Electricity Department Achievement Report for 2024 and 2025

With reference to the above-mentioned subject, and in response to the request for certain data and information required to complete the Academy's submission for the **Times Higher Education (THE) Impact Rankings**, specifically Research Point (7.2.4), the following is a summary of the electricity-saving measures implemented by the Electricity Department.

In accordance with the replacement and renovation plan implemented across all Academy buildings at its Alexandria branches, several electrical systems have been upgraded, modernized, and optimized to reduce electricity consumption and improve energy efficiency. The main achievements are summarized below.

First: Abu Qir Branch:

1. Upgrading the lighting system at the entrance of the new gymnasium by installing 20 LED spotlights (5 W each).
2. Upgrading all electrical outlets, data outlets, and lighting systems on the entire fourth floor of Iskan Hotel Building C.
3. Upgrading all electrical outlets and accessories on the entire second floor of Iskan Hotel Building H.
4. Replacing the lighting system in four classrooms on the fourth floor of the Architecture Engineering Building with LED lighting, installing 50 LED fixtures.
5. Upgrading the lighting in all corridors of Engineering Buildings C and D using 100 LED fixtures.
6. Upgrading the lighting in eight classrooms in the Marine Building D using 40 LED fixtures.
7. Installing two current-correction panels for two UPS units in the Financial Affairs Building.
8. Installing two control panels for the water pumps serving Iskan A and Iskan B.
9. Upgrading the lighting in the third- and fourth-floor classrooms of Engineering College Building D using 100 LED fixtures.
10. Upgrading the lighting in the third- and fourth-floor classrooms of Engineering College Building C using 100 LED fixtures.
11. Completely upgrading the lighting system in the main restaurant of Iskan Hotel using 50 LED fixtures.
12. Upgrading the lighting in four classrooms in the Preparatory Studies Building using 60 LED fixtures.
13. Upgrading the lighting, electrical outlets, and accessories on the third and fourth floors of Iskan Hotel Building C.
14. Upgrading the lighting, electrical outlets, and accessories on the first floor of Iskan Hotel Building D.
15. Installing seven control panels for the seven irrigation system pump units.
16. Installing one current-correction panel for the Civil Machinery Laboratory in Engineering College Building D.

17. Installing one current-correction panel for the paper-cutting machine in the Printing Building.
18. Upgrading the outdoor lighting of Smart Cafeteria using six 100 W LED façade floodlights.
19. Upgrading the lighting in the ground-floor classroom of Engineering College Building G using 30 LED fixtures.
20. Upgrading the lighting, electrical outlets, and accessories on the second and third floors of the Industrial Modernization Building.
21. Upgrading the lighting, electrical outlets, and accessories in Classroom 02 of the Preparatory Studies Building.
22. Installing one current-correction panel for a UPS unit on the ground floor of the Financial Affairs Building.
23. Upgrading the outdoor lighting on the rooftops of the Engineering College buildings using six 200 W LED façade floodlights.
24. Upgrading the outdoor lighting on the rooftop of the Campaign Building using six 200 W LED façade floodlights.
25. Upgrading the electrical sub-distribution panels serving the Engineering Colleges, including 18 panels for power and lighting.
26. Upgrading the electrical sub-distribution panels in Iskan Hotel Building D, including six power and lighting panels.
27. Completely upgrading the power supply panel of the restaurant in Iskan Hotel Building D, including power and lighting circuits.
28. Completely upgrading the power supply panels of the elevator system in the Marine Safety Building, including two power and lighting panels.
29. Upgrading the electrical panel serving the hangar in the Technicians' Building, including power and lighting circuits.
30. Upgrading the power supply panel of the Campaign Building, including power and lighting circuits.
31. Upgrading all offices on the second floor of Engineering College Building A, including lighting, electrical outlets, and accessories.
32. Upgrading four classrooms in the Faculty of Computing on the second, third, and fourth floors, including lighting, electrical outlets, and accessories.
33. Upgrading the lighting throughout all corridors of Engineering College Building G using 300 LED fixtures.
34. Upgrading the lighting in four classrooms in Engineering College Building G using 60 LED fixtures.
35. Upgrading the lighting in six classrooms in the IMO Building using 80 LED fixtures.
36. Installing two control panels for the irrigation pumps serving the sports field and the main restaurant, each rated at 3 HP.
37. Upgrading the swimming pool lighting in the Marine Safety Building using four 200 W LED façade floodlights.

38. Upgrading the second section of the low-voltage distribution panels at the main distribution station.
39. Upgrading the room lighting systems in Iskan A and Iskan B using 180 LED fixtures.
40. Upgrading the bathroom lighting in Iskan A and Iskan B using 60 LED spotlights.
41. Installing one service distribution panel at the Engineering College sports field to provide electrical connections during events and celebrations.
42. Upgrading two control panels associated with the water desalination plant at the main restaurant.
43. Upgrading the fire alarm panel in the Admission and Registration Building.
44. Installing an electrical current-correction panel for a UPS unit on the ground floor of the Financial Affairs Building.
45. Installing an automatic alternating control panel for the water pumps in Engineering College Building G.

Second: El-Wabour El-Maya Branch:

1. Upgrading the lighting throughout all ground-floor corridors using 50 LED fixtures.
2. Installing one current-correction panel for the UPS unit in the studio.
3. Upgrading the lighting throughout all ground-floor corridors using 50 LED fixtures.
4. Installing one control panel for two water pumps, each rated at 3 HP.
5. Upgrading the lighting in six classrooms using 50 lighting fixtures.
6. Upgrading the lighting in the ground-floor corridors and eight classrooms using 50 LED spotlights (24 W each).
7. Upgrading the lighting in the classrooms and corridors on the first and second floors using 30 LED spotlights (24 W each).

Third: Miami Branch:

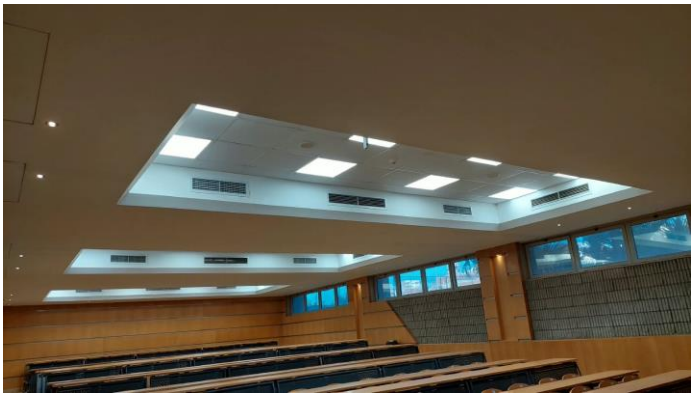
1. Upgrading the lighting on the ground floor of the Main Library and in the classrooms of Building A using 50 LED fixtures (40 W each).
2. Upgrading the rooftop lighting of Buildings A and C using six 200 W LED façade floodlights.
3. Upgrading six administrative offices on the ground floor of Building A, including lighting, electrical outlets, and accessories.
4. Upgrading three classrooms on the third floor of the Administrative Building, including lighting, electrical outlets, and accessories.
5. Upgrading the lighting in four classrooms in Building A using 40 LED fixtures.
6. Upgrading the outdoor lighting of the Administrative Building and Building B using 40 LED spotlights (6 W each).
7. Upgrading the landscape lighting system by installing 20 lighting poles/fixtures.
8. Installing a service distribution panel at the International School sports field to provide electrical connections during events and celebrations.
9. Upgrading the indoor lighting system of the new gymnasium.
10. Installing a dedicated electrical supply panel for the new gymnasium.

System	2024 Energy Consumption (kWh)	2025 Energy Consumption (kWh)
LED Lighting	124,816	150,640
Irrigation	124,816	0
Air Conditioning Units	144,420	86,652
Motors and Equipment	80,237	60,525
Solar Energy	75,989	79,632

Important note: The calculations are approximate and based on 8 operating hours per day, excluding official public holidays.

First: Abu Qir Branch

- Upgrading the lighting system in the auditorium of Engineering Building G.



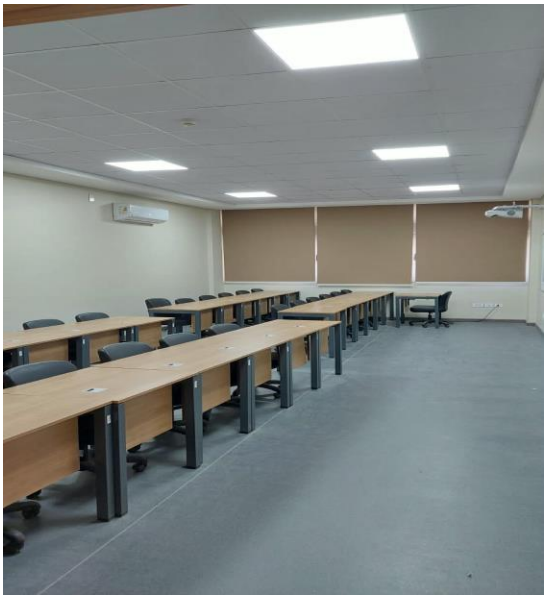




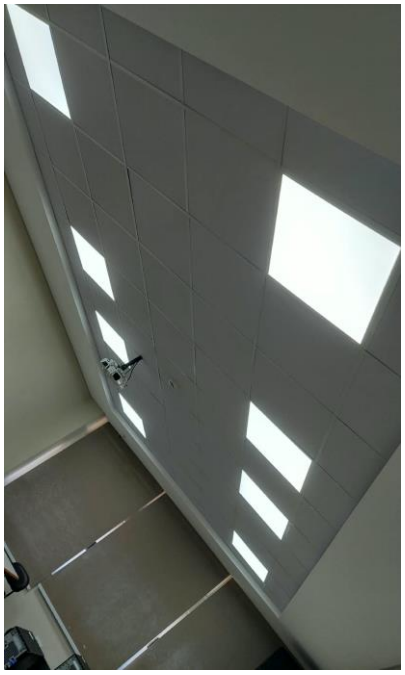


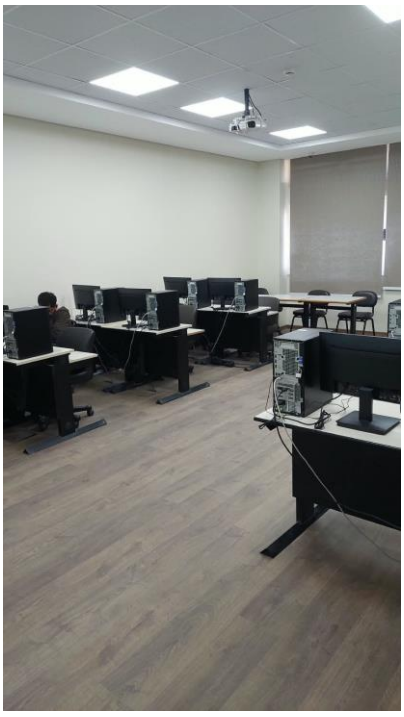
- Upgrading the lighting system throughout the corridors of Engineering Building G and rooms





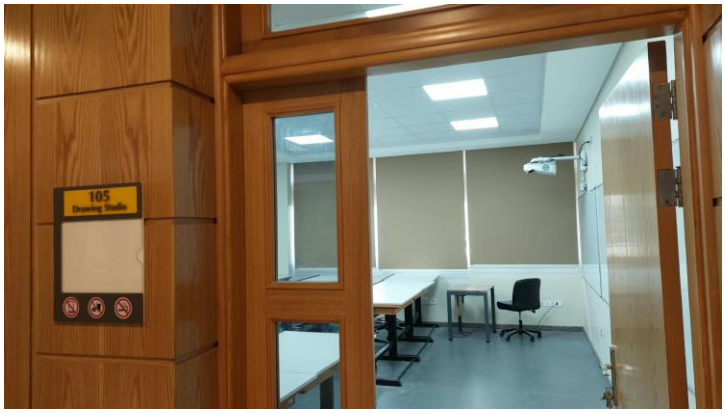
- Upgrading the computer labs of the Faculty of Computers on the third and fourth floors.







- Upgrading the halls of the Department of Arts and Design on the first floor of the Faculty of Computers building







- Upgrading the Cyber Cafeteria Building





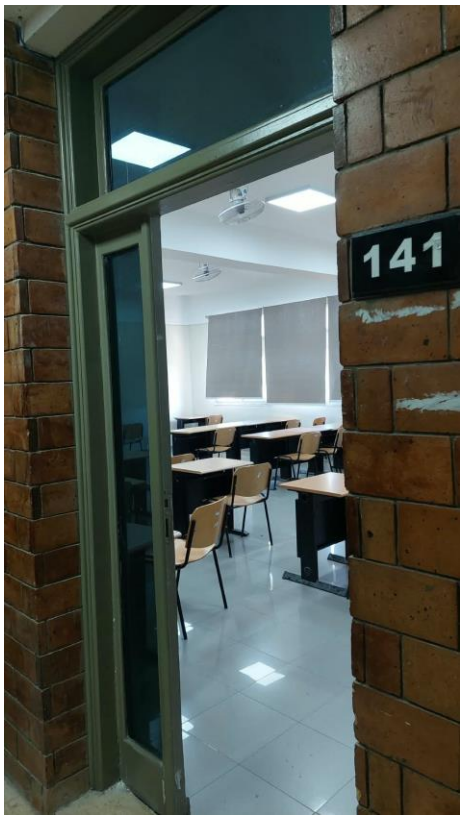
- Upgrading the Electrical Panels in the Faculty of Engineering Cafeteria Kitchen



- Installing control panels for the air conditioning fans in the Faculty of Engineering Building G



- Upgrading the Halls and Corridors of the Faculty of Engineering Building D







- Installing a power factor correction panel for the Maritime Building C Simulator





- Upgrading All Classrooms in the Simulator Building





- Upgrading the Staircase Lighting at Maritime Buildings C and D.

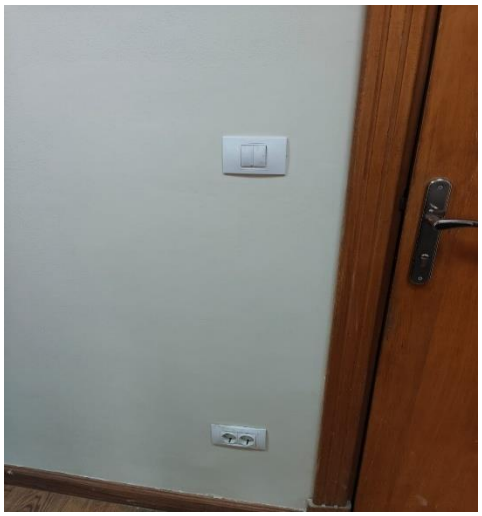


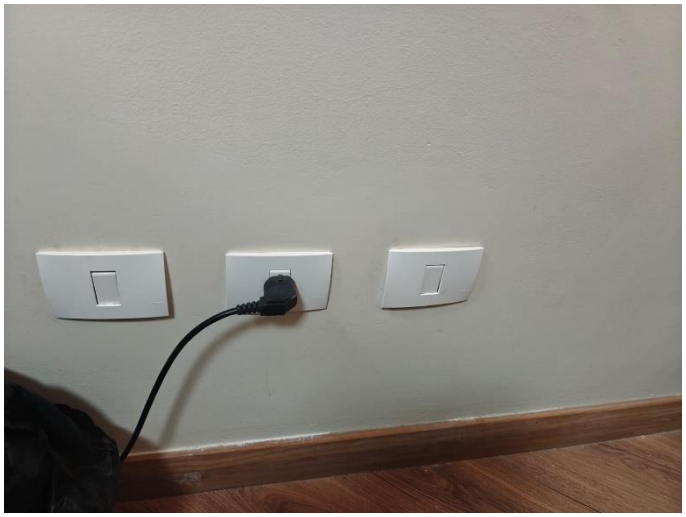


- Installing a protection panel for the swimming pool motors at the Maritime Safety building



- Upgrading the electrical outlets in Maritime Building D





- Upgrading the Lighting at the Informatics Building









- Upgrading the Lighting at the Networks Building.

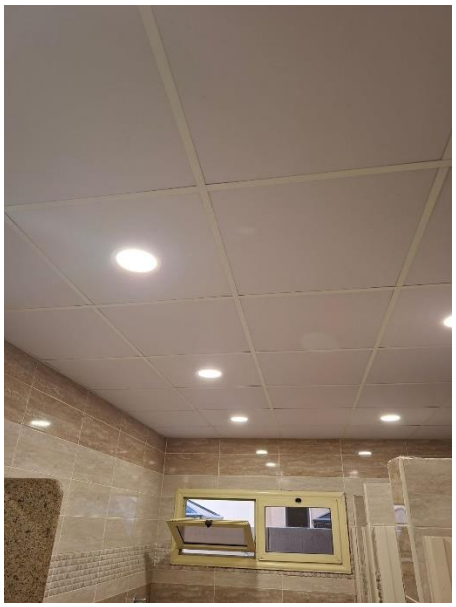




- Installing a control panel for the air conditioners in the Networks building



- Upgrading the Lighting in All Corridors and Bathrooms of Housing Buildings A and B





- Upgrading the Lighting at the Computer Services Center Building





- Upgrading the Lighting in the Main Restaurant Kitchen





- Upgrading Lighting in the Security Affairs building





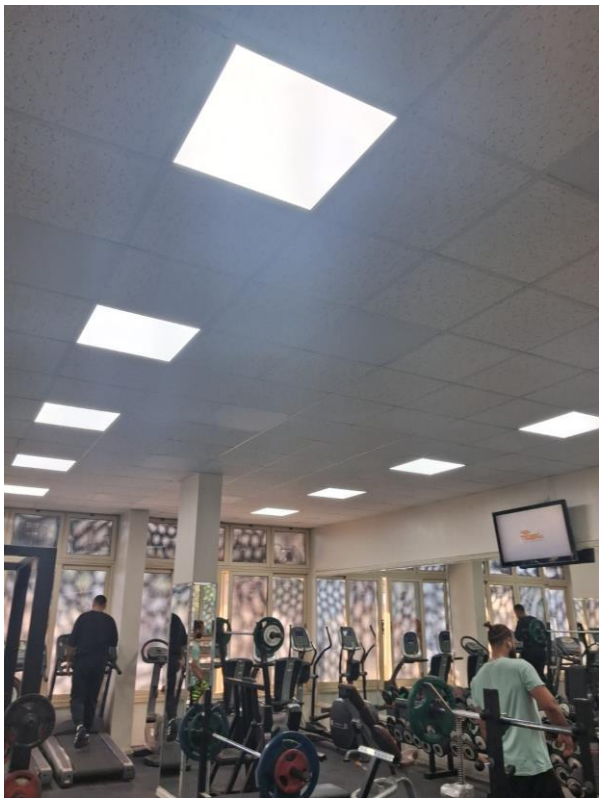




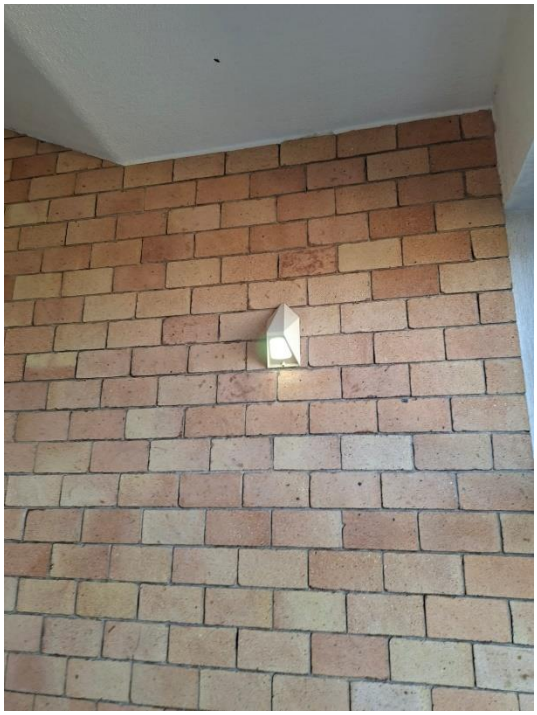
- Upgrading the Lighting at the Old Gym Building



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- Upgrading the Stairwell Lighting in Housing Buildings C and D

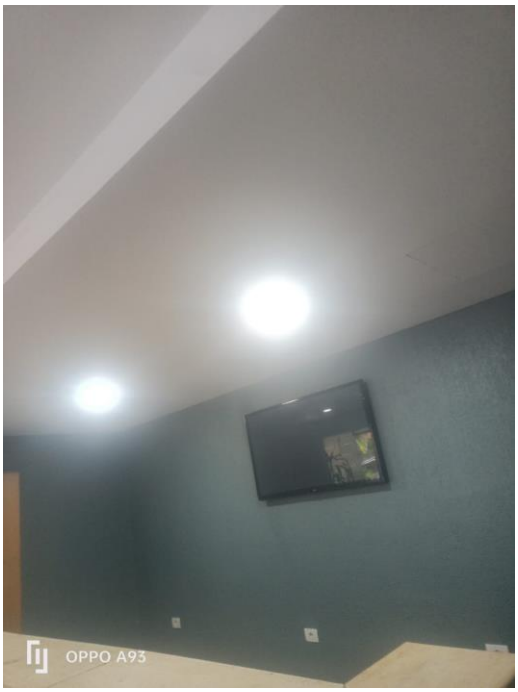


Second: Miami Branch

- Upgrading the Lighting in the Entrance and Corridors of Building A



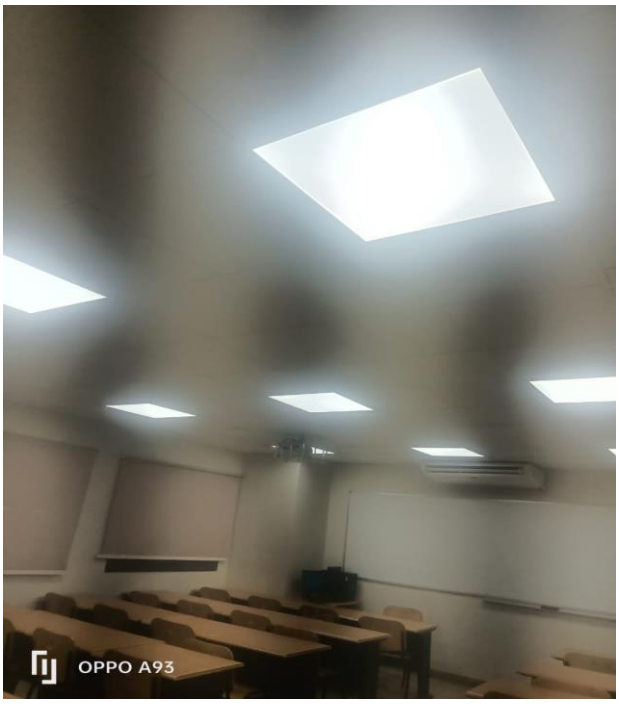






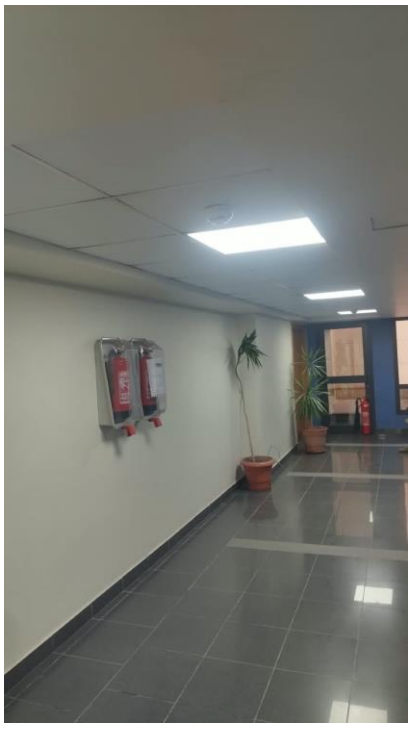
- Upgrading the Lighting in the Classrooms of Building A



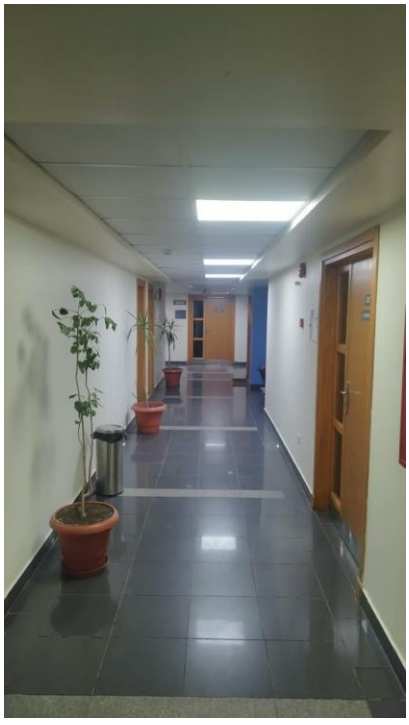


Third: Wabour Al-Miah Branch

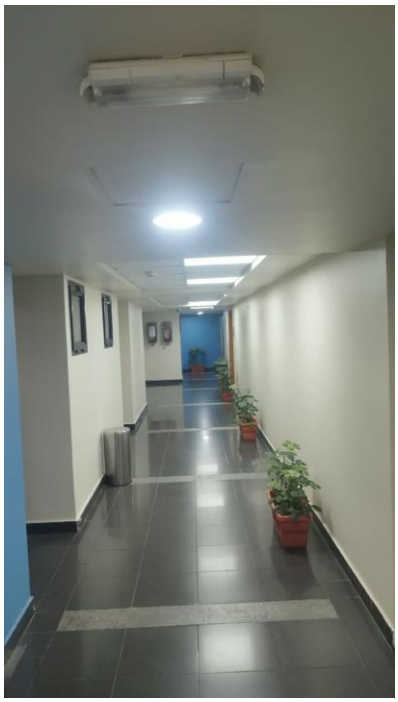
- Upgrading the lighting in the entrances and corridor













- Upgrading the Lighting in 14 Classroom



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- Installing control panels for the water motor





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