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## EUROPEAN GREEN CAPITALS. SYMBOL OF ENVIRONMENTAL PROTECTION AND MODEL FOR SUSTAINABLE URBAN DEVELOPMENT

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## Abstract

In a world facing many challenges and conflicts, Europe's Green Belt Spaces have enormous potential for overcoming divisions, strengthening vulnerable societies and improving international relations. Today there is a growing emphasis on the need to achieve social, economic, cultural, environmental and technological attractiveness and its impact on regional and local development. European green capitals are a major contributor in order to create socio-economic well-being, to preserve the civilization diversity and environmentally friendly way of life. The aim of this study is to analyze the European cities that have been awarded by the European Commission for nearly a decade in Europe for their overall commitment to sustainable urban development, their ability to act as a role model for other cities and their strategy of communicating and engaging with their citizens. Proof of their "green credentials" demonstrates how we can make cities more liveable and healthier. Another important condition is that each European Green Capital has shown high environmental standards to engage in ambitious future sustainable development goals, which should inspire and stimulate best practices in other European cities.

## **Keywords**

Green capital - Ecological standards - Environment - Sustainable development - Prosperity

## Para Citar este Artículo:

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> > PH. D. IVAYLO VLADEV / PH. D. MILENA STOYANOVA

## Introduction

The goal of this survey is to analyze the cities in Europe that were chosen by the European Commision for almost a decade for their whole arrangement for steady city development, their ability to be an example for other cities and their strategy for communicating and engaging their citizens. The proof for their "green authority" demostrates how we can make our cities better for living and also healthier.

The subject of examination are the ecological indicators which serve as the main criteria when choosing the European green capitals and verify the profile of each winner, improve its reputation and make it an attractive and steady destination for people who visit it, work and live there.

The aim is achieved by using a system of approaches and methods. The main approach is the systemathically structural one. Using it helps prooving the connections between different cities. The chronological approach is used for determining the spacial regulativies between the different objects, processes and phenomenons while the chronological approach is used for tracing the changes in the indicators examined in time.

Of all methods, here we used: observation, comparisson, analysis, synthesis, systhematizing, clasifying, evaluation.

Our modern world is a united global space in which billions of human beings exist. The following development of the countries and the nations therese days depends quite a lot on solving global issues. They affect the vital interests of every inhabitant of our planet and of humanity as a whole. The global processes with their universal and serious issues are a not only a field of science but also important issues of world politics, economy and ecology.

The intensifying and the complicated tangling up of global issues is one of the most important pelicularities of our time. They have a different nature – cultural and political, socially economical, demographical, related to natural resources, ecological, legal and so on. At the same time they are provoked of the chronological unity and the fast pace of destroying the balance between nature and society and that's why they should be viewed as a united system of dynamically changing connected phenomenons in the geographical space<sup>1</sup>.

People who were born in the middle of the 20th Century are in a world with a population of 2.5 billion. 10 000 generations were needed for the world population to reach such number in 1950. It's clear that in 2025 this generation will witness the time when the population of our planet will be 8.2 billion. If we compare the dynamics of the multiplying of worl population from the middle of the 20th Century with the intensifying of the green house effect in the atmosphere, the diminishing of the ozone layer, the diminishing of the forests, the expanditure of the deserted lands, the pollution of the atmosphere, the hydrosphere, the miltiplying of waste, the extinction of plants and animals, we'll see that the first process is unavoidably connected to all the others.

The steady development of economics, the social sphere, the political relations between countries, life is impossible without steady and rational approach towards the

<sup>&</sup>lt;sup>1</sup> P. Lakov, Regional economy: SED "Chista priroda", Pleven. 2015.

condition of nature and the natural resources of the planet as a whole and in each region. Another problematic issue is the one for the state of the environment, the quality and the quantity of natural resources for the future generation of human society<sup>2</sup>.

In the beginning of the 21st Century the dynamics of the changes of the supersystem "human – nature – economy – environment" strongly intensified. When getting into an unsolvable conflict with nature, human society realized that nature is inevitably connected to all aspects of its existence, starting from economics and ending with humans' health conditions.

After 2016 a little above than 50% of the inhabitants of earth live in cities and Europe is one of the continents with a relative portion of citizens of about more than 70%. It's like that because production is mostly concentrated in the urbanized regions. Another reason for migration to big cities is the need of good education which is a consequence of employers' need for better professional qualification. The main positive consequence of the concentration of people in cities is the develpment of city environment because of the innate aspiration of human beings to improve their way of living. From this point of view it's logical to come to the need of easily accesible services and it terms of that, cities ensures favorable conditions for mass access to education, culture, health care, information sources, social activities and various services. As whole, the most qualified part of society is concentrated in cities. This creates conditions for active scientific activity and remarkable scientific achievents. That's why cities are the powerhouse of European economy and it can be said that they serve as catalyst of creation and inovation in all of the EU<sup>3</sup>.

The retorted reaction of environment towards human society is related to its effect on people's health. It's quite defined by the condition of environment and it's not only about one's physical health but also about one's moral and psychological well-being. It's important to note that people spend most of their time in closed areas. From this point of view, environmental factors can be from the outside – exercising influence outside the rooms and from the inside – which exert influence inside the rooms (Table 1).

Natural Social		Technogenic	
1. Global change of	1. Quality of life	1. Physical pollution (noise,	
environment		electromagnetic radiation)	
2. Natural outbreaks of	2. Sanitary and hygienic	2. Chemical pollution (air,	
diseases	conditions	vater, food)	
3. Ultraviolet radiation	3. Developed system of	3.Radioactive contamination	
	services	(increase of the radiation	
		background)	

Source: Kalimanova, O., Margolina, I. (2010). Geoecologicheskie problemy: opyt vizualizatsii v schkolnym kurse geographii. Geographiya v schkole, № 5, pp. 28-32.

Table 1

Environmental factors affecting human health

In order to encourage local authorities all over Europe to lesses the negative impact urban environment has on its habitants and to establish high ecological standarts, in 2008 the European Comission established the award for European Green Capital.

<sup>&</sup>lt;sup>2</sup> S. Rakovskiy, "Problemy globalnogo ustoychogo razvitiya and UN", Geographiya v schkole, num 5 (2004): 3-10.

<sup>&</sup>lt;sup>3</sup> K. Petrov, Geourbanism and urban development, Plovdiv. 2018.

The goal is the winning cities to turn into an example for steady urban development, to inspire and encourage the best practices in other European cities. The award is given to one European city and its not needed it to be the capital of some country. All towns with population over 100 000 people can apply to be European Green Capital. An important condition is it to have shown high ecological standards, to have shows great effort for perserving the environment and to engage in ambitious activities for future steady development.

These days 75% of European population lives in cities and municipalities face various challenges and are trying to improve the urban environment by creating green areas and also by managing waste, urban mobility, power efficience, etc. The participation of citizens through actions and partnerships is a vital part of dealing with the complex problems of urban development. The principles of steady development and including social cohesion are quite of present interest and can be used in urban development strategies.

Every year since 2010 a group of independent experts in the field of urban steadiness evaluate the work of the competing cities based on 12 ecological indicators and chooses the finalists which qualify for the final round of the competition. The judges pannel consists of representatives of the European comission, the European parliament, The Comitee of Regions, The European Environmental Agency, ICLEI – Local authorities for steady development, the office of the Mayors' Convent and the European bureau of environment. The winnger is accounced at an official ceremony that is held in the city that won previously and wins a price of 350 000  $\in$ .

The choice of European Green Capital is bade on the following ecological indicators: 1. Climate changes: mitigation and adaptation; 2. Steady urban mobility; 3. Greean urban areas that allow steady usage of the land; 4. Nature and biological diversity; 5. Air quality; 6. Noise; 7. Generating and management of waste; 8. Water management; 9. Cleansing waste water; 10. Green development and ecological innovations; 11. Power efficiency; 12. Integrated management of the environment.

Environmental policies these days are focused around three main fields: perserving natural capital which strenghtens economical progress and people's well-being, stimulating an effecient low-carbon economics and social development and protecting people of health risks related to the environment<sup>4</sup>.

The listed 12 ecological indicators greatly contribute to forcifying the professs towards long-term benefits which are realized co-ordinated. Those are mitigating the known influences on the ecosystems and people's health and at the same time they create possibilities through efficient technological inovations; adaptation to the expected climatical and other changes in the environment through increasing cities' stability; avoiding potential serious ecological hazards for people's health and well-being and the ecosystems by taking protective measures and prevention actions based on early warnings from science and recovering the stability of ecosystems and society by increasing natural resources; contributing to economical development and overcoming social injustice. Governmental approaches that engage citizens, NGOs, companies and cities will be of help.

<sup>&</sup>lt;sup>4</sup> European environment – State and prospects 2015: Synthesizing report, European Environment Agency. Copenhagen, 208 p. (www.europa.eu)

The idea of an European Grean Capital is each winning town to turn into a symbol of perservation of the environment and a role model in terms of steady urban development. From 2010 to 2020, 11 European cities have won the award and have inspired and stimulated the best practices in other European cities (Table 2).

Year	Green Capital	Country	Population (thousands)	Area (km²)
2010	Stockholm	Sweden	1 372 565	188
2011	Hamburg	Germany	1 786 000	755
2012	Vitoria-Gasteis	Spain	240 000	277
2013	Nantes	France	800 000	65
2014	Copenhagen	Denmark	1 295 686	456
2015	Bristol	Great Britain	428 100	110
2016	Ljubljana	Slovenia	289 518	164
2017	Autumn	Germany	573 468	210
2018	Nijmegen	The Netherlands	168 840	57
2019	Oslo	Norway	634 293	454
2020	Lisbon	Portugal	564 477	84

## Source:

https://ec.europa.eu/eurostat/statistics-

explained/index.php?title=Statistics\_on\_European\_cities (02.10.2020)

Table 2

Cities winning the European Green Capital Competition

The analysis shows that just 5 of them (Stockholm, Copenhagen, Ljubljana, Oslo and Lisbon) are also the capitals of their countries and the only cities from the same country that have won the award are the German Hamburg and Essen. Among the winners we can find green capitals of all parts of Europe: Northern (Stockholm and Oslo), Western (Hamburg, Nant, Copenhagen, Bristol, Essen, Nijmegen), Central and Eastern (Ljubljana), Southern (Vitoria-Gasteis and Lisbon). From all the awarded cities the most populated one is Hamburg and the least is Nijmegen.

The first one to win, Stockholm, impresses mostly with the independednt experts for limiting the emissions of carbon dioxide. The capital of Sweden which is built in a forest on an archipelago in Baltian Sea, in 2009 registers carbon dioxide emissions of 3.4 t per person while the emissions reach about 10 t per person in the rest of Europe and the tendency is rather ascending. To achieve such impresive results, Stockholm concentrates its efforts towards transportation and heating – two branches which are responsible for about 43% of the green-house effect gases. The city limits the emissions from transporation and drastically cuts down the emissions related with heating by investing in a municipality system for central management that works with renewable power in which 75% of the homes are included. This system also generates its own electricity.

In a city where green areas take up 40% of its territory in which 95% of the habitants have nature place for rest at their disposal at no more than 300 m of distance, the municipality stimulates citizens not to use their cars. For example in 2008 about 168 000 people have commuted to their workplace in the centre of town using public transportation that uses renewable power – regional trains, subways, bus, while 56 000 used their cars. The road fees for the roads around the centre of town have helped in reducing traffic by 20%.

Hamburg is like a capital of Northern Germany and the second biggest city in Germany. It's popular ever since 811 and in 1189 it received important privileges for development of trade and crafts. In the middle ot the 19th century the town was pronounced as a duty-free port. The luxurious parks and lakes support the claim that Hamburg is the Venice of the North and not Stockholm<sup>5</sup>.

The city is the third biggest port in Europe and a blooming trade metropolis with economical achievements. It wins the award for a green capital in 2011 in a competition with 34 more European cities. Even though it's known for its developped mechanical engeneering and heavy industry, the town can be considered one of the greenest in Europe. Hamburg has turned into an example for steady development after the local authorities committed to dealing with waste which the local industry produces. Thanks to its policies the town has reduced carbon emissions since 1990 with 15% thanks to its developped public transportation network and the goals of the administration are to reduce emissions with 40% to 2020 and with 80% until 2050.

Something Hamburg is very proud of is the numerous green areas. More than 16% of urban environment is taken by parks, woods and places for rest. The are more than 2500 channels which is more than in Venice and Amsterdam together. The main goal for local authorities is the city to continue to develop as a green one which can be proud both of its economy and its responsible approach towards nature.

The motto of the green capital for 2012 Victoria-Gasteis is: "Green on the inside and green on the ouside." The town was created in 1181 and is the second biggest one in its region. Victoria-Gasteis is located in Northern Spain and is the capital of the Alava province. Nature literally lives in it as the town is designed in a way that its surronded by a green belt – greenery in concentric circles around its centre. Everything is made in such way that each citizen has access to greenery at 300 m away from their home at most. This green capital has set a goal to reduce water usage under 100 I per personper day. Investments that improve the quality of water supply, that reduce water waste and provide steady water management have been made. An information centre informs citizens with the important matters and problems that are related to the efficient usage of water.

Many measures have been taken for perserving and helping biological diversity and the ecosystems in town. Everything that has been made for perserving the environment and the steady development of the city also has an educational purpose – it allows citizens to learn gardening from up close which is unusual for other big cities.

The city of Nant is located on the Loire river close to the coast of the Atlantic ocean. It's been named as the "green wonder of Western France". In 2004 the Times magazine chooses Nant as the best city to live in in Europe. It was chosen as European green capital in 2013. In the last 10 years, Nant has steady transportation policy which accentuates on public transportation and the mass introduction of bycicles. In the next few years investments are stipulated for the improvement of the quality of public transportation and for ensuring a good infrastructure. The policy of steady development of public transportation has lead to all of the air pollution indicatiors (sulphur dioxide, nitrogen oxides, fine dust particles and other) are under the allowed amounts and together with the ambitious plans for fighting climate change, the emissions of carbon dioxide have been reduce to 4.7 t per person.

<sup>&</sup>lt;sup>5</sup> Ch. Mladenov y I. Vladev, Geography of the EU. Shumen, 2005.

Copenhagen which is located on the East coast of Scheland island and partly on Amager island is used to being awarded. In 2008 and 2013 it's been announced as the best city to live in in the world and based on infrastructured it's third after Singapore and Munich. The capital Copenhagen which is an economical and a financial center of Denmark is the green capital of Europe for 2014. The longest pedestrian area in the world is located there and it's know as Ströget and it's one of the biggest pedestrian areas in Europe. The capital of Denmark was preferred over 18 applicants because it's also a city of cyclists. It's deservedly called a world centre of bycyclization with the first cycling highway (an alley which is 22 km long with traffic lights for cyclists) from 26 ones planned. It's not coincidental that 35% of citizens go to work on a bike and the administration is planning this percentage to increase to 50% by 2020 and to make the city carbon-neutral – it to absorb as much carbon dioxide as it releases. Since 2005 the city has managed to decreace carbon emissions by 20% with the encouraging the use of electric cars too. Almost all vehicles run on natural gas. All that is done in this green capital through improving green mobility, green areas, blue areas, leads to a better quality of life. Copenhagen is a destination for everyone who loves cleanliness and tidiness

The town of Bristol which is located in the North-West part of England and is a historical and a marine town, was the green capital of 2015. It's often described as the greenest town in Britain. Bristol is impressive with its activities in ecology. It has invested 300 million € in renewable power sources and power efficiency. The policies of the town granted the city a decrease in carbon emissions by 15% between 2005 and 2010 while the usage of power has gone down by 16%. The eighth most densely populated city in Britain has put enormous efforts in making parks and green spaces presentable in the eyes of Europe. One third of Bristol is covered by green areas or water. There are 450 parks and green areas in the town which is way more compared to other cities in Britain. Every year more than 80% of the habitans of Bristol make about 25 million visits of the parks and the green areas and their role as the town's "lungs" is becoming more important as the effects of climate changes intensify. Historical parks have a pelicular status, they are easily accesible and give visitors the chance to see a lot of natural and cultural sights. The investments in the ecological infrastructure provide a type of "ecotherapy" as they contribute to smaller expenses for health care which is good for both the well-being ot citizens and public finance.

The capital of Slovenia – Ljubljana won the award for European Green Capital in 2016. It received acknowledgement for increasing the ecological attitude among its citizens, for its stratedy for steadiness "Vision 2025", the introduction of various green measures in the last decate and an impressive transportation network.

Ljubljana is on the crossroad between Central and Southern Europe. It's always been an animated city, its talented builders have turned it into a magnificent architectural ensemble around a few hills that are turned into parks. The town reminiscences Prague with its beauty, Zalzburg with its symetry and Paris with the pictoresque meanders of Ljubljanica (Stoyanova, Vladev, 2007: 126).

The program for perserving the environment, the plan for steady mobility, the plan for steady power and the strategy for the electric mobility have all worked together to achieve an integrated and ecological image of the city. Ljubljana has achieven an impressive improvement in the field of ecological public comissions which are used of 70% of the city's buyings. The future plans for the transportation are promising and in 2012 the city set goals and because of that public transportation, non-vehicle mobility and private vehicles will be

one third of all types of transportation by 2020. The way a city deals with its waste is a key moment of its steady development and here Ljubljana can be used as an impressive example because 65% of the collected waste have been seperated which is the highest for any European capital (the rate of recycling in the USA is about 34%). Lyublyana is the first European capital that approves the strategy of zero waste until 2025.

It we take into account the political and the economical realities in this part of Europe, what Lyublyana has achieved in a relatively short period of time should be acknowledged, learned and spread.

Essen is a town in the heart of Ruhr region in North Westfalen province, which is located in North-West Germany. In 2017 the town was awarded for an European green capital for its remarkable success in dealing with the ecological consequences from the extraction of coal and steel which was the dominating branch of the national economy in the past and for its transition to a greet town that is "sustainable for life". One of the main motives of the judge panel are the impressive results of Essen in the environmental field and the support of its authorities and citizens for the transition of a heavy industrial past to the creation of a cleaner and a greener town. Today 80% of the working power if engaged in the services branch. Essen has set a goal to make 20 000 work places in the environmental field by 2035. The expectations are that the town will become a blooming and economically stable town that withstands climate change and ensures a healthy environment.

Today Essen is the greenest city in North Rhine-Westphalia because its citizens are making efforts to stimulate and cultivate green areas. Another example is the transformation of the Emsher River, which passes through the city, and has long been used as a wastewater channel and considered to be biologically dead. Thanks to significant investments in its infrastructure, including in the construction of hundreds of kilometers closed, underground sewerage, the river was brought back to life. The quality of the water has already improved sharply and the fish returned to the river. Many of the projects presented have been proposed by the city's inhabitants and are grouped into five thematic areas: transport, consumption, green areas, training and employment, and life between the city's river.

The oldest town in the Netherlands – Nijmegen (with 2000 years of history) was chosen for an European green capital in 2018 with a "passionate, clear and convincing vision" according to the judges. The outstanding policies for adaptation to the climate changes, the commuting by bikes, the management of waste and water and the participation of its citizens make Nijmegen a true ambassador of change. The town is very old but with a very bright future. Nijmegen is located in the Eastern part of the Netherlands in the Gelderland province. It's an inner port that is located on the Vaal river and it's known as "the balcony of Europe". Its habitants have a vision for a steady future which is built on the old Dutch traditions like the management of water and commuting by bike. The goal is for the town to become one that has a neutral impact on climate by taking long-term measures and co-operation with different partners, including business and its citizens.

The culture of commuting by bike of the Dutch is best presents in Nijmegen which in 2016 was the winner in the vote for "the town of bikes" in the Netherlands. By this day, over 60 km of super highways have been constructed with plans of adding 20 km more to the network. Over 65% of the visitors of the center of town and the university campus Heyendaal commute by bike. Before the announcement of Nijmegen for a green capital, its citizens participated in a green rally to other winning towns (Copenhagen, Bristol and Ljubljana) by travelling by bike, running and swimming which makes a strong impression. The example of

Nijmegen will continue to be an inspiration to others with the various activities which were completed for the town to become cleaner, healthier, safer, steadier and greener.

In 2019 the capital of Norway – Oslo, became European green capital. The judges were impressed by the holistic approach towards various aspects which vary from biological diversity, public transportation and social integration to the health of the citizens. The slogan: "A town for all that puts people first." aims for dealing with the mutual challenges as restoring the space for citizens for the expense of vehicles with the co-operation of other towns. Forests take up a big part of Oslo's territory and less than one third of citizens use their own cars.

Cutting harmful emissions by 95% by 2030, all vehicles to be electrical, developed public transportation, gardens in the center of town and hives, green rooftops and low levels of noise. This makes it clear why Oslo wins the award for European green capital. The town is so nicely located, that nature itself has taken care to sustain the perfect living conditions without the intervention of man. Oslo isn't very populated, it's surrounded by forested hills and the land is cut by fiords and channels. The most part of the population is young and with good education with a constant influx of migrants who are specialists in different fields and the local authorities have been using the latest technology in geourbanistics for many years. That's why Oslo has all chances to actually become a town from the future as we've imagined it in sci-fi novels: full merging with nature and maximal comfort for people

The "green" policy of Oslo has to do with cutting on harmful emissions and control of climate changes, increasing the mobility of citizens and efficient recycling of waste and effluents. The idea is the capital of Norway to turn into an oasis of health, comfort and a bright healthy life. Local authorities gradually expand the market of vehicles that release zero emissions so that citizens can enjoy some fresh air. Today 30% of all new vehicles that are sold in Oslo are electric cars. It's planned that in future all the cars to be electrical and the ones that run on gas petrol - to be forgotten. At the same time, public transportation will switch to safe biogas. Until 2020 there won't be even one bus that runs on diesel left. You only feel comfortable in a city only when you can easily go from one place to another. That's why Oslo expands the public transportation network: new routes are opened, there are new bus stops, the bus park is constantly being renewed, it's becoming more convenient for people with limited mobility, the prices are optimized and tickets can be bought from a smartphone app. At the same time, there are less personal cars which is also owed to the strict parking restrictions. The project "A City Without Cars" is a priority for Oslo there days. 65% of mobility needs are covered by public transportation and bikes and the center was recently closed for personal vehicles.

After two consecutive line-ups for the final round for an European green capital, Lisbon received the award for 2020. According to the judges it can become an inspiration and an example to be followed by many other cities on the continent. The capital of Portugal demonstrated that economical growth and steadiness can be achieved simultaneously. Located on the coast of the Atlantic, this port town is full of golden sandy beaches and 220 days of sunny weather a year. Lisbon offers enormous culture in a picturesque environment.

The town is working exceptionally actively in three fields: steady mobility, limiting the use of vehicles by prioritizing public transportation and walking and also a development of the system for charging stations for electric cars. The actions towards waste separation is not to be ignored too as one of the town's goals is to make waste into a power source for 150 000 households at least. Lisbon is doing very well in the efficient usage of land, the

development of green spaces and the steady solutions, the adaptation for climate change and steady solutions about public transportation.

The finalists for an European green capital for 2021 have been chosen. Those are the French town Lille and Strasbourg and the Finnish town Lahti. They already made their first step in proving their green powers for their whole engagement in steady urban development.

# Conclusion

The success of Europe on the way to a green economy will lead to improvement in man's well-being and social equality as it significantly decreases the risks for the environment and the ecological scarcity. In order for this to work, every town needs different projects including key fields as water, waste, transportation, air and so on which mostly contribute to oppression and influences on the environment and different social groups. As whole, the green town is characterized by the thing that it has a vision for development, it's open to innovations, uses a strategic approach and achieves the same or higher economical value with less and renewable resources and less waste. The green town absolutely doesn't compromise with any of the three key components of steady development: economic, social and natural

What makes the city's value is the part that it's an inspiration and creates a new way of thinking for what the attitude towards urban spaces should be. It helps with investments and that way it can stimulate a certain city not only though building a town's self-confidence but also through new economic activities

## References

European environment – State and prospects 2015: Synthesizing report, European Environment Agency. Copenhagen, 208 p. (www.europa.eu)

Kalimanova, O., Margolina, I. (2010). Geoecologicheskie problemy: opyt vizualizatsii v schkolnym kurse geographii. Geographiya v schkole, № 5, pp. 28-32.

Mladenov, Ch., I. Vladev. (2005). Geography of the EU. Shumen.

Petrov, K. (2018). Geourbanism and urban development, Plovdiv.

Rakovskiy, S. (2004). Problemy globalnogo ustoychogo razvitiya and UN. Geographiya v schkole, № 5, pp. 3-10 и № 8, pp. 11-13.

Stoyanova, M., Vladev, I. (2007). Tourism in Balkan countries. Shumen.

https://move.bg/how-ljubljana-became-the-2016-european-green-capital (02.10.2020)

https://ec.europa.eu/environment/urban/index\_en.htm (12.10.2020)

https://www.bristol.gov.uk/bristol-green-capital (17.10.2020)

https://ec.europa.eu/environment/europeangreencapital/ (02.10.2020)

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https://www.greencapitalchallenges.nl/ (07.10.2020)

https://ec.europa.eu/environment/efe/news/welcome-essen-european-green-capital-2017-2017-01-19\_en (02.10.2020)

https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=Statistics\_on\_European\_cities (02.10.2020)



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