



The Grove has to maintain its luxury feel

The Grove hotel in Hertfordshire has slashed its energy consumption with an LED retrofit project, without changing its look and feel.

Lucy Fisher reports

As good AS EVER

The Grove, a luxury hotel, spa and golf resort in Hertfordshire, has undertaken an LED retrofit designed to deliver substantial energy savings without compromising on quality or aesthetics.

Robert Kenworthy, facilities director at the hotel, as well as others in and around London (including the Runnymede-on-Thames, the Athenaeum and 23 Greengarden House), points out that, given that the Grove prides itself on its high-end interior and design, it was critical that the new LED solution did not compromise the existing look and feel in any way.

Kenworthy's role is to look after development, refurbishment and maintenance programmes. He is also responsible for all of the environmental and health and safety initiatives. He emphasises how important it was that the lights were able to render to a precise specification.

Describing the Grove as an 'old stately home' – but

one that also has a new extension with 200 rooms – Kenworthy says the lighting retrofit was designed to target those areas that would generate the largest energy savings first.

The same only better

Bedroom lighting in the extension was also tackled as a priority because it was possible to specify a change and roll it out across all 200 rooms more easily than in other areas of the hotel. 'If we go into the mansion, every room is different, with quirky fittings,' he says.

The aim was not to re-design the lighting scheme to change the overall effect. 'We just wanted to replicate the light we had chosen originally with a more cost-effective light source. When the extension was built 15 years ago, lighting was already a really important aspect of the hotel rooms and, as we were starting from scratch then, we went through a whole host of lighting models to make sure the light levels were

Lights were upgraded in phases to minimise disruption



Facilities director Robert Kenworthy was keen not to compromise the hotel's ambience

right,' says Kenworthy. He adds that, when it comes to lighting projects, 'if you're not careful you can end up with a real hotchpotch of tone'.

New for old

The retrofit involved working on 'six or seven' model rooms that were gradually tweaked and refined until a point was reached that, 'if you walked into an old room with the original light, you wouldn't notice the difference'. The new fittings in the ceiling are near identical matches to the old ones, and the light level in the rooms is the same, says Kenworthy, who adds that he was keen to find a lighting supplier that could also install the new lighting scheme.

For that reason, he chose to work with SaveMoneyCutCarbon (SMCC), which also provides advice about reducing costs across other major areas of energy consumption – water, heating, ventilation and boilers – as well as lighting.

'We were going through a host of different suppliers and one of the benefits that SMCC gave us was that they would supply and install,' he says. 'We didn't

just need to buy a product. We needed people who understood what we were trying to do and could offer solutions and actually work with the install of the solutions as well.'

Kenworthy adds that a problem with previous projects had been the need to 'go back and forth' between supplier and installer with potential issues.

A phased approach was taken so that the work led to minimal disruption for both guests and staff. 'We took out small tranches of rooms that allowed the guys to roll through 12 or 14 rooms as one block and also then cover to the corridor outside of these rooms so that the guests who were staying were not inconvenienced by what was going on,' says Kenworthy. 'The back-of-house area is less challenging. But again the kitchens are in use all day every day, so the only option there was to schedule that to be installed at night.'

In total, more than 3,000 bespoke LED downlights were installed alongside LED tubes, LED strip lighting and LED panels. Emergency LED lighting was also supplied, by manufacturer EcoLED, in the 200 ►

More than 200 rooms at The Grove have gone LED



bedrooms, guest corridors, and back-of-house over the five-week schedule.

Big savings

SMCC claims that energy consumption has been cut by 71.6 per cent in bedrooms and corridors, with back-of-house energy use cut by nearly 60 per cent. Maintenance costs have also been reduced as the new LED lighting lasts 50,000 hours versus the 5000 hours of the old style bulbs, it says, while carbon emissions have seen a reduction of 84 per cent in the guest rooms alone.

SMCC predicts energy-savings paybacks of £40,000 a year and is working with the hotel management on wider energy and water saving initiatives, including further LED lighting opportunities. It claims that lighting quality, which was critical to this project, has been matched or improved in all areas.

Kenworthy points out that the project was something The Grove's management had been considering for a couple of years, reiterating: 'In the most part we were generally happy with the lighting levels that we had in the areas that we were looking at. We weren't necessarily trying to re-style the lighting. What we were trying to do was create the same effect but with a fitting that used less energy.'

Another area that was 'really key', he adds, were the guest corridors, which had previously been lit by fluorescent tubes: 'There were some issues in terms of them failing and inconsistent light, gaps and shadows. Our solution to that was to replace the fluorescents with an LED strip.'



And, while he says that the primary benefit of the new scheme is its reduced electricity usage, he also describes the longevity of the new lamps as 'incomparable' to the traditional fittings. 'We had somebody who was employed almost for an entire day every day walking around the property and looking for bulbs that had failed,' he says.

The work won't stop here. The next goal is to tackle public areas and Kenworthy has been looking at achieving greater energy efficiencies in the form of hardware that controls both the lighting and the air conditioning. 'It's driven by a sensor that switches off the air conditioning and the lights if there is nobody in the room,' he explains. 'We can do that because the rooms in the ten-year-old building are properly insulated and won't suffer from significant heat gain or loss. It wouldn't be possible in the old part of the building where we can't replace the single-glazed windows because it's listed.'

'Some areas are really tricky because they have odd fittings or have been built with the

aesthetics in mind. In our conference rooms we have chandeliers with 200 individual shaded lights,' he adds. 'It's not like the old days when you could swap an Osram 60W lamp for a Philips one and only had to consider whether to get a clear or a frosted one.'

But the 'real' challenge, he says, is feeling confident that you've chosen the right solution. 'There are so many solutions on the market and so many people telling you that theirs is the best one. You don't know if you've picked a bad one until quite late in the process.' Fortunately, that doesn't seem to have been the case with this particular project.

ENERGY DASHBOARD

72%
ENERGY
SAVINGS IN
BEDROOMS

£40,000
ANNUAL
SAVINGS