	Participants	Outcomes
<p>1. Design</p> <p>The original idea for the programme came from ‘The Bet’ campaign. However, it was up-dated and adapted to Hungarian circumstances. Furthermore, following the pilot in 3 schools in 2006/2007, the programme was further modified: e.g. no betting with officials is involved, less compulsory metering is included to allow for more flexibility and more schools to participate.</p>	<ul style="list-style-type: none"> ▪ (FoE Europe - original idea) ▪ NSC - relevant staff in central office and local member organisations 	<ul style="list-style-type: none"> ▪ Updated programme design for Climate Watch in 2007/2008. ▪ Booklet to help implementation of the programme written and printed.
<p>2. Communication, recruiting school groups</p> <p>Communication campaign organised by the central office of NSC as well as its local member organisations: various news items (interviews, articles, press release, articles in electronic journals, news item on webpage, email lists) posted in order to reach as many schools as possible.</p> <p>Schools could sign up to participate through a website, a central email or through the local member organisations. Each school group participating in the programme had a supervising mentor teacher. NSC intentionally made the programme flexible so that pupils and teachers in schools would be able to adopt all stages of the programme to the needs of their institution.*</p>	<ul style="list-style-type: none"> ▪ NSC - central office and local member organisations (14 local organisations took part in the implementation actively) ▪ Media ▪ Schools - teachers and pupils 	<ul style="list-style-type: none"> ▪ Numerous news items, visibility of programme. ▪ More than 55 school teams from all over Hungary sign up to participate in the programme/competition.
<p>3. Mapping energy use in schools and preparing reports</p> <p>NSC provided a booklet for each participating school group. The booklet contained: a suggested CO₂ tour of the school, a checklist for mapping energy use, ideas for collecting information on consumption, ideas on how to improve energy efficiency, ideas for organising campaigns and other programmes in schools.</p> <p>With the help of the booklet, teams observed and recorded energy consumption specifics for 8-10 weeks, and then summarised the results in a report. Reports also had to include proposals for how to increase efficiency and reduce consumption.</p> <p>Besides, most schools started implementing energy efficiency programmes on their own initiative.</p>	<ul style="list-style-type: none"> ▪ NSC local member organisations: providing assistance, conducting school visits ▪ School groups: pupils and teachers observing, mapping and surveying energy use, preparing reports ▪ Indirect participation by school management, facility managers and parents 	<ul style="list-style-type: none"> ▪ In the end, 52 school teams in two age groups and in 38 schools completed the programme and submitted reports. ▪ Numerous school energy awareness raising and efficiency programmes initiated (no information is collected on this).

* We can say that NSC, as the implementer and promoter of the programme, provided a clear framework for participants within which they had the freedom to act.

The framework had the following elements:

* same time period (8-10 weeks) for energy use and consumption observation in each school

* guiding booklet for volunteering teams, which contained: information on climate change, and the link between energy consumption and climate change; background info, ideas and a checklist for observing energy use; ideas for reducing use and increasing efficiency; ideas for actions schools can implement (e.g. having a notice board dedicated to energy issues, organizing campaigns, what kind of campaigns to organize, etc.)

* a report needed to be produced on the results of the observation, analysis and suggested action - the format of the report was not set either, but it was the basis on which school team efforts were evaluated

* access to help and assistance if needed (NSC staff and local member organizations provided this)

Within this, so to say, framework, school teams could decide how exactly to observe energy use, whom to involve, what data to analyze, what actions to suggest, and also what action programmes to implement (although this was not a requirement). So, some school teams carried out a thorough analysis taking into account metering data, questionnaires filled in by pupils, teachers, managers and maintenance staff, suggested actions as well as analyzed the easiness of their implementation. Others just did part of these. Also, some school teams mostly concentrated on lighting, others took into consideration heating, the maintenance of canteens and buffets, as well as office equipment. A further difference could be observed in the size of the school teams participating. Some of them had 3-4 members, others were much bigger.

Programme stage and description	Participants	Outcomes
<p>4. Evaluation</p> <p>Reports submitted by school teams were evaluated by a group experts representing the central NSC office and all 14 local organisations implementing the project. The following were the main criteria for evaluation:</p> <ul style="list-style-type: none"> ▪ Quality and quantity of information collected (thoroughness) ▪ Quality and quantity of proposed changes, creativity ▪ How easy and realistic it is to implement proposed actions ▪ How well the proposed actions fit the institution in question (appropriateness) 	<ul style="list-style-type: none"> ▪ NSC - central office and local member organisations 	
<p>5. Rewarding: award ceremony and camps</p> <p>An award ceremony receiving publicity was organised to reward best performing schools.</p> <p>Teams from these schools were invited to a summer camp organised by one of NSC's local members. In the camp, the young people received further input on environmentally friendly lifestyles as well as participated in fun activities.</p> <p>Best schools were also rewarded with books, a climate change related exhibition and presentations.</p>	<ul style="list-style-type: none"> ▪ NSC - central office and local member organisations ▪ Schools - teachers and students ▪ Hungarian Academy of Sciences - handing over the prizes ▪ Other interested parties (media, NGOs, schools, parents, etc.) ▪ National History Museum 	<ul style="list-style-type: none"> ▪ 9 schools (5 primary and 4 secondary) receiving prizes ▪ Award ceremony with high level of visibility (reaching other target groups and stakeholders)
<p>6. Follow-up: overall evaluation and planning of next year's Climate Watch Programme</p> <p>Representatives of NSC member organisations and central office staff are going to hold a workshop to discuss and evaluate the programme and agree about the design of this year's version.</p>	<ul style="list-style-type: none"> ▪ NSC - relevant staff from central office and local member organisations (some of them teachers) 	<ul style="list-style-type: none"> ▪ Plan for slightly modified Climate Watch Programme in 2008. ▪ New, updated booklet to help schools will be produced.

To help spread information about the programme, an intensive communication programme was also launched and kept up all through the programme. Thus, the programme had an impact on a population much larger than the target group. This was greatly helped by the facts that

- NSC's local member organizations also helped promote the programme through the local media and their own webpages;
- NSC published regular press releases about the programme and its progress;
- The outcomes of the programme - along with some of the creative ideas and the winning school team report freely downloadable - were also widely published in both the electronic and printed media as well as the radio.

Furthermore, to inform the design of the next Climate Watch programme as well as its other climate change and energy efficiency programmes, NSC in cooperation with other non-profit organisations (Greenpeace and WWF Hungary) commissioned a market research company in May 2008 to conduct a *representative poll on the knowledge of the Hungarian population on climate change* and what they expect from environmental civil society organisations.

Step 4: Process of programme

Interaction between the different participants

Interaction between the various participants - most importantly NSC and its local members, school teams - was smooth throughout the project, no problems arose. The cooperation between NSC and its local member organisations was successful: they worked together well in implementation, promotion and evaluation. Additionally, local NSC members visited the schools to check progress and also to address any problems - of which there were hardly any. The staff at NSC local member organisations was also available for advice, assistance, etc. if required by school teams.

Interaction with schools was also problem-free. In fact, school teams seemed to be perfectly able to work individually, they did not request much advice and assistance during the project.

Most teams at the schools involved other stakeholders from the school successfully. There was no survey prepared on how it was done in individual schools, but most teams initiated various energy efficiency and saving projects based on the results of their surveys conducted for the programme and summarised in the reports. They often managed to involve the management, facility managers and parents as well.

Reaction of the project manager to issues/problems

The programme manager mentioned several issues that she would like to change or improve in relation to the programme:

1. When initiating the programme, the original intention of NSC was to assist the best performing school financially as well, i.e. provide money for them to implement some of the actions proposed by them, the ones that require investment. However, they did not manage to raise sufficient financial resources for this. She suggested that in the future it might be useful to involve companies in the programme: they could provide some of the awards for participants in the form of equipment, etc.
2. As there was quite a lot of interest in the programme (more than 50 schools), administering organisations did not have the human resource capacity to visit each and every school during the project to facilitate progress and motivate them as well as to check the information provided by them or to monitor implementation of action plans. Thus, in the future, they are hoping to perhaps involve more organisations in implementation, perhaps even those that are not members of NSC.

When asked about involving at least some of the same schools again in the programme this year to be able to monitor progress and perhaps taking forward some of the actions proposed earlier, the programme manager said that they believed it was probably more important to reach new schools every year so that more of them start to be active in addressing environmental issues.

Step 5: Outcome of process

Objectives/goals/outcomes

As for raising young people and their teachers' awareness about energy efficiency and saving, the project was very successful: organisers themselves were surprised at the number of schools/school teams actively participating in the project. As a result of the Climate Watch programme, a lot of schools also started implementing climate change and energy consumption related projects.

Unfortunately, the project design did not contain a monitoring or follow-up stage to observe what happened in schools after the preparation of reports. Thus, although some of the suggested actions were very good, it is not known whether long-term (or even short-term) behavioural change was achieved. At the same time, in at least about 50 schools in Hungary (not counting schools which may have been motivated to change but did not participate in the programme), minimally discussion, but in a lot of cases concrete action started to change energy consumption behaviour (e.g. putting up stickers to remind children to turn off the light, purchasing energy efficient light bulbs, turning down the thermostat as the outside weather changed, etc.).

At the same time, as stated above, the Climate Change Programme was successful as it managed to involve a lot of children and their teachers in learning more about energy use in their own schools and motivating them to start various programmes on their own initiative.

Social learning

The Climate Watch programme definitely initiated a social learning process in the participating schools: energy use behaviour was observed, discussed within the school with the involvement of various stakeholders (teachers, pupils, management, facility managers as well as parents) and steps were taken to reduce consumption. In the opinion of the programme manager, the most important outcome of the Climate Watch is that schools started their own action programmes. NSC will try to do everything to support this change, however, it does not have any specific support networks set up for this. There are other supporting networks, though, that were mentioned earlier: the rather successful eco-school network, the energy awareness raising programmes of the relevant ministry and utility providers.

Follow-up of the programme

In this case, if by means we understand information and motivation, yes, some schools have been motivated by the programme and continued implementing some of their (own) ideas and suggested actions. However, unfortunately, there has been no monitoring of this.

No financial or technical means were provided, though, as organisers - although they did their best to do so - did not manage to raise money for it.

At the same time, a follow-up programme is planned for 2008, the specifics of which are not yet available. NSC hopes to provide more assistance to schools both in terms of experts visiting the schools and financial resources to install energy efficient equipment.

Step 6: Analysis and conclusion

Some of the most crucial factors in the context, focus, design and/or process of programme that contributed to its success:

Relating to the specific organisation:

- NSC has a very good reputation in the country among schools - it has implemented various programmes in the field with success since the end of 1980s;
- NSC has a good network of local organisations that can help promote and implement its programmes;
- NSC has a successful media and communication programme to facilitate the implementation of its project;

Relating to specific context:

- The topic is timely, and its on the national agenda, several other networks (e.g. eco-school network), programmes (e.g. Climate Deal programme of the same organisation, energy school programme of one of the main utility providers) and publications (both electronic and printed) exist that could contribute to the content and implementation of the programme;

Relating to programme design:

- Participation on a voluntary basis;
- Programme included an element of competition;
- The programme involved the active participation of school teams and encouraged them to come up with their own ideas - most reports handed included some kind of an evaluation (in terms of potential savings and the level of easiness to implement them) of suggested actions. This way, the programme helped (with information, assistance and reward) local teachers and pupils to become change agents in their own institution.

References

In preparing the detailed case description and analysis, the following were used throughout without making specific references to them:

The website of NSC at <http://www.mtvosz.hu> and all the materials provided there on the Climate Watch programme (e.g. news articles, comments, programme description, the report prepared by the most successful school team, etc.)

Interview conducted with Ms Alexa Botár, the climate change programme manager at NSC

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