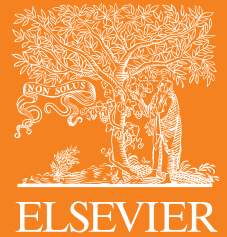


REM

RENEWABLE ENERGY INTEGRATION with
MINI/MICROGRID

RHODES, GREECE
September 28-30, 2018

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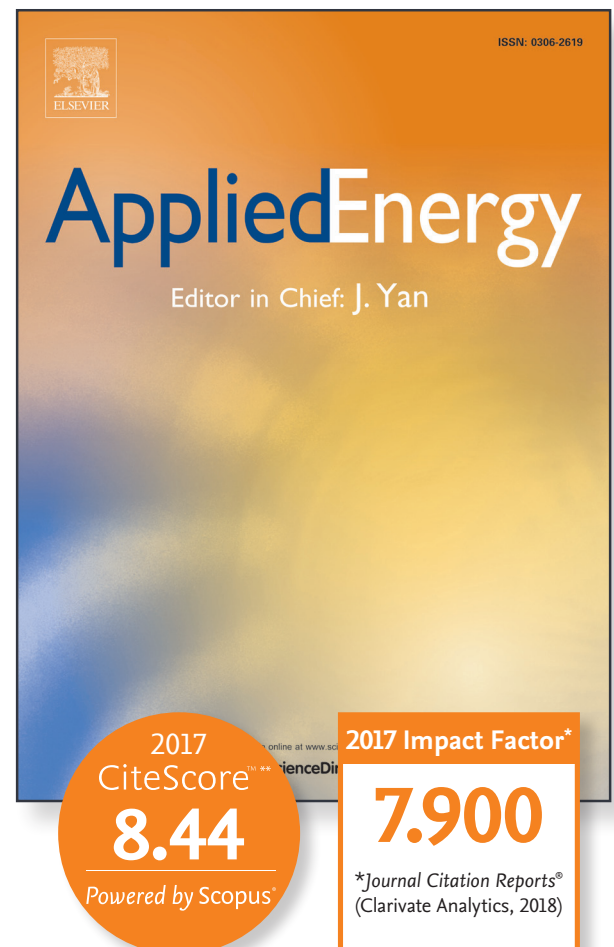
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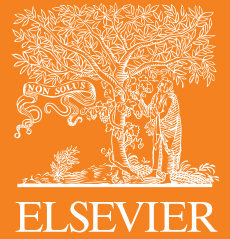


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- **Welcome to REM2018**
- **Acknowledgements**
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- **Panel Session**
- **Site Visit**
- **Practical Guide**
- **Venue Information**
- **Speaker's Guide**
- **Program at a Glance**
- **Oral Presentations**

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Applied Energy new section now publishing

Last year, *Applied Energy* launched a brand-new section: *Progress in Applied Energy*.

With a focus on renewable energy and clean technology, from energy efficiency to climate change mitigation, this new section aims to bridge the gap between development and implementation, focusing on fast-paced, cutting-edge research from forward looking aspects of energy innovations.

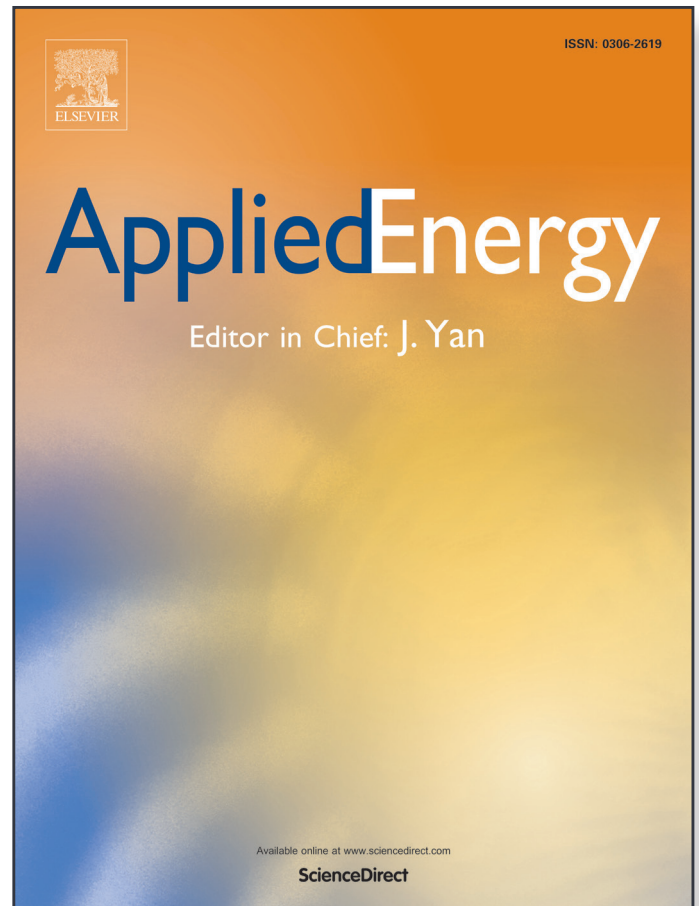
One year later, we're pleased to say our new section is publishing. Have a look at the first selection of articles published in our new section *Progress in Applied Energy*.

These articles are free to access until **31 October 2018**

<http://bit.ly/APENprogressin>

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Welcome to REM2018



Welcome to Applied Energy Symposium and Forum, REM2018: *Renewable Energy Integration with Mini/Microgrid*

The increasing share of variable renewable energy sources, strict targets set for the reduction of greenhouse gas emissions and the requirements on improvement of system security and reliability are calling for important changes in our energy systems. Distributed renewable energy and microgrids have emerged as effective ways for improving the quality of energy service given various types of renewable integration, and other challenges to the legacy system. The integration of distributed renewable energy and microgrids is significantly increasing the coupling and interactions between sources, and between supply and end use, at various scales (from multinational, national, and community scale down to building level). The need for energy storage and flexible demand is also increasing for improving the business case for their deployment. The issues need to be addressed to solve the challenges of intermittent power generation and mismatching of energy supply and demand over a time scale. Human behaviors should also be integrated into the energy systems to interactively improve the sustainability. Its interdisciplinary and synthetic approach not only reveals the systematic overview, but also details components of renewable energy systems.

This above background defines the aim and scope of the Applied Energy Symposium and Forum, REM2018: Renewable Energy Integration with Mini/Microgrid to be held in September 28-30, 2018 in Rhodes (Greece) organized by Applied Energy Innovation Institute (AEii) and TILOS European Project.

The REM2018, with the theme of “Distributed Energy and Microgrids for Smart Cities”, is to provide a platform focused on Distributed Energy & Microgrid (DEM). We invite all stakeholders including academia, inventors, project developers, financiers, suppliers, policy decision makers, even the public and end-users to participate in the conference. We will explore new approaches and innovative solutions to solve the challenging issues associated with new transitions of future renewable energy systems.

The event consists of keynote sessions, panel discussions, academic papers sessions, and on-site tour of renewable pilot projects.

We are looking forward to meeting you in Rhodes.

Prof. J.K. Kaldellis
University of West Attica

Prof. J. Yan
Editor-in-Chief of Applied Energy



FUTURE ENERGY



FUTURE ENERGY CENTER

THE CHALLENGES due to energy related emissions, increased energy demand and the fragile state of the global economy calls for rethinking global energy systems. Therefore, the research within the Future Energy Center focuses on renewable energy, energy efficiency and emission mitigation, as well as smarter modelling, optimization and management.

The Future Energy Center is one of Sweden's strongest research environments in process optimization targeting the process industry and the energy sector. We develop innovative solutions and tools within the areas of energy, building and environmental engineering.

The Future Energy Center has good relationships with both companies and recognized national and international centers, including several

Chinese universities. The profile comprises nine professors, a further fifteen senior researchers and more than forty graduate students.

THREE FOCUS AREAS

The research at Future Energy Center is focused on three areas:

TRACK 1 Renewable energy

TRACK 2 Energy efficiency and emission mitigation

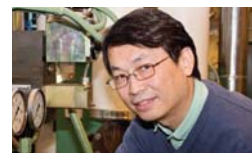
TRACK 3 Smarter modelling/ optimisation and management

The Future Energy Center also offers studies at post-graduate level in Energy and Environmental engineering. We are also part of the research school Reesbe (Resource-Efficient Energy Systems in the Built Environment).



CONTACT US
www.mdh.se

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Acknowledgements



THE APPLIED ENERGY
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Technology Innovation for the Local Scale
Optimum Integration of Battery Energy Storage



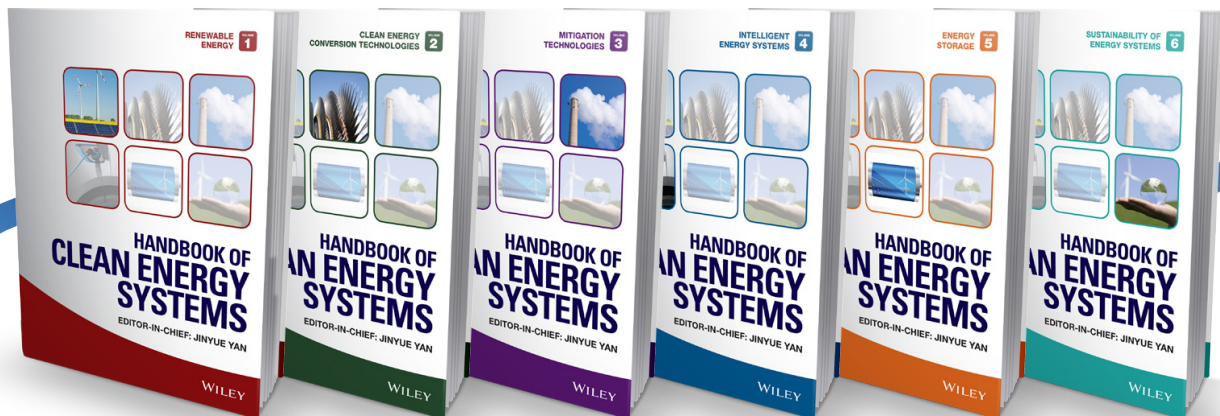
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Calling for Proposals

Applied Energy Summer School 2019

Applied Energy Summer School (AEss), associated with *Applied Energy* journal, a top journal on energy engineering with Impact Factor 7.900, and *UNiLABs*, a specialized platform to facilitate networking and communications and strengthen the multi-disciplinary collaborations, aims to build an academic, professional and persistent community for young scholars and experts by providing training courses, teamwork projects, plant tour opportunities and career development.

The missions of AEss are:

- Co-location to foster collaboration, innovation and multi-disciplinary comprehension through face-to-face communication and training courses;
- Collaboration to lead to creative integration and system solutions to complex problems by exploring linkages among different energy system components and developing a framework of system integration;
- Co-production to simulate and facilitate technology innovations with industrial and business sectors for commercialization.
- Career development to shape the future of youth with interactive exchange with editors, entrepreneurs, product producers, decision makers and investors;

AEss invites highly motivated international students (undergraduate, postgraduate and doctoral students) and young scientists and engineers from various academic and industrial backgrounds to join us.

Now we open Applied Energy Summer School platform for the hosts who could provide a dynamic learning environment, the perfect opportunity to meet and collaborate with students and researchers from around the globe. The topics are mainly on:

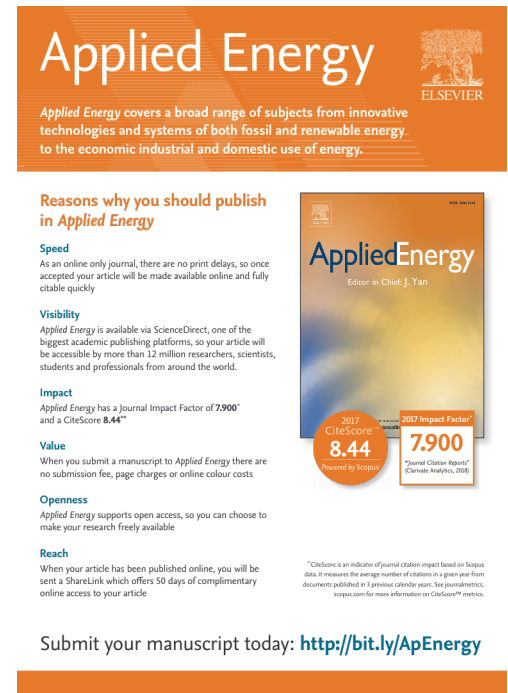
- Renewable energy
- Clean energy conversion technologies
- Mitigation technologies
- Intelligent energy systems
- Energy storage
- Sustainability of energy systems

Please send your proposal based on the attached template sumerschool2019@applied-energy.org as soon as possible but no later than March. 31, 2019.

For more information on Applied Energy, please visit <https://www.journals.elsevier.com/applied-energy>. If you have any question, please do not hesitate to contact: sumerschool2019@applied-energy.org

We are looking forward for the cooperation!

Prof. J. Yan
Editor-in-Chief of Applied Energy



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2017 CiteScore: **8.44**
Covered by Scopus

2017 Impact Factor: **7.900**
*Journal Citation Reports® (Clarivate Analytics, 2018)

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'TILOS,

Technology Innovation for the Local Scale, Optimum Integration of Battery Energy Storage



Technology Innovation for the Local Scale
Optimum Integration of Battery Energy Storage



Horizon 2020 - Low Carbon Energy - Local / small-scale storage
LCE-08-2014

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 646529.

“Be the change you want to see in the world around you”



Welcome to **Tilos!** A special, “S” shaped Greek island, located in the south-eastern **Aegean Sea**, part of the Dodecanese group of islands, lying midway between Kos and Rhodes. The island’s history begins after it broke off from the coast of Asia. During the years of its existence, the island was inhabited by several different nations and was influenced by multiple civilizations. Apart from its **natural beauty**, the variety of its landscape and the “grand bleu” of the Aegean Sea that surrounds it, Tilos has to show important medieval castles, a Byzantine monastery, many small picturesque churches and a village that is declared a cultural monument.

Tilos however is also known for its innovative and pioneering practices. It may be the Greek island most committed to sustainable development, having adopted a series of green policies which led the European Economic and Social Committee to characterise it a model of environmental management. In the near future, Tilos is planning to develop a recycling unit, an ecological village of 50 summer residences, a processing center for

biological, agricultural and livestock farming products etc.

Up until now, the electricity needs of the local population of Tilos, ~500 islanders, are covered through an undersea interconnection with the island of Kos, where a diesel-oil power station is operated. That means that until today the annual electricity consumption of Tilos, close to 3GWh, is covered entirely on the basis of oil imports.

What we -as a team- together with the people of Tilos aspire to accomplish, is to make this small and remote island a **blue- print** for **smart microgrids** facilitating **increased participation of renewable energy** in the local energy mix through the optimum utilisation of **energy storage**.

The participation of the local inhabitants in this project will contribute towards the protection of the environment, the reduction of the island carbon footprint, the fight against climate change and the development of sustainable energy models aiming at achieving increased energy autonomy.

Project in a Nutshell

The main objective of the TILOS project is to maximise the use of clean (renewable) energy sources in covering **the electricity needs** of Tilos island.

In this context, a new **prototype hybrid system for electricity production and storage** consisting of a medium-scale wind turbine of 800kW, a small-scale photovoltaic park of 160kW and a battery storage system of 2.4MWh useful energy capacity, has been developed and will operate on Tilos.

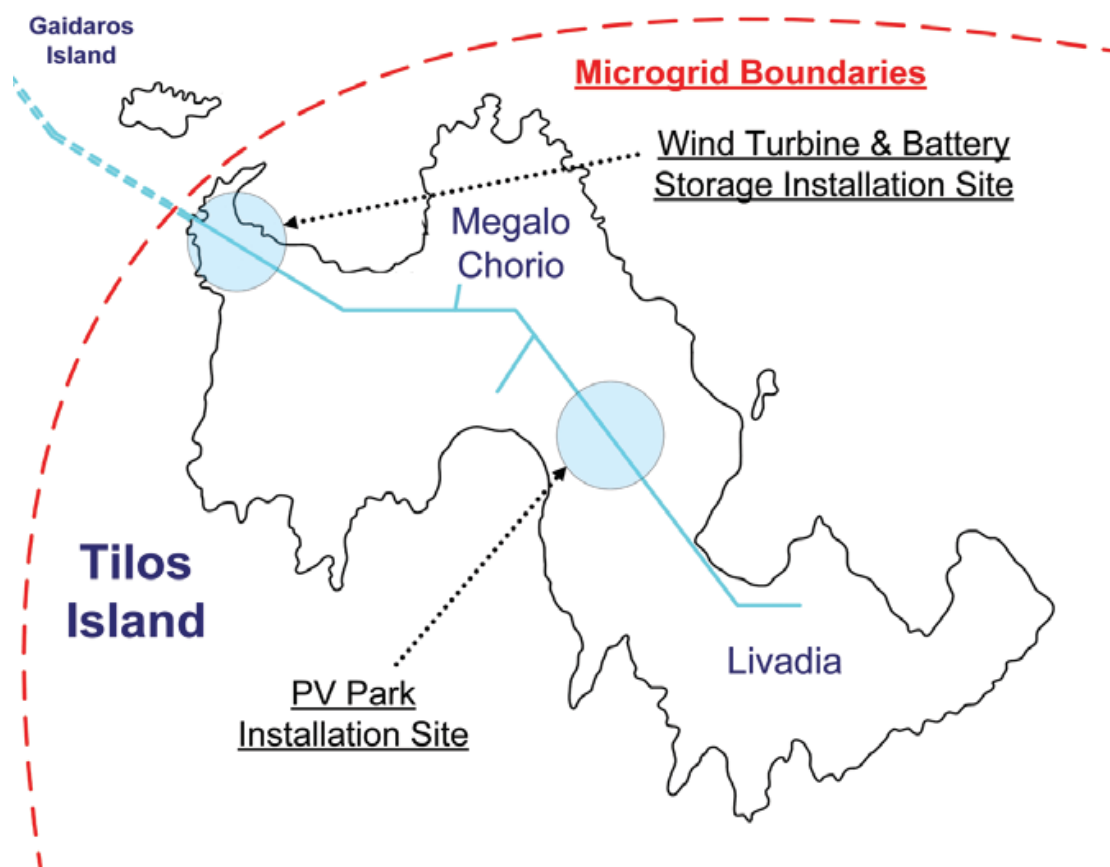
The green light for its operation was given on May 13, 2016. It was then that the production license for the hybrid power station of Tilos was issued from the Greek Regulatory Authority for Energy (RAE), making it the first power station of its kind that will operate in Greece, and among the first in Europe.

Apart from the hybrid power station, **smart meters** and **demand side management devices** have also been installed in the residential sector and other, central loads of Tilos island.

Moreover, a **smart energy management system** coordinating the operation of the various components will also be developed to achieve the highest possible electricity autonomy and balance between intermittent RES electricity production and electricity demand, with the support also of battery storage and demand side management.

The TILOS project focuses on island regions which constitute high priority areas. Apart from Tilos, other participating islands include **Pellworm** (Germany), **La Graciosa** (Portugal) and **Corsica** (France). The overall idea is to create a special platform that will enable technological know-how transfer between islands, by also exploiting the experience gained from the smart grid system of Pellworm, and that will designate new opportunities for the development of similar systems in other islands.

This revolutionary project for Europe will set the foundations for **the future development and replication** of similar hybrid systems in island regions and remote communities facing energy-related problems.



It's a team effort

TILOS is an innovative, European R&D project, which ranked first among 80 competing projects under the European funding Programme Horizon 2020. The project is led by the Laboratory of Soft Energy Applications and Environmental Protection of the University of West Attica (former TEI of Piraeus). Despite that TILOS carries a national identity, the project is also multinational involving a total of 13 European partners.

The partners originate from 7 different countries across the European continent (Greece,

Germany, France, United Kingdom, Sweden, Italy, Spain).

From Greece, apart from the University of West Attica, involved in the project are also HEDNO (the Hellenic Electricity Distribution Network Operator), the widely known environmental NGO WWF-Greece and the private company Eunice, with significant experience in the field of renewable energy sources, in the Greek and the European energy market.

Industrial / Commercial Partners

1. FIAMM Energy Storage Solutions FZSoNick (IT)
2. Younicos AG (DE)
3. EUNICE Laboratories SA (EL)
4. EUROSOL P&M GmbH (DE)

Research / Academic Partners

5. Commissariat à l'Énergie Atomique et aux Énergies Alternatives (FR)
6. Instituto Tecnológico de Canarias S.A. (ES)
7. University of West Attica (EL)
8. University of East Anglia – Business School (UK)

9. Université de Corse (FR)
10. Rheinisch-Westfälische Technische Hochschule Aachen (DE)
11. Kungliga Techniska Högskolan (SE)

Distribution System Operators (DSOs)

12. Hellenic Electricity Distribution Network Operator S.A. (EL)

NGOs

13. World Wide Fund for Nature – Greece (EL)

Photos: © Dimitris Zafirakis



Project Coordinator:

University of West Attica

Project Start: 01/02/2015

Project Duration: 4 years

Official website & e-mail:

www.tiloshorizon.eu

tilos@tiloshorizon.eu

Contact:

Dimitris Zafirakis,
tel: +30 210-5381580,
e-mail: dzaf@puas.gr



Keynote Speakers



**Prof. Agis M.
Papadopoulos**

Aristotle University of
Thessaloniki

Keynote: Micro-grids and cogeneration: A sustainable option for insular communities in the Mediterranean?

Prof. Agis M. Papadopoulos completed his Diploma in Mechanical Engineering at the Aristotle University Thessaloniki, in 1989, and his Master of Science in Energy Conservation at the School of Mechanical Engineering, Cranfield University (UK), in 1990. He made his Doctorate in Mechanical Engineering, on the feasibility of solar thermal systems, at the Aristotle University Thessaloniki, in 1994. Between 1994 and 1998, he was lecturing at the Dept. of Mechanical Engineering, at the University of Thessaly, in Volos and at the Department of Business Administration, at the University of Macedonia, in Thessaloniki. In 1998, he was elected Assistant Professor on Energy Systems at the Department of Mechanical Engineering at the Aristotle University Thessaloniki. In 2004, he was elected Associate Professor. Since 2010, he is a full Professor on energy systems. His research and academic work are focused on the following topics:

- Energy conservation and rational use of energy in buildings, emphasising on energy design of buildings, thermal insulation and HVAC systems.
- Energy and environmental economics, emphasising on the feasibility of energy investments and the development of incentives for the implementation of energy policies.

He has been a board member of the Hellenic Regulatory Authority for Energy (2003-2005) and of the AHEPANS General Hospital of Thessaloniki (2005-2007), as well as a national expert to the CEC on Research and Innovation in the 6th FP, on Energy in the 7th FP and on the Ideas Programme in the 7th FP. Furthermore, he is a member of the Hellenic Technical Chamber (TEE) since 1989 and of the American Society of Heating Refrigeration Air Conditioning Engineering (ASHRAE) since 2003.

Keynote Speakers



Prof. Yang Hong-xing
The Hong Kong
Polytechnic University

Keynote: Potential power generation from solar photovoltaic-integrated building facades: our simulation and experimental studies

Prof. Yang received his BEng in 1982 and MEng in 1985 in the Division of HVACR Engineering of Tianjin University, China. He obtained his PhD in 1993 in the Mechanical Engineering Department, University of Wales College of Cardiff, UK. He is now leading the Renewable Energy Research Group (RERG) in the Department of Building Services Engineering. His research interests cover a number of R&D topics in renewable energy applications and energy saving in buildings in urban areas including solar photovoltaic integration in buildings, indirect evaporation cooling, ground-coupled heat pumps and solar cell related materials. He has over 300 academic papers and 6 professional books published. According to the Shanghai Ranking's Global Ranking of Academic Subjects 2016 through Elsevier, he was on the list of 150 world most-cited researchers with impactful research in the disciplines of Civil Engineering. He was also on the list of the "Highly Cited Researchers 2017" reported by Clarivate Analytics. He is serving the International Journal of Applied Energy as associate editor, International Journal of Low Carbon Technologies as section editor and other international journals as editorial board member. He has been elected as the founding president of the Solar Energy Society of Hong Kong in 2018.

Day 2
11:00-13:00
Nefeli B

TILOS: Technology Innovation for the Local Scale Optimum Integration of Battery Energy Storage

TILOS is a European research project engaging 13 participating enterprises and institutes from 7 European countries (DE, FR, EL, UK, SE, IT, ES). The project's main goal is to demonstrate the potential of local / small-scale battery storage to serve a multipurpose role within an island microgrid that also interacts with a main electricity network. Among others, the project aims to achieve large-scale RES penetration and asset value maximization through the optimum integration of a hybrid RES (wind and PV) power station together with advanced battery storage, distributed, domestic heat storage, smart metering and DSM. The project progress will be discussed and an introduction will be made with regards to the scheduled, optional site visit to the island of Tilos.

Chair: *Prof. John Kaldellis, University of West Attica, Greece*

Participants:

Dr. Dimitrios Zafirakis, University of West Attica, Greece

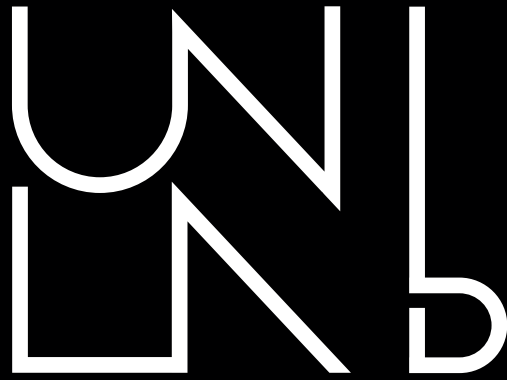
Dr. Jean-Laurent Duchaud, Université de Corse Pascal Paoli, France

Dr. Ottorino Veneri, National Research Council (CNR), Italy

Dr. Clemente Capasso, National Research Council (CNR), Italy

Dr. Dusan Nikolic, Enernet Global & University of Tasmania, Australia

Dr. Pietro Campana, KTH-Royal Institute of Technology & Mälardalen University, Sweden



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TILOS ISLAND AND SMART ENERGY MICROGRID

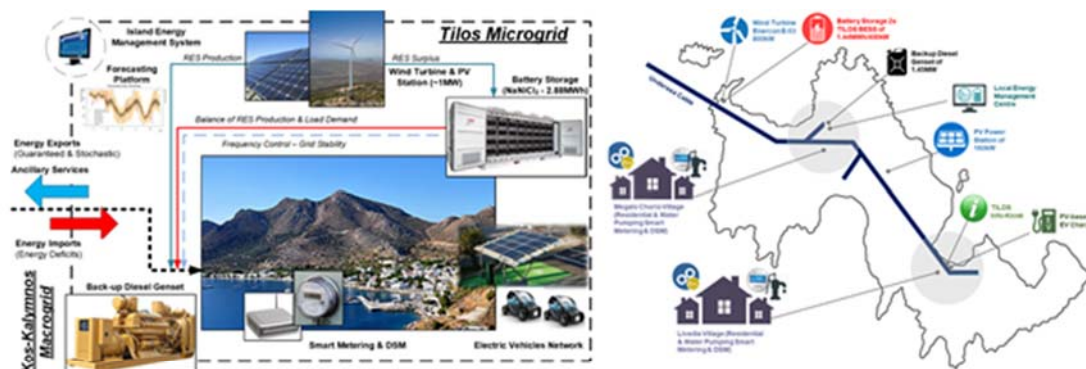
1st – 2nd, October 2018

Tilos is a majestic, tiny island, located on the south-eastern part of the Aegean Sea, sharing the distance between the islands of Kos and Rhodes. Although the island's permanent population does not exceed 500 people, tourists arriving during the summer period may even reach an additional of 2,000. But even these numbers do not add up to compare with the dominant island species, meaning stray cats and the literally tens of thousands of wild goats spread across the whole island area. This is only one indication of the ecological culture embraced by the local habitants of Tilos, actively supporting the notion of clean energy and sustainable development. These are the grounds where the first, integrated smart energy microgrid of the Mediterranean Sea is about to start its operation under the Horizon 2020 project of TILOS (<https://www.tiloshorizon.eu/>), standing as the acronym for "Technology Innovation for the Local Scale, Optimum Integration of Battery Energy Storage".



The smart island microgrid of Tilos employs a core, MW-scale, battery-based Hybrid Power Station (HPS) -the first of its kind in Greece and among the first in Europe- that comprises an 800kW wind turbine, 160kWp of installed PV capacity and a novel, NaNiCl₂ battery energy storage system of 2.88MWh/800kW. The HPS of Tilos combines with a Demand Side Management (DSM) network of approximately 150 smart meters and DSM panels distributed across the residential sector and centralized water pumping systems of the island, altogether coordinated under the governance of an advanced Microgrid Energy Management System incorporating novel forecasting aspects and DSM strategies.

Once fully operational, the integrated TILOS solution is expected to achieve annual RES shares in the order of 70-75% for the island of Tilos, minimizing the supply of oil-based electricity through the existing subsea cable that comes from the thermal power station of Kos. Instead, it is expected that Tilos will also provide peak shaving services for the broader Kos system by exporting guaranteed amounts of energy during times that electricity generation is most wanted. In addition, in an effort to maximize RES penetration, green electro mobility elements have also been recently introduced in the smart island microgrid of Tilos, allowing for the expansion of clean energy to the local transportation sector as well.



The research team of TILOS Project Coordinator, belonging in the Soft Energy Applications and Environmental Protection Lab (SEALAB) of the University of West Attica (former TEI of Piraeus), has the pleasure to invite REM2018 participants in Tilos island for a site visit to the HPS and to the rest of smart microgrid components under development. SEALAB (<https://www.sealab.gr>) is an academic lab with very long experience in educational and research activities in the field of energy technologies -mainly in Renewable Energy Sources and Hybrid Energy Systems- and clean energy applications contributing to sustainable development. SEALAB relevant ongoing research activities are focusing in:

- Technical and economic evaluation of energy systems
- Novel Strategies for Increasing RES Integration
- Policy Development & Economics of Energy Storage
- Implementation of the Green Island Concept
- Optimisation of the water and energy resources management

The site visit will take place after the completion of REM2018 Conference according to the following plan.

- Departure from Rhodes island on Monday, 1st of October, at 16:00, and arrival to Tilos at 18:10 of the same day.
- Departure from Tilos island on Tuesday, 2nd of October, at 14:25, and arrival to Rhodes at 16:30 of the same day.
- The registration fee shall cover all associated costs, including travel costs to and from Tilos island, accommodation and transportation costs on Tilos, and also a traditional dinner on Monday evening.

It is noted that due to capacity limitations, there will be a maximum number of fifty (50) site visit participants. Therefore, the applications will be accepted on a priority basis up to the completion of the maximum number of participants. The registration for the site visit can be done at the following link: <https://goo.gl/forms/jxxHIKFFXpLIXgPA3>

Venue

Rodos Palace Resort Hotel - Convention Center

Trianton Avenue, Ixia, 851 00 Rodos – Greece

Tel. +30 22410 25222

Fax. +30 22410 25350

www.rodos-palace.gr

How to get to the venue

Rodos Palace is exquisitely located near Rhodes town, with easy access to all major sights and attractions of the island. It is just a breath away from the beach and it allows you smooth transfer to the airport and port. The perfect retreat for those of you who wish to combine great accessibility and connectivity along with serenity and tranquility! You can reach Rhodes via airplane or ships. There is frequent and efficient transportation to and from the island, as well as wonderful transportation all around.

From Diagoras Rodos International Airport:

Travel Time 10-15 minutes

Distance from Hotel 12 km

Distance from Rhodes Town 16 km

"Diagoras" International Airport is located at Kremasti, 15 km South West of the town of Rhodes. There are regular international charter flights to and from most European cities, mainly during the summer, as well as a large number of charter flights to and from the rest of the world. Moreover there are daily flights to Athens, Heraklion and Thessaloniki and regular connections with the neighboring islands of Kastellorizo, Karpathos and Kassos.

Transportations from the Airport to Hotel:

- Car Rentals
- Taxis
- Regular public bus service

From Commercial Port/Mandraki Harbour/New Marina:

Travel Time 5 minutes

Distance from Hotel 4 km

Distance from Rhodes Town In Rhodes City

There are daily sailings from Piraeus all year round, more frequent in the summer months. The commercial harbor is situated in the city. All international and domestic ferries and cruise liners dock here. There are regular ferry lines connecting Rhodes to Athens (Piraeus), Thessaloniki, Heraklion, Cyprus and Turkey. Rhodes is also connected with all neighboring islands through extensive boat and hydrofoil services. Most of them dock at the commercial port and some at the Mandraki harbor. Transportations from the Commercial Port and Mandraki Harbour to the Hotel:

- Taxis
- Car Rentals
- Regular public bus service

Climate

Rhodes has a hot-summer Mediterranean climate. The average temperature in September is 24.4 °C.

Currency and Banking

The Euro (EUR) is the currency of Greece. ATMS and credit cards are widely accepted.

Electricity

Power is supplied at 230 Volts. The alternating current cycle is rated at 50 Hz. Adapters are needed if you come from foreign countries.

In Greece the power sockets are of type C and F. Check out the following pictures.

- Type C: also known as the standard "Euro" plug. This socket also works with plug E and plug F.
- Type F: also known as "Schuko". This socket also works with plug C and plug E.



Time Difference

UTC+3

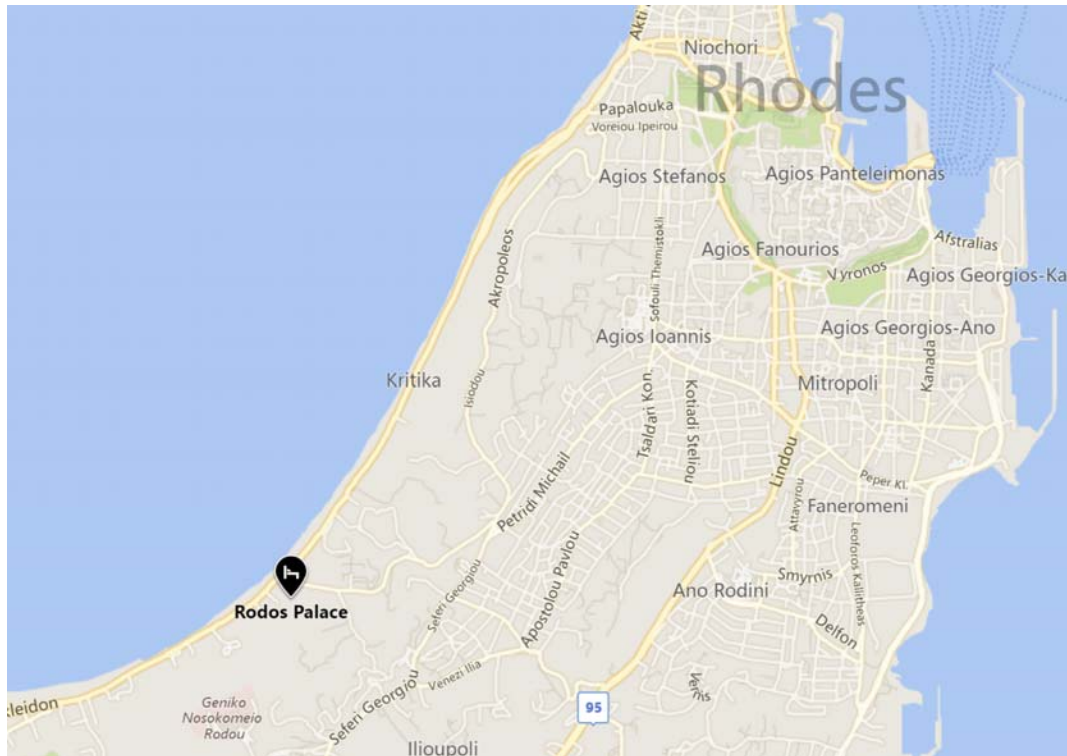
Venue Information

Conference Venue

The conference will be held at Rodos Palace Resort Hotel - Convention Center. The conference badge will have to be worn at all times to access the conference venue.

Location: Trianton Avenue, Ixia, 851 00 Rodos – Greece

More information about the hotel can be found: www.rodos-palace.gr



Registration area

The registration desk is in front of Delphi room.

Conference banquet, and lunch

Date	Activity	Location
29 th , September	Lunch	Ambrosia Restaurant
29 th , September	Conference Banquet	La Terrasse Restaurant
30 th , September	Lunch	Ambrosia Restaurant

Speaker's Guide

Presentation

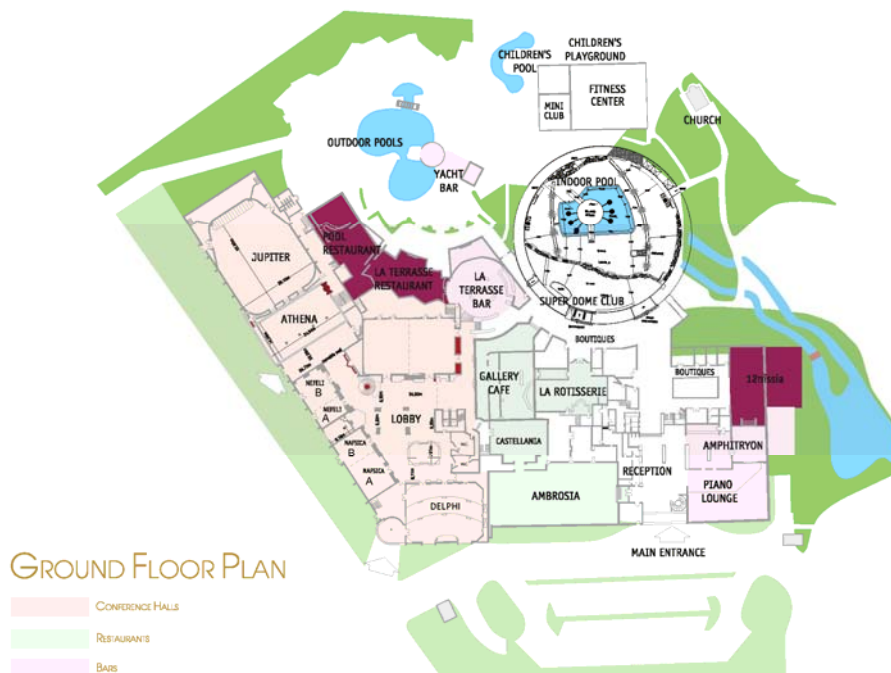
Length of presentation material should be in accordance with your allocated time. You are requested to load your presentation files before the session starts. Each oral presentation at the breakaway venues is limited to 30 minutes, which include the questions and answers. Please refer to this program booklet for actual presentation times. You are kindly requested to be present in the relevant presentation venue at least 10 minutes before the session starts.

Each presentation room is equipped with a laptop computer with a data projector. PowerPoint is the standard presentation format. The computers in the meetings rooms are provided to Window-based PC Users. Conference volunteers will be available to assist you in case you encounter difficulties to use the IT equipment.

Presentation Venues

The opening ceremony and keynote speeches will be held at Delphi. The following table lists all the presentation venues with abbreviations, which are used in the detailed program in the late part of this booklet.

Sessions	Room
Opening Ceremony, Keynote speeches	Delphi
Session 1-A3, Session 1-A4, Session 2-A1, Session 2-A2, Session 2-A3, Session 2-A4.	Nafsika A
Session 1-B3, Session 1-B4, Session 2-B1, Session 2-B2, Session 2-B3, Session 2-B4.	Nafsika B
Session 1-C3, Session 1-C4, Session 2-C1, Session 2-C2, Session 2-C3, Session 2-C4.	Nefeli A
Session 1-D3, Session 1-D4, Session 2-D1, Session 2-D2, Session 2-D3, Session 2-D4.	Nefeli B



Programme at a Glance

Registration: Sep 28, 14:00-17:00; Sep 29, 8:00-12:00; Sep 30, 8:00-12:00				
Time	Day 1: Sep 29			
10:00-10:30	Opening			
10:30-11:30	Keynote speaker 1			
11:30-12:00	Tea/Coffee Break			
12:00-13:00	Keynote speaker 2			
13:00-14:00	Lunch			
Afternoon	1-A3	1-B3	1-C3	1-D3
14:00-14:30	9	36	10	8
14:30-15:00	13	50	14	17
15:00-15:30	20	55	26	18
15:30-16:00	29	67	31	21
16:00-16:30	Tea/Coffee Break			
Afternoon	1-A4	1-B4	1-C4	1-D4
16:30-17:00	43	69	3	41
17:00-17:30	58	76	4	61
17:30-18:00	59	92	6	75
18:00-18:30	68	52	40	106
19:30-22:00	Conference Banquet			
Time	Day 2: Sep 30			
Morning	2-A1	2-B1	2-C1	2-D1
08:30-09:00	71	34	37	33
09:00-09:30	81	39	48	45
09:30-10:00	86	49	91	25
10:00-10:30	89	56	94	117
10:30-11:00	Tea/Coffee Break			
Morning	2-A2	2-B2	2-C2	2-D2
11:00-11:30	95	66	38	Panel session
11:30-12:00	110	78	47	
12:00-12:30	60	80	93	
12:30-13:00	119	82	111	
13:00-14:00	Lunch			
Afternoon	2-A3	2-B3	2-C3	2-D3
14:00-14:30	15	87	65	112
14:30-15:00	24	98	70	19
15:00-15:30	32	30	72	44
15:30-16:00	88	90	121	96
16:00-16:30	Tea/Coffee Break			
Afternoon	2-A4	2-B4	2-C4	2-D4
16:30-17:00	63	113	62	85
17:00-17:30	118	73	46	116
17:30-18:00	122	99	23	124
18:00-18:30	286	22	28	79
18:30-19:00	109			125

	Distributed renewable energy supplies
	Control and protection schemes
	Islands energy systems
	Microgrids
	Energy storage technologies
	Economic analysis, new business models and markets
	Energy in buildings
	Weather forecasting

Time	DAY 1: Sep 29		
10:00-10:30	OPENING		
10:30-11:30	KEYNOTE SPEAKER 1		
11:30-12:00	Tea/Coffee Break		
12:00-13:00	KEYNOTE SPEAKER 2		
13:00-14:00	Tea/Coffee Break		
Room: Nafsika A Session 1-A3: Distributed Renewable Energy Supplies I Session Chairs: John Kaldellis, Dimitrios Tsiamitros			
Time	ID	Author	Paper Title
14:00-14:30	9	Silvio Barbarelli, Teresa Castiglione, Giacomo Lo Zupone, Sergio Bova, Jinyue Yan	CFD Investigation Of The Open Center On The Performance Of A Tidal Current Turbine
14:30-15:00	13	Lorenzo Bartolucci, Stefano Cordiner, Vincenzo Mulone	FC Powered RBS: Data Analysis And System Optimization
15:00-15:30	20	Chia Yi Mah, Boon Han Lim, Chee-Woon Wong, Ming Hui Tan, Kok-Keong Chong, An Chow Lai	Investigating The Performance Improvement Of A Photovoltaic System In A Tropical Climate Using Water Cooling Method
15:30-16:00	29	Xu Wang, Zhaohong Bie, Fan Liu, Yu Kou	Robust Dispatch For Integrated Electricity And Natural Gas System Considering Wind Power Uncertainty
Room: Nafsika B Session 1-B3: Economic Analysis, New Business Models And Markets I Session Chairs: Evgenia Vanadzina, Bo Shen			
Time	ID	Author	Paper Title
14:00-14:30	36	Yi Wang	Emergency Management Of China's Refined Oil Supply Security: A Computational Assessment
14:30-15:00	50	Phedeas Stephanides, Konstantinos Chalvatzis, Xin Li, Nikos Mantzaris, Michalis Prodromou, Christiana Papapostolou, Dimitris Zafirakis	Sustainable Energy Solutions For The Aegean Archipelago Islands: What Is The Public Attitude?
15:00-15:30	55	Libang Guo, Yi Ding, Dan Zeng, Lei Liu	A Mechanism For Two-Level Power Market In China: Promoting Cross Regional Consumption Of Renewable Energy
15:30-16:00	67	Moonhyun Koh, Bola Ju, Woongchan Seo	A Review On Public Understanding Of Carbon Dioxide Capture And Storage (CCS) In South Korea

Room: Nefeli A Session 1-C3: Microgrids I Session Chairs: Marco Sorrentino, Pietro Campana			
Time	ID	Author	Paper Title
14:00-14:30	10	Clemente Capasso, Ottorino Veneri, Luigi Rubino, Guido Rubino	Power Architectures For The Integration Of DC-Microgrids With Photovoltaic Generation Systems
14:30-15:00	14	Carlotta Dainese, Mirco Faé, Agostino Gambarotta, Mirko Morini, Massimiliano Premoli, Giuliano Randazzo, Michele Rossi, Massimo Rovati, Costanza Saletti	Development And Application Of A Predictive Controller To A Mini District Heating Network Fed By A Biomass Boiler
15:00-15:30	26	Dieudonné Elike	Using Microgrids Featuring PV Panels And Batteries Connected To The Grid To Improve The Reliability Of A Low-Voltage Feeder In Kinshasa
15:30-16:00	31	Fan Liu, Zhaohong Bie, Jiangfeng Jiang, Ke Wang	Impact Of Microgrid Aggregator On Joint Energy And Reserve Market Based On Pure Strategy Nash Equilibrium
Room: Nefeli B Session 1-D3: Islands Energy Systems I Session Chairs: Dusan Nikolic, Konstantinos Chalvatzis			
Time	ID	Author	Paper Title
14:00-14:30	8	Jean-Laurent Duchaud, Gilles Notton, Alexis Fouilloy, Cyril Voyant	Wind, Solar And Battery Micro-Grid Optimal Sizing In Tilos Island
14:30-15:00	17	Seyed Ali Ghoreishi-Madiseh, Ali Fahrettin Kuyuk, Hosein Kalantari, Agus Pulung Sasmito	Ice Versus Battery Storage; A Case For Integration Of Renewable Energy In Refrigeration Systems Of Remote Sites
15:00-15:30	18	Seyed Ali Ghoreishi-Madiseh, Amir Safari, Leyla Amiri, Durjoy Baidya, Marco Rodrigues De Brito, Ali Fahrettin Kuyuk	Investigation Of Viability Of Seasonal Waste Heat Storage In Rock Piles For Remote Communities In Cold Climates
15:30-16:00	21	Dimitris Katsaprakakis, Irini Dakanali	Comparing Electricity Storage Technologies For Small Insular Grids
16:00-16:30	Tea/Coffee Break		

Room: Nafsika A Session 1-A4: Distributed Renewable Energy Supplies II Session Chairs: Davide Astiaso Garcia			
Time	ID	Author	Paper Title
16:30-17:00	43	Yan Wu, Yuwei Du	Preliminary Evaluation In Terms Of Building Group Layout Design Based On Simulated Local Wind And Daylight Conditions: A Case Study In Qinghai, China
17:00-17:30	58	Mahsa Daraei, Eva Thorin, Anders Avelin, Erik Dotzauer	Potentials For Increased Application Of Renewables In The Transportation System: A Case Study For Södermanland County, Sweden
17:30-18:00	59	Xiaohe Wang, Qibin Liu, Wei Han, Jing Lei	Thermodynamic Analyses Of The Solar Thermal Energy Driven Rankine Cycle With CO ₂ -H ₂ O Binary Mixture As A Working Fluid
18:00-18:30	68	Chao Yan, Zhaohong Bie	Evaluating National Multi-Energy System Based On General Modeling Method
Room: Nafsika B Session 1-B4: Economic Analysis, New Business Models And Markets II Session Chairs: Fredrik Wallin, Dimitris Katsaprakakis			
Time	ID	Author	Paper Title
16:30-17:00	69	Xin Li, Konstantinos J. Chalvatzis, Phedeas Stephanides	Bringing Innovation To Market: Business Models For Battery Storage
17:00-17:30	76	Evgenia Vanadzina, Antti Pinomaa, Samuli Honkapuro, Gonçalo Mendes	An Innovative Business Model For Rural Sub-Saharan Africa Electrification
17:30-18:00	92	Shiyu Liu, Zhaohong Bie, Fan Liu, Zewen Li, Gengfeng Li, Xifan Wang	Policy Implication On Distributed Generation PV Trading In China
18:00-18:30	52	Phedeas Stephanides, Konstantinos Chalvatzis, Xin Li, Nikos Mantzaris, Michalis Prodromou, Christiana Papapostolou, Dimitrios Zafirakis	Public Perception Of Sustainable Energy Innovation: A Case Study From Tilos, Greece
Room: Nefeli A Session 1-C4: Energy In Buildings I Session Chairs: Gianfranco Claudio, Bo Shen			
Time	ID	Author	Paper Title
16:30-17:00	3	Fabrizio Ascione, Martina Borrelli, Rosa Francesca De Masi, Filippo De Rossi, Giuseppe Peter Vanoli	Energy Refurbishment Of A University Building In Cold Italian Backcountry. Part 1: Audit And Calibration Of The Numerical Model
17:00-17:30	4	Fabrizio Ascione, Martina Borrelli, Rosa Francesca De Masi, Filippo De Rossi	Energy Refurbishment Of A University Building In Cold Italian Backcountry. Part 2: Sensitivity Studies And Optimization
17:30-18:00	6	Nan Yu, Chao Chen, Yu Zhang, Fengtao Han, Yaru Li, Lixing Jiang	Discussion On Optimization Method Of The Wall In PC Component Solar-Steam Curing Building Based On Phase Change Energy Storage Technology
18:00-18:30	40	Rui Tang, Shengwei Wang, Huilong Wang	Optimal Power Demand Management For Cluster-Level Commercial Buildings Using The Game Theoretic Method

Room: Nefeli B Session 1-D4: Distributed Renewable Energy Supplies III Session Chairs: Lorenzo Ferrari, Pietro Campana			
Time	ID	Author	Paper Title
16:30-17:00	41	Fabrizio Ascione, Nicola Bianco, Davide Ferdinando Napolitano, Gerardo Maria Mauro	Villas On Islands: Cost-Effective Energy Refurbishment In Mediterranean Coastline Houses
17:00-17:30	61	Salil Puri, Amarasinghage Tharindu Perera, Dasaraden Mauree, Silvia Cocco, Louis Delannoy, Jean-Louis Scartezzini	The Role Of Distributed Energy Systems In European Energy Transition
17:30-18:00	75	Amarasinghage Tharindu Perera, Vahid Nik, Jean-Louis Scartezzini	Impacts Of Extreme Climate Conditions Due To Climate Change On The Energy System Design And Operation
18:00-18:30	106	Yasin Movahhed, Amir Safari, Sina Motamedi, Ramin Haghighi Khoshkhoo	Simultaneous Use Of PV System And Green Roof: A Techno-Economic Study On Power Generation And Energy Consumption
19:30-22:00	Conference Banquet		

Room: Nafsika A Session 2-A1: Distributed Renewable Energy Supplies IV Session Chairs: Dimitris Katsaprakakis, Pietro Campana			
Time	ID	Author	Paper Title
08:30-09:00	71	Rohan Goddard, Lijun Zhang, Xiaohua Xia	Optimal Sizing And Power Sharing Of Distributed Hybrid Renewable Energy Systems Considering Socio-Demographic Factors
09:00-09:30	81	Nelson Troncoso, Luis Rojo, Manuel Villalobos, Óscar C. Vásquez, Héctor Chávez	Economic Decision-Making Tool For Distributed Solar Photovoltaic Panles And Storage: The Case Of Chile
09:30-10:00	86	Changsheng Li, Bo Shen	Bringing Dual Benefits Of Rural Electrification And Economic Growth Through Innovative Distributed Renewable Energy Applications
10:00-10:30	89	Peng Li, Bo Dong, Hao Yu, Chengshan Wang, Yanda Huo, Shuquan Li, Jianzhong Wu	A Unified Energy Bus Based Multi-Energy Flow Modeling Method Of Integrated Energy System
Room: Nafsika B Session 2-B1: Microgrids II Session Chairs: Clemente Capasso, Dusan Nikolic			
Time	ID	Author	Paper Title
08:30-09:00	34	Mir Sayed Shah Danish, Tomonobu Senjyu, Mikaeel Ahmadi, Abdul Matin Ibrahim, Ryoya Ohta, Harun Or Rashid Howlader	A Sustainable Microgrid (Part 1): A Sustainability-Oriented Approach
09:00-09:30	39	Yu Kou, Zhaohong Bie, Xu Wang, Fan Liu	ADMM-Based Multiperiod Optimal Energy Flow Of A Regional Integrated Multi-Energy Microgrid
09:30-10:00	49	Marco Sorrentino, Antonio Adamo, Gianmarco Nappi	Optimal Sizing Of An Rsoc-Based Renewable Microgrid
10:00-10:30	56	Anastasios Oulis Rousis, Ioannis Konstantelos, Panagiotis Fatouros, Goran Strbac	An AC OPF With Voltage – Frequency Coupling Constraints For Addressing Operational Challenges Of AC/DC Microgrids
Room: Nefeli A Session 2-C1: Energy Storage Technologies Session Chairs: John Kaldellis, Dimitris Zafirakis			
Time	ID	Author	Paper Title
08:30-09:00	37	Shuangqi Li, Jianwei Li, Hongwen He, Hanxiao Wang	Research On Lithium-Ion Battery Modeling Based On Big Data
09:00-09:30	48	Aleksandra Mikołajczak, Piotr Krawczyk, Michalina Kurkus-Gruszecka, Krzysztof Badyda	Analysis Of The Liquid Natural Gas Energy Storage Basing On The Mathematical Model
09:30-10:00	91	Yang Li, Zhe Tian, Kaiming Qin, Jide Niu, Haifeng Hong, Hong Liu, Hongfang Zhao	Impacts Of Water Storage On Robust Optimal Design Of Cooling System Considering Uncertainty
10:00-10:30	94	Alan Thomson, Gianfranco Claudio	The Technical And Economic Feasibility Of Phase Change Materials For Thermal Energy Storage In District Heating Networks

Room: Nefeli B Session 2-D1: Weather Forecasting Session Chairs: Silvio Barbarelli			
Time	ID	Author	Paper Title
08:30-09:00	33	Azim Heydari, Davide Astiaso Garcia, Farshid Keynia, Fabio Bisegna, Livio De Santoli	Renewable Energies Generation And Carbon Dioxide Emission Forecasting In Microgrids And National Grids Using GRNN-GWO Methodology
09:00-09:30	45	Chaoqiong Pan, Can Wang, Ziyao Zhao, Jinhao Wang, Zhaohong Bie	A Copula Function Based Monte Carlo Simulation Method Of Multivariate Wind Speed And PV Power Spatio-Temporal Series
09:30-10:00	25	Daniel Henríquez Alamo, Rafael Nebot Medina, Santiago Díaz Ruano, Salvador Suárez García, Konstantinos Moustris, Kosmas Kavadias, Dimitrios Zafirakis, Georgios Tzanes, Effrosyni Zafeiraki, Georgios Spyropoulos, John Kaldellis, Gilles Notton, Jean-Laurent Duchaud, Marie-Laure Nivet, Alexis Foulloy, Sylvain Lespinats	An Advanced Forecasting System For The Optimum Energy Management Of Island Microgrids
10:00-10:30	117	Dimitris Zafirakis, Georgios Tzanes, John Kaldellis	Forecasting Of Wind Power Generation With The Use Of Artificial Neural Networks And Support Vector Regression Models
10:30-11:00	Tea/Coffee Break		
Room: Nafsika A Session 2-A2: Distributed Renewable Energy Supplies V Session Chairs: Silvio Barbarelli, Boon Han Lim			
Time	ID	Author	Paper Title
11:00-11:30	95	Ramiar Sadegh-Vaziri, Matthäus U. Bäbler	Providing Sulfur Free Syngas To A Fuel Cell System
11:30-12:00	110	Márcia Andréa Rosas Luna, Felipe Barroco Fontes Cunha, Maria Candida Arrais De Miranda Mousinho Mousinho, Ednilo Andrade Torres	Solar Photovoltaic Generation Distributed In Brazil: The Case Of Resolution 482/2012
12:00-12:30	60	Andrea Baccioli, Gianluca Caposciutti, Andrea Marchionni, Lorenzo Ferrari, Umberto Desideri	Poly-Generation Capability Of A Biogas Plant With Upgrading System
12:30-13:00	119	Natarajan Prabakaran, Pietro Elia Campana, Amalorpavaraj Rini Ann Jerin, Kaliannan Palanisamy	A New Approach For Grid Integration Of Solar Photovoltaic System With Maximum Power Point Tracking Using Multi-Output Converter

Room: Nafsika B			
Session 2-B2: Microgrids III			
Session Chairs: Marco Sorrentino			
Time	ID	Author	Paper Title
11:00-11:30	66	Duanxia Xu, Masako Mumata, Gento Mogi	Economic Comparison Of Microgrid Systems For Rural Electrification In Myanmar
11:30-12:00	78	Arne Meeuw, Sandro Schopfer, Felix Wortmann	Experimental Bandwidth Benchmarking For P2P Markets In Blockchain Managed Microgrids
12:00-12:30	80	Xiyuan Liu, Zhaohong Bie	Optimal Allocation Planning For Public EV Charging Station Considering AC And DC Integrated Chargers
12:30-13:00	82	Eslam Nassar, Koji Tokimatsu, Muhammad Aziz	Potential Distributions Of Electric Vehicle Secondary Used Batteries For Frequency Regulation In Europe
Room: Nefeli A			
Session 2-C2: Energy In Buildings II			
Session Chairs: Amir Safari, Chao Long			
Time	ID	Author	Paper Title
11:00-11:30	38	Dimitris Katsaprakakis	Introducing A Solar-Combi System For Hot Water Production And Swimming Pools Heating In The Pancretan Stadium, Crete, Greece.
11:30-12:00	47	Yunran Min, Yi Chen, Hongxing Yang	Simplified Predicting Models On Energy-Saving Potential Of Indirect Evaporative Coolers In Hong Kong
12:00-12:30	93	Yang Zhang, Pietro Elia Campana, Anders Lundblad, Chi Zhang, Jinyue Yan	Building Energy System: From System Planning To Operation
12:30-13:00	111	Yan Qi, Lijia Du, Yunfei Mu, Hongjie Jia, Xudong Wang, Guodong Li	Optimal Dispatching Of Household Air-Source Heat Pump Heating System Considering Thermal Comfort
Room: Nefeli B			
Session 2-D2: Panel Discussion			
11:00-13:00	<p>TILOS: Technology Innovation For The Local Scale Optimum Integration Of Battery Energy Storage</p> <p>Chair: Prof. John Kaldellis, University Of West Attica, Greece</p> <p>Participants: Dr. Dimitrios Zafirakis, University Of West Attica, Greece Dr. Jean-Laurent Duchaud, Université De Corse Pascal Paoli, France Dr. Ottorino Veneri, National Research Council (CNR), Italy Dr. Clemente Capasso, National Research Council (CNR), Italy Dr. Pietro Campana, KTH-Royal Institute Of Technology & Mälardalen University, Sweden</p>		
13:00-14:00	Lunch		

Room: Nafsika A			
Session 2-A3: Control And Protection Schemes			
Session Chairs: Clemente Capasso			
Time	ID	Author	Paper Title
14:00-14:30	15	Yuanxin Qi, Marcus Thern, Mayken Espinoza Andaluz, Martin Andersson	Modeling And Control Strategies Of Proton Exchange Membrane Fuel Cells
14:30-15:00	24	Yishuang Hu, Yi Ding	Reliability Assessment In Distributed Multi-State Series-Parallel Systems
15:00-15:30	32	Ke Wang	Power System Critical Cutset Identification Based On Rolling Double Level Hierarchical Clustering
15:30-16:00	88	Haoran Ji, Hao Yu, Guanyu Song, Peng Li, Chengshan Wang, Jianzhong Wu	A Decentralized Voltage Control Strategy Of Soft Open Points In Active Distribution Networks
Room: Nafsika B			
Session 2-B3: Islands Energy Systems II			
Session Chairs: Gianfranco Claudio, Lorenzo Ferrari			
Time	ID	Author	Paper Title
14:00-14:30	87	Xiaojing Lv, Xiaoyi Ding, Yiwu Weng	Performance Analysis Of Island Energy System Of SOFC And GT With Gasified Biomass Fuel
14:30-15:00	98	Dusan Nikolic, Michael Negnevitsy	Adding Inertia To Isolated Power Systems For 100% Renewable Operation
15:00-15:30	30	Kosmas Kavadias, Panagiotis Alexopoulos, George Charis	Techno-Economic Evaluation Of Geothermal-Solar Power Plant In Nisyros Island In Greece
15:30-16:00	90	Georgios Tzanes, Effrosyni Zafeiraki, Christiana Papapostolou, Dimitris Zafirakis, Konstantinos Moustiris, Kosmas Kavadias, Konstantinos Chalvatzis, John Kaldellis	Assessing The Status Of Electricity Generation In The Non-Interconnected Islands Of The Aegean Sea Region
Room: Nefeli A			
Session 2-C3: Microgrids IV			
Session Chairs: Ottorino Veneri, Jean-Laurent Duchaud			
Time	ID	Author	Paper Title
14:00-14:30	65	Jiangfeng Jiang, Yu Kou, Zhaohong Bie, Gengfeng Li	Optimal Real-Time Pricing Of Electricity Based On Demand Response
14:30-15:00	70	Elamim Abderrazzak	Comparative Study Of Photovoltaic Solar Systems Connected To The Grid: Performance Evaluation And Economic Analysis
15:00-15:30	72	Danielle Griego, Sandro Schopfer, Gregor Henze, Elgar Fleisch, Verena Tiefenbeck	Aggregation Effects For Microgrid Communities At Varying Sizes And Prosumer-Consumer Ratios
15:30-16:00	121	Dimitrios Tsiamitros, Dimitrios Stimoniaris, Theodoros Kottas, Christoph Orth, Filipe Soares, Andre Madureira, Dimitrios Leonardos, Stylianos Panagiotou, Chrsanthi Chountala	Digital Audio Broadcasting (DAB)-Based Demand Response For Buildings, Electric Vehicles And Prosumers (DAB-DSM)

Room: Nefeli B			
Session 2-D3: Distributed Renewable Energy Supplies VI			
Session Chairs: Boon Han Lim, Mirko Morini			
Time	ID	Author	Paper Title
14:00-14:30	112	Zheng Zhang, Shuangqi Li, Jianwei Li, Hongwen He	Online Estimation For Parameters And State-Of-Charge Of Limnfeo4 Batteries With A Modified Adaptive Kalman Filter
14:30-15:00	19	Silvio Barbarelli, Mario Amelio, Teresa Castiglione, Gaetano Florio, Nino M. Scornaienchi	Hydraulic On-Shore System Recovering Energy From The Sea Waves
15:00-15:30	44	Xu Han, Yan Wu	The Construction And Application Of "Sponge City" In Different Precipitation Regions: Case Studies In Pingxiang And Tsinan, China
15:30-16:00	96	Chao Long, Yue Zhou, Jianzhong Wu	A Game Theoretic Approach For Peer To Peer Energy Trading
16:00-16:30	Tea/Coffee Break		
Room: Nafsika A			
Session 2-A4: Economic Analysis, New Business Models And Markets III			
Session Chairs: Evgenia Vanadzina, Phedeas Stephanides			
Time	ID	Author	Paper Title
16:30-17:00	63	Xiang Xia, Nan Shang, Jianliang Fang, Wei Jiang, Jun Liu, Lei Liu, Yi Ding	Management Of Bilateral Contracts For Gencos Considering The Risk In Spot Market
17:00-17:30	118	Chongmei Wang, Jiayu Chu	Analyzing On The Impact Mechanism Of Foreign Direct Investment(FDI) To Energy Consumption
17:30-18:00	122	Ying Yang, Jijiang He, Shujuan Wang, Shoubin Yang, Xiaowen Kang, Yang Zhang, Pietro Elia Campana, Jinyue Yan	Industrial And Commercial Distributed Solar PV Grid Parity Map: Based On The Analysis Of 345 Prefecture-Level Cities In China
18:00-18:30	286	Kai Chang	Emissions Reduction Targets And Wealth Distribution Effects Through Interprovincial Emissions Trading Scheme In China
18:30-19:00	109	Lucas Spangher	A Case Study Comparison Of Different Ownership And Finance Models For Off Grid Systems In Southern India
Room: Nafsika B			
Session 2-B4: Islands Energy Systems III			
Session Chairs: Silvio Barbarelli			
Time	ID	Author	Paper Title
16:30-17:00	113	Pietro Elia Campana, Maria Varini, Ariel Chiche, Yang Zhang, Chi Zhang, Anders Lundblad, Jinyue Yan	High Share Renewable Islands Through Synergies Between Energy Networks
17:00-17:30	73	Ambrose Njepu, Lijun Zhang, Xiaohua Xia	Optimal Tank Sizing And Operation Of Energy-Water Supply Systems In Residences
17:30-18:00	99	Dusan Nikolic, Michael Negnevitsky	Smart Grid In Isolated Power Systems – Practical Operational Experiences
18:00-18:30	22	Kosmas Kavadias, Emily Karamanou	Meteorological Input Data Effect On Sizing Stand-Alone Photovoltaic Systems

Room: Nefeli A Session 2-C4: Microgrids V Session Chairs: Dimitris Zafirakis, Jean-Laurent Duchaud			
Time	ID	Author	Paper Title
16:30-17:00	62	Guido Francesco Frate, Paolo Cherubini, Carlo Tacconelli, Andrea Micangeli, Lorenzo Ferrari, Umberto Desideri	Ramp Rate Abatement For Wind Energy Integration In Microgrids
17:00-17:30	46	Huilong Wang, Shengwei Wang, Rui Tang	Investigation On The Use Of Pumps In HVAC Systems For Providing Ancillary Services In Smart Grids
17:30-18:00	23	Chaouki Ghenai, Maamar Bettayeb	Grid-Tied Solar PV/Fuel Cell Hybrid Power System For University Building
18:00-18:30	28	Chaouki Ghenai	Solar Assisted Pyrolysis Of Plastic Waste: Pyrolysis Oil Characterization And Grid-Tied Solar PV Power System Design
Room: Nefeli B Session 2-D4: Microgrids VI Session Chairs: Boon Han Lim, Mirko Morini			
Time	ID	Author	Paper Title
16:30-17:00	85	Zhengchao Wang, Amarasinghage Tharindu Perera	Robust Optimization Of Power Grid With Distributed Generation And Improved Reliability
17:00-17:30	116	Chi Zhang, Pietro Elia Campana, Chenxi Liu, Zhang Yang, Jinyue Yan, Ke Wang	Choice Preferences And Willingness-To-Pay For Crowd-Funding With Integrated Photovoltaic Water Pumping System In Dairy Milk Production In China
17:30-18:00	124	Nand Kishor Meena, Jin Yang, Evangelos Zacharis	Optimal Planning and Operational Management of Open-Market Community Microgrids
18:00-18:30	79	Adnan Alamili	Experimental And Analytical Study Of The Ultra-Capacitor Storage Unit Used In The Regenerative Braking System
18:30-19:00	125	Paolo Gabrielli, Florian Fürer, Georgios Mavromatidis, Marco Mazzotti	Robust And Optimal Design Of Multi-Energy Systems With Seasonal Storage Through Uncertainty Analysis



RENEWABLE ENERGY INTEGRATION with
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