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Northern California Hilton Aims To Be Sustainability Leader



Concord, California – Sustainability can be a hard sell for hotels. Yes, some guests opt to recycle bottles, or ask housekeeping not to replace bed linens or bathroom towels each morning, if given the choice. But others, expecting to indulge, leave their green habits at home.

Confronted with this reality, hotels must ensure that energy and water efficiency is routine, without compromising the pampering and convenience guests expect. I recently toured one property, the [Hilton Concord](#), located in Northern California, where the management realizes that sustainability and guests' expectations are not mutually exclusive.

My guide at the Hilton Concord was the lead consultant for the hotel's ambitious sustainability overhaul, Charles A. Smith, CEO, [Hotel Sustainability Solutions, Inc.](#) Smith's handiwork is visible, delivering results, on every floor of the 30-year-old, 329-room hotel. The aim is to make the Hilton Concord the sustainability flagship property of [Interstate Hotels & Resorts](#), which operates the hotel under the Hilton flag. Interstate's plan, Smith said, was to select one of its hotels to test sustainability measures that could be deployed at the 400 properties it owns or manages around the world.

The Hilton Concord was selected because it's a wholly owned Interstate property and local water district and electric utility rebates are available to defray the cost of improvements. The hotel was already slated to receive a \$10-million facelift. The planned refurbishment, said Smith, was an "excellent opportunity to integrate sustainability into the whole operation."

Initiatives implemented

Smith is charged with shepherding an impressive package of energy-, water-, and waste-slashing measures to completion, with about two-dozen implemented to date and many more planned. The expected return on investment for the upgrades, Smith told me, is 1.2 years or less. For instance, the hotel received \$47,000 in rebates from the [Contra Costa Water District](#) to offset the cost to install low-flow toilets expected to save 900,000 gallons annually.

Here are some improvements that stand out among those already installed at the Hilton Concord:

LEDs indoors: Nearly all indoor lighting fixtures – in the guest rooms, lobby, business center, public rest rooms, elevators, and ballroom – have been outfitted with dimmable LEDs (light-emitting diodes). Lamps in guest rooms and public corridors use 12- or 17-watt Philips LED bulbs equivalent to 60- or 75-watt incandescent bulbs. Where LEDs have not been installed, existing bulbs have been replaced with more energy-efficient ones. Soffit fixtures in the public corridors and lobby, for instance, now hold 25-watt T8 fluorescent tube bulbs instead of 34-watt models.

Window film: Summer high temperatures in Concord occasionally top 100 degrees Fahrenheit. The single-pane windows at the Hilton Concord were burdening the climate-control system. Smith told me that he brought together a window film vendor, Window Innovations, and energy-management system provider, Pelican Wireless Systems, to collaborate on a solution. Window film was added to the west-facing window walls in the atrium, fitness center, and executive offices, with dramatic results. Light passage was reduced from 67% to 16%, and temperatures in the rooms dropped by an average of 14 degrees at the warmest times of day. With less heat entering the building, HVAC temperature settings were adjusted upward by 8 to 10 degrees. Additional window film applications are planned for west- and east-facing guest rooms.

Application of window film has dramatically reduced heat gain from west-facing window walls at the Hilton Concord. Here is a before-and-after illustration of window film applied to a window in the lobby corridor. Credit: Charles A. Smith

Smart controls: The wireless energy-management system also controls temperature settings in guest rooms. At check-in, activation of the guest's key card simultaneously triggers activation of the guest room's "comfort" temperature setting for occupancy. At check-out, the room reverts to an "economy" vacancy setting. The temperature settings can be controlled remotely for all public spaces and individual guest rooms.

Pillow-Vac: How often have you thought about the sustainability of pillows? I never had, until I toured the Hilton Concord. Housekeeping uses a system made by South Carolina-based Harris Pillow Supply called the Pillow-Vac that refurbishes used pillows. Before, the hotel purchased new pillows (at \$18.00 to \$24.50 apiece) as needed to replace the 2,648 pillows used hotel-wide. Used pillows were land-filled every couple of years; no longer.

Smith explained the process. Housekeeping slits open the end of an old pillow, emptying the down filling into a tumble chamber. Inside, an ozone-emitting germicidal light kills bacteria, sanitizing the feathers, while rotating brushes fluff the filling and removes dust. Eighty-seven percent of the original filling is re-used, said Smith, augmented by new filling and blown into

new cotton ticking. The procedure requires three to four minutes per pillow. The average cost for the hotel: \$8.56. Smith said the Hilton Concord's Pillow-Vac system paid for itself in two months.

I still have not mentioned the [BioHiTech waste digester](#) that converts 6.5 tons of food waste per month to water sent to a filtration plant for re-use. The system has reduced waste haul outs from two to three monthly to one every three weeks. Nor did I describe the Electrolux Laundry System that spins linens and towels with such force that drying time has been reduced from 20-25 minutes to an average of 5 minutes. In some cases, linens skip the dryer entirely and go directly to the ironing board.

Initiatives planned

Here are some initiatives that stand out among those planned for the fourth quarter of 2012 and early 2013:

LEDs outdoors, micro-turbine, motors and motion sensors, and electric vehicle charging.

Why did Interstate decide to dive into sustainability at the Hilton Concord? Charles Smith told me the overhaul has three objectives: position the property to achieve sustainability leadership in the marketplace; improve the competitiveness of, and add value to, the property; and reduce operating costs. On that last measure, Smith did not want to give me a hard figure, but he did say that efficiency savings should easily reach six figures annually.

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