

TLM INTERNATIONAL FZE



	52	69
Sustainable Sites	11	14
Water Efficiency	4	5
Energy & Atmosphere	16	17
Materials & Resources	5	13
Indoor Environmental	11	15
Innovation & Design	5	5

Points Achieved
 Points Available

LEED POINT ACHIEVEMENT

FAST FACTS

LEED Certification: Platinum, New Construction (NC) V2.2
Square Feet: 98,868 sq ft / Office & Warehouse
Neighborhood: Jebel Ali Free Zone, Dubai, UAE
Construction Cost: \$38 / square foot
Completed: January 2011
Date of Certification: July 20, 2011

BENEFITS

- 46.40% Savings on Energy Use
- 24.28% Offset by On-Site Renewable Energy
- 36.40% Savings on Potable Water Use

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 Maktoum, 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 "TLM INTERNATIONAL FZE" has been awarded with **Prestigious LEED Platinum Certification** established by the U.S. Green Building Council and verified by the Green Building Certification Institute (GBCI). It is the second project in the UAE to achieve the LEED NC 2.2 Platinum Certification.





PROJECT PROFILE

TLM INTERNATIONAL FZE, JAFZA Dubai, UAE

THE NEW BUILDING

TLM International FZE is a new office and warehouse building located in Jebel Ali Free Zone, Dubai. It has a total built-up area of 98,868 sq ft, consists of; warehouse with an area 89,215 sq ft and office with an area of 9,653 sq ft. The project has in-house infrastructure to manage all imports, logistics, clearances and associated services to support sales and distribution in GCC and Africa region.

The TLM International is part of a diversified group of companies engaged in the Renewable Energy Solutions that includes, but not limited to: Solar PV, Solar Thermal, PV Inverters and Charge Controllers, AGM Batteries and Wind Energy Solutions.

ENERGY EFFICIENCY AND RENEWABLE ENERGY

MECSD as a Sustainability Consultant for TLM International, created an energy model to evaluate the effectiveness of the building's energy conservation measures, in compliance with ASHRAE 90.1-2004 Appendix G methodology.

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

- Improved thermal envelope
- High efficiency glazing
- Reduced interior lighting power density
- Reduced exterior lighting power
- Solar water heating system
- Solar external lighting

TLM installed 88 solar PV panels on-site to generate 123,552 Kwh/year of renewable energy that offset energy costs considerably wherein it has a bigger impact in reducing the carbon footprint in the Middle East Region.

INDOOR ENVIRONMENTAL QUALITY

To provide a comfortable and healthy environment, TLM International FZE incorporated the following:

- The IAQ performance complies with the minimum requirements of ASHRAE Std 62.1-2004, Ventilation for Acceptable IAQ
- Installed air flow monitoring device for each mechanical ventilation to monitor the freshair
- Installed CO2 sensors to monitor the carbon dioxide concentration in the densely occupied spaces
- Developed and implemented a Construction Indoor Air Quality (IAQ) Management Plan in reference to SMACNA guidelines
- Temperature, humidity and lighting controllability are available for all shared occupant spaces
- Use of building finish materials with low emission of volatile organic compounds (VOC) for adhesives, sealants, paints and coatings
- Use of CRI certified carpets
- Use of no added urea-formaldehyde for all indoor composite wood and agrifiber materials

MATERIALS & RESOURCES

- 75.01% of on-site generated construction waste diverted from landfill
- 11.04% of materials use with recycled content
- 68.83% of materials use manufactured locally
- Provide appropriately sized dedicated areas for the collection and storage of recycling materials

OTHER GREEN FEATURES INCLUDE

- Exemplary performance for Site Development, Maximize Open Space
- Exemplary performance for On-Site Renewable Energy
- Exemplary performance for Heat Island Effect: Non-Roof. 100% of non-roof hardscape paved with highly reflective materials
- Exemplary performance for Regional Materials use

LESSONS LEARNED

Dedication to save the environment and sustainable practice has always been TLM International's mission and with MECSD's guidance and assistance is now a reality to this part of the world where we live.

THE TEAM

Owner: TLM International FZE

Design Consultant: MAS Engineering Consultants

Contractor: Roshan Construction LLC

Green Building Consultant: Middle East Centre for Sustainable Development (**MECSD**), Dubai, UAE

Chief Technical Officer: Thom Bohlen, Architect, LEED AP

LEED AP: Sheila Mateo & Loveleen Raval

Commissioning Authority: Pacific Control Systems

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