



Work package 2- Historical and recent attitude of stakeholders

Case 15: Pommerania region solar energy project

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

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1. Introduction

This paper presents the result of two EU funded Altener projects: Install and Solcamp, which are subsequent steps of a bigger solar project located in the seaside Pommeranian region in the North of Poland. First the Install project opened up ways for solar energy in the region via organisation of information campaigns, involving regional authorities and first and foremost by creating a positive climate for solar energy investments. Solcamp is the follow up of Install - and it is carried out in the same region, similar actors are involved, however, the scope of the project is more concrete- it concentrates on the development of solar energy at camping sites. Therefore, it can be said that these two projects are two links of the same chain, *i.e.* solar energy development in the Northern seaside region of Poland. The Install project is a completed project and it concentrated on the promotion of solar investments, whereas the Solcamp is still being carried out at the time of writing of this report and it refers to start up of investment in the camp sites.

2. Country overview: Development of solar thermal energy market in Poland

In order to foster the development of renewable energy technologies in Poland, including solar energy, the national *'Development Strategy of Renewable Energy Sector'* has been developed in 2000. The document was prepared by Ministry of Environment and endorsed by the Polish Parliament in 2001. The Strategy forecasted the increase of the share of renewable energy sources from 2.5% in 1999 to 7.5% to 2010 and up to 14% in 2020, in the total energy demand. The solar energy use according to the above mentioned document can be expressed as installation of 100,000 m² of air type solar collectors and 700,000 m² of liquid (water) type solar collectors.



Figure 2.1 Expected increase of yearly installed are of solar thermal collectors by 2010, to achieve the objectives of the 'Development Strategy of Renewable Energy Sector' (700,000 m² of solar collectors by 2010)

The potential market for solar thermal energy in Poland is substantial. However, despite continuous increase of the installed solar thermal capacity, the achievement of the assumed targets is still a challenge. The total area of the produced and installed solar thermal collectors in Poland has been growing, however, it is still not satisfactory in comparison with the leading EU countries. In Poland the opinion that: "We haven't got enough sun" is predominant, but in reality the irradiance is only a bit lower (average about $1,000 \text{ kWh/m}^2$ a year), than in Germany where the use of solar energy is wide spread.

Poland is a pioneer in the usage of solar air collectors in drying, because the first system was built as early as 1968, whereas, the first experimental liquid collectors installation was in 1975. Air solar collectors from the beginning have been built as 'do your self' systems. Due to the above and the lack of manufactures we can't say that there is a market for solar air collectors in Poland.

However, the most popular solar energy systems are SDHW (solar domestic hot water) for detached houses. These installations make up to 75% all of area installed collectors. Also several dozen installations at the size: 20-100 m^2 and about 20 larger systems (the collectors area more than 100) were built. The large-scale solar systems were built mainly in housing co-operatives, hospitals, church centres and resorts.

Solar collectors have been manufactured since the 1980's. But only since 1996 an increasing interest in such systems began. During 20 years over 20 manufacturers appeared on the Polish market. Until 1993 they installed more than $1,000 \text{ m}^2$ of liquid collectors, and between 1998 and 1999 the area of solar collectors reached $10,000 \text{ m}^2$. Since 1997 a significant increase have been observed at the rate of at least 20% of installed capacity per year. At present the total area of solar collectors is more than $100,000 \text{ m}^2$, however, as Poland is a big country, the ratio is only 2.6 m² per 1,000 inhabitants.

In 2004 there were 27 companies selling solar collectors on the Polish market and they sold 33,000 m² of solar water type collector all together. At present in Poland there are *circa* ten national manufactures and nearly the same number of importers. The major domestic manufactures are: Aparel, Emaru, Hewalex, Polska Ekologia and foreign manufacturers: Pardigma, Viessmann, Solarhart. The domestic manufacturers cover about half of the required number of solar collectors on the Polish market. The imported sets are approximately two times more expensive than domestic ones.

It was estimated that currently there are 320 persons totally and permanently employed in the solar thermal energy sector, but this number is expected to increase to more than 2,000 people by 2010.

3. Summary of the project

As already mentioned in the introductory section to this report the solar case study consists of the actions undertaken within two EU co-financed project: Install and Solcamp. The later is the follow up of the former and focuses in more detail on the realisation of concrete solar investments in the camping sites.

4. STEP ONE: Vision of the project

One of the new and important form of promotion of solar energy is the usage of the EU RTD programmes for combating non technical barriers. An example of such successful application for the EU funds is the INSTALL project, financed by the ALTENER programme and implemented already in three cities (Gdansk, Gdynia and Sopot). The project is the natural development from the OPET international action 'Solar Thermal Co-operation 2000/2' led by the Projekttraeger Juelich, Research Centre Juelich.

It was decided to locate the solar project in the Northern part of Poland because the region is characterized by very good insolation parameters and the high potential for using solar energy, especially in the summer period. The incomes of the region inhabitants are also higher that the national average wage, which is also an important factor. Additionally EC BREC IEO Ltd. - a local project leader, had a branch office in Gdansk, which has very good relationship with the local authorities.



Figure 4.1 Location of TriCity region

The TriCity is placed in the central-northern part of Poland on the seaside of the Baltic Sea. TriCity consists of three cities Gdansk, Gdynia and Sopot. It covers area of 415 km², where the housing covers 90 km², aforestation 110 km² and agricultural areas 120 km². The population is 720,000 people. The main industrial objects in the Tricity are: trade and naval see ports, ship-yards, refineries. The area has also good solar radiation parameters: insolation 1,000 kWh/m²/year, yearly solar activity 1,600 hours/year and 80% of annual total insolation is during the six month period, which is from spring till the end of summer. Without active promotion of solar energy, like solar energy campaigns, the Polish market would be hardly accessible for manufacturers. Below the two interrelated project i.e. Install and Solcamp, which are a part of the solar project in the Pommerania region are described in more detail:

Install Project

Objectives of the INSTALL project

The main objectives of the Install Project consisted of running of the solar campaign, which could be summarized as:

- Development of local enterprises.
- Increase the number of solar installations in the TriCity.
- Increase of community awareness ecological energy solutions.
- Air quality improvement in the TriCity area.
- Excellent example of sustainable development for other cities in Poland.
- Support for the Polish government in the implementation Directive No. 2002/91/EC energy efficiency in buildings.

Tasks of the INSTALL project

The main tasks of the solar campaign focused on:

- Rising of local community awareness.
- Increasing the number of solar installations.
- Strengthening the role of local solar thermal enterprises.

Which involved *inter alia*:

- Preparation of draft information materials for brochure (technical data, financial measures, list of manufacturers in TriCity) and the leaflet.
- Three seminars for municipal officials, local house owners, municipal companies, local installers, builders, *etc.* (separate for each city - Sopot, Gdynia, Gdansk).
- Printed guidebook on solar investment opportunities in TriCity.
- Sending the brochure and leaflet to the potential investors (the public sector targeted).
- Designing and setting up the project's WEB-page.
- Collecting statistical data on solar heating investments already existing in TriCity.
- Identification of local installers in TriCity.
- Initial identification of larger buildings (especially in the public sector under the management of City Halls) that may have adequate parameters for using solar systems with the aim to support and help in working out the proposals for subsidies or preferential credits from ecological or structural funds for building societies, public or social institutions, *etc.*
- Series of articles in the local press about renewable energy with the special consideration of solar energy.
- Meetings with potential investors from TriCity for technical advise, visits to sites.
- Organization of international seminar-workshop in TriCity for investors and municipal authorities with participation of installation companies, mass media, architects *etc*.

Solcamp Project

Objectives of the Solcamp project

The overall objective of the Solcamp project is to create, to implement and to monitor a campaign for increased use of solar thermal systems at camping sites. To achieve this goal a standardised, neutral consultant tool, the 'SolarCheckCamping' will be developed to provide the camping site owners with independent information on solar thermal systems and with the planning data for their site free of sales interests.

A 'SolarCheckCamping' tool simulation software will be developed and in each of the 11 regions 'SolarCheckers' will be trained. Increased penetration of solar thermal systems at camping sites will convince the guests by making positive experience also to invest in such systems, thus contributing to further dissemination of solar energy use.

In Poland there are some 200 camping sites. In the Pomorskie voivodship some 35 camping sites are located, *circa* half of them decided to participate in the Solcamp project. The actual local and regional situation was analyzed including all relevant data concerning camping sites, grant schemes and a compiled list of firms experienced in planning and installing solar thermal systems. Also networks of project participants and other relevant stakeholders were established.

Thus, it is expected that after the end of the project new Solar Checkers will be trained and that in the mid-term (2010-2012) all of the camping sites in each of the participating regions will be checked. It is hard to make a forecast for the number of the sites which are going to invest in solar thermal systems, but it can be expected that the annual figures are going to increase every year. One of the incentives for this growth is obviously the incorporation of such sites into the 'SolCamp' list and their presentation in the internet. Thus, it is expected that also for the reason of competitiveness camping sites will be forced to invest into solar thermal systems.

Within the proposed activity a significantly increase of share of solar thermal systems at camping sites is expected. A neutral tool for dimensioning solar thermal systems at camping sites adjusted to regional conditions in every partner region is supposed to be produced. Furthermore, it is expected that within the first training courses 100-150 SolarCheckers will be educated (in all participating European regions), the number being doubled before the end of the project. Moreover, it is expected that more than 1,000 'SolarCheckCamping' audits will be performed in the

course of the project resulting in a 10% increased share of solar thermal systems at camping sites by the end of the project.

This will lead to a totally increase of approx. $15,000 \text{ m}^2$ collector area corresponding to additional 150 new jobs in Europe. As a secondary effect it is expected that 0.5% of guests of awarded sites will take the same decision and implement solar thermal systems in their own houses resulting in further 10,000 solar thermal systems.

But not only increased growth of 'SolCamp' awarded camping sites community in the participating regions is expected. The fact is that 'SolarCheckers' in performing their audits are not bound only to the initial region. It is expected that they will be active also in neighbouring regions thus disseminating the 'SolCamp' quality label also there. In turn, potential checkers from the neighbouring regions will make use of training and contribute to further dissemination of the quality label and solar thermal systems.

This kind of dissemination - snow ball principle - is supposed not to be abridged only to the national borders. Thus it is expected that within ten years after the end of the project the quality label 'SOLCAMP' will be spread all over Europe and that 50% of all the European camping sites will be equipped with solar thermal systems.

Also secondary effects can be expected. Solar thermal systems at camping places will serve as model system for the guests. Increased penetration of solar thermal systems at camping sites was also supposed to convince the guests by making positive experience also to invest in such systems, thus contributing to further dissemination of solar energy use. Leaflets to be distributed among guest of 'SolCamp' sites will also serve as dissemination tool for solar thermal systems aiming now at a new target group - home owners. This leaflet will be designed and first published in the course of the project but its dissemination, together with corresponding list of 'SolarCheckers' and solar firms will be performed also after the end of the project.

Keeping in mind an increased growth of 'SolCamp' community and the related number of camping sites guests an annual rate of 0.5% of home owners following the information given by the leaflet and investing in solar thermal systems can be stated as an excellent result of the proposed action. Assuming this number is expected to exceed 2 million of guests, some 10,000 new solar thermal systems in private houses resulting from proposed action can additionally to the systems installed at camping places be expected. The related collector area amounts to 50,000 m².

A manual as internet supported brochure will include pre-conditions, possible technical solutions and 'best practice' cases. A low-price simulation software especially for dimensioning solar thermal systems at camping-sites will be produced and in each of the regions 'SolarCheckers' will be trained. During application of 'SolarCheckCamping' audits quality label 'SolCamp' will be awarded to the sites after checking the implemented solar system by an independent expert. Monitoring and dissemination will be performed by project partners via newsletter and on web sites and project results will presented in the course of an international seminar. Planned are also closed feed back loops to the target groups 'SolarChecker' and camping sites respectively.

Besides the direct effects the project could indirectly have influence on air quality improvement in the TriCity area, become an excellent example of solar thermal campaigns in other cities in Poland; as well as be of support for Polish government in implementing of Directive No. 2002/91/EC - on energy efficiency in buildings.

Tasks of the Solcamp project

First the actual local and regional situation was analysed including all relevant data concerning camping sites, grant schemes and a compiled list of firms experienced in planning and installing

solar thermal systems. Also networks consisting of project participants and other relevant stakeholders were established.

A manual as internet supported brochure including pre-conditions, possible technical solutions and 'best practice' cases will be elaborated. A low-priced simulation software especially for dimensioning solar thermal systems at camping-sites will be produced and in each of the regions 'SolarCheckers' will be trained. During application of 'SolarCheckCamping' audits quality label 'SolCamp' will be awarded to the sites after checking the implemented solar system by an independent expert. Monitoring and dissemination will be performed by project partners via newsletter and on web sites and project results will presented in the course of an international seminar. Planned are also closed feed back loops to the target groups 'SolarChecker' and camping sites respectively.

A neutral tool for dimensioning solar thermal systems at camping sites adjusted to regional conditions in every partner region will be produced. Furthermore it is expected that within the first training courses 100-150 SolarCheckers will be educated, the number being doubled before the end of the project. Moreover it is expected that more than 1000 'SolarCheckCamping' audits will be performed in the course of the project.

The promotion campaign for solar thermal systems is directed towards targeted groups in each of participating regions. These are served with information seminars, 'SolarCheckCamping' audits and in the case of implementation of such system awarded by 'SolCamp' quality label. For evaluation purposes written pools will be forwarded to this group and there will be closed loop feed-back. The members of the target group are informed on project progress whereas they will inform project partners on their experience with 'SolarCheckCamping' audit and experiences with implemented systems. This procedure serves as internal quality control for the project and its iterative nature is designed to improve project results.

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

The creation of regional networks is one of the most important prerequisites for successful dissemination of solar thermal systems. Project partners obliged themselves to keep the networks active also after the end of the campaigns.

Target Groups and Key Actors

The solar campaign was directed towards: municipal officials, local authorities, owners and administrators of buildings (hotels, boarding-houses, swimming-pools, schools, hospitals, houses of the social welfare *etc.*), build companies and building societies, installers and manufactures of solar collectors, architects, private investors and hobbyists. Within the Install project the participants learned that it is favourable for the project to concentrate their effort on a single target group or at least at groups with similar structures and activities. Because of advantageous circumstances camping sites were chosen as primary target group for proposed actions. The regional camping/tourism associations are the most important regional key actors in the networks. The next most important key actors are the regional associations of craftsmen dealing with heating systems and associations of energy consultants and planners respectively.

Another target group are skilled persons dealing with planning and/or installation of heating systems. They will be trained so as to be able to perform 'SolarCheckCamping' audit and interpretation of simulations prepared by the software. Training courses will give them good opportunities for feed-back and an active involvement in the project. Written pool asking for their experiences with software and auditing procedure will give project partners the input for improvement of training courses.

Finally, home owners belong to a secondary target group of the proposed action. This group, however, is not exacted to actively participate in the project because feed-back and monitoring procedures lay beyond the financial scope of proposed actions. There is a general believe in the society, that solar collector is a luxurious product. Even though the system provides a good reductions of costs, the payback time of this installation is quite long. The market research shows, two kinds of targeted customer, the first group consist of affluent population, who do not pay much attention to the investment costs instead focusing on interesting design and reputation of the company. The second group consist of middle-class people, for which the price and payback time of investment are the most important issues. These people ask for construction options and efficiency of the system.

The regional project partners will co-ordinate their activities with the key actors and will be involved in written pools, organisation of seminars and training courses, dissemination of information on training-courses as well as promotion of solar firms and 'SolarCheckers' respectively. The key actors will also be involved in dissemination of results as well through links between their web sites with regional project web sites as by reporting on project in course of events organized by the respective association.

Demonstration of already existing, success stories also play a role in the process. Therefore, the owners of such installations have been essential actors in the promotion of solar energy. Examples of two sites which will participate in the project are presented below. The Borki camping site is located in the vicinity of the water protected zone- due to this reason only green energy is a viable option for the use. Borki camping has 200 touring pitches and 80 caravans places as well as 50 huts. The total usable roof area is 62 m^2 . The total capacity of the solar thermal collector is 24 m^2 .



Figure 5.1 Solar installation at the camping site in Borki

Another example is a holiday resort in Jantar in Jurata. It has a tradition of 63 years of organising holidays in the Hell Pennnisula, located in the Baltic Seashore Landscape Park. The total complex consists of 22 ha in the middle of the forest. It has a capacity to host 700 guests in three storey buildings, 10 conference rooms and other facilities, including spa facilities. The facility was equipped with 309 solar thermal collectors, with the total area of 620 m² supported by the EcoFund Foundation. However, the facility consists of a big camping site with some 5,000 visitors per year, equipped with electric boilers. This facility struggles to obtain additional resources for more solar thermal capacity.



Figure 5.2 Solar installation at the holiday resort in Jurata

Another important participant of the SOLCAMP project is the Polish Federation of Camping and Caravanning (PFCC). This association has a big power of authority and its participation in the project is magnet for other camping sites to participate in the project.

Some of the camping sites could not participate in the project due to the land property right issues. If the land was leased then the willingness to invest in a solar collector was null. Also another factor which was decisive for non-participation in the project was the recently made investment in other retrofits of the heating systems like heat pumps, modern gas or oil heaters. A factor which discouraged some of the owners in the past was the fact that some advertisement of the technology has been done previously by non- experts whose lack of know-how could have been easily proven. Some of the participants show a strictly commercial attitude they show interest to participate only because they hope to find additional financing for their investments and they even make it a precondition to participate. However, in the past it was proven that receiving the co-financing would be extremely difficult- some of the potential investors applied to different financing institutions but did not manage to get the co-financing.

| Name | Туре | Involvement | Purpose |
|---|---|--|--|
| TriCity City Halls Gdansk Gdynia Sopot | Local self government | Project supervision, advertisement, and patronage | Invest in clean innovative technologies in the region |
| Warsaw City Hall | Local self government | Initial interest, later withdrew from the project | Reasons to participate: include solar collectors in the energy efficiency in buildings programme, Reasons to withdraw: lack of organizational skills within the municipality |
| PFCC | Polish Federation of Camping and Caravanning | Support for the project | Be involved, informed, do something useful for the members of the association |
| EC BREC IEO Ltd. IEO Ltd. | Consultant | Management of the project, information campaigns, feasibility studies for installations | Advertisement of consultancy services provided in the solar energy sector |
| Camping in Borki | Camping operator | Demonstration of the success story | Good practice promotion, free access to information, free advertisement |
| 14 Camping owners - willing to invest | Camping operator | Participants of the project | Reduce costs of energy, find additional financial resources, free access to information, free advertisement |
| Camping owners not willing to invest | Camping operator | Refused to participate in the project | Land leased not owned, recently invested in other clean energy heating options |
| PTTK Polish Association of Landscape Tourism | Camping operator, owner of majority of camping sites | Will be invited to the project | Reduce costs of energy, find additional financial resources, free access to information, free advertisement |
| PART Polish Agency for Tourist Development | National body | Promotion of the project | Promotion and facilitating tourism in Poland, free access to information, free advertisement |
| P.P.H.U. BACHUS ADMAL &ENERGIA ODNAWIALNA MM SOLAR Marek Hintzke, Marek Wolinski | Installers | Consultation of project phases | Increase profitably increase of product sales, free access to information, free advertisement |
| City Council Bulletin, Baltic Daily, Radio Gdańsk, Gazeta Wyborcza daily, Regional WEB Tricity portal, Pomerania 'Środowisko, others | Media | Articles, interviews, advertisement for the participants (camping sites, manufacturers), increasing public acceptance | News making |

 Table 5.1
 Actors participating in the project

| Name | Туре | Involvement | Purpose |
|---|---------------------------|---|---|
| Voivodship Fund of Environment Protection, Gdansk and Olsztyn, EkoFund, Bank of Environment Protection (BOS) | Financing institutions | Speeches delivered at conferences | Attract best, and most financially attractive projects |
| Plumbers | Plumbers | Participation | Wanting to learn a new profession |
| Population | Tourists | Users of the heating system, increasing public acceptance in other regions where tourists come from | Using of environmentally friendly system in a nature places, clean air, Applying of such systems in their own family houses |

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

Generally the actions performed under the case study can be divided into promotional and training activities performed within two EU co-financed projects: Install and Solcamp. The main coordinator of the actions undertaken within the solar thermal case study was IEO Ltd., the other actors changing depending on the type of action involved.

| Type of involvement | Organizers | Involvement | Purpose |
|--|--|--|---|
| Training of the Solar- Checkers | IEO Ltd., consultant | Providing training and materials for solar energy systems installers | Increase the know-how and competences of installers on the local market, Strengthen the position of local solar thermal enterprises |
| Solar energy campaigns | IEO Ltd., consultant, regional authorities, investors and municipal authorities with participation of installation companies, mass media, architects | Organization of seminars, preparation and distribution of leaflets, mass-media contacts, guidebooks, project web-page | Involvement of local authorities in the project, creating a positive climate for solar energy investments, raising awareness of local community |
| Installation of solar collectors at camping sites | IEO Ltd., consultant, owners of camping sites | Design of the system, advice on purchase, help with application for external funds | Increase the share of solar energy among camp site owners, demo- sites of solar energy encouraging other users to use solar collectors |
| Identification of investments | IEO Ltd., consultant, local authorities, investors | Identification of large public buildings where solar collectors could be installed, meetings with potential investors from TriCity for technical advise, visits to sites, questionnaires, preparation of pre- feasibility studies | Increase of solar thermal installed capacity, identify best investment sites, consultation desk for potential investors. |

Table 6.1Forms of participation in the case study

7. STEP FOUR: From visions to actualities

Results of solar project under Install

According to the attendance list in Gdansk 30 person took part in the organized seminar, 72 in Sopot and 86 in Gdynia. A brochure with a small questionnaire was sent to the potential investors. It contained the questions about possible destination of the solar installation and some important data if respondents come to decision to build the installation. Besides the brochure with a were also available in offices of City Halls for their clients.

The responses from questionnaires as well as personal contacts were used for the identification of potential solar systems sittings and then supporting them in acquisition of subsidies or preferential loans. Nineteen identified localizations were visited, especially those where large scale solar installations were feasible (10 in Gdansk, 6 in Sopot an 3 in Gdynia). It was estimated that sixteen of them were suitable for solar thermal installation and eventually 7 pre-feasibility studies were prepared for their owners or administrators.

International seminar was organized in 2004 in Gdansk for Pomeranian's voivodship local authorities, entitled 'Role of Local Authorities in promoting utilization of solar installations in European Cities'. The lecturers, which presented experiences from solar thermal campaigns, possibilities of financing were delivered by the representatives of the Polish national funding institutions: Voivodship Fund of Environment Protection, Gdansk and Olsztyn, EkoFund, Bank of Environment Protection (BOS), Local Fund, Gdansk) and two local installers.

Major results from the solar campaigns can be summarised:

- Awareness raising on solar energy.
- 'Solar TriCity' sign is easily recognized.
- Four conferences on solar energy with participation of 248 campaigners.
- Consultation desk for potential investors.
- 19 expert analyses for large scale solar installations carried out by EC BREC IEO Ltd..
- Total installed area of solar collectors increased by 714 m² during campaign in TriCity including 4 large-scale plants of over 100 m² each and 21 small solar plants (2-10 m²).
- 10 press releases (newspapers, radio, TV).
- Co-financing of solar installations from National and Local Environmental Funds.
- Several new jobs created.
- A new installation company was established.

When the campaign started, the information on the size of already existing solar thermal installations was collected, which was 284 m², built mainly during last 5 years. After the campaign had been finished, the total area of installed solar collectors increased to 998 m², so the size of collectors increased by 714 m² *i.e.* 251% during the campaign and in that:

- large scale installations (over 100 m²) 612 m²
- 21 small solar plants (2-10 m²) 102 m².

As a result of activities (the seminars + the leaflet and the brochure + the series of interviews in mass media + WEB pages) a numerous enquiries from potential investors as well as from potential plumbers who got interested in installing solar systems by themselves was received. Recently especially for the use in swimming pools. The problems encountered were the same as in whole country:

- Small knowledge of possibilities and limitations of solar technologies.
- Energy produced from fossil fuels is cheaper then energy received from solar radiation but could be competitive with support from preferential loans and grants.
- The moderate climate of Poland inclines to use SDHW systems mainly.

The important factors, which were received as a result of the campaign were:

- Increase in the number (surface area) of solar-collectors installed locally by 714 m2 (including 4 large scale installations).
- Number of campaigners participating in workshops 248.
- Number of local key actors who supported the local campaign 6.
- Number of press releases generated by each campaign 13.
- 19 potential places for investments were visited-from help desk contact, and feasibility study was prepared for them.

The so-far results of solar project under Solcamp

- Preparation and sending the letters of intents to the installers and camping sites with the intention of establishing the regional network.
- Visits to camping sites equipped with solar thermal installations Borki (24 m2 and in Jantar 620 m2 of solar thermal collectors.
- Preparation of WEB site
 - (http://www.ieo.pl/solcamp/,http://www.ieo.pl/projekty/solcamp.html) where we have: - Preparation of proposals for funds for co-financing SolCamp Project.
 - Treparation of proposals for funds for co-financing solicamp
 Testing and improvement the T*sol simulation software.

This is an on-going project so more results will come in due time.

8. Lessons learned

The lessons learned during extensive INSTALL solar campaigns in Poland can be summarized below:

- The campaign was very useful, mediumistic in the TriCity, because this region has been always associated with a rest at the coast of Baltic Sea and with the sun. Authorities of cities actively joined the campaign, giving it considerably greater significance.
- Numerous personal contacts with potential solar energy users allow for making a conclusion that the attitudes towards solar radiation energy usage are positive.
- The main factor which has great influence on the potential investors is the requirement to lower the cost of energy but the environmental considerations are less important. No matter how great the interest in the solar energy, it is expected from the investors that the cost will be completely or partially covered by public funds; the public funds are not easily available and are abridged with many conditions.
- The help of installers was essential, because they saw the possibility to increase the selling of their services and specific, technical experiences.

The proposals for continuation of campaigns on the national level are:

- Greater engagement of the city authorities in the campaigns.
- Interweaving the campaign into the region development programs (i.e. the energy for the commune, ecologically and cheap energy etc.).
- Consolidation of the regional installers in association.
- Annual summer seminars to win over new customers.
- To assure the financial support from ecological funds.
- To push communes for the start up of local solar funds.

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