




EIE-06-085 SOLPOOL

Intelligent Energy  Europe

# Solar Energy Use in Outdoor Swimming Pools SOLPOOL

**Event documentation**

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## Documentation of SOLPOOL Events



### 1 Summary Sheet

<b>Event:</b>	Workshop for owners “Solar Thermal Systems for outdoor swimming pools heating”
<b>Task number</b>	3.03.04.08
<b>Date, Location, Time:</b>	23.04.2009, 16.00 -20.00 Portes Palace, Potidea, Nea Moudania, Chalkidiki, Central Macedonia, Greece
<b>Theme:</b>	Solar Energy use in outdoor swimming pools
<b>Target group:</b>	<input checked="" type="checkbox"/> Owners and operators <input type="checkbox"/> Installers
<b>Performance:</b>	4 presentations, 1 oral and discussion
<b>Participants:</b>	14 participants, see attached list of participants [0]
<b>Success:</b>	<p>The workshop was co-organized by CRES and the Chalkidiki Hotel Association in Chalkidiki, in Northern Greece.</p> <p>Mr Gregory Tassios, President of the Halkidiki Hotel Association delivered a speech about the importance of the use of renewable energies and the upgrade of the green “Image” of the Hotel Sector.</p> <p>During the event, the SOLPOOL project was presented by Mr Dimitris Chasapis (CRES).</p> <p>The available technologies, the environmental gains, the energy savings and system costs, technical aspects as well as the Impact Advisor tool were presented by Ms Rozi Christodoulaki &amp; Mr Dimitris Chasapis (CRES).</p> <p>Mr Dimitris Nalbantis (HELIONAL SA) carried a presentation of an ST system installation for the heating of a private pool in a house located on Corfu island.</p> <p>Mr Filimon Kokkinos (SOLE SA) made a presentation of an ST system installation used to cover all the thermal needs (DHW, heating, cooling and swimming pool heating) of a hotel in Rethymno on the island of Crete</p> <p>The discussion was focused on technical &amp; economical aspects.</p>
<b>Download:</b>	The presentations can be downloaded under <a href="http://www.solpool.info/2335.0.html">http://www.solpool.info/2335.0.html</a>

## 2 Workshop Preparation

In order to enhance the dissemination of the ST technology for pool heating and the results of the project, the last WP3 workshop was organized in Chalkidiki especially for the members of Halkidiki Hotel Association, after the invitation from the President of the Association, Mr Gregory Tassios. Mr Tassios, who participated into Solpool workshop in Thessaloniki (11/02/09). Chalkidiki, is the top selection of the vacationers in the region of Northern Greece with numerous 4 and 5 stars hotels, which include more than one outdoor swimming pools.

The Solpool workshop referred to hotel owners and operators with outdoor swimming pools.

### SOLPOOL & SOLAIR projects synergy.

*Since CRES is participating in both SOLPOOL and SOLAIR projects and after consideration of the points discussed during the project meeting in Athens regarding potential projects synergies, Ms Rozi Christodoulaki (SOLAIR & SOLPOOL) and Ms Effie Korma (SOLPOOL) took the initiative of including a presentation for the Solar air-conditioning technology in the SOLPOOL event in Chalkidiki (presentation by Ms Rozi Christodoulaki, who was one of the key speakers at SOLPOOL workshops). Other costs referring to conference room rent, catering, etc, were covered by the Halkidiki Hotel Association.*

Since the workshop was organized mainly for the members of the Halkidiki Hotel Association, the promotion of the workshop was accomplished through:

- ✓ press release by the Halkidiki Hotel Association to its members

(<http://www.halkidiki-hotels.gr/index.php?MODULE=bce/application/pages&SiteID=534>)

- ✓ announcement on CRES website calendar and homepage [1]

## 3 Workshop Performance

14 participants attended the SOLPOOL workshop, which was held from 16.00 to 20.00 (see programme 4.1). The attendants were mainly hotel owners as well as engineers from the Technical Chamber of Greece. All the attendants received a folder with the workshop material (brochure, flyer, cd-rom, newsletter, questionnaire etc). Extra folders were forwarded to the Association for their distribution to its members.

### 3.1 Presentations

During the event the key speakers presented the following topics:

- “Solpool – Solar Energy Use for outdoor swimming pools, an IEE Project”, *Dimitris CHASAPIS, CRES*

The presentation included a short reference to the 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 were the main topics of this presentation.

- “Technical Aspects-The Impact Advisor Tool”, *Dimitris CHASAPIS, CRES*

Mr D. Chasapis proceeded to a detailed presentation of the Impact Advisor tool (version 1 & 2), which included the assumptions, required data, input & output as well as examples of calculations for different locations, collector types etc, considered for the employment of the tool.

- Private pool in Corfu Island example .

Mr Dimitris Nalbantis (HELIONAL SA) had a presentation of an ST system installation for the heating of a private pool in a house located on Corfu Island. Helional designed the whole system and was also the manufacturer of the solar thermal collector. This presentation also included a selection of projects in Greece & Balkan countries.

- Solar Heating, Cooling and Swimming Pool heating in Hotel in Crete Island example.

Mr Filimon Kokkinos (SOLE SA) made a presentation of an ST system installation for the DHW, space and swimming pool heating as well as space cooling of a hotel located on the Island of Crete. SOLE designed the whole system and was also the manufacturer of the solar thermal collector and chiller.

*See attached MS Power Point slides (4.4)*

### **3.2 Discussion**

The discussion that followed the main presentations was focused both on economical and technical issues referring to the installation, operation and performance of ST systems. In specific, questions were raised concerning reliability and maintenance of the systems. Moreover, most of the attendants were interested in economic and cost data as well as the availability of funding schemes and the prospects for introducing new incentives for encouraging the installation of ST systems.

### **3.3 Conclusion**

The location of these hotels (climate of northern Greece), the seasonal operation and the large number of daily visitors to the pools conclude to significant operational costs and meet almost all the prerequisites for a successful substitution of a conventional pool heating system. The attendants received with eagerness the initiative of the organization of an event on this subject. The discussion on technical and economical aspects of ST installations for swimming pool heating, resulted to the conclusion that the Hotel owners were very inter-

ested in the installation of ST systems and therefore they took the opportunity to talk directly to well experienced companies about their future projects. However, the current financial crisis as well as the unavailability of funding schemes composes a significant barrier for the installation of such systems.

## 4 Workshop Documentation

### 4.1 Invitation

(Invitation by Halkidiki Hotel Association directly to its members)

### 4.2 Programme



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ΗΛΚΙΔΙΚΗ ΟΤΑ



ΗΜΕΡΙΔΑ



ΧΑΛΚΙΔΙΚΗ

**ΕΦΑΡΜΟΓΕΣ ΘΕΡΜΙΚΩΝ ΗΛΙΑΚΩΝ ΣΥΣΤΗΜΑΤΩΝ  
ΚΟΛΥΜΒΗΤΙΚΕΣ ΔΕΞΑΜΕΝΕΣ &  
ΗΛΙΑΚΟΣ ΚΛΙΜΑΤΙΣΜΟΣ**

Χαλκιδική, Ξενοδοχείο Portes Palace  
Πέμπτη, 23 Απριλίου 2009

**ΠΡΟΓΡΑΜΜΑ**

**15:30-16:00 Εγγραφές**

**16:00 -16:20 Χαιρετισμοί**  
Τάσιος Γ., Πρόεδρος Ένωσης Ξενοδόχων Χαλκιδικής

**16:20-16:40 Παρουσίαση του ευρωπαϊκού έργου «SOLPOOL»**  
Χασάπης Δ., Κέντρο Ανανεώσιμων Πηγών και Εξοικονόμησης Ενέργειας-ΚΑΠΕ

**16:40-17:00 Τεχνολογίες Θέρμανσης Κολυμβητικών Δεξαμενών με χρήση ΘΗΣ**  
Χριστοδουλάκη Ρ., Κέντρο Ανανεώσιμων Πηγών και Εξοικονόμησης Ενέργειας-ΚΑΠΕ

**17:00-17:20 Παρουσίαση του υπολογιστικού εργαλείου «Impact Advisor»**  
Χασάπης Δ., Κέντρο Ανανεώσιμων Πηγών και Εξοικονόμησης Ενέργειας-ΚΑΠΕ

**17:20-17:40 Διάλειμα Καφέ**

**17:40-18:20 Παραδείγματα Εφαρμογών**  
Ναλμπάντης Μ., ΗΛΙΟΝΑΛ - Υιοί Ναλμπάντης Ο.Ε.  
Κόκκινος Φ., SOLE Α.Ε.

**18:20-19:10 Ευρωπαϊκό Έργο SOLAIR**  
Ηλιακός Κλιματισμός - Σχεδιασμός & Εγκατάσταση Συστημάτων  
Χριστοδουλάκη Ρ., Κέντρο Ανανεώσιμων Πηγών και Εξοικονόμησης Ενέργειας-ΚΑΠΕ

**19:10-20:00 Ερωτήσεις-Συζήτηση**

Με την υποστήριξη του προγράμματος

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### **4.3 Registration Form**

*(The registration procedure was handled by Halkidiki Hotel Association)*

### **4.4 Power Point presentations**

#### 4.6 Photos



The key speakers and the audience

#### **4.7 The event in the media**

The event was covered by two local TV networks (Super TV and TV Halkidiki)

#### **4.8 References**

1. Centre for Renewable Energy Sources and Saving [www.cres.gr](http://www.cres.gr)
2. Halkidiki Hotel Association [www.halkidiki-hotels.gr](http://www.halkidiki-hotels.gr)
3. EBHE, Greek Solar Industry Association, [www.ebhe.gr](http://www.ebhe.gr)