EIE-06-085 SOLPOOL

Intelligent Energy Europe

Work Package 5: Evaluation

Deliverable 17: Report optimized campaigns

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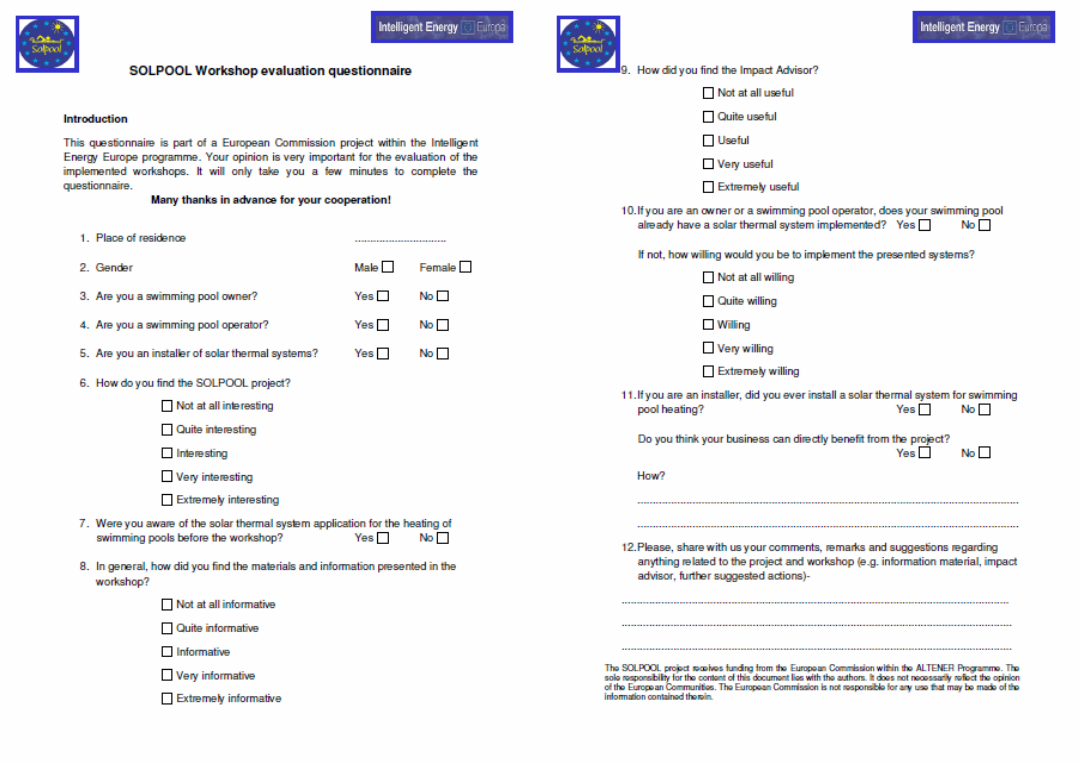
1. Introduction

During the execution of the SOLPOOL campaigns a series of dissemination materials, strategies and workshops were developed and implemented. In order to enable the consortium to improve the dissemination materials and measures within the project duration, an interim evaluation of the performed activities and generated materials took place. The results of this evaluation were aimed to form the basis of the optimisation measures which subsequently will lead to the generation of guidelines and recommendations for the future implementation of the promotion measures in other member/candidate state countries (Deliverable 19).

2. Optimization of workshops

The workshops were evaluated with a questionnaire designed and translated in all the project languages for that purpose.



SOLPOOL Workshop evaluation questionnaire

Introduction

This questionnaire is part of a European Commission project within the Intelligent Energy Europe programme. Your opinion is very important for the evaluation of the implemented workshops. It will only take you a few minutes to complete the questionnaire.

Many thanks in advance for your cooperation!

1. Place of residence .....
2. Gender Male ☐ Female ☐
3. Are you a swimming pool owner? Yes ☐ No ☐
4. Are you a swimming pool operator? Yes ☐ No ☐
5. Are you an installer of solar thermal systems? Yes ☐ No ☐
6. How do you find the SOLPOOL project?
   - ☐ Not at all interesting
   - ☐ Quite interesting
   - ☐ Interesting
   - ☐ Very interesting
   - ☐ Extremely interesting
7. Were you aware of the solar thermal system application for the heating of swimming pools before the workshop? Yes ☐ No ☐
8. In general, how did you find the materials and information presented in the workshop?
   - ☐ Not at all informative
   - ☐ Quite informative
   - ☐ Informative
   - ☐ Very informative
   - ☐ Extremely informative

9. How did you find the Impact Advisor?
   - ☐ Not at all useful
   - ☐ Quite useful
   - ☐ Useful
   - ☐ Very useful
   - ☐ Extremely useful
10. If you are an owner or a swimming pool operator, does your swimming pool already have a solar thermal system implemented? Yes ☐ No ☐

    If not, how willing would you be to implement the presented systems?
   - ☐ Not at all willing
   - ☐ Quite willing
   - ☐ Willing
   - ☐ Very willing
   - ☐ Extremely willing
11. If you are an installer, did you ever install a solar thermal system for swimming pool heating? Yes ☐ No ☐

    Do you think your business can directly benefit from the project? Yes ☐ No ☐

    How?

    .....

    .....
12. Please, share with us your comments, remarks and suggestions regarding anything related to the project and workshop (e.g. information material, impact advisor, further suggested actions)-

    .....

    .....

    .....

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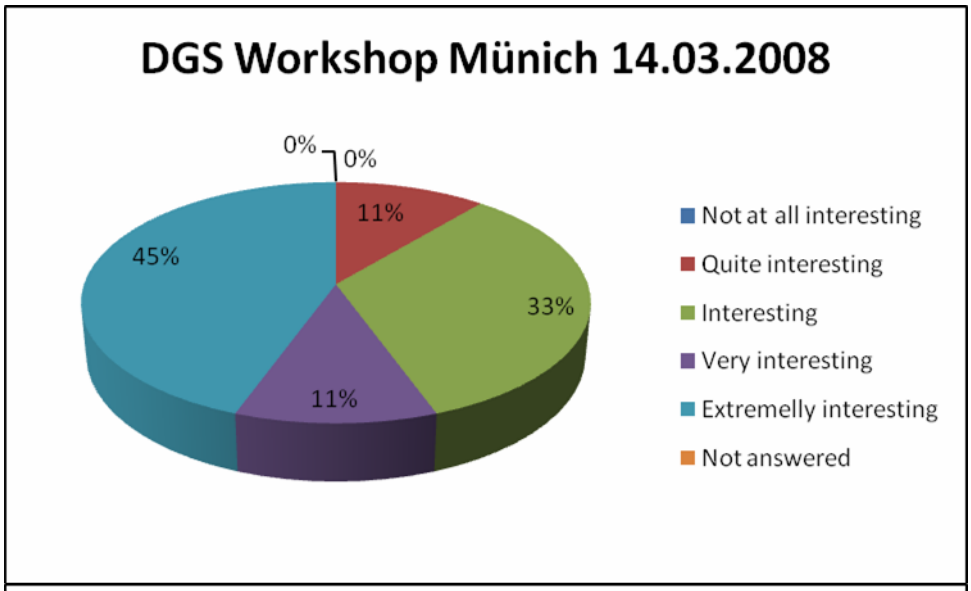
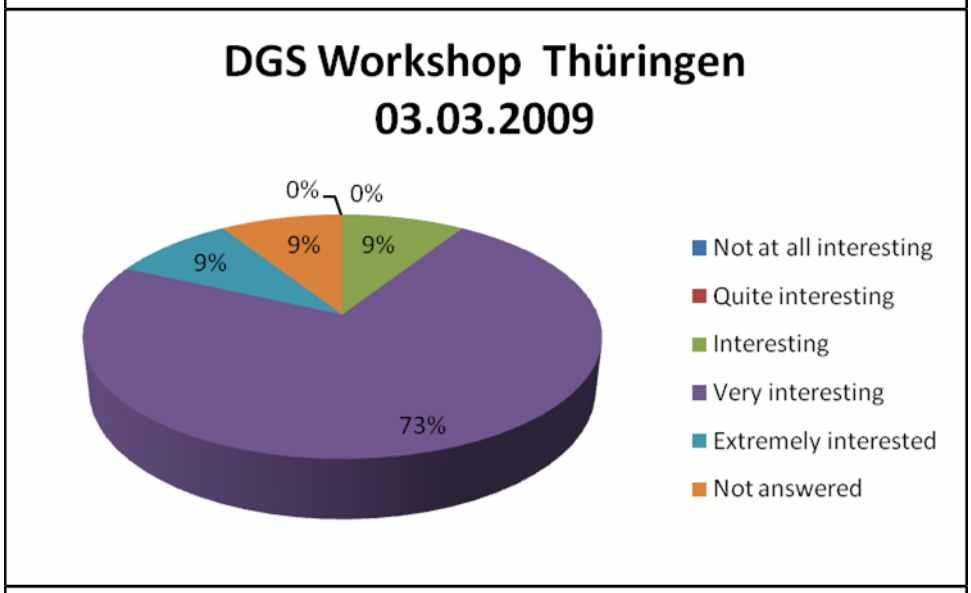
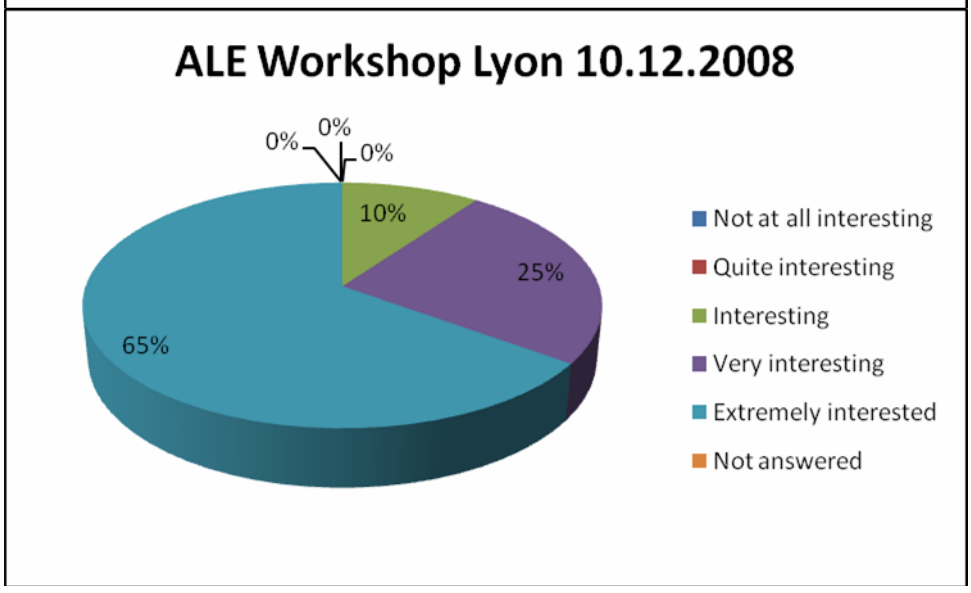
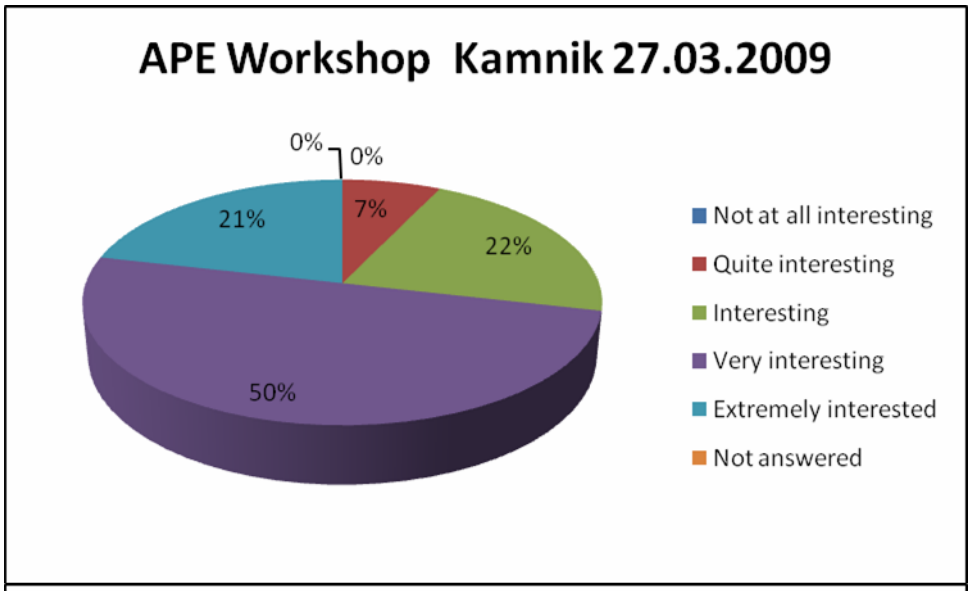
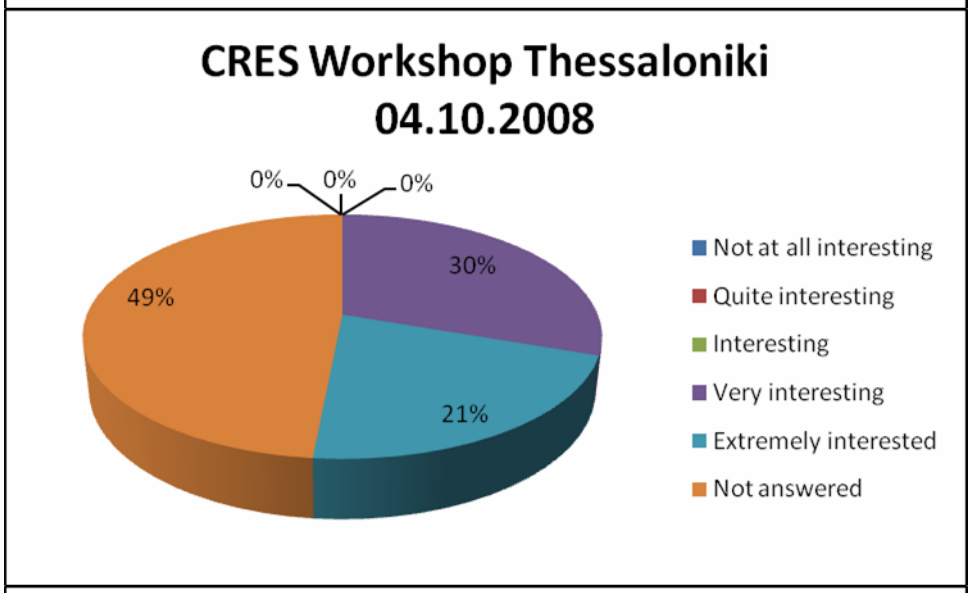
In some cases the returned questionnaires were uncompleted or non-completed at all. The following analysis is based on the results of 6 different workshops with a total of 124 participants completing their questionnaires. In general, based on the compiled data it can be said that the project raised a significant interest. When the participants were asked to select an answer to respond the question “how do you find the SOLPOOL project”? The results indicate that participants thought the project to be **from interesting to extremely interesting** as it can be seen in the following figures:

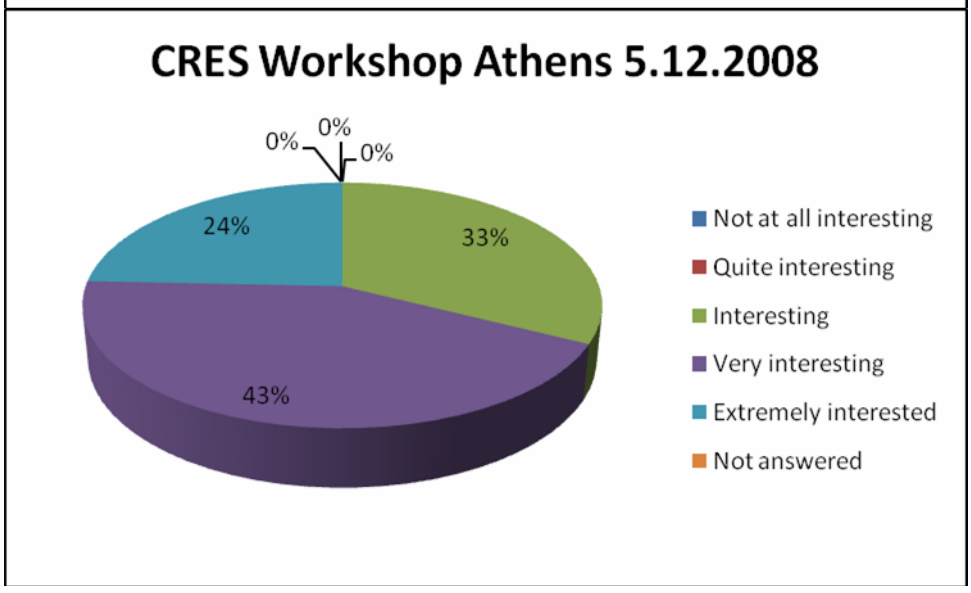

DGS Workshop Münich 14.03.2008
0%
0%
11%
33%
11%
45%
Not at all interesting
Quite interesting
Interesting
Very interesting
Extremelly interesting
Not answered


DGS Workshop Thüringen
03.03.2009
0%
0%
9%
9%
9%
73%
Not at all interesting
Quite interesting
Interesting
Very interesting
Extremely interested
Not answered

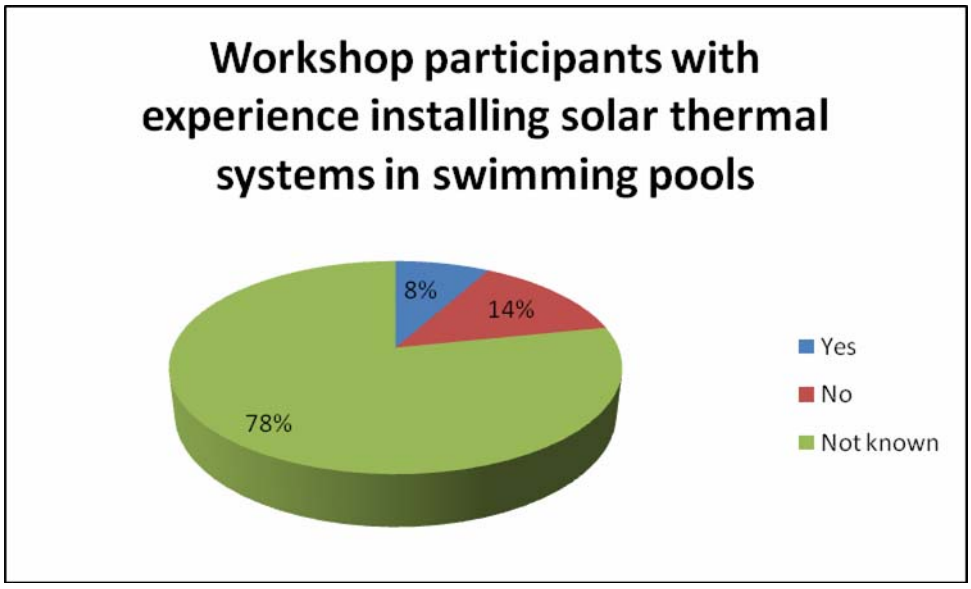

ALE Workshop Lyon 10.12.2008
0%
0%
0%
10%
25%
65%
Not at all interesting
Quite interesting
Interesting
Very interesting
Extremely interested
Not answered


APE Workshop Kamnik 27.03.2009
0%
0%
7%
22%
21%
50%
Not at all interesting
Quite interesting
Interesting
Very interesting
Extremely interested
Not answered

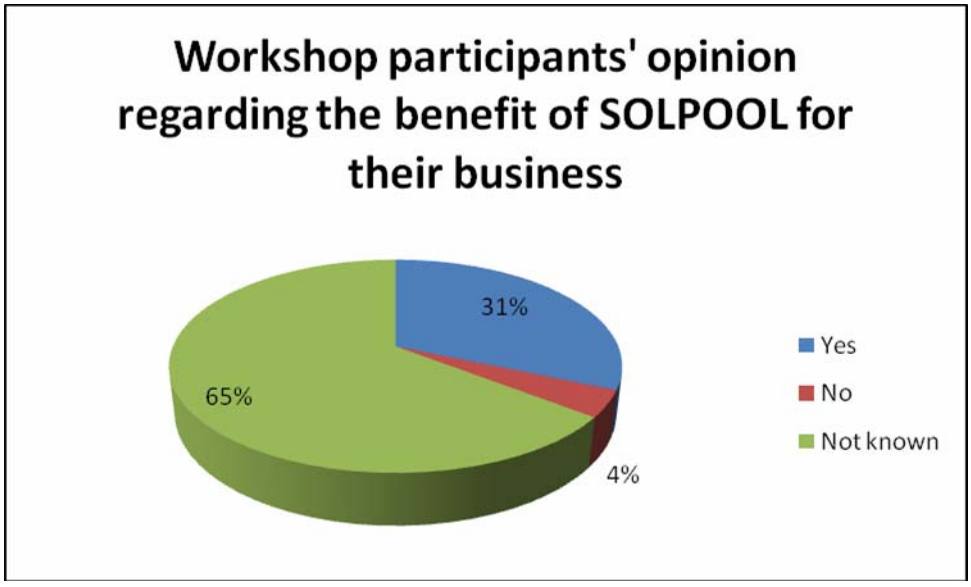

CRES Workshop Thessaloniki
04.10.2008
0%
0%
0%
30%
49%
21%
Not at all interesting
Quite interesting
Interesting
Very interesting
Extremely interested
Not answered


CRES Workshop Athens 5.12.2008
0%
0%
0%
24%
33%
43%
Not at all interesting
Quite interesting
Interesting
Very interesting
Extremely interested
Not answered

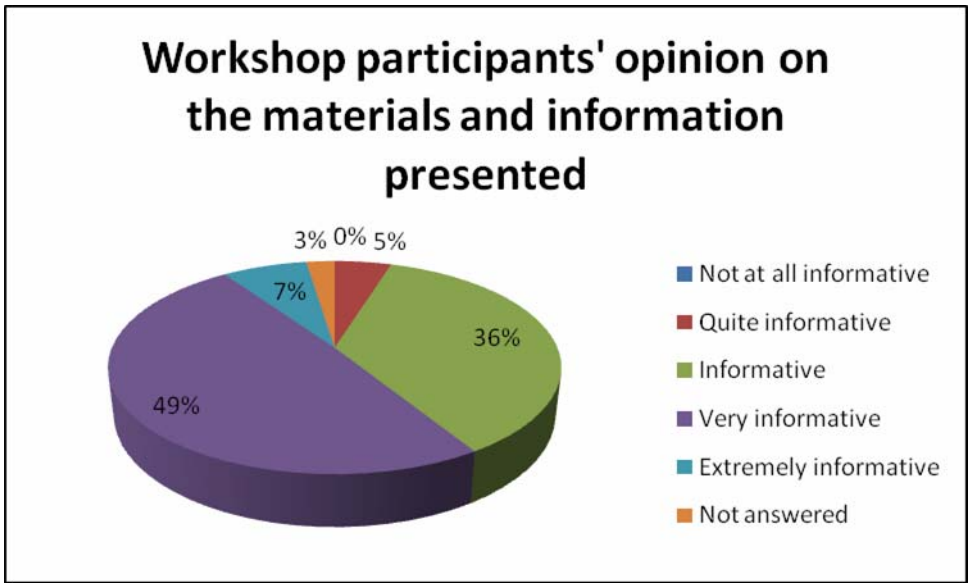
Another important question to be answered amongst the participants was the accumulated experienced installing solar thermal systems in swimming pools. Referring to the above workshops, the average was very low. Only 8% of the participants had previous experience with the topic in question:

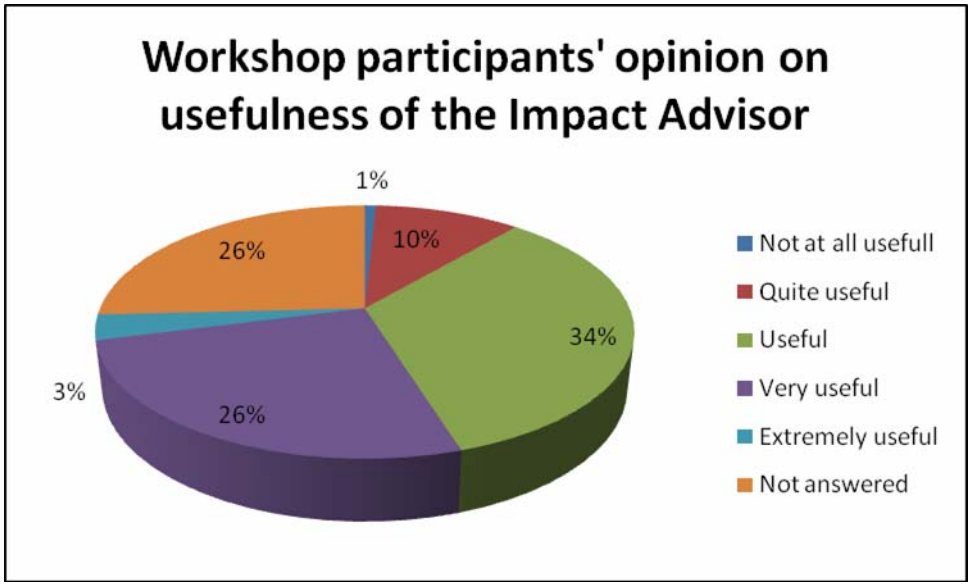


Regarding the impact that the SOLPOOL project might have on the participants' business the answer was not very clear. A share of 31% thought that they could directly benefit from the project but 65% did not answer to that question.



The materials and information presented at the workshops were considered mostly either very informative (49%) or informative (36%). When asked more specifically about the Impact Advisor, the participants considered it either useful (34%) or very useful (26%). It must be noted that 26% did not answer to that question probably following the comment of several attendees "I will first have to test it by myself in order to answer that question".





Out of the suggested comments in the questionnaires (Question 12) and the direct talk to the participants, a series of changes were implemented into the campaigns and materials. Subsequently it was decided to prepare a workshop documentation report including a summary sheet, information on preparation, workshop performance, photos and conclusions. A jobs- to-do list for the implementation of workshops was also prepared. A small example of part of one of the documented events and the jobs to do list for workshops can be seen as follows:

Documentation of SOLPOOL Events

1 Summary Sheet

Event:	Workshop for installers "Solar Thermal Systems for outdoor swimming pools heating"
Task number	3.03.04.05
Date, Location, Time:	14.07.2008, 17.00 -20.00 General Assembly of EBHE (Greek Solar Industry Association) Metropolitan Hotel, 385 Syggrou Av., Athens, Greece
Theme:	Solar Energy use in outdoor swimming pools
Target group:	☐ Owners and operators ☒ Installers
Performance:	2 presentations discussion
Participants:	20 participants, see attached list of participants
Success:	The event was organized by CRES as a closed technical meeting for the members of the Greek Solar Industry Association members (EBHE). During the event, the SOLPOOL project, the available technologies, the environmental gains, the energy savings and system costs as well as the Impact Advisor tool were presented by Ms Rozi Christodoulaki & Mr Dimitris Chasapis (CRES). The welcome address was made by the president of EBHE, Mr Emmanouel Kastanakis. The discussions were focused on technical & economical aspects as well as barriers.
Download:	The presentations can be downloaded under www.solpool.info

2 Workshop Preparation

The workshop for installers was held in the framework of the General Assembly of EBHE.

EBHE is the Greek Solar Industry Association. It was formed in 1979 and currently has 21 members. All 21 EBHE members are manufacturers of solar thermal systems, while among the associate members there are research institutes working on renewable energy (such as the National Centre for Scientific Research "Demokritos", and the Greek Centre for Renewable Energy Sources - CRES).

EBHE is aiming at promoting solar energy both on the national as well as the international level. It also guarantees that all its members follow the highest international standards in the manufacturing process of solar thermal systems, so that the customer enjoys the maximum benefits of solar energy. EBHE is a founding member of the European Solar Thermal Industry Federation (ESTIF).

The SOLPOOL agenda was incorporated to the GA agenda and during the meeting the SOLPOOL flyer was distributed among the participants.

3 Workshop Performance

The participants were solar thermal installers and manufactures of solar thermal collector and components.

3.1 Presentations

During the event the key speakers presented the following topics:

- "Solpool – Solar Energy Use for outdoor swimming pools, an European Project", *Rozi CHRISTODOULAKI, CRES*

  The presentation included a short presentation of CRES activities, the main scope, the consortium, the target groups and key actors, the main activities and the expected results of the project, as well as the contact details of the technical help desk.
- "Solar thermal technologies for outdoor swimming pool heating", *Rozi CHRISTODOULAKI, CRES*

  The principle, the components of the system, planning & dimensioning, cost and benefits, environmental gains and good practice examples, are the main topics of this presentation.
- "The Impact Advisor Tool", *Dimitris CHASAPIS, CRES*

  Detailed presentation of the Impact Advisor tool by Mr D. Chasapis. Assumptions, needed data, input & output and examples of calculations for different locations, collector types etc.

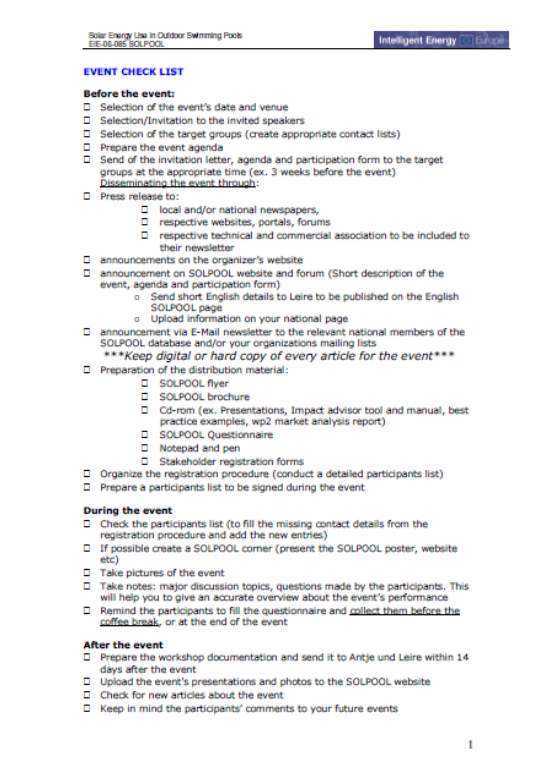
3.2 Discussion & Conclusion

The main topics of the discussion was technical issues (type of collectors, dimensioning and planning for ST for pool heating and domestic hot water production etc), economic issues such as reduction of capital cost, monitoring, combi systems. Also installers presented their opinion on already operating systems and pointed out those bad examples of the past (installed systems during 80') that are "hunting" the evolution of this technology and the pool owners and operator use circumspection with systems.

3.6 Photos

Picture 1 General assembly of EBHE

Picture 2 Ms Rozi Christodoulaki during her presentation



Solar Energy Use in Outdoor Swimming Pools
EIE-06-085 SOLPOOL

EVENT CHECK LIST

Before the event:

- ☐ Selection of the event's date and venue
- ☐ Selection/Invitation to the invited speakers
- ☐ Selection of the target groups (create appropriate contact lists)
- ☐ Prepare the event agenda
- ☐ Send of the invitation letter, agenda and participation form to the target groups at the appropriate time (ex. 3 weeks before the event)
  Disseminating the event through:
- ☐ Press release to:
  - ☐ local and/or national newspapers,
  - ☐ respective websites, portals, forums
  - ☐ respective technical and commercial association to be included to their newsletter
- ☐ announcements on the organizer's website
- ☐ announcement on SOLPOOL website and forum (Short description of the event, agenda and participation form)
  - Send short English details to Leire to be published on the English SOLPOOL page
  - Upload information on your national page
- ☐ announcement via E-Mail newsletter to the relevant national members of the SOLPOOL database and/or your organizations mailing lists
  Keep digital or hard copy of every article for the event
- ☐ Preparation of the distribution material:
  - ☐ SOLPOOL flyer
  - ☐ SOLPOOL brochure
  - ☐ Cd-rom (ex. Presentations, Impact advisor tool and manual, best practice examples, wp2 market analysis report)
  - ☐ SOLPOOL Questionnaire
  - ☐ Notepad and pen
  - ☐ Stakeholder registration forms
- ☐ Organize the registration procedure (conduct a detailed participants list)
- ☐ Prepare a participants list to be signed during the event

During the event

- ☐ Check the participants list (to fill the missing contact details from the registration procedure and add the new entries)
- ☐ If possible create a SOLPOOL corner (present the SOLPOOL poster, website etc)
- ☐ Take pictures of the event
- ☐ Take notes: major discussion topics, questions made by the participants. This will help you to give an accurate overview about the event's performance
- ☐ Remind the participants to fill the questionnaire and collect them before the coffee break, or at the end of the event

After the event

- ☐ Prepare the workshop documentation and send it to Antje und Leire within 14 days after the event
- ☐ Upload the event's presentations and photos to the SOLPOOL website
- ☐ Check for new articles about the event
- ☐ Keep in mind the participants' comments to your future events

1

The following feedback obtained from the initial workshops was considered in the subsequent ones:

- Solpool targets mainly community outdoor pools, private pools should also be included
- It would be important to have owners with running solar heating systems as speakers in the workshops. Their direct experiences can be very interesting
- The approach could be more practical
- Solpool partners have to disseminate amongst installers about the market potential and the key point: quality of the installation and maintenance
- It would be interesting to have more best practice examples, including those with renovated heating systems
- The majority of the target audiences were aware of solar thermal systems' application for pool heating before the workshops
- In the cases where less than 10 workshop participants are registered, it is recommended to merge the workshops for the two main differentiated target groups in one
- Designer, planners and architects could also be invited to the workshops aimed for installers
- The Impact Advisor should consider different pool sizes

- We will use the experiences when planning new heating systems for existing swimming pools

As a result of the feedback the following actions were taken:

- Hotel associations were invited to the events
- Owners of pools with solar pool heating running systems were invited to the workshops to share their experiences
- The workshops for installers increased the technical content, for instance presenting and comparing all the available systems in the market, including installation and maintenance problems and their solutions
- More best practice examples were prepared, including those were renovation of a previous heating system took place
- Workshops of installers and owner and operators were merged when not enough audience was present or for cost effectiveness purposes (minimization of travel costs, conference room rent etc).

3. Optimization of dissemination materials and produced deliverables

The dissemination materials were continuously adapted and developed. Here the major adaptations and changes are presented:

Demand and Potential report

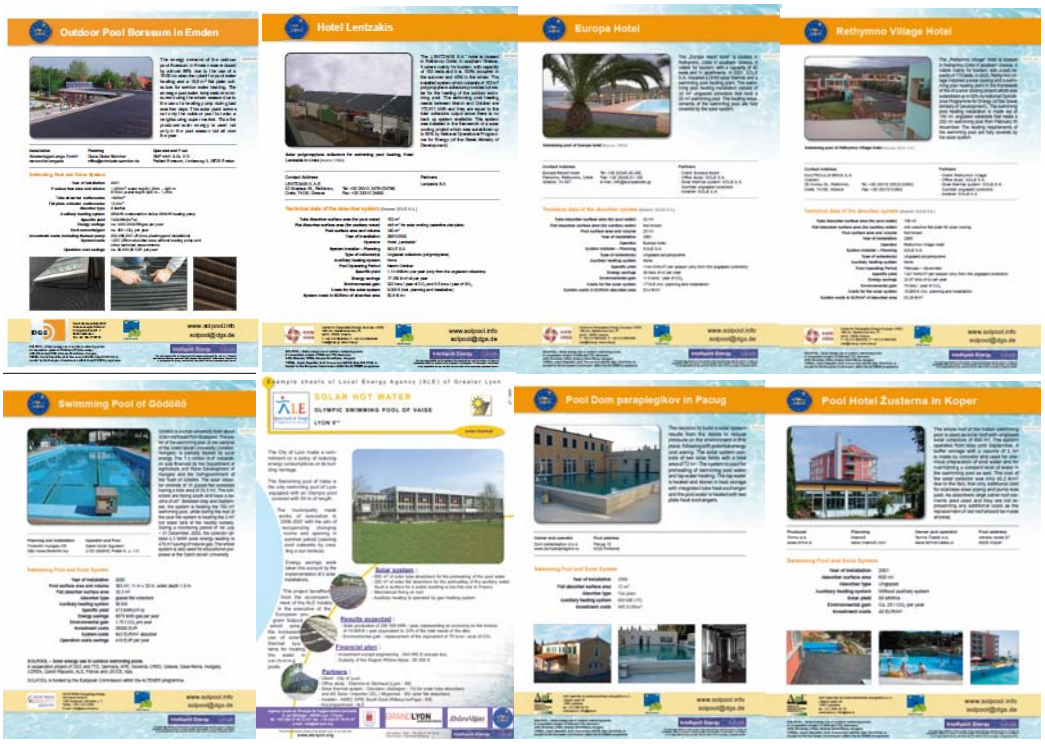
This report was improved according to the recommendations of the project officer, i.e. more comprehensive information on the state of the art, market potential, grant schemes and cost benefit analysis was included.

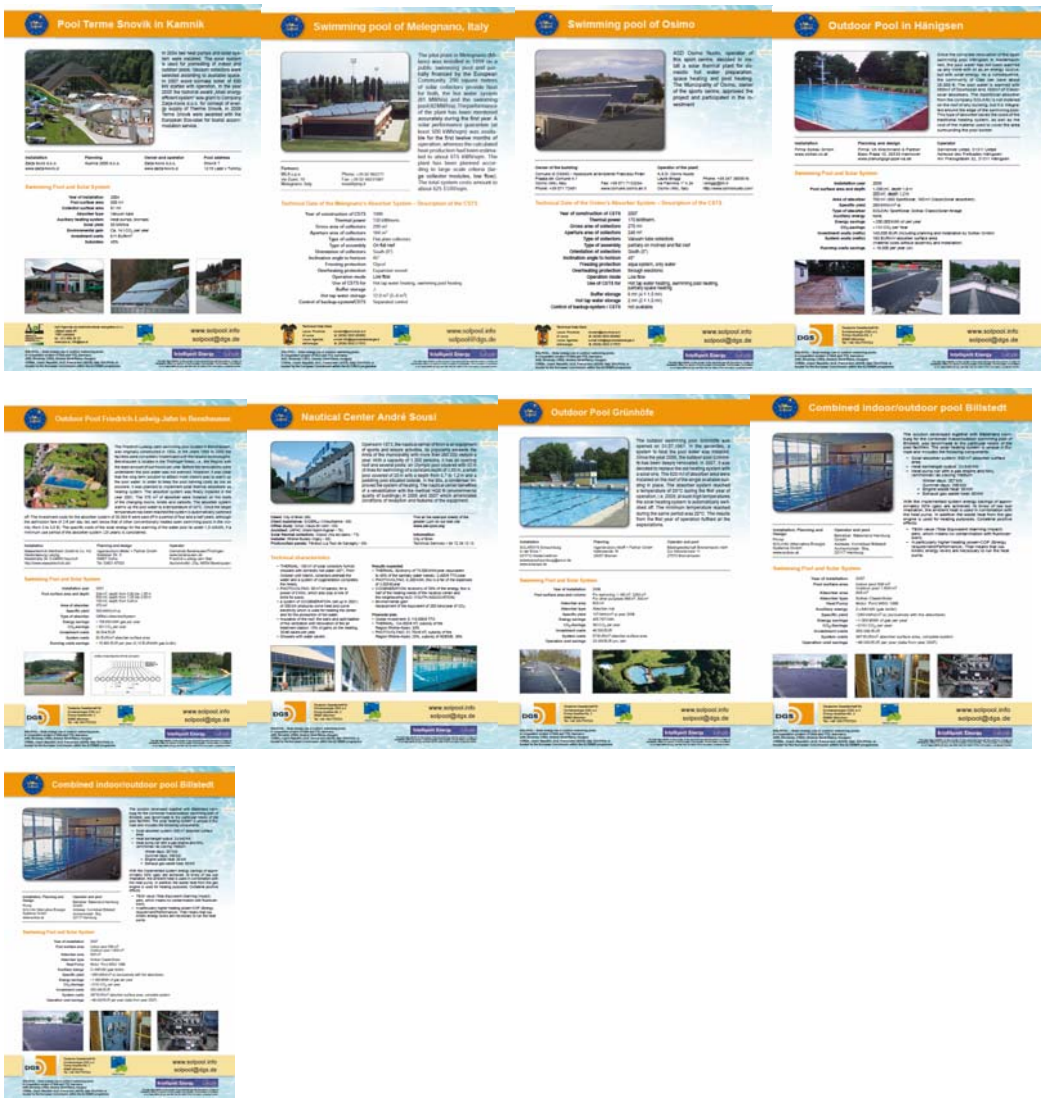
Facebook

The online forum was replaced by a facebook group, which was considered more popular and therefore it reaches a wider audience.

Best practice examples

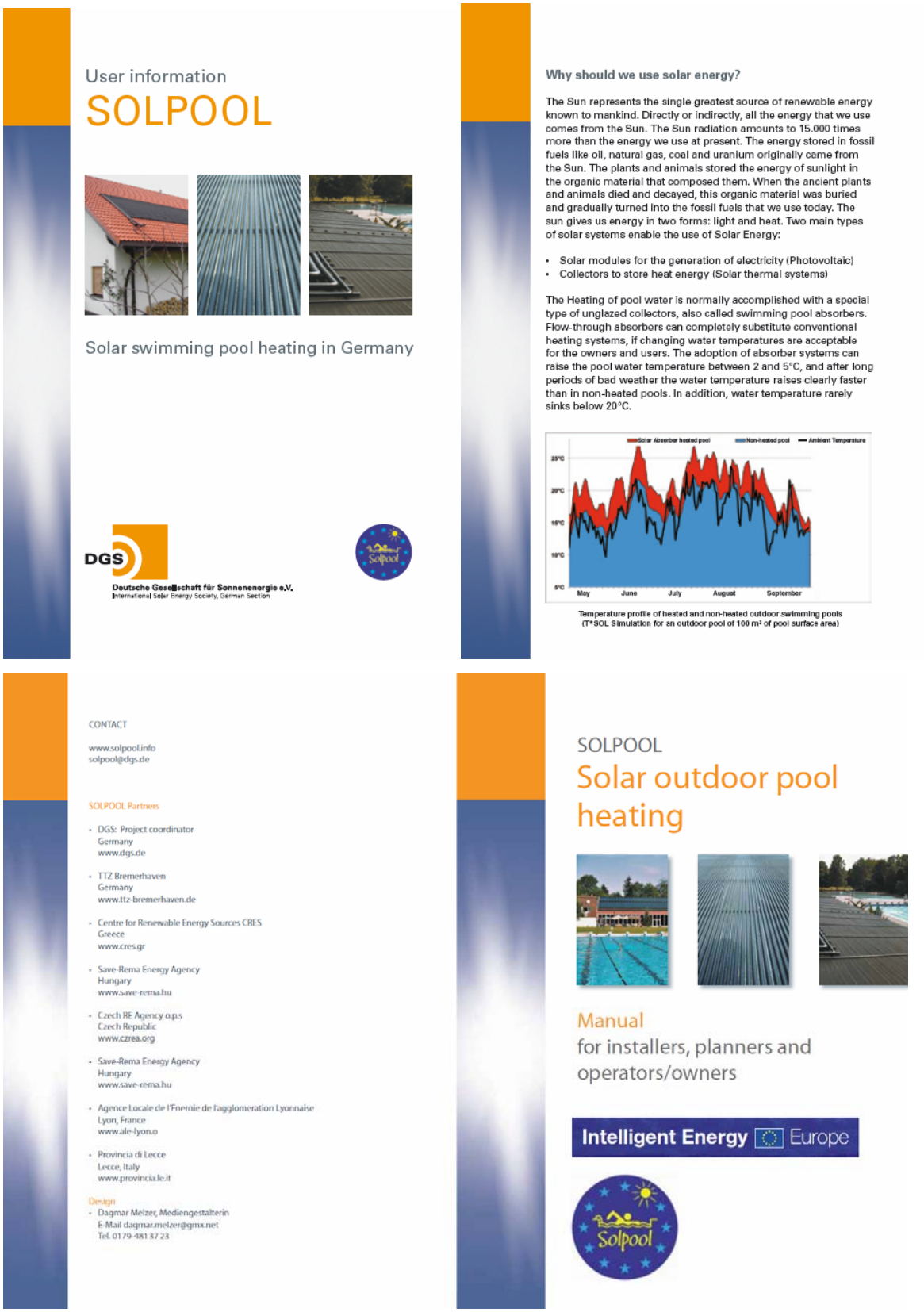
The number of best practice examples was greatly increased from 2 to 17 with examples from all the participating countries and regions. All of them are available in the national languages as well as in English. Some examples from different partners were also translated into several national languages in order to be able to present examples from other participating countries.





Manuals

A new 12 page user manual was produced and the manual for installers and operators was improved in all the languages.



Impact Advisor

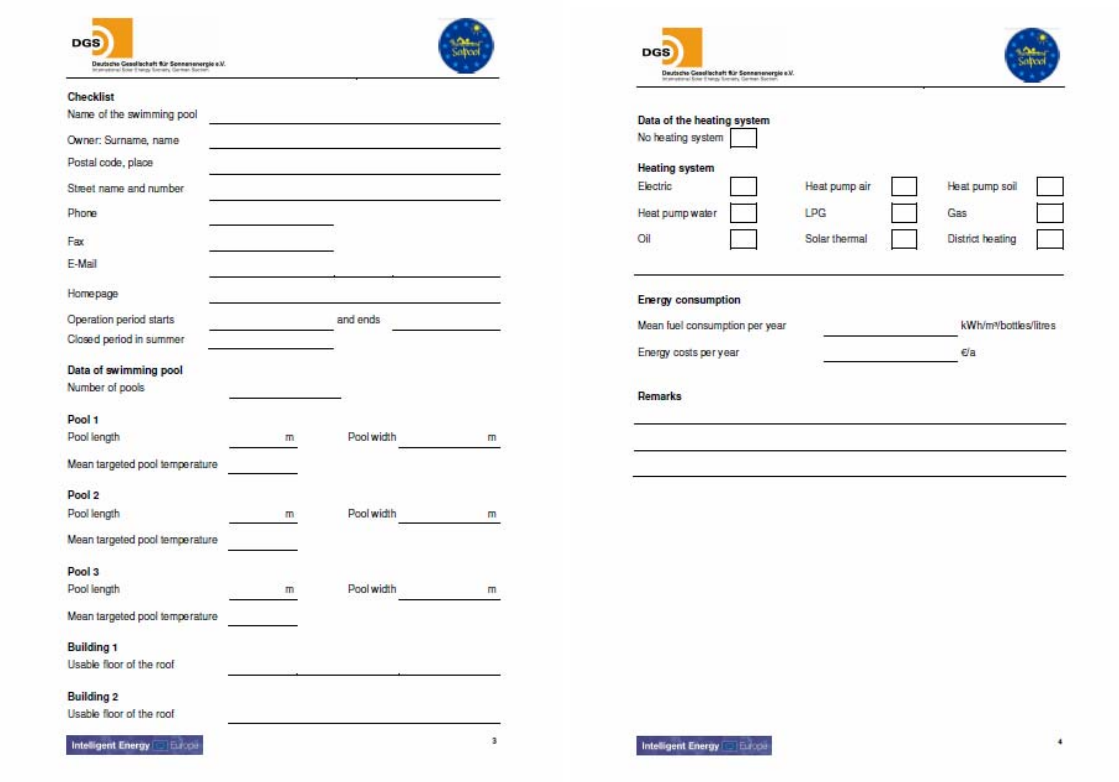
According the input received from the workshop participants and the consortium partners an instruction manual for the input advisor was created. In addition the following improvements were done to the Impact Advisor:

- The specific solar yield was modified so that it is not longer an input value; it is however considered for the calculations
- The global radiation reference was extended to different areas of the participating countries.
- Three types of pools were differentiated in terms of size and system costs. The chosen sizes are as follows:

1. Up to 100 m^2
2. >100 m2 up to 500m^2
3. >500m2 up to 1000m^2

- Each partner had to provide the average cost per square meter of the installed solar heating systems (both unglazed and flat plate collectors) for the three different selected pool sizes
- For the simulations to be performed an average surface area of 10m2 of pool per person were be considered.

Apart from the instruction manual, a guide for feasibility checks including a check list was prepared:



DGS

Checklist

Name of the swimming pool _____

Owner: Surname, name _____

Postal code, place _____

Street name and number _____

Phone _____

Fax _____

E-Mail _____

Homepage _____

Operation period starts _____ and ends _____

Closed period in summer _____

Data of swimming pool

Number of pools _____

Pool 1

Pool length _____ m Pool width _____ m

Mean targeted pool temperature _____

Pool 2

Pool length _____ m Pool width _____ m

Mean targeted pool temperature _____

Pool 3

Pool length _____ m Pool width _____ m

Mean targeted pool temperature _____

Building 1

Usable floor of the roof _____

Building 2

Usable floor of the roof _____

Intelligent Energy Europe 3

DGS

Data of the heating system

No heating system ☐

Heating system

Electric ☐ Heat pump air ☐ Heat pump soil ☐

Heat pump water ☐ LPG ☐ Gas ☐

Oil ☐ Solar thermal ☐ District heating ☐

Energy consumption

Mean fuel consumption per year _____ kWh/m³/bottles/litres

Energy costs per year _____ €/a

Remarks

_____

_____

_____

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Panels

The consortium decided to produce posters instead of panels in order to increase the amount of units to distribute and to reach a higher audience. After contacting some swimming pools

regarding the preference for displaying a poster or a panel, they chose the posters. A total of 8 posters in different languages were produced. Here are some examples:

5. Conclusions and recommendations

The experiences of all the different campaigns in the participating countries and regions have generated an important knowledge in terms of the most suitable content for the materials to be used as dissemination means. Best practice examples have been greatly increased and the Impact Advisor has been improved. Both of them have proven to be the most accepted dissemination materials at workshop level due to the fast and direct information and benefit that the target groups can obtain. The target groups have also been widened by for instance inviting hotel owners, planners, architects and designers to participate in the workshops. In the majority, all the countries and regions experienced difficulties in organizing isolated workshops. The most successful events in terms of attendance have definitely taken place in combination with fairs and exhibitions. Therefore, whenever possible we always tried to organize the final workshops in combination with other big events. We would recommend for any future similar actions to identify beforehand, at the project preparation level, the events where a SOLPOOL workshop could be organized in parallel.