



**THE CYPRUS
INSTITUTE**

RESEARCH • TECHNOLOGY • INNOVATION

Curriculum Vitae

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The Cyprus Institute
EEWRC
20 Konstantinou Kavafi St.
2121 Aglantzia, P.O.BOX 27456 Nicosia
Cyprus

Academic and Professional details:

Education:

- 2010** Ph.D. / Rural energy and income generation, Imperial College London, UK
- 2001** MSc / Energy Studies, The University of Sheffield, UK
- 2000** BEng / Electrical Engineering. The University of Southampton, UK
- 1998** BEng (TE) / Technological Educational Institute of West Macedonia, Greece

Professional Experience:

- Jan 2017 – present** Associate Research Scientist for Concentrated Solar Power, EEWRC, the Cyprus Institute
- Jan 2013 – Jan 2017** Post-doctoral fellow, EEWRC, the Cyprus Institute
- Oct 2009 – Dec 2012** Project engineer for Renewable Energy, Nova Energia Ltd., Cyprus
- Nov 2007 - Apr 2008** Health & Safety Consultant, Management Force (Cyprus) Ltd.
- Feb 2006 - Sep 2006** Research Assistant, Centre for Environmental Policy, Imperial College London, UK
- Jun 2001 – Sep 2002** Military Service in the Greek Army
- Mar 1998 - Sep 1998** Internship, Technological Educational Institute of West Macedonia, Kozani, Greece

Research Experience:

As Project Principal Investigator (PI):

- ‘Technical support on long-term energy modelling (LTEM)’ project, 2018-2019. Client: Joint Research Centre; Main project features: Updating energy system data and assumptions and conducting scenario analysis using OSeMOSYS

As Work Package (WP) leader

- Integrating National Research Agendas on Solar Heat for Industrial Processes (INSHIP, 2016-2020), Budget: €4m; H2020 research project. Main duties: Work Package leader for dissemination and outreach, IP issues and consolidation of national research policies on Solar Heat for Industrial Purposes
- Solar Facilities for the European Research Area (SFERA-III, 2019-2022), Budget >€4m, H2020 research project. Main duties: Task leader for research network and utilisation of research funding and facilities. IP issues and consolidation of national research policies on Concentrated Solar Power.
- Small-scale Thermal Solar district units for Mediterranean communities (STS-MED, 2013-2017). Budget €3.5m. ENPI-CBC funded. Main duties: WP leader on Overseeing construction of 4 research facilities in MENA countries.

As analyst:

- ‘Development of the OSeMOSYS Model to account for atmospheric pollutants and GHG emissions’ (2019). Client: Republic of Cyprus, Ministry of Energy (funded by SRSS); Main project features: Conducting an impact assessment of the integrated National Energy and Climate Plan (NECP) for Cyprus
- ‘Impact assessment of the Cyprus integrated National Energy and Climate Plan (2019)’. Client: Republic of Cyprus, Ministry of Energy; Main project features: Conducting a detailed assessment of the impact of changes in the energy system of Cyprus on the emissions of atmospheric pollutants and greenhouse gases (GHG)

Other research projects:

- Expert author in MedECC (Mediterranean Experts on Climate and environmental Change) on energy demand and supply projections for the MENA region
- Main scientific contact and completion of tasks for the FP7 project ‘EU-SOLARIS’
- Main scientific contact and completion of tasks on economics, IPR and international relations for the FP7 project ‘STAGE-STE’
- Part of the scientific team on technoeconomic of the INTERREG project ‘CSP-DSW’
- Position in expert panel in Energy overseeing activities of the MedSpring FP7 project
- Main contact in Cyprus for the MITei study ‘Maximizing the Value of Natural Gas Resources for Cyprus’, funded by RPF

In the proposal preparation for competitive research funds:

- *SIWAR* proposal: Principal proposal coordinator for the LC-SC3-RES-20-2020 H2020 call on Efficient combination of Concentrated Solar Power and desalination (with particular focus on the Gulf Cooperation Council (GCC) region). Main tasks: Authoring of implementation section, budgeting, editing and proofreading, partner communication, preparation of all forms, submission.

- *EDGE-STP* proposal: Principal proposal coordinator for a European Joint doctorate (EJD) proposal for H2020 on CSP. Main tasks: Authoring of implementation section, budgeting, editing and proofreading, partner communication, preparation of all forms, submission.
- Part of the authoring team of the successful application for the H2020 project 'NESTER' (€1.06m)
- Part of the authoring team of the successful application for the H2020 project 'CySTEM' (€3.5m)

Teaching Experience:

2022 (summer)	Lectures on economics and investment theory of energy systems for visiting students from the University of Antwerp
2016 - 2017	Annual lecture on the international NESTER school on 'Basics of CSP economics' (2016-2019)
Nov 2016	Lectures on energy economics, cogeneration and the future of STE for the international NESTER school
Sep 2003 – Mar 2004	Electrical circuit theory, Technological Employment Institutions, Thessaloniki, Greece

Management and Administrative experience:

- Interim head of Energy Policy and Analysis Group of the Energy Division, for a period of 1 year (summer 2019 to summer 2020) of the newly created EPA group, until the appointment of new faculty.
- Energy Division activities coordinator: Responsible for the organisation and delivery of weekly division presentations and discussions amongst the Energy Division of the EEWRG at the Cyprus Institute.
- **Student Mentoring:** Supervision of masters' thesis of Nikolaos Therapos' thesis on the Sustainable Return of Investment (SuROI) indicator, University of Bocconi, Milan, 2020; Supervision of Kyriakos Ioannou for three months in the summer of 2019, on his development of a paper on energy storage in sea water; assisting the supervision of Ulku Tasseven (2022-) on topics of LCA in energy and hydrogen chains relevant to transportation.
- Main contact in negotiation of enrolling Cyl in the Economic, Environmental and Societal Impact (e3s) of the EERA group
- Reviewer of the scientific papers for the SolarPACES 2016 conference
- Organiser of the 2013 'Natural Gas Pathways to Monetisation' workshop in Nicosia, Cyprus (Nov 2013)
- Organiser of the STS-Med project workshop and training schools (Oct 2014 and Apr 2016)
- Member of the Cyl IT modernisation committee
- Member of the employee selection committee for new recruits at the energy group, the Cyprus Institute
- Member of the organisation committee of the RESEE conference series (Nicosia, Cyprus)

Honours and Achievements:

- State Sponsorship Foundation (IKY) of the Hellenic Republic for graduate study (2004)

Other Skills:

Languages:

	Understanding	Speaking	Writing
Greek	<i>Native</i>	<i>Native</i>	<i>Native</i>
English	<i>C2</i>	<i>C2</i>	<i>C2</i>
Spanish	<i>B1</i>	<i>B1</i>	<i>B1</i>
German	<i>A1</i>	<i>A1</i>	<i>A1</i>

Professional Service and Memberships:

- Coordinator of the CSP National Working Group for Cyprus
- Member of the Scientific Technical Chamber of Cyprus (ETEK) since 2009
- Member of the UK Energy Institute since 2001
- Certified auditor of the energy performance of buildings (Cyprus, 2012)

Digital Skills

Office productivity: Microsoft Office (all apps, at a proficient level); Reference management software (zotero, Mendeley, endnote);

Project Management: MS Project desktop, MS Project for the web, MS project online

Online collaboration: MS Teams, MS SharePoint, Google Drive, Dropbox, Atlassian Confluence

Statistical Analysis: SPSS Statistics. MS Excel, R

Structural Equation Modelling: IBM Amos

Web Developing: Squarespace, WordPress

Other achievements

- Liaison scientist between the Cyprus Institute and the Scientific Management Board for the Cyprus Climate Initiative (2019-present)
- Main contact in negotiation of enrolling Cyl in the Economic, Environmental and Societal Impact (e3s) of the EERA group
- Reviewer of the scientific papers for the SolarPACES 2016 conference
- Organiser of the 2013 'Natural Gas Pathways to Monetisation' workshop in Nicosia, Cyprus (Nov 2013)
- Organiser of the STS-Med project workshop and training schools (Oct 2014 and Apr 2016)
- Committees' membership at the Cyprus Institute: IT modernisation; equal opportunities committee; employee selection for new recruits at the energy division; organisation of the RESEE conference series (Nicosia, Cyprus); yearly colloquium and seminar series.

Presentations and Outreach:

Invited Talks

- Fylaktos, N. (2019, October 29). Environmental Considerations of Technical Innovations in Offshore Gas Exploration in the Eastern Med. Invited talk presented at the IOGP conference: From North Sea to Eastern Mediterranean: Collaborating to Maximize the Potential of Hydrocarbon Resources, Landmark hotel, Nicosia.

- Fylaktos, N. (2018, October 21). Environmental Considerations of Technical Innovations in Offshore Gas Exploration in the Eastern Med. Presented at the CYPGasTech 2018, Limassol, Cyprus.
- Fylaktos, N. (2015, March 18). Cyprus and Global LNG Markets. Presented at the 2015 Eastern Mediterranean Gas Conference, Hilton hotel, Nicosia, Cyprus.
- Fylaktos, N. (2013, December 18). Natural Gas Monetization Pathways for Cyprus. Presented at the Workshop on Fiscal Policy Challenges of Hydrocarbon Exploration in Cyprus, University of Cyprus, Nicosia.

On Hydrocarbons

- Fylaktos, N. (2019, October 29). Environmental Considerations of Technical Innovations in Offshore Gas Exploration in the Eastern Med. Invited talk presented at the IOGP conference: From North Sea to Eastern Mediterranean: Collaborating to Maximize the Potential of Hydrocarbon Resources, Landmark hotel, Nicosia.
- Fylaktos, N. (2018, October 21). Environmental Considerations of Technical Innovations in Offshore Gas Exploration in the Eastern Med. Presented at the CYPGasTech 2018, Limassol, Cyprus.
- Fylaktos, N. (2015, March 18). Cyprus and Global LNG Markets. Presented at the 2015 Eastern Mediterranean Gas Conference, Hilton hotel, Nicosia, Cyprus.
- Fylaktos, N. (2013, December 18). Natural Gas Monetization Pathways for Cyprus. Presented at the Workshop on Fiscal Policy Challenges of Hydrocarbon Exploration in Cyprus, University of Cyprus, Nicosia.

On Solar Polygeneration

- Montenon, Alaric, Nestor Fylaktos, Fabio Maria Montagnino, Filippo Paredes, and Costas N. Papanicolas. 'Concentrated Solar Power in the Built Environment'. Abu Dhabi, UAE, 2016.
- Fylaktos, Nestor. 'Technoeconomic Analysis of the PROTEAS Research Infrastructure Facility'. presented at the 5th RESEE conference, Nicosia, Cyprus, 5 May 2016.
- Papanicolas, C. N., & Fylaktos, N. (2015, June 3). The Case of Concentrated Solar Power in Cyprus and other Islands. Presented at the Institut français de Chypre Seminar on Solar Energy and Photovoltaics, University of Cyprus, Nicosia.
- Fylaktos, N. (2014, May 12). Economic analysis of an electricity and desalinated water cogeneration plant in Cyprus. Presented at the EDS Conference and Exhibition on Desalination for the Environment, Clean Water and Energy, Limassol, Cyprus.
- Fylaktos, N. (2013, October 8). Technoeconomic analysis of a CSP-DSW Solar Thermal Plant. Presented at the 2nd International Conference on Power Options for the Eastern Mediterranean Region, Hilton hotel, Nicosia, Cyprus.
- Fylaktos, N. (2013, October 7). Small scale thermal solar district units for Mediterranean communities - The STS-MED project. Presented at the 2nd International Conference on Power Options for the Eastern Mediterranean Region, Hilton hotel, Nicosia, Cyprus.
- Fylaktos, N. (2013, June 7). Technoeconomic analysis of a co-generation Solar Thermal Plant. Presented at the 4th International Conference on Renewable Energy Sources & Energy Efficiency, Hilton hotel, Nicosia, Cyprus.

Other presentations

- Fylaktos, N. 'Challenges for Decarbonising the Energy Systems in the Eastern Mediterranean and Middle East'. Presented at the 2nd MENA IAEE Symposium / 5th Annual DERASAT Forum, Manama, Bahrain, 3 March 2022. <https://www.derasat.org.bh/2nd-mena-iaee-symposium-i-5th-annual-derasat-forum/>.

- Fylaktos, N. (2011, May 20). The effect of the use of Solar Home Systems on the income-generating capabilities of rural households of developing countries: Evidence from South Africa. Presented at the 3rd International Conference on Renewable Energy Sources and Energy Efficiency, Nicosia, Cyprus.

Publications:

Scientific Journal Publications

- Zachariadis, T., Giannakis, E., Taliotis, C., Karmellos, M., Fylaktos, N., Howells, M., Blyth, W., Hallegate, S., 2021. "Building Back Better" in Practice: A Science-Policy Framework for a Green Economic Recovery after COVID-19 (Policy Research Working Paper No. 9528). World Bank Climate Change Group.
- Karmellos, M., Kosmadakis, V., Dimas, P., Tsakanikas, A., Fylaktos, N., Taliotis, C., Zachariadis, T., 2021. A decomposition and decoupling analysis of carbon dioxide emissions from electricity generation: Evidence from the EU-27 and the UK. *Energy* 231, 120861. <https://doi.org/10.1016/j.energy.2021.120861>
- Taliotis, Constantinos, Elias Giannakis, Marios Karmellos, Nestor Fylaktos, and Theodoros Zachariadis. 'Estimating the Economy-Wide Impacts of Energy Policies in Cyprus'. *Energy Strategy Reviews* 29 (1 May 2020): 100495. <https://doi.org/10.1016/j.esr.2020.100495>.
- Taliotis, Constantinos, Nestor Fylaktos, George Partasides, Francesco Gardumi, Vignesh Sridharan, Marios Karmellos, and Costas N. Papanicolas. 'The Effect of Electric Vehicle Deployment on Renewable Electricity Generation in an Isolated Grid System: The Case Study of Cyprus'. *Frontiers in Energy Research* 8 (2020). <https://doi.org/10.3389/fenrg.2020.00205>.
- Papanicolas, C., M. A. Lange, N. Fylaktos, Alaric Montenon, G. Kalouris, N. Fintikakis, M. Fintikaki, et al. 'Design, Construction and Monitoring of a near-Zero Energy Laboratory Building in Cyprus'. *Advances in Building Energy Research*, 25 February 2015, 1–11. <https://doi.org/10.1080/17512549.2015.1014837>.
- Fylaktos, N., I. Mitra, G. Tzamtzis, and C.N. Papanicolas. 'Economic Analysis of an Electricity and Desalinated Water Cogeneration Plant in Cyprus'. *Desalination and Water Treatment*, 23 July 2014, 1–18. <https://doi.org/10.1080/19443994.2014.940219>.

Scientific Reports

- Drobinski, P., Azzopardi, B., Ben Janet Allal, H., Bouchet, V., Civel, E., Creti, A., Duic, N., Fylaktos, N., Mutale, J., Pariente-David, S., Ravetz, J., Taliotis, C., (2020). Energy transition in the Mediterranean, in: Cramer, W., Guiot, J., Marini, K. (Eds.), *Climate and Environmental Change in the Mediterranean Basin – Current Situation and Risks for the Future*. First Mediterranean Assessment Report. Union for the Mediterranean, Plan Bleu, UNEP/MAP, Marseille, France.
- Fylaktos, N. and Papanicolas, C. N. (2019) New technologies for Eastern Mediterranean offshore gas exploration. STOA technical reports PE 634.419. Nicosia, Cyprus: Scientific Foresight Unit (STOA). doi: 10.2861/617596.
- Taliotis, C. and Fylaktos, N. (2019) Analysis of future scenarios for the Cyprus energy system. JRC/IPR/2018/C.3/0034/NC. Nicosia, Cyprus: Joint Research Centre of the EC.
- Paltsev, Sergey, Frank O'Sullivan, Nathan Lee, Anna Agarwal, Mingda Li, Xuejing Li, and Nestor Fylaktos. (2013) *Natural Gas Monetization Pathways for Cyprus: Interim Report – Economics of Project Development Options*. Cambridge, MA: MIT Energy Initiative, Massachusetts Institute of Technology. Available at: http://mitei.mit.edu/system/files/Cyprus_NG_Report.pdf.

Conference Papers

- Παπανικόλας, Κ. Ν., Γεωργίου, Μ. and Φυλακτός, Ν. (2019) 'Συμπαράγωγή Ηλεκτρισμού Και Αφαλατωμένου Νερού', in Χριστοφόρου, Λ. (ed.). Ενέργεια και Ύδωρ στην Ελλάδα, Αθήνα: Επιτροπή Ενέργειας της Ακαδημίας Αθηνών.
- Taliotis, C., Fylaktos, N. and Gardumi, F. (2019) 'The effect of electric vehicle deployment on renewable electricity generation in an isolated grid system: the case study of Cyprus', in. 2019 International Energy Workshop, Paris, France.
- Montenon, A. et al. (2016) 'Concentrated Solar Power in the Built Environment', in. SolarPaces 2016, Abu Dhabi, UAE.
- Fylaktos, N. and Papanicolas, C. N. (2016) 'Technoeconomic analysis of the PROTEAS research infrastructure facility', in. 5th International Conference on Renewable Energy Sources & Energy Efficiency - New Challenges, Nicosia, Cyprus.
- Fylaktos, N. et al. (2014) 'Economic analysis of an electricity and desalinated water cogeneration plant in Cyprus', in. EDS Conference and Exhibition on Desalination for the Environment, Clean Water and Energy, Limassol, Cyprus.
- Fylaktos, N. and Cherni, J. A. (2011) 'The effect of the use of Solar Home Systems on the income-generating capabilities of rural households of developing countries: Evidence from South Africa', in. 3rd International Conference on Renewable Energy Sources and Energy Efficiency, Hilton hotel, Nicosia, Cyprus, pp. 259–278.

Other articles

- Friedrich-Ebert-Stiftung, PRIO Cyprus Centre, 2021. Eastern Mediterranean Natural Gas and the Energy Future.
- T. Zachariadis, N. Fylaktos, E. Giannakis, C. Taliotis, M. Karmellos, M. Howells, W. Blyth, S. Hallegate, Integrating climate policies in COVID-19 economic recovery packages – An example from Cyprus, World Bank Blogs. (2020). <https://blogs.worldbank.org/climatechange/integrating-climate-policies-covid-19-economic-recovery-packages-example-cyprus>
- Dufour, E., Fylaktos, N., Stemmer, J., & Nitz, P. (2019). Solar Heat for Industrial Processes: Establishment of a European Common Innovation and Research Agenda. European Energy Innovation, (Winter 2019). Retrieved from <http://www.europeanenergyinnovation.eu/PDF-Publications>
- Fylaktos, N. (2014, February). The Future Of Energy In Med Countries: It Is A Marathon, Not A Sprint. Agora MedSpring 3rd Newsletter. Retrieved from <http://www.medspring.eu/content/future-energy-med-countries-it-marathon-not-sprint-dr-nestor-fylaktos>
- Fylaktos, N. (2012, December). Net-metering and PV: Is it actually a good idea? Accountancy Cyprus, Nicosia, Cyprus.
- Fylaktos, N. (2012, March). Calculation of the cost of electricity generation from Photovoltaic parks in Cyprus. Accountancy Cyprus, pp. 96–98. Nicosia, Cyprus.
- Fylaktos, N. (2011, December 24). Net metering για φωτοβολταϊκά. Kathimerini of Sunday. Nicosia, Cyprus.