

George (Georgios) Xydis



Contact & Personal Info:

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Google Scholar-profile: <https://scholar.google.dk/citations?user=y8s849QAAAAJ&hl=en>

Online Profiles: Aarhus University: [link](#); Johns Hopkins University: [link](#); Open University of Cyprus: [link](#); DTU Orbit: [link](#)

linkedin profile: www.linkedin.com/in/gxydis

Web: <http://xydis.byethost24.com>

Tel.: +4593508006; +306937568556, Date & Place of Birth: Dec. 6th, 1978, Athens, GR

Research Interests:

Energy Resources Optimization; Energy Policy; Energy Planning; Wind Resource Assessment; Exergy Analysis; Demand Response; International Politics of Energy; Electricity Markets; Forecasting

Positions held & Appointments:

- √ Feb. 2017 – present: Associate Professor, *Aarhus University, Department of Business Development and Technology (BTECH)*
 - Member of the *Center for Energy Technologies (CET)* & the *Engineering & Technology Research Group (EngTech)*
 - Member of the *BTECH PhD field committee*
 - Supervising 3 PhD research projects
 - Teaching:
 - Master's Degree Programme in Engineering in *Technology Based Business Development (TBBD)*:
 - ✓ *Energy Engineering and Innovation* (former title: *Clean Technology*) – 10 ECTS: Course Coordinator & Instructor
 - ✓ *Sustainability in a Business Development Perspective* (Guest) – 10 ECTS
 - ✓ *Optimisation of Engineering Processes using Numerical Approaches* (Guest) – 10 ECTS
 - ✓ *Engineering Project Management* (Guest) – 10 ECTS
 - ✓ *Technology Specialisation I (Methods training)* [former *Research Design in Engineering*] – 10 ECTS
 - ✓ *Engineering Project: Systematic Review* – 5 ECTS
 - ✓ *Engineering Project: Case-Based Knowledge Creation* – 5 ECTS
 - Bachelor's Degree Programme in *Global Management and Manufacturing (GMM)*:
 - ✓ *Sustainability, Production and Resources* – 5 ECTS: Course Coordinator & Instructor
 - Master's Degree Programme in *Civil and Architectural Engineering, Department of Engineering, Aarhus University*:
 - ✓ *Sustainable Design and Production* – 10 ECTS: Course Examiner
- √ Nov. 2019 – present: *Johns Hopkins University, Energy Policy and Climate Program, Advanced Academic Programs, Lecturer - Adjunct Faculty* member, teaching “425.624 - Wind Energy: Science, Technology and Policy” module

- ✓ May. 2020 – present: Owner and Co-founder of the VerdeCube startup (<http://verde-cube.com/>) – Selected by the *EIT Seedbed Entrepreneurship Programme 2020* (Funded & Accepted to Seedbed Phase 2 of the Customer Discovery Journey)
- ✓ Sept. 2019 – Feb.2021: Adjunct Tutor, *Open University of Cyprus*, BSc in Economics, *Faculty of Economics and Management*, Module Coordinator (and MSc theses supervisor) of the “Energy and Natural Resource Economics (OIK312)” module
- ✓ Oct. 2013 – July 2017: Owner of the Energy Research & Applications SME: “G. Xydis” www.xydis.gr, Contracts with Academia, SMEs, and the Green Fund (Greek Ministry of Environment, Energy and Climate Change):

Academia:

- *Hellenic Open University*, Adjunct Tutor, School of Science & Technology, MSc Environmental Design of Infrastructure Works
 - Oct. 2016 – July 2017: “Design of infrastructure works and environmental protection” module
 - Oct. 2014 – July 2015: i) “Technology for mitigating environmental impacts” module, ii) theses supervisor
 - Oct. 2013 – Sept. 2015: MSc theses supervisor
- *Open University of Cyprus*, Adjunct Tutor and MSc theses supervisor, Faculty of Pure and Applied Sciences, MSc programme Environmental Conservation and Management
 - Sept. 2016 – June 2017: MSc theses supervisor
 - Sept. 2015 – June 2016: “Methods and Techniques in Environmental Research” module
 - Sept. 2014 – June 2015: “Environmental Protection (Energy and Pollution)” module
- *University of Piraeus*, MSc in Industrial Management & Technology, Specialization: Systems of Energy and Environmental Management, i) Tutor in “Renewable Energy Sources”, winter semester 2016-2017, ii) Member of *TEESLAB*, University of Piraeus, External Associate, 2017
- *School of Pedagogical & Technological Education (ASPETE)*, Department of Mechanical Engineering Educators, Adjunct tutor, teaching: “Design and Optimization of Energy Systems”, winter semester 2016-2017
- *International Hellenic University*, MSc in Environmental Management and Sustainability, Adjunct Lecturer (PD 407/80), teaching: “Sustainable Production and Consumption” 2015-2016
- *Piraeus University of Applied Sciences (TEI Piraeus)*, May 2014 – July 2016: Research Fellow
 - Projects’ Researcher (project *PHAROS* EXCELLENCE-II, Project *TILOS*),
 - *Heriot-Watt University/TEI Piraeus*, Lecturing on Wind Energy & MSc Theses Supervisor for the *MSc in Energy Systems* programme
- *Technological Research Center of Piraeus and Islands*: Seminar implementation manager (Organising and teaching):
 - Seminar on Modern Energy Storage Technologies, Nov.- Dec. 2015
 - Seminar on Wind Resource Assessment - Spatial and Techno-economic Approaches, Apr.-May 2016
- *Institute for Research and Technology Thessaly/Centre for Research & Technology, Hellas (CERTH)*, Senior Researcher (project funded), Oct. 2013 – Dec. 2014
- *Mediterranean College* (in collaboration with the *University of Derby*), Lecturing on the “Energy Production & Management” Professional Diploma: i) Distributed Energy Resources & ii) Energy Economics, Spring Semester 2013-2014
- *National Observatory of Athens* - Researcher (project funded - *BEYOND*), Nov. 2013 – April 2014

Public entity:

o **Green Fund**, Greek Ministry of Environment, Energy and Climate Change, Associate, 2016 –2017

- ✓ Oct. 2010 – July 2013: Researcher (eq. Assistant Professor level) in the **Centre for Electric Power and Energy (CEE)**, **DTU Electrical Engineering, Technical University of Denmark** (former Intelligent Energy Systems programme, Risø DTU)
- ✓ Jan. 2010 – Oct. 2010: Wind Projects Development Coordinator, **Iberdrola Renovables – Rokas Group**, Wind Business Development Dept.
- ✓ June 2007 – Dec. 2009: Wind & PV Projects Developer / Wind Resource & Sitting Engineer, **Vector Hellenic Wind Farms S.A.**
- ✓ Aug. 2005 – June 2007: Research Assistant, **Unit of Environmental Science and Technology**, National Technical University of Athens (NTUA)
- ✓ Mar. 2005 – July 2005: Research Assistant, **Lab. of Heat Transfer & Environmental Engineering**, Aristotle University of Thessaloniki (AUTH)

Professional Work Experience as a Consultant with the following Companies/Universities/Organizations:

- ✓ **GSF Capital** (Investment firm in the Renewable Energy industry), Consultant – identifying PV investment opportunities in Greece (Solar Energy Yield Calculations), 2009 – 2010
- ✓ **Volkswind GmbH**, Consultant - identifying Wind Farm investment opportunities
- ✓ **SYNERGYCERT S.A.** (Wind Measurements Laboratory), i) Responsible for the wind farm layout and energy yield calculations. Analysis of wind resource data from the meteorological masts for 3 projects of 40 MW, 2010
- ✓ **Strenecon and Associates Ltd** (Finance Advisor on Clean Technology Sector), Consultant, Due Diligence Reports on 3 operating wind farms (tot. capacity 26.55 MW) in Rhodes and Crete Islands, 2010
- ✓ **HELIODYNAMI L.T.D.**, PV Development studies, June 2007 – Dec. 2009
- ✓ **Hellenic Construction Technology Platform**, Technical Chamber of Greece, Individual Consultant, Member of a Working Group, 2006

Contributed in Research Funding

- ✓ **RIS Summer School “Circ4Res”**, 01.01.2021 – 31.12.2021 (12 months), EIT Food, Coordinator/lead partner: University of Turin, (Aarhus University budget: **EUR 10,000**)
- ✓ **“Skandinavisk Elektrisk Transport System II”** (Scandinavian Electric Transport System II – **SETS II**), duration: 3 years (July 1, 2019 - June 30, 2022) total budget: EUR 4,526,701 (Aarhus University budget: **EUR 456,147**), INTERREG Öresund-Kattegat-Skagerrak, Co-Principal Investigator (Co-PI), Short project description available at: <https://interreg-oks.eu/projektbank/projekt/skandinaviskelektrisktransportsystemii.5.19de82b216b0032caaedbc38.html>
- ✓ **“Smart Skills Development” (SMARTIES)**, ERASMUS+ application funded under the Call 2019 Round 1 KA2 - Cooperation for innovation and the exchange of good practices (KA204 - Strategic Partnerships for adult education), Project Duration: 25 months, Project Number: 2019-1-SK01-KA204-060691, Total grant: EUR 177,792 (Aarhus University budget: **EUR 46,656**), Principal Investigator (PI), <https://www.erasmusplus.sk/index.php?sw=33&menu=15&proj=2019-1-SK01-KA204-060691>
- ✓ Novel photo-assisted systems for direct Solar-driven redUction of CO₂ to energy rich CHEMicals (**SUN2CHEM**), H2020-LC-SC3-RES-29-2019 – Converting Sunlight to storable chemical energy, Co-PI, Project Duration: 36 months
- ✓ **SDG Network**, “Overcoming the Challenges of a Circular Economy”, Funding 1,000,000 DKK (approx. **EUR 133,000**), duration from 15/8/2019 to 15/8/2021, Participant, The Committee for Research and External Cooperation, Aarhus University,

Available at: <http://newsroom.au.dk/en/news/show/artikel/au-stoetter-forskningsnetvaerk-der-skal-bidrage-til-fns-verdensmaal>

- ✓ Blockchain in the Wind Turbine Industry (**UNWIND** - BLOCKCHAIN I VINDMØLLEINDUSTRIEN), Jan. 2020 – Jun. 2022, total project budget: DKK 3.87 million DKK, Industriens Fond, Participant, <https://www.industriensfond.dk/unwind>
- ✓ Bird Collision Avoidance (Radar-based AI solution for mapping of bird activity in wind farms) (**BirdAI**), project budget: DKK 2,500,000, AU budget: **DKK 500,000** (75% funded, DKK375,000)
- ✓ Funding for 3 PhD students (3 years) at BTECH, Aarhus University (supervisor).
- ✓ Industrial funding for the support of a PhD student (co-financing agreement between Vestas and Aarhus University) (approx. **EUR 30,000**), 2019-2022 (supervisor).
- ✓ Jean Monnet Erasmus+ proposal entitled “Economic Aspects of the Energy efficiency of EU countries” (tot. budget **EUR 59,946.75**), Participant, (Reference: 599491-EPP-1-2018-1-RU-EPPJMO-PROJECT)
- ✓ Submitted research proposals and received funding approx. **EUR 630,000** (at NTUA and at DTU) as a proposal coordinator (projects: WasteSUM (LIFE06 TCY/MA/000254), Twinning Project: LV2006/IB/EN/01 TL, and CIEL - Copenhagen Innovation and Entrepreneurship Lab)

Important Professional Activities/Achievements:

- ✓ Developing at BTECH, Aarhus University: **i)** a low wind lab incl. a small wind tunnel, **ii)** a small scale H₂ lab incl. an electrolysis and a Fuel Cell bicycle, and **iii)** a small hydroponics and energy demand unit, <http://btech.au.dk/en/research/research-sections-and-centres/cet/subgroups/>
 - ✓ Strong links to SMEs and industry (Smart Blade GmbH, SYNERGYCERT S.A., Iberdrola S.A., Strencon, Vector Hellenic Wind Farms S.A.), led to a significant number of journal publications
 - ✓ Preliminary Study and Development for Rokas Group – Iberdrola Renovables of a **2 billion EUR, 486 MW Offshore** wind project with 2 proposed offshore substations and HVDC connection to the mainland, Project Under Evaluation, Regulatory Authority for Energy, Greece, www.4coffshore.com/windfarms/windfarms.aspx?windfarmId=GR36
 - ✓ Wind resource analyses and energy yield assessment (more than 1,700 MW) case studies in Greece (Wind data from more than 100 meteo masts), Greenfields Development (business development, technical consultancy & feasibility studies), Projects Submitted to the Regulatory Authority for Energy, Greece
 - ✓ Contacts with Utilities & Investors (through Vector Hellenic Wind Farms S.A) such as **INVENERGY LLC**, **PRENEAL**, Global Wind Energy Group, **ELECTRABEL** **GDF SUEZ**, **TERNA S.A.**, ACCIONA Hellas, **EDF ENERGIES NOUVELLES**, ROSEBUD ENERGIE Deutschland GmbH, **EFACEC**, and **ELLAKTOR Group** and production of progress reports, business plans, cost – benefit analyses and risk analyses of investments
 - ✓ Proposal Coordinator: Write more than 20 grant research proposals for funding on Renewable Energy Sources & Environmental Issues (H2020, FP7, FP6, LIFE, Intelligent Energy, Europaid, Interreg, Twinning)
 - ✓ Member of the studies team of the **installed** Wind Farms of **i) 18 MW** in the Municipality of Ermioni, Argolida Prefecture, Greece for the JV VECTOR – TERNA (JV TERNA VECTOR LOGGARAKIA) and **ii) 38 MW** in the Municipality of Nafplion, Argolida Prefecture, Greece for **Iberdrola Renovables – Rokas Group**
 - ✓ Study of 7 MW (in total) PV projects, Projects Submitted to the Regulatory Authority for Energy, Greece
 - ✓ Study of a 24.2 MW Wind – Hydro power station, Project Submitted to the Regulatory Authority for Energy, Greece
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Education:

- 2010: PhD, Title: Exergy & Multicriteria Analysis in the Solid Waste Management Area using Renewable Energy Sources, National Technical University of Athens
- 2005: M.Eng, Mechanical Engineering Diploma (5-year studies), Aristotle University of Thessaloniki

Training:

- Nov. '19 – Apr. '20: *Master's and PhD Supervision for associate professors and professors*
- Jan. '18 – Feb. '19: *Go Online: Course on blended learning, Aarhus University*
- Apr. '15: *Qblade tool* (wind turbine blade design and aerodynamic simulation) training, TU Berlin
- June '14: *Meteodyn WT* (CFD tool) training (8 h)
- Nov. '12: Module 1 of Education in *University Teaching at DTU* (UDTU) for new teachers, 2½ ECTS points (50 h)
- Oct. '12: *The PhD Supervision Process: Methods and Tools*, DTU (16 h)
- Mar. '12: Certified WAsP user, DTU Wind (http://www.wasp.dk/Courses-and-Certification#certification-details__certified-users-by-country)
- Nov. '11: WAsP Course, 2011 – Risø DTU, Wind Energy Division, Denmark (24 h)
- Nov. '09: Seminar on ArcInfo – ArcView, Marathon Data, 19th meeting of users, Athens (8 h)
- Feb. '09: Seminar on “Energy Performance of Buildings”, Technical Chambers of Greece (20 h)
- Apr. '08: Seminar on “Medium Voltage&High Voltage Substations”, Technical Chambers of Greece (40 h)
- Nov. '05: Seminar on ArcInfo – ArcView, Marathon Data, 15th meeting of users, Athens (9 h)
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Affiliation with scientific journals/conferences:

- √ Associate Editor, *Energy & Environment* (Impact factor: 1.775), SAGE Publishing
- √ Associate Editor the Editorial Board of *Wind Energy*, a specialty section within *Frontiers in Energy Research* (Impact factor: 2.746), www.frontiersin.org
- √ Associate Editor the Editorial Board of *Frontiers in Energy Systems and Policy*, a specialty section within *Frontiers in Energy Research* (Impact factor: 2.746), www.frontiersin.org
- √ Member of the Editorial board, *Energy Sources, Part B: Economics, Planning, and Policy*, Taylor & Francis
- √ Member of the Editorial board, *Energies*, MDPI
- √ Member of the Editorial board, *Sustainable Futures*, Elsevier
- √ Member of the Editorial board, *Sustainability*, MDPI
- √ Member of the Editorial board, *Challenges*, MDPI
- √ Member of the Editors board, *Open Engineering* (formerly Central European Journal of Engineering), De Gruyter
- √ Guest Editor, *Energies*, MDPI, Call for Papers: Special Issue “COVID-19 Pandemics: Energy, Economic, Environmental, Social, Policy and Health Impacts”, Deadline for manuscript submissions: 27 January 2021
- √ Guest Editor, *Energy Exploration & Exploitation*, SAGE Publishing, *Dataset Construction of Global Oceanic Offshore Wind Energy Resources*, Deadline for manuscript submissions: 30 Sept. 2020
- √ Guest Editor, *Energies*, MDPI, Call for Papers: Special Issue “Energy Demand and Small Scale Renewable Energy Applications”, (3 Papers Published)

- √ Guest Editor, *Sustainability*, MDPI, Special Issue "*Sustainability Indicators for Renewable Energy Transition*", 2017 (4 Papers Published: https://www.mdpi.com/journal/sustainability/special_issues/Renewable_Energy_Transition)
- √ Lead Guest Editor, *Advances in Meteorology*, Hindawi Publishing Special Issue: "*Wind Integration, Forecasting, and Wind Resource Assessment*", 2016
- √ Associate Editor, *Innovative Energy Policies*, Environmental Sciences Group, OMICS International
- √ Invited Speaker in the ASME IGTI Turbo Expo 2014, Panel Session 46-13: *State-of-Art and Future Steps in Wind Energy*, June 16-20, 2014, Düsseldorf, Germany
- √ Reviewer for the following international scientific journals (ISI indexed):
 - Elsevier: *Renewable & Sustainable Energy Reviews*; *Applied Energy*; *Renewable Energy*; *Energy*; *Journal of Cleaner Production*; *Solar Energy*; *Energy and Buildings*; *International Journal of Electrical Power & Energy Systems*; *Energy Conversion and Management*; *Simulation Modelling Practice and Theory*; *Transport Policy*; *Technological Forecasting & Social Change*; *Journal of Environmental Management*; *International Journal of Production Economics*; *Science of the Total Environment*; *Technological Forecasting and Social Change*, *Sustainable Cities and Society*; *International Journal of Hydrogen Energy*; *Sustainable Futures*; *Sustainable Production and Consumption*
 - Springer: *The International Journal of Life Cycle Assessment*; *Annals of Operations Research*; *Applied Research in Quality of Life*
 - SAGE Publications: *Indoor and Built Environment*; *Energy & Environment*
 - Wiley: *Wind Energy*; *International Transactions on Electrical Energy Systems*; *Environmental Progress & Sustainable Energy*
 - International Association for Energy Economics: *Energy Journal*
 - MDPI: *Entropy*; *Energies*; *Remote Sensing*
 - Inderscience Publishers: *International Journal of Exergy*
 - ASME: *Journal of Solar Energy Engineering*
 - Taylor & Francis: *Desalination and Water Treatment*; *International Journal of Sustainable Transportation*
 - IET: *IET Generation, Transmission & Distribution*
 - Hindawi: *Advances in Meteorology*
- √ Reviewer for the following international scientific journals (non ISI indexed):
 - De Gruyter Open: *Open Engineering (Central European Journal of Engineering)*
 - Springer: *Waste and Biomass Valorization*
 - Elsevier: *Journal of Building Engineering*
 - Bentham Science Publishers: *Open Renewable Energy Journal*; *Recent Patents on Electrical & Electronic Engineering*; *The Open Fuels & Energy Science Journal*; *Current Environmental Engineering*
 - Inderscience Publishers: *International Journal of Energy Technology & Policy*
 - SciencePG: *International Journal of Energy and Power Engineering*; *American Journal of Electrical Power and Energy Systems*
 - Research-Academic Journals: *Journal of Engineering & Technology*; *Journal of Mechanical Engineering*
 - Academic Journals: *Scientific Research & Essays*; *International Journal of Physical Sciences*; *Journal of Engineering and Technology Research*
 - AIMS Press: *AIMS Energy*

- Estonian Agricultural University: Agronomy Research
 - Hindawi: Journal of Energy
 - L & H Scientific Publishing: Journal of Environmental Accounting and Management
 - Emerald Publishing: International Journal of Energy Sector Management
 - √ Reviewer of Papers of the 1st and the 2nd International Exergy, Life Cycle Assessment, and Sustainability Workshop & Symposium (www.elcasnet.com) and in the 4th International Exergy, Energy and Environment Symposium (IEEEES-4: ieees4.trackchair.com/)
 - √ Reviewer of Papers of the ASME Turbo Expo 2015 Conference, <http://www.asmeconferences.org/TE2015>
 - √ Member of the Scientific Publication Committee of the 4th IEEE ISGT conference, 6th – 9th Oct., 2013 (www.ieee-isgt-2013.eu/)
 - √ Member of the Program Technical Committee of the 3rd ScienceOne International Conference on Environmental Sciences ICES2014, 21-23 Jan., 2014
 - √ Member of the Scientific Committee (International Advisory Board) at Techfest International Students Conference 2015
 - √ Member of the Program Technical Committee of the 4th ScienceOne International Conference on Environmental Sciences
 - √ Member of the Scientific Committee of the 8TH IEEESE (International Aegean Energy Symposium and Exhibition)
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Memberships of Scientific Committees, Associations:

- √ Member of the evaluation committee for the The Smart Campus Herning Prize (Sponsored by AUHE MidtVest's Støttefond)
- √ Member (3-yr membership) of the ESF College of Expert Reviewers, 2017-2020
- √ Faculty Member of the Copenhagen Innovation and Entrepreneurship Lab (CIEL) organization
- √ Member of the team of evaluators (for the area: Renewable Energies), ERAfrica Common Call Management, German Aerospace Agency (DLR.de)
- √ Reviewer for research project proposals of the National Centre of Science and Technology evaluation, Ministry of Education and Science, Republic of Kazakhstan (NSTE)
- √ Reviewer for research project proposals of the Cyprus Research Promotion Foundation (RPF)
- √ Member of the World Wind Energy Association (WWEA) 2009-2013
- √ External Expert of CIS WIND Committee at WWEA
- √ Danish member of the Management Committee (MC) of the European COST Action TU1205 "Building Integration of Solar Thermal Systems (BISTS)"
- √ National Representative of the European COST Action C24 "Analysis and Design of Innovative Systems for Low-EXergy in the Built Environment: COSTeXergy", Member of the MC
- √ National Representative of the European COST Action TU0902 "Integrated assessment technologies to support the sustainable development of urban areas", Member of MC
- √ National Representative of the European TUD COST Action TU0701 "Improving the Quality of Suburban Building Stocks", Member of MC
- √ Member of a sub-working group for the integration of the IES programme, Risø DTU in DTU Electrical Engineering.
- √ Member of the Organizing Committee of 3 international conferences since 2005 (ELCAS, ELCAS-2, ELCAS-3, and IEEEES2

- ✓ Member of the Organizing Committee for the conference – exhibition “Hellenic Days Of Research And Technology – European Cooperation”, Athens, 22 – 23 June, 2006
 - ✓ Member of the Technical Chambers of Greece, www.tee.gr
 - ✓ Member of a working group of the Hellenic Construction Technology Platform, [Technical Chambers of Greece](#)
 - ✓ Member of IDA ([Danish Society of Engineers](#))
 - ✓ Member of DIP ([Danish pension fund for engineers](#))
 - ✓ Participated in the COST Action C23 “Strategies for a Low Carbon Built Environment” as a member of two working groups
 - ✓ Participated in the COST Action 530, Sustainable Materials Technology, “Life Cycle Inventories for Environmentally Conscious Manufacturing Processes”, 2001-2005. Working Group III: “Integrated Product Policy”
 - ✓ Registered on the “Technical Studies Register” for Environmental Studies and Electrical-Mechanical Studies, Hellenic Ministry of Environment, Energy and Climate Change
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Publication List:

Journal Publications: 74 (Single Author Papers: 13, Editorial: 1), Conference Proceedings: 35, Books: 1, Book chapters: 5 ([Google Scholar citations](#): 1461, h-index: 20, i10-index: 37):

1. **Aviles, A., Bottcher, J., Xydis, G.**, Solar-powered Golf Buggies Charging on the Road, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, DOI: 10.1080/15567036.2020.1792589, Accepted: June 13, 2020, [Journal impact factor^{2019/2020}: 1.184](#)
2. **Tzavidas, E; Enevoldsen, P., Xydis, G.**, A University-Industry Knowledge Transfer Online Education via a Cloud-based Database Global Solution, Smart Learning Environments, DOI: 10.1186/s40561-020-00128-5, Accepted: July 10, 2020
3. **Avgoustaki, D.D.; Li, J.; Xydis, G.**, Basil Plants Grown under Intermittent Light Stress in a Small-Scale Indoor Environment: Introducing Energy Demand Reduction Intelligent Technologies, Food Control, DOI: 10.1016/j.foodcont.2020.107389, Accepted: June 03, 2020, [Journal impact factor^{2019/2020}: 4.258](#)
4. **Roungkvist, J. S.; Enevoldsen, P.; Xydis, G.**, High-Resolution Electricity Spot Price Forecast for the Danish Power Market, Sustainability, SI: Sustainable and Renewable Energy Systems, DOI: 10.3390/su12104267, Accepted: May 20, 2020, [Journal impact factor^{2019/2020}: 2.576](#)
5. **Ucal, S. M.; Xydis, G.**, Multidirectional Relationship between Energy Resources, Climate Changes and Sustainable Development: Technoeconomic analysis, Sustainable Cities and Society, DOI: 10.1016/j.scs.2020.102210, Accepted: Apr. 18, 2020, [Journal impact factor^{2019/2020}: 5.268](#)
6. **Karabiber, O.A.; Xydis, G.**, A Review of the Day-Ahead Natural Gas Consumption in Denmark. Starting point towards Forecasting Accuracy Improvement, Int. Journal of Coal Science and Technology, DOI: 10.1007/s40789-020-00331-2, Accepted: May 13, 2020
7. **Avgoustaki, D.D., Xydis, G.**, Indoor Vertical Farming in the Urban Nexus Context: Business Growth and Resource Savings, Sustainability, 2020, 12(5), 1965; doi: 10.3390/su12051965, [Journal impact factor^{2019/2020}: 2.576](#)
8. **Karabiber, O.A.; Xydis, G.**, Forecasting Day-Ahead Natural Gas Demand in Denmark, Journal of Natural Gas Science & Engineering, DOI: 10.1016/j.jngse.2020.103193, [Journal impact factor^{2019/2020}: 3.841](#), Accepted: Feb. 4, 2020
9. **Xydis, G., Liaros, S., Avgoustaki, D.D.**, Small Scale Plant Factories with Artificial Lighting and Wind Energy Microgeneration: A Multiple Revenue Stream Approach, Journal of Cleaner Production, SI: SV: CP – SDGs, DOI: 10.1016/j.jclepro.2020.120227, [Journal impact factor^{2019/2020}: 7.246](#), Accepted: Jan 22, 2020

10. **Rasmussen, N. B.; Enevoldsen, P., Xydis, G.**, Transformative multi-value business models: A bottom-up perspective on the hydrogen-based green transition for modern wind power cooperatives, *International Journal of Energy Research*, DOI: 10.1002/ER.5215, *Journal impact factor*^{2019/2020}: **3.741**, Accepted Jan. 2020
11. **Nanaki, E. A., Kiartzis, S., Xydis, G. A.**, Are only demand-based policy incentives enough to deploy electromobility?, *Policy Studies*, DOI: 10.1080/01442872.2020.1718072, *Journal impact factor*^{2019/2020}: **1.200**, Accepted Jan. 2020
12. **Avgoustaki, D.D., Xydis, G.**, Plant Factories in the Water-Food-Energy Nexus Era: A Systematic Bibliographical Review, *Food Security*, DOI: 10.1007/s12571-019-01003-z, *Journal impact factor*^{2019/2020}: **2.095**, First Online: 13 January 2020
13. **Koscis G., Xydis, G.**, Repair process analysis for Wind Turbines equipped with Hydraulic Pitch mechanism on the U.S. market in focus of cost optimization, 2019, *Applied Sciences* 9 (16), 3230, *Journal impact factor*^{2019/2020}: **2.474**
14. **Apostolou, D., Xydis, G.**, A Literature Review on Hydrogen Refuelling Stations and Infrastructure. Current Status and Future Prospects, *Renewable & Sustainable Energy Reviews*, 2019, Vol. 113, DOI: 10.1016/j.rser.2019.109292, *Journal impact factor*^{2019/2020}: **12.110**
15. **Enevoldsen, P.; Permien, F.-H.; Bakhtaoui, I., von Krauland, A.-K.; Jacobson, M. Z.; Xydis, G.; Sovacool, B. K.; Valentine, S. V.; Luecht, D.; Oxley, G.**, How Much Wind Power Potential Does Europe Have? Examining European Wind Power Potential with an Enhanced Socio-Technical Atlas, *Energy Policy*, Vol. 132, 2019, 1092-1100, DOI: 10.1016/j.enpol.2019.06.064, *Journal impact factor*^{2019/2020}: **5.042**
16. **Papadopoulou, K., Alasis, C., Xydis, G.**, On the Wind Blade's Surface Roughness due to Dust Accumulation and its Impact on the Wind Turbine's Performance: A Heuristic QBlade-based Modelling Assessment, *Environmental Progress & Sustainable Energy*, DOI:10.1002/ep.13296, First published: 20 June 2019, *Journal impact factor*^{2019/2020}: **1.989**
17. **Xydis, G.; Vlachakis, N.**, Feed-in-Premium Renewable Energy Support Scheme: A Scenario Approach. *Resources* 2019, 8, 106, DOI: 10.3390/resources8020106
18. **Enevoldsen, P., Xydis, G.**, Examining the Trends of 35 Years Growth of Key Wind Turbine Components, *Energy for Sustainable Development*, DOI: 10.1016/j.esd.2019.02.003, Volume 50, June 2019, Pages 18-26, *Journal impact factor*^{2019/2020}: **3.610**
19. **Manos, D. P.; Xydis, G.**, Hydroponics: Are we moving towards that direction only because of the Environment? A Discussion on Forecasting and a Systems Review, *Environmental Science and Pollution Research*, 26(13), 12662-12672, 2019, DOI: 10.1007/s11356-019-04933-5, *Journal impact factor*^{2019/2020}: **3.056**
20. **Karabiber, O.A., Xydis, G.**, Electricity Price Forecasting in Danish Day-Ahead Market using TBATS, ANN and ARIMA Methods, *Energies* 2019, 12(5), 928; doi: 10.3390/en120509282019, Special Issue "Demand Response in Electricity Markets", *Journal impact factor*^{2019/2020}: **2.702**
21. **Joergensen, L.D., Tambo, T., Xydis, G.**, An efficiency evaluation of radar-based obstruction lights controlling at a wind turbine test site, *Wind Energy*. 2019;22:576–586, *Journal impact factor*^{2019/2020}: **2.646**
22. **Sotiropoulos, A.; Xydis, G.; Yard, M.; Vakalis, S.**, Domestic biowaste drying as a pretreatment method to produce a stabilized biological resource, *International Journal of Environment and Waste Management*, Inderscience, 2019, 24(3), pp. 237–249, doi: 10.1504/IJEWMM.2019.103101
23. **Hansen, J.M., Xydis, G.**, Rural Electrification in Kenya. A useful case for remote areas in Sub-Saharan Africa, *Energy Efficiency (special issue: Off-grid Appliances and Smart Controls for Energy Access)*, 1-16, 2018, doi: 10.1007/s12053-018-9756-z, *Journal impact factor*^{2019/2020}: **1.810**

24. **Apostolou, D., Enevoldsen, P., Xydis, G.**, Supporting Green Urban Mobility – The Case of a Small-Scale Autonomous H2 Refuelling Station, *International Journal of Hydrogen Energy*, Special issue of SI:ICH2P-2018, doi: 10.1016/j.ijhydene.2018.11.197, *Journal impact factor*^{2019/2020}: 4.939
25. **Sotiropoulos, A., Xydis, G., Kontogianni, N., Vakalis, S.**, Results on the implementation of an innovative dehydrated biological waste to ethanol management scheme, *International Journal of Environmental Science and Technology*, doi: 10.1007/s13762-018-2135-7, Accepted, 14-Nov-2018, *Journal impact factor*^{2019/2020}: 2.540
26. **Stylos, N.; Koroneos, C.; Roset, J.; Gonzalez-Sanchez, C.; Xydis, G.; Munoz, F.**, Exergy as an Indicator for enhancing Evaluation of Environmental Management Performance in the Hospitality Industry, *Journal of Cleaner Production*, Vol. 198 (2018) pp. 1503-1514, doi: 10.1016/j.jclepro.2018.07.107, *Journal impact factor*^{2019/2020}: 7.246
27. **Panagiotidis, P., Effraimis, A., Xydis, G.**, An R-focused Forecasting Approach for Efficient Demand Response Strategies in Autonomous Micro Grids, *Energy & Environment (Special Issue on Sustainable Energy Planning and Management)*, 2018, doi: 10.1177/0958305X18787259, *Journal impact factor*^{2019/2020}: 1.775
28. **Nikas, E., Sotiropoulos, A., Xydis, G. A.**, "Spatial Planning of Biogas Processing Facilities in Greece: The Sunflower's Capabilities and the Waste-to-Bioproducts Approach", *Chemical Engineering Research and Design*, (Special Issue: Energy Systems Engineering), Vol. 131, pp. 234-244, 2018, doi: 10.1016/j.cherd.2018.01.004, *Journal impact factor*^{2019/2020}: 3.350
29. **Michalitsakos, P. L. Mihet-Popa, P., Xydis, G.**, A Hybrid RES Distributed Generation System in for Autonomous Islands: A DER-CAM and Storage based Economic and Optimal Dispatch Analysis, *Sustainability* 2017, 9(11), 2010; doi: 10.3390/su9112010, *Journal impact factor*^{2019/2020}: 2.576
30. **Koroneos, C., Polyzakis, A., Nanaki, E., Xydis, G., Stylos, N.**, Exergy Analysis for a proposed binary geothermal power plant in Nisyros Island, Greece, *Geothermics*, Elsevier, pp. 38-46, doi: 10.1016/j.geothermics.2017.06.004, *Journal impact factor*^{2019/2020}: 3.682
31. **Xydis, G., Liaros, S., Botsis K.**, Energy demand analysis via small scale hydroponic systems in suburban areas – An integrated energy-food nexus solution, *Science of the Total Environment*, 2017, 593-594, pp. 610-617, doi: 10.1016/j.scitotenv.2017.03.170, *Journal impact factor*^{2019/2020}: 6.551
32. **Xydis, G., Mihet-Popa, L.**, Wind Energy Integration via Residential Appliances, *Energy Efficiency*, Springer, 2016, pp. 1-11, In press, DOI: 10.1007/s12053-016-9459-2, *Journal impact factor*^{2019/2020}: 1.810
33. **Nanaki, E., Koroneos, C., Xydis, G.**, Environmental Impact Assessment of Electricity Production from Lignite, *Environmental Progress & Sustainable Energy*, Wiley, 35(6), pp. 1868-1875, doi:10.1002/ep.12427, *Journal impact factor*^{2019/2020}: 1.989
34. **Liaros, S., Botsis K., Xydis, G.**, Technoeconomic Evaluation of Urban Plant Factories: The Case of Basil (*Ocimum basilicum*), *Science of the Total Environment*, Elsevier, 2016, Jun 1;554-555:218-27, doi: 10.1016/j.scitotenv.2016.02.174, *Journal impact factor*^{2019/2020}: 6.551
35. **Panagiotidou, M., Xydis, G., Koroneos, C.**, Environmental siting framework for wind farms: A case study in the Dodecanese Islands, 2016, *Resources* 2016, 5(3), 24; doi:10.3390/resources5030024
36. **Panagiotidou, M.; Xydis, G.; Koroneos, C.**, Spatial Inequalities and Wind Farm Development in the Dodecanese Islands—Legislative Framework and Planning: A Review. *Environments* 2016, 3, 18, doi:10.3390/environments3030018
37. **Dalianis, G.; Nanaki, E.; Xydis, G.; Zervas, E.**, New Aspects to Greenhouse Gas Mitigation Policies for Low Carbon Cities. *Energies* 2016, 9, 128; doi:10.3390/en9030128, *Journal impact factor*^{2019/2020}: 2.702
38. **Xydis, G.**, 2016, A Wind Resource Assessment around Large Mountain Masses. The Speed-Up Effect, *International Journal of Green Energy*, 13:6, 616-623, DOI:10.1080/15435075.2014.993763, *Journal impact factor*^{2019/2020}: 1.388

39. **Nanaki, E. A., Xydis, G. A., Koroneos, C.J.**, *Electric Vehicle Deployment in Urban Areas, Indoor and Built Environment (special issue: Urban Sustainability)*, Sage Publications, 2015, 25(7), pp. 1065-1074, DOI: 10.1177/1420326X15623078, *Journal impact factor*^{2019/2020}: 1.900
40. **Xydis, G., Nanaki, E.**, *Wind Energy based Electric Vehicle Charging Stations Sitting. A GIS/Wind Resource Assessment Approach*. *Challenges* 2015, 6(2), 258-270; doi: 10.3390/challe6020258
41. **Xydis G., Pechlivanoglou, G., Nayeri, N. C.**, *Wind Turbine Waste Heat Recovery—A Short-Term Heat Loss Forecasting Approach*. *Challenges* 2015, 6, 188-201, doi:10.3390/challe6020188
42. **Wang Q., Zhang C., Ding Y., Xydis G., Wang J., Østergaard J.**, *Review of Real-Time Electricity Markets on aspect of Integrating Distributed Energy Resources and Demand Response*, *Applied Energy*, Vol. 138, pp. 695–706, 2015, doi:10.1016/j.apenergy.2014.10.048, *Journal impact factor*^{2019/2020}: 8.848
43. **Xydis G.**, *Wind Energy Integration through District Heating. A Wind Resource based Approach, (Special Issue: Spatial and Temporal Variation of the Wind Resource)* *Resources* 2015, 4(1), 110-127; doi:10.3390/resources4010110
44. **Xydis, G.**, *A Wind Energy Integration Analysis using Wind Resource Assessment as a Decision Tool for Promoting Sustainable Energy Utilization in Agriculture*, 2015, *Journal of Cleaner Production*, 96, 3799, pp. 476-485 (Sp. Volume: CP Strategies), DOI: 10.1016/j.jclepro.2013.11.030, *Journal impact factor*^{2019/2020}: 7.246
45. **Nanaki, E. A., Koroneos, C. J., Xydis, G., Rovas, D.**, *Comparative Environmental Assessment of Athens Urban Buses- Diesel, CNG and Biofuel Powered*, *Transport Policy*, 2014, Vol.35, pp. 311–318, 2014, doi:10.1016/j.tranpol.2014.04.001, *Journal impact factor*^{2019/2020}: 3.382
46. **Xydis G.**, (2014) *On the Accumulated Capacity Factor of Integrated Energy Systems*. *Innov Energy Policies* 3:101e. doi: 10.4172/2090-5009.1000101e
47. **Xydis, G., Nanaki, E. A., Koroneos, C. J.**, *Comparative Wind Farm Planning on a High Plateau. Dust Dispersion as a Sitting Constraint*, *Land Use Policy*, Vol. 39, 2014, pp. 22-33, DOI: 10.1016/j.landusepol.2014.03.001, *Journal impact factor*^{2019/2020}: 3.682
48. **Xydis, G., Nanaki, E., Koroneos, C.**, *Low-Enthalpy Geothermal Resources for Electricity Production. A Demand Side Management Study for Intelligent Communities*, 2013, *Energy Policy*, 62, pp. 118-123, 2013, DOI: 10.1016/j.enpol.2013.08.012, *Journal impact factor*^{2019/2020}: 5.042
49. **Xydis, G., Nanaki, E., Koroneos, C.**, *Exergy analysis of Biogas Production from a Municipal Solid Waste Landfill*, *Sustainable Energy Technologies and Assessments*, 4, pp. 20-28, 2013, DOI: 10.1016/j.seta.2013.08.003, *Journal impact factor*^{2019/2020}: 3.427
50. **Xydis, G.**, *"A Techno-economic and Spatial Analysis for the Optimal Planning of Wind Energy in Kythira Island, Greece"* *Int Journal of Production Economics (Special Issue on Energy Sustainability for Production Design and Operations)*, 146 (2013), pp. 440-452, DOI: 10.1016/j.ijpe.2013.02.013, *Journal impact factor*^{2019/2020}: 5.134
51. **Xydis, G.**, *The Wind Chill Temperature Effect on a large-scale PV Plant – An Exergy Approach*, *Progress in Photovoltaics: Research and Applications*, Wiley Publishers, 2013, DOI: 10.1002/pip.2247, *Journal impact factor*^{2019/2020}: 7.690
52. **Koroneos, C., Xydis, G., Polyzakis, A.**, *The Optimal Use of Renewable Energy Sources – The Case of Lemnos Island*, *International Journal of Green Energy*, 10 (8), pp. 860-875, 2013, DOI:10.1080/15435075.2012.727929, *Journal impact factor*^{2019/2020}: 1.388

53. **Xydis, G.**, Comparison Study between a Renewable Energy Supply System and a Supergrid for Achieving 100% from Renewable Energy Sources in Islands, *International Journal of Electrical Power and Energy Systems*, 46, 2013, pp. 198-210, doi: 10.1016/j.ijepes.2012.10.046, *Journal impact factor*^{2019/2020}: 3.588
54. **Xydis, G.**, Wind Energy to Thermal and Cold Storage – A Systems Approach, *Energy and Buildings*, Vol. 56, 2013, pp. 41-47, doi: 10.1016/j.enbuild.2012.10.011, *Journal impact factor*^{2019/2020}: 4.867
55. **Xydis, G.**, Effects of Air Psychrometrics on the Exergetic Efficiency of a Wind Farm at a Coastal Mountainous Site - An Experimental Study, *Energy*, 37 (1), 2012, pp. 632-638, doi:10.1016/j.energy.2011.10.039, *Journal impact factor*^{2019/2020}: 6.082
56. **Xydis, G.**, Development of an Integrated Methodology for the Energy Needs of a Major Urban City. The Case Study of Athens, Greece, 2012, *Renewable and Sustainable Energy Reviews* 16 (9), pp. 6705-6716, DOI: 10.1016/j.rser.2012.09.003, *Journal impact factor*^{2019/2020}: 12.110
57. **Xydis, G.**, On the Exergetic Capacity Factor of a Wind – Solar Power Generation System, *Journal of Cleaner Production*, 2013, Vol. 47, pp. 437-445, doi: 10.1016/j.jclepro.2012.07.014, *Journal impact factor*^{2019/2020}: 7.246
58. **Xydis, G.**, Wind-Direction Analysis in Coastal Mountainous Sites. An Experimental Study within the Gulf of Corinth, Greece. *Energy Conversion and Management* 64, pp. 157-169, doi: 10.1016/j.enconman.2012.05.018, *Journal impact factor*^{2019/2020}: 8.208
59. **Koroneos, C.J., Nanaki, E.A., Xydis, G.A.**, Sustainability Indicators for the Use of resources – The Exergy Approach, *Sustainability (Special issue: Advances in Sustainability: Selected Papers from 1st World Sustainability Forum)*, MDPI Publishing, 2012, doi:10.3390/su4081867, *Journal impact factor*^{2019/2020}: 2.576
60. **Xydis, G., Koroneos, C.J.**, A Linear Programming Approach for the Optimal Planning of a Future Energy System. Potential Contribution of Energy Recovery from Municipal Solid Wastes, *Renewable and Sustainable Energy Reviews*, 2012, Vol. 16, No. 1, pp. 369-378, doi: 10.1016/j.rser.2011.08.001, *Journal impact factor*^{2019/2020}: 12.110
61. **Xydis, G., Koroneos, C., Nanaki, E.** Exergy Based Comparison of two Greek Industries, *International Journal of Exergy*, 2011 - Vol. 8, No.4, pp. 460 – 476, DOI:10.1504/IJEX.2011.041033, *Journal impact factor*^{2019/2020}: 0.958
62. **Koroneos, C.J., Nanaki, E.A., Xydis, G.A.**, Exergy analysis of the energy use in Greece, *Energy Policy*, 39 (5), pp. 2475-2481, doi:10.1016/j.enpol.2011.02.012, *Journal impact factor*^{2019/2020}: 5.042
63. **Xydis, G., Loizidou, M., Koroneos, C.J.** (2010) Multicriteria analysis of Renewable Energy Sources (RES) utilisation in waste treatment facilities: the case of Chania prefecture, Greece, *Int. J. Environment and Waste Management*, Vol. 6, Nos. 1/2, pp.197–213, DOI:10.1504/IJEW.2010.033993
64. **Koroneos, C., Nanaki, E., Xydis, G.**, Solar air conditioning systems and their applicability—An exergy approach, *Resources, Conservation and Recycling*, Elsevier, Volume 55, Issue 1, 2010, pp. 74-82, doi:10.1016/j.resconrec.2010.07.005, *Journal impact factor*^{2019/2020}: 8.086
65. **Koroneos, C.J., Xydis, G., Polyzakis A.**, The optimal use of renewable energy sources – The case of the new international “Makedonia” airport of Thessaloniki, Greece. *Renewable & Sustainable Energy Reviews*, Elsevier Publishers, Volume 14, Issue 6, 2010, pp. 1622-1628, doi:10.1016/j.rser.2010.02.007, *Journal impact factor*^{2019/2020}: 12.110
66. **Xydis, G., Koroneos, C., Loizidou, M.**, Exergy analysis in a wind speed prognostic model as a Wind Farm sitting selection tool. A case study in Southern Greece, *Applied Energy*, Vol. 86 (2009) pp. 2411–2420, DOI: 10.1016/j.apenergy.2009.03.017, *Journal impact factor*^{2019/2020}: 8.848

67. **Xydis, G., Koroneos, C.**, (2009) Alternative scenarios of the utilisation of renewable energy sources in small prefectures: a case study in Lasithi Prefecture, Greece, *Int. J. Global Energy Issues*, 2009, Vol. 31, No. 1, pp.61–87, doi: 10.1504/IJGEI.2009.021543
68. **Xydis, G.**, Exergy Analysis in Low Carbon Technologies – The case of Renewable energy in the Building Sector, Indoor and Built Environment (special issue: “Strategies for a low carbon urban built environment”), Volume 18 Issue 5, 2009, DOI: 10.1177/1420326X09344280, *Journal impact factor*^{2019/2020}: 1.900
69. **Xydis, G., Koroneos, C., Polyzakis, A.**, Energy and Exergy Analysis of the Greek Hotel Sector: An Application, *Energy and Buildings*, Volume 41, Issue 4, 2009, pp. 402–406, doi:10.1016/j.enbuild.2008.11.001, *Journal impact factor*^{2019/2020}: 4.867
70. **Xydis, G., Koroneos, C., Moropoulou, A.** (2008) Energy and exergy utilisation in the Greek building sector, *Int. J. Energy Technology and Policy*, 2008, Vol. 6, No. 5/6, pp.474–494, doi:10.1504/IJETP.2008.020736
71. **Polyzakis, A.L., Koroneos, C., Xydis, G., Malkogianni, A.**, Energy analysis of Brayton combined cycles, *Int. J. of Exergy* 2008 - Vol. 5, No.5/6, pp. 652 – 683, doi:10.1504/IJEX.2008.020831, *Journal impact factor*^{2019/2020}: 0.958
72. **Moustakas, K., Xydis, G., Malamis, S., Haralambous, K.-J., Loizidou, M.**, Analysis of results from the operation of a pilot plasma gasification/vitrification unit for optimising its performance, *Journal of Hazardous Materials*, Volume 151, Issues 2-3, 2008, pp. 473–480, doi:10.1016/j.jhazmat.2007.06.006, *Journal impact factor*^{2019/2020}: 9.038
73. **Polyzakis, A.L., Koroneos, C., Xydis, G.**, Optimum gas turbine cycle for combined cycle power plant, *Energy Conversion and Management*, Volume 49, Issue 4, 2008, pp. 551–563, doi:10.1016/j.enconman.2007.08.002, *Journal impact factor*^{2019/2020}: 8.208
74. **Koroneos, C.J., Xydis, G.**, Sustainable development of the Prefecture of Kefalonia, *Int. J. Sustainable Development*, 2005, Vol. 8, No. 4, pp.243–257, doi:10.1504/IJSD.2005.00957

International Conference Proceedings:

75. **Salkanovic, E., Enevoldsen, P., Xydis, G.**, Applying AI-Based Solutions to Avoid Bird Collisions at Wind Parks, 2019 Energy & Resources for Tomorrow Symposium, Windsor, Ontario, Canada, June 20–21, 2019
76. **Baker, J. A., Moesby Tinggaard, M. S., Enevoldsen, P., Xydis, G.**, Circular economy in relation to manufacturing companies producing kitchens - a method for realizing the theory in practice, 6th International Conference on Sustainable Solid Waste Management, Naxos Island, Greece, 13–16 June 2018
77. **Apostolou, D.; Enevoldsen, P.; Xydis, G.**, Investigation of a Small Scale Autonomous H2 Station for Cycling based Transportation, 9th International Conference on Hydrogen Production, Zagreb, Croatia, 16 - 19 July, 2018
78. **E. Nanaki, C. Koroneos, G. Xydis**, Exergy & Environmental Based Comparison of Hydrogen Production from Natural gas, Carbon and Nuclear energy, 15th International Conference on Environmental Science and Technology (CEST2017), Rhodes, Greece, 31 August - September 2, 2017
79. **K. Lasaridi, C. Chroni, K. Abeliotis, K. Boikou, Ph. Kyrkitsos, A. Dalamagka, M. Rama, A. Sotiropoulos, G. Xydis, R. Charitopoulou, K. Kalafata, M. Intzeler, Ch. Angelakopoulos**, State-of-the Art review on Waste Electrical & Electronic Equipment reuse in the framework of the LIFE REWEEE project, 5th International Conference on Sustainable Solid Waste Management, 21–24 June 2017, Athens, Greece
80. **E. A. Nanaki, G. A. Xydis, C. J. Koroneos**, Synergistic benefits of renewable energy sources and electric vehicles in autonomous grids, International Conference Smart Energy Regions, 11 - 12 Feb. 2016, Cardiff, Wales, UK

81. **G. Tzanes, D. Zafirakis, G. A. Xydis, J. K. Kaldellis**, *An Optimal Hybrid Renewable Energy System Analysis in Aegean Sea Islands. A GIS and a Developer's Perspective*, International Scientific Conference eRA - 10, Piraeus, , Greece, 23 - 25/09/2015
82. **G. Tzanes, D. Zafirakis, G. A. Xydis, J. K. Kaldellis**, *Techno-economic Analysis for the Optimal Hybrid Renewable Energy based System Planning in Autonomous Islands of Aegean Sea*, MESAEP 18th Symposium, Crete, Greece 26-30 September 2015
83. **E.A. Nanaki, C. J. Koroneos, G. Xydis**, *Environmental Assessment of the use of bioethanol and biodiesel in the automotive sector*, CEST 2015, 3-5 Sept. 2015, Rhodes, GR
84. **M. Panagiotidou, C. Koroneos, G. Xydis**, *Wind farm siting in the Dodecanese islands: An environmental Management Framework*, 21st SETAC Europe LCA Case Study Symposium, 12-14 July 2015, Nisyros, Greece
85. **C. J. Koroneos, E. A. Nanaki, G. A. Xydis**, *The Use of Life Cycle Assessment in the Integrated Solid Waste Management*, 2nd International Conference on Sustainable Solid Waste Management Conference, 12th–14th June 2014, Athens 2014 Biowaste
86. **C. J. Koroneos, E. A. Nanaki, G. A. Xydis**, *The Impact of Exergy Analysis in the Symbiosis of the Energy Use*, E-symbiosis conference, 19-21 June 2014 Athens, Greece
87. **E. A. Nanaki; C. Koroneos; G. Xydis; D. Rovas**, *Exergy Analysis and Life Cycle Analysis used as Climate Change Mitigation Tools*, Poster, Urban Integration 2014, 6-7 March 2014, Sheffield, UK
88. **C. Koroneos, E. Nanaki, D. Rovas, G. Xydis**, (2012), "Global Warming Gases Emissions Modeling for Greece". To be presented at the Global Conference on Global Warming, 8-12 July 2012, Istanbul, Turkey, <http://www.gcgw.org/gcgw12/index.php?conference=gcgw&schedConf=gcgw12>
89. **G. Romanovsky, G. Xydis, J. Mutale**, *Participation of smaller size renewable generation in the electricity market trade in UK: analyses and approaches*, IEEE-PES 2nd European conference and exhibition on Innovative Smart Grid Technologies (ISGT-EUROPE 2011), December 5 – 7, 2011, Manchester, UK
90. **G. Xydis**, *Wind-Direction Analysis in Coastal Mountainous Sites. An Experimental Study within the Gulf of Corinth, Greece*, IREC 2011, The International Renewable Energy Congress, Dec. 20-22, 2011, Hammamet, Tunisia
91. **C. J. Koroneos, E. A. Nanaki, G. A. Xydis**, *Greenhouse Gases Emissions and the Energy System of Greece*, The Global Conference On Global Warming 2011 (GCGW2011), 11-14 July, 2011, Lisbon, Portugal
92. **C. J. Koroneos, E. A. Nanaki, G. A. Xydis**, *Sustainability Indicators for the Use of resources – The Exergy Approach*, The 1st World Sustainability Forum (WSF-2011), November 2011
93. **E.A.Nanaki, C.J.Koroneos, G. Xydis**, *Environmental Impact Assessment of Public Transportation- the case study of Athens*, 2nd International Exergy, Life Cycle Assessment, and Sustainability Workshop & Symposium (ELCAS2), 19 - 21 June, 2011, Nisyros, Greece
94. **G. Xydis, E. Nanaki, C. Koroneos**, *The Effect of Parnassus Mountain on Wind Farm Sitting – An Experimental and a GIS-based Industrial Symbiosis Study towards Sustainable Development*, 2nd International Exergy, Life Cycle Assessment, and Sustainability Workshop & Symposium (ELCAS2), 19 - 21 June, 2011, Nisyros, Greece
95. **Xydis, G.**, *Effects of Air Psychrometrics on the Exergetic Efficiency of a Wind Farm at a Coastal Mountainous Site - An Experimental Study*, 7th Biennial International Workshop "Advances in Energy Studies", 19-21 October 2010, Barcelona, Spain
96. **C. Koroneos, E. Nanaki, G. Xydis**, *Exergy analysis of Biogas Production from a Municipal Solid Waste Landfill*, 4th International Exergy, Energy and Environment Symposium, Poster Presentation, 19 – 23 April 2009, Sharjah, United Arab Emirates

97. **C. Koroneos, E. Nanaki, G. Xydis**, *Solar air-conditioning systems impact on the built environment - A thermodynamic approach*, Low Carbon Cities, 45th ISOCARP International Congress, Porto-Portugal, 18-22 Oct. 2009
98. **C. Koroneos, E. Nanaki, G. Xydis**, (2008) *Exergy Analysis of Solar Air-conditioning Systems and their Applicability*, Low Carbon Urban Built Environments, 24-25 September, 2008, Munich, Germany
99. **G. Xydis**, *Exergy Analysis in Low Carbon Technologies – The case of Renewable Energy*, Strategies for a Low Carbon Urban Built Environments Conference, April 17-18, 2007, Vienna, Austria
100. **A. L. Polyzakis, C. Koroneos, G. Xydis**, (2007), *Exergy Analysis of Brayton Combined Cycles*, 3rd International Energy, Exergy and Environment Symposium, July, 1 – 5, 2007, IEEEES-3, University of Évora, Portugal
101. **G. Xydis, M. Loizidou, A. Tzempelikos, C. Koroneos, K. Moustakas**, *The Efficient Enhancement of Solar Energy Utilization in Lasithi Prefecture, Greece*, Joint 31st SESCL and 1st SBRN Conference, Concordia University, August 20-24, 2006, Montreal, Canada,
102. **M. Loizidou, C. Koroneos, A. Charalambous, A. Bourka, K. Moustakas, S. Malamis, G. Xydis**, *Sustainable Construction in Public and Private Works through IPP approach*, Poster, Hellenic Days Of Research And Technology – European Cooperation, 22 – 23 June, 2006 Athens, Greece (in Greek)
103. **C. Koroneos, G. Xydis**, *The Application of Exergy Analysis in Cogeneration – A case Study in Greece*, Proceedings of the 2nd International Conference on Applied Thermodynamics, 18-20 May, 2005, Istanbul, Turkey
104. **Polyzakis A., C. Koroneos C., Xydis G.**, *The Optimal Use Of Renewable Energy Sources In The New International “Makedonia” Airport Of Thessaloniki*, Dubrovnik Conference on Sustainable Development of Energy, Water & Environment Systems, June 5 – 10, 2005, Dubrovnik Croatia
105. **C. Koroneos, G. Xydis and N. Moussiopoulos**, *The Optimal Use of Solar System in the Greek Island of Kephallonia*, International Solar Energy Conference, 6-12 August, 2005, Orlando, Florida, U.S.A.
106. **Thomakou T., Kerasidou F., Xydis G., Koroneos C.**, *Life cycle analysis of a heating system*, Second (2nd) International Exergy, Energy and Environment Symposium (IEEEES2), 3 - 7 July, 2005, Kos, Greece
107. **Chatziaggelidis K., Chaviaras I., Xydis G., Koroneos C.**, *Use of nuclear energy for hydrogen production*, 2nd International Exergy, Energy and Environment Symposium (IEEEES2), 3-7 July 2005, Kos, Greece
108. **C. Koroneos, G. Xydis and N. Moussiopoulos**, *Low Enthalpy Geothermal Energy, Applications in Greece and Environmental Benefits from its use*, 3rd National Congress on the Application of Renewable Energy Sources - Prospects and Priorities to the Objective of 2010, 23-25 Feb., 2005, Athens, Greece (in Greek)
109. **Koroneos C., Vasileiadis M., Xydis G., Moussiopoulos N.**, *Life cycle assessment of solid oxide fuel cells*, 9th International Conference on Environmental Science and Technology, 1-3 Sept. 2005, Rhodes, Greece

Book Chapters:

- ✓ **Avgoustaki, D.D.; Xydis, G.**; (2020), *How energy innovation in indoor vertical farming can improve food security, sustainability, and food safety?* In: Cohen, M. J.(ed.); *Advances in Food Security and Sustainability*, Volume 5, 1st Edition ISBN: 9780128207116, Academic Press, <https://www.sciencedirect.com/science/article/pii/S2452263520300021?via%3Dihub>
- ✓ **Xydis, G.; Nanaki E.A.**; (2020), *Wind Resource Forecasting Error in Flat and Complex Terrains*, In: Stagner J., Ting DK. (eds) *Green Energy and Infrastructure. Securing a Sustainable Future*; ISBN 9780367559496, October 2, 2020, CRC Press,

<https://www.routledge.com/Green-Energy-and-Infrastructure-Securing-a-Sustainable-Future/Stagner-Ting/p/book/9780367559496>

- ✓ **Vilar A.Á., Xydis G., Nanaki E.A.** (2020) *Small Wind: A Review of Challenges and Opportunities*. In: Stagner J., Ting DK. (eds) *Sustaining Resources for Tomorrow. Green Energy and Technology*. Springer, Cham, https://doi.org/10.1007/978-3-030-27676-8_10, Springer Nature, https://link.springer.com/chapter/10.1007/978-3-030-27676-8_10
- ✓ **Nanaki E.; Xydis G.** (2018), *Advances in Renewable Energies and Power Technologies. Volume 2: Geothermal and Biomass Energies, Fuel Cells, and Smart Grid*, Chapter: "Deployment of Renewable Energy Systems: Barriers, Challenges and Opportunities" Elsevier, B978-0-12-813185-5.00005-X, Available: <https://www.elsevier.com/books/advances-in-renewable-energies-and-power-technologies/yahyaoui/978-0-12-813185-5>
- ✓ **Bouris D., Koroneos C.J., Xydis G. and Nanaki E.** (2009), VII Greece, in *European Carbon Atlas*, (Ph. Jones, P. Pinho, J. Patterson and Ch. Tweed, eds), Published by the Welsh School of Architecture, Cardiff University, UK, 75-85, Available online: www.lcube.eu.com/Euro_Carbon_Atlas/C23%20European%20Carbon%20Atlas.pdf

Books:

- ✓ **Nanaki, E. A., Xydis, G. A.**, "Exergetic Aspects of Renewable Energy Systems – Insights of Transportation and Energy Sector for Intelligent Communities", CRC Press, Taylor & Francis, DOI: 10.1201/b22277, eBook Published: 30 August 2019, eBook ISBN: 9781315109756, <https://www.taylorfrancis.com/books/9781315109756> (first Edition, First Published 14 January 2019)
- ✓ **Xydis, G., Enevoldsen, P.**, "Wind Energy: Future Innovations", CRC Press, Taylor & Francis, (signed contract /writing phase/to be delivered within 2020)

National Professional Journals (Broader Readership):

- ✓ **G. Xydis** (2005), "Geothermal energy usefulness", ECOTEC (ISSN: 1790 – 3297) Vol. 2, pp.47, Available online: www.ecotec.gr/magazine.php?id=1117573200
- ✓ **G. Xydis** (2007), "Hybrid R.E.S. Systems. Optimization of Geothermal & PV Use", ECOTEC (ISSN: 1790 – 3297) Vol. 23, pp.47, Available online: www.ecotec.gr/magazine.php?id=1177966800

Conference Abstracts:

- ✓ **C. J. Koroneos, G. Xydis, E. Nanaki, D. Rovas**, Comparative life cycle assessment of three battery types, SETAC Europe 18th LCA Case Study Symposium and 4th NorLCA Symposium, 54-54

Lecture Notes:

- ✓ **G. Xydis**, Technical Works of Distributed Energy Resources, Lecture Notes for: I) Distributed Energy Resources - Renewable Energy Sources & Cogeneration & II) Energy Economics, Professional Diploma in Energy Production & Management, Mediterranean College

Presentations in International Meetings/Workshops:

- ✓ **G. Xydis, D. Apostolou, E. Stamatakis**, Refuelling scenarios for urban light-duty hydrogen vehicles. Comparison with other vehicle counterparts, 55th NCSR Demokritos summer school, July 13-17, 2020 (virtual edition), Athens, Greece

- √ **E. Salkanović, P. Enevoldsen, G. Xydis**, *A comprehensive review analyzing avian mortality studies performed around wind parks*, **NAWEA/WindTech 2019 Conference**, October 14-16, 2019, UMass Amherst, USA
- √ **G. Xydis**, *A Techno-economic Optimization Methodology for Greening the Energy System in the City of Athens*, TUD COST Action 0902 “Integrated assessment technologies to support the sustainable development of urban areas”, WG III: Resource flows and urban ecosystem services in cities, 9-10, Nov., 2011, Riga, Latvia
- √ **G. Xydis**, “Exergy Analysis of Waste Management in the Prefecture of Kephallonia”, COST Action C24 “Analysis and Design of Innovative Systems for Low-EXergy in the Built Environment: COSTeXergy, WG I “METHODS & IMPLEMENTATION OF METHODS”, 20-21 Sept., 2007, Novo Mesto, Slovenia
- √ **G. Xydis**, “IPP in the Construction Industry”, COST Materials Action 530, Life Cycle Inventories for Environmentally Conscious Manufacturing Processes, WG IV “INTEGRATED PRODUCT POLICY”, 6-7 July, 2006, Barcelona, Spain

Teaching Experience:

- √ BTECH, Aarhus University (DK): MSc in Engineering in Technology Based Business Development:
 - *Energy Engineering and Innovation (Elective)*, Winter Semester
 - *Clean Technology (Elective)*, Winter Semester, 2017-2018
 - *Research Design in Engineering*, Winter Semesters, 2017-2020
 - *Optimisation of Engineering Processes Using Numerical Approaches (Guest Lecturer)*, Spring Semester, 2017-2018
 - *Research Design in Engineering*, 2017-2018
 - *Engineering Project Management (Guest Lecturer)*, 2017-2020
 - *Sustainability in a Business Development Perspective, (Guest Lecturer)*, 2020-2021
 - *Technology Specialisation I (Methods)*, 2019-2021
 - *Engineering Project: Systematic Review*, 2019-2020
 - *Engineering Project: Case-Based Knowledge Creation*, 2020-2021
- √ BTECH, Aarhus University (DK): Bachelor's Degree Programme in Global Management and Manufacturing (GMM):
 - *Sustainability, Production and Resources (Elective)*, Winter Semester, 2018-2019
- √ Johns Hopkins University, Energy Policy and Climate Program, Advanced Academic Programs,
 - 425.624 - Wind Energy: Science, Technology and Policy module, 2019-2020
- √ Open University of Cyprus (CY), MSc Environmental Conservation and Management, Faculty of Pure and Applied Sciences:
 - DPP51: Methods and Techniques in Environmental Research module, Sept. 2015 – June 2016
 - DPP60: Environmental Protection (Energy and Pollution) module, 2014-2015
- √ Open University of Cyprus (CY), BSc in Economics, Faculty of Economics and Management, Module Coordinator (and MSc thesis supervisor) of the “Energy and Natural Resource Economics (OIK312)” module, 2019-2021
- √ International Hellenic University, School of Economics, Business Administration and Legal Studies, MSc in Environmental Management and Sustainability, “Sustainable Production and Consumption”, 2015-2016
- √ Heriot-Watt University/Piraeus University of Applied Sciences (UK/GR):
 - *Wind Energy Applications (Invited)*, Cohort 18-19, "MSc in Energy Systems", 2015-2016
- √ University of Piraeus, MSc in Industrial Management & Technology, Specialization: Systems of Energy and Environmental Management, Tutor in “Renewable Energy Sources”, winter semester 2016-2017

- √ *School of Pedagogical & Technological Education (ASPETE), Department of Mechanical Engineering Educators, Adjunct tutor, teaching: “Design and Optimization of Energy Systems”, winter semester 2016-2017*
 - √ *Technological Research Center of Piraeus and Islands/Piraeus University of Applied Sciences:*
 - *Electricity Market Analysis – The Role of Storage: Organising and teaching, Seminar on modern energy storage technologies; Teaching on: i) “Analysis of electricity markets – the role of Storage” & ii) “Electricity supply and demand – the role of Storage”, Nov.-Dec. 2015*
 - *Wind Resource Assessment - Spatial and Techno-economic Approaches: Organising and teaching, Seminar on Wind Resource Assessment (WRA); Teaching on: i) “Intro on WRA”, ii) “WRA, Forecast and Power Integration”, iii) “Spatial Analysis and Remote Sensing”, iv) “WRA and Project Development”, Apr.-May 2016*
 - √ *Hellenic Open University (GR):*
 - *PSE61: Technology for mitigating environmental impacts module, MSc Environmental Design of Infrastructure Works, School of Science & Technology, 2014-2015*
 - *PSE60: “Design of infrastructure works and environmental protection” module, MSc Environmental Design of Infrastructure Works, School of Science & Technology, 2016-2017*
 - √ *Mediterranean College (in collaboration with the University of Derby) (GR):*
 - *Energy Production & Management Professional Diploma, 2013-2014:*
 - ✓ *Distributed Energy Resources*
 - ✓ *Energy Economics*
 - √ *Technical University of Denmark (DK):*
 - *PhD course 45800: “Energy Technologies for a Sustainable Future”, Risø DTU, i) Optimization (Energy Technology), ii) Grid modeling, iii) Wilmar model & GAMS coding, 2011 – 2012*
 - *UDTU course, “Wind Farm Planning”, 2012 – 2013*
 - √ *National Technical University of Athens (GR):*
 - *Teaching assistant for the course: “Renewable Energy Sources”, Interdisciplinary MSc programme “Environment & Development”, i) Wind Energy I, ii) Wind Energy II, iii) Exergy Analysis, iv) only in 2014-2015: Hydroelectric Energy, 2007 – 2008, 2009 – 2010, 2014-2015*
 - *Lab instructor in the implementation of laboratorial exercises of 5th semester course of “General Chemistry”, School of Applied Mathematics and Natural Science, 2006 – 2007*
 - √ *University of Western Macedonia (GR):*
 - *Teaching assistant for the course: “Life Cycle of Energy Systems”, Department of Mechanical engineering (former Department of Engineering and Management of Energy Resources), 2005 – 2007*
-

Advising Experience:

- √ *Supervisor:*
 - *PhD student **Eldina Salkanovic**, BTECH, Aarhus University, PhD title: “**Applying Artificial Intelligence-Based Solutions to Avoid Bird Collisions at Wind Parks**”, Partially funded by **Vestas***
 - *PhD student **Dimitrios Apostolou**, BTECH, Aarhus University, PhD title: “**Assessment of a portable RES-based H2 production-storage system towards a zero-emission cycling based transportation**”*

- PhD student *Dafni Despoina Augoustaki*, BTECH, Aarhus University, PhD title: “Growth perspectives of small scale hydroponic systems in cities: The sustainable energy-based business approach”
 - *EIT Food’s Global Food Venture programme* application successful and enrolled to the programme
- 15 MSc theses for the *MSc in Technology-based Business Development*, BTECH/AU Herning), Aarhus University 2016-2017 (2), 2017-2018 (5), 2018-2019 (4), 2019-2020 (2), 2020-2021 (2)
- 13 MSc thesis at the Open University of Cyprus
 - *Faculty of Pure and Applied Sciences, MSc Environmental Conservation and Management* 2014-2015(1), 2015-2016 (7), 2016-2017 (1), 2017-2018 (2),
 - *MBA, Faculty of Economics and Management*, 2020-2021 (2)
- 6 MSc theses at *MSc Environmental Design of Infrastructure Works, Hellenic Open University*, 2013-2014 (4), 2014-2015 (2)
- 6 MSc theses for the *MSc in Energy, Heriot-Watt University/ Piraeus University of Applied Sciences*, 2014-2015
- 1 MSc thesis for the *MSc in Energy and Environmental Investments*, Piraeus University of Applied Sciences, 2015-2016
- 1 BSc thesis for the Bachelor's Degree Programme in *Global Management and Manufacturing (GMM)*, Aarhus University
- 1 BSc thesis for the *School of Pedagogical & Technological Education (ASPETE), Department of Mechanical Engineering Educators*, 2016-2017

√ Member of 4 PhD assessment committees:

- *Peter Enevoldsen*, Industrial PhD student (Siemens/Aarhus University), Committee Chair, PhD dissertation title: “Managing the Risks of Wind Farms in Forested Areas: Design Principles for Northern Europe”, other committee members: Professor and Vice Dean Michael Goodsite, University of Southern Denmark; Head of Section Jake Badger, DTU Wind (<https://btech.au.dk/en/education/phd/phd-dissertations/>)
- *Gerardo Zarazua de Rubens*, PhD student (Aarhus University), Committee Chair, PhD dissertation title: “Investigating the feasibility of Electric Vehicles and Vehicle-to-Grid in the Nordic region: a path for adoption”, other committee members: Professor Marianne Ryghaug, Norwegian University of Science and Technology; Senior Researcher Peter Bach Andersen, DTU Elektro (<https://btech.au.dk/en/education/phd/phd-dissertations/>)
- *Dimitrios Pappas*, PhD student, University of East Anglia, Norwich Research Park, external examiner, PhD dissertation title: “Energy and emissions accounting: The case of intra-regional industrial shifts in SE Asia”, other committee members: Associate Professor Nick Yip & Associate Professor James Cornford, Supervisor: Professor Konstantinos Chalvatzis
- *Jon Lerche*, Industrial PhD student (Siemens/Aarhus University), Committee Chair, PhD dissertation title: “Offshore Wind Project Production System: Reducing Construction Duration Through Planning”, other committee members: Christian Thuesen, DTU Management; Professor Christine Pasquire, Nottingham Trent University (<https://btech.au.dk/en/education/phd/phd-dissertations/>)

√ Co-supervisor:

- PhD student **Kristoffer Holm**, BTECH, Aarhus University, PhD title: “Application of Blockchain in the Danish Wind Industry” (Supervisor: Prof. René Chester Goduscheit, BTECH, Aarhus University), 2019-2022
 - PhD student Tzelepis Stefanos, University of West Attica, Dept. of Mechanical Engineering, PhD title: “Development and Experimental Investigation of a Proton Exchange Fuel Cell Simulation Model” (Supervisor: Ass. Prof. Kosmas Kavvadias, University of West Attica), 2019-2022
 - Visiting PhD **Camila Fernandes** from Instituto de Investigación Tecnológica – IIT, Universidad Pontificia Comillas student at DTU Electrical Engineering Department, Intelligent Energy Systems Programme, PhD title: “Impact of intermittent generation on the expansion of the Spanish power system interconnection capacity”, 2012-2013
 - 1 MSc student Interdisciplinary MSc programme “Environment & Development”, National Technical University of Athens, 2014-2015
 - 5 M.Eng and MSc theses at NTUA, 2005-2007
 - 3 M.Eng at LHTEE in various energy and environmental topics, 2005-2007
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Distinctions and Awards:

- ✓ Aug. 2017: Renewable Energy Reviewer Award 2016, Elsevier Publishers
 - ✓ Apr. 2015: ERASMUS+ MOBILITY STT (OUC funding) Training in Qblade tool, TUBerlin
 - ✓ Feb. 2015: Renewable Energy Reviewer Award 2014, Elsevier Publishers
 - ✓ Outstanding Reviewer Status: i) Energy (Nov. 2014), ii) Renewable Energy (Sept. 2015)
 - ✓ Sept. 2009: Best Research Paper Award, Scholarship from Thomaidio foundation, NTUA. Paper published in: Applied Energy, Elsevier Publishers
 - ✓ Mar. 2007: Best Research Paper Award, Scholarship from Thomaidio foundation, NTUA. Paper published in: International Journal of Environment and Waste Management, Inderscience Publishers
-

Research Responsibilities & Experience (Projects), 2005 – present:

Main participant of the research group:

- ✓ **SMARTIES** (BTECH)
- ✓ **SETS II** (BTECH)
- ✓ **SDG Network** (BTECH)
- ✓ **ECENEF** (BTECH)
- ✓ **BirdAI** Bird Collission Avoidance (Radar-based AI solution for mapping of bird activity in wind farms), project budget: DKK 2,500,000, AU budget: **DKK 500,000** (75% funded, DKK375,000) (BTECH)
- ✓ **H2020 - TILOS** (Technology Innovation for the Local Scale, Optimum Integration of Battery Energy Storage), LCE-08-2014, participant, requested grant: 11 M€ - FUNDED (grade: 14/15) – contributed
- ✓ **ReWeee**: Development and demonstration of Waste Electrical and Electronic Equipment (WEEE) prevention and reuse paradigms (Green Fund)
- ✓ **EXCELLENCE II-PHAROS**, An Integrated Planning Tool for Meeting the Energy and Water Needs of Small and Medium Size Aegean Sea Islands Using Optimum Renewable Energy Sources Hybrid Systems, Laboratory of Soft Energy Applications and Environmental Protection (Piraeus University of Applied Sciences)

- Member of the “Integrated Databank, with RES Potential, Climate and Environmental Impacts Data for Each Island” Development Team (programming in C#) – *DatabaseSL tool*
- Member of the “Integrated Planning Tool for the Satisfaction of Energy and Water Needs in Island Regions using RES-Based Hybrid Configurations” Development Team (programming in C#) – *ESA tool*
- √ *BEYOND: Building a Centre of Excellence for Earth Observation-based monitoring of Natural Disasters* (NOA)
- √ *MF-Retrofit—Multifunctional facades of reduced thickness for fast and cost-effective retrofitting* (CERTH/NTUA)
- √ *TWENTIES FP7 Project* (Project Leader for DTU Electrical Engineering)
- √ *Enhanced Ancillary Services from Wind Power Plants - EASE WIND* (Project Leader for DTU Electrical Engineering)
- √ ERA project title: *Creating the city of the future* (DTU)
- √ *FlexPower – a market design project* (DTU)
 - *Report: G. Xydis, Review of Existing Real Time Markets, FlexPower, funded by Energinet.dk, project no. 10486*
- √ *Sustainable Construction in Public and Private Works through IPP approach*, LIFE Env. Project, 2005-2008, LIFE05 ENV/GR/000235 (NTUA)
 - Member of the “Building Design and Assessment Tool” Development Team, Available online: www.uest.gr/suscon/deliveable_software.xls
 - Developer of the “Eupalinus Database”, Available online: www.uest.gr/eupalinus
 - *Report: G. Xydis, Web site structure design and implementation report, SUSCON LIFE, LIFE05 ENV/GR/000235*
- √ *Mediterranean Islands Sustainability ISO-Based Action Plan “2006-2015”, Interreg III* (NTUA)
- √ *Management and Valorisation of Solid Domestic Waste for the Small Urban Communities in Morocco, Life-3rd Countries, 2006-2009, LIFE06 TCY/MA/000254* (proposal coordinator/proposal writer @ NTUA) - attracted research funding approx. **EUR 500,000**
- √ *Capacity Building of State Hazardous Waste Management Agency*, Twinning Project, LV2006/IB/EN/01 TL, 2007 (proposal coordinator/proposal writer @ NTUA) – attracted research funding approx. 120,000 EUR
- √ CIEL - Copenhagen Innovation and Entrepreneurship Lab – (proposal writer) attracted research funding approx. 60,000DKK
- √ *Design and Application of an Innovative Composting Unit for the Effective Treatment of Sludge and other Biodegradable Organic Waste in Morocco*, Life 3rd Countries, 2006-2008, LIFE05 TCY/MA/000141 (NTUA)
 - *Report: M. Loizidou, D. Malamis, S. Malamis, G. Xydis, and K. Moustakas, “Assessment of the existing situation and the related legislation in EU in connection with sludge management,” MOROCOMP LIFE TCY05/MA000141, pp. 30–81, 2006. (Deliverable 2)*
- √ Participated (member of a working group and of the MC) in the COST Action C24 “Analysis and Design of Innovative Systems for Low-EXergy in the Built Environment: *COSTeXergy*”
- √ Participated (member of a working group and of the MC) in the COST Action TU0902 “*Integrated assessment technologies to support the sustainable development of urban areas*”
- √ Participated as a member of a working group in the COST Action C23 “*Strategies for a Low Carbon Built Environment*” 2005-2009

Participant of the research group of NTUA or DTU:

- √ *EERA Smart Cities joint programme, WP1: Simulation framework/system integration* (DTU)

- √ NREL project: Advanced Unit Commitment Strategies in the Eastern Interconnection (DTU)
- √ *iPower* – a Strategic Platform for Innovation and Research within Intelligent Electricity (DTU)
- √ Copenhagen Innovation and Entrepreneurship Lab (CIEL) (DTU)
- √ DHC Annex XI: Smart DHC Networks in Low Temperature Energy Systems (DTU)
- √ Participated (member of a working group and of the Management Committee) in the COST Action TU0701 “Improving the Quality of Suburban Building Stocks” (DTU)
- √ Participated as a member of a working group in the European Action: “COST Materials Action 530, Sustainable Materials Technology, Life Cycle Inventories for Environmentally Conscious Manufacturing Processes”, 2001-2005. Working Group IV “Integrated Product Policy”
- √ Study for preparing the first working plan of the Eco-Design Directive, 2007 (NTUA)
- √ Development of best management systems for high priority waste streams in Cyprus, Life 3rd Countries 2004-2006, (NTUA)
- √ Promotion and Implementation of Systems for the Production of High Quality Compost from Biodegradable Household Waste separated at Source, LIFE Environment Project, 2004-2006 (NTUA)
- √ Development of tools and guidelines for the promotion of the sustainable urban wastewater treatment and reuse in the agricultural production in the Mediterranean countries, 2003-2006, MEDA projects (NTUA)

Research collaboration with industry/academia, 2006 – present:

- √ Large Enterprises/SMEs (Electrabel GDF Suez S.A, Nel Hydrogen, WKN Windkraft Nord AG, Siemens Gamesa Renewable Energy, Enercon GmbH, RES Group, Iberdrola Renovables, Vestas Wind Systems A/S, Energiequelle GmbH, Terna S.A., PNE WIND AG, Volkswind GmbH, Ørsted (former DONG Energy), MeteoDyn, Pragma Industries, Smart Blade GmbH),
 - √ Universities (Johns Hopkins University-Energy Policy and Climate program; Stanford University-Energy Resources Engineering; Purdue University–Civil Engineering; University of Windsor-Faculty of Engineering; Technical University of Denmark–Dept. of Electrical Engineering; Delft University of Technology; Universidad Carlos III de Madrid-Electrical Engineering Dept.; Instituto de Investigación Tecnológica-Universidad Pontificia Comillas; Technische Universität Berlin–Inst. for Energy Engineering & Inst. of Fluid Dynamics and Technical Acoustics; Universitat Politècnica de Catalunya–Dept de Física Aplicada; UEA-Norwich Business School; University of Bristol–Department of Management) and
 - √ Research Institutes (VTT – Building and Transport, NREL, Fraunhofer IBP, Fraunhofer IWES, JRC – Clean Energies Unit, SINTEF, ARAID-Foundation for the Development of New Hydrogen Technologies in Aragon)
-

Language skills:

- √ Greek: Fluent (Mother Tongue)
 - √ English: Fluent (Certificate of Proficiency in English – University of Michigan)
 - √ Italian: Average (Celi 3 del Università per Stranieri di Perugia)
 - √ Spanish: Average (Diploma Básico de Español, Instituto Cervantes)
 - √ Danish: Elementary
-

Software tool skills:

MS Office, WAsP (Wind Atlas Analysis and Application Program), WindSim, ReSoft WindFarm (Wind Energy Software for the Optimisation, Analysis and Design of Wind Farms), RETScreen, WindRose (Wind data analysis tool), Windographer (Wind Resource Assessment Software), Qblade, ENERCON SCADA Remote, Google Earth, AutoCAD/Map 3D/Simulation CFD 2014, Global Mapper (Design/viewer tool), Simscale, QGIS, ILWIS, Lingo/Lindo (Optimization Software), WILMAR (unit commitment and dispatch software), Surfer, PVSYST (Study of Photovoltaic Systems), PVGIS (Online Photovoltaic Geographical Information System tool), Sunny Design (SMA tool), SimaPro LCA, HOMER, DER-CAM (Distributed Energy Resources Customer Adoption Model), MS Visual C#, R(programming language), Simile, NEPLAN (Power System Analysis and Engineering Software), ANSYS Fluent, Comsol, SPSS, Dreamweaver

Other Activities:

√ Hobbies: Reading; Basketball; Cycling