



UNIVERSITY
OF COLOGNE

Faculty of Management, Economics and Social Sciences

Research Associate in Smart Sustainable Energy Markets (f/m/x)

Department of Information Systems for Sustainable Society (IS3)

We are one of the largest and oldest universities in Europe and one of the most important employers in our region. Our broad range of subjects, the dynamic development of our main research areas and our central location in Cologne make us attractive for students and researchers from around the world. We offer a wide range of career opportunities in science, technology, and administration.

IS3 works on highly interdisciplinary research, drawing from data analytics, decision science, computer science, economics, behavioral science, and machine learning to advance sustainable smart energy and mobility markets.

YOUR TASKS

- » Conduct research in smart and sustainable energy markets, with a focus on electricity market design, trading algorithms, and blockchain-based solutions
- » Design and implement reinforcement learning models for trading strategies
- » Develop and deploy smart contracts for decentralized energy trading mechanisms
- » Collaborate in an interdisciplinary team and engage in international research networks, particularly within the 'INTELLIGENT' EU-Horizon project (intelligent-project.eu)

YOUR PROFILE

- » Master's degree (or equivalent) in energy engineering, computer science, economics, information systems or a related field
- » A strong background in energy systems and electricity market design plus understanding of blockchain and decentralized ledger technologies
- » Demonstrated programming skills, particularly in Python
- » Knowledge of machine learning and reinforcement learning methods
- » Excellent communication skills and ability to collaborate within a diverse, international team
- » Prior experience with EU-level industrial or research projects, especially in the context of electricity markets, is highly desirable

WE OFFER

- » The opportunity to obtain a doctorate degree to be awarded
- » A diverse working environment with equal opportunities
- » Support in balancing work and family life
- » Extensive advanced training opportunities
- » Occupational health management offers
- » Flexible working time models, full-time positions suitable for job sharing
- » Opportunity to work remotely

The University of Cologne promotes equal opportunities and diversity. Women will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from all suitable candidates regardless of their gender, nationality, ethnic and social origin, religion, disability, age, sexual orientation and identity.

The position is available from 01.10.2025 on a part-time basis (29,87 hours per week). The position is to be filled for a fixed term until 30.11.2027. If the applicant meets the relevant wage requirements and personal qualifications, the salary is based on remuneration group I3 TV-L of the pay scale for the German public sector.

Please apply online with proof of the required qualifications without a photo under: <https://jobportal.uni-koeln.de>. The reference number is Wiss2507-06. The application deadline is 17.08.2025. For further inquiries, please contact Saber Talari (talari@wiso.uni-koeln.de) or Wolf Ketter (ketter@wiso.uni-koeln.de) and take a look at our [FAQs](#).



HR EXCELLENCE IN RESEARCH