



## THE Impact Ranking 2023

University: Al-Mustaqbal University College

Country: Iraq

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

SDG 7.3: Energy use density

Energy use density is typically expressed as energy consumption per unit of gross domestic product (GDP) or per unit of floor area in buildings. Here the energy consuming density for the university buildings in detail.

**\*Min. at least five requirements for each building**

No.	Name	Place	automation		safety				energy		water		Indoor environment				lighting				Building Area (m <sup>2</sup> )
			B1	B2	S1	S2	S3	S4	E1	E2	A1	A2	I1	I2	I3	I4	L1	L2	L3	L4	
1	AL-Mustaqbal University College ; Engineering Building A	Babylon , Iraq		x	x	x	x		x		x		x	x		x	x		x	5500	
2	AL-Mustaqbal University College ; Medical Building B	Babylon , Iraq		x	x	x	x	x			x		x	x		x	x	x	x	15000	
3	AL-Mustaqbal University College ; Administration Building c	Babylon , Iraq		x	x	x	x		x		x		x	x		x	x	x	x	2500	
4	AL-Mustaqbal University College; Physical Education and Sports Sciences Building D	Babylon , Iraq		x	x	x	x				x		x	x		x	x	x	x	3500	
5	AL-Mustaqbal University College Pharmacy Building	Babylon , Iraq			x	x	x				x		x	x		x	x	x	x	2500	
6	AL-Mustaqbal University College Dental Building	Babylon , Iraq			x	x	x				x		x	x		x	x	x	x	2500	
7	AL-Mustaqbal University College student club	Babylon , Iraq		x	x	x	x		x		x		x	x		x	x		x	3000	
8	AL-Mustaqbal University College Nursing building	Babylon , Iraq		x	x	x	x		x		x		x	x		x	x		x	2500	
<b>Total</b>																				<b>37000</b>	

————— Please compile one row for each building (or homogeneous part of it) by ticking with a "X" for each requirement —————

### Smart building implementation



$$\frac{37500}{72800} \times 100\%$$

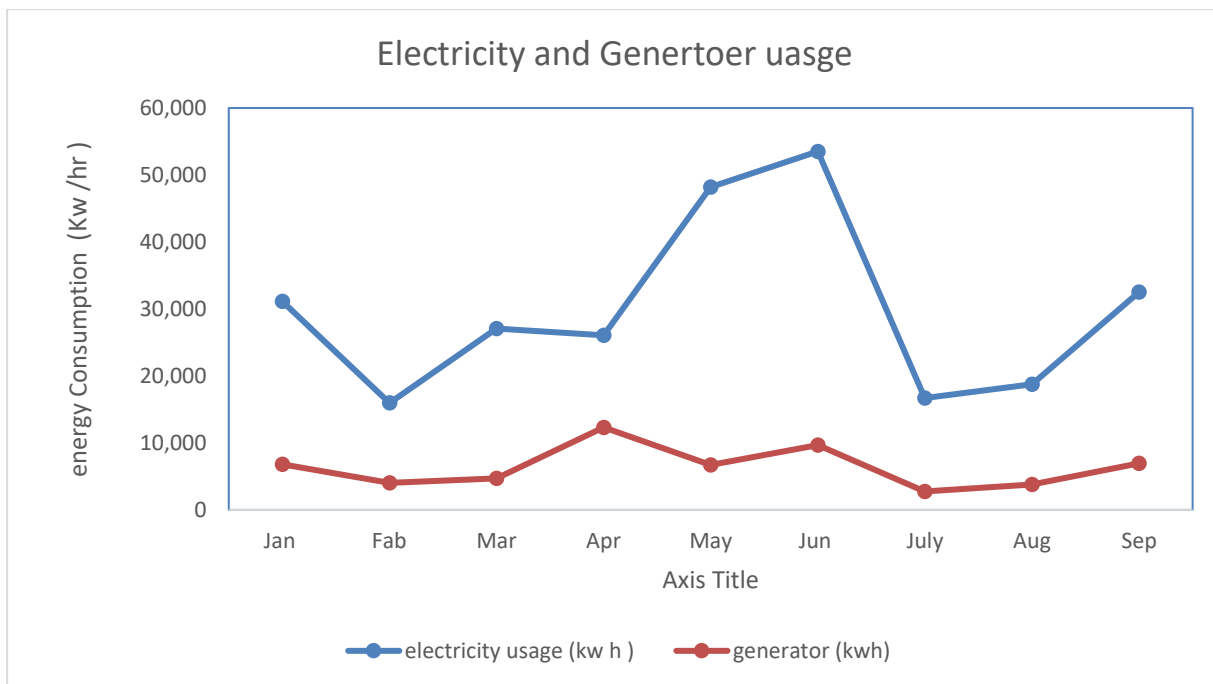
\*Total Building Area: 72800 m<sup>2</sup>

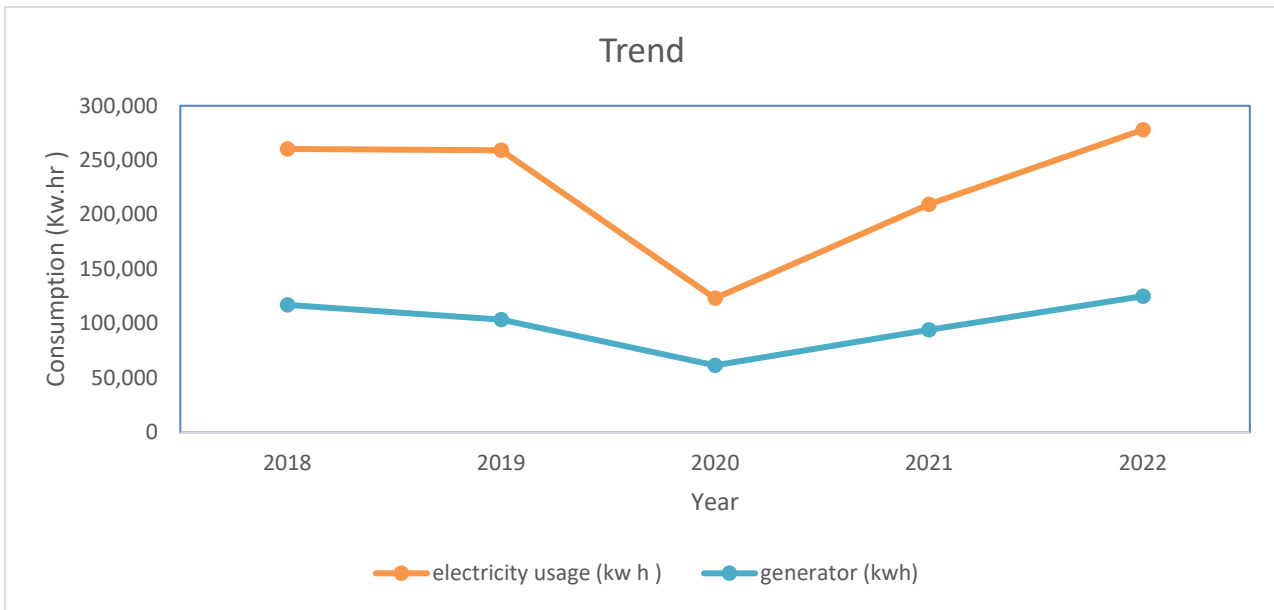
$$\frac{37,500 \text{ m}^2}{72800 \text{ m}^2} \times 100\% = 51.51\%$$

generator (kwh)	electricity usage (kw h )	Month
6786.285	31143.123	Jan
4029.6795	15959.9484	Fab
4683.2346	27077.8464	Mar
12316.9112	26071.4619	Apr
6714.42464	48188.5767	May
9664.8728	53521.04132	Jun
2749.51644	16680.28626	July
3786.59094	18759.43882	Aug
6928.866792	32514.53824	Sep
4350.89094		oct
3291.66354		Nov
3476.38764		Dec
68779.32403	269,916.26	



generator (kwh)	electricity usage (kw h )	
117086.7245	260,192.72	2018
103677.0885	259,192.72	2019
61567.0693	123,134.14	2020
94207.90781	209,350.91	2021
125062.3175	277,916.26	2022





Additional evidence link:



Building A



Building B



Building C



Building D



Building E



Building F





Felid	Requirements	Evidence
Automation	B2 ( APP or online service )	<a href="http://centralarchive.mustaqbal-programs.esy.es/">http://centralarchive.mustaqbal-programs.esy.es/</a> <a href="http://humanresources.mustaqbal-programs.esy.es">http://humanresources.mustaqbal-programs.esy.es</a> <a href="http://developer-r.mustaqbal-programs.esy.es/">http://developer-r.mustaqbal-programs.esy.es/</a> <a href="http://timetable.mustaqbal-programs.esy.es/login">http://timetable.mustaqbal-programs.esy.es/login</a> <a href="http://job.mustaqbal-programs.esy.es/">http://job.mustaqbal-programs.esy.es/</a> <a href="http://admin.it-almustaqbal.com/admin/login.php">http://admin.it-almustaqbal.com/admin/login.php</a> <a href="https://www.mustaqbal-college.edu.iq/CPStudent.aspx">https://www.mustaqbal-college.edu.iq/CPStudent.aspx</a>
Safety	S1 (Intruder Alarm System)	See Fig.1
	S2 ( Fire-fighting)	See Fig.2
	S3 ( Video surveillance)	See Fig.3
	S4( Anti-flooding)	
Energy	E1 (Monitoring)	See Fig.4
Water	A1 (Monitoring )	
Indoor environment	I1 ( Thermal comfort)	See Fig.5
	I2 ( Air quality)	See Fig.5
	I3 ( Real-time )	
	I4 (Passive system)	See Fig.5
Lighting	LEDs	See fig.6a
	Sensors	See fig.6b
	Shielding	See fig.6c
	Natural light	See fig.6d



Fig.1 intruder alarm system



Fig.2, Fire-fighting system





Fig.3 Video surveillance system





Fig 4. Automatic acquisition and logging system of energy consumption





Fig.5 Indoor environment



Fig. 6a Led light



Fig.6b Sensors



Fig.6c Natural light



Fig.6d Shielding