MASHREQ BANK , JAFZA

	40	69
Sustainable Sites	10	14
Water Efficiency	5	5
Energy & Atmosphere	6	17
Materials & Resources	6	13
Indoor Environmental	8	15
Innovation & Design	5	5

Points Achieved Points Available

LEED POINT ACHIEVEMENT

FAST FACTS

LEED Certification: Gold, New Construction (NC) V2.2
Gross Area: 138,900 Sq.ft. / Office
Neighborhood: Jebel Ali Free Zone, Dubai, UAE
Completed: June 2011
Date of Certification: August 6, 2013

BENEFITS

- **23.1%** Savings on Energy Use
- **72.4 %** Savings on Potable Water Use
- **2.6 %** Offset by On-Site Renewable Energy
- **87.03**% Construction Waste Diverted from Landfill
- **26.46** % Use of Materials with Recycled Content
- **42.95**% Use of Materials Regionally Available

PROJECT BACKGROUND

A new resolution on the implementation of green building specifications and standards in the emirates of Dubai has been issued by H.H. Sheikh Mohammed bin Rashid Al Makhtoum, Vice-President and Prime Minister of UAE and ruler of Dubai. As per the new resolution, effective on January 2008, all owners of residential and commercial buildings and properties in the emirates of Dubai must comply with the internationally recognized environment friendly specifications to turn Dubai into a healthy city that meets the demands of best practices and benchmarks of pollution-free sustainable development.

Implementing this resolution, Dubai becomes the first city in the Middle East to adopt green building specifications and requirements. The resolution falls in line with Sheikh Mohammed's keen interest in dealing with the current environmental challenges.

In response to this resolution, we are proud to inform that **"AL MASHREQ BANK"** has been awarded with **Prestigious LEED Gold Certification** established by the U.S. Green Building Council and verified by the Green Building Certification Institute (GBCI). It is the 1st Commercial Bank project in the Middle East to achieve the LEED NC v2.2 Gold Certification.

PROJECT PROFILE

MASHREQ BANK, PSC JAFZA, Dubai, UAE

THE NEW BUILDING

Mashreq Bank, JAFZA The project is built on a 32, 504.75 sq. ft. plot area located at plot no. MO-06-104 JAFZA, Dubai UAE with a gross area of 138, 900.0 sq. ft. The new facility will be housing a total of 443 occupants on its full operation with 100 expected visitors during peak time on a daily basis

The new 2B + G + 3 + R Office Building in JAFZA for AL MASHREQ Bank will be operated as the bank's back Office. Through the development of Mashreq Bank as a sustainable facility, the Mashreq organization is contributing with the cooperation and assistance of its guests, in reducing the carbon footprint of Dubai and mitigating the effects of Climate Change.

INDOOR ENVIRONMENTAL QUALITY

- Automatic Lighting Control System was installed to Optimize the building's Energy Use and for occupant's controllability
- Building Spaces was designed & built to enable occupant's wide access to views
- MERV 13-16 filters has been installed to AHUs to ensure building's indoor air quality
- Permanently installed entryway/foot path cleaning system to reduce particulates & dirt from coming inside the building
- CO2 sensors are installed to all the densely occupied areas of the building to ensure supply of required fresh air inside the bldg.
- Reduce the quantity on indoor air contaminants by using low-emitting materials as well as declaring the building as non-smoking

ENERGY EFFICIENCY AND RENEWABLE ENERGY

MASHREQ BANK utilizes enhanced metering and sophisticated Building Management System at the building's common area to closely monitor building energy use and identify opportunities in real time for adjustments.

The following are the Energy Conservation Measures incorporated in the project:

- Occupancy sensors are installed to all the meeting rooms as well as corridors
- High-performance building envelope insulation (with better U-values)
- High- performance glazing (with better SHGC value)
- Efficient lighting fixtures
- High efficient Chillers with higher COP
- High efficient fans, pumps and motors

Mashreq Bank offsets 2.6% of its energy consumption through Solar Hot Water Panels as on-site renewable energy source.

OTHER GREEN FEATURES INCLUDE

- Native adaptive species are utilized for the vegetation, AC condensate is also being utilized as well as efficient irrigation design
- Proper storm water drainage system are in-place to limit disruption of natural hydrology
- Water used for plumbing/sanitary are recycled through the Gray Water Recycling System & are being reused for Irrigation & flushing
- 100% of roof area was installed with high albedo materials to maximize energy savings and avoid heat island effect
- Use of building finishes with low VOC paints, coatings, adhesives and sealants
- Supports pollution reduction from Automobile Use through provision of preferred parking spaces of LEV & Car/Van Pool & Bicycle
- Shuttle Service has been provided so occupants would have access to mass transit such as metro rail and RTA bus

LESSONS LEARNED

- Must be firm on implementing ASHRAE compliance for Electro-Mechanical design
- Identify strategies early and set green building goals.

THE TEAM

Owner: Al Mashreq Bank
Design Consultant: National Engineering Bureau
Contractor: OST Constructional Projects
Green Building Consultant: Middle East Centre for Sustainable Development **(MECSD)**, Dubai, UAE
Chief Technical Officer: Thom Bohlen, Architect, LEED AP
LEED AP: Ms. Charity N. Pena
Commissioning Authority: Pacific Control Systems
Photograph Courtesy of: Mashreq Bank
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