The Burj Khalifa, Dubai — the world's tallest structure.

In a city of innovation, Hilton Garden Inn Dubai Mall of the Emirates leads with solutions from Schneider Electric.

Where expectations are sky high

Hilton wanted to meet a critical need in a city looking to further boost tourism: offer an affordable four-star, focused-service option in an area saturated with five-star offerings.

Before they could do that, however, Hilton had to answer some tough questions: How could they keep operations lean and efficient? To what extent could they control energy costs? Would they be able to meet tight development timelines and still ensure the facility met their sustainability standards?

And, most importantly, could they do all of this and still deliver an exceptional guest experience?

In partnership with Schneider Electric, Hilton answered all of these questions, overcame the challenges inherent in the region, and opened the largest Hilton Garden Inn outside the U.S.: Hilton Garden Inn Dubai Mall of the Emirates.

Goal

Greater energy and operational efficiency without sacrificing guest comfort.

Approach

Integrate the hotel's operating systems and leverage automation to achieve optimal efficiency and comfort.
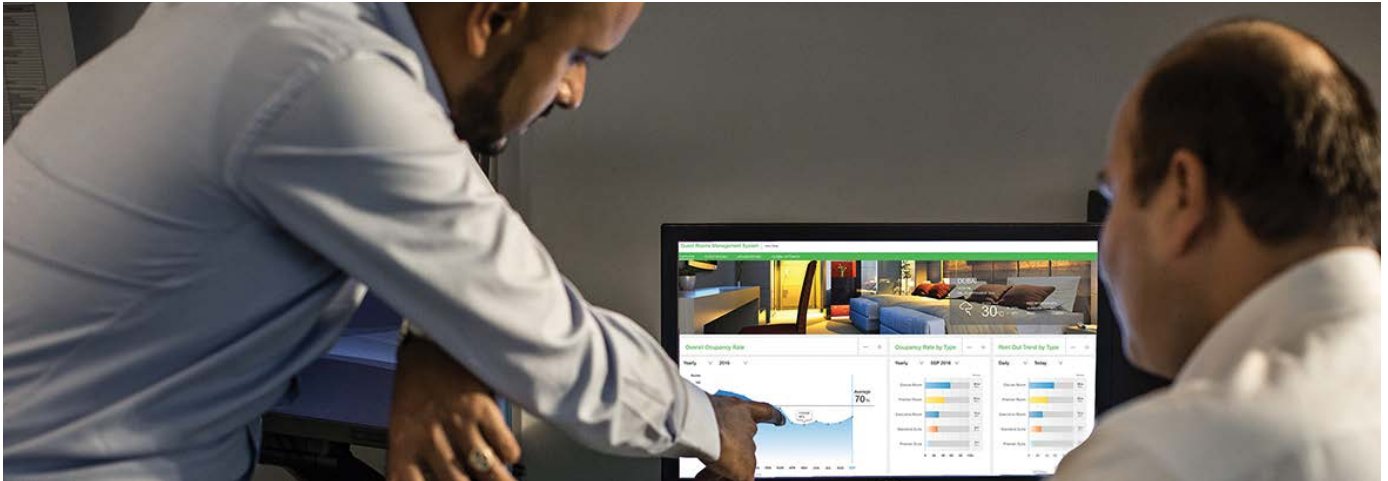
Story

The largest Hilton Garden Inn outside the U.S. is now one of Hilton's most efficient and sustainable hotels. By integrating the building, guest room, and property management systems, Hilton Garden Inn Dubai Mall of the Emirates was able to increase both operational efficiency and energy efficiency, while achieving guest satisfaction far above benchmark.

Results

- The hotel is LEED certified to the Gold level
- Integrated systems increase energy efficiency, operational efficiency, and guest control
- Occupancy-based energy management ensures guest comfort, convenience, and control while saving energy

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Going green in the desert

Located next to the Mall of the Emirates and its world-famous indoor ski slope, Hilton Garden Inn Dubai Mall of the Emirates was constructed on a tight timeline.

This fast-paced development included the added challenge of achieving certification in the LEED building program, the most widely used green building rating system in the world. Certification in LEED (short for "Leadership in Energy and Environmental Design") is overseen by the U.S. Green Building Council. It provides a framework that project teams can apply to create healthy, highly efficient, and cost-saving green buildings. LEED certification is a globally recognized symbol of sustainability achievement.

Once their objectives were set, Hilton chose the Schneider Electric EcoStruxure™ Building solution, which includes a building management system, EcoStruxure™ Building Operation, and a guest room management system, EcoStruxure™ Guest Room Expert. Integrating Schneider's building management (BMS) and guest room management systems (GRMS) with Hilton's property management system (PMS) on a single technology platform was crucial to Hilton achieving its goals. They wanted to do their part in combating climate change, and to have a facility that was both operationally and energy efficient, all while maintaining their high standard for guest satisfaction.

The hotel was awarded LEED Gold Certification and actually opened ahead of schedule.

Achieving efficiency through integration

Integration of these three systems (BMS, GRMS, and PMS) is unique, with only a handful of hotels in the world currently employing it so far. And it has significant advantages. Because of this integration, every phase of a guest's experience is recognized by the system. For example, when a guest checks in to Hilton Garden Inn Dubai Mall of the Emirates, the PMS communicates this to the BMS, which then, through the GRMS, adjusts the temperature from its "unoccupied" set point to its "stand-by" set point. A motion sensor on the SE8000 Room Controller then detects when the guest enters the room and the GRMS again adjusts the temperature to an "occupied" set point.

When the guest leaves the room, the system adjusts again to save energy. When the guest checks out, the room temperature goes into deep setback to further enhance energy savings.

92% of LEED-certified new construction projects are improving energy performance by at least 10.5%, according to an analysis of 7,100 projects.

EcoStruxure™ Building
Innovation At Every Level

EcoStruxure Building Solution

- Combines proven hardware and software innovation to unlock value
- Monitors, measures, and optimizes operational and energy performance
- Provides insight across all critical systems
- Enables edge control of EcoStruxure-ready connected devices
- Offers predictive services and proactive maintenance plans

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The end result is an entire, integrated energy management system preparing for and accommodating guests with the proper temperatures in their room at all times, while lowering energy costs for the hotel. And the seemingly minor temperature changes of one or two degrees can add up to thousands of dollars in energy savings for the hotel throughout the year.

At Hilton Garden Inn Dubai Mall of the Emirates, the integrated systems also control hallway lighting, shutting some lights off to save energy when the hallway is unoccupied. Motion sensors turn the lights on immediately when guests or hotel staff are detected.

Keeping cool in the Middle East

For guests, the SE8000 Room Controller makes adjustments easy with an intuitive touchscreen interface. The controller can display welcome messages from the hotel, be used to promote events or special offers, and can be set to different languages. The screen also dims at night so guests can sleep without distraction.

The benefits of system integration make the engineering department's job easier as well. From one desktop, the entire system can be seen and managed. Alerts notify the staff when there's an issue with a system or connected device. And any potential concerns can be managed remotely before guests even notice.

The staff has the ability to monitor conditions in every area of the property, allowing them to be in full control of what is happening throughout the facility. EcoStruxure™ Building Operation can also be configured for remote monitoring from laptop computers, smartphones, or tablets.

In a region bathed in sun year round, Hilton Garden Inn Dubai Mall of the Emirates makes use of solar energy. Schneider Electric's BMS gives engineers the capabilities they need to adjust parameters for the hotel's two heating sources — solar and gas — and to use both efficiently, heating their water supply while controlling energy costs and delivering a superior guest experience.

"Schneider's vision is to create innovative technology, and our vision is to create exceptional guest experiences. This is exactly where the two come together. Schneider's vision enables us to create exceptional guest experiences."

— Oliver Kesseler,
General Manager,
Hilton Garden Inn
Dubai Mall of
the Emirates

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"For our new hotels, we are really looking forward to having the same kind of integration … because we see a lot of benefits."

— Vinesh Hurrychurn, Director of Engineering Operations, Hilton Middle East, Africa, and Turkey

Innovating for the future

With an eye toward constant improvement and innovation, Hilton chose Schneider Electric solutions not just for the immediate benefits, but also the future possibilities. Because the BMS, GRMS, and PMS are integrated and able to share data, the combined solution effectively grows "smarter." This evolution will mean greater efficiency and energy savings for Hilton Garden Inn Dubai Mall of the Emirates, and consistent comfort for their guests. In fact, the hotel plans to pursue additional certifications under the LEED program.

As Schneider and Hilton continue their partnership, insights gleaned from the integrated systems at Hilton Garden Inn Dubai Mall of the Emirates will prove valuable to the companies' future projects, bringing increased efficiency to more hotels and greater satisfaction to more Hilton guests all over the world.

EcoStruxure Guest Room Expert

- Monitor and control all guest rooms

- Manage individual rooms, or the entire network of rooms

- Monitor and manage energy usage

- Automated energy management can achieve energy savings of 25% – 44% through occupancy detection, set point configuration, and temperature standby

- Operators can identify rooms that are out of temperature range and troubleshoot, avoiding energy waste

- View and manage room conditions and equipment such as occupancy, temperature, humidity, HVAC, curtains, DND/MUR, door, and window status

- Troubleshoot problems remotely and perform proactive maintenance

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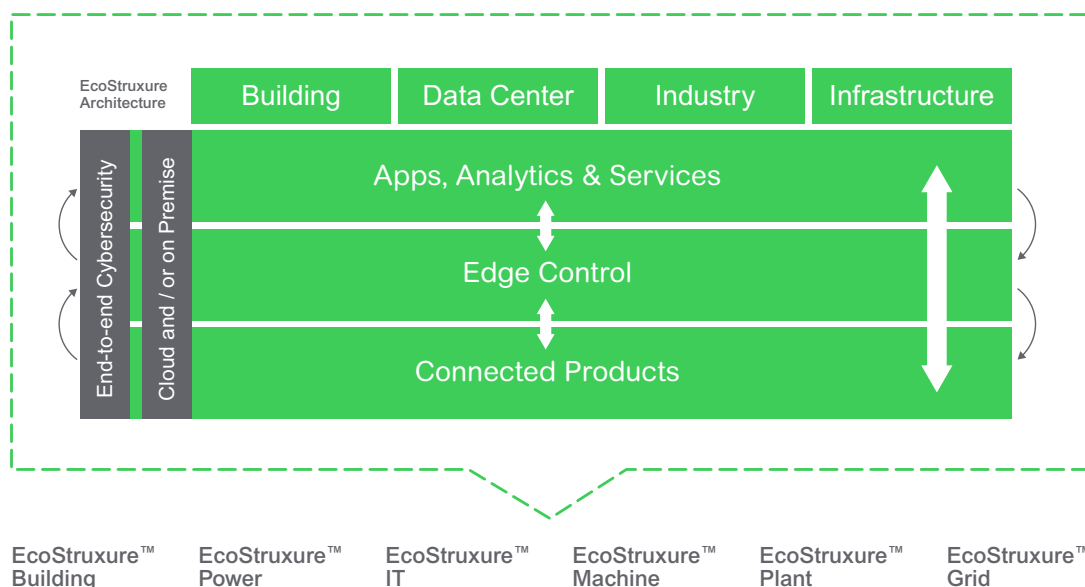
Eco Struxure™
Innovation At Every Level

IoT-enabled solutions that drive operational and energy efficiency

EcoStruxure is Schneider Electric's open, interoperable, IoT-enabled system architecture and platform.

EcoStruxure delivers enhanced value around safety, reliability, efficiency, sustainability, and connectivity for our customers.

EcoStruxure leverages advancements in IoT, mobility, sensing, cloud, analytics, and cybersecurity to deliver Innovation at Every Level including Connected Products, Edge Control, and Apps, Analytics & Services. EcoStruxure™ has been deployed in 480,000+ sites, with the support of 20,000+ system integrators and developers, connecting over 1.6 million assets under management through 40+ digital services.

One EcoStruxure architecture, serving 4 End Markets with 6 Domains of Expertise

EcoStruxure Architecture	Building	Data Center	Industry	Infrastructure

End-to-end Cybersecurity | Cloud and / or on Premise

Apps, Analytics & Services

Edge Control

Connected Products

EcoStruxure™ Building | EcoStruxure™ Power | EcoStruxure™ IT | EcoStruxure™ Machine | EcoStruxure™ Plant | EcoStruxure™ Grid

Connected Products

The Internet of Things starts with the best things. Our IoT-enabled best-in-class connected products include breakers, drives, UPSs, relays, sensors, and more. Devices with embedded intelligence drive better decision-making throughout operations.

Edge Control

Mission-critical scenarios can be unpredictable, so control of devices at the edge of the IoT network is a must. This essential capability provides real-time solutions that enable local control at the edge, protecting safety and uptime.

Apps, Analytics & Services

Interoperability is imperative to supporting the diverse hardware and systems in building, data center, industry, and grid environments. EcoStruxure enables a breadth of agnostic Applications, Analytics, & Services for seamless enterprise integration.

Find out more about EcoStruxure™

schneider-electric.com/ecostruxure

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Learn More

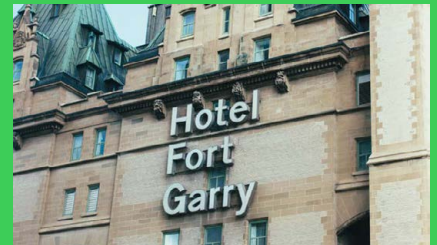Discover EcoStruxure™ for Hotels

Discover EcoStruxure™ Buildings

Learn more about our Hotel Building Management

Contact us to start your journey

Efficiency in the desert with Hilton Garden Inn Dubai Mall of the Emirates

Innovation transforms landmark Fort Garry Hotel

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