



EIE-06-085 SOLPOOL

Intelligent Energy  Europe

Work Package 5: D18: Guideline SOLPOOL Campaigns

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1. Introduction

The project SOLPOOL is an initiative to enhance the use of solar systems for the heating of outdoor swimming pools. During the execution of the project SOLPOOL, a series of dissemination materials, strategies and workshops were developed and implemented. This document is intended as a guideline for the design and implementation of a promotion campaign for solar swimming pool heating. The process starts with the identification of key stakeholders and target groups, so that the level and scope of the dissemination process can be established. Subsequently, the best dissemination tools and strategies for the implementation of campaigns are defined. In general, as a result of the experiences of the campaigns performed in the participating countries and regions of SOLPOOL, it can be said that a regional approach has proven to be more suitable. However, there are some exceptions such as Hungary, where the market potential is quite limited, and a national approach is preferably recommended.

It must be clarified that this guideline assumes the availability of financial means to design and implement SOLPOOL campaigns

2. Study the baseline situation

The first step to initiate a new SOLPOOL campaign is to perform a baseline situation analysis. The baseline is needed to understand the present conditions in relation to the project purpose.

What is the purpose of the SOLPOOL project?

To enhance the use of solar energy for outdoor swimming pool heating

The study of baseline situation is divided in three major steps:

- Preparation
- Baseline study
- Action plan on the basis of the baseline study

The preparation step consists on discussions by the staff on the reasons for a baseline study. The preparation of a questionnaire can guide the focus of group discussions. Here it has to be decided who will collect the baseline data and from whom, where and when. After that, **the baseline study** has to be conducted. It is recommended to make a survey on the **total number of existing pools, with and without heating system**. It is also important to know the **type of heating system** in use, if existing at all. In some cases it is possible to access official lists of registered swimming pools but this might not include the private small swimming pools. **General ambient temperature conditions** of the region/area in question have to be defined in order to see the potential benefit of the implementation of solar pool heating systems. Other points to consider in the baseline survey are the **existing financial schemes** that could fit into the implementation of a new solar pool heating system and companies at regional and national level providing installation and planning services. Other additional points according to the specific situation might also be of interest. Therefore, the following minimum information should be collected and compiled during the baseline study:

- **Number of existing outdoor pools, including private pools whenever possible**
 - **Number of pools with a heating system**
 - **Type of heating system in use, if existing at all**
- **Average ambient temperature conditions during the opening season**
- **Existing financial schemes for the design and implementation of solar pool heating projects or other fitting thematic areas**
- **Companies providing installation and planning services for solar pool heating**

Subsequently, an action plan on the basis of the baseline study has to be defined and implemented. The plan will start with a strategy of the team to change the present situation and tackle the problem, defining responsibilities and what needs to be done immediately and in later phases of the project. At this stage the preparation of the first year's works plan is recommended.

3. Identify the stakeholders

Definitions

Stakeholders are persons, groups or institutions with interests in a project or programme. A slight variation of this definition is that stakeholders are “an individual or organisation that has the ability to represent interests before others within the social field, with the purpose of making them see his own vision of the world or his own point of view on specific issues” (Domb, 2006) or, in this case, on the implementation of the SOLPOOL project.

Stakeholders must play a central role in setting up priorities and objectives of solar swimming pool heating knowledge and information dissemination initiatives in order to ensure relevance and appropriateness.

It is important that all stakeholders are involved in the development of projects and not just direct beneficiaries. Three categories of stakeholders are distinguished:

1. **Primary stakeholders** such as direct beneficiaries (swimming pool owners, operators and users, etc.)
2. **Secondary stakeholders** such as intermediaries (e.g. architects, planners, technology providers, etc.)
3. **External stakeholders** such as decision, policy makers (politicians, etc.)

All three groups are important to have them represented on the project as stakeholders if the necessary commitment is to be achieved. Care must be taken, however, to ensure that when a diverse range of stakeholders are engaged in a programme.

This part shows a classification of stakeholders into three groups according to their participation in the dissemination process of solar swimming pool heating. It will help indicating the course of action to be taken towards different groups.

Primary	Secondary	Tertiary
<ul style="list-style-type: none"> • Swimming pool owners • Swimming pool operators • Swimming pool users 	<ul style="list-style-type: none"> • Local authority • Direction of Municipality Technical Services • Architects and planners • Installers 	<ul style="list-style-type: none"> • Financial institutions and donors • National authorities (at all levels) • Opinion leaders • Civil society • Medias

Nowadays, the process known as **Stakeholder Analysis** is usually performed in the early stages of a project, with a view to ensure its sustainability and effectiveness. Stakeholder analysis consists of the identification of a project's key stakeholders, an assessment of their interests, and the ways in which these interests affect project riskiness and viability. It is linked to both institutional appraisal and social analysis: drawing on the information deriving from these approaches, but also contributing to the combining of such data in a single framework. Stakeholder analysis helps to identify appropriate forms of stakeholder participation, and in the case of SOLPOOL-like initiatives, it also contributes to design dissemination activities.

Drawing up a stakeholder list and identifying their interests and power in relation to the adoption of solar heating pool systems in their respective areas

In order to draw up the list of all potential SOLPOOL project stakeholders, the recommended methodology is to gather data from project partners and their working networks at the national and local levels, as well as from local informants, such as municipalities or other local governments, organizations, associations and other institutions in the selected locations where the project will be carried out.

The enquiry may be conducted by mail, email, telephone or personal interviews wherever possible, and should seek to identify all the relevant stakeholders in the field of solar swimming pool heating in the selected locations where the SOLPOOL initiative will be implemented.

Additionally, secondary sources, such as the existing databases like the one developed during the SOLPOOL project can be used. In addition, other relevant information systems should be reviewed. This work can be done only once the locations where the project will be implemented are selected and should result in a listing of **all potential stakeholders**.

The list of potential SOLPOOL stakeholders may be drawn up by answering the following questions:

Who has, shows or might show *any type of interest* in certain aspect of the adoption of solar systems for swimming pool heating? Or, in other words:

Which individuals, organizations or institutions might see their *interests affected* (negatively or positively) by any of the activities related to the adoption of solar systems for swimming pool heating?

Before drawing up a stakeholder list, the identified stakeholders have to be already categorised into primary, secondary or tertiary. The following methodology will allow the identification of the course of action of the communication strategy to be taken towards these different groups of stakeholders, reason why a brief assessment of the likely impact of the project on each of these stakeholder interests (positive, negative, or unknown) should be performed. As a qualitative analysis, the **impact** of the project on the stakeholders will be function of **power** and **interests**.

Power is the capacity that stakeholders have to control what decisions are made, facilitate their implementation or to exert influence that affects the project negatively. Power may derive from the nature of a stakeholder's organisation, or his/her/its position in relation to other stakeholders; thus the importance of analysing the relations between them as part of the stakeholder identification and assessment.

A measurement of the stakeholders' **interests** should reflect the particular expectations that each one of them has regarding the project, and the benefits that are likely to be for them by the adoption of the project policies.

The tool that is developed as a part of this step provides a set of aspects regarding **power** and **interests** that need to be evaluated for every stakeholder involved. The evaluation must be performed in the scale of 1 to 3 and covers the following items:

		POWER				INTEREST					
		Capacity to take action	Potential of engagement	Capacity to contribute	Total Power	Area of interest /attachment to solar pool heating	Perception of solar heating systems as a solution	Level of interest	Expected gain/profit	Level or acceptance of solar energy solutions	Total Interest
Primary Stakeholders	Name: Personal Details										
	Name: Personal Details										
	Name: Personal Details										

Legend Low:1 Medium: 2 Strong:3

	POWER				INTEREST		
	Degree of decision making power	Potential of to influence communities	Degree of implication	Total Power	Degree of attachment to solar pool heating systems	Degree of acceptance of solar pool heating systems	Total Interest
Secondary Stakeholders							
Name:							
Personal Details							
Name:							
Personal Details							
Name:							
Personal Details							
Legend	Low:1	Medium: 2	Strong:3				

	POWER				INTEREST		
	Degree of decision making power	Potential of to influence communities	Degree of implication	Total Power	Degree of attachment to solar pool heating systems	Degree of acceptance of solar pool heating systems	Total Interest
Tertiary Stakeholders							
Name:							
Personal Details							
Name:							
Personal Details							
Name:							
Personal Details							
Legend	Low:1	Medium: 2	Strong:3				

The depicted diagram allows the classification of stakeholders by their interest against power in the information dissemination process. Once a simple average of the scores regarding power and interest is calculated, the results are going to be very useful to perform a prioritisation of stakeholders. According to these averages, it is possible to identify the course of action to be taken towards every stakeholder involved. Those stakeholders located in the area covered by “concentrate communication efforts” will be our main target groups but that does not mean that other groups do not have to be targeted. The dissemination strategy will have to be tailor-made to each specific target group.

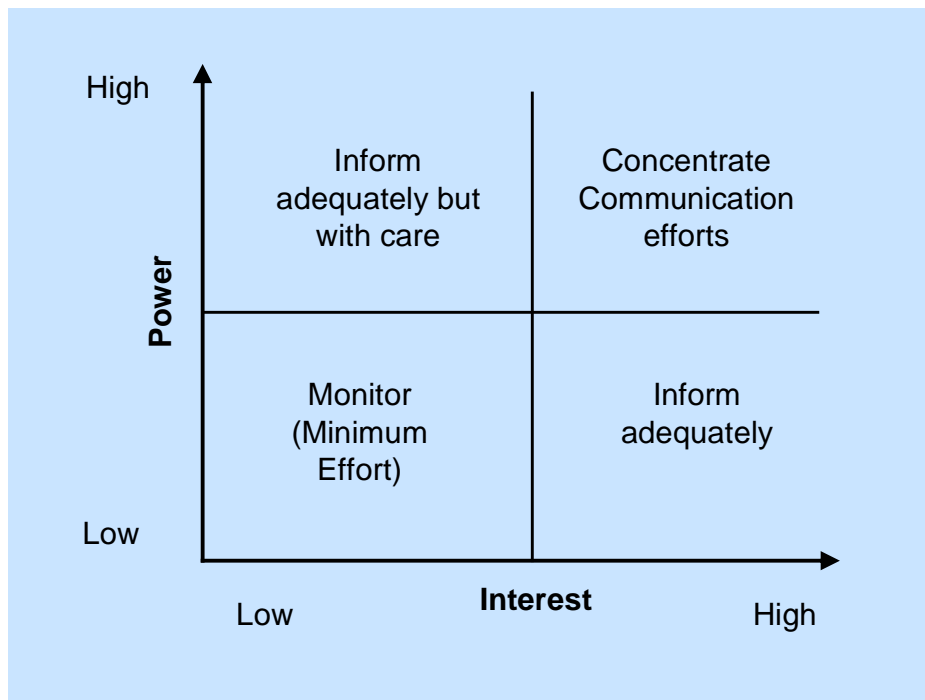


Figure 1: Power/Interest Grid for stakeholder prioritization

3. Know your target group

Spend some time finding out about your target group and where they stand in relation to the issue.

Understand the characteristics of your target groups

Gain an understanding of their current knowledge, attitudes and practices concerning the issue. This will help you define your project's objectives and outcomes more accurately. In the case of the SOLPOOL we focused on two main target groups, Owners & Operators and Installers, however we provide a list of possible target groups you might decide to focus on, as you can see in the following table:

Target groups	Specifications
Owners	Public sector: municipalities, local or national authorities, etc
	Private sector: chain or/and individual hotels, sport clubs, spa clubs, tourism structures, tour operators, private people, etc
	Others
Operators	Public sector: municipalities, local or national authorities, town councils, municipal employees, school authorities, etc
	Private sector: chain or/and individual hotels, sport clubs, spa clubs, tourism structures, tour operators, private people, etc
	Others

Local/national energy agencies/authorities	Local or national energy agencies, public or private agencies/companies, etc.
	Energy authorities, etc
	Others
Relevant associations/umbrella organizations	Sport associations
	Tourism associations
	Spa associations
	Swimming pool associations/federations
	Operator associations
	Manufacturer associations
	Solar thermal industry associations
	Others
End users:	Swimming pool guests
	Tourism guests
	Sport guests
	Others
Manufacturers	Solar thermal equipment manufacturers
	Pool and pool equipment manufacturers
	Retailers
	Others
Consultants	Planners, designers, architects, etc

Involve your target group

Remember that your target group will also be a stakeholder in the project. If possible, find representatives from your target group to be part of your stakeholder network. Try to find a motivation factor that will encourage the target group to be on board. Involving your target group will not only provide important information for your project design, but also it can open up opportunities for approaching your target group, once the project is under way.

4. Determine objectives and outcomes

Determine the result you want from your project. Define this in terms of a goal, campaign objectives and desired outcomes. The **goal or aim** of your project is a broad statement of what you want to achieve, i.e. the **purpose** of your project. It summarizes the collective effect of your specific objectives. Define your general objectives in terms of the knowledge, skills, beliefs and practices you want the target group to have or adopt to achieve the goal. Be

realistic in setting your goal and objectives. Once you have defined your objectives, spend some time to consider how you will evaluate the extent to which they have been achieved.

5. Design the dissemination strategy in the SOLPOOL context

The SOLPOOL dissemination strategy is intended to reach different target audiences, as already decided in previous steps. Each different target audience will be approached in a particular way, using different dissemination methods.

The planning stage of each dissemination activity to be potentially undertaken in the context of SOLPOOL should include an assessment of the existing communication infrastructure in the particular location/region where it will take place. Questions like **-which national circulation newspapers or magazines are sold in the locality/region? Or which are the printed media published at local/regional level?**-should be carefully considered. It is important to keep in mind the fact that the target audiences must actually be able to access the information, materials and tools, and that onsite dissemination activities can actually take place. In other words, it is of utmost importance to assess the means of communications that our target audiences most frequently use in each particular case. The key question here is:

Which are the prevailing or most frequently used forms and characteristics of dissemination processes in the locality or region?

- What languages are involved?
- Are oral communication and personal contact preferred over, say, written forms of communication?
- Are radio and TV more relevant to that particular community than, say, the Internet?
- Does the community regularly hold some sort of gathering where information is traditionally shared?
- Are visual means more effective in that particular context?

6. Design the materials and tools for dissemination in the SOLPOOL context

The project SOLPOOL is a source of materials and tools that would facilitate any attempt to perform a similar dissemination campaign. Investigate first the materials and tools generated during the Solpool project; they can be downloaded from the project website. The original files in indesign format can be used as a basis for the preparation of the specific materials for potential new campaigns, adapting them not only to the desired language but also to the specific local/regional conditions. The main generated materials and tools can be seen as follows:

SOLPOOL web-page

This is the main dissemination platform for all types of target audiences containing files of all the generated information materials and tools.



Solpool
Solar Energy Use in Outdoor Swimming Pools

Solpool - A Project under the Intelligent Energy Europe Programme

State-of-the-Art

Stakeholder database

Partners

Download Impact Advisor!!

National Websites

Service

FAQs

Internal Page

Promotional Activities

Press releases

Best practice examples

Awarded swimming pools

Deliverables

Solpool Home

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Solar Power Heated Pool (photocase, Gerold Uder)

Outdoor swimming pools are big energy consumers. Pool owners and/or operators in EU - mostly municipalities - spend millions of Euros annually to heat their pools, mostly by using fossil fuels. The use of solar energy for heating swimming pools is a cost-efficient alternative to fossil fuels.

The solpool project intends to demonstrate owners, operators (campaign 1) and also installers (campaign 2) the economical and ecological advantages of the proposed systems and the positive image effect associated to their use. The partners are all independent in terms of economic interests in the use of solar energy for the heating of outdoor pools. The project is supported by the European Union in order to push solar thermal energy and take environmental objectives seriously.

The industry's network will be improved by bringing stakeholders together in a neutral information platform. The stakeholder database will provide contact information details of relevant industrial players. In addition, a decision support tool named "Impact Advisor" will help owners and operators of swimming pools to have a general idea in terms of cost-benefit of solar thermal systems according to their own specifications. Both the stakeholder database and the Impact Advisor will be made available to the public in the project website. The experiences with the project in European countries will be summed up in guidelines. By this means, other countries can benefit from the existing network and know-how transfer.

Figure 2: SOLPOOL website

Impact Advisor

The Impact Advisor is a basic decision tool for policy makers or investment decision makers to pursue the idea of solar pool heating. The simple excel based Impact Advisor software tool provides the following technical capacities: calculation of dimensioning, building and operation costs, economic gains, energy savings and reduced CO₂-emissions for solar pool systems against the existing or conventional heating. The impact advisor is available in English, German, Slovenian, French, Czech, Greek, Hungarian and Italian.

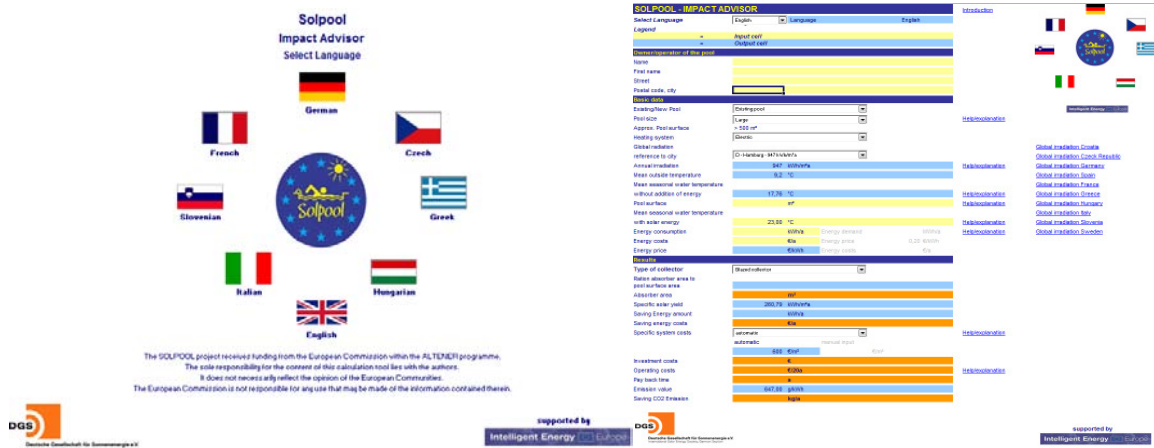


Figure 3: SOLPOOL Impact Advisor

SOLPOOL leaflets

They were produced in 8 languages, providing general project facts and information and additional technical and economic information to the stakeholders



Figure 4: SOLPOOL leaflet

Manuals for end-users and for installers & operators

Two types of manuals were prepared in the frame of SOLPOOL, targeting end-users, and installers and operators. The first manual, a booklet of 12 pages intended for end-users, describes the concept of solar energy, its advantages for heating outdoor swimming pools, the types of absorbers, the typical design, the basic requirements for implementation, planning and dimensioning, costs and yields, options for national financing, and the “5 steps to a gut solar system”. The second manual, a booklet of 16 pages, includes the sections mentioned above plus more technical information, as it was produced for installers and operators, such as the components of solar thermal systems for outdoor swimming pools, available concepts/designs, differentiation among systems, installation, operation and maintenance.

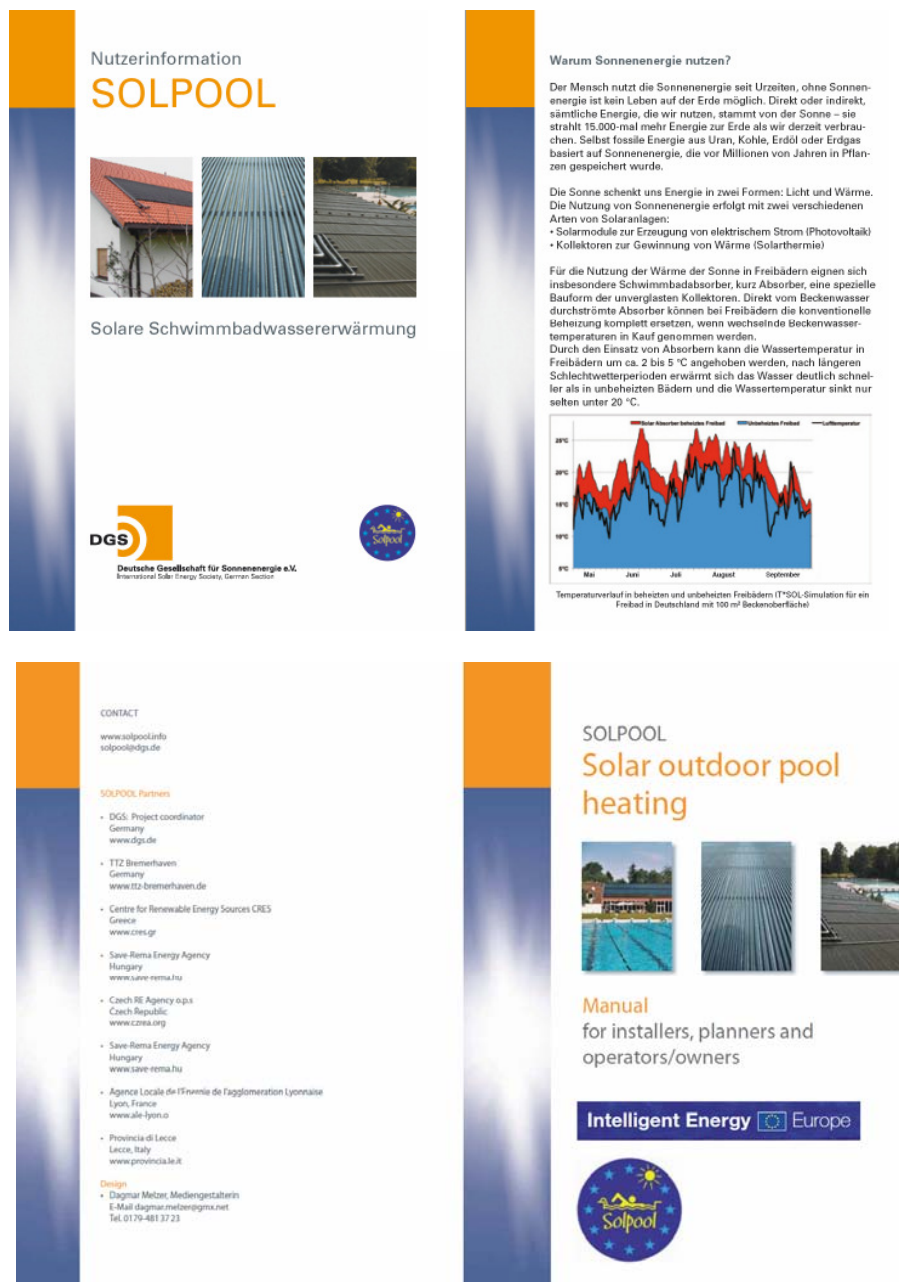


Figure 5: SOLPOOL manuals

Best practice examples

The best practice sheets with real examples of pools that have solar heating systems provide very interesting facts and information for the target groups. A good example of this is the cost of the system and the yearly energy savings.

Outdoor Pool Borssum in Emden



The energy demand of the outdoor pool Borssum in Emden was reduced by almost 85% due to the use of a 1900m² absorber plant for pool water heating and a 15.5 m² flat plate collectors for service water heating. The average pool-water temperature is ensured during the whole season due to the use of a heating pump during bad weather days. This solar plant serves not only the outdoor pool but also a neighbouring super market. Thus the produced solar energy is used not only in the pool season but all over the year.

Installation
Solaranlagen Lange GmbH
www.solar-lange.de

Planning
Claus-Dieter Böscher
office@schriedens-emden.de

Operator and Pool
GMF mBH & Co. KG
Freibad Borssum, Lindenweg 3, 26724 Emden

Swimming Pool and Solar System	
Year of installation	2001
Pool surface area and volume	1 020 m ² , water depth 1.00 m – 2.00 m
Tube absorber surface area	875 m ² , water depth 0.00 m – 1.25 m
Flat plate collector surface area	1500 m ²
Absorber type	Solarflex
Auxiliary heating system	360 kW condensation boiler, 360 kW heating pump
Specific yield	740 kWh/(m ² a)
Energy savings	ca 1 100 000 kWh gas per year
Environmental gain	ca. 320 t CO ₂ per year
Investment costs including the heat pump	360 000,00 EUR (incl. planning and installation)
System costs	125 EUR/m ² absorber area without heating pump and other technical installations
Operation cost savings	ca. 38 000,00 EUR per year





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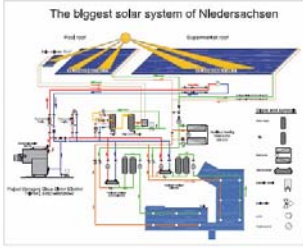
www.solpool.info
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Freibad Borssum in Emden

Description of the system

Renewable energies can generate profitable solutions through a clever management. A good example of this is the open swimming pool of Borssum in Emden. The originally installed heating system to warm the outdoor pool water became obsolete and eventually, it had to be changed. The optimization of the budget through the reduction of energy costs was a major fact to consider for the new heating system and therefore, it was decided to implement a solar energy system. The whole project was designed by an Engineering consulting firm in Emden under the supervision of Mr. Claus-Dieter Böscher. In the year 2000, he had already been in charge of implementing a solar absorber system in the community outdoor pool of W. Amerian in Emden. The new system achieved a 50% of energy costs saving in the first year. Two main aspects must be considered before the installation of a solar system: the technical feasibility and the economic viability. After a first assessment it was clear that both points were fulfilled for the outdoor pool of Borssum. The total investment costs amounted to 350 000 € which were paid off in a period of 9 years through the energy savings achieved by the solar energy system. In May 2002 the solar energy system was put into operation. Through an optimal system design, 85% of the previously used natural gas is being saved each year, in addition to 320 Tonnes of CO₂. The pool water is warmed up with a 1 900 m² absorber system, 500 m² of absorbers

being installed on the roof of the pool premises and 1400 m² on the roof of a neighbouring supermarket. Under bad weather conditions it might be the case that the 54 km long absorber pipeline is not enough to bring the pool water up to the target temperature of 23°C. In such a case, a heat pump is used as auxiliary energy source. The heat pump and absorber system combination achieves a very good coefficient of performance (up to 6) for the heat pump. The water for the showers is heated with the help of a 12,5 m² solar collector system. The implemented solar system has covered for the last 5 years not only the energy needs to warm up the pool water, but also the heating needs of the neighbouring supermarket. This means that the energy produced from the system is used all year round. The special characteristic of the implemented system is its interactive use. The absorbers lead the sun heat away from the roof of the supermarket which implies a reduction in the supermarket energy need for air conditioning purposes in hot summer days. The whole project has significantly reduced the energy costs of the Borssum outdoor pool and subsequently it has helped to stabilize the admission fee over the years. Therefore, the slogan of the project developers becomes a reality, Solar system = Social system.



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Ξενοδοχείο Europa



Το ξενοδοχείο "Europa Resort" βρίσκεται στο Ρέθυμνο, Κρήτης (επιχειρείται τον τουριστικό τομέα, με χωρητικότητα 45 κλινών και 11 διαμερίσματα. Το 2001 η SOLE S.A. εγκατέστησε στο ξενοδοχείο ένα μοναδικό σύστημα θέρμανσης νερού νερού ζέστασης και κολυμβητικής δεξαμενής με χρήση ΟΗΕ. Η εγκατάσταση για τη θέρμανση της κολυμβητικής δεξαμενής αποτελείται από 32 m² ακατέπαινα συλλεκτικά, που θερμαίνουν ένα 25 m² πισίνα. Οι ανάγκες θέρμανσης της κολυμβητικής δεξαμενής καλύπτονται εξακολουθώντας από το ηλιακό σύστημα.

Πορεία του Ξενοδοχείου Europa (πηγή: KATIE)

Contact Address
Ξενοδοχείο Europa Resort
Πάνορος, Ρέθυμνο,
Κρήτη, 74 057

Tel. +30 28340 20 200,
Fac. +30 28340 51 100
email: info@europahotel.gr

Partners
· Πύλη της Ξενοδοχείου Europa resort
· MAHM; SOLE S.A.
· Οργανό ηλιακό σύστημα SOLE S.A.
· SunStar ανάκτηση συλλεκτών
· Φυσικομαθητ. SOLE S.A.

Τεχνικά στοιχεία των ηλιακών συλλεκτών της κολυμβητικής δεξαμενής (πηγή: SOLE S.A.)

Επιφάνεια συλλεκτικών συλλεκτών (για το νερό κολυμβητικής δεξαμενής)	32 m ²
Επιφάνεια επίπεδων συλλεκτών (για ζεστό νερό χρήσης)	δεν είναι γνωστό
Επιφάνεια και όγκος κολυμβητικής δεξαμενής	25 m ²
Έτος εγκατάστασης	2001
Εγκατάσταση – συμβασιολογία	Ξενοδοχείο Europa
Τύπος συλλεκτή (4m)	SOLE S.A.
Επιπρόσθετο σύστημα θέρμανσης	Ακτινιστά συλλεκτών (πεκλιοπολυμερές)
Ειδική απόδοση	δεν υπάρχει
Εξοικονόμηση ενέργειας	1144 kWh/m ² ανά εποχή (μόνο για ακατέπαινα συλλεκτικά)
Παραδοσιακά κέρδη	36 tons oil per year
Κόστος ηλιακού συστήματος	11 € βασικό / συστήματα
Κόστος συστήματος σε €/m ² επιφάνειας συλλεκτή	1710 € (συμπεριλαμβανομένου και εγκατάστασης)
	53.4 €/m ²

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Intelligent Energy Europe

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Europa Hotel



The "Europa resort hotel" is located in Rethymno, Crete in southern Greece. It caters for tourism, with a capacity of 45 beds and 11 apartments. In 2001, SOLE S.A. installed a DHW solar thermal and a swimming pool heating plant. The swimming pool heating installation consist of 32 m² unglazed collectors that heat a 25 m² swimming pool. The heating requirements of the swimming pool are fully covered by the solar system.

Swimming pool of Europa hotel (Source: KATIE)

Contact Address
Europa Resort Hotel
Panoros, Rethymno, Crete
Greece, 74 057.

Tel. +30 28340 20 200,
Fac. +30 28340 51 100
email: info@europahotel.gr

Partners
· Client: Europa resort
· Office study: SOLE S.A.
· Solar thermal system: SOLE S.A.
· SunStar unglazed collectors
· Installer: SOLE S.A.

Technical data of the absorber system (Source: SOLE S.A.)

Tube Absorber surface area (for pool water)	32 m ²
Flat Absorber surface area (for sanitary water)	Not known
Pool surface area and volume	25 m ²
Year of installation	2001
Operator	Europa Hotel
System installer – Planning	SOLE S.A.
Type of collector(s)	Unglazed polypropylene
Auxiliary heating system	None
Specific yield	1144 kWh/m ² per season (only from the unglazed collectors)
Energy savings	36 tons of oil per year
Environmental gain	11.8 tons / year of CO ₂
Costs for the solar system	1710 € (incl. planning and installation)
System costs in EUR/m ² absorber area	53.4 €/m ²

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Figure 6: Best practice examples

Posters

The prepared posters are to be displayed in solar heated swimming pools to promote the solar energy amongst the visitors. Two different posters are available for selection.

USE THE ENERGY FROM THE SUN!

SOLPOOL is a project that supports and encourages the use of solar energy applied to outdoor swimming pool heating.

WHAT ARE THE BENEFITS OF USING SOLAR ENERGY FOR OUTDOOR POOLS?

- One of the most cost-effective uses of solar energy is to heat swimming pools. Swimming pools require low temperature heat, which is where solar collectors are most efficient.
- Solar heating systems can provide up to 100% of the pool heating needs and can extend the length of the swimming season with minimal operating costs.
- The consumption of energy of fossil fuel origin is reduced, as well as the CO₂ emissions.
- Although the investment costs for solar thermal systems for outdoor swimming pools are higher than those for other conventional systems, the operating costs of the former systems are very low, which results in a payback period of approximately 7 years.

SOLAR ENERGY FOR YOUR HOME

Solar thermal collectors are widely used to provide domestic hot water and can provide yearly energy savings of 60% compared with energy derived from fossil fuel sources.

A solar domestic hot water system usually has a storage tank for the solar heated water along with a conventional fossil fueled hot water heater. If there is insufficient hot water in the solar storage tank, the conventional hot water heater takes over and heats the water. Therefore, hot water is always available to the household.

The minimum requirements for a solar domestic hot water system are:

- A collector area of 1-1.5 m² per person to be mounted on the roof.
- A hot water storage tank of 80 l volume per person.

The average cost of the installed system is about 3,000 € (incl. installation and tax) for a family of 3-4 members and the durability of the system is 25 years minimum.

www.solpool.info

Intelligent Energy  Europe

Sončna energija – darilo narave

SOLPOOL
Uporaba sončne energije za ogrevanje vode zunanjih bazenov

SOLPOOL je projekt, ki podpira in spodbuja uporabo sončne energije za ogrevanje vode v zunanjih bazenih.

PREDNOSTI UPORABE SONČNE ENERGIJE ZA BAZENE:

- ogrevanje bazenov je ena stroškovno najbolj učinkovitih uporab sončne energije. Za bazene zadošča nizko temperaturno ogrevanje, kjer so sprejemniki sončne energije najbolj učinkoviti
- solarni ogrevalni sistemi lahko pokrijejo do 100% potreb ogrevanja bazena in lahko podaljšajo plavalno sezono z minimalnimi stroški obratovanja
- zmanjša se poraba energije iz fosilnih goriv, prav tako tudi emisije CO₂
- vračilna doba sistemov z nezastekljenimi sprejemniki je okoli 7 let

www.solpool.info

SONČNA ENERGIJA ZA VAŠ DOM

Minimalne zahteve solarnega sistema za pripravo tople sanitarne vode:

- površina sprejemnikov sončne energije vgrajenih na steno 1-1,5 m² na osebo
- izmenik tople vode prostornine 80 litrov na osebo

in za ogrevanje prostorov:

- stena orientirana proti jugu brez senčenja
- površina sprejemnikov sončne energije na steni 2-3 m² na osebo
- razpokljivi prostor za hranilnik tople prostornine 80 litrov na kvadratni meter površine sprejemnikov
- letni prirazki energije zlastaj 25-40% skupnih potreb po energiji

Specifični stroški standardnega solarnega sistema:


- 600 €/m² sprejemnikov sončne energije (ena vključuje namestitve in DOV), za tak sistem je možno pridobiti povratno subvencijo Eko sklada v višini 25% stroškov namestitve

Če vas zanima investicija v solarni sistem pošljite zveščajo na www.ape.si

DGS Deutsche Gesellschaft für Sonnenenergie (DGS) e.V. Emmy-Noether-Str. 2 69126 Mannheim Tel: 04381 419137

APF AGENCIJA ZA PRESTRUKTURIRANJE ENERGETIKE d.o.o. Ljubljana, ul. 1000 Ljubljana 1a, (01) 556 38 33 www.ape.si info@ape.si

SOLPOOL – Uporaba sončne energije za ogrevanje vode v zunanjih bazenih. Projekt APE, ki je sofinanciran v okviru programa Inteligentna energija Evropa.

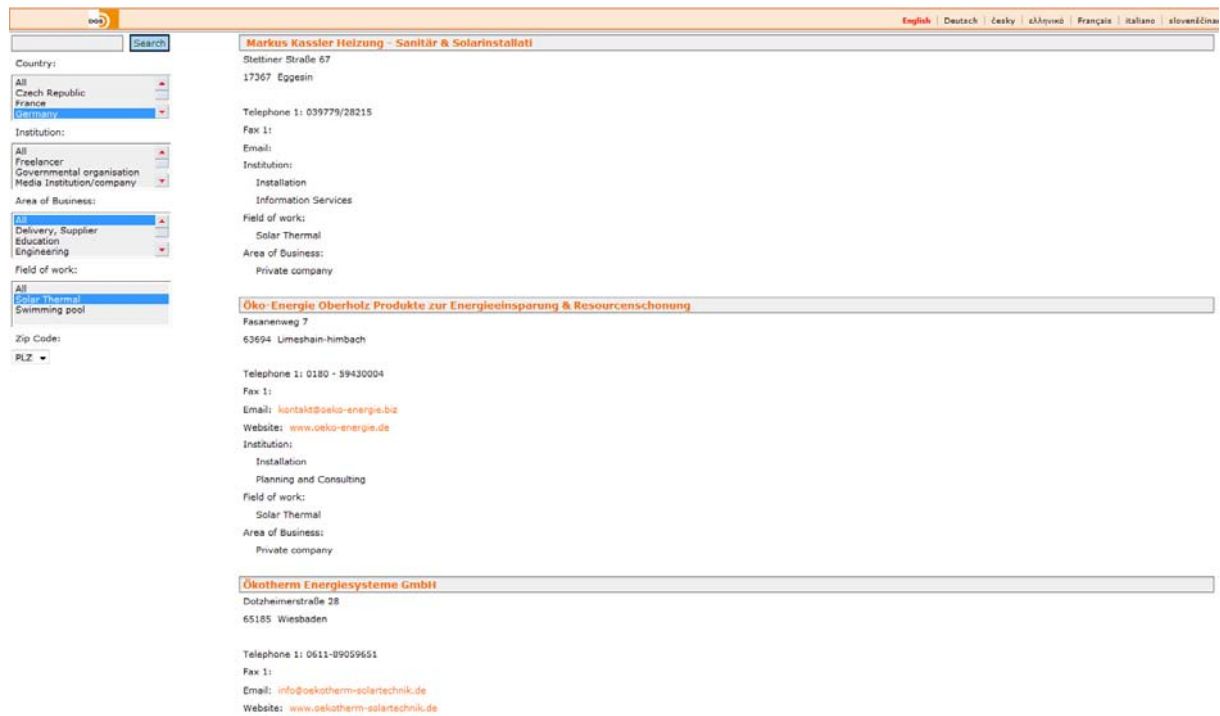
Intelligent Energy  Europe

Finančiranje projekta SOLPOOL podpira Evropska komisija v okviru programa ALTERER. Za večjo info dokumente so odgovorni naši sodelavci. Večerja se odobna avtor Evropske komisije. Evropska komisija ni odgovorna za vsebino vsebin, ki jih vsebujejo spletni strani.

Figure 7: SOLPOOL posters

Stakeholder database

A database with information on the different identified stakeholders of the participating countries and regions is available at the website. Companies working with solar heating technologies, pool facilities, and other relevant information can be easily retrieved from the system.



The screenshot shows a web interface for a stakeholder database. On the left, there are search filters for Country, Institution, Area of Business, and Field of work. The main area displays three company profiles:

- Markus Kassler Heizung - Sanitär & Solarinstallati**
 - Stettiner Straße 67
 - 17367 Eggesin
 - Telephone 1: 039779/28215
 - Fax 1:
 - Email:
 - Institution:
 - Installation
 - Information Services
 - Field of work:
 - Solar Thermal
 - Area of Business:
 - Private company
- Öko-Energie Oberholz Produkte zur Energieeinsparung & Ressourcenschonung**
 - Fasanenweg 7
 - 63694 Limeshain-himbach
 - Telephone 1: 0180 - 59430004
 - Fax 1:
 - Email: kontakt@oeko-energie.biz
 - Website: www.oeko-energie.de
 - Institution:
 - Installation
 - Planning and Consulting
 - Field of work:
 - Solar Thermal
 - Area of Business:
 - Private company
- Ökotherm Energiesysteme GmbH**
 - Dotzheimerstraße 28
 - 65185 Wiesbaden
 - Telephone 1: 0611-89059651
 - Fax 1:
 - Email: info@oekotherm-solartechnik.de
 - Website: www.oekotherm-solartechnik.de

Figure 8: Stakeholder database

Presentations from the workshops

All the presentations from the different implemented workshops can be downloaded from the SOLPOOL website: www.solpool.info

7. Make an action plan and implement it

Prepare an action plan to ensure you achieve your project's goal and objectives. An action plan identifies who has to do what by when, and what resources will be needed. An action plan is designed to keep you and others in your project on track. You can follow these steps:

- Identify your resource requirements: people, budget, and needed time
- Prepare a schedule with milestones
- Identify specific tasks and subtasks with deadlines and responsible personnel
- Prepare a detailed budget including all the activities to be carried out for each task

8. Monitor and evaluate

This is a complex step of the guideline but it can help you to make decisions and recommendations about future directions, identify the strengths and weaknesses of the project, determine stakeholder and target group satisfaction and monitor performance.

Evaluation is about collecting information and keeping records that show the progress of your project, and problems and achievements against your goal and objectives. This can be done by examining, describing and documenting the project's activities or processes.

9. Conclusions and recommendations

The SOLPOOL's guideline for designing and implementing similar campaigns provides a general framework with different steps to be followed. The simple methodology outlined in the first sections of this document should help project teams to better specify the key stakeholders or stakeholders in each case and locality/region, where SOLPOOL campaigns will be further implemented, while the last sections of the document focus on the design and implementation of the campaigns. After the experiences of all the consortium participants it is very recommendable to design every campaign very site specific. The approach to be followed at a national level is very different to the approach to be followed at a local/regional level. We also recommend to repeat similar projects in Spain, Portugal, Austria and Cyprus due to their interest shown in the project.