BEST ENVIRONMENTAL PRACTICES FOR THE HOTEL INDUSTRY

CANDLES HOTEL

Petra, Wadi Mousa, Jordan

HOTEL IN BRIEF

The Hidab Hotel is a 2-star hotel at the entrance of Wadi Mousa in Petra. The hotel was established as a family business in 1999. The hotel has 37 rooms, one restaurant, one kitchen, one Turkish bath and one terrace café. The hotel has a total of 10 employees working in its different departments (reception, housekeeping department, food and beverage department, accounting department). The environmental audit was conducted with the manager, Mr. Hafez Al-Mekhee, on July 9, 2008.

MANAGEMENT CONSIDERATIONS

In spite that no environmental management system is established in this hotel, the management shows concern for environmental issues. Indeed, solar panels have been installed to partially supply hot domestic water.

The owner intends to renovate the hotel in the coming months. A particular attention will be given to design the new extension in an environmentally friendly way.

The manager wishes to apply the Guide of Best Environmental Practices (BEP) for the Hotel Industry mainly in order to identify water- and energy-saving equipment to reduce operational costs when renovating. In this respect, the payback period should also be investigated. Moreover, the BEP Guide should allow planning activities related to environmental management in a systematic and sustainable way.

ENVIRONMENTAL ASSESSMENT

Water in the hotel is supplied by the municipal network. No water saving measure has yet been implemented. Indeed, no mixers are installed on taps and showers and toilets are single flushed as illustrated in Figure 1. Water consumption in each department is not known.

Fig. 1 : *taps without mixers and single flushed toilets*

Air conditioning in the rooms and hotel departments is provided by a central chiller (on/off). Rooms are lighted by traditional light bulbs and heated by electrical heaters. Hot water for domestic use is provided by a diesel boiler connected to solar panels on the roof. It was noticed that the insulation of the boiler could be improved. Heat for the Turkish bath is provided by gas geysers. No energy-saving measures have been implemented. Electricity is believed to be the most important energy consumption as it provides cooling, heating and lighting. Energy consumption in each department is not known.

The management ignores how much exactly the hotel pays for the disposal of its waste. No recycling is carried out as there is no local recycling market. However, the waste bread is given to local peasants to feed their goats.

The management purchases food at local markets (fruits, vegetables, dairy products) and in Amman (meat and fish). This is also the case for domestic products, appliances and equipment. The management does not favour biodegradable, recyclable or reusable products and does not purchase appliances and other equipment that is designed for minimum water and energy consumption. However, it is willing to spend a little more in order to protect the environment. Finally, the management ignores the practices of its suppliers regarding environmental protection and working conditions.

The hotel keeps its stock records up-to-date and expiring dates of food are carefully checked. The manager has no specific procedures regarding the handling and storing of merchandise nor does he train his staff to handle and store properly merchandise. Equipment, appliances and chemicals are checked on a regular basis.

ACTION PLAN

Environmental objective	Action & means	Expected results	Investments	Annual savings
Reduce water consumption in rooms without cutting on guest's comfort; enabling also to tackle calcification problems in pipes	▪ 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 ▪ Install low flush toilets consumption 4.2 litres/flush instead of 13.2 litres/flush	▪ Reduction by about 50% of the shower flow rate ▪ Reduction by about 50% of the tap flow rate ▪ Reduction of calcification problems in pipes ▪ Reduction by about 70% of water consumption through toilet flushing	13'200 JOD	12'300 JOD
Reduce the electricity consumption through energy-efficient lighting	▪ Use energy-efficient compact fluorescent lamps (CFL) of 100 W equivalent for rooms ▪ Use energy-efficient CFL of 60 W equivalent for bathrooms	▪ Reduction of electricity consumption	180 JOD	700 JOD

LESSONS LEARNED

The hotel management understands that renovation is an opportunity to save money on the long term and to mitigate the hotel's environmental impact by investing in water- and energy-saving equipment and appliances. However, other domains covered by the BEP Guide (waste, purchasing policy) are not considered by the management as relevant. The hotel management is strongly encouraged to focus on procedures and staff training, as the present situation is unsatisfactory.

Awareness raising initiated by the hotel management among the staff is essential. Water, energy and logistics issues should be addressed in priority. 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. 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.*