

Energy and Water Performance of

DUBAI HOTELS



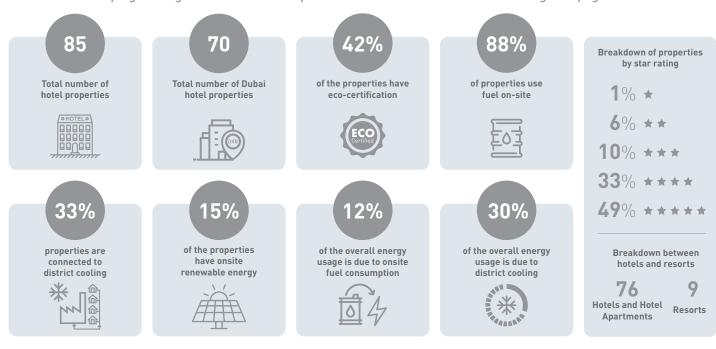


In partnership with



Overview

EmiratesGBC conducted the Hotels Benchmarking Project as part of Dubai's commitment to the Building Efficiency Accelerator (BEA) Initiative to establish energy and water benchmarks to support the retrofit market and drive policy makers in developing strategies. Read the full Report on the EmiratesGBC's benchmarking web page.



Key Findings - Hotel & Hotel Apartments





Median Hotel & Hotel Apartments
Performers



4 ENERGY

EUI $1 = 249 \text{ kWh/m}^2/\text{year}$

EUI 2 = 69 kWh/quest night/year

Worst Hotel & Hotel Apartments
Performers



4 ENERGY

EUI 1 < 171 kWh/m²/year EUI 2 < 23 kWh/guest night/year

♦ WATER

WUI 1 = 1,486 litres/m²/year WUI 2 = 363 litres/quest night/year

♦ ENERGY

EUI 1 > 414 kWh/m²/year EUI 2 > 168 kWh/guest night/year

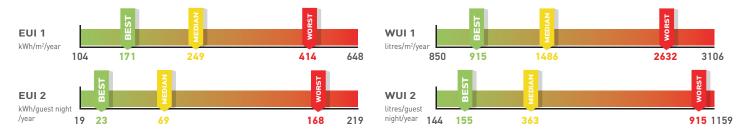
♦ WATER

WUI 1< 915 litres/m²/year WUI 2 < 155 litres/guest night/year

♦ WATER

WUI 1 > 2,632 litres/m²/year WUI 2 > 915 litres/guest night/year

Key Results



Key Findings - Resorts

Best Resorts Performers

Median Resorts Performers

Worst Resorts Performers







4 ENERGY

EUI 1 < 193 kWh/m²/year EUI 2 < 71 kWh/quest night/year

4 ENERGY

EUI 1 = $334 \text{ kWh/m}^2/\text{year}$ EUI 2 = 148 kWh/guest night/year

4 ENERGY

EUI 1 > 444 kWh/m²/year EUI 2 > 249 kWh/guest night/year

♦ WATER

WUI 1 < 1,093 litres/m²/year WUI 2 < 586 litres/guest night/year

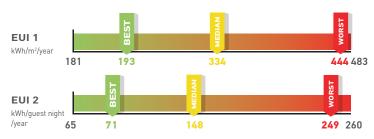
♦ WATER

WUI 1 = 1,676 litres/m²/year WUI 2 = 855 litres/guest night/year

♦ WATER

WUI 1 > 4,927 litres/m²/year WUI 2 > 997 litres/guest night/year

Key Results





Best vs Worst Performers

Overall, best performers consume

58% less energ

per area than worst performer

Best hotel performers consume

65% less water

per area than worst performer

Best resorts performers consume

78% less water

per area than worst performer

EUI 1: The Energy Use Intensity 1 is the total energy used by the property (i.e. the onsite electricity, fuel and district cooling) used divided by the gross conditioned floor area.

EUI 2: The Energy Use Intensity 2 s the total energy used by the

property divided by the annual guest night.
WUI 1: The Water Use Intensity 1 is the total water used by the property divided by the gross conditioned floor area.

WUI 2: The Water Use Intensity 2 is the total water used by the property divided by the annual guest night.

The $5^{\rm th}$ percentile and the $95^{\rm th}$ percentile values were used as a scale to define the best performers and worst performers, respectively.

The Building Efficiency Accelerator (BEA), is a public-private collaboration that turns global expertise into action to accelerate local government implementation of building efficiency policies and programs. The global initiative is led by World Resources Institute (WRI) and is one of the six assessment tools under the UN program Sustainable Energy for All which aims to double the global rate of improvement in energy efficiency.