A REGIONAL LEADER

Under the long-term national initiative “Green Economy for Sustainable Development” launched in 2012, Dubai and Abu Dhabi aim to place the United Arab Emirates at the forefront of urban sustainability. The Dubai Supreme Council of Energy (DSCE) and the Emirates Green Building Council (EmiratesGBC) have actively collaborated to encourage innovative green building programs and best practices throughout the country.

GREEN BUILDING POLICIES

The Green Economy Initiative covers a wide range of policies, regulations and projects in the fields of urban planning, renewable energy, energy efficiency, waste management, technology and climate change. Combined with international certification programs, such as the LEED Green Building Rating System™, and local standards and guidelines, including those developed by Dubai Electricity and Water Authority - DEWA, the initiative provides government and building professionals with a solid framework to support green building programs and contribute to urban sustainability.

As such, the Initiative complements proactive schemes implemented by the government to enhance green building practices in the region. For instance, the Green Building 2007 Directive issued by HH Sheikh Mohammed bin Rashid Al Maktoum mandates developers in Dubai to comply with critical building standards to ensure that buildings are “operationally sustainable” while meeting the needs of their intended design.

Regulatory Framework

In line with the Dubai Strategy Plan 2015 and as a joint initiative of DEWA and Dubai Municipality, the Green Building Regulations and Specifications aim at improving the performance of new buildings by reducing their consumption of energy, water and building materials. The regulations emphasize the need for sustainable planning, design, construction and operations as core requirements for enhancing public health, safety and general welfare. Currently used as guidelines, this regulatory framework became mandatory for all new buildings in January 2014.

As of January 2014, 89 buildings in the United Arab Emirates were certified under the LEED Green Building rating system, with 753 projects registered.

Energy Efficiency

In 2011, the DSCE launched the Dubai Integrated Energy Strategy for 2030 (DIES 2030) aiming at decreasing energy demand by 30% by 2030 and at developing energy efficient programs to reduce energy consumption in existing facilities and infrastructure. Additionally, the technical specifications of existing buildings in Dubai are addressed by local authorities and building professionals through informative campaigns on the benefits of energy efficiency retrofit programs.

PLACE DETAILS

<table>
<thead>
<tr>
<th>Population</th>
<th>2.1 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Area (km²)</td>
<td>4,114</td>
</tr>
<tr>
<td>Gross Domestic Product (USD billions)</td>
<td>65.9</td>
</tr>
<tr>
<td>Average Walk Score¹</td>
<td>70/100</td>
</tr>
<tr>
<td>Annual Rainfall (mm/year)</td>
<td>94</td>
</tr>
<tr>
<td>Number of Heating Degree Days</td>
<td>--</td>
</tr>
<tr>
<td>Number of Cooling Degree Days</td>
<td>--</td>
</tr>
<tr>
<td>Climate Action Plan</td>
<td>Yes</td>
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</table>

MEMBERSHIP AND PROFESSIONALS

<table>
<thead>
<tr>
<th>EGBC Members ² - Individuals</th>
<th>41</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGBC Members - Companies</td>
<td>139</td>
</tr>
<tr>
<td>LEED Credentialed Professionals (UAE) ³</td>
<td>1,172</td>
</tr>
</tbody>
</table>

PROJECT BREAKDOWN

- 92 LEED Certified Projects (Dubai)
- 629 LEED Registered Projects (Dubai)
- 108 LEED Certified Projects (UAE)
- 750 LEED Registered Projects (UAE)

CITY EMISSIONS TARGET:

The Dubai Integrated Energy Strategy for 2030 (DIES 2030) aims to decrease energy demand by 30% by 2030.

CITY LEVEL POLICIES PRESENT

- Green Building Codes
- Energy Benchmarking and Data Transparency ✗
- Green Municipal Buildings
- New/Existing Commercial Building Incentives ✗
- New/Existing Residential Building Incentives ✗
- Green Schools
- Neighborhood-Scale Sustainability
Green Healthcare

In line with the Dubai Strategy Plan 2015, the MedHealth Medical Centre was inaugurated in April 2013 as the first health-related building implementing the Green Building 2007 Directive. Among the hospital’s features are a solar-powered hot water system capable of producing 1,000 liters per day, and a system that collects condensation from air conditioners for irrigation. The MedHealth Medical Centre was awarded LEED Gold Certification and can accommodate 120 in-patients and up to 80 out-patients.

Sustainable Transportation

To complement the already-existing 100 km of cycling paths in Dubai, the Roads and Transport Authority (RTA) is planning on completing its Dubai Bicycle Master Plan by 2030 to connect key spots of Dubai via an 850 km long network. The RTA also launched a series of other successful initiatives such as the Green Bus which runs on biofuel, electric abras (a traditional boat made out of wood) and hybrid taxis that run on a combination of electric batteries and petrol.

PROJECT SPOTLIGHT:
The Change Initiative, Sheikh Zayed Road
The 55,000 sq. ft. facility dedicated to sustainable home and workplace solutions, The Change Initiative (TCI), was awarded the LEED Platinum Certification under the LEED for Commercial Interiors Rating System. The project achieved 107 points, making it one of the highest-rated projects globally under LEED CI.

For more information on technical performance please visit www.thechangeinitiative.com.

SUSTAINABLE URBAN DEVELOPMENT

Sustainable Housing and Urban Planning

In 2013, plans for a new district in Dubai called “Sustainable City” were announced, supporting the vision of HH Sheikh Mohammed bin Rashid Al Maktoum, Vice-President, Prime Minister of the UAE and the Ruler of Dubai. The project will respond to the local community’s needs and environmental constraints through eco-friendly innovations. A solar energy farm will support the energy needs of the district, while waste and sewage water will be treated and recycled for irrigation purposes. The Sustainable City is planned to be complete by mid-2015 with the aim at accommodating 10,000 residents, students and employees.

REFERENCES

1. Walk Score measures the walkability of a city by measuring community connectivity and pedestrian friendliness. A Walk Score between 70-89 is deemed “Very Walkable.” Available at walkscore.com.
2. Emirates Green Building Council Membership Figures were retrieved on 11 October 2013.
3. LEED Professionals and Project Figures were retrieved on 5 June 2014.