



Smart Building Implementation: Abis Campus (11 University buildings)

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

No.	Name	Place	automation		safety				energy		water		Indoor environment				lighting				Building Area (m ²)
			B1	B2	S1	S2	S3	S4	E1	E2	A1	A2	I1	I2	I3	I4	L1	L2	L3	L4	
1	University Alexandria; Abis Campus, Buildings 1-11	Alexandria, Egypt			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	667,730.988
Total																					667,730.988

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

Elements of Green Building Implementation as Reflected in all new construction and renovation policies:

- The area of the project is 160 acres (667,730.988 m²), a general site for educational buildings, and 120 acres are complementary activities. The percentage of green areas and lake is about 52% in addition to 25% atreets and lanes.
- Water-saving plots are used, which will reduce water consumption by abut 30%. The sewage water will be trated and reused in the irrigation of green areas in the project.
- Rainwater is collected in the main lake and used for irrigation.
- The use of plants with few water rationed plants to reduce irrigation needs in addition to absorbing quantities of rainwater to reduce the severity of rain spells.
- As for energy, all the buildings have solar enery generation cells to provide part of the building's needs, which are estimated at about 45%, in addition to using energy-saving lamps (LED).
- The punlic site lighting poles are powered by solar enery.

Total Building Area

$$\frac{\text{total building area}}{\text{total area}} \times 100\%$$

Total Building Area:

$$\frac{667730.988 \text{ m}^2}{2225769.96 \text{ m}^2} \times 100\% = 30\%$$

Smart building implementation

$$\frac{\text{total smart building area}}{\text{total building area}} \times 100\%$$

Smart building implementation

$$\frac{135,500 \text{ m}^2}{667730.988 \text{ m}^2} \times 100\% = 20\%$$

Building 1



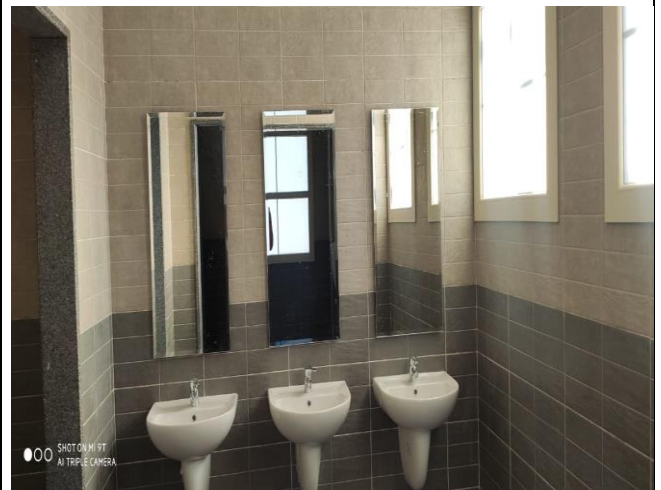
Building 1



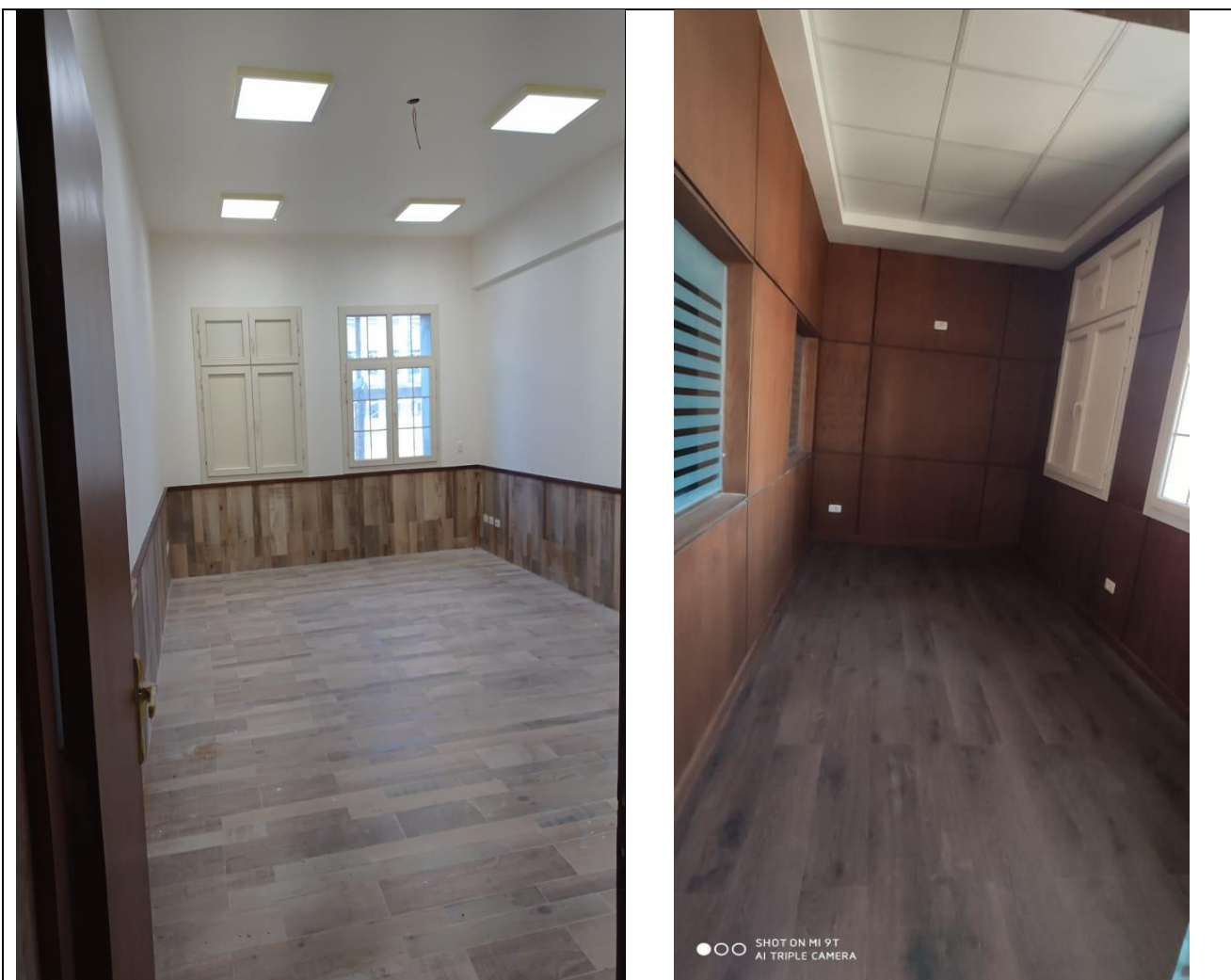
Building 3



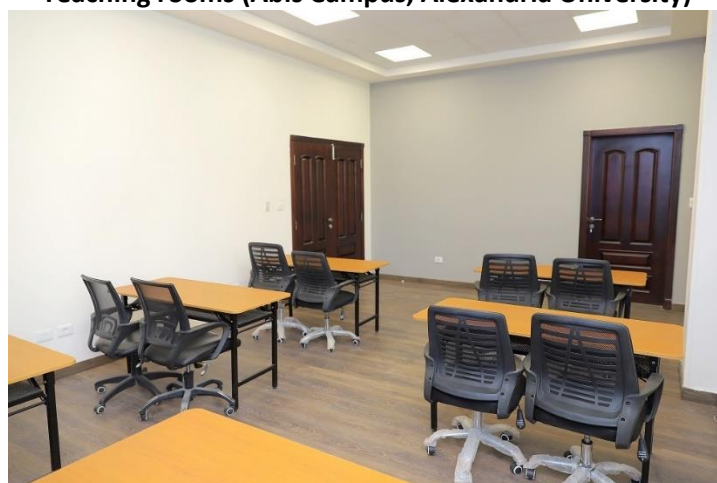
Building 4 (Bathroom, water saving)



Building 1-11 (LED Lighting)



Teaching rooms (Abis Campus, Alexandria University)





All teaching rooms contains well equipped technological facilities (screens, data shows and white boards).



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- Water-saving plots are used, which will reduce water consumption by about 30%. The sewage water will be treated and reused in the irrigation of green areas in the project.
- Rainwater is collected in the main lake and used for irrigation.
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- As for energy, all the buildings have solar energy generation cells to provide part of the building's needs, which are estimated at about 45%, in addition to using energy-saving lamps (LED).
- The public site lighting poles are powered by solar energy.

Additional evidence link: <https://alexu.edu.eg/index.php/about-us-ar>

Link for LED lighting:

https://alexu.edu.eg/index.php/?option=com_content&view=article&id=5935&catid=21&lang=ar-AA

Link for Solar Energy:

https://alexu.edu.eg/index.php/?option=com_content&view=article&id=5936&catid=21&lang=ar-AA

Link for Sustainable Development: <https://alexu.edu.eg/index.php/en/sustainable-development>

Link for Green University:

https://alexu.edu.eg/index.php/?option=com_content&view=article&id=5932&catid=21&lang=ar-AA

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