



Template for Evidence(s) UI GreenMetric Questionnaire

University : Alexandria University

Country : Egypt

Web Address : https://alexu.edu.eg/...

[2] Energy and Climate Change (EC)

[2.3] Smart Building Implementation: The 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 (m²)
1	University Alexandria; Abis	Alexandria Carret	B1	B2		S2								12	13	14	L1	L2		L4	667 770 000
1	1-11	Alexandria, Egypt			X	X	Х	Х	×	Х	х	X	х	X	Х	X	X	х	х	х	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

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

Total Building Area:

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

Smart building implementation

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





Smart building implementation

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





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).



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

- The area of the project is 160 acres, 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% streets and lanes.
- Water-saving plots are used, which will reduce water consumption by abut 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.
- 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.

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:

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



VICE PRESIDENT
Community Service & Environment Development

Smart Building Implementation The Abis Campus (11 University buildings)

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 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 punlic site lighting poles are powered by solar enery.

Total Building Area

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

Total Building Area:

$$\frac{667730,988 \, m^2}{2225769,96 \, m^2} \times 100\% = 30\%$$

Smart building implementation

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

Smart building implementation

$$\frac{135.500\,m^2}{667.730,988\,m^2}\times 20\%$$



VICE PRESIDENT

Community Service & Environment Development

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

- The area of the project is 160 acres, 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% streets and lanes.
- Water-saving plots are used, which will reduce water consumption by abut 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.
- 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 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 punlic site lighting poles are powered by solar enery.

Sincerely,

Prof. Ashraf Elghandour, MD

Vice president of graduate Students & Research Acting Vice president Community Service &

Environment Development

Alexandria University