

## “GREEN” HOTELS: OPPORTUNITIES AND BARRIERS

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### **Abstract**

*Today an increase in the demand for ecological goods and services is one of the trends of the modern economy. The hotel business is no exception. This article gives a brief review of the conditions of usage green concept in the hotel industry and advantages of the "green" hotels. Their development contributes to increasing the competitiveness of hotel services and attracting new customers. The article shows how green investment in European tourism sector can improve resource efficiency and minimize environmental degradation. Much of the economic potential for green tourism is found in small and medium-sized enterprises (SMEs), which need better access to financing for investing in green tourism.*

**Keywords:** «green» hotel, resource saving, energy efficiency, small and medium-sized enterprises, green investments.

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In June 2012, Brazil hosted the Rio+20 Summit on Environment and Sustainable Development. The Summit adopted guidelines on the Green economy policies in the context of Sustainable Development and Poverty Eradication”. [1]

The “green” economy is summoned to solve the issues of economic growth, social progress and environmental security, as well as to enhance the development of the three main components of sustainable development: environmental, economic and social. Proponents of “green” economy are becoming more and more numerous every day, as people are concerned about the environment and irresponsible consumption. Environmentally friendly alternatives are now needed, and tourism, as a dynamic industry, has not been left behind. In international hotel practice, the term “eco-hotel”, “green” hotel – hotels operating on the principle of environmental responsibility and on the basis of eco-technologies, which are used in the construction and operational management of hotels, has appeared. [2]

In the late 80s, eco-friendly or “green” hotels appeared in the United States and some European countries such as Germany and the United Kingdom. This trend was originally designed to save the environment, while now it is more focused on the use of resources and energy-saving technologies that reduce the negative impact of the production process on the environment.

### **1. What are “green” hotels?**

In modern conditions of increased competition in the hotel business, hotel owners are constantly looking for innovative solutions in order to create additional competitive advantages for their hotel. “Green” hotels contribute to the preservation of the environment and are considered by consumers as the most beneficial for themselves and for society as a whole. It therefore seems reasonable that in order to call a hotel “green” or environmentally friendly, a hotel is required to do more than just comply with current building requirements.

Looking to the definition of “green” hotels by the Green Hotels Association they are: “environmentally-friendly properties whose managers are eager to institute programs that save water, save energy and reduce solid waste-while saving money to help protect our one and only Earth”. [2]

The transition of hotels to the category of “green” is a rather costly process that requires not only significant material and financial resources, but also temporary ones, associated with the coordination of many issues related to the necessary documentation and certification. Despite this, in modern conditions, the policy of many hotels is aimed at “greening” of their activities.

A number of reasons for such a high interest to the elements of “green” business can be identified. First of all, the hotel should be environmentally sustainable. Therefore, it is necessary to endeavor saving water, electricity, and other sources of energy.

A study of the environmental organization Green Seal showed that a hotel with 150 rooms consumes as much electricity per week as 100 private houses. This is due to the heating of empty rooms, huge corridors, round-the-clock lighting, and irrational use of electricity by guests.[3]

Competent environmental policy in the hotels leads to cost savings. There are many ways to save money: using fluorescent lamps and energy-saving incandescent light bulbs; motion sensors that turn on the light in the room only when someone is there; faucets with water-saving filters; biodegradable materials. For example, by initially installing more expensive energy-saving light bulbs, after some time it will be possible to reduce energy costs by 20-40%. Many hotels allow guests to choose when to change their towels, which can save a lot on laundry detergents and, as a result, save money. [4]

One of the most striking examples of the development of energy-saving “green” technologies is the JW Marriott South Beach hotel in Singapore. The canopy, which covers almost 3 hectares of the territory adjacent to the hotel, imitates the curve of the ocean wave. At the same time, the tilt angles of the aluminum structure are designed in such a way that the air flow provides cooling of the territory by 1-2 degrees without the use of any air conditioning systems. The structure is also designed to collect rainwater and is equipped with solar panels to help illuminate the building’s façade. Spectral glass also helps to limit infrared waves, which reduce the amount of heat without restricting the passage of light. This means interiors stay cooler without the expenditures for such cooling. [5]

There are other famous hotel objects that apply “green” technology - the Marina Bay Sands hotel, which has introduced an intelligent system of control over lighting, heating and water supply, as well as regenerative motors for elevators, which require 40% less energy than conventional ones. The Park Royal Garden Hotel is widely known for its engineering arsenal of rain sensors, solar panels, and natural landscaping. [5]

According to the existing regulations and standards, in order to be considered “green”, a hotel must have the following main elements: excellent natural lighting; use of renewable energy sources such as wind or solar energy; ecosystem architecture; solid waste management system; furniture in accordance with the bioclimatic features of the region.

Being a “green” hotel is not only economically profitable. Taking care of the environment, preserving natural resources, showing social responsibility – these are the factors that stand out to many visitors.

On the other hand, to be a truly environmentally friendly hotel, it is important to extend this concept to all the departments of the hotel, such as the restaurant and the kitchen. Food in eco-hotels is usually from organic farming, local products, and even from the hotel’s garden itself. “Green” hotels usually have vegetarian menus and promote healthy food.

Chateau Mcely is the first “green” hotel in the Czech Republic, which has been awarded the European Ecolable, and the “World’s Best Ecological Hotel” according to the World Travel Awards. The Chateau Mcely (a 17<sup>th</sup> century noble estate) has been reconstructed to become a luxurious five-star eco-hotel. It is located on a hill among the centuries-old trees of the forest of St. George, an hour’s drive from Prague. The hotel’s 23 rooms are provided with electricity from renewable sources, garbage is sorted, and waste water is filtered through its own treatment system. The collected rainwater is used to irrigate the castle park. The restaurant’s menu includes dishes prepared with products from local suppliers. [6]

## **2. Advantages of “green” hotels**

“Green” or eco-friendly hotels are all those that perform their activities without impacting the natural environment in which they develop, and their main goal is to minimize negative

environmental effects on the surrounding area. However, this is not the only advantage they offer, as they also have the potential to:

1. *Provide a competitive advantage.* Environmental certifications showing compliance with international eco standards is a great marketing move. The traveler, choosing from two similar options, will not take a risk and will prefer a more reliable hotel.

2. *Increase staff motivation.* Many hotels are redirecting the savings from the implementation of the environmental strategy to the payment of wages to employees. The employee, knowing that he will receive real encouragement from the successful implementation of the “green” program, will himself strive for the quality performance of his part of the work to achieve the goal.

3. *Ensure customer loyalty.* Over the last quarter of a century there has been a change in the requirements of travelers, many of whom have begun to pay attention to how the hotel approaches the issue of ecology. If guests know that the bottles and paper being thrown away are being recycled, the restaurant serves food from organic, non-GMO products, and an eco-powered bus is used for the transfer, this will certainly affect the rating of the hotels. With surveys showing that 81% of travelers prefer eco-friendly accommodation. It is widely known that travelers put keywords such as sustainability, environment friendly, and zero waste first on their list of priorities when planning their holidays and especially when choosing a hotel.[7]

4. *Minimize risks.* The risk management strategy in hotels involves health and safety: food and water quality control, fire safety, protection from natural disasters, disease prevention and guest safety. At present, we can add to this the reduction of water and soil pollution; noise reduction; waste recycling; and environmental protection activities. Reduction of waste during preparation and efficient recording of waste are just a few ideas could be applied immediately and easily to the operation of hotel’s kitchen.

On the one hand, a number of these things are not obligatory for hotels – it is the task of state/local authorities. But if, for example, a hotel located on the seashore will not take care of the cleanliness of the nearby beaches, then in the near future it may lose customers at all.

It should be mentioned that there is a counter-process: leading hoteliers are introducing more and more “green” technologies and programs, and tourists are also increasingly pointing out the importance of the environmental factor when searching for a hotel.

In the United States and some other countries green hotels are united in specialized associations, and it is possible to determine whether a hotel is a member of such an association or not and whether its activities comply with environmental standards. [7]

### **3. International programs and development of “green” hotels**

It should be pointed out that the spread of “green” hotels has also contributed to the emergence of international projects aimed at improving the efficiency of the hotel business through the dissemination of “green” technology:

1. *The International Hotels Environment Initiative* brings together the world’s leading international hotel companies to promote environmental and social responsibility in the industry. The main objective of this project is to show at practice that environmental and social responsibility is important for business. For this purpose, it offers a number of practical products and programs for eco-development of hotels and solves arising problems within the framework of its joint working groups. [8]

2. *Energy Star for Hospitality* is a non-profit organization, a U.S. environmental program that helps businesses and individuals save money and protect the climate through innovative technologies. [9]

3. *Green Key* is a certificate confirming the company’s compliance with leading environmental standards. Developed by Green Education International organization to promote and implement green ideas in the lodging industry, it has been in effect since 2010. Hotels with Green Key certification meet 90 mandatory and optional criteria, such as reducing electricity, water,

chemical products, minimizing waste and recycling. Each hotel undergoes a special inspection performed by a program expert. [10]

4. *Hotel Energy Solutions* is a project implemented by the UNO to protect the environment and with the support of the French Agency for Ecology and Energy Efficiency (ADEME). The project provides small and medium-sized enterprises of the hospitality and tourism industry in the EU with advice, technical support, and training on improving the energy efficiency of buildings and the use of renewable energy sources. [11]

As a part of the test mode, the program was launched in more than 100 European hotels located in four leading countries: France, Spain, Germany and Bulgaria. Hotels in these countries have received the most positive feedback from their owners and managers. The Hotel Energy Solutions program provides hoteliers with a comprehensive report on their actual energy consumption, as well as recommendations on the selection of suitable renewable energy sources. It also advises hoteliers on what efficient energy consumption technologies should be used and what measures should be taken to reduce the costs. [12]

The implementation of the program in all the countries of the world will allow hotels to use energy efficiently and rationally and significantly reduce energy costs, which overall means a great success for the project within the framework of environmental protection. [11]

5. “*PLANET 21*” is an environmental development program of the Accor hotels chain which has 21 environmental performance goals and includes disease prevention workshops for employees (in 95% of its hotels), special events to promote a more balanced diet (in 80% of its hotels), the use of certified organic products (in 85% of its hotels) and economical use of water and energy resources (in 15% and 10% of its owned and rented hotels). [13], [14]

#### **4. Barriers and restrictions in the spread of "green" technologies in the hotel business**

As a rule, it is large hotel operators (for example, the aforementioned Accor hotel chain) that invest in green technologies. At the same time, almost 90% of all the hotels in the EU and in Moldova are small and medium-sized enterprises, which simply do not have access to many of the available technologies. At the same time, the need for such investments is relevant due to the growing cost of energy; introduction of additional carbon taxes and environmental requirements in the EU; increasing customer expectations; technical advances in low-carbon technologies.

Additional investments in energy efficiency and sustainable building and renovation projects are estimated at a relatively modest 6% of the total construction cost (for a 106-room hotel), with a very good return on investment. Based on its experience in greening one of the world's leading tourist beach destinations (Spain's seaside region), Booz & Company reports a significant return on investment in energy efficiency, reduced water use, better waste management and biodiversity conservation, and reduced risk of complete depletion of key natural resources such as coral reefs and marine life. [15]

Capital investment in greening the tourism sector can be quickly recouped by savings in operating costs. Savings from reducing operating costs as a result of green programs (versus capital investment) range from 174% (operational efficiency of hotel buildings) to 707% (biodiversity conservation).

Of course, state legislation is designed to protect the environment, control and limit its potentially harmful development. But facilitating the access of small and medium-sized hotel enterprises to new technologies, information, knowledge, as well as capital will be considered an important factor in the development of eco-hotels. Without the adoption of the right laws and regulations, the “green” tourism strategy cannot be successfully implemented. Appropriate taxation and subsidy policies should be developed to encourage investment in energy and resource saving technologies. Tax incentives and subsidies can also be used to encourage green investment in the construction of sustainable buildings. Subsidies can be allocated for the purchase of equipment or technology that reduces waste generation, promotes energy and water efficiency, preserves

biodiversity (payments for environmental services) and strengthens ties with local firms and community organizations.

Environmental and social investments are relatively new and due to a lack of experience, payback periods and necessary amounts of funds are difficult to establish precisely. This makes investing in “greening” a problem for banks or investment companies/funds. In addition, there are difficulties in calculating the effectiveness of investments. For example, the effect of energy savings can be determined, but the effect of hotel guest satisfaction, their loyalty is more difficult to calculate.

In our opinion, the creation of partnerships between hotel, construction, trade, banking and insurance organizations is one of the directions that will allow small and medium-sized hotel enterprises to implement a “green” strategy. In addition to favorable interest rates and longer repayment periods for investment loans from banks, offering marketing and technical assistance services can help recompense the cash needs of businesses.

At the national level, the involvement of the government, the Ministry of Finance, regulatory bodies and civil society should be an important part of the efforts to coordinate business in this area.

**Conclusion.** In the Republic of Moldova, in general, the introduction of “green” technologies is still in its infancy. But with the increase of tariffs for electricity, heat and water, a competent policy of saving these resources in hotels is of particular importance. Providing a building with electricity, water and heat accounts for at least 30-40% of all operating costs. The “smart house” or “smart home” systems implemented in European hotel chains allow to achieve 20% saving of energy resources, as well as significantly time and labor costs for service personnel. The listed measures bring the greatest economic effect, being implemented in a complex. However, in our country, Western experience in energy conservation is adopted very selectively and fragmentarily, which greatly reduces its effectiveness.

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