

Energy and Water Performance of **DUBAI MALLS**

المجلس الأعلىء للطاقة Supreme Council of Energy

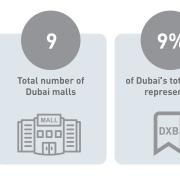


In partnership with

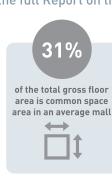


Overview

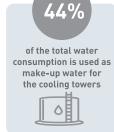
EmiratesGBC conducted the Malls Benchmarking Project as part of Dubai's commitment to the Building Efficiency Accelerator (BEA) Initiative to establish energy and water benchmarks to support the retrofit market and drive policy makers in developing strategies. Read the full Report on the EmiratesGBC's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















Key Findings



LOWEST CONSUMER

♦ ENERGY

EUI 1 = 378 kWh/m 2 /year EUI 2 = 1.84 kWh/footfall/year EUI $3 = 253 \text{ kWh/m}^2/\text{year}$

(A) WATER

WUI 1 = 658 litres/m²/year WUI 2 = 5.17 litres/footfall/year WUI 3 = 1,510 litres/m²/year



♦ ENERGY

EUI 1 = $462 \text{ kWh/m}^2/\text{year}$ EUI 2 = 3.81 kWh/footfall/year EUI $3 = 409 \text{ kWh/m}^2/\text{year}$

♦ WATER

WUI 1 = 1,260 litres/m²/year WUI 2 = 10.76 litres/footfall/year WUI 3 = 2,809 litres/m²/year



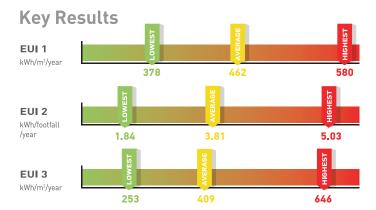
HIGHEST CONSUMER

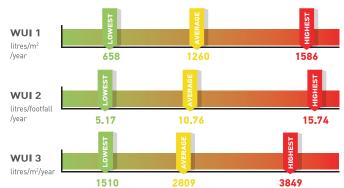
4 ENERGY

EUI $1 = 580 \text{ kWh/m}^2/\text{year}$ EUI 2 = 5.03 kWh/footfall/year EUI $3 = 646 \text{ kWh/m}^2/\text{year}$

♦ WATER

WUI 1 = 1,586 litres/m²/year WUI 2 = 15.74 litres/footfall/year WUI 3 = 3,849 litres/m²/year





Lowest vs Highest Consumers

The lowest consumer uses

% less energy per area than the highest consumer

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58% less wat per area than the highest consumer

- EUI 1: The Net Energy Use Intensity 1 is the total energy used by the property (including both landlord and tenant electricity and district cooling but excluding fuel) divided by the
- gross conditioned floor area. EUI 2: The Net Energy Use Intensity 2 is the total energy used by the property divided by the annual footfall.
- EUI 3: The Landlord Energy Use Intensity 3 is the common spaces electricity and cooling divided by the common spaces area
- WUI 1: The Water Use Intensity 1 is the total water used by the property (including tenants but excluding makeup water and treated sewage effluent) divided by the gross conditioned floor area.

 WUI 2: The Water Use Intensity 2 is the total water used in the common places the property divided by the annual footfall.

 WUI 3: The Common Services Water Use Intensity 3 is the water used by common spaces divided by common spaces area.

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.