Journal of Tourism Theory and Research
Online, https://dergipark.org.tr/tr/pub/jttr
Volume: 7(1), 2021

ISSN: 2548-7583

A research on provide competitive advantage of energy use on the tourism sector

Emre Demir[a] and Ozan Bahar[b*]

[a]*Mugla Sıtkı Kocman University, Department of Economics (Ph.D. Student), Mugla/ Turkey, ORCID:* https://orcid.org/*0000-0001-7881-9575*
[b]*Mugla Sıtkı Kocman University, Faculty of EAS (Prof. Dr), Mugla/ Turkey, ORCID:* https://orcid.org/*0000-0003-3349-5479*

Abstract

The tourism sector plays a locomotive role in the development of the country and in this regard, the energy factor plays a vital role in providing locally sourced conditions for competitive advantage. The purpose of this study is to reveal the relationship between energy production and the tourism sector within a competitive advantage. In this selected issue five countries (China, the USA, Germany, Russia, and Turkey) have been compared. The findings show that energy creates a competitive advantage in service infrastructure and transportation facilities, especially in tourism. Identifying the relationship between energy use and tourism will contribute to local governments to determine an appropriate strategy for energy management and sustainable tourism development policies, and reveal how energy will create a competitive advantage over the tourism sector.

Keywords*: Tourism, Energy, Competition, Comparative analysis*

1. Introduction

Among the main results of the Industrial Revolution; there is the emergence of fast and cheap transportation opportunities and the integration of world economies under increasing distances with increasing tempo. Under these results, the economies of the country started to need more energy resources to be able to produce more and get ahead of their competitors. Actually, these results are in line with the touch of the industrial revolution on the essential character of the economy, in other words, the taking place of the industry in the economy as the dominant production sector.

The limit of human needs; is the minimum of nutrients required for survival. Likewise, after the industrial revolution, the dominant role of industry in the economy has revealed the importance of the availability of energy required per worker. Thus, the amount of energy per worker has become the most important factor determining productivity in production, and this situation has been in parallel with the economic developments of the countries. After the transition to the industrial society; coal, lignite, oil, natural gas, and lignite, which cannot be replaced by others, have contributed to the development of imperialism by increasing the competition between countries. Among these energy sources, coal has been the main element in the emergence and spread of industrial civilization (Cipolla, 1967). As a matter of fact, it should be underlined in these matters is the new concept of the world brought about by the new invention understanding that developed after the industrial revolution, in other words, the integration of technological developments with energy production into economies.

The fact that these energy resources turn into a commercial activity over time and constitute an important place for the development of countries has increased the interaction between the world economies have been subject to new developments (Guran, 2003). Subsequently, these developments increased competition in national and international platforms. Especially after the 1950s, globalization, and regional integrations have intensely brought export economies to the agenda, and such a structure has highlighted competitiveness as the main strategic factor (Ekin, 1997). In this process, the advantages of countries in international competition; have emerged with technological developments and energy production.

Energy is a source of strength for the three general strategies (cost leadership, differentiation, and focus) that tourism industries must follow in order to achieve their goals,

*Corresponding author.
E-mail addresses: *emredemir3407@gmail.com* *(E.Demir)*, *obahar@mu.edu.tr* *(O.Bahar)**

Article info:
Research Article
Received: 6 March 2020
Received in revised form: 3 December 2020
Accepted: 16 December 2020

Ethics committee approval:
All responsibility belongs to the researchers. All parties were involved in the research of their own free will.

To cite this article: Demir, E., & Bahar, O. (2021). A research on provide competitive advantage of energy use on the tourism sector. *Journal of Tourism Theory and Research,* 7(1), 1-10. https://doi.org/10.24288/jttr.699521

grow or eliminate their competitors. The main purpose of this research is to reveal the relationship between energy and tourism within a competitive advantage. In this context, the studies on the relations between energy, tourism, competition, and growth are reviewed and necessary inferences are made within the scope of the five-country comparison. The remainder of this study continues as follows: In the first part, the advantages of energy on economic growth and tourism; in the second part, a literature review on tourism, energy, growth, and competition; in the third part, energy and tourism comparison regarding five countries and the fourth part, in the last part, presents the conclusion and discussion.

2. The advantages provided of energy on economic growth and tourism sector

Consistently high economic growth is one of the main goals preferred by the world economies. Energy, on the other hand, provides the development of underdeveloped countries and the growth of developed countries since the industrial revolution. In this regard, developing economic and socio-cultural factors are in parallel with energy production and consumption. So much so that, after the 1950s, there is a simultaneous relationship between the rapidly increasing world population and energy production and consumption.

line with the technological developments in the 19th century, the extraordinary increase in energy resources contributed to the economic development and thus the development of education and scientific research. Under these results, new energy sources have been revealed. In fact, energy production in countries has been increased faster than the population for a long time. However, due to the fact that the distribution of energy resources is not proportional to the population of the countries, unfair distributions have occurred and this situation has caused the country's economies to differentiate. As can be understood, great inequality has been emerged in the worldwide distribution of consumable energy. This inequality affects all aspects of development, more specifically social, economic, environmental and even quality of life. Therefore, energy is recognized as an essential requirement for economic growth and potentially used as a tool for economic and social development (Apergis and Danuletiu, 2014:578).

Local industries can thrive as long as they have favorable factor conditions in their environment. In the factor conditions of availability of the energy factor, which is a physical resource; is necessary to ensure competitive advantage and efficiency in the tourism sector (Crouch and Ritchie 1999). Energy is a source of strength for the three general strategies (Cost leadership, differentiation and focus) that tourism industries need to implement in order to achieve their goals, grow and get ahead of their competitors[1]. In addition, the energy factor involves an evolution in terms of tourism, in other words; It facilitates / supports the transition from primitive tourism to modern tourism. This issue develops in parallel with the increasing production and consumption in energy[2].

This competitive advantage that energy offers in the tourism sector is generally seen in destinations (tourism regions). In other words, destination is considered as the factor determining competitiveness (Harris and Leiper, 1995). The presence of energy in tourism provides regions provides a better service to visitors with ease of transportation or different forms, and in this context, it can improve customer satisfaction and lead to an increase in tourism revenues. Among the factors that contribute to the creation of a tourism product in order to ensure harmony and sustainability among the factors used in satisfying the visitors (Bahar and Kozak, 2012: 41) the use of energy resources is a direct relationship with the development of the tourism sector[3]. Such that, the inefficient use or misuse of the energy needed by the tourism industry in order to gain competitiveness directly creates negative effects on the environment and other resources. For this reason, the way energy is used also has direct effects on the competitive advantage. Therefore, sustainable tourism[4] development policies have an important place in this subject. Such that; cultural and socio-economic texture, flora and fauna were not disturbed during energy production and use; not contaminated by sight, noise and environmental; destinations that preserve a clean, green, healthy and ecological nature and environment can gain competitive advantage and achieve competitive power more easily (Priestley et al., 1996: 6).

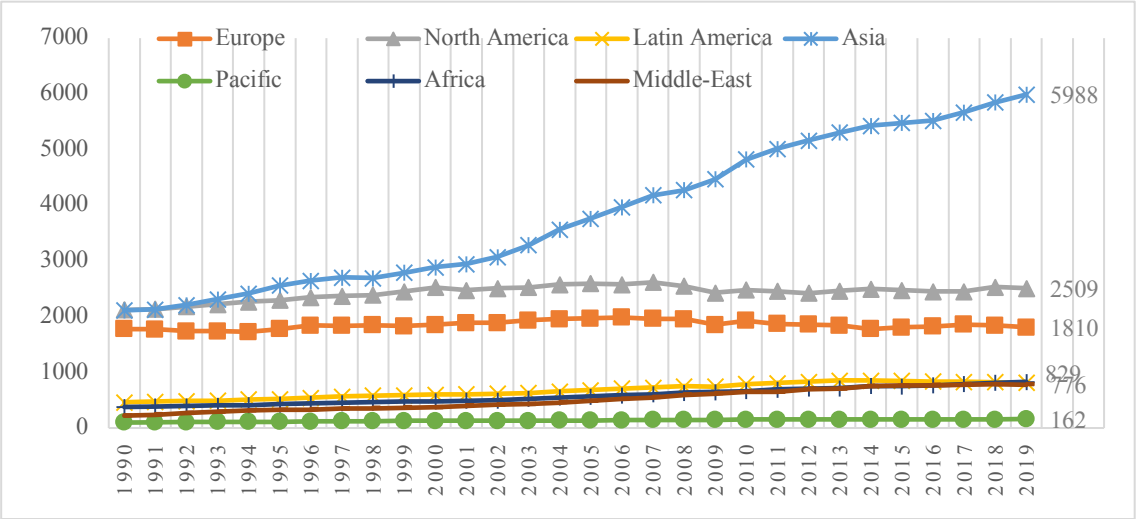
This conjuncture is shown in Graphic 1., Graphic 2., and Graphic 3. as of 1990. In the presented graphics, it is aimed to establish a link between energy production and consumption in the world and Per capita GDP in the world. In the present graphics, energy, shown with Mtoe unit. As seen in Graph 1 and Graph 2, Asia, Latin America and the Middle East countries take the lead in energy production. In its consumption, Asia, Latin America and European countries are the majority. However, on the contrary, energy production continued to decline in Europe. The rise of Asia within the years included in the graphic is remarkable. In this regard, the USA and China are the leading countries in energy production and consumption, both in energy production and energy consumption. As can be seen in Graphic 1 and Graphic 2, the differences in the distribution of total energy production and Consumption in the world and between regions draw attention in the mentioned issues. The evidences of the effects of these results on economies are shown in Graphic 3. Graph 3 draws attention to the high per capita GDP ratios of North American and European countries, which lead the way in energy production and consumption. For Asia, this situation can be explained by population. The most important issue on this subject; is the necessary capital formation and the most effective use of this capital in order to operate resources and to generate energy

Finally; it is an important issue for the economies of the country to bring their local characteristics to the forefront in order to gain and maintain their competitive advantage in their local industry. Especially in times of increased integra-

ISSN: 2548-7583

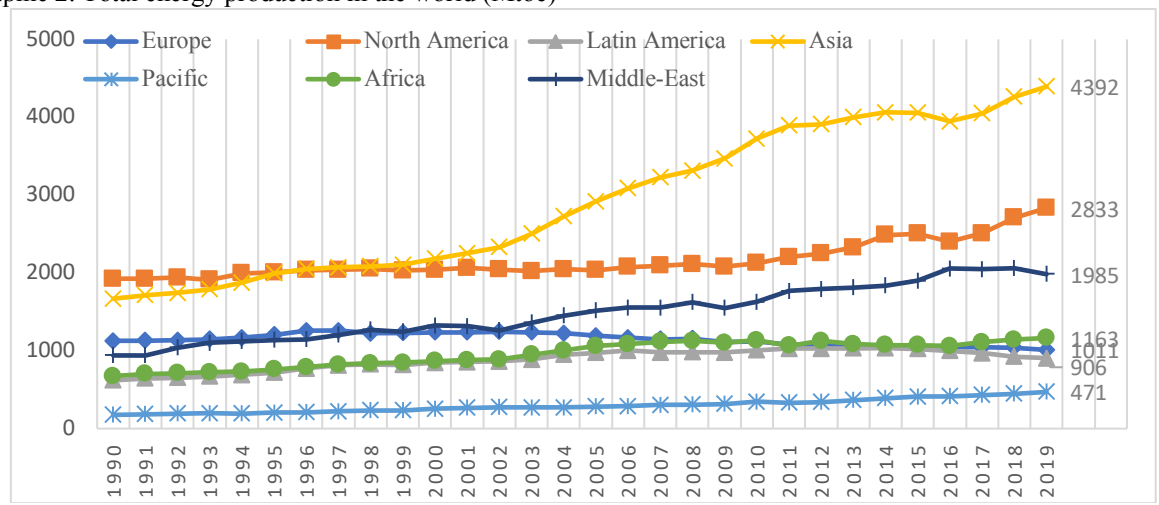
tion, the unique values of countries are necessary for competitive advantage. In addition, countries have to renew and develop the factors they have in order to maintain their competitive position. Because the factors that enable states to gain competitive advantage are not dependent on the legacy left to them from previous periods, but on the factors that they developed and used effectively (Porter, 1990). Today, countries are using the most suitable energy forms for the concept of clean and non-polluting clean environment such as renewable energy sources (Solar Energy, Biomass Energy, Heat Pump, Wind Energy and Geothermal Energy etc.) they started to implement. These practices are more common, especially in developed countries. Therefore, considering that the tourism industry is one of the biggest energy consumers, it is important to increase the production and use of renewable or alternative energy and subsequently reduce the consumption of traditional energy resources for tourism development and sustainability (Scott & Becken, 2010). In this context, international tourist arrivals in the world, is shown in Graphic 4.

Graphic 1. Total energy consumption in the world (Mtoe)



Source: Enerdata, Global Energy Statistics Yearbook

Graphic 2. Total energy production in the world (Mtoe)



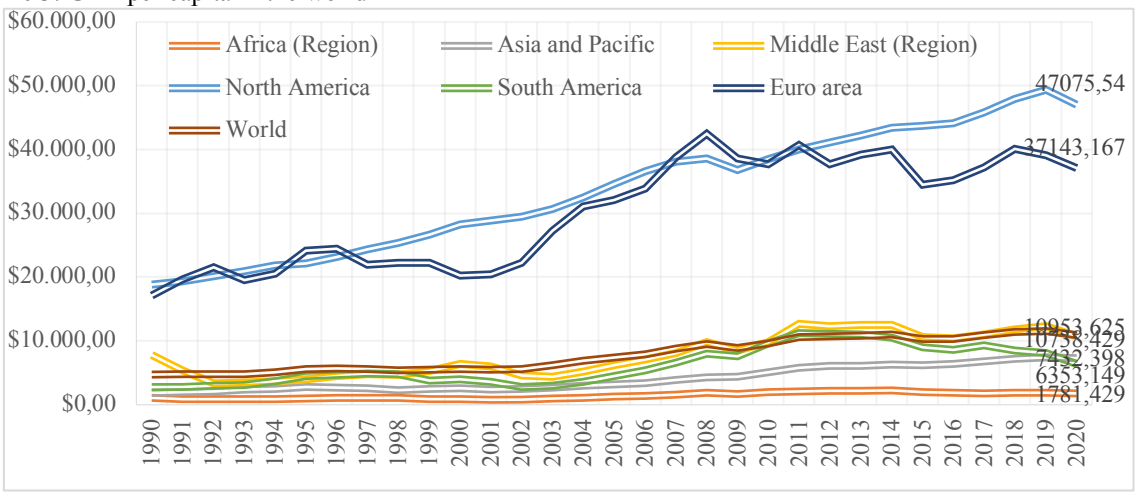
Source: Enerdata, Global Energy Statistics Yearbook

3. Literature review

The relationship between energy and tourism has generally been ignored, and studies have focused more on energy and economic growth. However, considering that energy and tourism are among the most important sectors of economies in the last century, it seems usual for researchers to focus more on the relationship between these two important sectors and economic growth. The existence of the relationship between these two economic factors, which are examined in different branches as tourism economy and energy economy, still maintains its importance today. Energy, which constitutes an important resource for the development and sustainability of tourism, can be validated in terms of obtaining competitive advantage in tourism (quality, efficiency, technology) for countries. Some studies on these issues are presented below.

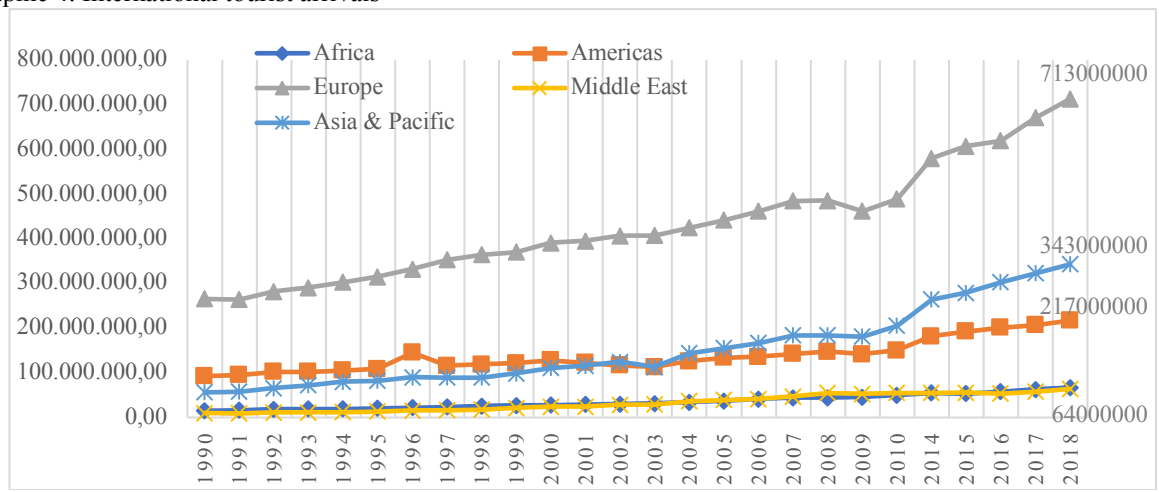
Warnken et al. (2005), per capita energy consumption per night is higher in tourism facilities that provide higher quality service. Therefore, the increase in tourism is expected to cause an increase in energy consumption. Wang (2012) energy consumption data, building information and other business data; It has collected from 45 Taiwanese international tourist hotels, 19 standard tourist hotels, 116 hotel businesses and 20 bed and breakfast establishments. He has determined the energy use density (ABI) of hotels as 280.1, 237.7, 186.3 and 146.6 kWh / m2 / year, respectively. The analysis revealed that electricity mainly accounts for 84% of the total energy. Kou et al. (2012) examined the effects of tourism development and energy consumption in China on CO2 and economic growth between 1981 and 2010 and made an extension of the ARIMA model to investigate the relationship between variables. Findings show that the increase in tourism revenues results in higher energy consumption and CO2 emissions compared to the number of visitors. Nižić et al. (2016) determined the cyclical relationship between tourism, economy and energy in their research results on EU countries in order to reveal the cause-effect relationship between tourism and energy consumption and to determine whether the increase in the number of tourists will increase energy consumption.

Graphic 3. GDP per capita in the world



Source: International Monetary Fund (IMF)

Graphic 4. International tourist arrivals



Source: United Nations World Tourism Organization (UNWTO)

Becken et al. (2017) estimated the total energy use of the accommodation sector in New Zealand, and in their findings, they found that hotels were the largest (net and per capita) energy consumer in the accommodation sector, accounting for 67% of the total 1.74 petajoules consumed in the accommodation sector in 1999. It has been observed that the commercial sector in New Zealand accounts for 4.4% of energy use and 0.4% of total energy use. Isık et al. (2017), using bootstrap Granger non-causality method for the 10 most visited countries by tourists; tourism revenues, energy consumption and examined aspects of causality between economic growth (France, USA, Spain, China, Italy, Turkey, Germany, Britain, Russia and Mexico). In their findings; an energy-driven economic growth in Spain; growth-related energy consumption in Turkey, Germany and Chine; bidirectional causation in Italy and the USA, have been found. However, a causal relationship between growth and energy has not been found in France, Mexico, Russia and the UK.

ISSN: 2548-7583

Romero et al. (2017), using econometric panel data techniques, examined the relationship between overnight stays of tourists and accommodation sector with electricity consumption for Spanish cities in the period 1999-2013. For this purpose, the Energy-Tourism Kuznets Curve hypothesis was tested. In the results, it was found that the Energy-Tourism Kuznets Curve hypothesis was not supported and there was an increasing positive relationship between the electricity consumption of the accommodation sector and overnight stays. The results also revealed that the electricity consumption elasticity values of the accommodation sector, according to the overnight stays of the tourists, are in the range of 0.1-0.5 during the period and differ between provinces.

Gokmenoglu and Eren (2019), have examined with empirical evidence of the interactions between the tourism sector and the energy use of international tourism in Turkey and have determined that the increase Turkey's energy consumption considerably. Shazbaz and Lean (2012) have evaluated the relationship between energy consumption, financial development, economic growth, industrialization and urbanization in Tunisia from 1971 to 2008. They performed the analysis with the help of autoregressive distributed lag test, cointegration and Granger causality tests. In the findings; the existence of the long-term relationship between energy consumption, economic growth, financial development, industrialization and urbanization in Tunisia has been demonstrated. In addition, long-term bi-directional causality between financial development and energy consumption, financial development and industrialization, industrialization and energy consumption has been identified. Sadorsky (2011) analyzed 9 leading countries in Central and Eastern Europe using the generalized moments method (GMM) method, and as a result of the research found a bidirectional causality between financial development and energy consumption. Chontanawata et al. (2008), as a result of their study on OECD countries, revealed that energy consumption causes economic growth. They also have stated that energy conservation policies may have an adverse effect on economic growth.

Acaravcı and Ozturk (2010) investigated the causal relationship between carbon dioxide emissions, energy consumption and economic growth by using autoregressive distributed delay (ARDL) boundary test cointegration approach for 19 European countries. In the findings; they had revealed that there is a long-term relationship between carbon emissions per capita, energy consumption per capita, gross domestic product (GDP), and real gross national product per capita. Altunbas and Kapusuzoglu (2011) could not find a long-term causality between energy consumption and economic growth in the UK, but they found that the unidirectional causation in the short term extends from economic growth to energy consumption in the UK. As can be seen in the literature, it is observed that there is a generally meaningful relationship between energy and tourism, and that there is an increase in energy use in line with tourism development. In addition, parallel to the developments in the 21st century, the increasing concerns about the state of the environment and the sustainable development of tourism, the effect of tourism trends on energy consumption, CO2 emissions and GDP have been of interest by researchers. The presentation of these studies under more specific samples was realized with the increased interest of the researchers in the subject. At the same time, the importance of environmental factors brought about by the use of energy and the use of renewable resources in studies on the sustainability of tourism is emphasized. In addition, the relationship between energy and economic growth emerges as an important issue.

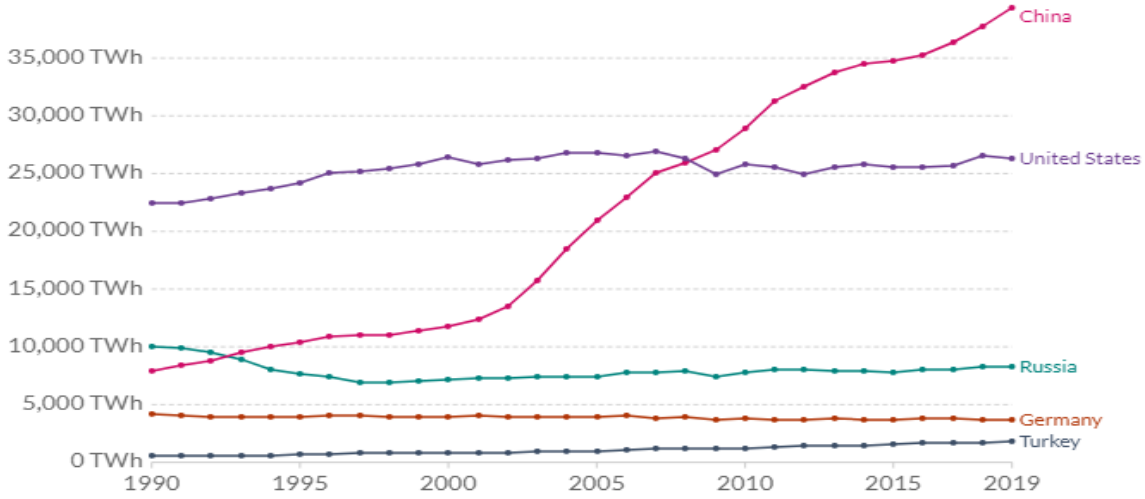
4. Comparative analysis of the relationship between energy use and tourism in the framework of competitive advantage

In order to reveal the relationship between energy and tourism and to validate certain inferences, data on energy use and tourism sector of five countries belonging to different country groups are presented. These countries are; China, the US, Germany, Russia and Turkey. The population numbers of these countries are; China 1.4 billion, 330.3 million US, Russia 143.9 million, Germany 83.3 and Turkey is 83.1 million. In addition, the GDP amounts of these countries are; China 14.4. trillion dollars, USA 21.4 trillion dollars, Russia 1.4. trillion dollars, Germany 4.1 trillion dollars, and Turkey 827.2 billion dollars. Graph 5 shows the comparative total energy consumption of these five countries (Terawatt-hour "TWh"). While a decrease is observed in the amount of energy consumption in the USA and Germany, the increases in energy consumption in China especially after the 2008 Global Crisis are remarkable. As of 2008, China has been the most energy consuming country in the world, leaving the USA behind. China accounts for 54% of the total energy use in Asia; USA accounts for 88% of total energy use in North America; Russia accounts for 72% of the total energy use of CIS (Community of Independent Countries) countries; Germany, 17% of the total energy use of European countries and Turkey are the 8's%.

The amount of energy used per person is shown in Graphic 6 above. In this regard, the reason for the differentiation in energy use is associated with the energy resources of countries. As can be seen in the graph, the difference in energy use per capita varies according to the resources of the countries, as stated before, and it can also have an impact on the per capita income in these five countries. For this reason, the amount of national income per capita is shown in Graphic 7. In order to make explanations and inferences about the effects of energy, which is one of the factors that affect competitiveness and competitiveness in tourism and provide competitive advantage, of these five countries, whose energy and economic data are presented and the necessary researches are made, the tourism data of these countries are presented below.

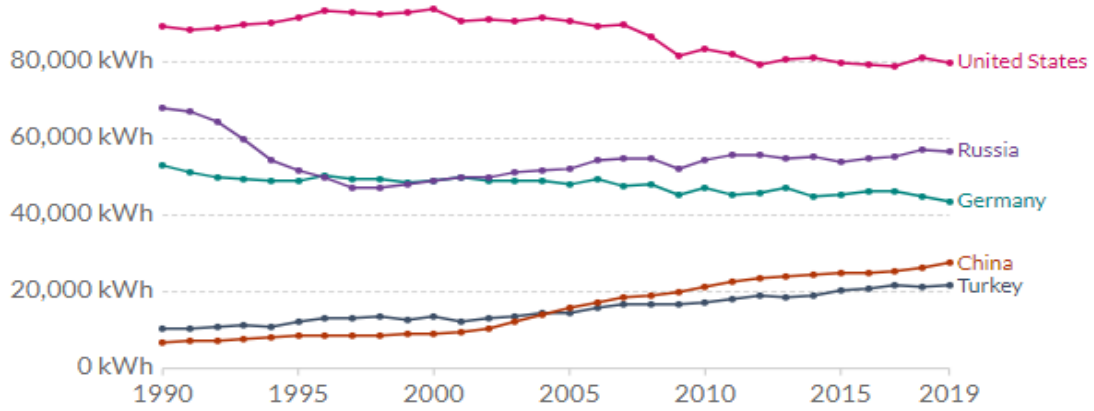
ISSN: 2548-7583

Graphic 5. Total energy usage amounts in selected countries (TWh)



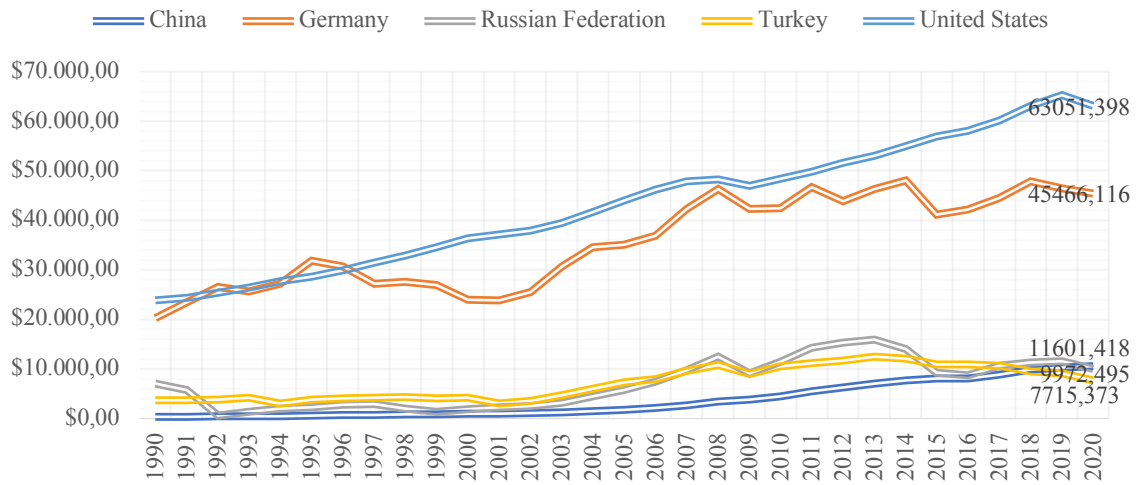
Source: Ourworldindata

Graph 6. Energy usage per capita (TWh)



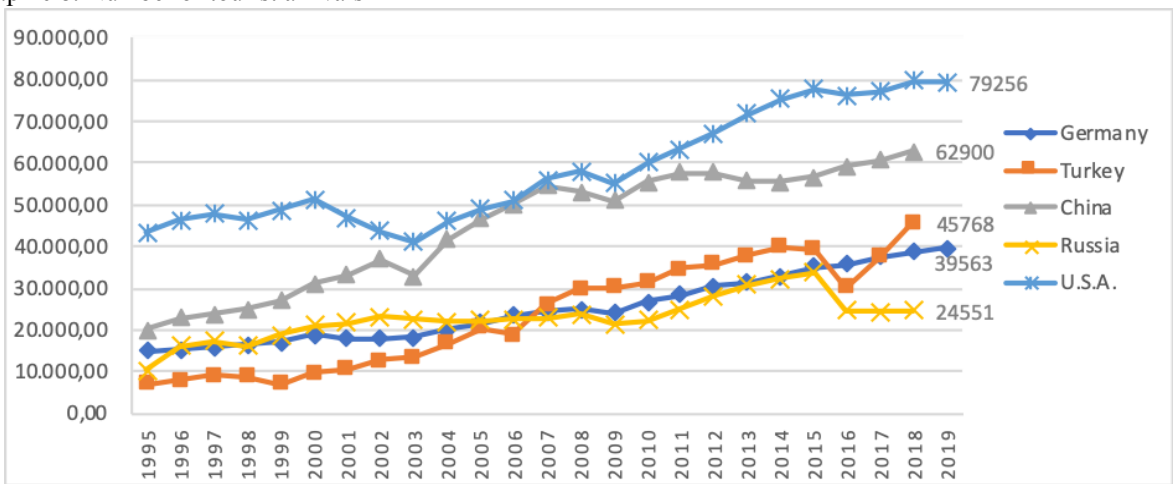
Source: Ourworldindata

Graphic 7. GDP per capita in selected countries



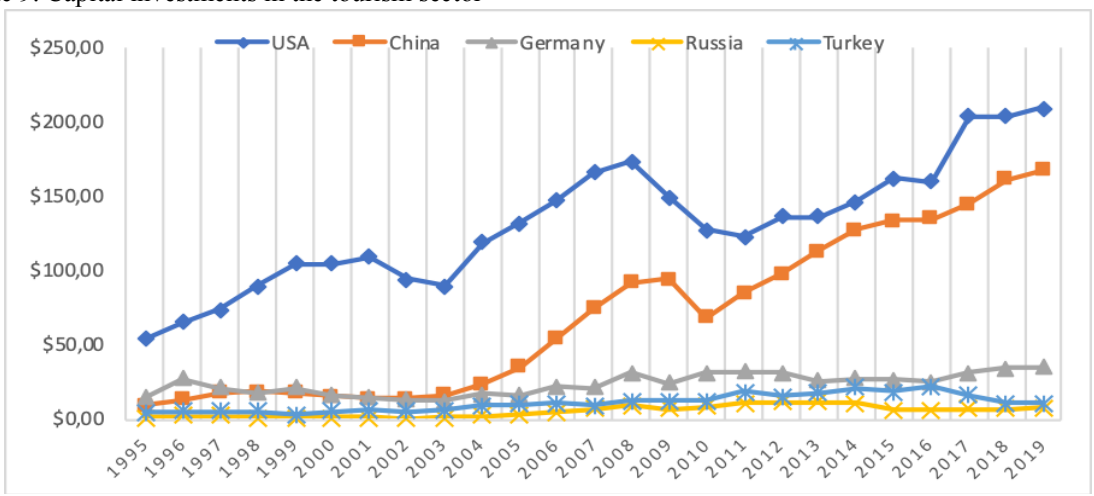
Source: IMF, World Economic Outlook Database

Graphic 8. Number of tourist arrivals



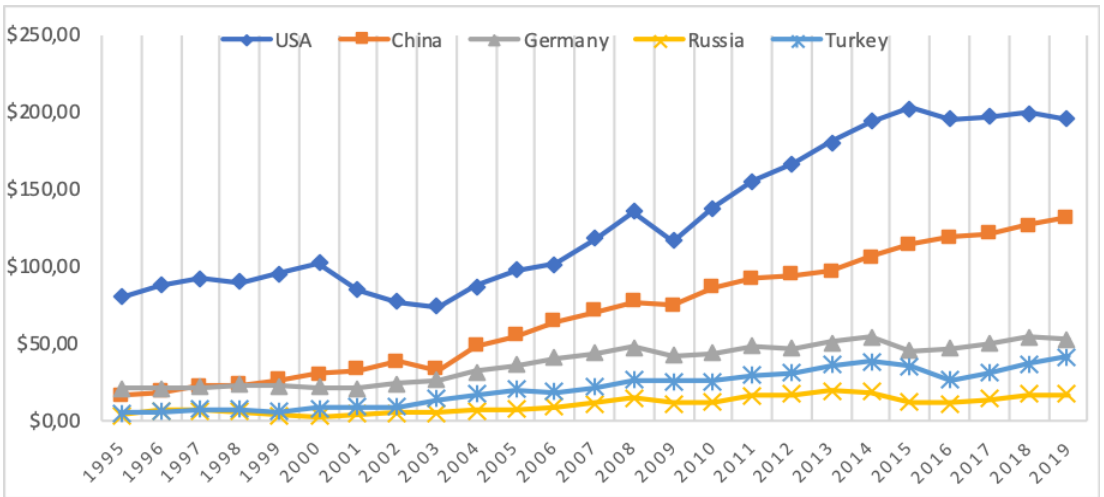
Source: UNWTO

Graphic 9. Capital investments in the tourism sector



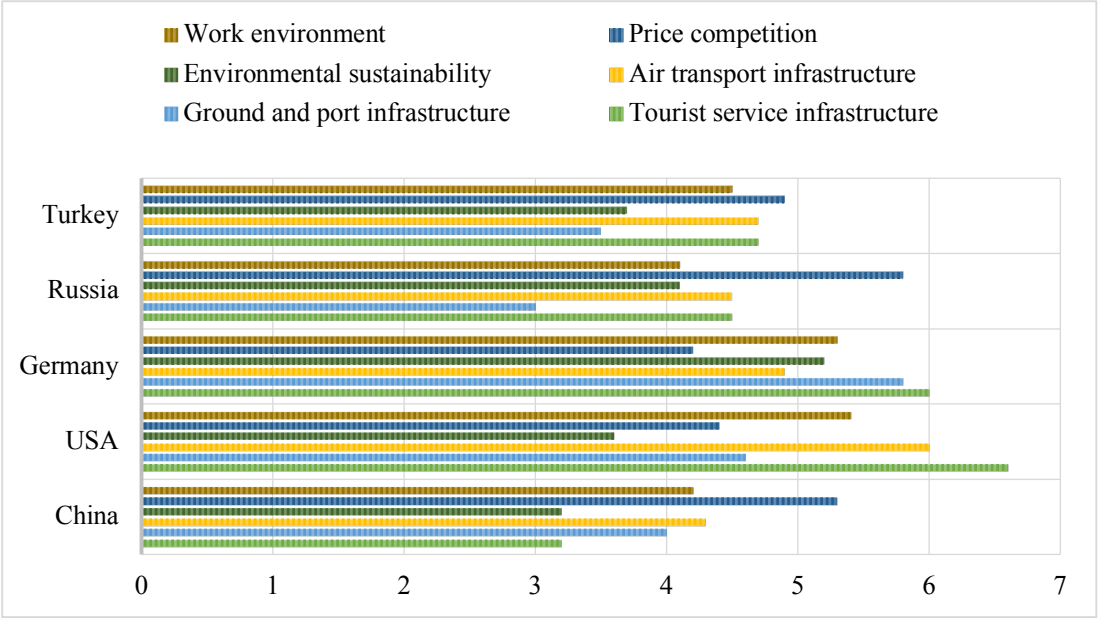
Source: World Travel and Tourism Council (WTTC)

Graphic 10. Inbound (foreign) visitor expenditures



Source: WTTC

Graphic 11. Basic tourism performance indicators of five countries



Source: Travel and Tourism Competition Report

The World Economic Forum has making an in-depth analysis of the Travel and Tourism competitiveness of 136 economies around the world for the last 11 years and has identified a set of factors and policies that ensure the sustainable development of the travel and tourism industry in order to create the "Travel and Tourism Competitiveness Index" of countries. This contributes to a country's development and competitiveness.

The Travel and Tourism Competitiveness Index enables all stakeholders to work together to increase the industry's competitiveness in their national economies. Thus, these efforts reflect a focus on ensuring the sector's sustainable growth in an uncertain security environment, while at the same time protecting the natural environment and local communities to which it is very richly dependent. In this context, comparative performances of five countries are presented in Graphic 11. Basic tourism performance indicators of the countries present in Graphic 11. These indicators are also indicators associated with the energy sector. In addition, the actual results of these indicators, in the level of competitiveness in tourism 3. Germany, 4. USA, China 15, Russia 43, and Turkey 44, ranks.

Germany ranks high in touristic service infrastructure activities, ground and port infrastructure facilities and environmental sustainability. In addition, it is seen that these indicators are at high levels also in the USA. However, Russia, China and Turkey are much lower than Germany and the USA in these indicators. In this regard, the experiences of Germany and the USA in energy factor and energy factor come to the fore. These developed countries (USA and Germany) are seen to be superior in tourism service infrastructures and transportation facilities, as they have completed the necessary studies and infrastructures regarding energy and energy accessibility as in other developed countries. For this reason, energy creates a competitive advantage for developed countries. In these countries, infrastructure opportunities in tourism services are more dominant due to the experience of energy use and the completion of the studies. However, emerging countries like Turkey, China and Russia failure to have sufficient energy owing to their experience of countries, can't give the necessary importance to this area, and do not achieve a competitive advantage in the tourism sector. While these and such countries generally stand out in terms of price, they also compete to take advantage of some of the advantages they bring in their cultural and geographical location.

Germany's competitiveness on sustainable environment comes from the studies and initiatives they have done to minimize environmental costs during the use of energy resources. Especially the orientation to renewable energy sources and the existence of a reduction policy in the use of non-renewable energy provides an advantage for the country in this regard. The policies of the countries in these orientations in line with the new world understanding also enable them to gain a competitive power. These issues, which have been given importance especially by the societies of developed countries in the last century, are also effective in the tourism destination decisions of these societies.

5. Conclusion

Although the tourism and tourism sector start with human, it must have some features within its body. The realization of these properties basically requires the energy factor. In this context, having cheap and uninterrupted energy supply and taking necessary precautions against possible environmental effects of energy use also support the development and sustainable growth of tourism.

The role of energy consumption for the tourism sector is almost ignored in research studies that are also necessary for sustainable tourism. The principles of sustainable tourism can be applied to all types of tourism (either traditional mass tourism or niche tourism segments such as ecotourism) and require optimal use of natural resources, environmental protection, respect for the socio-cultural aspects of host communities. The long-term economic viability and socio-economic benefits of tourism businesses need to be fairly distributed to all stakeholders. Therefore, managing energy supply and consumption is a critical component of the sustainable tourism industry. The growth of tourist traffic and the increase in the number of tourists not only affect the economic well-being of the country, but also energy consumption. Although the energy factor is one of the preconditions for sectoral development, existing obstacles hamper the development and growth of the sector.

In the study, in order to gain competitive power and gain advantage, the subject of energy and tourism was mentioned, a general literature on this subject was presented and information on tourism, energy and tourism performances of five countries was given. As a result, it is inevitable that energy will create a competitive advantage for countries. As seen in the examples of USA and Germany, which are among the five countries presented, especially the excess in infrastructure services and facilities enable these countries to gain a competitive power and gain an advantage in this regard. It can be stated that the experience of these countries in energy is related with these results. Turkey, however, as seen in the example of Russia and China, yet these countries have completed enough experience and accessibility, infrastructure and tourism services are unable to provide sufficient competitive advantage in transportation facilities. For this reason, these and such countries try to create a competitive power only in price, and in this case, it shadows the quality and sustainability of tourism. The high levels of business environment indicators in the USA can also be associated with energy use. However, it should not be forgotten that these energy uses are in parallel with the development levels of the countries.

Our overall research can be a guide for researchers and governments to create better tourism and energy strategies. At this point, the primary focus of policy makers is to strengthen the implementation of existing regulations and energy management policies in order to achieve sustainable growth in the tourism sector and gain competitive advantage in the sector. Enterprises under the hospitality sector such as hotels, resorts and restaurants can benefit from the efficient use of energy by reducing the cost of their operations, which are vital to the competitiveness of the tourism industry. Considering the increasing environmental awareness of tourists, it can be said that green tourism efforts will contribute to the growth and competitiveness of the tourism sector. However, the high installation cost of renewable energy systems and energy conservation devices can discourage these companies. Therefore, support policies can be implemented to increase the number of tourism facilities designed with green energy. More policies can also be developed for urban areas.

Author contribution statements

E. Demir and O. Bahar contributed equally to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript.

Disclosure statement

"No potential competing interest was reported by the authors."

Ethics committee approval

All responsibility belongs to the researchers. All parties were involved in the research of their own free will.

Appendix: Endnote

[1]This basic view has been associated with community cost leadership within Michael E. Porter's three general strategies. See Also (Porter, 2000: 44-45)

[2] This approach belongs to the "Traditionalist Competitive Approach" and the main representatives of this approach are; R. Cantillon is A. Smith and D. Ricardo. See Also (Lynch, 1997)

[3] A large number of motivating factors can be effective in choosing a particular region for the tourist. These elements are mainly; They appear as geographical, economic and social factors. See also (Bahar and Kozak, 2012: 41).

[4] Sustainable tourism development policies are defined as "all tourism plans and principles that cover the ability of present generations to meet their own needs without jeopardizing the ability of future generations to meet their needs and desires". See also (Tosun, 2001: 290)

References

Acaravcı, A. and Ozturk, I. (2010). On the Relationship Between Energy Consumption, CO2 Emissions and Economic Growth in Europe. Energy Policy, 35 (12), 5412-5420.

Altunbas, Y. and Kapusuzoglu, A. (2011). The Causality Between Energy Consumption and Economic Growth in United Kingdom. *Economic Research*, 9, 330–335.

Apergis, N. and Danuletiu, D. C. (2014). Renewable Energy and Economic Growth: Evidence from the Sign of Panel Long-Run Causality. *International Journal of Energy Economics and Policy* 4(4), 578-587

Apergis, N. and Payne, J. E. (2010). The Renewable Energy Consumption-Growth Nexus in Central America. *Applied Energy*, 88, 343-347

Bahar, O. ve Kozak, M. (2012). *Tourism and Competition. Ankara: Detay Publishing*

Becken, S., Frampton, C. and Simmons, D. (2001). Energy Consumption Patterns in the Accommodation Sector – the New Zealand Case. *Ecological Economics*, 1-40.

Chontanawata, J., Huntb, L. C. and Pierse, R. (2008). Does Energy Consumption Cause Economic Growth? Evidence From a Systematic Study of Over 100 Countries. *Journal of Policy Modeling*, 30, 209–220.

Cipolla, C. M. (1963). *World Economic History. Istanbul: Book Limited Company Publications*

Crouch, G. I. and Ritchie, J. R. B. (1999). Tourism, Competitiveness and Societal Prosperity. *Journal of Business Research*, 44, 137 – 152.

Ekin, N. (2007). *Education-Productivity-Employment in the Global Information Age. Istanbul: Chamber of Commerce Publications*

Gokmenoglu, K. K. and Eren, B. M. (2019). The Role of International Tourism on Energy Consumption: Empirical Evidence from Turkey. *Current Issues in Tourism*, 1-7. DOI: 10.1080/13683500.2019.1574723

Guran, T. (2003). *Economic History. Istanbul: Acar Printing House*

Harris, R. And Leiper, N. (1995). S*ustainable Tourism: An Australian Perspective*. Butterworth-Heinemann, Chatswood.

Isik, C., Doğan, E. and Ongan, S. (2017). Analyzing the Tourism–Energy–Growth Nexus for the Top 10 Most-Visited Countries. *Economies*, 5 (40), 2-13.

Katie, J. and Nicholls, S. (2010). The Impacts of Climate Variability and Potential Climate Change on Tourism Business in Torbay, England and Implications for Adaptation. *Tourism Analysis*, 15, 17–30.

Kuo, K. C., Liu, M. and Lai, S. L. (2012). Effect of Tourism Development on Energy Consumption, CO2 and Economic Growth in China. *Advanced Materials Research*, 524 (527), 3380-3383.

Lynch, R. (1997). *Corporate Strategy*. London: Pitman Publishing

Nižić, M. K., Grdić, Z. S. and Hustić, A. (2016). The Importance of Energy for the Tourism Sector, *Academica Turistica*, 9 (2), 77-83.

Porter, M. E. (1990). *The Competitive Advantage of Nations*. New York: The Free Press

Porter, M. E. (2000). *Competition Strategy: Sector and Competitor Analysis Techniques. (Translated by: Ulubilgen, G.). Istanbul: Sistem Publishing*

Priestley, G. K., Edwards, J. A. and Coccossis, H. (1996). *Sustainable Tourism? European Experiences*. İngiltere: Oxford University Press

Romero, M. P. P., Pozo-Barajas, R. and Sánchez-Rivas, J. (2017). Relationships Between Tourism and Hospitality Sector Electricity Consumption in Spanish Provinces (1999–2013). *Sustainability*, 9 (480), 2-12.

Sadorsky, P. (2011). Financial Development and Energy Consumption in Central and Eastern European Frontier Economies. *Energy Policy*, 39, 999-1006.

Scott, D. and Becken, S. (2010). Adapting to Climate Change and Climate Policy: Progress, Problems and Potentials. *Journal of Sustainable Tourism*, 18, 283–295.

Shahbaz, M. and Lean, H. H. (2012). Does Financial Development Increase Energy Consumption? The Role of Industrialization and Urbanization in Tunisia. *Energy Policy*, 40, 473–79.

Tosun, C. (2001). Challenges of Sustainable Tourism Development in the Developing World: *The Case of Turkey. Tourism Management,* 22 (3), 289-303.

Wang, J. C. (2012). A Study on the Energy Performance of Hotel Buildings in Taiwan. *Energy Build*, 49, 268–275.

Warnken, J. Bradley, M. Guilding, C. (2005). Eco-resorts vs. Mainstream Accommodation Providers: An Investigation of the Viability of Benchmarking Environmental Performance. *Tourism Management*, 26, 367–379

Internet references

United Nations Statistics Division (https://unstats.un.org/unsd/snaama/Index). http://data.un.org/Explorer.aspx?d=19&f=docID:401

Enerdata, https://yearbook.enerdata.net/total-energy/world-consumption-statistics.html

World Travel and Tourism Council https://www.wttc.org/datagateway/

World Bank https://data.worldbank.org/indicator/EG.GDP.PUSE.KO.PP?locations=TR

Travel and Tourism Competition Report, http://reports.weforum.org/travel-and-tourism-competitiveness-report-2017/country-profiles/#economy=RUS