



# THE Impact Ranking 2023

University: Al-Mustaqbal University College

Country: Iraq

Web Address: https://uomus.edu.iq/en/default.aspx

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)

There is a program of Energy efficiency services for industry with the following steps:

# Fundamental One: Patent that service the industry

MUC aimed at improving energy efficiency and clean energy. The industrial sector seeks the assistance of energy experts from the professors working at our campus, promote a cooperation between the university and industry sectors

Ministry of higher education and scientific research supplied the universities with a platform to upload their ideas of the applied research to allow for the industrial companies in private and public sector to know about these ideas.

One of these service that involve a patent on "Design of Cooling System for an Automotive using Exhaust Gasses of Turbocharged Diesel Engine" prepared by Prof. Dr. Qusay Rasheed Al-Amir1 and Asst. Prof. Dr. Mohamed F. Al-Dawody and Assit Prof. De. Azher M. Abed, HOD of air conditioning and refrigeration techniques engineering department, Al-Mustaqbal University College









Image for the design is inserted below;



Engine

Heat exchanger

Control board

Frame









## Fundamental Two: Long-term plan

#### STEP -1: Building the benchmark of the progammes

To reduce energy usage and save on energy costs, firstly, we need to gain an understanding of how organization is using energy. There are seven tips we shall follow such as" Finding of Air Leaks, Verify Insulation Levels, Check Thermostat, Inspect HVAC, Look at Lighting, Assess Nighttime Power, Contact a Professional"

### STEP 2: Next Steps: Establish a Baseline and Move Forward

We starting to visit different industrial companies in many disciplines such as electrical ministry, oil ministry etc. to apply the program of energy efficiency to industry. Additionally, different workshops had been organized to explain the importance of energy in enhancing the living level of our people.

#### STEP 3: Research on renewable energy

There are continuous research on renewable energy that had been published in peer-reviewed journals

Table. 1 illustrates the published works from 2017-2022 along with the citation number for each article in addition to the title of the paper and the journal.

#### Fundamental Three:

- > Holding and organization of workshops in energy efficiency and renewable energy.
- Organization of conference in a cooperation with many international and local universities in energy consumption.
- Our faculties discuss rationalizing energy consumption in addition to the utilization of renewable energies to confront the phenomenon of climate change and the global warming and to draw attention to the importance of benefiting from awareness of the dangers of this phenomenon

https://uomus.edu.iq/NewDep.aspx?depid=2&newid=5031





Al-Mustaqbal university do offer direct services to local industries aimed at improving energy efficiency and clean energy. These services often fall under the umbrella of outreach programs, research initiatives, or collaborations with local businesses and industries. Here are some common ways in which the university can provide such services:

- 1. **Energy Efficiency Assessments:** The university with expertise in energy efficiency offer assessments to local industries. These assessments can involve energy audits to identify areas where energy efficiency improvements can be made. Recommendations might include upgrades to equipment, building modifications, or changes in operational practices to reduce energy consumption.
- 2. Workshops and Training: The university organizes workshops, training sessions, and seminars to educate local industries about energy-efficient practices and the adoption of clean energy technologies. These events can help businesses understand the benefits and implementation strategies for energy efficiency.
- 3. **Research and Development:** The university has research centers or institutes focused on clean energy technologies and practices. They can collaborate with local industries on research projects related to renewable energy, energy storage, and energy management. This collaboration can lead to the development of innovative solutions.
- 4. **Feasibility Studies:** The university conducts feasibility studies to assess the viability of renewable energy options, such as solar or wind power, for local industries. These studies can provide valuable insights into the potential benefits, costs, and environmental impacts of adopting specific clean energy solutions.
- 5. **Technical Assistance:** The university provides technical assistance to local industries seeking to implement renewable energy projects. This can include assistance with grant applications, permitting, system design, and project management.
- 6. **Incubators and Innovation Hubs:** The university has business incubators or innovation hubs focused on clean energy startups and technologies. They can provide mentorship, funding opportunities, and access to research facilities for local entrepreneurs and businesses working in the clean energy sector.