



ΚΥΠΡΙΑΚΟ  
ΕΜΠΟΡΙΚΟ ΚΑΙ  
ΒΙΟΜΗΧΑΝΙΚΟ  
ΕΠΙΜΕΛΗΤΗΡΙΟ



Λευκωσία, 13 Μαΐου 2014

**Προς:** Όλους τους ενδιαφερόμενους

**Θέμα:** Ανανεώσιμες Πηγές Ενέργειας στον Τουριστικό τομέα

Κυρία/ε,

Επιθυμούμε να σας πληροφορήσουμε για την διοργάνωση του συνεδρίου **‘Renewable Energy Applications for Island Tourism’** που θα διεξαχθεί το **διήμερο 29-30 Μαΐου 2014** στο **ξενοδοχείο Aphrodite Hills** στην **Πάφο**.

Το συνέδριο διοργανώνεται από το Υπουργείο Ενέργειας, Εμπορίου, Βιομηχανίας και Τουρισμού και τον Διεθνή Οργανισμό Ανανεώσιμων Πηγών Ενέργειας IRENA και η συμμετοχή σε αυτό είναι δωρεάν. Το ΚΕΒΕ θεωρεί ότι το συνέδριο αποτελεί μια πολύ καλή ευκαιρία ενημέρωσης σας για τις τελευταίες εξελίξεις στον τομέα των ΑΠΕ και την διασύνδεση τους με τον νησιώτικο Τουρισμό.

Συνημμένα θα βρείτε πληροφοριακό υλικό, το προκαταρκτικό πρόγραμμα και την δήλωση συμμετοχής την οποία θα πρέπει να αποστείλετε στο Υπουργείο Ενέργειας, Εμπορίου, Βιομηχανίας και Τουρισμού. Ο αριθμός των θέσεων συμμετοχής είναι πολύ περιορισμένος για αυτό παρακαλώ αποστείλετε την συμμετοχή σας το συντομότερο και όχι αργότερα από την Παρασκευή 17 Μαΐου 2014.

Για οποιαδήποτε επιπρόσθετη πληροφόρηση παρακαλώ όπως επικοινωνείτε με τον αρμόδιο λειτουργό κ. Ιωσήφ Σπυριδίδη στο τηλέφωνο 22-409385.

Με εκτίμηση,

Ανδρέας Ανδρέου,  
Αναπλ. Διευθυντής Τμήματος Βιομηχανίας,  
για Γενικό Γραμματέα.

ΑΑ/ΕΚ



## **IRENA - CYPRUS EVENT ON RENEWABLE ENERGY APPLICATIONS FOR ISLAND TOURISM**

**INTERCONTINENTAL, Aphrodite Hills Resort hotel, Paphos,  
Cyprus, May 29-30 2014**

### **Background**

In the Malta Communique of 2012, Ministers and other officials from 48 countries called on IRENA to establish a Global Renewable Energy Islands Network (GREIN) as a platform for pooling knowledge, sharing best practices and seeking innovative solutions for accelerated uptake of clean and cost-effective renewable energy technologies on islands, reducing their needs for costly fossil fuel. GREIN is establishing clusters of islands that wish to work together on renewable energy roadmaps, power grid integration, resource assessment, waste-to-energy systems, desalination, and applications for tourism.

The tourism sector on islands represents a prime commercial opportunity for renewable energy development. Many islands have substantial tourist industries that represent over 25 percent of GDP. With costs of diesel-dominated electricity generation typically over 35 U.S. cents per kilowatt-hour, hotels on such islands can substantially improve their competitiveness and reduce operating costs by installing cost-effective renewable energy technologies for cooling, hot water production and electricity production, all of which can substantially reduce their energy bills.

Cyprus has an isolated energy system due to its location as well as its size. It is the third largest island in the Mediterranean Sea. The fact that Cyprus is an island and interconnections with other countries are difficult and costly, makes it almost totally depended on imports for energy production. Cyprus was highly depended on other countries for energy, but since 2005 the Roadmap of Cyprus has started to change by increasing renewables from 3.8% in 2005 to almost 9% in 2013.

Cyprus is a leader in deploying solar hot water heating systems for hotels and residential buildings making the country have the highest Solar heating per capita of all European countries. Hence, its experience with solar hot water heating and other renewable energy technologies could usefully inform the tourism industry elsewhere. Cyprus is also an active participant in GREIN and could form a locus for the tourism interest cluster in the Africa-Indian Ocean-Mediterranean-South China Sea (AIMS) region. Together with a conference session in Dominican Republic at the Caribbean Tourism Energy Forum in December 2013, an event on tourism in Cyprus in May 2014 will help in creating awareness and sharing best practices to accelerate renewable energy deployment in the tourism sector of islands worldwide.

### **Expected Outcome**

The event will constitute the first of three regional events that will discuss strategies to accelerate the deployment of renewable energy in the tourism sector. The majority of the participants and the presenters will be from the private sector, involved in the tourism business. Some of them will showcase their experiences in deploying renewable energy in their facilities. Others are interested in



doing the same but are still looking for best practices and more specific evidence of economic viability and technology reliability. This event will provide the platform for exchange of experiences and information, with the objective of accelerating the deployment of renewable energy technologies in the island tourism sector.

The IRENA draft report on renewable energy for island tourism applications will be presented, and the feedback received will be incorporated in the final version of the report.

The outcome of this event will be compiled together with the IRENA report as an annex, and presented in Samoa in September, in occasion of the Third International Conference on SIDS.

### **Format and structure**

The first day of the event will focus on renewable energy solutions for island tourism. The technologies will be first introduced by experts, then the compelling business cases will be presented by the hotels that implemented renewable energy solutions in their premises. Each session will be concluded with a discussion between the panelists on the drivers that convinced them to invest in renewable energy in their hotels, and questions from the audience.

On the second day of the event, IRENA's sector study on renewable energy for island tourism will be presented. This should initiate discussion among policy makers on successful policy measures for the promotion of renewable energy in island tourism. Findings will be presented and considered, with a focus on cost effectiveness as well as policy effectiveness. Development partners will present their experiences and share views on what international cooperation can contribute in this area. The concluding session will be a discussion among public, private and international cooperation stakeholders, to discuss how to accelerate the deployment of renewable energy in island tourism applications, and the role for IRENA in supporting these efforts.



## PROVISIONAL AGENDA

### DAY 1 – RENEWABLE ENERGY SOLUTIONS FOR HOTELS – PRIVATE SECTOR BEST PRACTICES

#### Opening session

- H.E. Yiorgos Lakkotripis, Minister of Energy, Commerce, Industry and Tourism
- Adnan Z. Amin, Director-General, IRENA

#### Session 1: Solar Water Heating Systems for Island Hotels

- Technology and cost overview (IRENA)
- Quality infrastructure in Cyprus (Mr. George Reditis, Cyprus Solar Water Heater Laboratory Expert)
- Case studies from Cyprus (Marios Nicolaou, chairman of EVIEK – Cyprus Union of Solar Water Heaters Manufacturers)
- Discussion on key enabling factors and barriers

#### COFFEE BREAK

#### Session 2: Renewable Energy driven Air Conditioning for Island Hotels

- Solar Thermal Cooling: technology, cost and case study (Dr. Panagiotis Tsekouras, CRES, Greece)
- Solar cooling: case studies from Cyprus (Dr. George Florides, University of Cyprus)
- Sea Water Air Conditioning: technology, cost and case study (Makai Ocean Engineering, Hawaii, US)
- Ground source heat pumps for hotels: technology, cost and case study (Chrysis Chrysanthou, Ayii Anargyiri, Cyprus)
- Discussion on key enabling factors and barriers

#### LUNCH

#### Session 3: The Business Case for Solar Photovoltaic Systems in Island Hotels

- Technology overview (Dr. George Karagiorgis, Frederick University, Cyprus)
- Cost overview (IRENA)
- Business models: Starwood partnership with NRG Energy for captive PPAs (Starwood, TBC)
- Large PV hybrid off-grid for a resort (Bruce Clay, Clay Energy, case study from Fiji)
- Large PV hybrid off-grid for a resort (Alessandro Venanzini, Nidec ASI, case study from Maldives)
- Discussion on key enabling factors and barriers

#### Session 4: The Business Case for renewable water desalination for island tourism

- Technology overview, cost and case studies from Cyprus (Dr. Costas Papanicolas, CEO of CREF and President of the Cyprus Institute)
- Case study from Maldives (AQUIVA Foundation, Memsys desalination system in Gulhi Island, Maldives) TBC
- Discussion on key enabling factors and barriers

#### COFFEE BREAK



Session 5: The Business Case for renewable energy transport for island tourism

- Biofuels for air transportation (Alejandro Rios Galvan, Sustainable Bioenergy Research Consortium, UAE)
- Algae for biofuels for road transportation (Alexandros Charalambide, Senior Lecturer, Cyprus University of Technology)
- Sailing tours in Mauritius (Mauritius Tourism Promotion Authority) TBC
- Cruise ships powered by renewable energy while at the dock (Princess Cruises) TBC
- Electric vehicles for renewable energy use in island tourism (Isbrand Ho, Managing Director, BYD Europe B.V.) TBC

**DINNER RECEPTION**

DRAFT



## **DAY 2 – STRATEGIES TO ACCELERATE RENEWABLE ENERGY DEPLOYMENT IN ISLAND TOURISM**

### **Opening speech by His Excellency Nicos Anastasiades, President of the Republic of Cyprus**

#### Session 1: Roadmap for renewable energy in island tourism

Chair: Dolf Gielen, Director, IRENA Innovation and Technology Centre

- Presentation of IRENA findings on Renewable Energy Solutions for Island Tourism
- Review of common barriers (project development, policy and cooperation perspectives)
- Discussion of effective policies and measures to remove these barriers

#### Session 2: Development partners' experiences

- UNESCO (Cipriano Marin, Secretary-General, UNESCO Centre of the Canary Islands)
- IDB (Adriana Valencia, Team Leader, Inter-American Development Bank)
- UNWTO (Sofía Gutiérrez, Deputy Director, Sustainable Development of Tourism)
- GIZ (Alexander Haack, Team Leader, Energy)

### **LUNCH**

#### **Session 3: Concluding Roundtable on “Overcoming Barriers to the deployment of Renewable Energy Technologies in Islands Tourism”**

Chair: Adnan Z. Amin, Director-General, IRENA

- What needs to be the focus to overcome the key barriers to the deployment of RE technologies in island tourism?
- How might islands work together through the GREIN tourism cluster to address these barriers?

### **DINNER AND SITE VISIT AT AYII ANARGYIRI**

Visit to the hotel, which has PV-driven pool pumps, solar water heaters, heat pumps and ground-source VRV chillers. Dinner will follow. A bus will take the participants back to Aphrodite Hills.



## Participation

Participants in the event will include, inter alia:

- Governments from Island Countries and Countries with islands, with relevant tourism industry
- Hotels with experience in renewable energy deployment
- Hotels and hotel chains interested in deploying renewable energy
- Tour operators and hotel associations
- Development partners
- Aviation and sea transport operators with experience in RE
- Private Stakeholders and Financing Institutions

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**Participation Form**

**IRENA - CYPRUS EVENT  
 “RENEWABLE ENERGY for ISLAND TOURISM”**

**Intercontinental Aphrodite Hills Hotel, Cyprus  
 29-30 May 2014**

Please fax the completed participation form to **22304759** or email: [gla.cie@cytanet.com.cy](mailto:gla.cie@cytanet.com.cy), [iss.cie@cytanet.com.cy](mailto:iss.cie@cytanet.com.cy) no later than Friday 14<sup>th</sup> of May 2014.

NAME						
ORGANIZATION						
INDUSTRY SECTOR	TOURISM:		ENGINEERING CONSULTANT		GOVERNMENT	
	TRADE UNION:		BUSINESS CONSULTANT		EQUIPMENT MANUFACTURER	
ADDRESS						
TEL:	OFFICE:			FAX:		
	MOBILE:					
EMAIL:						
WEBSITE:						

**Notices**

1. Participations are treated on a first come first served basis due seat limitations.
2. Participants’ seats are limited to 2 persons per organization. If your organization wishes that more than two people attend, send a participation you will be notified by email if they become available.
3. Confirm your participation with the Energy Service of the Ministry of Energy, Commerce, Industry and Tourism.

Signature: .....

Date: .....