



Paper 1: Analyzing the Impact of Blockchain-Based Power Trading in Residential Communities: A Quantitative Approach

Paper 2: Towards a Blockchain-enabled Transactive Renewable Energy Trading Market

Author's Bio:

**DR. AMENI BOUMAIZA**

Dr. Ameni is a Scientist at Qatar Environment and Energy Research Institute (QEERI) since 2020 where she leads Energy Demand & Trade project. She has led several innovative and market-driven projects. She is pioneering the development of a Community Solar Ecosystem for Qatar based on Blockchain technology. In 2023, she received “the Innovative Entrepreneurship Program Award for Startup Funding Program” and will launch a startup “Q Green” to foster the development of AI-based technologies for the energy sector. She served as PI for many QNRF funded projects. Her primary research interests are in solar energy management and artificial intelligence based smart systems. She has completed several studies on solar PV adoption, techno-economic modeling of energy systems, and Blockchain based energy trading applications. These studies have generated operational software prototypes, publications in high impact journals, several book chapters, and patent applications. Recently, she has been nominated for the “UNESCO-AI Forzan International Prize for the Promotion of Young Scientists, cycle 1”. She has been elected as IEEE YP Chair for Qatar section and is an active member of the Qatar Women in Engineering Association in Qatar (QWEA) as well as for the Alumni association.