



BEST ENVIRONMENTAL PRACTICES FOR THE HOTEL INDUSTRY

SHWEIKI HOTEL

Aqaba, Jordan

HOTEL IN BRIEF

The Shweiki Hotel is a 2-star hotel located in the centre of Aqaba. The hotel was established as a family business in 1996 and is managed by its owners. It has 48 rooms, one restaurant, one kitchen and one coffee-shop. It registered 8'666 guest overnight stays in 2007. The hotel has a total of 10 employees. Usually the number of employees depends on the season. The environmental audit was conducted with the manager, Mr. Abdel Affoo Al-Shweiki, on July 6, 2008.



MANAGEMENT CONSIDERATIONS

In spite that no environmental management system is established in this hotel, the owners are motivated to improve its current environmental and economic performance through the application of cleaner production.

The manager is willing to do progress towards better environmental management by sorting and recycling waste, and by installing solar panels on the hotel roof to provide hot water in combination with the existing diesel boiler. Moreover, he wishes to replace the old air conditioning split units by more energy-efficient ones. He nevertheless complains about the lack of local recycling market.

The hotel management wishes to apply the Guide of Best Environmental Practices (BEP) mainly in order to reduce costs related to water and energy consumption. This should be achieved through good housekeeping measures and acquisition of equipment and appliances allowing significant annual savings in water, energy.

ENVIRONMENTAL ASSESSMENT

The hotel has its own well and pumps water from a 15-meter deep renewable aquifer. Due to its high content of total dissolved substances (TDS), the water is softened prior to its utilization for cleaning rooms, flushing toilets, showers, etc. Because well water does not have a cost, no measurement is carried out to monitor its consumption. The municipal network provides drinking water as well as water for the kitchen. The overall municipal water consumption in 2007 was 2'552 cubic meters. Until now there has been no implementation of water saving measures, except new mixers installed for showers and taps. Toilets are single flushed. Figure 1 shows the water consumption in m³ per overnight stay for different periods.

Electricity is the most important energy source for the hotel in terms of end energy and costs, as shown in Figure 2. Air conditioning in the rooms and hotel departments is provided by old split units (on, off). The manager plans to replace them. Lighting is provided by neon tubes. The electricity consumption in 2007 was 260'241 kWh. When a guest leaves his room, the power is switched off by the reception, thus saving energy on air conditioning, lighting and other electrical appliances (television). In January 2008, for which diesel data is available, the total energy consumption (electricity, LPG and diesel expressed in kWh) was 21'560 kWh. The BEP Guide proposes several measures to reduce electricity consumption for air conditioning (new split units, shading windows, double-glazed windows) and other appliances (energy-saving light bulbs).

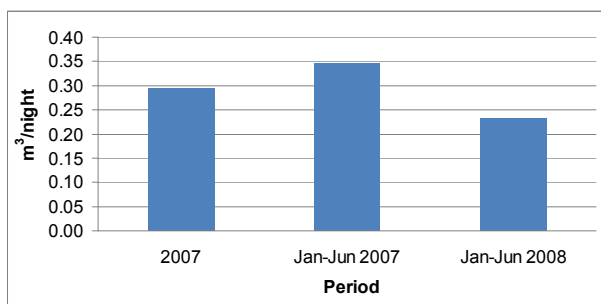


Fig 1 : water consumption per overnight stay

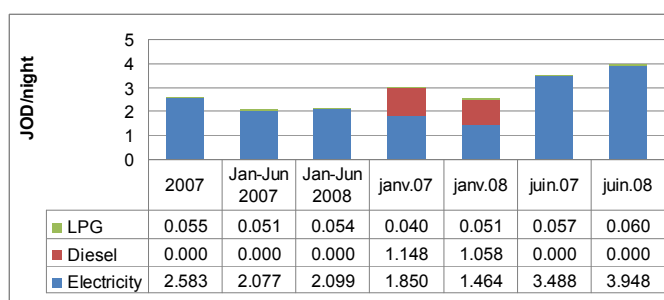


Fig 2 : energy consumption costs per overnight stay

ACTION PLAN

Environmental objective	Action & means	Expected results	Investment	Annual savings
Reduce water consumption in rooms without cutting on guest comfort and tackle calcification problems in pipes	<ul style="list-style-type: none"> Install flow regulators on the showerheads in rooms in order to decrease consumption from 18 to 8 litres/minute Install water-reducing filters for taps in rooms in order to decrease consumption from 18 to 8 litres/minute 	<ul style="list-style-type: none"> Reduction by about 50% of the shower flow rate Reduction by about 50% of the tap flow rate Reduction of calcification problems in pipes 	1'700 JOD	13'100 JOD
Reduce the overall energy consumption of the hotel by focusing on the consumption of electricity of air conditioning devices	<ul style="list-style-type: none"> Install energy-efficient air conditioning devices 	<ul style="list-style-type: none"> Reduction by 10% of energy consumption for air conditioning Improved room comfort (higher price for rooms) 	10'200 JOD	3'000 JOD

LESSONS LEARNED

The hotel management is aware of environmental issues and of the economic benefits that environmental action can bring in the water and energy domains. As proved by the above action plan, savings can be done in both domains that will benefit the environment. In Jordan however, the lack of proper municipal waste management (recycling market) is the main obstacle to sound waste disposal within the hotel. It is proposed that the hotels in Aqaba lobby for the establishment of such waste management by the competent authority, i.e. the Aqaba Special Economic Zone Authority. Indirect measures to save on air conditioning costs such as installing double-glazed windows will also limit heating costs and noise emissions from traffic, thus improving the direct environment of the hotel.

Awareness raising initiated by the hotel management is essential. Indeed, the hotel staff is the 'greening actor' as they implement the eco-efficiency measures on a daily basis. Water and energy should be addressed in priority, followed by waste management and logistics, and finally the purchasing policy and issues related to noise, air quality and landscape integration. It must be noted that many measures have positive effects in more than one environmental domain. Moreover, all measures implemented by the hotel should be communicated to the local and foreign guests who are becoming ever more aware of environmental protection. This communication can be used as a 'green marketing' tool. The ultimate goal can be an environmental management system (ISO 14'001 or EMAS) or an eco-label.

FOR FURTHER INFORMATION

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The Guide of Best Environmental Practices for the Hotel Industry was developed by sba with the participation of the Royal Scientific Society. This Guide presents eco-efficiency measures adapted to the hotel industry of the Mediterranean countries in order to reduce their impact on the environment. These measures are built on sba's experience in the field of environmental management. Cost-efficient and easy to implement, they constitute the first step towards sustainable tourism.