GREEN BUILDING & SMART CITIES IN THE UAE

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Agenda

- Status of the Green Buildings as part of Smart Cities Initiative in UAE
- Smart City Trends and notable projects New Buildings
- Retrofitting Existing Buildings for Sustainable Operation
- EmiratesGBC Technical Guidelines for Retrofitting Existing Buildings
UAE Sustainable Development Initiative

- UAE has the eighth-largest stock of Leed-certified buildings outside the US at 3.1 million square metres.
- Country has the fourth-largest number of LEED accredited construction professionals in the world – behind the US, Canada and China.
- Dubai’s plan to be the most sustainable city in the world by 2020.
- The DSP 2021 also intends to build a strong and safe society within a sustainable and smart city aligns with UAE Vision 2021 and the Green Economy for Sustainable Development Initiative.
International Renewable Energy Agency HQ in Masdar City
Dubai seeks to reduce energy demand by 30% by 2030. The Dubai Supreme Council of Energy has set the goal of reducing energy demand by 30% by 2030.

Retrofitting and refurbishing existing buildings has been identified as a core strategy to reduce overall energy demand.

The retrofitting of existing buildings to greener standards is widely recognised as a key step in the sustainable development of a nation’s economy.

There are 120,000 buildings in Dubai alone. A lot of these were built prior to any sustainable or energy-efficient building codes in the UAE, so there is large potential for retrofitting these. A study indicates >30% have significant greening potential with very high ROI.
Dubai Chamber of Commerce & Industries
Retrofit - LEED Platinum
Rosewood Abu Dhabi Hotel LEED Certified Existing Building
DESCRIPTION, PURPOSE, AND OBJECTIVE

The EmiratesGBC Technical Guidelines have been developed in conformance with the UAE’s sustainability agenda – a part of its National Agenda 2021 - and in conformance with local sustainable strategies such as the Dubai Integrated Energy Strategy (DIES) and Abu Dhabi Vision 2030.

The Guidelines provide an organized collection of economically viable methods that will equip existing building owners in the UAE with the necessary tools to achieve sustainable and comfortable buildings.
The Guideline’s main chapters are comprised of sub-sections which provide readers a choice of specific processes they can implement to improve their building’s performance, save money, and prevent further pollution of the environment.

The retrofit solutions provided enable immediate and long-term reductions and/or efficiency in energy and water use, improvements in indoor air quality, and effective waste management, with subsequent lowering of utility and labor costs for building owners.
# Content Overview

## Chapter Titles

<table>
<thead>
<tr>
<th>Energy</th>
<th>Water</th>
<th>Indoor Air Quality</th>
<th>Materials and Waste</th>
<th>Innovation and Management</th>
</tr>
</thead>
</table>
| • No Cost Measures  
  • Energy Auditing  
  • Recommissioning  
  • Preventive Maintenance  
  • Automation Systems  
  • Lighting Retrofit  
  • Lighting Controls  
  • Air Conditioning Systems  
  • Thermal Insulation  
  • Building Air Tightness  
  • Electrical Network Optimization  
  • Solar Hot Water  | • Water Management and Auditing  
  • Water Efficient Fixtures  
  • Graywater Systems  
  • Condensate Recovery  
  • Landscaping and Irrigation  
  • Water Quality (Legionella Risk)  | • Indoor Air Quality and Fresh Air Supply  
  • Energy Recovery Ventilation  
  • IAQ Testing  
  • Interior Materials and Chemicals (specific to O&M and repair materials)  
  • Demand Controlled Ventilation  
  • Outdoor Air Quality  | • Operational Waste Management  
  • Green Purchasing Policy  | • Tenant Education & Awareness  
  • FM Staff Training  
  • Safety – Hazardous Building Materials  |
The Emirates Green Building Council (EmiratesGBC) is a professional platform and membership-driven organization formed in 2006, with the goal of advancing green building principles that help protect the environment and foster sustainability in the United Arab Emirates.

- Corporate Members: 152
- Individual Members: 49
Thanks

Emirates Green Building Council

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