



THE Impact Ranking 2023

University: Al-Mustaqbal University College

Country: Iraq

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

SDG 7.2: University measures towards affordable and clean energy

7.2.4 Does your university as a body have an energy efficiency plan in place to reduce overall energy consumption?

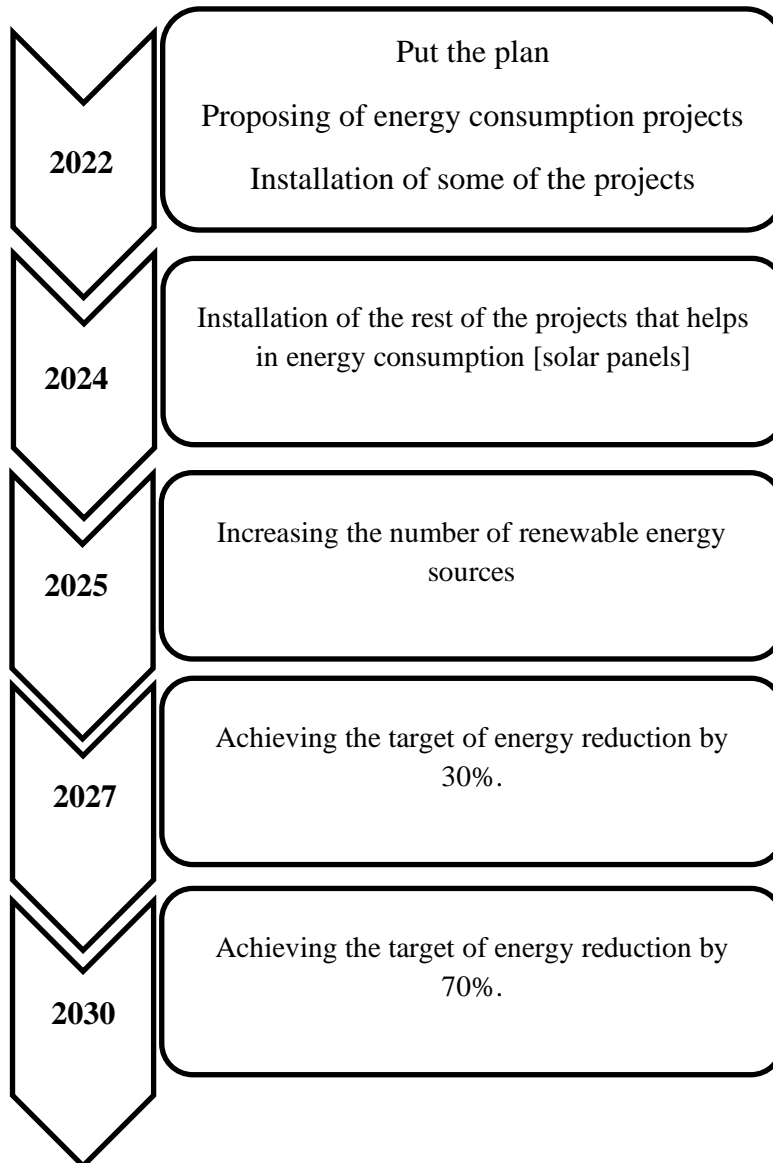
The major target of the plan can be summarized in the following points.

1. Reduction of electrical bills.
2. Reducing the pollution to our environment.
3. Achieving a reduction in the energy consumption on the conventional sources of energy by 70% in 2030.



Plan Milestone

The milestone would be prepared to be within three years starting from 1-8-2022 – 1-10-2030.



[illegible]



Medical Building

[illegible]



Engineering Building

[illegible]

Pharmacy Building

		2025											
	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Entry the proposal of project to college counsel												
2	Planning and design												
3	2 nd Floor												
4	Preparation of material												
5	Starting installation solar cells												
6	Grand Floor												
7	The rest of the buildings												



Dental Building

		2026											
	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Entry the proposal of project to college counsel												
2	Planning and design												
3	2 nd Floor												
4	Preparation of material												
5	Starting installation solar cells												
6	Grand Floor												
7	The rest of the buildings												

Student club

		2026											
	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Entry the proposal of project to college counsel												
2	Planning and design												
3	2 nd Floor												
4	Preparation of material												
5	Starting installation solar cells												
6	Grand Floor												
7	The rest of the buildings												



Nursing building

[illegible]

Sport Building

		<i>2027</i>											
	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Entry the proposal of project to college counsel												
2	Planning and design												
3	2 nd Floor												
4	Preparation of material												
5	Starting installation solar cells												
6	Grand Floor												
7	The rest of the buildings												

Methodology to reduce the energy consumption

We had the following methods within our plan in order to reduce the energy consumption which they had been summarized.

1. Al-Mustaqbal University College would install solar heater in the roof of the shopping book center as it would be very helpful in the winter season. Additionally, it will consume a lot of energy which in turn reduce the bills of electricity as indicated in Figure 1.



Figure 1. Use the solar water heater on the roof of the shopping book center

2. The plan in the above-mentioned point had many forward steps. Firstly, Air conditioning and refrigeration techniques engineering department, one of the departments in Al-Mustaqbal University College announced many industrial projects. For example, heating water can be achieved using Solar evacuated tube collector, flat plate solar collector and parabolic solar dish collector. Recently, solar dish collector had been designed with solar tracking system for the purpose of heating water.



Figure 2. Solar evacuated tube collector



Figure 3. Parabolic collector



Figure 4. Solar dish collector

3. There is a plan to install roof mounted solar panels on the admiration buildings. Additionally, there is a plan to install solar panels on the main restaurant as indicated in Figure 5. This makes good and nice looking for the building it self in addition to the energy consumption that we get later.



Figure 4. Roof Mounted Solar Panels on the administration building and the main restaurant.

4. However, we recently install solar panels on the roof of the medical buildings as inserted in Figure 5.



Figure 5. solar panels on the medical building

Additionally, cleaning of these solar panels had been taken into the consideration. Further, many jobs had been offers due to the installation as research studies on the solar energy had been made as in Figure 6.



Figure 6. studies on solar panels of medical buildings



We install Mounted Solar Panels on the main entrance to our college for lighting as in Figure 7.

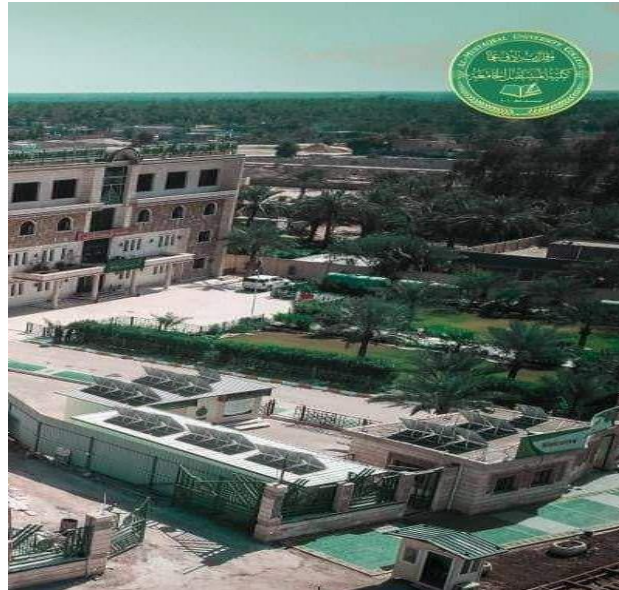


Figure 7. Solar Panels on the main entrance

5. Additionally, on the green area that our students prefer for their social activities like college day, book day, women day, there is a plan to install solar panels for mobile charging



Figure 8. Using of the Solar Panels for multipurpose use (mobile charging)

6. Installation of two horizontal-axis wind generator for lighting purposes. This offer job for our society



Figure 9. wind energy systems

7. In Iraqi climate, the HVAC devices utilized a lot of electrical power so, we connect the solar energy technology with the HVAC for two major reasons. The first reason is to supply the energy to drive the systems and the second reason is to reduce the emission as much as possible.