



INRES

INRES INTERREGIONAL WORKSHOP, CRETE



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INRES

Insular Regions Cooperation for Maximising the Environmental And Economic Benefits From the Research in Renewable Energy Sources
<http://www.inresproject.eu>



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List of Abbreviations

CRES	:	Center For Renewable Energy Sources
FORTH	:	Foundation for Research and Technology STEP-C - Hellas
ITC	:	Instituto Tecnológico de Canarias
NHMC	:	Natural History Museum of Crete
OANAK	:	Eastern Crete Development Organization
REAC	:	Region of Crete - Regional Energy Agency of Crete
SEA	:	Samsø Energy Agency
STPC	:	Science and Technology Park of Crete
TEI Crete	:	Technological Educational Institute of Crete
TUC	:	Technical University of Crete
UoC	:	University of Crete



1. Introduction

INRES project aims to enhance the integration and the cooperation among three European insular regions, Canary Islands (Spain), Crete (Greece) and Samsø (Denmark) in the development of their regional Renewable Energy policies and strategies through the establishment of a mutual learning process and collaborative relationships among regional research-driven clusters.

The consortium, formed of 10 partners, targets the development of an inter-regional strategy, in the view of EC recommendations and support, for developing the take up of innovative measures included in the regional energetic plans that spin towards new collaboration among regional players, especially SMEs who are involved in the dynamics of the RES energy technology in the framework of a higher local economic efficiency and environment safeguard.

In the context of INRES Project, an Interregional Workshop in Crete was organised by the Cretan partners of INRES, the Foundation for Research and Technology - Hellas (FORTH)/Science and Technology Park of Crete (STEP-C), the Region of Crete - Regional Energy Agency of Crete (REAC), and the TEAB MARIS HOTELS SA (CANDIA). The aim of the Workshop was to raise awareness and bring together key players and stakeholders from European regions (Crete, Canary Islands and Samsø), such as policy makers, technology experts and SMEs connected to RES in order to exchange experiences and best practices, create working groups and provide solutions related to RES existing and potential barriers.

The event was held in the Region of Crete conference room in Heraklion, in April 27th, 2010. Additionally, four technical visits have been planned and conducted, as part of the Workshop.



2. Preparing the Interregional Workshop in Crete

In order to ensure effective co-ordination and facilitate the organisation of the Workshop the partners organised 2 regional meetings, identifying and finalising the day to day activities of the event through an action plan.

Furthermore, the 1st meeting on March 5, 2010 was to distribute the preparatory work, while the 2nd one on March 26, 2010 was to prepare the draft Agenda, to discuss the progress and define the next action steps.

Next to the meetings, both partners carried out the following coordinated preparatory activities:

- Identification of potential participants and speakers, as well as, areas of operation and expertise. The target group consisted of SMEs, Entrepreneurs and Technology Experts, Academic and Research Organisations, Public and Private Authorities and Development Organisations, MEDIA
- Preparation of the Agenda in collaboration with the other Project partners
- Organising 2 Working Groups for the Workshop in co-operation with the other European partners. Identifying RES technology and policy experts and grouping them in the working teams. The following questions-topics have been placed for discussion:

Table 1 Working Groups topics

WG1/RES Policy	WG2 - RES Technologies
Policy / Planning / Legal & Administrative Framework	How to promote co-operation between industrial players in the 3 regions
Funding opportunities and ownership models for supporting RES Projects and policies	Which technology areas to build on
How to promote integration of research and industrial sectors?	How to improve skills of people in RES industry and revert brain drain
Isolation / Insularity Problems	Isolation / Insularity problems

Source: Based on INRES partners primary analysis



- Preparation of the official invitation package including the agenda and invitation card in English and Greek. The informative package was delivered through internet inserts, emails, regular post and MEDIA press releases. Additionally, where appropriate, personal phone calls and invites have been conducted to key participants to inform and prepare them for the Workshop discussions.
- Finalising appropriate facilities for the workshop (i.e. translation services and necessary equipment, catering).

3. Workshop Abstracts & Discussions

The Inter-regional Workshop realized in the Conference Room of the Region of Crete. Apart from the welcome speeches, the agenda of the inter-regional workshop included two creative sessions moderated by **Dr. Nikolaos Zografakis** (REAC) and **Mr. Artemis Saitakis** (STEPC). The first one, morning session, included presentations describing the Project and its objectives followed by speakers from local Authorities, Academia, and RES players from the three regions explaining and providing information and best practices for the Industry. During the afternoon session a creative workshop consisting of two working groups was organised. Furthermore, the programme included the following:

- **Mr Athanasios Karountzos**, Secretary General of the Region of Crete, delivered a welcome speech. **Mr. Nikiforos Labrinos**, President of Heraklion Hotels Association and **Mr. Andreas Metaxas** Managing Director of Maris Hotels S.A. made welcome speeches. Both speakers highlighted the contribution of INRES Project in promoting RES culture and identified the potential of RES technologies and their consequences in the society.

MORNING SESSION

- The morning session started with **Mrs Lucia Dobarro** (ITC) who gave an overall view of the Project, its objectives and deliverables. Additionally, a very interesting regional analysis describing the RES situation (SWOT) for the three regions (Crete, Canary Islands and Samsø) and an outlook on the future joint action plan was presented by **Mrs Antje Klaesener** (INNOVA), tables 2,3,4



Table 2 SWOT Analysis - Canary Islands

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Highly skilled personnel • Strong research base (research infrastructure) • Development of innovative RES technologies by research players • International cooperation activities of regional research community 	<ul style="list-style-type: none"> • Low level of financial resources for conducting RTD activities in RES from private side • Poor linkage between research entities and enterprises • Low exploitation of funding potential by research community • Not enough start-ups resulting from research • Low innovation commitment of companies • No international orientation of regional comp.
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Availability of EU RTD funds for research • Networking possibilities (RICAM cluster) • Favourable territorial and environmental conditions for adopting RES technologies • Surplus of well educated researchers • Increasing number of collaboration between research & industry • Regional funding programmes/grants for public-private partnerships for developing R&D projects 	<ul style="list-style-type: none"> • Bureaucracy barriers • Low awareness of regional research capacity from companies' side • Brain drain of research community

Source: Based on INRES partners primary analysis

Table 3 SWOT Analysis - Crete

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Highly skilled personnel in research • Strong skills in solar thermal industry • Operation of many RES production plants (wind parks, PV, agricultural biomass) • Strong international cooperation of regional research community in EU projects • Adoption of innovative technologies in facilities (mainly hotels) 	<ul style="list-style-type: none"> • Not enough start-ups from research results • Low financial resources for conducting RTD activities in the RES sector • Poor linkage between research entities and enterprises • Insufficient research base in companies in the RES sector • Low innovation commitment and culture of companies • No international orientation of companies
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Availability of EU& nat. RTD funds for research and investment in RES • Increasing number of collaboration between research & industry • Surplus of well educated researchers • Favourable territorial and environmental conditions for adopting RES technologies • Strong interest for RES applications from business side 	<ul style="list-style-type: none"> • Bureaucracy barriers (permissions and funding) • Few or not used incentives for public-private partnerships • Low awareness of regional research capacity from industrial and political side • Brain drain • Isolation/ Insularity

Source: Based on INRES partners primary analysis



Table 4 SWOT Analysis - Samsø

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Public-private cooperation • Strong local networks and mutual trust among local enterprises (strong local patriotism among SMEs) • Large research collaboration network, also at international level • Strong involvement of regional community in RES • Samsø Energy Academy as catalyst for local initiatives • Strong adoption of innovative RES technologies ('off the shelf' technologies) 	<ul style="list-style-type: none"> • No financial reserves of companies for conducting RTD activities • Lack of human research resources • Funding is only on a project-by-project basis, i.e. no long-term plans possible • Small company size reduces focus on innovative processes • Low growth caused by island boundaries
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Availability of EU RTD funds for research • Access to well-educated researchers outside the island • Low interest rates for bank loans, facilitating RES investments • Positive image as RES island and strong interest from international media 	<ul style="list-style-type: none"> • Bureaucracy barriers at EU level • Brain drain due to small company size and island characteristics (few jobs, island depopulation) • Diminished national focus on RES research activities during the last years • RES solutions demand large capital investments and long period of returns for investments in RES technologies

Source: Based on INRES partners primary analysis

- **Dr. Nikolaos Zografakis** (REAC) presented the entrepreneurial approach in the field of Renewable Energy Sources and Energy Saving in Crete. He continued with the regional added value for each type of RES available in Crete, providing the entrepreneurial involvement of specific professional target groups. He presented all the RES technologies that can be implemented or already are installed in Crete giving specific details for the key players such as Academia, local businesses and manufacturers.
- There was a best practice session, where representatives from the participating regions presented success cases of RES introductions and applications. Moreover, Mr **Dimitrios Chasapis** (CRES) provided information for some innovative RES projects installed in Crete, while **Dr Jan Jantzen** (SEA) presented cases from local ownerships in the RES market of Samsø. Other large Spanish RES projects and clustering activities have also been presented by **Mr. Salvador Suárez** (ITC) and **Mr. Agustín González** (RICAM Cluster).
- During the morning session, academics and scholars had the opportunity to present some mature research outcomes with an application in the RES sector.



Representatives from the local Academic and Research Organizations with a long experience in RES topics, introduced and discussed their research work and ideas, identifying potential RES opportunities. Furthermore, **Prof. Theocharis Tsoutsos** (TUC) presented applications of Renewable & Sustainable Energy Systems; **Prof. Athanassios Coutsolelos** (UoC) presented an EU on-going project related to bioinspired solar energy utilization, while **Dr Dimitrios Katsambrakakis** (TEI Crete) provided an outlook for the integration of isolated power production systems based on 100 % use of RES.

- The session ended with three different presentations from the business perspective, where pioneer companies presented their RES applications and installations. Furthermore, **Mr. Evangelos Charkoutsakis** (TEAB S.A. MARIS HOTELS) presented the case of solar energy in Mövenpick Resort & Thalasso Crete (CANDIA MARIS), **Mr. Julián Monedero** (Dobontech) some Dobontech applications, and **Mr Bernd Garbers** (SEA) a technology implementation in the local municipality of Samsø. Next to them, **Mr. Ole Klejs Hemmingsen** demonstrated technologies developed by Brdr. Stjerne.

AFTERNOON SESSION

The Afternoon session covered the Inter-regional Workshop split into two parallel Working Groups (WPs). The first one, WP1-RES Policies, moderated by **Dr. Nikolaos Zografakis** (REAC), consisted of 11 policy experts, while the second one, WP2-RES Technologies with 9 technology experts by **Mr. Artemis Saitakis** (STEPC)¹. Both Moderators provided useful information about the structure of the WPs, explaining the procedure to be followed. Each WP had one Rapporteur, **Mr. Konstantinos Kaltsounakis** (REAC) for WP1, and **Mr. George Papamichail** (STEPC) for WP2 which participated also in the groups.

¹ See Appendix, Working Group Participants



Work of the Groups

WG1 - RES Policy

The WG1 aimed at identifying and discussing main policy trends, obstacles and opportunities - concerning all regional stakeholders including the local RES industry and entrepreneurs - in the local RES industry. WG1 moderator Dr. Nikos Zografakis (REAC), focused on the necessity for exchanging of experience throughout Europe, exploiting events for this purpose.

The main question addressed was “How to implement RES in a best way” considering the related policies to:

1. Having the citizens public acceptance by an efficient policy and planning,
2. Implementing RES with simultaneous creation of new local activities and new jobs promoting innovation and,



Work of the Group 1

3. Ensuring local environmental and energy advantages by valorizing related financial incentives, which is the regional planning methodology and the policy procedures.

Then, he gave the floor to the audience.

The main topics related to the above issues of the discussion are the following ones:

Topic 1: Local and Administrative Framework

▪ Successful RES Policies and Planning Methodologies

The successful case of Samsø was analysed where the “top-down” national initiative for the Green Danish Islands was successfully implemented by the “bottom-up” active participation through a small team of motivated “mediators” who knew to combine the different interests and make people understand and accept.

The existence of concrete policies for RES and the implementation of an administration plan are very important for the development of RES. That structure is implemented in Samsø. This model not only permits but also foresees and



encourages private initiatives. The investments of RES – public or private – have to be implemented in the framework of a specific action plan. In this way, we avoid the danger of developing an inefficient and insufficient energy system.

▪ **Bureaucracy**

Bureaucracy barriers exist – more or less – in most of the European countries. The bureaucracy implication is the big delay of RES investments or even the cancelation of the investments whenever the bureaucratic barriers are insuperable.

Reduction of necessary permits, intensive dialogue of crucial stakeholders, continuous information and raising awareness of decision makers (at local – regional – national level), simplicity of rules, certification of installations etc. are some of the measures proposed for reducing bureaucracy.

There are efforts at national level for reducing the bureaucratic procedures in many European countries but there are also relevant efforts at E.U. level (new RES EU Directive).

▪ **Environmental Impact**

The environmental impact of RES installations has an important role in European countries. The license departments demand “environmental assessments” in order to give specific environmental permission. Structured dialogue between stakeholders, public hearings, and scientific appraisal help to define and accept the RES environmental impacts.

▪ **Individuals Involvement – Public Acceptance of RES**

The involvement and the awareness of citizens in RES. investments are crucial because in that way the public acceptance is achieved. For instance, three of the off-shore wind turbines in Samsø are privately owned for the most part by local farmers. Other two are sold on a cooperative basis to many small shareholders. Public hearings for the RES environmental impact were extensive and information and raising awareness is continuous and targeted. They have achieved to convince the locals for the necessity of RES. on the island and finally even to involve them in the investments.



- **Simplicity of Rules – Regulations**

The simplicity of legal framework, rules and administration procedures on RES. helps to the reduction of bureaucracy and the RES public acceptance. The participants noted that new flexible regulations are necessary for the attraction of investors and the facilitation of RES. license and implementation. This concerns also “financial initiatives and instruments”.

- **Information of Authorities and General Public**

The successful implementation of RES. demands simultaneous and continuous information campaigns for public authorities and the general public. The first target group has to be informed in order to support, integrate and promote RES. policy initiatives and the second one has to be informed in order to accept, support or even participate in the new RES. investments. This concerns also “financial initiatives and instruments”.

Topic 2: Financial Initiatives and Instruments

- **Ownership Models**

The ownership model of RES installations in Samsø (Denmark) is a characteristic best practice. The citizens of Samsø are stockholders of companies which have installed RES applications on the island. This is very important because the general public participates actively in the implementation of RES that was created the formation of various ownership models. For instance, there are three district heating systems (straw based). One is owned by a cooperatively owned regional utility, the second is owned by a local commercial operator and the third is owned and financed locally by the consumers themselves.

We have to note that these ownership models are implemented in Samsø which is a very small island of 4.124 inhabitants (2006). It is not too easy to implement such ownership models in big islands e.g. Crete (623.666 inhabitants). Nevertheless, the active involvement of the consumers to the RES. projects is crucial and those ownership models can inspire similar adapted local initiatives elsewhere.



- **Feed in Tariffs**

All the participants agreed that the implementation of “Feed in Tariffs Models” is a decisive policy mechanism designed to encourage the adoption and expansion of renewable energy sources. These models guarantee grid access, provide long term contracts and ensure competitive purchase prices for the electricity produced. Specific provisions for domestic implementation of RES (PV, Solar Thermal, Biomass) have to be promoted.

Topic 3: Promotion of Innovation

- **Grid Interconnections – Insularity**

Interconnected areas – e.g. Denmark – have the privilege to manage and exploit efficiently the surplus of electricity produced from RES. (e.g. Samsø). Remote insular areas – e.g. Crete is not connected to the mainland electricity grid – can’t integrate the full production of RES in their electricity systems and therefore the RES penetration is limited and a big percentage of RES electricity is wasted. The problem is more intensive in non connected islands which they have not developed “reverse pumping storage systems” for the exploitation of wind potential. This is also a disadvantage of insularity in the energy sector.

- **Quality of Electricity Produced and Consumed**

The theme of the “quality of electricity” was discussed mostly due to the “bad quality” of electricity in the system of Crete, sometimes occurring during peak summer periods. But, the participants agreed that there are similar problems in the quality of electricity in other European countries and in some cases there are also black-outs.

- **“Model” and Innovative Installations for Pilot Use / Standardization of RES Equipment**

Model installations of RES. – especially combination of RES. – are very important in order to promote innovative applications. For instance, a pilot farm which combines various technologies e.g. small Wind Turbine, Photovoltaics, Biomass Heating System, Bioclimatic Architecture etc. can be a reference best practice and



demonstration case for the promotion of RES. and Energy Saving. RES equipment standardization helps also to wider and more correct implementation of RES.

▪ **Energy Efficient Buildings – Energy Saving**

Beside of the installation of RES, we have to give great attention to the implementation of energy saving measures especially in buildings. These measures are necessary in order to have efficient buildings which also integrate various RES technologies. The bioclimatic architecture gains supporters in all over Europe seeking for the reduction of energy consumed for electricity, heating and cooling. The deployment of energy certificates for buildings contributes to the achievement of this target.

WG2 - RES Technologies

The WG2 aimed at identifying and discussing main technology trends and opportunities in the local RES industry. Academics and industry experts from the public and private sector² have been participating in the session for more than an hour. They exchanged experiences and technology ideas, and tried to provide possible solutions for potential barriers in the RES for Crete, Canary Islands and Samsø.



Work of the Group 2

The four topics for discussion have been previously identified by the project partners in order to reduce time and expand the last of the session. Furthermore, the following issues/questions have been explored and discussed:

Topic 1: How to promote co-operation between industrial players in the 3 regions

In order to promote co-operation between industrial players in the 3 regions, participants proposed the following action plan:

- Raising awareness of the general public. In many cases the local societies do not see the introduction of renewable technologies as an effective project, mainly

² See Appendix, Working Group participants



due to a range of different environmental reasons. This happens when incorrect information is delivered to the people. Additionally, effort should be given to provide the appropriate information and support to specific targets with activities and expertise in RES sector.

- A long term Master Plan should be defined and developed. A clear action plan should also be contained with a detailed look forward to the future.
- Steps should be taken to improve and integrate the Intellectual Property Rights (IPR) and Technology Transfer (TT) framework. This will contribute and facilitate the commercialization process, and boost potential negotiations and synergies between Academia and Industry.
- The creation of regional clusters is also considered as an important opportunity to enhance joint industrial RES activities. International experience has shown that clusters improve SMEs efficiency and performance, promote entrepreneurship and boost the economic development of the sector. Pioneer players and key stakeholders from the industry should act as leaders and, in collaboration with the local public authorities, exploit support mechanisms and take initiatives for networking RES businesses and clusters creation.

Topic 2: Which technology areas to build on

- Regarding the technology areas to build on a particular focus will be given on those areas where there are already available technologies for further exploitation in the three regions. Potential synergies among key technology players should be considered as a means of further utilization of existing RES technologies.
- Additionally, new technology ventures and pilot RES projects should be carried out with an application to sectors with strong businesses activity in each of the three regions (i.e. for Crete and the Canary Islands the construction of a bungalow with 100% autonomy in RES technologies).
- An effective Energy Demand Management (EDM) could maximize the RES storage, reducing importantly the need for investments in traditional power generation industry and power plants.
- The creation of a marketing planning will facilitate the transfer of specific specifications to research in order to adopt the industry needs.



Topic 3: How to improve skills of people in RES industry and revert brain drain

- Expanding the local RES sector, new market opportunities will be raised, with business ideas and collaborations, new investments and job opportunities.
- The introduction of professional training courses, which will be leading to an official certification, will improve RES community skills and capabilities in specific areas where needed. These training sessions should be planned and delivered by experts in a regular base, including crucial information such as recent renewable energy trends, futures etc.
- Next to the training, effective participation in some university initiatives such as the European Master (MSc) in Renewable Energy, (EUREC) will definitely provide specialized knowledge and expertise for the RES sector.
- Additionally, a further exploitation of the existing exchange training schemes will reverse brain drain as reciprocal visit exchanges for example will reduce the need for experts' immigration to more RES developed markets.

Topic 4: Isolation / Insularity problems

- Internationalization appears to be an effective business activity for overcoming insularity problems. The establishment of mutual collaborations in the RES industry at an international level, could definitely contribute to the creation of new job opportunities, and help the industry to retain experts and employees.
- The creation of a very specialized portfolio of expertise in the three regions could act as an integrated knowledge base, offering RES consulting services and technology solutions. This initiative requires the creation of a network with experts from Crete, Canary Islands and Samsø.
- Business isolation and insularity appear to maximize the risk of developing new products and services based on renewable technologies, and consequently prevent investments. Twinning similar innovative RES installations from different networked regions could provide the opportunity for knowledge access and technology validation, minimizing importantly the technological risk.



4. Technical Visits

Four different technical visits have been carried out in April, 28 2010. The main purpose of these visits was to present local innovative applications of RES and energy saving in large-scale users (i.e. in the tourism industry), RES scientific innovative approaches conducted by Academia, and RES innovations from local industries. General information for the visits is presented as follows:

4.1. Mövenpick Hotels & Resorts - Crete

- Mövenpick Crete Hotel accounts 285 rooms and suites and 6 separate Bungalow buildings holding 59 rooms and suite units. INRES project partners had the opportunity to visit extensively all the innovative energy systems of the hotel. The hotel combines the operation of a solar thermal system (one of the biggest solar thermal fields in South Europe) and a sea cooling system. These systems are used for:
 - Space Heating
 - Air conditioning - Cooling
 - Hot water for use, swimming pools, spa etc
 - Innovative desalination system

The solar thermal system consists of 1.980 m² of solar panels. Solar energy use is ameliorated implementing the maximum storage of solar energy. After measurements it was revealed that for a period of 8 months (July to February) there was a significant energy gain of about 740 MWh of actual savings (equivalent to 115.529 lt oil), although the region of Heraklion sunshine during this period was lower than the average of the last 10 years.

Additionally, there is in operation a complete Building Management System (BMS) and a Desalination Unit. The geothermal system consists of water drillings, buffer tanks, boilers and geothermal heat pumps.

AN estimation of 80-85 % of thermal demand is covered by the use of solar thermal and shallow geothermal systems. The installation of BMS saves maintenance costs and allows time programming and temperature control. It saves 30 – 35 % of energy.



The implementation of the above technologies in the hotel is a characteristic best practice of RES. and Energy Saving in the tourist sector of Crete.

4.2. Technological Educational Institute of Crete, Wind Energy Laboratory

The second technical visit organized in Technological Educational Institute of Crete, Wind Energy Laboratory had two main parts:

First Part: Presentation of the “Bioclimatic Building” of the Wind Energy Laboratory

The design of the laboratory is based on the “Bioclimatic Architecture”. There is no use of oil for heating during winter and there is no use of electricity for air-conditioning during summer (there is an exemption in the web-server room where there are special air-conditioning needs). The frame of the building foresees the maximum exploitation of the sun during winter for natural heating and the exploitation of natural ventilation for cooling during summer. Furthermore, the roof and the walls are isolated suitably in order to maximize the energy efficiency of the building. The scientific team has started to promote bioclimatic technologies in the specific climatic conditions of Crete by performing measurements of different bioclimatic parameters.

Second Part: Presentation of the scientific activities of the Wind Energy Laboratory

Most of the basic scientific activities of the laboratory were presented to the project partners, including the following:

- Undertaking of studies for wind farm development in Crete and elsewhere in Greece
- Measurement of wind potential according to the ISO 17025 - IEC 61400-12
- Design of small wind turbines and small scale related manufacture
- Development and calculation of small autonomous energy systems
- Design and manufacture of prototype fixtures for education and research
- Studies for reverse pumping storage systems using wind farms in insular systems

The laboratory is certified to ELOT EN ISO 9001 and accredited to ELOT EN ISO / IEC 17025 for wind potential measurements and power potential measurements.

The information is presented by Dr. Dimitrios Katsaprakakis (Wind Energy Laboratory – Technological Educational Institute of Crete).



4.3. Kipriotakis Solar Systems

The third visit took place in the manufacturing company of “Kipriotakis Solar Systems” located at the Industrial Area of Heraklion. Kipriotakis Solar Systems designs and manufactures Hot Water Solar Systems. It is an innovative company which adapted the relevant technologies designing and manufacturing products ideal for the regional conditions. The company manufactures the copper boilers and assembles the solar thermal collectors (normal and selective surface). It has certification for its products and it is member of the Greek Solar Industry Association (EVIE).

The owner of the company presented the installations, the products and the production chain. He presented the regional situation of the solar market analyzing the local perspectives and obstacles. He expressed also a great interest for the new “smart metering system” which has been developed in Samsø.



Technical visit, Kypriotakis SA

The partners from Samsø provided the necessary information about the technology and its perspectives of the new smart metering system.

4.4. Kelarakis G. – Creta Sun S.A.

The last technical visit was implemented in the company “Kelarakis G. – Creta Sun S.A.” in the Industrial Area of Heraklion. The company manufactures solar thermal systems. It is a local company with many-year experience in the field of solar thermal systems.

The owner of the company presented its products and the production chain. He presented also technical data of solar thermal systems e.g. for the boilers, the solar panels etc. and he provided information of the manufacture and the assembly of the systems. He presented also a damaged system due to the bad quality of the water analyzing the typical problems of the open-circuit systems in Crete.

The project partners had a brief overview of the facilities and they had a fruitful discussion with the owner of the company exchanging experiences.



5. General Conclusions

The main general conclusions and aspects of the INRES Inter-regional Workshop, CRETE are presented in the following bullets:

- Over 70 people from different RES business areas (solar and PV system manufacturers, consultants, hoteliers), Academia, Public Authorities etc, participated in the main Workshop, while 24 technology and policy experts joined the two Working Group sessions.
- Effective inter-regional coordination among participants from the three partner-regions and mutual exchanging of RES professional experiences and best practices at regional and international level for further expansion of the sector.
- The Workshop raised awareness and enhanced the local public recognition for RES applications. The regional MEDIA covered the event and provided part of the workshop, as well we as, personal interviews by the partner co-coordinators highlighting the environmental consequences of RES technologies.
- There is a need for continuous information campaigns targeted to the general public carried out by regional Authorities. These campaigns should have an informative role, explaining to individuals the RES framework and its importance for the environment.
- Bureaucracy barriers (permissions, legal framework, IPR and TT issues) in the RES industry exist more or less in most of the European countries. In the case of Greece and particularly Crete, a range of different bureaucratic problems should be overcome in order to attract and boost investments in the sector. EU and national initiatives for reducing bureaucracy should be fully exploited by key RES public and private players.
- The creation of regional clusters is considered as an important opportunity to enhance joint industrial RES activities. Regional players, key stakeholders and local public authorities from RES sector should take some initiatives to further exploit the existing support mechanisms for networking RES businesses and support the creation of clusters. Next to this, new technology ventures and pilot RES projects should be carried out with an application to sectors with strong businesses activity in each of the three regions
- The introduction of professional training courses, which will be leading to an official certification, will improve RES community skills and capabilities in specific



areas where needed, while next to the training, effective participation in some university initiatives will provide specialized knowledge and expertise for the RES sector.


- Internationalization appears to be an effective business activity for overcoming insularity problems. The establishment of mutual collaborations in the RES industry at an international level, could definitely contribute to the creation of new job opportunities, and help the industry to retain experts and employees.
- The creation of a very specialized portfolio of expertise in the three regions could act as an integrated knowledge base, offering RES consulting services and technology solutions. This initiative requires the creation of a network with experts from Crete, Canary Islands and Samsø.



6. Appendices



6.1. Agenda & Invitation

Figure 1 Workshop Agenda, EN



INRES PROJECT, INTER-REGIONAL WORKSHOP, CRETE

Tuesday April 27, 2010, Region of Crete, Conference room, Kountourioti sq., Heraklion






TEAB MARIS S.A.

AGENDA

09.00-09.15	Registration	
09.15-09.45	Opening Session & Welcome speeches	
	Mr Athanasios Karountzos	Secretary General, Region of Crete, GR
	Mr. Nikiforos Labrinos	President of Heraklion Hotels Association, GR
	Mr. Andreas Metaxas	Managing Director of Maris Hotels S.A., GR
Morning Session		
09.45-10.00	"Presentation of INRES Project" Mrs Lucia Dobarro	Project Coordinator, Instituto Tecnológico de Canarias, ES
10.00-10.15	"INRES Regional SWOT Analysis" Mrs Antje Klaesener	INNOVA S.p.A.
10.15-10.30	"The Renewable Energy Sources in Crete: Regional Innovation and Added Value" Dr. Nikolaos Zografakis	Director of Regional Energy Agency of Crete, GR
10.30-10.50	BEST PRACTICE PRESENTATIONS-Crete Pilot implementation of solar thermal technologies in Greece - Crete Mr Dimitrios Chasapis	Center For Renewable Energy Sources, GR
10.50-11.20	Coffee break	
11.20-11.40	BEST PRACTICE PRESENTATIONS-Samsø "Local Ownership Cases from Samsø" Dr Jan Jantzen	Samsø Energy Agency, DK
11.40-12.05	BEST PRACTICE PRESENTATIONS-Canarias "El Hierro 100% RES" Mr.Salvador Suárez "Canary Island cluster in RES" Mr. Agustín González	Head of unit RES, Instituto Tecnológico de Canarias CEO, RICAM cluster
12.05-12.20	"Applications of Renewable & Sustainable Energy Systems" Prof. Theodoris Tsoutsos	Technical University of Crete, GR
12.20-12.35	"Bioinspired solar energy utilization" Prof. Athanasios Coutsos	President, Dept. of Chemistry, University of Crete, GR
12.35-12.50	"The integration of isolated power production systems based on 100 % use of RES" Prof. Dimitrios Christakis	Technological Educational Institute of Crete, GR
12.50-13.20	Companies Presentations 1. Candia Maris-Solar Field Mr. Evangelos Charkoutsakis 2. Dobontech Mr. Julián Monedero 3. Samsø Companies	Consultant, TEAB S.A. MARIS HOTELS, GR CEO, Dobon's Technology Companies, Samsø Energy Agency - Academy
13.20-15.00	Light Lunch	
Afternoon Session (Workshop)		
15.00-16.00	Working Group 1 RES Policies	Working Group 2 RES Technologies
16.00-16.15	Coffee break	
16.15-16.45	Working Group presentations	
16.45-17.30	General Conclusions & Discussion	

INRES Project is financed by EU

Source: Based on INRES Project work



Figure 2 Workshop Agenda, GR

INRES PROJECT, INTER-REGIONAL WORKSHOP, CRETE

Τρίτη 27 Απριλίου 2010, Περιφέρεια Κρήτης, Πλατεία Κουντουριώτη (Λιμάνι), Ηράκλειο

ITE

Information Technology & Environment

TEAB MARIS S.A.

AGENDA

09.00-09.15	Εγγραφή	
09.15-09.45	Έναρξη - Χαιρετισμοί	
	κ. Αθανάσιος Καρούντζος	Γενικός Γραμματέας Περιφέρειας Κρήτης
	κ. Νικηφόρος Λαμπρινός	Πρόεδρος Ένωσης Ξενοδόχων Ν. Ηρακλείου
	κ. Ανδρέας Μεταξάς	Διευθύνων Σύμβουλος Maris Hotels A.E.
Πρωινή Συνεδρία		
09.45-10.00	"Παρουσίαση του Έργου INRES" κα Lucia Dobarro	Συντονιστής Έργου, Τεχνολογικό Ινστιτούτο Καναρίων Νήσων, Ισπανία
10.00-10.15	"Συγκριτική Ανάλυση SWOT" κα Antje Klaesener	INNOVA S.p.A.
10.15-10.30	"Οι ΑΠΕ στην Κρήτη: Περιφερειακή Καινοτομία και Προστιθέμενη Αξία" Δρ. Νικόλαος Ζωγραφάκης	Προϊστάμενος Ενεργειακού Κέντρου Περιφέρειας Κρήτης
10.30-10.50	ΠΑΡΟΥΣΙΑΣΗ ΚΑΛΩΝ ΠΡΑΚΤΙΚΩΝ-Κρήτη: Πιλοτικές εφαρμογές θερμικών ηλιακών: Ελλάδα - Κρήτη κ. Δημήτριος Χασάπης	Κέντρο Ανανεώσιμων Πηγών & Εξοικονόμησης Ενέργειας
10.50-11.20	Διάλειμμα, Καφές	
11.20-11.40	ΠΑΡΟΥΣΙΑΣΗ ΚΑΛΩΝ ΠΡΑΚΤΙΚΩΝ-Samsø "Συλλογική Τοπική Ιδιοκτησία Εγκαταστάσεων ΑΠΕ στο Samsø" Δρ Jan Jantzen	Ακαδημία Ενέργειας, Samsø, Δανία
11.40-12.05	ΠΑΡΟΥΣΙΑΣΗ ΚΑΛΩΝ ΠΡΑΚΤΙΚΩΝ-Canarias - "Νησί El Hierro: 100% ΑΠΕ" κ. Salvador Suárez	Διευθυντής Μονάδας ΑΠΕ Τεχνολογικό Ινστιτούτο Καναρίων Νήσων, Ισπανία
	- "Δίκτυο ΑΠΕ στα Κανάρια Νησιά" κ. Agustín González	Διευθυντής, RICAM cluster, Ισπανία
12.05-12.20	"Εφαρμογές Ανανεώσιμων & Βιώσιμων Συστημάτων παραγωγής ενέργειας" καθ. Θεοχάρης Τσούτσος Τμήμα Μηχ. Περιβάλλοντος	Πολυτεχνείο Κρήτης
12.20-12.35	"Βιομετατροπή Ηλιακής Ενέργειας" καθ. Αθανάσιος Κουτσολέλος Πρόεδρος, Τμήμα Χημείας	Πανεπιστήμιο Κρήτης
12.35-12.50	"Ολοκλήρωση απομονωμένων συστημάτων παραγωγής ενέργειας βασιζόμενα 100% στη χρήση ΑΠΕ" καθ. Δημήτριος Χριστάκης Σχολή Τεχνολογικών Εφαρμογών	Τεχνολογικό Εκπαιδευτικό Ίδρυμα Κρήτης
12.50-13.20	Παρουσιάσεις εταιριών 1. Candia Maris – Θερμική Ηλιακή Εγκατάσταση Μεγάλης Κλίμακας κ. Ευάγγελος Χαρκουτσάκης	Σύμβουλος Μηχανικός, TEAB A.E. MARIS HOTELS
	2. Dobontech κ. Julián Monedero	CEO, Dobon's Technology
	3. Samsø	Ακαδημία Ενέργειας - Επιχειρήσεις, Samsø, Δανία
13.20-15.00	Ελαφρύ γεύμα	
Απογευματινή Συνεδρία (Workshop)		
15.00-16.00	Ομάδα Εργασίας 1: Πολιτικές	Ομάδα Εργασίας 2: Τεχνολογίες
16.00-16.15	Διάλειμμα, Καφές	
16.15-16.45	Παρουσιάσεις Ομάδων Εργασίας	
16.45-17.30	Γενικά Συμπεράσματα & Συζήτηση	

INRES Project is financed by EU

Source: Based in INRES Project work



Figure 3 Invitation Letter , GR

ΠΡΟΣΚΛΗΣΗ

Η Περιφέρεια Κρήτης – Ενέργεια Κέντρο σε συνεργασία με το Επιστημονικό Τεχνολογικό Πάρκο Κρήτης του Ιδρύματος Τεχνολογίας & Έρευνας (ΙΤΕ) και την εταιρεία TEAB MARIS A.E. σας προσκαλούν την



Τρίτη 27 Απριλίου 2010 και ώρα 09.00, στο
Διαπεριφερειακό Συνέδριο:
«Συνεργασία Νησιωτικών περιοχών για την Ενέργεια και Καινοτομία»

Το συνέδριο θα πραγματοποιηθεί στην αίθουσα της Περιφέρειας Κρήτης (Πλατεία Κουντουριώτη, Λιμάνι). Θα συμμετάσχουν φορείς από Περιφέρειες με πιλοτικές εφαρμογές και έντονη δραστηριότητα στις Ανανεώσιμες Πηγές Ενέργειας όπως το νησί Σαντορίνη και τα Κανάρια Νησιά/Ισπανία καθώς επίσης και τοπικοί φορείς, Τριτοβάθμια Εκπαιδευτικά Ιδρύματα και επιχειρήσεις. Στόχος του Συνεδρίου είναι η ανταλλαγή εμπειριών και η προώθηση της καινοτομίας στους τομείς των Ανανεώσιμων Πηγών Ενέργειας και της Εξοικονόμησης Ενέργειας.


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κ. Γιώργος Παπαμιχαήλ


TEAB MARIS A.E.
Τηλ. 2810 300520
E-mail: eatzo@tea.gr
κ. Ευάγγελος Ατζολετάκης




Το Συνέδριο πραγματοποιείται στα πλαίσια του ευρωπαϊκού προγράμματος:
«Συνεργασία Νησιωτικών Περιφερειών για την μεγιστοποίηση των οικονομικών και περιβαλλοντικών πλεονεκτημάτων από την χρήση Ανανεώσιμων Πηγών Ενέργειας- INRES»



Το έργο INRES χρηματοδοτείται από την Ε.Ε.





Source: Based in INRES Project work



6.2. Technical Visits

Figure 4 Company Visits Programme

WEDNESDAY, APRIL 28

09.30 – 14.30

Visit to local companies and RES installations

- 1. Mövenpick Hotels & Resorts - Crete (Candia Maris Hotel)**
- 2. Technological Educational Institute of Crete**
- 3. Kipriotakis Solar Systems SA**
- 4. Kelarakis G. – Creta Sun SA**

INRES Project is financed by EU



Source: Based in INRES Project work



Table 5 Technical Visits participant list

A/A	Name	Organization
1	Nikolaos Zografakis	REAC
2	Artemis Saitakis	STEP-C
3	Evangelos Antzoletakis	TEAB MARIS SA
4	Kostas Kalitsounakis	REAC
5	Maria Katantonaki	REAC
6	Lucia Dobarro Delgado	ITC
7	Julian Monedero	Dobontech
8	Salvador Suárez García	ITC
9	Agustin J. Gonzalez Martin	RICAM
10	Jan Jantzen	SEA
11	Bernd Garbers	SEA
12	Ole Hemmingsen	Brdr. Stjerne
13	Antje Klaesener	INNOVA
14	George papamichail	STEP-C



6.3. Working Group Participants

Table 6 WP1-RES Policy Participants

WP1 RES POLICY			
	Name	Initials	Organisation
Moderator	Nikos Zografakis	NZ	REAC
Rapporteur	Kostantinos Kalitsounakis	KK	REAC
1	Evangelos Antzoletakis	EA	TEAB S.A. MARIS HOTELS
2	Ioannis Bourdoubas	IB	TEI Crete
3	Alexandros Perakis	AP	OLYMPIC SUN
4	Stavros Xirouxakis	SX	NHMC
5	Thalis Papazoglou	TP	TEI Crete
6	Iossif Ventouras	IV	UoC
7	Jan Jantzen	JJ	SEA
8	Antje Klaesener	AK	INNOVA
9	Lucia Dobarro	LD	ITC
10	Agustín González	AG	RICAM Cluster
11	Ioanna Paraskaki	IP	REAC



Table 7 WP2-RES Technology Participants

WP1 RES TECHNOLOGY			
	Name	Initials	Organisation
Moderator	Artemis Saitakis	AS	STEP-C
Rapporteur	George Papamichail	GP	STEP-C
1	Theocharis Tsoutsos	TT	TUC
2	Salvador Suárez	SS	ITC
3	Julián Monedero	JM	Dobontech
4	Evangelos Charkoutsakis	EC	TEAB S.A. MARIS HOTELS
5	Dimitrios Chasapis	DC	CRES
6	Dimitrios Katsambrakakis	DK	TEI Crete
7	Maria Kokolaki	MK	OANAK
8	Bernd Garbers	BG	SEA
9	Ole Klejs Hemmingsen	OH	Brdr. Stjerne



6.4. Participation List

Table 8 Workshop Participation List

ΔΙΑΠΕΡΙΦΕΡΕΙΑΚΟ ΣΥΝΕΔΡΙΟ «Οι επιχειρήσεις της Κρήτης στους τομείς των Ανανεώσιμων Πηγών Ενέργειας και της Εξοικονόμησης Ενέργειας» Τρίτη 27 Μαρτίου 2010				
A/A	Ονοματεπώνυμο Name	Φορέας Organization	Τηλέφωνο Telephone	E-mail
1.	Δανελάκης Γεώργιος	Δήμος Χερσονήσου	2897340012	
2.	Παπάζογλου Θαλής	ΤΕΙ Κρήτης & ΟΑΣ	2810379701	thales@teemail.gr
3.	Καμπάνης Νίκος	ITE	2810391780	kampanis@iacm.forth.gr
4.	Ατζολετάκης Ευάγγελος	TEAB	2810881182	eatzo@otenet.gr
5.	Agustin J. Gonzalez Martin	RICAM	+34911196710	dir.gerente@clusterricam.org
6.	Ole Hemmingsen	Brdr Sherne	+4586591700	oh@brdrstjerne.dk
7.	Bernd Garbers	Samsø Energy Academy	+4524409220	bg@energiakadcuiet.dk
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9.	Κούρος Αντώνιος	Ιδιώτης	6973038036	ecopowerepe@gmail.com
10.	Salvador Suarez	ITC	+39928727574	ssuarez@itccanarias.org
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12.	Χασάπης Δημήτριος	ΚΑΠΕ	2106603300	chasapis@cres.gr
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15.	Βασιλάκης Νικόλαος	Τμήμα Χημείας	6944144850	vasilas2000@yahoo.gr
16.	Antje Klaesener	INNOVA	390640040358	a.klaesener@innova-eu.net
17.	Παντελής Τρικαλίτης	Τμήμα Χημείας	2810545052	ptrikal@chemistry.uoc.gr
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20.	Λατζουράκης Γεώργιος	Δήμος Ηρακλείου	6945411968	g-Latz@heraklion.gr
21.	Τζιράκης Φραγκίσκος	ITE	6978176646	tzirakis@live.com
22.	Σαριδάκης Κων/νος	Δήμος Ρεθύμνου	6932245094	saridakisk@agency.interamerican.gr
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24.	Ψαρουδάκης Γιάννης	Δήμος Ιεράπετρας	6977352590	
25.	Κουναλάκης Μάνος	Δήμος Βιάννου	6945141403	stgcomp@otenet.gr
26.	Κυπριωτάκης Γεώργιος	Βιοτεχνία Κατασκευής Ηλιακών	6979987141	info@kipriotakis.gr
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6.5. Press Releases and inserts

Figure 5 "Mesogeios" Newspaper of Heraklion (www.mesogios.gr)

Διαπεριφερειακό Συνέδριο για την Συνεργασία Νησιωτικών περιοχών για την Ενεργειακή Καινοτομία

Η Περιφέρεια Κρήτης - Ενεργειακό Κέντρο σε συνεργασία με το Τεχνολογικό Πάρκο Κρήτης του Ιδρύματος Τεχνολογίας Έρευνας και την εταιρεία TEAB A.E. συνδιοργανώνουν Διαπεριφερειακό Συνέδριο με θέμα την Συνεργασία των Νησιωτικών περιοχών για την Ενεργειακή Καινοτομία στα πλαίσια του σχετικού ευρωπαϊκού προγράμματος "INRES", σήμερα Τρίτη 27 Απριλίου 2010 στην Αίθουσα Διαχείρισης Κρίσεων της Περιφέρειας Κρήτης. Συμμετέχουν οι Νησιωτικές περιοχές της Κρήτης, των Κανáriων Νησιών (Ισπανία) και του νησιού Σάμσο (Δανία). Από κάθε περιοχή συμπράττουν οι Περιφερειακές αρχές, Επιστημονικοί Τεχνολογικοί Φορείς μεταφοράς Τεχνολογίας και Επιχειρήσεις.

Θα παρουσιαστούν: Συγκριτική ανάλυση του Τομέα των Ανανεώσιμων Πηγών

Ενέργειας στις τρεις Περιφέρειες, παρουσίαση επιτυχημένων πρακτικών και παραδειγμάτων, δραστηριότητες Επιστημονικών και Τεχνολογικών Φορέων καθώς και έργα - εφαρμογές εταιριών στον τομέα των Ανανεώσιμων Πηγών Ενέργειας και Εξοικονόμησης Ενέργειας. Ιδιαίτερη σημασία έχει η παρουσίαση του νησιού Σάμσο που αποτελεί παγκοσμίως το πιο επιτυχημένο παράδειγμα εφαρμογής και αποδοχής των Ανανεώσιμων Πηγών Ενέργειας. Η συνεργασία των τριών περιοχών στοχεύει στην ανταλλαγή εμπειριών, στην μεταφορά τεχνολογίας στην προώθηση της ενεργειακής καινοτομίας και καινοτομίας και την εκπόνηση κοινών σχεδίων δράσης για την μεγιστοποίηση των οικονομικών, ενεργειακών και περιβαλλοντικών οφελών από την εκτεταμένη χρήση Ανανεώσιμων Πηγών Ενέργειας. Θα

ακολουθήσουν συναντήσεις δύο ομάδων εργασίας για τις σχετικές πολιτικές και τεχνολογίες.

Αύριο Τέταρτη 28 Απριλίου θα γίνουν τεχνικές επισκέψεις στο TEI Κρήτης, σε Ξενοδοχεία με εγκαταστάσεις Ανανεώσιμων Πηγών Ενέργειας και σε επιχειρήσεις κατασκευής ηλιακών θερμοσιφώνων.

Το πρόγραμμα έχει ως εξής:

Σήμερα 27 Απριλίου 2010
09.00-09.15: Εγγραφή
09.15-09.45: Έναρξη - Χαιρετισμοί κ. Αθανάσιος Καρούντζος, Γενικός Γραμματέας Περιφέρειας Κρήτης, κ. Νικήφορος Λαμπρινός, Πρόεδρος Ένωσης Ξενοδόχων Ν. Ηρακλείου, κ. Ανδρέας Μεταξάς Διευθύνων Σύμβουλος Maris Hotels A.E.
Πρωινή Συνεδρία
09.45-10.00: "Παρουσίαση

του Έργου INRES" κα Lucia Dobarro, Συντονιστής Έργου, Τεχνολογικό Ινστιτούτο Κανáriων Νήσων, Ισπανία
10.00-10.15: "Συγκριτική Ανάλυση SWOT" κα Antje Klasesner INNOVA S.p.A.
10.15-10.30: "Οι ΑΠΕ στην Κρήτη: Περιφερειακή Καινοτομία και Προστιθέμενη Αξία" Δρ. Νικόλαος Ζωγραφάκης, Προϊστάμενος Ενεργειακού Κέντρου Περιφέρειας Κρήτης
10.30-10.50: ΠΑΡΟΥΣΙΑΣΗ ΚΑΛΩΝ ΠΡΑΚΤΙΚΩΝ-Κρήτη-Πολιτικές εφαρμογές θερμικών ηλιακών: Ελλάδα - Κρήτη κ. Δημήτριος Χασάπης, Κέντρο Ανανεώσιμων Πηγών & Εξοικονόμησης Ενέργειας
10.50-11.20: Διάλειμμα, Καφές
11.20-11.40: ΠΑΡΟΥΣΙΑΣΗ ΚΑΛΩΝ ΠΡΑΚΤΙΚΩΝ-Samsø" Συλλογική Τοπική Ιδιοκτησία Εγκαταστάσεων ΑΠΕ στο Samsø" Δρ Jan Jantzen

Ακαδημία Ενέργειας, Samsø, Δανία
11.40-12.05: ΠΑΡΟΥΣΙΑΣΗ ΚΑΛΩΝ ΠΡΑΚΤΙΚΩΝ-Canarias- "Nhsí El Hierro: 100% ΑΠΕ" κ. Salvador Suarez - Δίκτυο ΑΠΕ στα Κανάρια Νησιά κ. Agustín González, Διευθυντής Μονάδας ΑΠΕ Τεχνολογικό Ινστιτούτο Κανáriων Νήσων, Ισπανία Διευθυντής, RICAM cluster, Ισπανία
12.05-12.20: "Εφαρμογές Ανανεώσιμων & Βιώσιμων Συστημάτων παραγωγής ενέργειας" κα Θεοχάρης Τσούτσος Τμήμα Μηχ. Περιβάλλοντος, Πολυτεχνείο Κρήτης
12.20-12.35: "Βιομετατροπή Ηλιακής Ενέργειας" κα Αθανάσιος Κουτσουλέλος Πρόεδρος, Τμήμα Χημείας, Πανεπιστήμιο Κρήτης
12.35-12.50: "Ολοκλήρωση απομονωμένων συστημάτων παραγωγής ενέργειας βασισμένα 100% στη χρήση

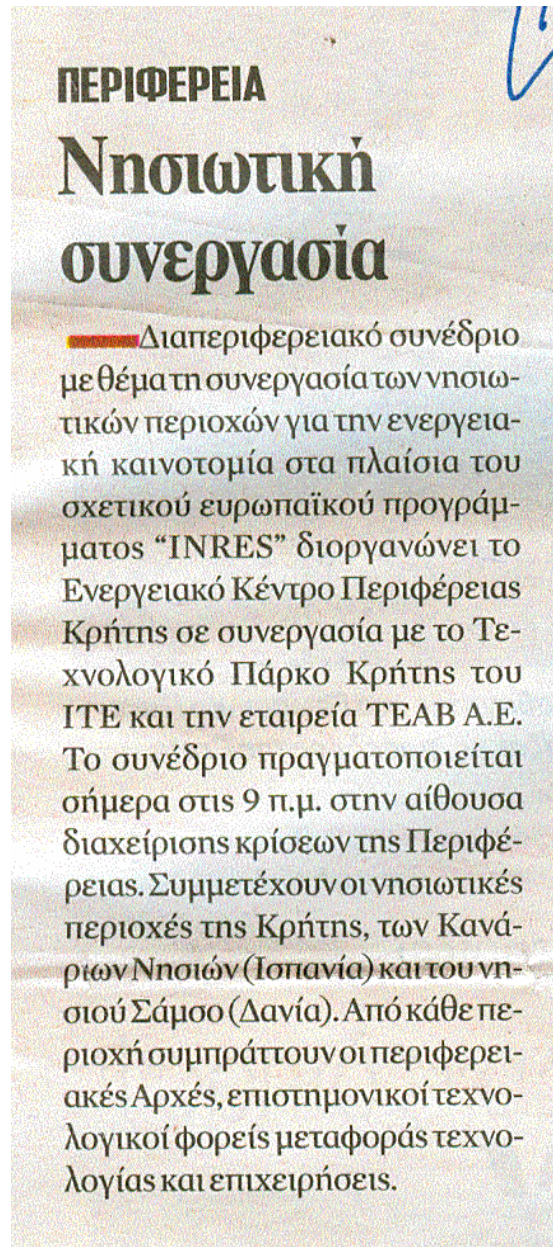
ΑΠΕ" καθ. Δημήτριος Χριστάκης Σχολή Τεχνολογικών Εφαρμογών, Τεχνολογικό Εκπαιδευτικό Ίδρυμα Κρήτης
12.50-13.20: Παρουσιάσεις εταιριών 1. Candia Maris - Θερμική Ηλιακή Εγκατάσταση Μεγάλης Κλίμακας. Ευάγγελος Χαρκουτσάκης 2. Dobon-techk. Julian Monedero 3. Samsø Σύμβουλος Μηχανικός, TEAB A.E. MARIS HOTELSCEO, Dobon's Technology Ακαδημία Ενέργειας - Επιχειρήσεις, Samsø, Δανία
13.20-15.00: Ελαφρύ γεύμα

Απογευματινή Συνεδρία (Workshop)

15.00-16.00: Ομάδα Εργασίας 1: Πολιτικές Ομάδα Εργασίας 2: Τεχνολογίες
16.00-16.15: Διάλειμμα, Καφές
16.15-16.45: Παρουσιάσεις Ομάδων Εργασίας
16.45-17.30: Γενικά Συμπεράσματα και Συζήτηση



Figure 6 Nea Kriti, Heraklion-Crete (www.neakriti.gr)



ΣΕ ΔΙΑΠΕΡΙΦΕΡΕΙΑΚΟ ΕΠΙΠΕΔΟ

Συνέδριο για τη Συνεργασία Νησιωτικών περιοχών για την Ενεργειακή Καινοτομία

Διαπεριφερειακό συνέδριο για τη «Συνεργασία Νησιωτικών περιοχών για την Ενεργειακή Καινοτομία» διοργανώνει σήμερα η Περιφέρεια Κρήτης και το Ενεργειακό Κέντρο σε συνεργασία με το Τεχνολογικό Πάρκο Κρήτης του Ιδρύματος Τεχνολογίας Έρευνας και την εταιρεία TEAB A.E.

Το συνέδριο αυτό που θα φιλοξενηθεί στην Αίθουσα Διαχείρισης Κρίσεων της Περιφέρειας Κρήτης γίνεται στα πλαίσια του σχετικού ευρωπαϊκού προγράμματος «INRES».

Οι διεργασίες θα ξεκινήσουν στις 9 το πρωί και θα ολοκληρωθούν στις 5:30 το απόγευμα, ενώ το παρών θα δώσει και ο Γενικός Γραμματέας της Περιφέρειας Κρήτης κ. **Αθανάσιος Καρούντζος**.

Σε αυτό πρόκειται να συμμετάσχουν οι Νησιωτικές περιοχές της Κρήτης, των Κανάριων Νησιών (Ισπανία) και του νησιού Σάμσο (Δανία) και από κάθε περιοχή συμπράττουν οι Περιφερειακές αρχές, Επισημημονικοί Τεχνολογικοί Φορείς μεταφοράς Τεχνολογίας και Επιχειρήσεις.

Στα πλαίσια του συνεδρίου θα γίνει η παρουσίαση της συγκριτικής ανάλυσης του Τομέα των Ανανεώσιμων Πηγών Ενέργειας στις τρεις Περιφέρειες, επιτυχημένων πρακτικών και παραδειγμάτων, δραστηριότητες Επισημημονικών και Τε-

χνολογικών Φορέων καθώς και έργα - εφαρμογές εταιρειών στον τομέα των Ανανεώσιμων Πηγών Ενέργειας και Εξοικονόμησης Ενέργειας. Επίσης θα ακολουθήσουν συναντήσεις δύο ομάδων εργασίας για τις σχετικές πολιτικές και τεχνολογίες.

Όπως αναφέρεται στη σχετική ανακοίνωση «ιδιαίτερη σημασία θα έχει η παρουσίαση του νησιού Σάμσο που αποτελεί παγκοσμίως το πιο επιτυχημένο παράδειγμα εφαρμογής και αποδοχής των Ανανεώσιμων Πηγών Ενέργειας».

Η συνεργασία των τριών περιοχών στοχεύει στην ανταλλαγή εμπειριών, στη μεταφορά τεχνολογίας στην προώθηση της ενεργειακής καινοτομίας και κουλτούρας και την εκπόνηση κοινών σχεδίων δράσης για την μεγιστοποίηση των οικονομικών, ενεργειακών και περιβαλλοντικών οφελών από την εκτεταμένη χρήση Ανανεώσιμων Πηγών Ενέργειας.

Τέλος αύριο Τετάρτη, θα γίνουν τεχνικές επισκέψεις στο ΤΕΙ Κρήτης, σε Ξενοδοχεία με εγκαταστάσεις Ανανεώσιμων Πηγών Ενέργειας και σε επιχειρήσεις κατασκευής ηλιακών θερμοσιφώνων.

Το πρόγραμμα του συνεδρίου διαμορφώνεται ως εξής:

Τρίτη 27 Απριλίου 2010

09.00-09.15: Εγγραφή

09.15-09.45: Έναρξη - Χαιρετισμοί, κ. **Αθανάσιος Καρούντζος**, Γενικός Γραμματέας Περιφέρειας Κρήτης, κ. **Νικόλαος Λαμπρινός**, Πρόεδρος Ένωσης Ξενοδόχων Ν. Ηρα-

κλείου, κ. **Ανδρέας Μεταξά**, Διευθύνων Σύμβουλος Maris Hotels A.E.

Πρωινή Συνεδρία

09.45-10.00: "Παρουσίαση του Έργου INRES" κα **Lucia Dobarro**, Συντονιστής Έργου, Τεχνολογικό Ινστιτούτο Καναρίων Νήσων, Ισπανία

10.00-10.15: "Συγκριτική Ανάλυση SWOT", κα **Antje Klaesener**, INNOVA S.p.A.

10.15-10.30: "Οι ΑΠΕ στην Κρήτη: Περιφερειακή Καινοτομία και Προστιθέμενη Αξία", Δρ. **Νικόλαος Ζωγραφάκης**, Προϊστάμενος Ενεργειακού Κέντρου Περιφέρειας Κρήτης

10.30-10.50: ΠΑΡΟΥΣΙΑΣΗ ΚΑΛΩΝ ΠΡΑΚΤΙΚΩΝ-Κρήτη Πιλοτικές εφαρμογές θερμικών ηλιακών: Ελλάδα - Κρήτη, κ. **Δημήτριος Χαδόπης**, Κέντρο Ανανεώσιμων Πηγών & Εξοικονόμησης Ενέργειας

10.50-11.20: Διάλειμμα, Καφές

11.20-11.40: ΠΑΡΟΥΣΙΑΣΗ ΚΑΛΩΝ ΠΡΑΚΤΙΚΩΝ-Sams

"Συλλογική Τοπική Ιδιοκτησία Εγκαταστάσεων ΑΠΕ στο Sams", Δρ **Jan Jantzen**, Ακαδημία Ενέργειας, Sams, Δανία

11.40-12.05: ΠΑΡΟΥΣΙΑΣΗ ΚΑΛΩΝ ΠΡΑΚΤΙΚΩΝ-Canarias

- "Νησί El Hierro: 100% ΑΠΕ" κ. **Salvador Suarez**, Διευθυντής Μονάδας ΑΠΕ Τεχνολογικό Ινστιτούτο Καναρίων Νήσων, Ισπανία

- "Δίκτυο ΑΠΕ στα Κανάρια Νησιά" κ. **Agustin Gonzalez**, Διευθυντής, RICAM cluster, Ισπανία

12.05-12.20: "Εφαρμογές Ανανεώσιμων & Βιώσιμων Συστημάτων παραγωγής ενέργειας", καθ. **Θεοχάρης Τσοούτσος**

Τμήμα Μπν. Περιβάλλοντος Πολυτεχνείο Κρήτης

12.20-12.35: "Βιομετατροπή Ηλιακής Ενέργειας", καθ. **Αθανάσιος Κουτσολέλος**, Πρόεδρος, Τμήμα Χημείας Πανεπιστήμιο Κρήτης

12.35-12.50: "Ολοκλήρωση απομονωμένων συστημάτων παραγωγής ενέργειας βασίζομενα 100% στη χρήση ΑΠΕ", καθ. **Δημήτριος Χριστάκης**, Σχολή Τεχνολογικών Εφαρμογών Τεχνολογικό Εκπαιδευτικό Ίδρυμα Κρήτης

12.50-13.20: Παρουσιάσεις εταιρειών

1. Candia Maris - Θερμική Ηλιακή Εγκατάσταση Μεγάλης Κλίμακας, κ. **Ευάγγελος Χαροκουτσάκης**, Σύμβουλος Μηχανικός, TEAB A.E. MARIS HOTELS

2. Dobontech, κ. **Julian Monedero**, CEO, Dobon's Technology

3. Sams, Ακαδημία Ενέργειας - Επιχειρήσεις, Sams, Δανία

13.20-15.00: Ελαφρύ γεύμα **Απογευματινή Συνεδρία**

15.00-16.00: Ομάδα Εργασίας 1: Πολιτικές Ομάδα Εργασίας 2: Τεχνολογίες

16.00-16.15: Διάλειμμα, Καφές

16.15-16.45: Παρουσιάσεις Ομάδων Εργασίας

16.45-17.30: Γενικά Συμπεράσματα & Συζήτηση



Figure 8 Rethimniotika Nea (www.rethnea.gr)

Διαπεριφερειακό συνέδριο στην περιφέρεια

Διαπεριφερειακό συνέδριο με θέμα τη συνεργασία των νησιωτικών περιοχών για την ενεργειακή καινοτομία στα πλαίσια του σχετικού ευρωπαϊκού προγράμματος «INRES», συνδιοργανώνουν σήμερα η περιφέρεια Κρήτης-

ενεργειακό κέντρο, το τεχνολογικό πάρκο Κρήτης (του Ιδρύματος τεχνολογίας έρευνας) και η εταιρεία TEAB A.E. Στο συνέδριο που θα πραγματοποιηθεί στην αίθουσα διαχείρισης κρίσεων της περιφέρειας, θα συμμετάσχουν οι

νησιωτικές περιοχές της Κρήτης, των Κανáriων Νησιών (Ισπανία) και του νησιού Σάμσο (Δανία). Από κάθε περιοχή συμπράττουν οι περιφερειακές αρχές, επιστημονικοί τεχνολογικοί φορείς μεταφοράς τεχνολο-

γίας και Επιχειρήσεις.

Τα θέματα που θα παρουσιαστούν είναι η συγκριτική ανάλυση του τομέα ανανεώσιμων πηγών ενέργειας στις τρεις περιφέρειες, η παρουσίαση επιτυχημένων πρακτικών και παραδειγμάτων, δραστηριότητες Επιστημονικών και Τεχνολογικών Φορέων καθώς και έργα-εφαρμογές εταιριών στον τομέα των Ανανεώσιμων Πηγών Ενέργειας και Εξοικονόμησης Ενέργειας. Ιδιαίτερη σημασία έχει η παρουσίαση του νησιού Σάμσο, που αποτελεί παγκοσμίως το πιο επιτυχημένο παράδειγμα εφαρμογής και αποδοχής των Ανανεώσιμων Πηγών Ενέρ-

γειας.

Η συνεργασία των τριών περιοχών στοχεύει στην ανταλλαγή εμπειριών, στη μεταφορά τεχνολογίας, στην προώθηση της ενεργειακής καινοτομίας και κουλτούρας και την εκπόνηση κοινών σχεδίων δράσης για τη μεγιστοποίηση των οικονομικών, ενεργειακών και περιβαλλοντικών οφελών από την εκτεταμένη χρήση Ανανεώσιμων Πηγών Ενέργειας. Παράλληλα, αύριο θα γίνουν τεχνικές επισκέψεις στο ΤΕΙ Κρήτης, σε Ξενοδοχεία με εγκαταστάσεις Ανανεώσιμων Πηγών Ενέργειας και σε επιχειρήσεις κατασκευής ηλιακών θερμοσιφώνων.

**11^ο Παγκρήτιο
Συνέδριο**

ΞΕΝΟΓΛΩΣΣΗΣ ΕΚΠΑΙΔΕΥΣΗΣ

**Creta Panorama
Iberostar Hotel**

1 - 2 ΜΑΪΟΥ

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www.palso-rethimno.gr

ΥΠΟ ΤΗΝ ΑΙΓΙΔΑ ΤΗΣ ΝΟΜΑΡΧΙΑΚΗΣ ΑΥΤΟΔΙΟΙΚΗΣΗΣ ΡΕΘΥΜΝΗΣ & ΤΗΣ ΟΜΟΣΠΟΝΔΙΑΣ PALSΟ



Figure 9 Other internet inserts



Figure 10 INRES Inter-regional Workshop, Crete – Partners photo

