

Renewable Energy System With 100% Guaranteed Power Supply

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Facts

Duration: 2023 – 2025
 Partner Countries: Algeria, Germany, Jordan
 Partner Universities: Pan African University Institute of Water and Energy Sciences (PAUWES)
 Hamburg University of Technology (TUHH)
 University of Jordan (UJ)
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Objectives

The challenges of climate change, which are now showing effects in many parts of the world, demonstrate that a purely regional or local approach to combating climate change by a few willing states is not sufficient.

To tackle these issues and further develop international expertise in these areas, the TUHH (Hamburg, Germany) collaborates with the PAUWES (Tlemcen, Algeria) and the UJ (Amman, Jordan). A particular focus is placed on the integration of renewable energies into existing national supply systems, as well as the provision and use of green hydrogen and its derivatives as part of a holistic solution system.

Pan African University Institute of Water and Energy Sciences



As part of the Pan African University framework, the Institute of Water and Energy Sciences provides highly innovative Master programs to students from 31 countries across Africa. The institute aims to address Africa's most pressing development challenges with programs focusing on water, energy and climate change.

Measures

To achieve our objectives, the TUHH, the PAUWES and the UJ cooperate to:

- Analyze the integration of renewable energies into the existing national energy systems, including hydrogen and its derivatives, in student theses.
- Organize stays abroad, to further the students understanding of the topic and to allow for new perspectives on potential opportunities and challenges.
- Develop a joined course on renewable energies and hydrogen in the MENA region.
- Expand teaching skills through joined "Teach-the-Teacher" workshops and continuous exchange between the universities.
- Establish a lasting knowledge base and cooperation network by creating a digital competence center and presenting the research results in a final project conference in 2025.

University of Jordan

The University of Jordan strives to enable their students to contribute to a sustainable development, both globally and locally. Additionally, the UJ aims to build lasting partnerships to achieve the sustainable development goals. One of its partners is TUHH, with whom the UJ has been cooperating for more than a decade.



Hamburg University of Technology

Founded in May of 1978, the Hamburg University of Technology focusses its research efforts on renewable energies, as Environmental & Energy Systems are one of the TUHHs five primary field of research.

