TECHNICAL GUIDE

PROPERTY MAINTENANCE FOR HOTELIERS

Operating a compliant and energy-efficient hotel business is not easy. Rigorous standards and statutory responsibilities govern food safety, hygiene, health and safety of guests and employees, and of course the safety of your property.

To help hoteliers understand how best practice property maintenance can save you money, read on (and yes, you did read that last sentence correctly).

Reputable and experienced maintenance providers can help your business reduce costs and improve energy efficiency, as well as maintaining the safety and operational reliability of your mechanical and electrical systems.

phs Compliance's guidance is based on our extensive experience supporting UK hoteliers and pub companies. James O'Hare, Head of M&E Services at phs Compliance, looks at maintenance & energy efficiency issues affecting different areas of your hotel.

SAVINGS FROM GREATER ENERGY EFFICIENCY GO STRAIGHT TO YOUR BOTTOM LINE AND REVENUE PER AVAILABLE ROOM.

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HOTEL WIDE

Your greatest maintenance responsibility and no doubt the greater part of your annual energy bill, lies with your systems for heating and hot water, closely followed by lighting. One estimate suggests 60% of a hotel's carbon footprint is due to energy usage, and around 70% of typical hotel energy usage is driven by heating, hot water and air conditioning*.

Effective annual maintenance and servicing of gas or other fuel-fired boilers, flues and pipework also represents immediate cost-efficiency by avoiding breakdown, downtime and shortened equipment lifecycles.

When gas boilers are due for replacement, hoteliers should be aware of cost and energy-efficient solutions.

If a hotelier chooses to replace old for new gas-fired equipment, a cascade system ensures that heating load is split into manageable, energy efficient configurations. For example, a 300kw boiler can be replaced by three 100kw boilers with capacity to ramp up and down. Instead of firing up one large 300kW boiler to achieve a level of required heating, costs can be saved by firing just one or more smaller 100kw boilers to achieve the same level of heating demanded.

Combination boilers are also more cost-effective at producing hot water on-demand. A simple plate heat exchanger generates hot water from your mains supply almost instantaneously, whilst a buffer vessel can store a limited amount of hot water for use at peak demand. Heating systems also benefit from smart compensating controls which are more efficient and effective than timeclock systems.

Other cost-effective and energy-efficient heating options include swapping gas or oil-fired equipment for air conditioning systems that heat, cool and ventilate.

Leading manufacturers such as Mitsubishi Electric provide highly energy-efficient air conditioning systems based on heat pumps. Not only are significant energy-efficiency savings available with these technologies, carbon reduction and sustainability concerns are augmented by heat pump technology which is essentially renewable energy-based. Structured finance schemes are available from leading manufacturers too. Whole-life costs can be assessed against payback calculations, and repayments structured in line with monthly cost savings.

Regular maintenance of fans, filters and heat exchangers within air conditioning units can help to maintain energy efficiency by up to 40%. Qualified experienced air conditioning engineers can advise too on simple low-cost efficiency gains by looking at the potential for better natural ventilation, at thermal insulation and air leakage issues, and fitting time-delay or motion controls for heating and cooling.

Another relatively 'easy win' for hoteliers lies in commissioning an energy assessment of your air conditioning system, known as TM44. TM44 assessments should be carried out every five years by law, but the benefit of investing in this assessment means that every aspect of your system will be independently reviewed and recommendations made in terms of maintenance to improve system performance.

Manufacturers of heating, ventilation and air-conditioning (HVAC) systems are well 'ahead of the curve' in terms of developing not just highly energy-efficient systems but controls and sensors for energy management too.

These technologies can be retro-fitted to provide on-demand time-efficient solutions.

Lighting may not necessarily represent your largest area of energy spend, but there are inexpensive solutions through which your business can reduce energy and cost. Light-emitting diode (LED) technology is now highly sophisticated and inexpensive, as are motion-activated sensors & controls. In just one LED lighting replacement project for a multi-storey car-park maintenance project alone, phs Compliance helped our client immediately save more than 74% in kW energy usage.

* Hotel News Now, 22 April 2015, http://hotelnewsnow.com/Articles/25821/How-to-reduce-energy-consumption-in-hotels

LICENSED & PUBLIC AREAS, GUEST ROOMS

Lobbies, lounges, cafes, bars and other front-of-house areas are invariably 'statement' spaces that are central to your brand reputation and to guest experience and comfort. These areas can benefit in terms of energy efficiency and cost savings without compromising on aesthetics.

Latest-generation LED lighting provide high-end creative solutions that add to the guest experience, reduce your energy bills and, due to long life-cycles and warranties reduce maintenance spend. LED lighting does not require the level of maintenance as standard incandescent lighting.

Some emergency lighting systems now available on the market are in fact self-testing, thereby almost entirely removing maintenance labour cost.

Not only can you create appealing aesthetics and mood with LED lighting, you'll save between 25-80% of typical incandescent lighting running costs. For larger properties requiring extensive LED replacement programmes, reputable building services firms can provide pay-back calculations, enabling you to make capital investment decisions with full knowledge of cost-savings and pay-back periods.

Don't forget too that as a UK business you can access the Enhanced Capital Allowance to benefit from tax breaks when you install energy-efficient equipment, and you can access funding schemes such as the Carbon Trust's Green Business Fund to support energy-efficiency investment.

Catering plant

For the hotelier, catering and kitchen ventilation is one of the most business-critical capabilities of all. Statutory compliance and regular maintenance services must protect your valuable catering and equipment assets, as well as avoiding downtime and disruption to trading.

Carbon Trust data suggests the UK's catering industry annually consumes more than 20.6 million kW largely for cooking, chilling, space heating and refrigeration. Whilst best practice maintenance can go a long way to ensure your kitchen equipment is working optimally and that deep clean procedures regularly remove all grease, deposits and debris, new energy-efficient appliances, products & technologies can also make a significant contribution. Controls, sensors, and heat recovery technology for cookers or dishwashers are widely available and can be easily adopted.

The physical location of many catering appliances can have significant impact too – refrigeration and chilling equipment should ideally be located well away from ovens or grills. Reputable maintenance providers can help identify improvement to siting or ventilation of appliances with a follow-on impact for improved energy efficiency.

Leisure facilities

Heated swimming pools and spa areas are typically energy-intensive spaces, and any energy efficiency investments need to be guided by clear and persuasive payback calculations.

Combined heat and power systems are increasingly found across a range of commercial properties, and other energy-efficient solutions including ventilation and pool water heat recovery systems are also relevant.

Competent and experienced building services engineers can advise you on the complexity, cost savings and payback forecasts for these and other available solutions relating to heating, lighting and ventilation in pool and spa areas. Independent advice is often backed with supply chain expertise and manufacturer innovation, so you should be guided by reliable impartial expertise as a starting point.

AND FINALLY…

Planned property maintenance is fundamentally driven by leading national standards referred to as SFG20*.

Amongst other important considerations, these standards exist to make sure that building assets such as equipment, appliances and installations are neither over- or under-maintained.

Providers working to SFG20 standards are best-placed to ensure your operating spend remains within forecast, that your environment is compliant with health & safety, and that your expensive capital assets are correctly maintained for a long effective life.

Lots of independent guidance is available from reputable organisations such as the Carbon Trust and the Chartered Institution of Building Services Engineers (CIBSE). Carbon Trust guidance papers on energy efficient lighting or heating specifically for hoteliers can be downloaded for free**.

Thanks for downloading phs Compliance's guidance document. We hope you find it helpful and if it prompts you to think about the quality of your property management supply chain and the efficiency of your building assets, all the better.

If you think your business can benefit from cost-efficient planned maintenance or improvements in your energy efficiency, get in touch.

CHALLENGE US TO DRIVE VALUE INTO YOUR PROPERTY MANAGEMENT STRATEGY.

* https://www.sfg20.co.uk/
** https://www.carbontrust.com/resources/guides/sector-based-advice/hotels-and-the-hospitality-industry/

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