



**Tarragona:** the ancient Tarraco, a city with more than 2000 years of history, was one of the most important capitals of the Roman Empire. The UNESCO named Tarragona as World Heritage.



Organisation:

**Organisation Committee**

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**Conference Venue**

Palau Firal i de Congressos  
de Tarragona  
Tarragona Trade-Fair and  
Congress Centre  
Arquitecte Rovira, 2  
43001 Tarragona, Spain  
Phone: +34 977 245 577  
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**Conference Fee**

**If registered until March 14<sup>th</sup>, 2010 | after March 14<sup>th</sup>, 2010**  
Per Person: € 700,- | 780,-  
Member of OTTI/EPIA, EUREC:  
Per Person: € 600,- | 650,-  
Reduced fee for presenters:  
Per Person: € 360,-  
From third participant on,  
every other participant of your  
company profits from our **15% discount**  
on the conference fee. Fees cover the admission to all  
sessions, invitation to all coffee  
breaks, two conference lunches,  
a dinner, the conference procee-  
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**Accommodation**  
Please book your accommo-  
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**5<sup>th</sup> European  
PV-Hybrid and Mini-Grid Conference**

**April 29<sup>th</sup>/30<sup>th</sup>, 2010 in Tarragona, Spain (IPV 3222)**

- I will participate.
- I will submit a paper.
- Interested in sponsorship.
- Interested in trade exhibition.

Family name \_\_\_\_\_

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**OTTI e.V. Renewable Energies, Wernerwerkstraße 4,  
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**Fax: +49 941 29688-17**

**Registration Conditions**

You will receive the relevant papers and confirmation as soon as we have your registration. The fees are exempt from value-added tax (VAT) and are payable in full upon receipt of the invoice. **Payment must be received no later than 14 days before the conference begins (it has to be settled in EURO). All bank charges have to be covered by the transmitter!** OTTI reserves the right to refuse admission if the amount has not arrived, unless said amount is paid by cheque on the day. In case transferring occurs later than 14 days before the conference, please keep a copy of the transfer order ready and show it in the organisation office at the conference. OTTI reserves the right to change the programme at short notice for urgent reasons. There is no charge for cancellations made at least 35 days before the event starts. If the booking is cancelled 34 days before the start of the conference a service charge of € 120,00 will be made. For later cancellations (14 days before the conference starts) the complete conference fee will be charged. All cancellations must be in writing. It is possible to send a substitute delegate at any time without additional cost, but we need a written message about the change 4 days before the conference starts. Legal domicile and place of fulfilment is Regensburg, Germany.



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**5<sup>th</sup> European**

**PV-Hybrid and  
Mini-Grid Conference**

**April 29<sup>th</sup>/30<sup>th</sup>, 2010  
Palau Firal i Congressos  
Tarragona, Costa Dorada, Spain**



Supported by:



The 5<sup>th</sup> European Conference on PV-Hybrid Systems and Mini-grids will be held in Tarragona, Spain, on April 29<sup>th</sup>/30<sup>th</sup>, 2010.

We have the pleasure to invite you to actively participate in this European Conference, which will take place at a crucial moment, where changes are shaping the electricity generation and distribution paradigm of the future. Among the major driving forces of this transition are the development of both PV Hybrid systems and their integration into micro- and mini-grids for high penetration of Renewable Energy Sources (RES).

One of the main assets of solar radiation as energy source is its universality, and the value of PV technology is its capacity to convert it into clean electricity anywhere at any size. For this technology, the tremendous opportunities and challenges are to provide electricity supply to rural villages and scattered population, to refurbish, with PV hybrids, diesel power plants operating in existing remote villages and islands as well as increasing the security of supply in interconnected mini-grids. This universality is further broadened by adequate hybridization with small wind, biomass and other renewable energy sources and by sharing a common approach in both industrialized and developing countries. In European insular regions, like the Greek Archipelagos or the Canary Islands, with weak electrical systems, territorial protections and other barriers to the development of conventional grids, these distributed generation technologies are already being taken into consideration by energy policy makers and constitute excellent laboratories for testing technological, social and regulatory aspects that can be transferred to developing areas around the world as well as to continental systems.

PV hybrids are a growing comprehensive field that involves scientists, engineers, sociologists, economists and entrepreneurs of the public as well as the private sector, the academics as well as the field experience. Moreover from the technological point of view it offers a unique opportunity of cross-fertilization with other emerging technologies like smart-grids, hydrogen, electricity storage, and grid-connected PV, etc.

After the success of the previous 4 events we encourage submission of papers that contribute to broaden and share the knowledge in this area. The topics of the conference include field experience and systems' technology based on PV as well as small wind hybrid generation and concepts for the implementation of mini-grids. Developments in system components, advanced storage and back-up will be addressed. Moreover, new strategic approaches for optimizing design and operation will be presented. Issues of special interest will include possible synergies that could arise from the combination of mini-grid schemes with numerical weather forecast models, demand management, communication (ICT) technologies and socio-economic issues.

High volatility of fossil fuel markets and the need to mitigate GHG emissions are stressing the need to look for ways to increase the use of indigenous clean renewable energy sources. PV-Hybrid systems and Mini-grids are a tool to contribute towards these objectives. We are looking forward to the opportunity to share with you all the exciting ongoing progresses in these fields and hope to meet you at the Conference.

### Chairmen Tandem:

Xavier Vallvé, Trama TecnoAmbiental (TTA), Barcelona, Spain  
Gonzalo Piernavieja, Instituto Tecnológico de Canarias (ITC), Canary Islands, Spain

### Topics of the Conference

#### Papers are invited on the following topics:

##### 1. Field Experience

- Operation and Maintenance
- Socio Economics
- Sustainability

##### 2. Systems Technology

- PV-Hybrid
- PV-Wind Hybrids
- Information and Communication Technologies (ICT)
- Advanced Management Technologies
- Standardization

##### 3. Components

- Storage Technologies
- Power Electronics
- Power Generation

##### 4. Simulation and Sizing

##### 5. Political, Economic and Regulatory Frameworks

##### 6. Education and Training

##### 7. Economical Feasible Projects

##### 8. Social and Behavioural Aspects

Papers will be presented orally and in poster sessions. All accepted papers will be published in the proceedings volume and on CD-ROM.

The abstract, in English, should include: Full title, author's full name, affiliation, address, phone/fax/e-mail, name and affiliation of co-authors, topic, kind of presentation (oral or poster), a brief summary including the purpose, methods, approach, results and conclusions of the presented work.

The whole on ONE sheet A4. In addition, authors may add up to 1 explanatory page to facilitate the reviewer's assessment.

The submission of your abstract implies a **compulsory** participation in the conference and presentation of your paper or poster. **With the acceptance of your abstract you are automatically registered for the conference. It is not possible to cancel once accepted!**

### Deadline for submissions of abstracts: October 5<sup>th</sup>, 2009

Please upload your abstract in our review system under:

<http://review.otti.eu>

Before Christmas you will receive an e-mail with the result of the evaluation.

**If you are accepted please upload the ready for printing manuscript (8 pages) in our review system by March 1<sup>st</sup>, 2010**

**Presenters will get the reduced fee of € 360,00.**

## Programme

The two-day programme for this conference will comprise of

- Invited lectures
- Oral presentations
- Posters

**Language of the conference will be English.**

Xavier Vallvé, Trama TecnoAmbiental (TTA), Barcelona, Spain  
Gonzalo Piernavieja, Instituto Tecnológico de Canarias (ITC), Canary Islands, Spain

### Scientific Committee:

**Prof. Dr. Sabry Abdel Mottaleb**, Egypt

**Dr. Houda Ben Jannet Allal**, France

**Prof. Dr. Fernando Antúnes**, Brasil

**Jean-Louis Bal**, France

**Roland Barthez**, France

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**Dr. Stathis Tselepis**, Greece

**Xavier Vallvé**, Spain

**Prof. Dr. Rakwichian Wattanapong**, Thailand

### Conference Focus:

- Development and Application of Technologies
- Exchange of Results and Ideas
- Know-how Transfer
- Identification of R&D Needs
- Presentation of Field Experience

### You will meet:

Users of renewable energy systems and mini-grid, users involved in rural electrification, manufacturers and suppliers of renewable energy systems and energy storage technology, energy consultants, public utilities, users from developing countries, development programme specialists, energy policy makers, other attendees.