Hyatt Regency Sanctuary Cove Keeps an Eye on Power Savings

All hotels are wanting a greener, cleaner and more sustainable industry which is what is desirable, the fact remains that change comes at a cost. But when green solutions offer very real savings for industry participants, everyone's a winner.

That's exactly what Hyatt Regency Sanctuary Cove found when it implemented Smart Hotel Solutions' Energy Eye system.

According to the property's Director of Engineering, Ian Crookston, the hotel was keen to find a power saving solution that was not only effective, but was cheap, quick and practical to install.

"The Energy Eye system was chosen because the Energy Eye components communicate wirelessly. This allows the installation to be located where wiring would be very difficult or otherwise visible," he says. "It also makes installation much faster and less expensive. On average a room only took forty five minutes to complete fully" and the install was done while the hotel was operating normally.

Doron Danon is Smart Hotel Solutions' Managing Director. specialises in finding and implementing best fit technologies and systems that maximise energy savings for hotels. Energy Eye is one such solution.

He's been supplying world class hotel room innovations for the past twenty years,. Two years ago, with all the talk about rising energy costs, strict green regulation and dwindling resources, he saw an opportunity. His business premise was simple.

"I identified enormous wastage in hotel rooms. In light of rising energy costs, there was a chance to help hotels save a large amount of money."

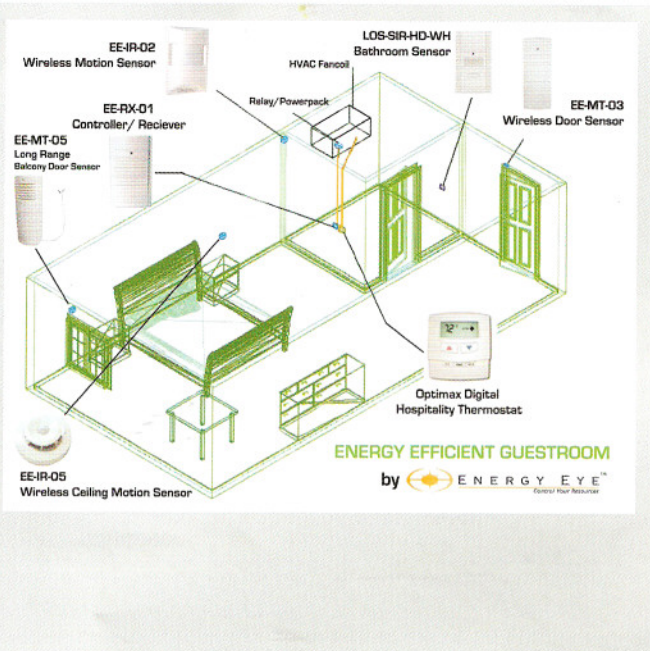
The Hyatt Regency Sanctuary Cove was a case in point.

"Simply put, Hyatt needed to maximise the in-room energy savings without affecting of compromising guest experience and service," he says.

Hyatt Regency Sanctuary Cove's problem was Danon's bread and butter.

His solution was both clever and straight forward. He set up a sensor operated system to help reduce electricity costs due to HVAC and lights being left on when a room was unoccupied.

The Energy Eye System utilises a wireless door sensor and wireless PIR motion detection sensor to determine whether someone is in a room at any given time. The PIR sensor only has to detect motion once to put the room into an occupied



room mode and it will remain in this mode indefinitely and not interfere with HVAC operation while guests are in the room until a door is opened. And if there's no motion detected within a preset time frame, the system won't start.

Danon explains further.

"The Energy Eye achieves doesn't interfere with guest HVAC or light operation once the guest is in the room. This is achieved due to the motion sensor only having to detect the motion once to put the room into occupied mode during timer operation. Also when the room is vacant, Energy Eye will refresh the room air automatically every two hours thus not allowing humidity or mould build ups in the room.

Danon says the beauty of the system is its relative simplicity. And that extends to installation as well as usage.

"Due to the fact that Energy Eye is a wireless system, typical installation times are about thirty to forty-five minutes per room. Due to the wireless technology and quick install times, installation costs are reduced making it very cost effective and practical. The Energy Eye system can be installed at any time as a retrofit and does not have to be done during refurbishment program. It's really a very neat solution if you want to reduce energy use, save money or meet environmental regulations."

But Danon would say that. What about the end user?

Over to Ian Crookston again...

"After trials over a month in two rooms - one with and one without energy eye - results indicated that with both rooms occupied the same total number of nights, the air-conditioning chilled water valve was open only one sixth the time compared to the room where the system wasn't fitted. The longest length of time on any one day the room was physically occupied was thirteen hours, the general average being ten. Before, our air conditioning units would run twenty four hours a day. So the system has to provide a reduction in load on the main chillers.

Crookston says he was also impressed with the versatility and adaptability of the system.

"Because the system monitors whether a room is occupied we also incorporated two other functions. Firstly the room's lights switch off if the room is not occupied for more than fifteen minutes. The second adaptation was an LED light mounted above the entrance door which illuminates when a room is occupied. This allows hotel staff to know that there is a guest in the room and prevents the need for staff to ring a door bell to see if the room is empty and disturb the guest. This particularly assists housekeeping when cleaning rooms and engineering when we want to act on maintenance requests."

As for actual bottom line savings, Crookston is confident the proof will be in the pudding. In fact, he says quantifiable savings have already been noted.

"By the end of April it will be the first full month where all guest rooms will have been fitted with Energy Eye and reduction of kilowatts per hour on the main chillers power can be totally assessed then. But an indication of around a $3,000 reduction was recorded in terms of the value of power consumed by the chillers in March despite there being a greater number of cooling days similar room nights than we recorded in the same month last year." ■