

**PUBLICATIONS (29) IN INTERNATIONAL SCIENTIFIC JOURNALS**  
**with MSc in Energy Students Contribution (2010-2013)**

1. **Stathopoulos M.**, Zafirakis D., Kavadias K., Kaldellis J.K., **2013**, "The Role of Residential Load-Management in the Support of RES-based Power Generation in Remote Electricity Grids", *Energy Procedia Journal*, Vol.46, pp.281-286.
2. Kaldellis J.K., **Anestis A.**, Koronaki I., **2013**, "Strategic Planning in the Electricity Generation Sector through the Development of an Integrated Delphi-based Multi-criteria Evaluation Model", *Fuel*, Vol.106, pp.212-218.
3. Vokas G., **Klironomos P.**, Kaldellis J.K., **2013**, "Evaluation of Building Integrated Photovoltaic Systems' Potential in the Industrial Sector: Case Study Oinofyta-Viotia Zone, Greece", accepted for publication *Journal of Energy and Power Engineering*, JEPE13010604.
4. Kaldellis J.K., Kapsali M., Kaldelli El., **Katsanou Ev.**, **2013**, "Comparing Recent Views of Public Attitude on Wind Energy, Photovoltaic and Small Hydro Applications", *Renewable Energy*, Vol.52, pp.197-208.
5. **Tiligadas D.**, Kondili E., Kaldellis J.K., **2013**, "Photovoltaic-Based Combined Electricity and Clean Water Production for Remote Small Islands", *Journal of Desalination and Water Treatment*, Vol.51(4-6), pp. 695-701.
6. Kondili E., Kaldellis J.K., **Paidousi M.**, **2013**, "A Multicriteria Analysis for the Optimal Desalination-RES System. Special focus: the Small Greek Islands", *Journal of Desalination and Water Treatment*, Vol.51(4-6), pp. 1205-1218.
7. Kaldellis J.K., **Gkikaki Ant.**, Kaldelli El., Kapsali M., **2012**, "Investigating the Energy Autonomy of Very Small Non-Interconnected Islands. A Case Study: Agathonisi, Greece", *Energy for Sustainable Development*, Vol.16(4), pp.476-485.
8. Kaldellis J.K., Zafirakis, D., **Stavropoulou V.**, Kaldelli El., **2012**, "Optimum Wind- and Photovoltaic-Based Stand-Alone Systems on the Basis of Life Cycle Energy Analysis", *Energy Policy*, Vol.50, pp.345-357.
9. Kaldellis J.K., Kapsali M., **Emmanouilidis M.**, **2012**, "Long-Term Evaluation of Nitrogen Oxides and Sulphur Dioxide Emissions from the Greek Lignite-Based Electricity Generation Sector", *Fresenius Environmental Bulletin*, Vol.21(9), F-2012-197.
10. Kondili E., **Bartzis I.**, Kapsali M., Kaldellis J.K., **2012**, "Multicriteria Analysis of Municipal Solid Wastes Energy Recovery Technologies in Greece", *Global NEST Journal*, Vol.14(2), pp.225-234.
11. Kaldellis J.K., Kapsali M., **Katsanou Ev.**, **2012**, "Renewable Energy Applications in Greece - What is the Public Attitude?", *Energy Policy*, Vol.42, pp.37-48.
12. Kaldellis J.K., **Garakis K.**, Kapsali M., **2012**, "Noise Impact Assessment on the Basis of Onsite Acoustic Noise Emission Measurements for a Representative Wind Farm", *Renewable Energy*, Vol.41, pp.306-314.

13. **Skarlis Str.**, Kondili E., Kaldellis J.K., **2012**, "Small Scale Biodiesel Production Economics: A Case Study Focus on Crete Island", *Journal of Cleaner Production*, Vol.20(1), pp.20-26.
14. Kaldellis J.K., Kapsali M., **Tiligadas D.**, **2011**, "Presentation of a Stochastic Model Estimating the Wind Energy Contribution in Remote Island Electrical Networks", *Applied Energy*, Vol.97, pp.68-76.
15. Kaldellis J.K., **Ninou I.**, **2011**, "Energy Balance Analysis of Combined Photovoltaic-Diesel Powered Telecommunication Stations", *International Journal of Electrical Power & Energy Systems*, Vol.33(10), pp. 1739-1749.
16. **Papapostolou C.**, Kondili E., Kaldellis J.K., **2011**, "Development and Implementation of an Optimisation Model for Biofuels Supply Chain", *Energy*, Vol.36(10), pp. 6019-6026.
17. Kaldellis J.K., **Mantelis N.**, Zafirakis D., **2011**, "Evaluating the Ability of Greek Power Stations to Comply with the Obligations Posed by the Second National Allocation Plan Concerning Carbon Dioxide Emissions", *Fuel*, Vol.90(9), pp.2884-2895.
18. Kaldellis J.K., **Meidanis E.**, Zafirakis D., **2011**, "Experimental Energy Analysis of a Stand-Alone Photovoltaic-Based Water Pumping Installation", *Applied Energy*, Vol.88(12), pp. 4556-4562.
19. Kaldellis J.K., **Ninou I.**, Zafirakis D., **2011**, "Minimum long-term cost solution for remote telecommunication stations on the basis of photovoltaic-based hybrid power systems", *Energy Policy*, Vol.39(5), pp.2512-2527.
20. Kaldellis J.K., Zafirakis D., **Mantelis N.**, **2011**, "Critical Evaluation of the National Allocation Plans under the European Union Emission Trading Scheme. Case Study Greece", *Fresenius Environmental Bulletin*, Vol.20(7), pp. 1629-1641.
21. Kaldellis J.K., **Fragos P.**, Kapsali M., **2011**, "Systematic experimental study of the pollution deposition impact on the energy yield of photovoltaic installations", *Renewable Energy*, Vol.36(10), pp. 2717-2724.
22. Kaldellis J.K., **Fragos P.**, **2011**, "Ash Deposition Impact on the Energy Performance of Photovoltaic Generators", *Journal of Cleaner Production*, Vol.19(4), pp.311-317.
23. **Spyropoulos G.**, Balaras C.A., **2011**, "Energy consumption and the potential of energy savings in Hellenic office buildings used as bank branches-A case study", *Energy and Buildings*, Vol.43(4), pp.770-778.
24. Kaldellis J.K., **Kokala A.**, Kapsali M., **2010**, " Natural Air Pollution Deposition Impact on The Efficiency of PV Panels in Urban Environment", *Fresenius Environmental Bulletin*, Vol.19(12), pp.2864-2872.
25. Kaldellis J.K., **Kokala A.**, **2010**, "Quantifying the decrease of the photovoltaic panels' energy yield due to phenomena of natural air pollution disposal", *Energy*, Vol.35(12), pp.4862-4869.
26. **Kapsali M.**, Kaldellis J.K., **2010**, "Combining hydro and variable wind power generation by means of pumped-storage under economically viable terms", *Applied Energy*, Vol.87(11), pp.3475-3485.

27. **Zafirakis D.**, Kaldellis J.K., **2010**, "Autonomous dual-mode CAES systems for maximum wind energy contribution in remote island networks", *Energy Conversion and Management*, Vol.51(11), pp.2150-2161.
28. Kaldellis J.K., **Kapsali M.**, Kavadias K.A., **2010**, "Energy balance analysis of wind-based pumped hydro storage systems in remote island electrical networks", *Applied Energy*, Vol.87(8), pp.2427-2437.
29. **Zafirakis D.**, Kaldellis J.K., **2010**, "Economic evaluation of the dual mode CAES solution for increased wind energy contribution in autonomous island networks", *Energy Policy*, Vol.37(5), pp.1958-1969.

**PAPERS (35) IN INTERNATIONAL SCIENTIFIC CONFERENCES  
with MSc in Energy Students Contribution (2010-2013)**

- IC1. **Chliaoutakis Ar.**, Protogeropoulos Chr., Cameron M., Kaldellis J.K., **2013**, "Performance Comparison between Central and Multistring-Based Inverters for the Support of Large-Scale Photovoltaic Power Stations in Greece", 28<sup>th</sup> European PV Solar Energy Conference, September 30-October 4, Paris, France.
- IC2. **Kotsenos A.**, Kondili E., Paliatsos A.G., Kaldellis J.K., **2013**, "Comparative Evaluation of the Air Quality Indexes. Application for the Greater Athens Area", CEST2013, 13<sup>th</sup> *International Conference on Environmental Science and Technology*, September 2013, Athens, Greece.
- IC3. Kondili E., Papapostolou C., **Balaska A.**, Aggelakopoulos J., Papagiakomos A., Kaldellis J.K., **2013**, "Environmental Performance Improvement and Environmental Management Systems (EMS) in Universities. Special Focus in the TEI of Piraeus Campus", CEST2013, 13<sup>th</sup> *International Conference on Environmental Science and Technology*, September 2013, Athens, Greece.
- IC4. Kondili E., Papapostolou C., **Pantemi G.**, Kaldellis J.K., **2013**, "Energy and Environmental Education in Greek Secondary Education: Highlights, Prospects and Expectations", CEST2013, 13<sup>th</sup> *International Conference on Environmental Science and Technology*, September 2013, Athens, Greece.
- IC5. Kaldellis J.K., Kapsali M., **Giannaraki Chr.**, **Pavlou A.**, **2013**, "Opportunities for Wave Energy Exploitation in the East Mediterranean Region", 4<sup>th</sup> *International Conference on Renewable Energy Sources & Energy Efficiency*, June 2013, Cyprus.
- IC6. **Ristas G.**, Spyropoulos G., Kavadias K., Kaldellis J.K., **2013**, "Experimental Energy Analysis of a Hybrid Wind-PV Stand-Alone Installation", 4<sup>th</sup> *International Conference on Renewable Energy Sources & Energy Efficiency*, June 2013, Cyprus.
- IC7. **Papadopoulos G.**, Zafirakis D., Kavadias K., Kaldellis J.K., **2013**, "Investigating the Role of Hybrid PV-Diesel Stand-Alone Systems for the Electrification of Remote Telecommunication Stations in Greece", *International Conference on Applied Energy, ICAE-2013*, July 2013, Pretoria, South Africa.
- IC8. **Triantafillidis K.**, Zafirakis D., Kapsali M., Kaldellis J.K., **2013**, "Development of Hybrid Wind-PV-CAES Configurations for the Electrification of Remote Communities", *International Conference on Applied Energy, ICAE-2013*, July 2013, Pretoria, South Africa.
- IC9. Zafirakis D., **Rozakeas K.**, Kaldellis J.K., **2013**, "Evaluation of Arbitrage Strategies Practiced by Pumped Hydro Storage in the Greek Mainland Electricity Market", *International Conference on Applied Energy, ICAE-2013*, July 2013, Pretoria, South Africa.
- IC10. **Alikaj D.**, Zafirakis D., Kavadias K., Kaldellis J.K., **2013**, "Optimum Sizing of Hybrid, Wind-Based Configurations for the Satisfaction of Remote Consumers' Total Energy Needs", *European Wind Energy Conference (EWEC-2013)*, February 2013, Vienna, Austria.

- IC11. **Gazis F.S.**, Vokas G.A., Kaldellis J.K., **Katsimardou I.J.**, 2013, "Micro Inverters for PV Plants Compared to the Ordinary String or Central Inverters", International Scientific Conference eRA-8, September 2013, Piraeus, Greece.
- IC12. **Katsimardou I.J.**, Vokas G.A., Kaldellis J.K., **Gazis F.S.**, 2013, "Performance Evaluation of a Building Integrated Photovoltaic Thermal (BIPVT) Air collector Using Different Photovoltaic Technologies", International Scientific Conference eRA-8, September 2013, Piraeus, Greece.
- IC13. **Proias G.T.**, Moustris K.P., Koukouletsos K.V., Paliatsos A.G., 2013, "Air quality assessment in the city of Volos, Greece, by using environmental indices", International Conference of Changing Cities. Spatial, morphological, formal and socio-economic dimensions, June 2013, Skiathos, Greece.
- IC14. **Emmanouilidis M.**, Kapsali M., Kaldellis J.K., 2012, "Detailed Examination of Greek Lignite Thermal Power Stations on The Basis of NO<sub>x</sub> Emissions", *International Conference of Protection and Restoration of the Environment XI*, July 3-6, 2012, Thessaloniki, Greece.
- IC15. **Skarlis S.**, Papapostolou C., Kondili E., Kaldellis J.K., 2012, "Willingness To Pay for Biodiesel from Vegetable Oil Crops in Rural Areas in Greece", *International Conference of Protection and Restoration of the Environment XI*, July 3-6, 2012, Thessaloniki, Greece.
- IC16. **Klironomos P.G.**, Vokas G.A., Kaldellis J.K., 2012, "Potential of Building Integrated Photovoltaic Systems (BIPV): Study on the Oinofyta Viotias Industrial Buildings Zone", 8th Mediterranean Conference on Power Generation, Transmission Distribution and Energy Conversion (*MedPower 2012*), October 1-3, 2012, Cagliari, Italy.
- IC17. **Tiligadas D.**, Kondili E., Kaldellis J.K., 2012, "Photovoltaic-Based Combined Electricity and Clean Water Production for Remote Small Islands", *Desalination and the Environment Conference (EDS)*, April 2012, Barcelona, Spain.
- IC18. Kondili E., Kaldellis J.K., **Paidousi M.**, 2012, "A Multicriteria Analysis for the Optimal Desalination-RES System. Special focus: the Small Greek Islands", *Desalination and the Environment Conference (EDS)*, April 2012, Barcelona, Spain.
- IC19. Zafirakis D., Kavadias K.A., **Efthimiadis S.**, Kapsali M., Kaldellis J.K., 2012, "100% RES Integration in the Island of Agios Efstratios-Greece with the Use of Different Wind-Energy Storage Systems", *European Wind Energy Conference (EWEC-2012)*, April 2012, Copenhagen, Denmark.
- IC20. Zafirakis D., **Gavrilopoulou El.**, Kavadias K.A., Kaldellis J.K., 2012, "The Need for the Development of a New Readjusted Weibull Distribution for Increased Reliability of Energy Yield Estimation", *European Wind Energy Conference (EWEC-2012)*, April 2012, Copenhagen, Denmark.
- IC21. **Kazakidis S.A.**, Kokkosis A.I., Moustris K.P., Paliatsos A.G., 2012, "Electricity consumption prognosis with the combination of smart metering and artificial neural networks", 8<sup>th</sup> Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion-MedPower 2012, October 2012, Cagliari, Italy.
- IC22. **Bartzis I.**, Kondili E., Kaldellis J.K., 2011, "Investigation of Energy Production by the Utilization of Municipal Solid Wastes in Greece", CEST2011, 12<sup>th</sup> International Conference on Environmental Science and Technology, September 2011, Rhodes, Greece.

- IC23. Spyropoulos G.C., **Emmanouilidis M.**, Kaldellis J.K., **2011**, "Investigating the Long-Term Environmental Performance of the Greek Electricity Sector on the Basis of SO<sub>2</sub> Emissions", CEST2011, 12<sup>th</sup> International Conference on Environmental Science and Technology, September 2011, Rhodes, Greece.
- IC24. **Mantelis N.**, Zafirakis D., Spyropoulos G.C., Kaldellis J.K., **2011**, "Critical Evaluation of the Second National Allocation Plan Concerning the Control of CO<sub>2</sub> Emissions in Greece", CEST2011, 12<sup>th</sup> International Conference on Environmental Science and Technology, September 2011, Rhodes, Greece.
- IC25. **Rokas St.**, Ktenidis T., Kondili E., Kaldellis J.K., **2011**, "RES-based Power Plants Siting Using Geographical Information Systems", ICCEP-2011, International Conference on "Clean Electrical Power", IEEE, June 2011, Ischia, Italy.
- IC26. Kapsali M., **Tiligadas D.**, Kaldellis J.K., **2011**, "Analytical stochastic model calculating the wind energy contribution in remote micro-grids", presented in ICAE-2011, May 2011, Perugia, Italy.
- IC27. **Katsanou Ev.**, Zafirakis D., Kondili E., Kaldellis J.K., **2011**, "Recent Views on the Public Acceptance of Wind Energy and Photovoltaic Applications in Greece", presented in the EWEC-2011, Brussels, Belgium.
- IC28. **Katsirou V.**, Zafirakis D., Kavadias K.A., Kaldellis J.K., **2011**, " An Integrated Methodology for the Experimental Validation of a Wind Turbine's Power Curve", presented in the EWEC-2011, Brussels, Belgium.
- IC29. **Stavropoulou V.**, Zafirakis, D., Spyropoulos, G., Kaldellis J.K., **2011**, "Comparison of the Energy Pay-Back Period between Wind and Photovoltaic Stand-Alone Power Systems", presented in the EWEC-2011, Brussels, Belgium.
- IC30. **Garakis C.**, Kaldellis J.K., **2010**, "Evaluation of noise impact on the basis of acoustic noise emissions measurements for onshore wind farms", World Renewable Energy Congress -WRECXI, 25-30 September 2010, Abu Dhabi, United Emirates.
- IC31. Kaldellis J.K., **Fragos P.**, Kapsali M., Zafirakis D., Spyropoulos G., **2010**, "Dust Deposition Impact on Photovoltaic-Assisted Water Pumping Systems", World Renewable Energy Congress -WRECXI, 25-30 September 2010, Abu Dhabi, United Emirates.
- IC32. **Kapsali M.**, Anagnostopoulos K., Kaldellis J.K., **2010**, "Size optimization of wind-based pumped hydro storage systems based on economic criteria", World Renewable Energy Congress -WRECXI, 25-30 September 2010, Abu Dhabi, United Emirates.
- IC33. Kondili E., Kaldellis J.K., **Tiligadas D.**, **2010**, "Wind-based Combined Electricity and Clean Water Production for Remote Islands", World Renewable Energy Congress -WRECXI, 25-30 September 2010, Abu Dhabi, United Emirates.
- IC34. **Proias G.T.**, Kaldellis J.K., Paliatsos A.G., **2010**, "Optimum Autonomous Wind Power System Sizing for Remote Consumer in Pelion Mountain in Volos – Greece", 5<sup>th</sup> International Conference on Deregulated Electricity Market issues in South-Eastern Europe (DEMSEE 2010), September 2010, Sitia, Greece.
- IC35. Papapostolou Chr., **Minoyiannis M.**, Kondili E., Kaldellis J.K., **2010**, "Biomass supply chain development in Greece with special focus on the

utilization of biomass residues", 1<sup>st</sup> International Conference on Supply Chains, October 2010, Katerini, Greece.