

Energy Sustainability and Its Impacts on Croatian Tourism

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Abstract

Energy efficiency, renewable energy sources, and environmental protection projects play a pivotal role in tourism. The World Tourism Organization (UNWTO) addresses resource management and energy use as one of the major issues. The main goal of the paper is to present the economic–financial analysis and the assessment of investment projects in the construction of a conventional mid-size hotel using fossil fuels and a mid-size hotel based on sustainable principles and renewable energy sources. Comparative analysis of conventional and energy-efficient hotels is used to calculate the key financial indicators in decision-making. Case study shows that the introduction of renewable energy sources meets the needs of modern guests and increases the hotel's competitiveness, while the effects of energy sustainability reflect on the environment and reduced CO₂ emissions. Based on the results, the paper suggests measures for improving

energy sustainability in hotels and other tourism facilities. The paper is intended for those who deal with theoretical and practical issues of energy sustainability in tourism, tourism certificates, renewable energy sources and investment costs—scientists, researchers, PhD candidates and students as a basis for further comparative studies and benchmarking. It can also be useful for a considerably wider circle of users—managers at all levels and other business decision makers, as well as proprietors, investors, and creditors.

Keywords: energy sustainability, hotel industry, ecological certificate, CO₂ emission, investment costs, energy efficiency measures

JEL classification: O13, P28, Q01, Q50, Z32

1 Introduction¹

Tourism is considered to be not only one of the fastest growing economic sectors, but also one of the key drivers of socio-economic progress of the country (Snowden Duffield, 1982). According to the Croatian National Bank (CNB) (CNB, 2016), the revenues from travel and tourism in the period July–September 2016 amounted up to EUR 5.46 billion, which is EUR 450.2 million, or nearly nine percent more compared to the third quarter of 2015. In Croatia, tourism is one of the main sources of income, generating 18 percent of direct contribution to the GDP and is therefore the most vital economic activity (IZTZG, 2014). This implies a significant potential for growth, development and a stronger involvement of all relevant stakeholders in Croatian economy (Blažević, 2007). However, tourism is susceptible to various risks such as geopolitical instability, climate change and other environmental problems. There is a growing interest of business entities, including hotels, to solve the problem of using fossil energy sources and to meet current environmental standards. In its document *Agenda 21 for the Tourism and Travel Industry*, the World Tourism Organization (UNWTO) addresses resource management and energy use as one of the major issues (Becken,

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2013). The goal of *Agenda 21* is to assist tourism authorities—ministries, tourist organizations, business associations, hotels, and businesses in the tourism sector realize their potentials, achieve sustainable development, and a higher level of energy efficiency (UNEP and ICLEI, 2003). Hotel energy efficiency constitutes a vital part of the eco-efficiency and tourism operations (Tsagarakis et al., 2011). The implementation of green concepts in the construction and operation is part of the *Croatian Tourism Development Strategy until 2020* (MINT, 2013), whereby green hospitality represents a movement that has been recognized by the environmentally-conscious guests (UNEP and UNWTO, 2012), as well as hotel managers (Baker, Davis and Weaver, 2014; Manan et al., 2010). The goal of the paper is to present the economic-financial analysis and the assessment of investment projects in the construction of a conventional mid-size hotel using fossil fuels and a mid-size hotel based on sustainable principles and renewable energy sources. The paper is structured as follows. The following section provides the conceptual framework of the analysis. Section three explains the methodology and hotel characteristics used as the research sample. Using the example of two average hotels in Croatia, a preliminary financial analysis and a business plan were carried out to calculate not only the key financial indicators, but also the reduction of CO₂ emissions. Section four proposes new energy measures needed for improving energy sustainability in hotels. Section five provides the conclusion.

2 Literature Review

Many foreign authors (Chan, 2008; Chan, 2012; Kirk, 1995; Marunda, Judias Sai and Muchenje, 2013), as well as local authors (Petrić and Pranić, 2009, Radić Lakoš, Sladoljev and Goleš, 2009) agree that those hotels, which are a part of large hotel chains, apply energy efficiency and sustainable development measures more quickly and more often. The reason for this, other than simple rationalization measures, is that most activities require a significant initial investment. Although the return on this investment is relatively quick, the hotels that operate without a secure and stable financial and managerial support find such an investment

more difficult to afford. Hotel facilities are great consumers of energy, which implies high energy costs (Farrou, Kolokotroni and Santamouris, 2012). However, energy costs can be effectively controlled, which in turn affects the financial results and increases profits (Santamouris et al., 1996). Although there are many investment studies and energy efficiency projects which aim to reduce energy costs (HES, 2011), they should be approached and applied selectively, without decreasing the level of service quality and guest satisfaction. One way to encourage energy efficiency and the rational use of energy in hotels is to promote guests' environmental awareness. The most flexible, practical and cost-effective solution for improving energy efficiency is the use of renewable energy sources. In order to develop a sustainable and renewable energy system, it is important to encourage the use of renewable energy sources for heating and cooling. This can be achieved through the promotion of individual systems that use renewable energy sources (RES) (or electricity from RES) or by using centralized heating systems for district heating and cooling using renewable energy sources (or electricity from RES). One prerequisite for the achievement of this objective is an increase in energy efficiency, i.e. reducing the need for heating and cooling technologies (Enea, 2010). This, in turn, requires specific legislative measures at the state level, as well as support mechanisms and subsidies which would motivate the hoteliers to implement RES more often. One of the mechanisms of achieving that would involve each of the regional energy agencies operating in Croatia informing the hotel owners and managers about the tenders published by the Environmental Protection and Energy Efficiency Fund, as well as applications for various EU funds (EC, 2014). One of the motives behind such a mechanism could include environmentally-conscious guests who are increasingly interested in accommodation that meets the environmental standards and who are willing to pay more for a green service (Kostakis and Sardianou, 2012). In addition to energy efficiency measures, the implementation of green certificates can also be one of the more important goals for policy-makers (Stefanica, 2013). A number of hotels in Croatia base their operation on green hospitality principles. The analysis of the 2017 situation reveals that Croatia currently has 41 hotels

with the *Sustainable Hotel Certificate by UPUHH*, awarded by the Association of Employers in Croatian Hospitality (UPUHH) (UPUHH, 2016) for the period from 2014 to 2016. The certificate guarantees that the facility follows global trends in sustainable business, such as: successful sustainability management in daily hotel business, environmental protection, continuous environmental protection awareness raising, energy efficiency, staff training, energy and water saving, sustainable procurement, sales, marketing and PR, and the control of CO₂ emissions. Figure 1 shows the current list of certified eco-friendly hotels in Croatia. The competitiveness of firms (hotels) depends on internal efforts, but also on a number of external factors such as the overall perception of producers coming from a region or city (Stojčić, Bačić and Aralica, 2016).

Figure 1: Map of Certified Eco-friendly Hotels by Destination in Croatia



Source: Authors' analysis of UPUHH Zagreb data.

One reason for concern is the fact that out of 200 UPUHH members, which account for about 80 percent of the total Croatian hotel industry, only 41 have been rewarded the *Sustainable Hotel Certificate*. However, the plan is that by the end of 2018, other hotels also adopt the concept of a green business, and that new professional associations (from camping, nautical and other segments of tourism) join the project. The costs of this project are covered by the UPUHH and co-financed by the Ministry of Tourism and other partners. The strategic goal of the project is in line with the goals of the *Croatian Tourism Development Strategy until 2020*, which are based on the introduction of green business practices and which imply a synergy of economic benefits, concerns for the environment in its broadest sense, and social inclusion in a wider community (IZTZG, 2016; MINT, 2013), all in accordance with the principles of sustainable development and energy efficiency.

3 Methodology and Results

This section provides the research methodology and a description of survey data analysis. Information needed for the cost-effectiveness analysis of the construction of a conventional hotel and an energy-efficient hotel has been collected on the market, and refers to the prices of accommodation, food and drinks, energy prices, construction costs, employee costs etc. Research data was obtained by interviewing the members of the controlling services and human resources in similar hotel companies in the Primorje-Gorski Kotar County and Istria. Basic technical parameters and legal and legislative regulations of the Republic of Croatia were also used in the research. The final sources of data are the assumptions and forecasts that, in the absence of exact data, have to be applied in certain cases. All of the abovementioned parameters were used in the presented model of the conventional and energy-sustainable hotel. The paper presents not only the assessment of the financial elements, but also the assessment of the social benefits of the two hotels and an estimate of CO₂ emission reduction

for both hotels. It should be emphasized that the 15-year projection (until 2031) was made on the following bases:

- Both hotels are situated on the Croatian coast and are categorized as four-star hotels.
- Both hotels have 50 double rooms, i.e. 100 accommodation units.
- Both hotels have one pool, a restaurant and a congress hall; a total area of 3000 m²; the size of each room is 26 m².
- Both hotels have 41 employees.
- The average room price is EUR 195.
- During the first three years, both hotels increased their revenues by six percent per year. In years four through seven, the annual increase was seven percent per year, followed by six percent per year until the end of the period observed. The pace of the revenue increase is based on the UNWTO tourists' arrival forecasts for the Mediterranean and on conversations with workers in the tourism sector who deal with tourism revenue calculations in Croatia. The forecast of the pace of revenue increase is held the same for both hotels in order to avoid biasing the revenue-based financial results of one of the hotels. Financial revenues in both hotels increase by 0.2 percent per year. Those revenues are not large amounts and therefore their increase does not have a significant share in total revenues.
- Expenditures include material costs that increase by two percent per year in both hotels and other expenses that increase by 0.5 percent annually. In addition, depreciation rate is calculated based on the Croatian accounting regulations, while financial expenses are calculated based on a five percent interest rate. Income tax, which is currently 20 percent, is also calculated according to the Croatian accounting regulations. Revenue increases are based on the hotel sector forecasts for future periods.

- Costs for employees in a classic hotel are somewhat lower at the beginning, while increasing at an average two percent annual rate. In order to maintain the whole system, the energy-efficient hotel needs to hire experts on energy efficiency, and therefore, the starting costs for employees are somewhat higher while continuing to grow at a three percent yearly rate. Due to the fact that other costs in an energy-efficient hotel are lower than in a conventional hotel, it was possible to forecast a higher wage increase.
- Parameters needed to analyze hotels are not based on any particular hotel operation, but rather on common characteristics across a range of existing hotels and on information gathered through interviews with hotel experts.
- The conventional hotel uses fuel oil, while the energy-efficient hotel uses solar energy.

The parameters required for the analysis of the conventional and energy-sustainable hotel models do not refer to any particular hotel, but are based on certain prominent characteristics of the existing hotel facilities on the Croatian coast. The coastal part of Croatia is used for case analysis because real estate prices are higher than in the continental part. The tables below show the basic business elements of both models.

Table 1: Basic Business Elements in a Conventional Hotel

Initial investment	Value in 000 HRK															
	36,703	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
ELEMENTS/YEAR																
Business revenue	13338	14138	14987	16036	17158	18359	19644	20823	22072	23397	24801	26289	27866	29538	31310	
Financial and extraordinary gains	100	102	104	106	108	110	113	115	117	120	122	124	127	129	132	
TOTAL REVENUE	13438	14240	15091	16142	17266	18470	19757	20938	22190	23516	24922	26413	27993	29667	31442	
Business expenses	11088	11141	11201	11268	11342	11421	11509	11603	11704	11810	11923	12043	12167	12299	12436	
Material costs	3600	3672	3745	3820	3897	3975	4054	4135	4218	4302	4388	4476	4566	4657	4750	
Other expenditures	2700	2714	2727	2741	2754	2768	2782	2796	2810	2824	2838	2852	2867	2881	2895	
Staff costs	2953	3012	3072	3134	3196	3260	3326	3392	3460	3529	3600	3672	3745	3820	3896	
Amortization	1835	1743	1656	1573	1494	1418	1347	1280	1216	1155	1097	1043	990	941	894	
Financial expenses	1835	1750	1660	1567	1468	1365	1256	1142	1023	897	765	626	481	328	168	
TOTAL EXPENSES	12923	12891	12861	12835	12810	12786	12765	12745	12727	12707	12688	12669	12648	12627	12604	
GAIN	515	1349	2230	3307	4457	5683	6992	8193	9463	10809	12234	13744	15344	17040	18838	
Income tax	103	270	446	661	891	1137	1398	1639	1893	2162	2447	2749	3069	3408	3768	
PROFIT	412	1079	1784	2646	3565	4547	5594	6554	7570	8647	9787	10995	12276	13632	15071	
PROFIT + AMORTIZATION	2247	2823	3440	4219	5059	5965	6941	7834	8786	9802	10884	12038	13266	14573	15965	

Source: Authors' results based on simulation.

The projection is made based on the abovementioned input parameters, with an investment made in the construction of a conventional hotel in value of HRK 36.7 million.

Apart from the financial indicators, the environmental features of the hotel itself (i.e., CO₂ emissions) are also shown. Fuel oil consumption and higher levels of greenhouse gas emissions are to be expected in a conventional hotel, as shown in the following table.

Table 2: CO₂ Emissions by Energy Source Relating to the Consumption in a Conventional Hotel

Description	Conventional hotel
Greenhouse gas emission:	
• Water consumption	2.605 kg/year
• Fuel oil consumption	128.471 kg/year
• Electrical energy	227.370 kg/year
Electricity produced by photovoltaic collectors	
TOTAL	357.906 kg/year
Fee per 1 t of CO ₂ emitted	HRK 18,00
Annual fee in HRK	6.444,00

Source: Authors' results based on simulation.

An average conventional hotel emits around 358 000 kilograms of CO₂ into the atmosphere every year. Other than the financial data obtained, no additional economic benefits have been taken into account in the analysis, such as indirect employment, regional economic growth, improved infrastructure and competitiveness, labor and population mobility, support to related industries and businesses etc.

Table 3: Basic Business Elements in an Energy-efficient Hotel

Initial investment	Value in 000 HRK														
	47,866	Business year													
ELEMENTS/YEAR	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Business revenue	13338	14138	14987	16036	17158	18359	19644	20823	22072	23397	24801	26289	27866	29538	31310
Financial and extraordinary gains	100	102	104	106	108	110	113	115	117	120	122	124	127	129	132
TOTAL REVENUE	13438	14240	15091	16142	17266	18470	19757	20938	22190	23516	24922	26413	27993	29667	31442
Business expenses	10393	10428	10474	10529	10593	10666	10750	10842	10943	11055	11173	11302	11438	11583	11737
Material costs	2000	2040	2081	2122	2165	2208	2252	2297	2343	2390	2438	2487	2536	2587	2639
Other expenditures	2600	2613	2626	2639	2652	2666	2679	2692	2706	2719	2733	2747	2760	2774	2788
Staff costs	3400	3502	3607	3715	3827	3942	4060	4182	4307	4436	4569	4706	4848	4993	5143
Amortization	2393	2273	2160	2052	1949	1851	1759	1671	1587	1509	1433	1362	1294	1229	1167
Financial and extraordinary losses	2393	2282	2165	2043	1915	1780	1638	1490	1334	1170	998	817	627	428	219
TOTAL EXPENSES	12786	12710	12639	12572	12508	12446	12388	12332	12277	12225	12171	12119	12065	12011	11956
GAIN	652	1530	2452	3570	4758	6023	7369	8606	9912	11291	12751	14294	15927	17656	19486
Income tax	130	306	490	714	952	1205	1474	1721	1982	2258	2550	2859	3185	3531	3897
PROFIT	522	1224	1961	2856	3807	4819	5895	6884	7930	9033	10201	11435	12742	14125	15589
PROFIT + AMORTIZATION	2915	3497	4121	4908	5756	6670	7654	8555	9517	10542	11634	12797	14036	15354	16756

Source: Authors' results based on simulation.

Based on literature research, it is estimated that the construction costs will be increased by 30 percent for an energy-efficient hotel model compared to the conventional hotel (Hrs Borković, Kulišić and Zidar, 2008). Investments in the construction of this hotel amount up to HRK 47.8 million.

An energy-efficient, sustainable hotel uses solar energy and thus emits less CO₂ than the conventional hotel, as can be seen in the following table.

Table 4: CO₂ Emissions by Energy Source Relating to the Consumption in a Sustainable Hotel

Description	Sustainable hotel
Greenhouse gas emission:	
• Water consumption	1.605 kg/year
• Fuel oil consumption	0,00 kg/year
• Electrical energy	136.446 kg/year
Electricity produced by photovoltaic collectors	-29.812 kg/year
TOTAL	108.239 kg/year
Fee per 1 t of CO ₂ emitted	HRK 18,00
Annual fee in HRK	1.944

Source: Authors' results based on simulation.

The energy-efficient, sustainable hotel annually emits around 108,000 kilograms of CO₂ into the atmosphere, which is significantly less than the conventional hotel. Just like the conventional hotel, the energy-efficient hotel also brings economic and social benefits, but the importance of the realization of such investments is reflected in its environmental benefits, as well as the creation of a new image of an environmentally-friendly business on the market. By using renewable energy sources, this hotel is involved in environmental protection and climate change in terms of reducing the amount of CO₂ emissions and contributing to the energy supply security. The concluding assessment of both projects is presented in the following table.

Table 5: *A Comparative Analysis and Concluding Assessment of the Conventional and Sustainable Hotel*

Description	Conventional hotel	Sustainable hotel
IRR	10,81%	8,36%
Payback period	15 years	18 years
NPV (with discount rate of 5%) in 000 HRK	24.439	16.754

Notes: IRR – Internal Rate of Return; NPV – Net Present Value.

Source: Authors' results based on simulation.

The discount rate in economic analysis tends to reflect the public view of the ways in which future benefits and expenditures should be valued in relation to current benefits and expenditures. It may differ from the financial yield rate when the capital market is imperfect (Blažević and Krstinić Nižić, 2011). This research takes a five percent discount rate, while for future research, a lower discount rate is recommended. Although the construction of a conventional hotel is more acceptable based on economic rating, this hotel type is not sufficiently aligned with the guests' environmental requirements and does not use alternative sources of energy, which is the primary goal of the European Union energy policy. The World Tourism Organization predicts an increase in the number of eco-tourists and Croatian tourism will also need to adjust to this trend. This is exactly what a sustainable hotel strives for, oriented toward the future and the promotion and implementation of renewable energy sources. The 18-year return on investment period for an energy-efficient hotel should not play a crucial role for the investors in their consideration of a responsible business and greater competitiveness not only for the hotel, but also for the Croatian tourism in general. Similarly, the construction of such hotels results in the reduction of CO₂ emissions, which is in line with the goals set out during the 21st United Nations Framework Convention on Climate Change (UNFCCC) (Conference of the Parties – COP 21) Conference held in Paris in December 2015. The conference adopted a new global climate change agreement which includes an action plan to keep global warming 'to well below two degrees Celsius' (UNFCCC, 2015).

4 Measures and Recommendations for Energy Sustainability Improvement of Croatian Tourism

Croatian energy statistics and state policy measures have not yet recognized the problem of power consumption in tourism facilities, camps, hotels, and apartments. Unfortunately, there was also no encouragement for the energy renovation of those facilities, even though the energy and financial effects that could be achieved by energy renovation are substantial. Therefore, the following table provides a number of proposed measures for improving energy sustainability in tourism facilities.

Table 6: *Proposed Measures for the Improvement of Energy Sustainability in Hotels and Other Tourism Facilities*

Measure 1 – The use of solar thermal heating systems for domestic hot water	This measure aims to eliminate the use of electricity and fossil fuels for heating and to promote the use of Sun's energy whenever possible. Each tourism facility should at least consider heating domestic hot water using the Sun. In order for these procedures to become used on a large scale, it is necessary to develop various analyses and implementation projects, which would allow better support and maintenance, and remove barriers to implementation.
Measure 2 – Increasing the efficiency of cooling systems in hotels and other tourism facilities	This measure aims to encourage a wider use of energy-efficient cooling systems in hotels. This refers to the use of a centralized cooling system in larger hotels, the use of heat pumps, and utilizing the environment for thermal energy storage (sea water). In addition to energy savings, this also results in peak load reductions. Furthermore, this measure also allows a centralized heating system that ensures a longer season during the winter.
Measure 3 – Implementation of green certificates	Apart from the standard norms such as ISO 14001, facilities in tourism are encouraged to implement ISO 50001 (for systematic energy management), as well as other environmental certificates that not only contribute to the image of the facility but also oblige the management to comply with a set of environmental criteria.
Purpose and application	Measures of energy sustainability are primarily intended for managers and hotel owners.
Implementation	The Ministry of Economy, Entrepreneurship and Crafts, the Ministry of Environmental Protection and Energy, and the Ministry of Tourism should all include these measures in their programs and promote them among the owners of hotels and other tourism facilities.
Financing	<ul style="list-style-type: none"> • The Environmental Protection and Energy Efficiency Fund (FZOEU) • Croatian Bank for Reconstruction and Development (HBOR) • Croatian Agency for Small Business and Investments (HAMAG INVEST) • The European Investment Bank (EIB) • The European Bank for Reconstruction and Development (EBRD) • The European Energy Efficiency Fund (EEEF) • CroPSSF Sustainable Energy (a line of credit developed in cooperation between the EBRD and the EU).

Source: Authors' research.

The Republic of Croatia has recognized the importance of financial support for environmental protection, energy efficiency and renewable energy projects by setting up special programs, funds and credit lines for the entrepreneurial sector. National institutions such as the Environmental Protection and Energy Efficiency Fund and the Croatian Bank for Reconstruction and Development, which are engaged in the achievement of energy goals, are also supported by the European development banks such as the European Investment Bank and the European Bank for Reconstruction and Development. This paper lists the currently available financial sources in the Republic of Croatia, while a deeper analysis is recommended for further research. The Croatian tax system has no special fiscal instruments which would encourage the procurement or investment in equipment for an increase in energy efficiency. In the European Union, 14 member states have so far introduced some type of special fiscal measures to boost energy efficiency investments (MGIPU, 2015). These mostly refer to various types of tax exemption aimed at specific consumer groups (citizens or the entrepreneurial sector), while a smaller number of countries have also introduced a lower value added tax (VAT) rates for energy-efficient equipment. One of the advantages of introducing a lower VAT rate is that it refers to all consumer groups. However, it also brings additional complications into the tax system and makes it administratively more expensive to implement. Nevertheless, experiences from other countries show that lower tax rates and tax incentives have a significant impact on increasing investments in energy-efficient equipment and represent an excellent complementary instrument, along with preferential credit lines and subsidies for entrepreneurs. It is important to note that the limitations defined by the European Commission regarding the amount of state aid also include tax incentives.

The aim of the recommendations that are presented below is to encourage researchers, hoteliers, managers, and citizens to implement energy efficiency measures in their operations as much as possible, and to be guided by best practices of investment in green technologies and renewable energy sources

(Zografakis and Sifaki, 2010). At the national level, it is necessary to implement various national policies to increase energy efficiency (MINGO, 2009; MINGO, 2014). Likewise, it is equally important to systematically improve and ensure the implementation of energy-efficiency measures and policies as a strong incentive to reduce energy dependence. Reducing energy dependence also leads to reduced energy imports, a positive balance of payments, and a parallel increase of domestic production through local jobs and the development of renewable energy sources (Krstinić Nižić, Šverko Grdić and Hrustić, 2016).

5 Conclusion

European hotels innovate their products and services and introduce green measures into their business practice. Their businesses become recognizable on the market by various environmental certificates (e.g., Green Key, Sustainable Hotels etc.). Tourism in Croatia has not yet sufficiently recognized the quality and importance of these and other environmental certificates.

Therefore, these models of conventional and energy-efficient hotels can help future researchers, as well as investors, in deciding on their business model. Although it is evident that the return on investment period is shorter for the conventional hotel and that the internal rate of return and net present value are higher, the evaluation process needs to analyze not only market efficiency, but also the socio-economic efficiency. The proposed model of a sustainable hotel can become the basis for hotel industry trends in Croatian tourism. An energy-efficient hotel can prove that an advanced sustainability strategy does not exclude economic success. Such a hotel follows environmental guidelines, providing future guests with safe, energy-efficient accommodation and raising the competitiveness of Croatian tourism. Social benefits, which are defined as positive effects influencing the process of socio-economic development, are also immeasurable benefits not marketed and to which it is difficult or impossible

to attribute monetary value (quality of stay in a destination, air purity, energy supply, security etc.).

Therefore, the authors recommend involving both the staff and the guests in energy sustainability processes from the very beginning in order to increase their awareness of energy saving. The analyzed and estimated CO₂ emissions in hotels stress the importance of removing the obstacles to the implementation of energy-efficiency measures in existing tourism facilities, as well as the importance of introducing renewable energy sources and energy-efficient technologies. It can be concluded that, despite the fact that the conventional hotel has better economic results, this should not be the sole indicator for the decision to build a certain type of hotel.

The paper highlights undeniable opportunities and benefits of energy sustainability. Furthermore, it stresses the necessity of a new approach to future tourism development in this area, which must necessarily be based on energy sustainability and sustainable development. The authors put forward the proposed measures and activities to be taken in order to successfully integrate Croatian tourism in the European market, and to ensure a long-term, sustainable development of Croatian tourism.

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