Scope of the Conference

The 6th International Conference on Renewable Energy Sources and Energy Efficiency (RESEE2018) follows the five successful editions held in Nicosia (2007, 2009, 2011, 2013, and 2016). The aim of the conference is to bring together all the key stakeholders interested in renewable energy sources and energy efficiency to share and discuss advances and developments in this field. It is therefore aimed at assisting researchers, scientists, manufacturers, companies, communities and agencies to keep abreast on new developments in their specialist fields and to join forces in finding alternative energy solutions to current issues. The thematic areas of the conference cover all topics of renewable energy as well as energy efficiency in all sectors.

Who should attend

- Members of the research and academic communities aiming at exchanging results, sharing similar experiences or new applications.
- Architects, engineers and energy consultants.
- Decision makers, including managers and policy makers interested in exchanging ideas and experiences and learning about new initiatives.
- Representatives of international organizations or other organizations willing to share relevant experience on renewable energy exploitation, energy efficiency techniques and developments of conventional technologies.
- Private companies interested in investing on renewable energy and energy efficiency equipment.
- Individuals who wish to be informed on new developments, tools and techniques.
- Regulators, utilities and operators enriching the conference with their views on the changing needs of systems in delivering the quality of supply that everybody expects.

Venue

University of Cyprus, Nicosia

Parallel Workshops

Industry workshops will be organised and be available on request, depending on satisfactory number of applications received.

Conference presentations

- The presentation of all the selected papers will be 15 minutes duration. Each session will be followed by a 10-minute discussion.
- Conference proceedings: All accepted papers and the papers of the invited speakers will be available to the registered participants in the Conference webpage www.mse.com.cy/resee2018
- Official language: The official language of the conference is English.
6th International Conference on Renewable Energy Sources & Energy Efficiency

1-2 November 2018

Executive Organising Committee

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              Prof Theodoros Zachariadis, Cyprus University of Technology

Conference Coordinator: Mr Andreas Andreou, Cyprus Chamber of Commerce and Industry

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- Mr Christos Maxoulis
- Dr Nestor Fylaktos
- Prof Theodosis Tsoutsos
- Mr Nicos Kyriakides
- Dr Constantinos Rousas
- Prof Panayiotis Keleris
- Prof Michalis Komodromos
- Dr Michalis Syrimis
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- Prof Ioannis Michaelides
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- Prof. H. Kambezidis
- Prof. G. Karagiorgis
- Prof. A. Kolos
- Prof. E. Kyriakides
- Prof. I. Meir
- Prof. M. Neophytou
- Prof. S. Nizetic
- Prof. K. Papakostas
- Prof. L. Seduikyte
- Prof. Despina Serghides
- Prof. T. Theodosiou
- Prof. M. Todorovic
- Prof. A. Tournidakis
- Prof. G. Tsilingiridis
- Prof. D. Wilson

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- Prof. Evangoulos Dinalas
  National Technical University of Athens, Greece
- Dr Venizelos Efthymiou
  Chairman, FOSS Research Centre for Sustainable Energy, University of Cyprus

Invited Keynote Speakers

To be announced

Publication of selected papers in Journals

Authors of selected papers presented at the conference will be invited to publish extended and revised versions, after the respective review procedure, in the SCOPUS, EI, INSPEC, etc. listed journals:

- International Journal of Sustainable Energy, Taylor & Francis
- Advances in Building Energy Research, Taylor & Francis
- Journal of Power Technologies (JPT), IFC

Conference Fees

- Early Registration before 1st October 2018  € 250
- Registration after 1st October 2018  € 350
- Students  € 100

Fees cover the admission to all sessions, invitation to all coffee breaks, one lunch, conference material, and VAT.

Registration

To register please visit www.mse.com.cy/resee2018

Conference Secretariat

MSE Congress Plus
3, Sina Street, 2nd Floor, Office 204A, P.O. Box 24612, T.T. 1306 Nicosia-Cyprus
Phone: 00357 22 466400, Fax: 00357 22 767680
E-mail: mse@mse.com.cy, Website: www.mse.com.cy
Conference webpage: www.mse.com.cy/resee2018
Conference topics

Papers are invited reporting original research as well as papers focusing on the results that have been achieved in the areas of Renewable Energy Sources, Energy Efficiency and Policy, Education and Research in Energy and Environment, as well as Oil and Gas Technologies. Indicative themes of the Conference are listed below:

**Renewable Energy Sources**
- Renewable energies
- Biomass, bioenergy & bio-economy
- Energy storage technologies
- Geothermal technologies
- Photovoltaics
- Power systems
- Concentrated solar power
- Smart networks
- Energy networks
- Wind energy technologies
- Hybrid energy systems
- Solar heating and cooling
- Solar desalination
- Grid integration
- Demand Response,
- Demand Side Management

**Energy Efficiency and Policy**
- Energy generation
- Energy recovery
- Energy management and economics
- Automation of energy systems
- Energy and the built environment
- Bioclimatic design of buildings and public spaces
- Smart cities
- Building management systems
- Heating, ventilating and air conditioning systems
- Sustainable transport
- Zero emission buildings
- Energy policy, economics and planning
- Energy and climate change
- Environmental impact
- Energy investment financing

**Education and Research in Energy and Environment**
- Distance learning in Energy and Environmental topics
- Interdisciplinary educational programmes
- Large scale research facilities
- Pilot and demonstration projects
- Training and certification schemes

**New Challenges**
- Security of energy supply
- Carbon capture and storage technologies
- Enhanced oil recovery for deep-water
- Hydrocarbons exploration strategies
- Natural gas liquefaction technologies
- Natural gas pipeline transportation technologies
- Natural gas policy issues
- Enhanced oil recovery for deep-water
- Oil and gas reserves and economics by region
- Shale gas technologies
- Energy-food-water nexus

Organised by:

Co-organisers:
### Thursday

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<th>Time</th>
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<th>Chair: Nicos Kyriakides</th>
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<td>08:30-09:00</td>
<td>Registration</td>
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<td>09:00-09:30</td>
<td>Opening Ceremony</td>
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#### Plenary session 1
Chair: Prof. G.H. Georgiou - Dr. G. Partasidis

Dr. Charles Ellinas, E-C Natural Hydrocarbons Company Ltd (eCNHC), UK: Energy Transition and its impact on East Med and the wider region


Prof. Agis Papadopoulos, Aristotle University of Thessaloniki, Greece: Thermal comfort in Zero Energy Buildings: State of the art and prospects

11:00-11:15 Coffee break

### Session A2
Chair: Dr. V. Efthimiou - Prof. A. Charalambides

14:00-16:00

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<th>Keynote</th>
<th>1828 S. Nizetic: General effectiveness of the passive cooling techniques for siliceous based photovoltaic panels</th>
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<tr>
<td>1801 A. Demou:</td>
<td>Thermal modelling of solar air collectors</td>
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<td>1848 A. Montenon:</td>
<td>Theoretical study of a hybrid Fresnel collector to supply electricity and air-conditioning for buildings</td>
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<td>1810 E. Kyriaki:</td>
<td>Phase Change Materials to increase storage in solar thermal systems for buildings</td>
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<td>1831 V. Efthimiou:</td>
<td>The EOS 50MW CSP project in Cyprus for 24-hour solar energy</td>
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16:00-16:15 Coffee break

### Plenary session 1 (Continued)
Chair: Prof. G.H. Georgiou - Dr. G. Partasidis

Dr. Charles Ellinas, E-C Natural Hydrocarbons Company Ltd (eCNHC), UK: Energy Transition and its impact on East Med and the wider region


Prof. Agis Papadopoulos, Aristotle University of Thessaloniki, Greece: Thermal comfort in Zero Energy Buildings: State of the art and prospects
### Thursday

**16:15-18:00**  
**Session A3**  
Chair: Dr. C.Rouvas - Prof. M.Komodromos  

**Energy policies in Cyprus**  

**Keynote**  
Dr Constantinos Varnava, Director, Cyprus Transmission System Operator, Cyprus: Integration of renewable energies into the electricity market

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**16:15-18:00**  
**Session B3**  
Chair: Prof. K.Papakostas - C.Maxoulis

**Energy and Buildings 2**  

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Speaker(s)</th>
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<tr>
<td>1845</td>
<td>Managing Household Electricity Consumption: A Factor Analysis Study</td>
<td>A.Efstathiades</td>
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<tr>
<td>1809</td>
<td>Energy and Environmental Performance of Airports' Operation</td>
<td>E.Giama</td>
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<tr>
<td>18111</td>
<td>Comparative analysis of air-to-water heat pumps performances – seasonal performance for heating of domestic heat pumps in the Greek climate</td>
<td>G.Mouzeviris</td>
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<td>1869</td>
<td>Thermal Performance and Environmental Impact of an Innovative Exterior Wall System</td>
<td>Aimilios Michael</td>
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<td>18110</td>
<td>Applying Responsible Research and Innovation in Wave Energy – Lessons Learned and Best Practices</td>
<td>X.T. Schneider</td>
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**Session C2 (continued)**

**Networking**
**Friday**

**09:15-10:45** Plenary session 2  
Chair: Prof. T.Zachariadis - Dr. N.Fylaktos

- Prof. Dr. Roland Roesc, International Renewable Energy Agency (IRENA): New pathways for the acceleration of the global transition to a sustainable future based on innovative renewable energy options
- Dr Diego-César Alarcón-Padilla, CIEMAT-Plataforma Solar de Almeria, Spain: Solar desalination: A review of the current available technologies and their economic feasibility
- Dr Andreas Poullikkas, Cyprus Energy Regulatory Authority Chairman, Cyprus: Development of energy strategies for sustainable future

**10:45-11:30** Coffee break - Poster tour and presentation

**11:30-13:15** Session A2  
Biomass and Biofuels  
Chair: P.Keliris - Prof. C.Christodoulou

- Preliminary investigation on the solar pyrolysis of waste biomass: the reactor concept  
  - 18141 S.Werle

- Pilot evaluation of a novel anaerobic fermentation process for the production of digestate with low ammonia content  
  - 1895 P.Photiou

- Energy and Environmental Assessment of Pellets produced from solid residues of the winery Industry  
  - 1812 E.Dolmaci

- Combustion simulations of different hydrocarbon content natural gas in constant volume chamber and direct-injection spark-ignition internal combustion engine  
  - 1890 C.Chasos

- On the Combustion of Premixed Gasoline - Natural Gas Dual Fuel Blends in an Optical SI engine  
  - 1839 S.Petakides

**13:15-14:00** Lunch break

**14:00-14:40** Meet the Editors  
Prof. A.M.Papadopoulos, Prof.J.Milewski and Prof. S.Nizetic

**13:30-15:00** Session B2  
Sustainable mobility  
Chair: Prof. T.Tsotsos and M. Stylianou-Michaelidou

- Overcoming energy efficiency challenges for sustainable mobility in Madeira  
  - C. Mantero

- Fast tourist development and need for sustainable mobility measures. The Limassol story  
  - M. Stylianou

- Environmental evaluation of mobility measures - Experience from the H2020 CIVITAS DESTINATIONS project  
  - S.Tournaki

- From Used Cooking Oil to biodiesel. Full Supply Chain demonstration  
  - S.Gouskos

- Round table discussion

**13:30-15:00** Session C2:  
Energy policies  
Chair: C.Stambolis - Prof.H.Doukas

- Making innovative energy policy through integrated approaches  
  - 1835 H.Doukas

- Renewable Energy Sources in SE Europe: Challenges and Lessons to be Learned  
  - 1849 C.Stambolis

- An Overview of Energy Poverty - Policies and Measures in Cyprus  
  - 1850 I.Kyprianou

- Classification of EU countries in terms of energy efficiency indicators  
  - 1861 A.Orlov

- Cyprus System of Guarantees of Origin  
  - 1881 M.Syrimis
## 6th International Conference on Renewable Energy Sources & Energy Efficiency

### Friday

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<td>15:00-16:45</td>
<td><strong>RES Systems</strong> Chair: Prof. N.Christorfides - Prof. M.Neofytou</td>
<td><strong>Grids</strong> Chair: M.Syrimis - Prof. E.Kyriakides</td>
<td><strong>Research activities of Cyprus Institutions</strong> Chair: Prof. A.Papadopoulos - Prof. S.Nizetic</td>
</tr>
<tr>
<td></td>
<td>1897 R.Chumbinho The role of test facilities in the development of Marine Renewable Energy - Smartbay as an example</td>
<td>1854 C.Charalambides Promoting Effective Generation and Sustainable Uses of electricity (PEGASUS) – The case of the FOSS lab area nanogrid</td>
<td>Prof. Alexandros Charalambides ENERFUND</td>
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<td></td>
<td>1821 K.Gkarakis Performance analysis of an operating windfarm of 21MW in Greece for a period of three years</td>
<td>1855 A.Sahlberg Geospatial modelling for universal electrification. Can hybrid mini-grids be part of the solution?</td>
<td>Prof. George E. Georghiou Stimulating scientific excellence through twinning in the quest for sustainable energy (TwinPV)</td>
</tr>
<tr>
<td></td>
<td>18144 T.Slini Environmental management systems as tools to address climate change: the case of Cyprus</td>
<td>18145 J.Kupecki Strategies for operating solid oxide electrolyzers as a part of grid balancing systems in reference markets</td>
<td></td>
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</tbody>
</table>