Address: Residence Tower, N4 2NE, London

Date of Birth: December 8th, 1989
Place of Birth: Larisa, Greece

Nationality: Greek

E-Mail: alex.lari.kor@gmail.com
Mobile: +46 (0)735 84 36 13
Portfolio akorkovelos.me



EDUCATION

09/2013 - 08/2015

09/2015 – 06/2020 KTH Royal Institute of Technology (Sweden)

PhD candidate in Energy Systems Analysis

Research Focus: Energy modelling and systems' planning to support electrification activities in developing economies under the Sustainable Energy for All (SE4ALL) framework.

Main Courses: Energy System Economics, Modelling and Indicators for Sustainable Energy Development, Energy Data, Balances and Projections, Energy and Geopolitics, Spatial Data Analysis.

KTH Royal Institute of Technology (Sweden) & Universitat Politècnica de Catalunya (Spain)

Master of Science (MSc.) in Sustainable Energy Engineering

European Institute of Innovation & Technology (EIT KIC InnoEnergy) Scholarship 2013 - 2015

Master Thesis in Renetech AB, Stockholm Sweden: Energy modelling to support subnational sustainable planning in developing countries: The case of Kakamega County in Kenya.

Main courses: Energy Resources, Renewable Energy Technologies, Energy & Environment, Polygeneration, Economics and Energy Markets, Innovation & Entrepreneurship in Sustainable Energy Technology, Environomical Pathways for Sustainable Energy Conversion.

09/2007 - 07/2013

DUTH - Democritus University of Thrace - School of Engineering, Xanthi Greece

Diploma (MEng) in Industrial Engineering & Management GPA: 8.04/10.0

Major in Production optimization

Master Thesis: EcoReDesign of industrial product: Case of split unit air conditioner.

Main courses: Computer Programming, Data analysis, Operations Resource Management, Total Quality Management, Project Management, Marketing, Industrial Economics, Industrial Informatics.

WORK EXPERIENCE

09/2015 - present

Division of Energy Systems Analysis (dESA) at KTH, Stockholm, Sweden

Research Consultant

- Coordinate the development of the Global Electrification Platform (GEP): Client: The World Rank
- Coordinate and support the development of the Open Source Spatial Electrification Toolkit (OnSSET) Client; UNDESA, SIDA, ABB, The World Bank
- Conduct the geospatial electrification analysis featuring at IEA's Energy Access Outlook 2017: Client: IEA
- Conduct geospatial electrification analyses for developing countries (44 countries in Sub-Saharan Africa, 10 countries in Latin America & 6 countries in South East Asia) Client: UNDP-UNDESA
- Develop and maintain a comprehensive geo-database of energy related data for developing countries Client: The World Bank
- Support educational and capacity building activities in developing countries organized by KTH dESA, UNDESA and The World Bank
- Coordinate (research) proposals: The World Bank, Africa Development Bank, UNDESA, IEA, ESA

Project Manager

- Energy planning for boosting agricultural productivity in Mozambique Client: The World Bank
- Electrification perspectives for Madagascar Client: The World Bank
- Rural electrification and energy infrastructure planning in Afghanistan Client: The World Bank

02/2015 - 11/2015

Renetech AB, Stockholm Sweden

Energy Consultant

- Coordinating the feasibility study for a small hydro power plant in Rucanzogera, Rwanda
- Provided GIS support to the elaboration of the geo-topological and hydrological assessment of the project
- Developed a socio-economic and environmental assessment for the project
- Reviewed the legal and institutional framework for electrification processes in Rwanda

LANGUAGES

Greek: Native Language

English: Fluent Spanish: Basic Swedish: Basic

IT SKILLS

Microsoft office: Competent - Word, Excel, Visio, PowerPoint, Access

Engineering Competent – ArcGIS, QGIS (Geographic Information Systems)

Software & Competent – OnSSET, LEAP (Energy Systems Modelling)

Programming: Good – Python, Osmosis (for Open Street Maps applications), Git

Basic - PVSyst, RETscreen, HOMER, AWS, GEE, SNAP, Grass GIS & Linux OS

PUBLICATIONS

First Author

Korkovelos A.; Mentis D.; Siyal S.; Arderne C.; Rogner H.; Bazilian M.; Howells M.; Beck H.; De Roo A.; "A geospatial assessment of small-scale hydropower potential in Sub-Saharan Africa", Energies

(2018), Volume 11, Issue 11.

Korkovelos A.; Howells M.; Sahlberg A.; Khavari B.; "The role of Open Source data and tools in

geospatial electrification planning and the achievement of SDG 7", Energies (2019), Volume 12, Issue

7.

Korkovelos A.; Mentis D.; Siyal S.; Bazilian M.; Angelou N.; Howells M.; "Supporting Electrification

Policy in Fragile States: A Conflict-Adjusted Geospatial Least Cost Approach for Afghanistan".

Sustainability (2020), Volume 12, Issue 3.

2020 Korkovelos A.; Howells M.; Nerini F.; Bazilian M.; Zerriffi H.; Rogner H.; "A retrospective analysis of

 $electrification\ with\ a\ focus\ on\ isolated\ and\ mini-grids",\ Sustainability\ (2020),\ Volume\ 12,\ Issue\ 5.$

Co-author

05/2020 Applied Energy (2020), Volume 264, Menghwani V. Zerriffi H.; Korkovelos A.; Khavari B.; Sahlberg

A.; Howells M.; Mentis D.; "Planning with justice. Using spatial modelling to incorporate justice in

electricity pricing – The case of Tanzania".

09/2017 Energy Strategy Reviews 2017, 17, 45-49, Mentis D.; Siyal S.; Korkovelos A.; Howells M.;

"Estimating the spatially explicit wind generated electricity cost in Africa - A GIS based analysis".

07/2017 Environmental Research Letters 2017, 12, 8, Mentis D.; Howells M.; Rogner H.; Korkovelos A.;

Arderne C.; Zepeda E.; Siyal S.; Taliotis C.; Bazillian M.; De Roo A.; Tanvez Y.; Oudalov A.;

"Lighting the World: the first application of an open source, spatial electrification tool (OnSSET) on

Sub-Saharan Africa".

07/2017 **Environmental Research Letters 2017,** Moksnes N.; **Korkovelos A.**; Mentis D.; Howells M.;

"Electrification pathways for Kenya – linking spatial electrification analysis and medium to long term

energy planning".

11/2016 Renewable Energy 2016, 97, 77-88, Mentis D.; Siyal S.; Korkovelos A.; Howells M.;

"A geospatial assessment of the techno-economic wind power potential in India using geographical

restrictions".

04/2016 Applied Geography 2016, 72, 1-13, Mentis D.; Andersson M.; Howells M.; Rogner H.; Siyal S.; Broad O.;

Korkovelos A.; "The benefits of geospatial planning in energy access – A case study on Ethiopia".

WORKSHOPS - CONFERENCES - PRIZES

06/2019 Four-week workshop at OpTIMUS Summer School - Capacity building with the World Bank and

representatives of the Government of 15 countries, Trieste Italy.

02/2018 Training Workshop on OnSSET tool at Energy Modelling Platform for Africa (EMPA) - Capacity

building with UNECA and representatives of 6 African countries, Addis Ababa Ethiopia.

07/2017	Training Workshop on OnSSET tool - Capacity building with the World Bank and representatives of the Government of Afghanistan, Dubai UAE.
05/2017	World Hydropower Congress – Invitation to participate as panelist to the dialogue on the role of small (off-grid) hydropower in rural electrification & Awarded the prize of IHA Young Researcher for 2017, Addis Ababa Ethiopia.
04/2017	European Geosciences Union General Assembly – Nominated for the Outstanding Student Poster and Pico Award for 2017, Vienna Austria.
02/2017	Training Workshop on energy modelling - Capacity building with the World Bank and representatives of four South East Asian Countries, New Delhi India.
08/2016	Training Workshop – Capacity building of 30 officials from various African countries on Modelling tools and integrated approaches for sustainable development policies in partnership with UNDESA/DPAD and UNDP, Addis Ababa Ethiopia.
11/2015	International Workshop on Environment & Alternative Energy organized by NASA and ESA, ESAC Madrid Spain.

HOBBIES

- Outdoor sports Coding Travelling