



# **HOTEL WATER MANAGEMENT & ENERGY EFFICIENCY**

**Miele**

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## Introduction

Saving money, keeping your guests happy and doing your bit for the planet sounds good doesn't it? Well, this is all possible when you start making changes to your hotel's water management and energy efficiency processes.

Have a quick scan through the customer hotel reviews on TripAdvisor and you'll notice phrases like 'energy efficient' are beginning to crop up more often. This is because consumers are more environmentally conscious than ever before, and they look for a similar focus from the companies with whom they spend their money.

But before you start worrying that environmentally-conscious changes may upset your excellent customer experience, be aware that even small changes to your operation can produce great results.

And, as an added bonus, you'll also be able to reduce your energy bills and save money. **"Water accounts for 10% of utility bills in many hotels and depending on how water efficient the organisation is, it's possible to reduce the amount of water consumed per guest per night by up to 50%"** - [www.greenhotelier.org](http://www.greenhotelier.org)

So read on to find out how changes to your water and energy management systems could help improve your customer experience... and your bottom line.

In some cases the water consumed per guest can be reduced by up to

**50%**



# Water usage and management

If you're looking to improve your hotel's water management and reduce your bills, then there's only one place to start... guest rooms.

Make sure you provide shower facilities and encourage your guests to use them because a shower only uses 35 litres of water whereas the average bath uses 80 litres. And, by installing eco-friendly shower heads, you could potentially reduce water usage by 75% compared to 'older style' showers.

Remember, that by reducing water usage, you also reduce the energy needed to heat it; which means even more savings.

In bathrooms, also consider installing percussion taps or spray taps. Percussion taps reduce water usage by turning themselves off after a certain amount of time, which means they won't be left needlessly running. Spray taps minimise the amount of water used and will actually only use approximately 25% of the water of normal taps. Just think how much water and money you could save by installing taps like these in all of your guest rooms.

A key consideration when reviewing your hotel's water management is dripping taps. A dripping tap at home may not be an urgent issue, but in a building with multiple rooms, multiple bathrooms and multiple taps, there is a potential for lots of wasted water (and money). To combat this, make sure someone (such as a room attendant or handyman) checks the taps regularly, for instance after every guest departure.

When it comes to toilets, there is a great potential to save water here too. Modern eco-friendly toilets provide a dual-flush system that can cut water consumption by more than 50%. If you need to retain 'older style' toilets (for example, for decor reasons), there are products which can be retro-fitted to help reduce the amount of water used in each flush.

Out of the total amount of water used in any hotel, statistics show that more than 41% of water is used for regular domestic use in restrooms, guest rooms, toilets, and urinals.  
- [www.ecogreenhotel.com](http://www.ecogreenhotel.com)

# The Water Technology List

Developed by Defra and the Inland Revenue, the Water Technology List promotes products and technologies that encourage sustainable water use. It also rewards businesses for investing in such technology through the Enhanced Capital Allowance (ECA) scheme.

The ECA scheme allows UK businesses to write off the whole cost of the equipment against the taxable profits generated during the year of purchase. The thinking behind the scheme is that it can provide organisations with a cash flow boost and incentivise investment in sustainable water products.

Loss-making companies can realise the tax benefit of their investment in WTL qualifying technologies with ECA first-year tax credits by surrendering losses attributable to ECAs in return for a cash payment from the Government.

If you'd like your business to use less water and therefore reduce your water bills (and who doesn't want that?), be sure to look for products which have been accepted onto the Water Technology List.



Look out for products which have been accepted onto the Water Technology List to qualify your business for the ECA scheme.  
- Search for ECA at [www.hmrc.gov.uk](http://www.hmrc.gov.uk)

# Electricals

By using less energy you are reducing the global resources needed to produce it, and in turn reducing the carbon emissions released into the atmosphere which contribute to global warming. So, how can you ensure you are using the least amount of energy possible? Start by reviewing your electrical appliances.

Think of the number of electrical appliances you have in your hotel and how much energy and money you could be wasting if these are not operating in an energy efficient way. To ensure your appliances are functioning as efficiently as possible, always look to purchase 'A Rated' products. These appliances will use the least amount of electricity possible therefore acting as less of a drain on the environment, and your pocket.

In addition to the A Rating, also look for appliances (such as washing machines and tumble dryers) that have economical settings or programmes as these will further reduce your energy consumption.

It should always go without saying, but make sure kitchen appliances are always switched off when they are not in use. There is a tendency for equipment in kitchens to be left on during busy periods and this can make a dramatic difference to energy bills. The process of 'warming up' ovens can also be achieved in a much shorter time than many people think, so pay closer attention to this as well.

For larger hotel kitchens with walk-in freezers, ensure there is a PVC curtain behind the door to help maintain temperatures when the door is open. This will mean the freezer has to work less in order to maintain optimum freezing temperatures... again reducing energy consumption.



# Eco-friendly practices

According to the Carbon Trust, 40% of a building's electricity use is accounted for by lighting. And yet, reducing the energy used by lighting is one of the easiest measures to implement. Consider an energy-efficient lighting policy which includes...

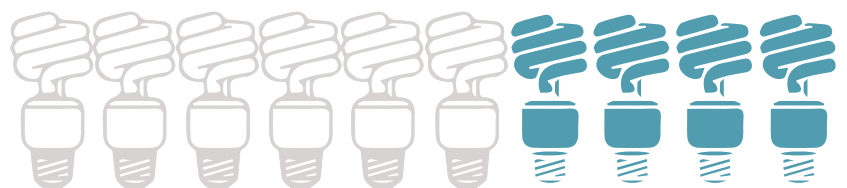
- Making the most of natural lighting by keeping windows clean
- Using low energy bulbs wherever possible
- Replacing 50W halogen spotlights with 9W compact fluorescent GU10's which fit into the recessed light fittings (saving 80% on energy)
- Introducing light or movement sensitive switches (such as PIR sensors) in areas which only occasionally require light such as toilets, hallways, and external areas
- Installing dimmer switches in areas with variable light requirements
- Utilising daylight tubes in the ceilings of areas with no natural light
- Using low wattage and solar lights with movement detectors for external lighting

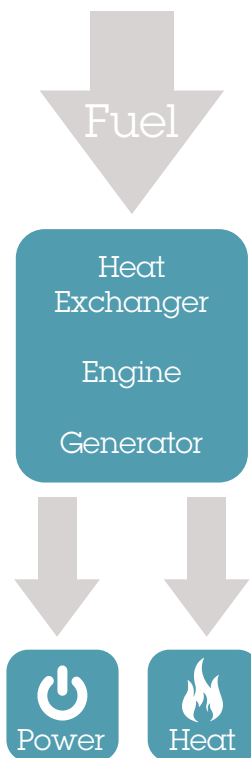
Implementing the changes mentioned above in a hotel is a great start, but most of the appliances, lighting and water aren't going to be used by staff. They will be used by the guest, which means it is important that guests are encouraged to carry out a 'best practice' approach to energy consumption, such as:

- Switching off appliances, fan heaters, air conditioners and lights before leaving their rooms
- Closing all doors and windows in their room when leaving
- Boiling only the amount of water they need when using kettles to make drinks
- Avoiding leaving televisions in stand-by mode (they use nearly as much energy in stand-by mode as when switched on)

Lighting  
accounts for 40%  
of a building's  
electricity use

**40%**





# Cogeneration plant and H<sup>2</sup>O drying at Hotel Höltje

In the north German town of Verden (30 miles outside of Bremen), Günter Glander operates Hotel Höltje. This 62-room establishment is popular with internationally operating companies in the local area and is typically busy every night of the week. There is one significant feature which differentiates Hotel Höltje though...

It currently has a cogeneration plant which runs on natural gas and produces electricity and heat.

To simplify the cogeneration system, the natural gas fuel is burned; the energy released drives a generator and this in turn creates electricity. The process generates a great deal of heat which can be used simply as heating or to produce hot water in huge water tanks.

The important result though is that the Glanders are able to reduce Hotel Höltje's electricity costs by over €20,000 per year. And with Miele's H<sup>2</sup>O dryer, they can now dry 200kg of laundry each day at practically no expense.

Having been introduced to Hotel Höltje in June this year, Miele's H<sup>2</sup>O dryer uses 80°C hot water from the cogeneration plant's storage tanks to heat the air used in the tumble drying process. With the dryer running upwards of ten times a day, Glander is able to see significant savings.

By using the combination of an EC Power XRGI 20 cogeneration plant and Miele's H<sup>2</sup>O dryer, Anolda Glander, Hotel Höltje's Senior Manager can not only operate the hotel laundry virtual cost-free, but can guarantee the due care and attention is given to the hotel's linens. "We tried outsourcing years ago, but were continually beset by mix-ups and plagued by laundry damage. Besides that, turnaround times were simply too long".

With free electricity, heat, hot water and laundry drying facilities, the Glanders have made a huge investment into Hotel Höltje, but Günter Glander believes the investment "has already paid its way and will reap huge economic rewards in the long run".

You can't manage what you don't measure.  
- [www.sustainablehotel.com](http://www.sustainablehotel.com)

# Conclusion

In order to measure the cost savings attributed to better water management and improved energy efficiency, be sure to record the gas, electric and water meter readings every month. Regularly checking these figures will also help you to...

- Spot problems with water leakage or faulty electrical equipment
- Recognise issues with your bills
- Diagnose excessive use of systems and recognize the need for investment

By carrying out the suggestions in this publication and aiming to achieve an almost self-sufficient approach like that used in the German cogeneration hotel, you will be able to save money and do your bit for the planet.

And, by reducing your energy consumption, you'll cut your energy bills and overheads, meaning an increase to your bottom line. You will also be more likely to attract guests who are environmentally focused and look to spend their money with organisations who share their views.

And to top it all off, you'll also be reducing your consumption and causing less damage to the environment through carbon emissions.

### Want to find out more?

If you'd like to talk more about energy efficiency and how you can reduce the consumption at your hotel or guest house, simply call us on 0845 643 1073 and we'll be happy to help.

Visit us at: [www.mieleprofessional.co.uk](http://www.mieleprofessional.co.uk)