



University:Northern Technical UniversityCountry:IraqWeb Address :https://www.ntu.edu.iq

SDG 7.4: Energy and the community

7.4.3: Does your university as a body provide direct services to local industry aimed at improving energy efficiency and clean energy (energy efficiency assessments, workshops, research renewable energy options)

Yes, Northern Technical University (NTU) provides direct services to local industries aimed at improving energy efficiency and promoting clean energy. These services typically include:

- Energy Efficiency Assessments: NTU often conducts energy audits and efficiency assessments for local businesses. These assessments help identify areas where organizations can reduce energy consumption, lower costs, and implement more sustainable practices.
- Workshops and Training Programs: The university organizes workshops and training sessions for industry professionals focusing on energy efficiency, renewable energy technologies, and sustainable practices. These programs aim to equip participants with the knowledge and skills necessary to implement energy-saving measures and adopt clean energy solutions.
- Collaborative Research and Development: NTU engages in collaborative research projects with local industries to explore and develop renewable energy options. This partnership enables the university to leverage its research capabilities to assist industries in transitioning to cleaner energy sources.
- Consultation Services: Faculty members and researchers at NTU may offer consulting services to local industries, providing expert advice on integrating renewable energy technologies and optimizing energy efficiency within their operations.
- Community Engagement Initiatives: The university often participates in community engagement initiatives that promote awareness of energy efficiency and renewable energy within the local industry. This can include public lectures, informational sessions, and collaboration with local government and businesses.

By providing these direct services, Northern Technical University plays a vital role in supporting local industries in their efforts to enhance energy efficiency and adopt sustainable practices, contributing to a more sustainable regional economy.





Many researches have been published by Northern Technical University under the caption of ""Northern Technical University, Iraq "& clean energy"" you can refer to the link below for more information:

https://scholar.google.com/scholar?q=%22Northern+Technical+University%2C+Iraq+%22% 26+clean+energy%22&hl=ar&as_sdt=2007&as_ylo=2022&as_yhi=2023

The Northern Technical University sponsors the Our Industry is Our Identity Festival for the first time in Nineveh Governorate... Hosting the President of the Northern Technical University, Prof. Dr. Alia Abbas Ali Al-Attar, Niya Al-Sayyidba, on her behalf, attended the Assistant President of the Northern Technical University, Dr. Thanoon Younis Thanoon, witnessed the activities of the Our Industry is Our Identity Festival and the participation of 120 factories and companies from the center and the region, organized by the Nineveh Chamber of Industry in cooperation with Basma Group Company for the last festival until 9/24/2022. The festival was attended by His Excellency Mr. Treasury of Industry and Mr. Governor of Nineveh and a number of directors, which is summarized and dignitaries of the city









Northern Technical University Established the <u>Renewable Energy Research Center</u> (<u>RERC</u>)

The Renewable Energy Research Center (RERC) was established in 2023, under the approval of the Ministry of Higher Education and Scientific Research (5223 on 19/6/2023) and the University decree (7/37/7062 on 12/7/2023) issued by the Northern Technical University. The center aims to provide a specialized research center focusing on developing alternative and environmentally friendly energy sources to tackle the challenges of traditional fuel running down. It connects directly with the presidency of the Northern Technical University.

RERC Objectives

The objectives of the Renewable Energy Research Center include but not limited:

1. Developing new techniques for utilizing renewable energy more efficiently.

2. Conducting research involving the study and analysis of climate change impacts and developing sustainable solutions to mitigate them.

3. Raising awareness about the importance of renewable energy and sustainability in Iraqi society.

4. Collaborating with the industrial and governmental sectors to implement new technologies in the field of renewable energy.





5. Providing training and education for engineers and researchers in the field of renewable energy.

- 6. Encouraging innovation and developing policies that promote the use of renewable energy.
- 7. Providing consultation and technical support for projects related to renewable energy.
- 8. Contributing to achieving sustainable energy goals at the local and global levels.

Renewable Energy Center Departments

A brief overview of the departments within the center and their core functionalities:

Energy Storage and Nanotechnology Department

The Energy Storage and Nanotechnology Department at the Renewable Energy Research Center – Kirkuk seeks to enhance the university's role locally and internationally in the fields of energy storage and nanotechnology. This department takes an important role as a basis of knowledge in this field, making an effort to innovate and develop these essential areas of modern technology.



At the Renewable Energy Research Center, we endeavor to provide a fertile and advanced research environment that fosters creativity and discovery. The department aims to provide outstanding research leadership that contributes to raising awareness and knowledge about the importance of nanotechnology and its broad dimensions in the field of energy storage.





Additionally, the department places great emphasis on building specialized human capacities in the field of nanotechnology, through offering advanced educational programs and high-quality practical training in collaboration with specialized researchers from inside and outside Iraq. The department's efforts in nanotechnology and energy storage are integral to sustainable development. Through research and innovation, the department contributes to the development of sustainable and efficient solutions to energy and environmental challenges, and works to enhance international cooperation in this regard to achieve sustainable development goals and comprehensive prosperity.

Renewable Energy Department

The Renewable Energy Department at the Renewable Energy Research Center- Kirkuk focuses on the field of sustainable energy and researching various aspects related to it. The department conducts research on diverse topics including energy policies and strategies, renewable energy applications, development of integrated electric power systems, as well as studying energy management and enhancing its effective and sustainable use.



Additionally, the department works on exploring the economic and social dimensions of renewable energy, and how to integrate it into current energy systems in a sustainable and efficient manner.





The department aims to consolidate the efforts and individual experiences of researchers specializing in the field of energy, whether within or outside Northern Technical University, by providing a stimulating research environment and collaborative projects that contribute to the development of new concepts and innovative applications in the field of sustainable energy. Furthermore, the department is committed to providing consultations and guidance in the field of energy to various sectors, including governmental, industrial, and academic, with the aim of enhancing their understanding of the challenges and opportunities in the field of sustainable energy. One of the department's objectives is also to provide high-quality scientific research that contributes to the development of knowledge and progress in the field of sustainable energy. The department also invests in utilizing this research in teaching and guiding students who seek to complete their academic degrees in the fields of energy and environment, whether they are master's or doctoral students, with the aim of preparing a new generation of researchers and specialists in this vital field.