Dr. Eftim Popovski

ENERGY SYSTEMS ENGINEER & GIS EXPERT

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Overview

Energy Engineer with more than ten years of experience in energy systems, district heating, and HVAC, combining applied research, GIS analysis, and on-site implementation to advance sustainable energy solutions and reliable infrastructure.

Experience

IREES | Senior Researcher / Project Manager **2019 - present**

- Applied research and consulting on renewable heating and municipal heat planning
- Led multiple projects on municipal heat planning, district heating and cooling
- Developed GIS tools and models for urban energy planning

Fraunhofer Institute for Systems and Innovation Research ISI | Researcher **2016 - 2019**

- Analyzed energy system transformation pathways and infrastructure requirements
- Co-authored studies on renewable energy integration in the European energy sector
- Developed models for district heating and industrial energy efficiency

Zikol DOO, Sanmarti DOO **2011 - 2015**

- Provided technical support for REHAU products in the construction sector
- Designed and supervised HVAC installation for construction projects
- Coordinated with contractors and ensured compliance with standards and requirements

Education

Albert- Ludwig-University of Freiburg | PhD | Environment and Natural Resources **2022 - 2024**

Thesis title: Modeling and techno-economic assessment of renewable heat supply technologies and district heating potentials

University of Applied Sciences | M.Sc. | Mechanical Engineering **2015 - 2016**

Faculty of Mechanical Engineering, Skopje | B.Sc. | Thermal and Power Engineering **2007 - 2011**

Skills & abilities

- Energy Systems Modeling & Techno-Economic Assessment
- District Heating & Renewable Energy Technologies
- Data Analysis: Python, SQL, Power BI
- HVAC Design: AutoCAD
- Spatial Analysis: QGIS
- Microsoft 365
- Project Management & Stakeholder Engagement
- Academic Research & Publications
- Languages: Macedonian (native), German (C2), English (C2), South Slavic languages (C1)

Top 5 Clifton Strengths Test

1.	Learner	Desire to learn and continuously improve
2.	Analytical	Ability to think about all the factors, reasons and causes
3.	Relator	Deep satisfaction in working hard with people I care
4.	Deliberative	Serious care in making decisions or choices
5.	Achiever	Work hard and possess a great deal of stamina

Publications

Popovski Eftim, Tobias Fleiter, Ragwitz Mario. *The role of solar district heat in the energy transition of Germany,* Energy 310 (2024) 133176 https://doi.org/10.1016/j.energy.2024.133176

Popovski Eftim, Ragwitz Mario, Brugger Heike. *Decarbonization of district heating and deep retrofits of buildings as competing or synergetic strategies for the implementation of the energy first principle*. Smart Energy 10 (2023) 100096 doi.org/10.1016/j.segy.2023.100096

Popovski E, Aydemir A, Fleiter T, Bellstädt D, Büchele R, Steinbach J, *The role and costs of large-scale heat pumps in decarbonising existing district heating networks - A case study for the city of Hertenn Germany*, Energy 2019, 180: 918-933, https://doi.org/10.1016/j.energy.2019.05.122

Popovski E, Fleiter T, Santos H, Leal V, Fernandes E. *Technical and economic feasibility of sustainable heating and cooling supply options in southern European municipalities e a case study for Matosinhos. Portugal*, Energy 2018;153:311-323. https://doi.org/10.1016/j.energy.2018.04.036

Mandel Tim, Kranzl Lukas, Popovski Eftim, Sensfuß Frank, Müller Andreas, Eichhammer Wolfgang. *Investigating pathways to a net-zero emissions building sector in the European Union. What role for the Energy Efficiency First principle?* Energy Efficiency (2023) doi.org/10.1007/s12053-023-10100-0

Billerbeck Anna, Breitschopf Barbara, Winkler Jenny, Bürger Veit, Köhler Benjamin, Bacquet Alexandre, Popovski Eftim, Fallahnejad Mostafa, Kranzl Lukas, Ragwitz Mario. *Policy frameworks for district heating: A comprehensive overview and analysis of regulations and support measures across Europe*. Energy Policy 173 (2023) 113377 doi.org/10.1016/j.enpol.2022.113377