



ENERGY EFFICIENCY SERIES



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Factors and Initiatives affecting Energy Efficiency use in the Hotel Industry

Hotel Energy Solutions Official Partners



Supported by



**FACTORS AND INITIATIVES
AFFECTING ENERGY EFFICIENCY USE
IN THE HOTEL INDUSTRY**



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FACTORS AND INITIATIVES AFFECTING ENERGY EFFICIENCY USE IN THE HOTEL INDUSTRY



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Executive summary

✓ Providing knowledge, demonstrating cost savings and raising environmental awareness are key to educating travellers

The hotel industry has an immense potential for incorporating energy efficiency measures (EE) and utilizing renewable energy sources (RES). As yet, this potential has not been realized for a number of reasons and barriers.

The objective of this report is to provide an overview of the factors and initiatives affecting energy efficiency use in the hotel industry and more particularly in SME hotels. In the first part, the results of several European surveys which have researched the differences in attitudes and practices between independently managed hotels – many of which are small properties – and chain hotels are discussed.

These surveys demonstrate that individually owned and managed facilities are generally less active with environmental and energy issues than chain-affiliated hotels, and typically demonstrate less knowledge than chain-affiliated hotels. This shows that providing knowledge about energy efficient solutions to SME hotels is key.

Regarding the incentives that would encourage hoteliers to undertake environmentally-oriented initiatives in their hotels, the studies show that the possibility of reducing operational costs is the most commonly mentioned factor. Customer demand is second. Third is the desire to improve the hotel's image. This has

led us to conclude that cost savings associated with energy saving solutions should be widely demonstrated within the sector, along with educating travellers about the benefits of complying with these environmental initiatives.

✓ While energy savings should be highlighted, it may be wise not to focus only on communicating cost reductions and return on investment

Regarding cost savings, it is important to recognize that some energy conservation measures with great potential for saving energy require a large investment and may not be cost effective in the short term (< 5-7 years) – in which case financial support (from banks, for example) would be necessary. In addition, in most cases, cost savings resulting from energy savings may be hard to demonstrate because energy consumption is influenced by many factors, including changes in weather conditions, changes in the services provided by the hotel and in the occupancy rate. Therefore communicating the economic benefits must be clearly defined..

Discussions with pro-active hoteliers suggested that the promotion of energy efficiency use by SME hotels should not be based on cost savings if we want to be effective and bring about change. While potential energy savings associated with energy efficient solutions can be highlighted, it is equally important to highlight the other benefits that result from an energy efficiency action plan: increased motivation of employees, increased market visibility, possibility for the business to engage in a continuous improvement process, etc. For SME hotels, investment in energy efficient measures (and environmental actions) usually forces them to innovate and to question their daily practices, which results in a better global competitiveness.

Also according to the hoteliers interviewed, it may be worth making a distinction between “immediate actions” that can be taken right away by hoteliers to save energy and money, and other more demanding measures that require a rather high level of investment. Hoteliers should be convinced of starting with immediate actions, and to invest these savings in other energy conservation measures, therefore allowing the hotelier to continue to improve his business.

One final note regarding cost savings is that it is very complicated to give exact figures on costs and return on investment within the framework of a European-wide project, as there are considerable differences existing at local levels. Therefore, estimated energy savings can be more easily calculated within the framework of an EETI project. Consequently, we have estimated energy savings using the latter framework

✓ **Some noteworthy initiatives have been implemented at a national level**

Several initiatives have been taken in the sector to improve the energy efficiency of hotels. The most noteworthy ones may be the nation-wide information campaigns in the UK and, more recently, in Germany. The success of these campaigns is due to several facts: they were implemented in the hospitality sector (including hotels), they emphasized costs reductions from energy savings, the entry threshold was low (participation is entirely voluntary), they were designed for long term results and they were adapted at a local level.

✓ **Targeted actions need to be pursued to create change**

In conclusion, the following recommendations can be made in order to increase the implementation of efficient energy solutions and renewable energy solutions in SME hotels:

- market benefits associated with energy saving solutions should be broadly demonstrated within the sector to introduce change; these market benefits include:
 - a) operational costs reduction / energy savings,
 - b) increased competitiveness (due to the increased motivation of employees, the improved market visibility and global performance of the business),
 - c) environmental benefits,
- information needs to be provided to the hoteliers to help them assess the feasibility of energy efficient solutions,
- best business practices in SME hotels need to be identified and documented, and the associated benefits illustrated (increased profitability, potential for an improved market-share, preservation of natural resources),
- raising the environmental awareness of hoteliers as well as travellers

Understanding the barriers and drivers of energy efficiency use in SME hotels

Lessons learnt from previous surveys

The most comprehensive research that has been conducted in the hotel sector in the area of environmental awareness, performance, management and protection was focused on Europe and included (Bohdanowicz, 2006):

- The PricewaterhouseCoopers survey *European hotels' implementation of environmental policies* (Clark and Siddall, 2001),
- *Green Flag for greener hotels* (Despretz, 2001),
- *Feasibility and market study for a European eco-label for tourist accommodation* (CREM and CH2M-HILL, 2000),
- the reports prepared by ANPA (2001) and APAT (2002) : *Tourist accommodation EU eco-label award scheme*.

Studies with a more global reach than Europe are scarce (one of these studies is the *1998 Worldwide Hotel Industry Study*, prepared and published by Horwath International and Smith Travel Research in 2000).

Few studies have researched the differences in attitudes and activities between independently managed hotels – many of which are small properties – and chain hotels. The main ones are discussed below.

Knowledge and the attitude is key

A study performed by IER (Institut für Energiewirtschaft und Rationelle Energieanwendung) in 2000 for the Green Flag project (Despretz, 2001) showed that, in the case of independently operated facilities, environmental concern and a willingness to act are strongly dependent on the hoteliers' attitude and knowledge: "If they are interested in ecological matters, they may go rather far in implementing all type of environmentally friendly measures. On the other hand, hoteliers not interested in environmental protection can hardly be targeted through a labelling initiative".

In contrast, chain-affiliated hotels often incorporate environmental issues into their company policies, which usually are imposed on each individual establishment.

One may conclude from this study that independently operated hotels need more support than chain-affiliated hotels to implement an environmental management program. This leads us to raise the following questions: what type of support or action is the most needed? Have there been any initiatives targeting SME hotels or independently managed hotels in the past, and have these initiatives been successful?

We will attempt to answer to these questions in the successive stages of the report.

The environmental knowledge and practices

A comprehensive survey of European hoteliers' environmental attitudes was carried out between 2002 and 2003 by a researcher based in Sweden (Bohdanowicz, 2005-a). For this study, a survey questionnaire was addressed to 4,049 European hotels, located in Sweden, Poland and Croatia. 610 totally and correctly completed forms were received back from the hotels. Responses from independent hotels (182 in total) accounted for 29.8 % of the 610 respondents, and the remaining 70.2 % (428 hotels) belonged to a specific type of hotel association or chain.

The survey confirmed to some extent that chain-affiliated hotels were generally more active in environmental issues than individually owned and managed facilities and also provided further insight on the attitudes and behaviour of European hoteliers regarding energy issues.

Environmental knowledge and practices of hoteliers

While most hoteliers participating in the study recognized that their facilities influence the natural surroundings, and were aware that the hotel industry would benefit from environmental pro-activeness, some respondents doubted the need for hotels to be eco-friendly, and also expressed concerns about the costs of such initiatives, predominantly among the independent managers, and participants from Poland and Croatia.

Chain and affiliated establishments demonstrated a higher environmental knowledge than independently managed establishments. According to Bohdanowicz, this can be attributed to the efforts made by most chain head offices towards developing and enforcing environmental policies and programs, as well as providing their personnel with environmental training. More than half (51.4%) of the respondents from chain-affiliated establishments declared they knew of institutions that dealt with environmental issues in the hotel industry, compared to only 24.2% among the independent facilities.

As for the environmental activities undertaken by the hotels (energy conservation, water conservation, responsible waste management), these activities seemed to depend more on the region than on the size of the facility. More than 83% of the respondents from Poland and Sweden, and only 26% from Croatia declared their involvement in energy saving measures. This is attributed by Bohdanowicz to different levels of general awareness as well as financial means possessed by hoteliers from these three regions.

The difference in involvement between chain hotels and individually managed hotels in energy saving measures was small and almost negligible (81.5%, respectively 77.5%). The slightly higher involvement in all types of activities displayed by the representatives of the chain hotels was attributed to the existence of a corporate environmental policy and action plans among chain establishments, as well as the availability of more extensive financial resources. Indeed, more than 40% of the chain-hotel managers declared having an environmental policy statement in their business policy, while among the individually managed facilities, only 18% responded positively. One must however note that some hoteliers believe that compliance with laws and local standards is enough to make their facilities environmentally responsible, as the Green Flag Study also revealed (Despretz, 2001).

This demonstrates the necessity to communicate the environmental impacts from hotel facilities as well as the solutions (apart from regulation) which exist to lower this impact, such as energy conservation measures, etc.

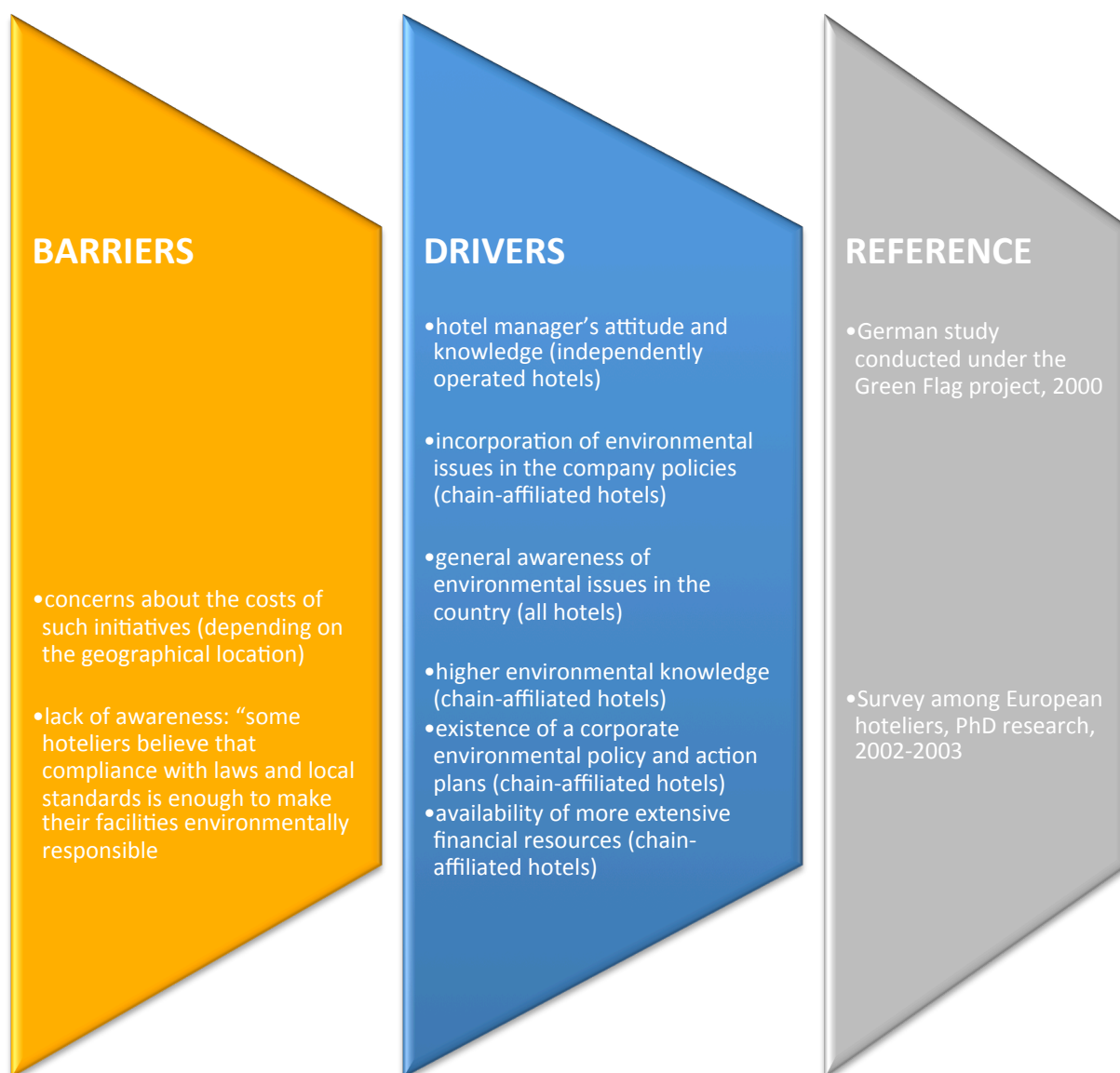


Table 1. Barriers and drivers to energy efficiency use in hotels, as observed by two surveys among European hoteliers.

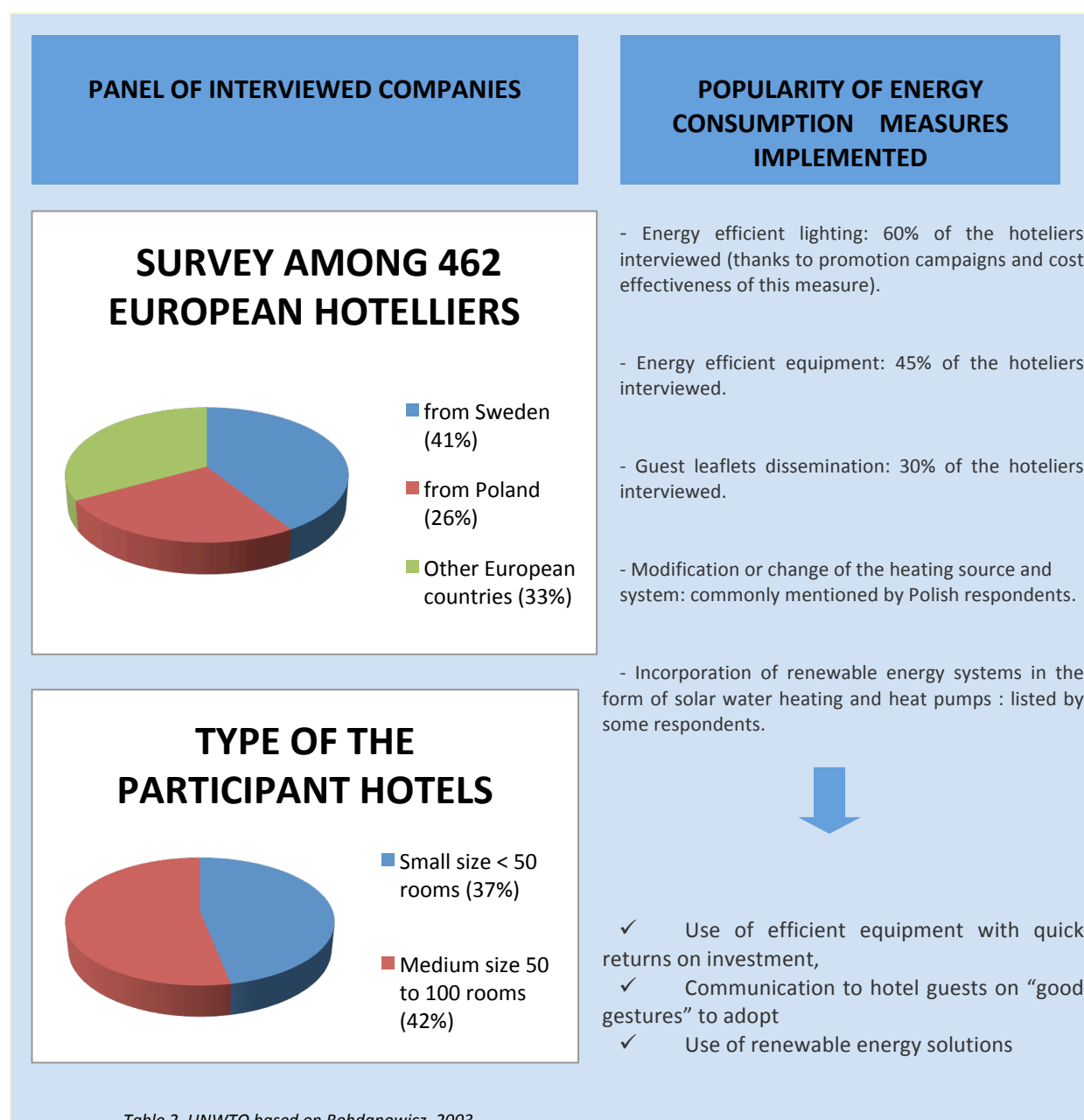
Types of energy saving activities reported by the hoteliers

A draft report written after the first stage of the survey provides some insights on the energy conservation measures implemented by the hoteliers (Bohdanowicz, 2003). These results were based on 462 completed questionnaires (190 from Sweden, 122 from Poland and 150 from other European countries). Small sized hotels (less than 50 rooms) represented respectively 49.2% of the respondents from Poland, 36.3% of the respondents from Sweden and 26.7% of the respondents from other European countries. Medium sized hotels (50 to 150 rooms) represented approximately 42% of the respondents, for all regions.

- The survey indicated a high popularity of energy efficient lighting among all respondents (60%). This was attributed to promotion campaigns performed in most of the regions, and to the fact that use of energy efficient fluorescent bulbs results in time and maintenance cost savings (return on investment for installing energy-efficient lighting equipment was estimated to be less than three years – Alliance to Save Energy, 2000).
- Usage of energy efficient equipment was declared by approximately 45% of the hoteliers surveyed.
- Leaflets encouraging hotel guests to save energy were displayed by approximately 30% of the hoteliers surveyed.

- The modification or change of the heating source and system was mostly commonly mentioned by Polish respondents.
- The incorporation of renewable energy systems in the form of solar water heating and heat pumps was listed by a number of respondents.
- Various energy consumption control methods including occupancy sensors/light controls, master cards and even computerised building management systems were mentioned. (These systems may, for instance, be used to switch off lights or reduce the flow of air-conditioned air, when a room is unoccupied. The author reminds us that the installation of occupancy sensors can lead to 35-45% savings on the lighting cost – IMPIVA, 1994).
- Only three respondents mentioned proper training and induction of behavioural changes among personnel (although such a solution is typically cheaper than most technological measures with simultaneously similar energy savings achieved).

These results show that most energy saving activities implemented by hoteliers are: use of efficient equipment with rather quick returns on investment (such as efficient lighting), use of renewable energy solutions and communication to hotel guests on “good gestures” to adopt.





Market benefit as the first driver

The key factors that would encourage hoteliers to implement more environmentally friendly activities

The prospect of significant cost savings along with customer demand were identified as the most likely parameters to enhance environmental responsibility among hoteliers (Bohdanowicz, 2005-a). The reduction of operational costs was indeed listed as the first driver for change, customer demand as the second driver, followed by: the desire to improve the hotel's image (third driver) and the wish to diminish environmental damage (fourth driver). The availability of professional advice was not found to be a sufficient incentive to enhance eco-friendliness.

The author reminds us that energy costs expressed in terms of gross hotel revenue traditionally range from 3-5% for limited-service hotels, to 4-6% for typical full-service properties, with a tendency to increase in the future (reference to Pateman, 2001). She recommends that cost savings associated with energy saving solutions be widely demonstrated among the sector to introduce change. As for customer demand, the author recognizes that environmentally conscious tourists represent a niche clientele that do not have enough purchasing power to induce changes: the demand for alternative green lodging is still low. This fact is also supported by Kasim (2004) who found that most tourists still choose a hotel based on price, quality of service and the building's physical attractiveness, rather than environmental and social factors. Bohdanowicz therefore recommends increasing environmental knowledge and awareness of travellers, in order to introduce significant change.

Literature review (2000)

The review of the report conducted by Saskia Faulk (2000) on environmental strategies and practices of hotels and related businesses confirmed that hoteliers were quite sensitive to cost savings associated with energy savings. Indeed, in the hospitality and tourism industry report on the subject of environmental management, environmental pressures for change are often cited, but most emphasis is placed on reducing costs and saving resources to reduce future expenses. In addition, it is interesting to note that the hotels and tourism businesses themselves cite energy, water and waste savings in monetary terms.

As for the factors that would encourage a traveller to choose a "green service": five sources were cited (Smith and Haugtvedt, 1997): the media (e.g., news, documentaries, agenda-setting), pressure groups (e.g., Friends of the Earth, Tourism Concern), governments and destination countries, the tourism industry itself (e.g., marketing by individual firms, and professional tourism bodies), and from personal first-hand experiences by the traveller and friends or family.

Did you know...

Chain-affiliated hotels are generally more active in environmental issues than individually owned and managed facilities – many of which are small properties. Different factors contribute to this situation. First, large companies are increasingly required to demonstrate their environmental and social commitment as well as achievements in addition to the traditional financial statement in order to maintain a good brand image. As a result, most chain head offices make efforts towards developing and enforcing environmental policies and programs. Second, chain hotels' financial resources are generally higher than those of individually owned and managed facilities.

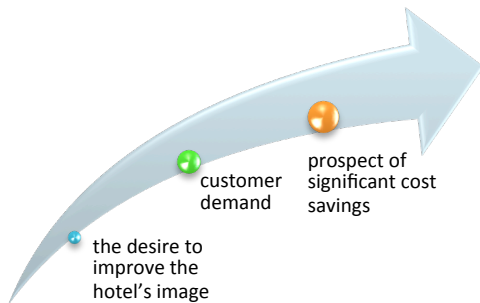
In the case of independently operated facilities, the environmental concern and a willingness to act are strongly dependent on the hotelier's attitude and knowledge. Because these types of facilities typically have less environmental knowledge than chain-affiliated hotels, pro-environmental institutions working in the hotel industry sector and professional organisations should target them as a priority.

Regarding the incentives which would encourage hoteliers to undertake environmentally-oriented initiatives in their hotels, the possibility of reducing operational costs is the most commonly mentioned. Customer demand comes in second position, and the desire to improve the hotel's image comes in third.

It can be concluded that **cost savings** associated with energy saving solutions should be widely demonstrated within the sector, along with raising the **environmental awareness of the traveller**, in order to introduce change in the hotel industry.

KEY INCENTIVES

(as reported by hoteliers themselves)



KEY FACTORS

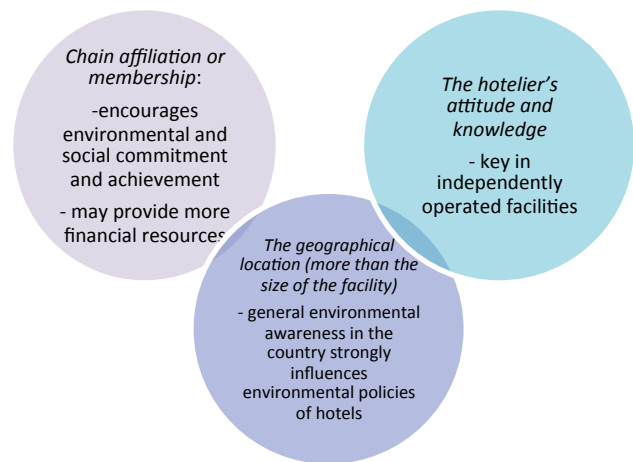


Table 3. Key factors and incentives for an enhanced environmental policy in hotel Environmental management systems and SME hotels

Main Findings

The hotelier's knowledge and attitude is key to the implementation of environmental policies in independently-managed hotels

The environmental knowledge and practices of European hoteliers depend greatly on the region where the hotel is located and on chain affiliation or membership

European hoteliers state that cost savings is the first driver for the implementation of energy efficient policy

Environmental management systems and SME hotels

Cultural and cost barriers

Evidence collected by Kasim (2004) documented that the incorporation of environmental and social measures as part of company policy was more common among large hotel corporations than among individual hotels. Indeed, many large businesses, government and non-profit organisations have developed or are currently developing eco-labels or EMSs (Environmental Management Systems) as they become increasingly convinced of their necessity and effectiveness¹. However, this is not the case in small and medium-sized enterprises, where the implementation of these tools still represents a major challenge.

As reported by the ShMILE project, based on the review (2005), many small and medium-sized enterprises (SMEs) think eco-labels and EMSs do not fit very well in the organisational culture and decision-making structure of the company. "Management system thinking" may be a new experience hard to understand for a structure like a SME. For many of them, taking a step back from the front-line of daily business to analyse the firm's strategic position and potential may seem daunting and a bit theoretical at first. In other words, they think **the company is too small for such complicated and "innovative" management approaches**.

In addition to this cultural barrier, the **costs** in terms of internal working hours for external consulting and certification are, in the case of SMEs, a very important barrier in decision-making with regard to obtaining an eco-label or EMS implementation. Many SMEs see eco-labels and EMSs as an additional cost to their business, and do not see it as a tool for competitive advantage, a marketing angle, or a selling feature to their customer base. Indeed, many SMEs address predominantly domestic markets often considered less concerned about environmental issues than the international markets of large companies.

Moreover, there is a lack of promotion of eco-labels. The survey carried out by Bohdanowicz among European hoteliers (2005) revealed a low awareness of eco-labels in the hotel industry (especially among independently managed hotels). This was recognized at the European level whereby some projects were launched in order to establish the EU Flower eco-label for tourist accommodations: "train to Eco-label" was initiated in December 2005 under the EU Leonardo Program with the aim of developing a training system for hoteliers and employees to help them implement the EU Flower eco-label for tourist accommodations, while the ShMILE project was launched in 2006 under LIFE program 2004 to promote the EU Flower eco-label in the Mediterranean area.

¹ These tools provide a framework to ensure that environmental risks and liabilities are properly identified, minimized, managed or eliminated. Their objectives are namely to manage, evaluate and communicate the organization's environmental performance.



Main Findings

Cultural and cost barriers to implementing Environmental Management Systems (EMS) and ecolabels in SME hotels

BARRIERS to the implementation of EMS and eco-labels in SME hotels	
Cultural barrier	In general, the SME hotels believe their company is too small to implement “complicated and innovative” management techniques and programmes in their facilities.
Costs (in terms of internal working hours)	The costs in terms of internal working hours as well as external consulting and certification are perceived as a very large barrier in the decision-making process

FACTORS that influence the implementation of EMS and eco-labels in SME hotels	
<ul style="list-style-type: none"> ▪ Lack of promotion of eco-labels => low-awareness of eco-labels in the hotel industry ▪ Eco-labels are not recognized by SME hotels as a tool providing competitive advantage 	

Table 4. Barriers to the implementation of EMS and eco-labels in SME hotels.

The potential for change

Promotion of efficient energy use is key

Educational and awareness raising campaigns are key to implementing energy efficient solutions

SME hotels, because of their smaller size and less formal internal organisation, have the flexibility for more rapid integration of innovation than large companies. They should therefore seize the opportunity to invest time and energy to implement energy efficient solutions and renewable energy solutions, as these can provide direct and indirect benefits in the short, medium and long-terms.

In order to increase the implementation of efficient energy solutions and renewable energy solutions in SME hotels, the following actions should be taken:

- cost savings associated with energy saving solutions should be widely demonstrated among the sector to introduce change, and information should be provided to the hoteliers to help them assess the feasibility of these solutions,
- good practices in SME hotels should be identified and documented, and the associated benefits illustrated (increased profitability, potential for an improved market-share, preservation of natural resources...),
- environmental awareness of hoteliers, as well as of travellers, should be raised.

Pro-environmental institutions working in the hotel industry sector, and professional organisations, should target unaffiliated hotels as a priority, since the environmental knowledge of managers of unaffiliated hotels is usually lower than in chain-hotels. Establishment of partnerships with environmental organizations may, in particular, be useful.

Provision of knowledge and awareness raising campaigns are among the most important actions that local authorities, branch associations or company management teams can take to encourage hoteliers to implement energy conservation measures.

Some actions also need to be taken to encourage SME hotels to implement Environmental Management Systems and eco-labels. For an innovation to be accepted, it has to be fully understood, deemed useful, and positively assessed according to the best interests of the company. The author of the ShMILE report (2006) recommended the following actions:

- show the true benefits the company can obtain by implementing these tools,
- identify and analyse the barriers and drivers, both inside and outside the hotel, and the conditions for success for the implementation of these specific measures,
- enable hoteliers to evaluate the feasibility of implementing specific measures.

As reported by the ShMILE project, businesses that do invest the time and energy in implementing these tools can reap the benefits in short, medium and long-terms.

Is the best strategy to focus communication on cost savings? A hotelier's point of view

Although there is a clear need to communicate cost savings associated with energy conservation measures, it may be foolish not to recognize that some of the energy conservation measures that have the greatest potential in energy saving require a large investment and may not be cost effective in the short term (< 5-7 years).

To encourage hoteliers to really invest in environmental measures (including energy conservation measures), a pro-active French hotelier interviewed in 2009 recommended highlighting the fact that investment in energy conservation measures can improve the overall performance of the hotel.

For him, investing in environmental measures and putting sustainable development at the heart of a hotel's strategy is the primary way to improve the performance of the hotel. Indeed, it is a way to motivate the staff and an opportunity to re-evaluate guests' needs and the services provided by the hotel, while getting more visibility on the market and maintaining expenses at the same level (because cost savings can be obtained from investments with quick return on investment and can be reinvested in more global measures). "Decreasing the environmental impact of the hotel, improving the quality of service delivered to the guests and maintaining (or achieving) good economic performance are realistic objectives any hotel can set for itself".

As a member of the sustainable development section of a "young managers' club", this hotelier could tell that hotel managers were more keen on hearing this type of message than one saying that energy conservation measures necessarily lead to cost savings. In other words, the interviewed hotelier insisted on having a clear and concise objective regarding the benefits of an environmental approach, and on promoting a global approach to a commitment to the environment and energy conservation measures.

Promoting all the benefits resulting from the investment in energy efficiency

Interviews conducted with hoteliers who have implemented energy efficient measures showed that three types of benefits could be highlighted (although these benefits are not always measurable):

- operational costs reduction (resulting from the decrease in energy consumption) while maintaining or improving the comfort of hotel guests and employees,
- competitiveness:
 - either due to the increased motivation of the employees: this was generally the case when a global environmental approach was implemented and when the staff was invited to take part in implementing the policy,
 - or to an improved market visibility, in a context where clients are becoming increasingly aware of environmental issues and are getting more and more sensitive to the environmental impact of hotels,
 - or due to the improved global performance of the business (when savings are reinvested in new environmental measures to ensure continuous improvement),
- environmental benefits (reduction of carbon emissions resulting from a decrease in energy consumption).

As highlighted before, all these benefits should be widely demonstrated and promoted throughout the sector.

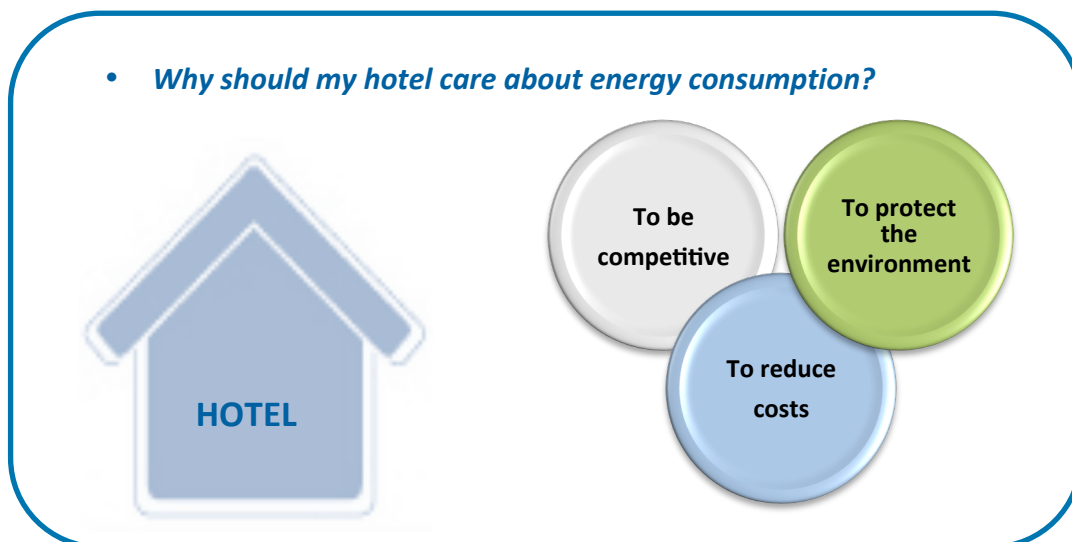


Figure 1. Why should care for my energy consumption? Key aspects to communicate

From theory to practice: considering all the factors affecting implementation of an energy efficient or renewable energy solution in hotels

As reported by the Green Flag Project (Despretz, 2001), almost no hotel would make large investments only for environmental reasons. Hoteliers are entrepreneurs and usually the protection of the environment is not their primary concern. Therefore and as previously mentioned, it is essential to show hoteliers the benefits of implementing environmental measures (such as reduction of energy consumption).

But this is not enough. To go from theory to practice, it is also necessary to help hoteliers assess opportunities for implementing energy solutions. In other words: business benefits and critical conditions for the implementation of technical and management solutions need to be assessed for each hotel and for each solution.

The barriers and drivers which influence the different levels (technical, cultural, economic...) when implementing environmental solutions

One of the objectives of the ShMILE project was to identify barriers and drivers at different levels that affect implementation of the EU Ecolabel. This work resulted in a framework of factors affecting implementation of environmental measures.

The factors relating to energy consumption are listed below (ShMILE, 2006-b). They provide a good overview of the factors affecting implementation of an energy efficient or renewable energy solution.

These criteria are divided into five different themes (technical, social/business culture, environmental, economical, regulatory) and a distinction between external and internal criteria can be made (see the following table):

Drivers / Strengths		Barriers / Weaknesses	
Internal	External	Internal	External
Technical analysis			
Ease of implementation in an existing accommodation structure	Availability in local market	Difficulty of implementation in an existing accommodation structure	Lack of local provisions (e.g. Resources)
	High performance: ease of use, maintenance and durability		Lack of market offer
Social / Business Culture Analysis			
Flexibility of the organisation in the decision-making process (SMEs)	High guest demand	Inflexible organisation	Lack of market pressure, lack of guest demand
	Few consequences on human welfare/health	Need for specific skills and qualified personnel for maintenance	Broad European cultural factors (fear or failure)
	High social acceptance	Large amount of personnel time for implementing, training and maintenance	Lack of suitable information (e.g. material too general or designed for larger companies)
		Low social acceptance	
Environmental Analysis			
	Lower CO2 emissions and other greenhouse gas emissions		High environmental impact in terms of air emissions
Economical Analysis			
	Financial incentives, subsidies and fiscal framework for investment	High investment costs and low return on investment	Lack of funding or financing
	Low operation and maintenance costs	High costs for maintenance/updating	
	Low investment costs		
Regulatory Analysis			
Solution already integrated in the accommodation's internal policy	Legal or administrative mandatory context	Solution incompatible with the accommodation's internal policy	Conflict with other national brands or eco-labels
			Conflict with local or national administrative regulations.

Table 5. Barriers and drivers, at different levels, for the implementation of an environmental solution

This table can be used for:

- individual hotels: to carry out an opportunity assessment of each energy solution which appears to be applicable to the hotel (note that this analysis needs to be performed locally, as a specific solution may or may not be interesting depending on the country and the business).
- more generally: to get an overview of the range of actions that are needed to support the use of energy efficiency solutions in hotels. Examples:
 - help hoteliers to assess the technical feasibility of a solution (by providing finance support for a professional assessment),
 - inform hoteliers about energy efficient solutions that are available on the market,
 - establish financial incentives and subsidies to encourage investments in energy efficient solutions.

Noteworthy initiatives targeting energy efficiency in the hotel industry

Organizations active in the promotion of energy efficiency in the hotel industry

Many hotel-oriented and tourism-oriented initiatives have been established by various organisations in order to encourage the tourism industry – and in particular hotels – in reducing their use of resources (energy, water, etc.).

Some initiatives /organisations are cited below:

- International Hotel Environmental Initiative (IHEI) launched by the Prince of Wales International Business Leaders' Forum (IBLF),
- Energy Star for Hospitality by the United States Environmental Protection Agency (US EPA),
- Creation of eco-labels or eco-certificates for the hotel industry sector, including: the European eco-label (ELTAS), the Green Key, Green Globe 21.
- European projects dedicated to the improvement of energy efficiency in hotels and the use of renewable energy resources, namely: the HOTRES project (Karagiorgas et al., 2006) and the XENIOS project (2001).
- Support provided by the Swedish non-profit environmental education organization "The Natural Step" to help hoteliers get a deeper understanding of sustainability as a business opportunity (their approach has been used by the Scandic hotel chain but also by SME independently managed hotels).
- Edition of a guide for hoteliers and communication on best practices in the hotel sector.
Examples are provided below:
 - Environmental Action Pack for hotels: practical steps to benefit your business and the environment, by IH&RA, IHEI and UNEP (1995);
 - Environmental Good Practices in hotels – Green hoteliers: a booklet published by UNEP and IH&RA (1996);

- Good Practices Guides and Hotel Building Environmental Assessment Scheme (HBEAS – 2000): an initiative from the Hong Kong Hotels Association (HKHA);
- Eco-management and eco-construction (ODIT France, 2008): a guide edited by the French public agency for the tourist industry development and engineering (ODIT France) in partnership with the French Agency for Environment and Energy (ADEME), a French Ministry (Ministère de l'Ecologie, de l'Energie, du Développement durable et de la Mer) and professional organisations. This guide offers a step-by-step approach to the improvement of environmental management of a hotel, and can be particularly relevant to SME hotels because of its step-by-step approach and its simple format.

Educational and awareness raising campaigns are the most frequent actions taken to promote energy efficiency in the hotel industry. Although the effectiveness and success of these actions are difficult to evaluate quantitatively, it is clear that these actions have contributed to promoting energy efficiency in the sector.

Examples of actions targeted at SME hotels: providing information

A recent initiative was taken by UNEP, ADEME, the Vietnam National Administration of Tourism and a French Ministry (Ministère de l'Ecologie, de l'Energie, du Développement durable et de la Mer) to develop a practical e-toolbox on environmental practices for SME hotels. This toolbox is called Envirotel. Its aim is to assist hoteliers of SMEs to integrate sound environmental practices into their business operation by providing knowledge and by improving their decision-making on environmental issues.

The toolbox was first released in Vietnam in early 2009.

Promotional campaigns

Promotional campaigns targeted at energy efficient technologies: the case of energy efficient lighting

The survey of European hoteliers' environmental attitudes mentioned earlier in the report (Bohdanowicz, 2003) indicated a lot of popularity for energy efficient lighting among all respondents (60%). This was attributed to promotional campaigns having been performed in most of the studied regions – besides the fact that the use of energy efficient fluorescent bulbs results in saving time and maintenance costs. (One promotional campaign was conducted under the European Greenlight Programme, which was launched in 2000).

This shows that promotional campaigns targeted at one particular technology can prove very effective in implementing change.

Nation-wide promotional campaigns: Hospitable Climates in the UK and the EnergieKampagne Gastgewerbe in Germany

▪ *Hospitable Climates, UK*

Launched nationally in 2000, 'Hospitable Climates' was an energy efficiency agreement between the Institute of Hospitality – the professional body for hospitality, tourism and leisure managers worldwide – and the Government. It provided an energy advisory programme, supported by the Carbon Trust and managed by the Institute of Hospitality on behalf of the Hospitable Climates network - comprising the British Institute of Innkeeping (BII), the British Hospitality Association (BHA), the Association of Licensed Multiple Retailers (ALMR) and the British Beer & Pub Association (BBPA).

The programme offers all sectors of the UK hospitality industry – regardless of size or whether they are chain-owned or independent – a free advisory service to help them reduce their energy consumption, including:

- targeted advice about energy saving techniques (provided by a brochure entitled “The Fact Files”),
- confidential comparison of the energy consumption of their own operation from year to year (thanks to the HEAT Online benchmarking tool),
- free training materials,
- access to the Hospitable Climates Forum for exchanging energy saving ideas,
- access to an on-line interactive map, geographically promoting Hospitable Climates members,
- on-line case-studies and feature articles,
- signposting linked to other useful resources and consultants.

In return, all UK hospitality industry operators who join Hospitable Climates are expected to provide energy consumption data about their businesses, and set specific energy reduction targets.

The success of the programme is in the ongoing savings that participants make in terms of carbon emissions and costs.

▪ *The energy saving campaign in Germany*

Recognizing that the promotion of energy efficiency was key, the German Federal Ministry for the Environment (BMU) and the German Association of Hotels and Restaurants (DEHOGA) decided to collaborate to deliver a nation-wide energy saving campaign under the “Energiekampagne Gastgewerbe” banner (Lee, 2009). The campaign was launched in March 2006 as a free-of-cost campaign and was built on the experience of the British Campaign “Hospitable Climates”.

The promotion campaign has set itself the following targets:

- Participants are to reduce their energy consumption to 15% below 2006 levels by 2011,
- To secure the participation of 3,000 individual hospitality businesses within the first three years,
- To secure the participation of another 2,000 individual hospitality businesses after 5 years.

It provides: detailed information with case studies, check lists, a special website with an energy calculator (including benchmark figures), a case study database and a financial support database.

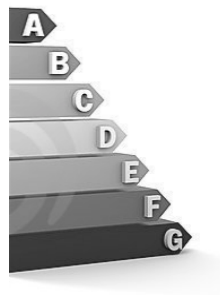
These two nation-wide energy saving campaigns proved successful because:

- they were directed at the hospitality sector,
- they emphasized energy cost reductions,
- the entry threshold was low (participation is entirely voluntary),
- they were designed for the long term,
- they were adapted to the local context

Demonstration projects

The on-going European demonstration project called LowEHotels (Low Energy Hotels in Southern Europe) is also worth mentioning – although it is not directed at SME hotels. Its objectives are to develop and demonstrate how hotels in the Mediterranean area can change from highly energy intensive facilities into sustainably driven facilities with substantially reduced operational costs thanks to the dramatic reduction in the need for non-renewable energy sources.

The project also highlights the implementation of the project at three hotels, one in Cyprus and two in Greece. One of the hotels was a small hotel with 52 rooms, the other two were larger. The project runs from 2007 to 2010.



Conclusions



In order to increase the implementation of efficient energy solutions and renewable energy solutions in SME hotels, the following actions need to be taken:

- market benefits associated with energy saving solutions should be widely demonstrated among the sector to introduce change; they include:
 - a) operational cost reduction,
 - b) increased competitiveness (due to the increased motivation of employees, the improved market visibility and global performance of the business),
 - c) environmental benefits,
- information should be provided to the hoteliers to help them assess the feasibility of energy efficient solutions,
- best business practices in SME hotels should be identified and documented, and the associated benefits illustrated (increased profitability, potential for an improved market-share, preservation of natural resources...),
- raise the environmental awareness of hoteliers, as well as of travellers



Final remarks



This version of the report was written by ADEME in the course the European HES project (Hotel Energy Solution, EIE 2007) and results from this project have not been incorporated into the report (information resulting from the survey among hoteliers, from the pilot actions in SME hotels, etc).

This will be done at a later stage when the results are available.

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