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Poštovani čitaoci,

pred vama je posebno izdanje 20. broja časopisa *Prostor*. Ovo je tematski broj posvećen stručnoj ekskurziji studenata prostornog planiranja u Austriji, pod nazivom „Globalni, regionalni i lokalni aspekti prostornog planiranja u Centralnoj Evropi“, realizovanoj u periodu od 20. do 26. aprila 2015. godine.

U uvodnom delu broja koji je pred vama, organizatori ekskurzije, profesor dr Velimir Šećerov i docent dr Aleksandar Đorđević, osvrnuće se na pojedinosti same ekskurzije, njenu tradiciju, kao i prikaz svih stručnih institucija koje su nas ugostile prilikom boravka u Austriji i Slovačkoj.

Učesnici ekskurzije i autori radova jesu studenti prostornog planiranja osnovnih i doktorskih akademskih studija Geografskog fakulteta u Beogradu. Radovi i teme u ovom broju *Prostora* su: Korišćenje obnovljivih izvora energije u Austriji na primeru grada Güssinga, koji će vas upoznati sa “Güssing modelom”, jednim od najuspešnijih modela korišćenja OIE u svetu; Proces urbanizacije u Republici Austriji - od regionalnog ka lokalnom - tema u okviru koje su autori analizirali proces urbanizacije u Austriji, urbanu formu i aktuelne urbanističko-razvojne projekte u Gracu i Beču (i Bratislavi), a na samom kraju dali i komparativnu analizu urbanizacije bečkog i beogradskog metropolitena; Zaštita prirode i životne sredine Austrije, sa informacijama o korišćenju OIE, upravljanju otpadom i zaštićenim prirodnim područjima u Austriji; Turizam i kulturno-istorijsko nasleđe istočne Austrije, gde su izdvojeni i opisani turistički lokaliteti i mesta u delu Austrije koji su autori imali priliku da posete tokom ekskurzije, od Graca i Gusinga, preko Melka i Kremisa do Beča, Bratislave i Nozjidla; na samom kraju je rad sa temom ASPERN, u kojem su date osnovne informacije o trenutno jednom od najuspešnijih i najvećih razvojnih projekata u Evropi.

Naša iskustva su da stručne ekskurzije predstavljaju neizostavni deo usavršavanja studenata tokom svih nivoa studija, stoga se nadamo da će se njihova realizacija nastaviti u budućnosti, a studenti svoje stečeno znanje i impresije o aktuelnim trendovima prostornog planiranja u Evropi predstaviti u nekom od narednih brojeva časopisa *Prostor*.

Posebno zadovoljstvo nam je što 20. izdanje *Prostora* objavljujemo na 20. godišnjicu izlaska prvog broja časopisa. Kako bismo ostvarili našu zamisao da održimo kontinuitet objavljivanja dva broja godišnje, pozivamo vas da nam pišete, dajete svoje predloge i ideje, kao i da se uključite u pripremu i realizaciju narednih brojeva.

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Sa željom da se uskoro vidimo na novom putovanju,
a svoja iskustva i impresije predstavimo kolegama u *Prostoru*,

prijatno čitanje žele Vam

Branko Protić

Ljubica Petrović

urednici 20. broja časopisa *Prostor*

Beograd, decembar 2015. godine

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We can imagine...

(u spomen prijatelju, Prof. Dr. Werner Kvarda 1940-2013)

Nastavljajući tradiciju dugu četrnaest godina, 2015. godine je po osmi put organizovan studijski boravak studenata završnih godina osnovnih studija i master studenata smera za prostorno planiranje, kao i doktoranata na Geografskom fakultetu, u Austriji i Slovačkoj, od 20. do 26. aprila. Grupa od osamnaest studenata, zajedno sa dva eksperta, uz koordinaciju programa i putovanja od strane prof. dr Velimira Šećerova i doc. dr Alekandra Đorđevića, prešla je preko 2.800 kilometara puta kroz 6 evropskih zemalja.

Ovogodišnji studijski boravak bio je specifičan po mnogo čemu. Najpre, ponovo se desio nakon 5 godina pauze, u promenjenim okolnostima, relativno kratko pripreman, i na kraju, po prvi put organizovan pooptuno samostalno, ali uz veliku pomoć i sa velikom ljubaznošću kolega iz Austrije i Slovačke. Fokus stručnog boravka ovoga puta je blago pomeren ka urbanim sredinama, dok je naročito važna bila i poseta srodnim univerzitetima: Univerzitetu u Gracu - **Institut für Geographie und Raumforschung, IMC Fachhochschule Krems - University of Applied Sciences** u Kremsu, Univerzitetu BOKU - **Universität für Bodenkultur**, u Beču Tehničkom univerzitetu u Beču - **Department für Raumplanung** i Univerzitetu u Bratislavi - **SPECTRA Centre of Excellence of the EU and Institute of Management Slovak University of Technology in Bratislava**.

O svemu ovom pišu naše buduće kolege u svojim člancima posvećenim: istoriji urbanizacije Austrije i Slovačke i aktuelnoj današnjoj praksi u ovoj oblasti, kao i novim oblicima organizacije fizičke i integralne stukture grada (*Aspern Seestadt*); jedinstvenom primeru gotovo energetski nezavisnog grada u jugoistočnom delu Austrije (*Guessing - European Centre for Renewable Energy*); ekološko-turističkim regionima i poseti *Wahau dolini* bogatoj vinogradima, uz reku Dunav gde je i srž austrijskog državnog kulturnog bića; nacionalnim parkovima i zaštićenim područjima u Burgenlendu i Donjoj Austriji, i o još mnogo toga.

Osim toga, otvoren je put saradnje između univerziteta (u međuvremenu potpisan sporazum između Univerziteta za primenjene nauke u Kremsu i Geografskog fakulteta), potvrđena dosadašnja dobra praksa (dugogodišnja bliska saradnja sa TUW, BOKU, SPECTRA), ali i sagledana primena nastavnih programa u različitim aspektima planiranja, geografije, turizma, urbanizma, saradnja i privatno-javno partnerstvo u visokom školstvu, projektima, uzajamnom uticaju privrede i obrazovanja na profil budućih stručnjaka i stalna modifikacija aplikativnih znanja i dr.

Sve ovo bi bilo drugačije i teško organizovano na ovaj način, bez pomoći naših kolega i dragih prijatelja kojima neizmerno dugujemo na svemu prikazanom i učinjenom: dr Milanu Topiću i prof. dr Wolfgangu Fisheru iz Graca, prof.(FH) dr Karl Ennsfellneru i MSc Jens Peter Ennenu iz Kremsa, prof. dr Gernot Stoeglehneru i ostalim kolegama iz BOKU, dugogodišnjem saradniku prof. dr Thomasu Dillingeru i mladoj dr Petrai Hirschler sa TUW, uvek ljubaznom prof. dr Marosu Finki i svaki put inspirativnom dr Juraju Berdišu iz Bratislave, te našim domaćinima u Melk-u i Duernstein-u, Aspern-u i Schlosshof-u. Organizatori se naročito zahvaljuju studentima na izuzetnoj saradnji i angažovanju.

prof. dr Velimir Šećerov i doc. dr Aleksandar Đorđević

Foreword

We can imagine...

(in memory of a friend, Professor Werner Kvarda 1940-2013)

Continuing a tradition that started 14 years ago, in April this year we organized the 8th study visit of students in their final year of undergraduate studies and master students of the Department of Spatial Planning, as well as doctoral students at the Faculty of Geography, to Austria and Slovakia. From 20th to 26th April, a group of 18 students and two experts who coordinated the program and the trip, Professor Velimir Šećerov and Assistant Professor Aleksandar Đorđević, travelled over 2,800 kilometers through six European countries.

This year's study visit was specific in many ways. First of all, it was the first study visit after a five year break, it happened in changed circumstances, the preparation was short and, finally, we organized it completely on our own for the first time, albeit with great help and kindness from our colleagues from Austria and Slovakia. The focus of this study visit was slightly shifted towards urban areas, with great importance placed to the visits to related universities: the University of Graz - **Institut für Geographie und Raumforschung**, University of Applied Sciences in Krems - **IMC Fachhochschule Krems**, BOKU University in Vienna - **Universität für Bodenkultur**, Vienna University of Technology - **Department für Raumplanung** and the University in Bratislava - **SPECTRA Centre of Excellence of the EU and Institute of Management Slovak University of Technology in Bratislava**.

Our future colleagues wrote about all of this in their articles dedicated to: the history of urbanization of Austria and Slovakia and the current practice in this area, as well as new forms of organization of physical and integral structure of a city (*Aspern Seestadt*); a unique example of almost totally energy-independent city in southeast Austria (*Guessing - European Centre for Renewable Energy*); ecological-tourist regions and the visit to Wachau valley, rich with vineyards, which lies on the Danube and represents the core of Austrian cultural identity; national parks and protected areas of Burgenland in Lower Austria, and many more things.

Furthermore, this study visit paved the way for further cooperation between universities (in the meantime, an agreement was signed between the University of Applied Sciences in Krems and the Faculty of Geography in Belgrade), it confirmed the existing good relations (a long-standing close cooperation with TUW, BOKU, SPECTRA), but also gave us a chance to review the implementation of curriculums in different aspects of planning, geography, tourism, urbanism and cooperation, the cooperation and public-private partnership in higher education, projects, mutual influence of economy and education on the profile of future experts and the constant modification of applied knowledge, etc.

All this would be quite different and hard to organize in this way if it was not for the help of our colleagues and dear friends, who we owe so much for everything they have done: Dr Milan Topić and Professor Wolfgang Fischer from Graz, Professor (FH) Dr Karl Ennsfellner and Jens Peter Ennen, MSc, from Krems, Professor Gernot Stoeglehner and other colleagues from BOKU, our longtime associate Professor Thomas Dillinger and young Dr Petra Hirschler from TUW, the always kind Professor Maroš Finka and the always inspiring Dr Juraj Berdis from Bratislava, as well as our hosts in Melk and Duernstein, Aspern and Schlosshof. The organizers particularly wish to thank the students for their exceptional cooperation and effort.

Professor Velimir Šećerov and Assistant Professor Aleksandar Đorđević

KORIŠĆENJE OBNOVLJIVIH IZVORA ENERGIJE U AUSTRIJI NA PRIMERU GRADA GUSINGA

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Tijana Đorđević, Ana Jelovac, Jelena Tolić

UVOD

Svetska energetska kriza, izazvana naglim promenama na tržištu nafte, primorala je mnoge zemlje sveta da ozbiljnije i dugoročnije sagledaju sve energetske mogućnosti i da potraže prava rešenja. Osim energetske krize, sve je veći pritisak na životnu sredinu pa se tako javila i ekološka kriza koja je bila podjednako jaka kao i energetska. Budući da iz delatnosti vezanih za energetiku proističe glavna pretnja čovekovojoj okolini, rešavanje energetskeg problema postalo je u isto vreme značajno i sa ekološke strane. Zato su obnovljivi i čisti izvori energije došli u prvi plan. Iscrpljenje konvencionalnih izvora energije više nije mit, danas je postalo vidljivo i jasno da se pomenutim rezervama bliži kraj i da se moraju tražiti novi izvori energije. Nasuprot konvencionalnim izvorima stoje obnovljivi izvori energije: sunce, vetar i geotermalna energija. Pored toga što su neiscrpni, ovi izvori su i najčistiji i stoga najprihvatljiviji sa ekološke tačke gledišta, a imaju osobinu da su neotuđivi.

Izvore energije delimo na neobnovljive i obnovljive. Neobnovljivi izvori energije su fosilna (ugalj, nafta i prirodni gas) i nuklearna goriva (uran, plutonijum), čija su nalazišta i zalihe ograničene te samim tim podložna konačnom iscrpljivanju. Za razliku od njih, karakteristika obnovljivih izvora energije je da su neiscrpni odnosno neprestano se obnavljaju u prirodi. U obnovljive izvore energije ubrajamo sunčevu energiju, energiju vetra, energiju vode, geotermalnu energiju, energiju iz biomase i energiju talasa, plime i oseke.

Sunčeva energija - Solarna energija je energija sunčevog zračenja koju primamo u obliku svetla i toplote, a koja solarnom tehnologijom obezbeđuje toplotu, svetlost, toplu vodu, struju i hlađenje objekata do kojih se distribuira kao energent obnovljivog izvora. Postoje dve vrste solarnih sistema koji se koriste za proizvodnju električne energije: solarne fotonaponske ćelije koje konvertuju solarno

INTRODUCTION

The global energy crisis, caused by the sudden changes in the oil market, obliged many countries in the world to reconsider more carefully and in the long run all the energy forms and to attempt to find new appropriate solutions to this crisis. Apart from the energy crisis, there is an increased rate in pressure put on the environment, which resulted in another crisis which soon arose – ecological crisis, as grave as the former one. Finding a solution for the energy crisis has become important from the ecological aspect too, since the main menace to the environment derives from the energy related activities. That is the reason for foregrounding the renewable and raw sources of energy. Exhaustion of the conventional sources of energy is no longer a myth; it has become crystal clear that the aforementioned energy reserves are coming to an end and that we have to seek the new ones. Opposite to the conventional sources there are renewable sources of energy, such as: the Sun, wind and geothermal energy. Apart from being inexhaustible, these sources are also the purest and therefore the most acceptable from the ecological aspect, while being inalienable at the same time.

The sources of energy are divided into renewable and non-renewable sources. **Non-renewable** sources of energy are fossil fuels (black coal, oil and natural gas) and nuclear fuels (uranium, plutonium), whose sources and reserves are limited and therefore prone to the final dissipation. Unlike them, the main characteristic of the renewable sources of energy is limitlessness, which means that they are constantly renewed in the nature.

Renewable sources of energy comprise solar energy, wind energy, water energy, geothermal energy, biomass energy and wave energy – the tidal power.

Solar energy – Solar energy uses radiant light and heat that is obtained from sunlight; through the solar



zračenje u električnu energiju putem solarnih panela, i solarni termalni sistemi koji skladište sunčevu toplotu koja se može koristiti u razne svrhe.

Energija vetra - Energija vetra ili eolska energija je pretvaranje snage vetra (vazduha koji struji) u koristan oblik energije, korišćenjem tehnologije turbina na vetar za proizvodnju električne energije, vetrenjača za mehaničku energiju, pumpi na vetar za navodnjavanje i odvodnjavanje ili jedara za pogon brodova (jedrila).

Energija vode - Energija hidrotokova je važan izvor energije koji nastaje iz strujanja vodotokova koji zavisi od protoka, snage vodotoka i pada vodene mase. Hidroelektrane rečne tokove usmeravaju na turbine koje pokreću generatore. MHE su male hidroelektrane snage do 10MW, a iznad te snage su HE. Postoje protočne, akumulacione i reverzibilne hidroelektrane.

Geotermalna energija - Obuhvata toplotnu energiju akumuliranu u fluidima i stenskim masama u zemljinoj kori.

Energija iz biomase - Biomasa predstavlja obnovljiv izvor energije koji nastaje od biorazgradivih delova nusproizvoda drvne industrije, otpadaka i ostataka biljne mase ili „viška“ iz primarne poljoprivredne proizvodnje; sagorevanjem se može koristiti za proizvodnju toplotne energije, ali i proizvodnju električne energije ili se konvertovati različitim metodama u tečno stanje (biogorivo za saobraćaj),

technology it provides with heat, light, warm water, electricity and cooling the objects it is distributed to as a renewable energy source. There are two types of solar systems used for electricity production: solar photovoltaic cells, which convert sunlight directly into electricity through the solar panels; and solar thermal systems, which accumulate solar heat so that it can be used for different things.

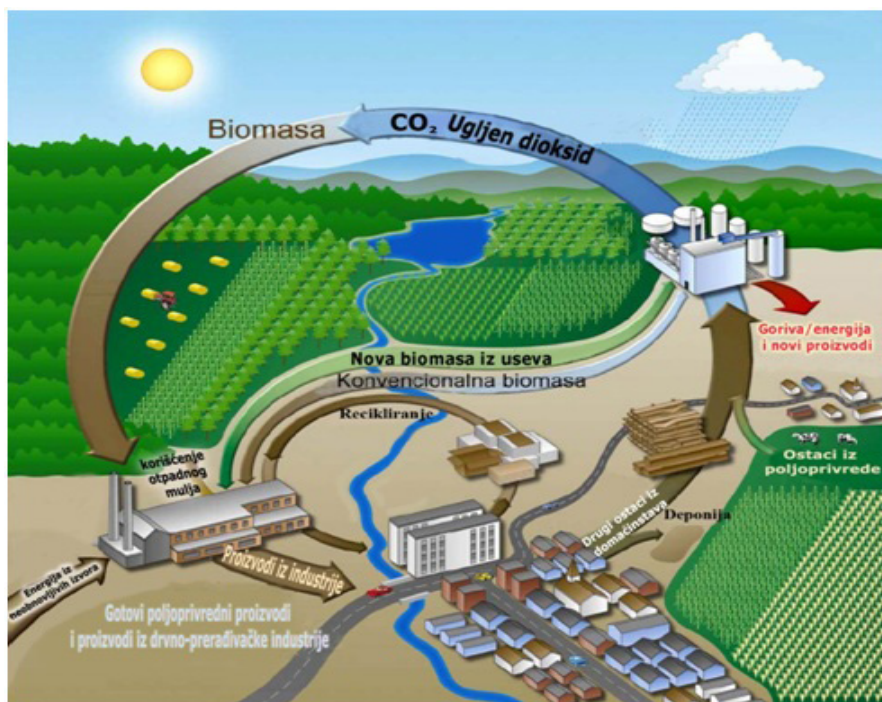
Wind energy - Wind energy or wind power is converting wind energy (airflow circulation) into a useful source of energy, by using wind turbines to produce electrical energy, or windmills for mechanical energy, or windpumps for water pumping or sails to propel ships.

Water energy - Hydropower is an important source of energy that is derived from the energy of watercourse and depends on water flow, watercourse power and falling waters. Hydroelectric power plants divert watercourse towards turbines that move the generators. There are small hydro types - they use 10megawatts, and those that are above that level are hydroelectric power plants.

Geothermal energy - This is thermal energy accumulated in fluids and rocks of the Earth's crust.

Wave energy - tidal power - Wave energy occurs as a result of the influence of the Sun and the Moon on seas and oceans.

Renewable energy replaces conventional fuels in four distinct areas: electricity generation, air and



Slika 1. Zatvoreni tok materije u biosferi
Figure 1. Biogeochemical cycle
(Source: www.green-group.rs)

ili gasifikacijom i biološkim razlaganjem različitog otpada u gasovito stanje (biogas).

Energija talasa, plime i oseke - Nastaje kao posledica delovanja Sunca i Meseca na vodu mora i okeana.

Obnovljiva energija zamenjuje konvencionalna goriva u četiri različite oblasti: električna energija, dobijanje tople vode - grejanje prostora, motorna goriva, i snabdevanje sistema ruralnih područija (off-grid) sa električnom energijom.

Najznačajniji potencijal obnovljivih izvora energije u Srbiji je energija iz biomase i procenjuje se na 3,405 miliona ten (tona ekvivalenta nafte), a u ukupnom potencijalu obnovljivih izvora energije biomasa učestvuje sa 60,3%. Trenutno najveći stepen iskorišćenja energije iz obnovljivih izvora u Srbiji je iz energije hidrotokova, čiji ukupan bruto potencijal vode koje otiču u vodotocima na teritoriji Republike Srbije iznosi oko 25.000 GWh (giga vat časova) godišnje (www.energetskiportal.rs).

POZITIVNI PRIMERI U SVETU

- Proizvodnja električne energije. Obnovljiva energija obezbeđuje 19% električne energije u svetu. Generisanje električne energije iz obnovljivih izvora energije su rasprostranjeni u mnogim zemljama, i samo energija iz vetra već pruža značajan udeo električne energije u određenim oblastima: na primer, 14% u američkoj državi Ajovi, 40% u severnoj nemačkoj državi Šlezvig-Holštajn, a 20% u Danskoj. Uvećan udeo električne energija iz obnovljivih izvora energije imaju Island (100%), Norveška (98%), Brazil (86%), Austrija (62%), Novi Zeland (65%) i Švedska (54%).
- Grejanje, pomoću obnovljivih izvora energije doprinosi u uštedi mnogih zemalja u odnosu na sve izvore toplote, pre svega u Kini, koja sada ima 70% od ukupnog svetskog stanovništva (sada se generiše oko 180 GWth toplotne energije iz nekog oblika OIE). U Švedskoj, nacionalno korišćenje energije biomase je prevazišao obim toplotne energije koju daje nafta. Direktna primena geotermalne energije za grejanje je takođe u porastu.
- Transportna goriva iz obnovljivih izvora - biogoriva su doprinela značajnom padu potrošnje nafte u Sjedinjenim Državama i EU od 2009. su biogoriva korišćena oko 8% od ukupne potrošnje naftnih derivata.

ENERGETSKA EFIKASNOST

Obnovljivi izvori energije daju značajne mogućnosti za energetska efikasnost, za razliku od drugih izvora

water heating, motor fuels, and rural (off-grid) energy services.

The most significant potential among the renewable sources of energy in Serbia is biomass energy; it is estimated to be 3.405 mil (a tone of the oil equivalent), while it is 60.3% of the overall potential of renewable sources of energy. Currently the most used renewable source of energy in Serbia is hydropower; the overall gross potential of water flow in the territory of the Republic of Serbia is approximately 25.000 GWh per annum.

POSITIVE EXAMPLES AROUND THE WORLD

- Electrical energy production. Renewable energy provides 19% of electrical energy in the world. Electrical energy generation from the renewable sources of energy is widespread in many countries, and the wind power itself already provides electrical energy production in certain areas: for e.g. 14% in Iowa (USA), 40% in Schleswig-Holstein (northern Germany), 20% in Denmark. The countries that largely contribute in electrical energy production using the renewable sources of energy are: Iceland (100%), Norway (98%), Brazil (86%), Austria (62%), New Zealand (65%) and Sweden (54%).
- Heating, using the renewable sources of energy proves to be cost-effective in many countries, compared to the rest ways of heating, primarily China, where 70% of the overall world population lives (now generates around 180GWth of thermal energy from some of the renewable sources of energy). In Sweden, national use of biomass energy has exceeded the quantity of thermal energy provided by oil. Also, direct implementation of geothermal energy for heating has also showed an increased rate.
- Fuels for vehicles obtained from the renewable sources – biofuels, have affected decrease in oil use in USA, while in EU, since 2009, biofuels have comprised 8% of oil products.

ENERGY EFFICIENCY

Renewable sources of energy offer significant possibilities for energy efficiency, unlike other sources of energy, concentrated in few countries. Energy efficiency is a set of measures and operations in all areas of life that have, as their main goal, minimal energy consumption, under the condition that the living and working conditions remain the same or improve. That is not just an energy saving method that includes renunciations, but its efficient



energije, koji su koncentrisani u malom broju zemalja. Energetska efikasnost predstavlja zbir mera i delovanja u svim oblastima života kojima je krajnji cilj minimalna potrošnja energije, uz uslov da nivo rada i življenja ostane isti ili se poboljša. To nije puka štednja energije koja podrazumeva odricanja, već njena efikasna upotreba koja doprinosi poboljšanju kvaliteta života i rada, kao i većoj konkurentnosti proizvodnje (www.green-group.rs).

Prostorno planiranje ima ogromne potencijale za unapređenje sistema uštede energije, formiranje energetske efikasne struktura naselja i usmeravanje racionalnog korišćenja obnovljivih izvora energije. Mnogi projekti obnovljivih izvora energije su velikih razmera, ali su takođe pogodni za seoske i udaljene oblasti, gde je energija često presudna u ljudskom razvoju. U daljem delu rada osvrnućemo se na Austrijski pristup ovom problemu kroz primer grada Güssing (Burgenland) u kome je smešten Evropski centar obnovljivih izvora energije.

GÜSSING MODEL

Grad Güssing nalazi se na teritoriji najmlađe savezne države Burgenland, na krajnjem istoku Austrije. Burgenland je najvećim delom teritorije u sklopu Panonske nizije, po čemu se znatno razlikuje od ostatka Austrije. Reljef je ravničarski, jedino je mali deo na zapadu pokrajine planinski i pripada nižim, prvim planinama Alpa. U sklopu Austro-ugarske ova savezna država pripadala je mađarskom delu monarhije. Raspadom Austro-ugarske nakon Prvog svetskog rata rodio se među većinskim nemačkim stanovništvom pokret za priključenje Austriji. Pokrajina je priključena Austriji 1921. godine. Zbog svog nepovoljnog, marginalizovanog položaja, Burgenland je postala najnerazvijenija austrijska pokrajina. Zbog toga se veliki deo stanovništva iselio tokom 20. veka u veće gradove, kao što su Beč i Graz. Burgenland je oduvek bio poljoprivredno područje bez velikih gradova. Danas ova pokrajina prima veliku finansijsku pomoć i potporu za razvoj lokalne privrede od strane Evropske unije i same Austrije (www.guessing.co.at).

Grad Güssing se nalazi u jugoistočnom delu Austrije, šest kilometara severno od državne granice sa Mađarskom i 160km južno od Beča. Smešten je u dolini rečice Pinke, pritoke Rabe. Nadmorska visina grada je oko 230m. Grad se obrazovao oko usamljenog brda u središnjem delu doline, na kome su izgrađeni zamak i gradska crkva. Prema podacima iz 2011. godine ima 3.764 stanovnika (www.guessing.co.at).

use that contributes to the better living and working conditions, as well as the greater competitiveness in the production (www.green-group.rs).

Spatial planning has great potential for improving the system of energy saving, forming the energy efficient town structures, and diverting of the reasonable use of renewable sources. Many projects pertaining to the renewable sources are very comprehensive, but they are also suitable for rural and distant towns and villages, where the electrical energy is often crucial for any development. In the following section we will consider the Austrian solution for this problem through the example of the city of Güssing (Burgenland), the location of the European center for the renewable sources of energy.

GÜSSING MODEL

The town of Güssing is located in the youngest federal state territory – state of Burgenland in the east of Austria. Burgenland is mostly located in the Pannonian Basin, which makes his relief significantly different from the rest of Austria. The relief is plain, except for the small area in the west part of the province which includes several lower mountains that belong to the first rows of the Alps. As a part of the Austrian-Hungarian Empire this state belonged to the Hungarian part of the monarchy. Breakdown of this Empire after the First World War initiated a movement among a majority of the German population in Burgenland, to join Austria. The province joined Austria in 1921. Because of its vulnerable, marginalised position Burgenland has become the least developed province of Austria. Because of that, a large part of the population emigrated during the 20th century, in the bigger cities, such as Vienna and Graz. Burgenland has always been an agricultural area without large cities. Today the province receives a great financial support and assistance from European Union and Austria itself, in order to develop its local economy.

City of Güssing is located in the southeastern part of Austria, only six kilometers north of the border with Hungary and 160 kilometers south of Vienna. It is located in the valley of the river Pinke, that flows into Raba's stream. The town was formed around a lonely hill in the central part of the valley, where they built the castle and the town's church. According to the data from 2011, Güssing has 3,764 inhabitants.

Until the fall of the Iron Curtain, Güssing was one of the most underdeveloped areas in Austria.

Do pada gvozdene zavese, tj završetka blokovske podele krajem 80-ih godina Güssing je bio jedno od najnerazvijenijih područja u Austriji, bez industrije, bez transportne infrastrukture, usitnjenih seoskih gazdinstava, sa visokom stopom nezaposlenosti i konstantnim iseljavanjem stanovništva. Oko 70% zaposlenih su putovali svakodnevno u Beč i upravo zbog nedostatka saobraćajnica visokog nivoa i nepovezanosti sa Austrian Autobahn sistemom, energetske izdaci bili su ekstremno visoki. U tom trenutku umirući grad Güssing jedva je uspevao da izdvoji oko 8 miliona evra za troškove fosilnih goriva. Gradski čelnici su uvideli da bi taj novac mogao da ostane u regiji, umesto da se daje okolnim regionima u zamenu za grejanje, električnu energiju i drugo. Tako se 90-ih godina razvoj grada usmerava na sa jedne strane smanjenje potrošnje energije (gradsko osvetljenje dobilo je energetske-efikasne sijalice, poboljšana je izolacija na zgradama itd.) a sa druge strane na iskorišćavanje lokalnih izvora obnovljive energije – biomase iz šumarstva i poljoprivrede i sunčeve energije. Usvojena je strategija lokalne proizvodnje energije iz postojećih obnovljivih izvora regije, kao i cilj da čitava regija postane nezavisna kada je u pitanju korišćenje fosilnih goriva. Tada je usvojena politika koja se poziva na potpunu eliminaciju upotrebe fosilnih goriva u svim javnim zgradama, u pokušaju da se više novca zadrži na lokalnoj ekonomskoj sceni i da se time oživi grad Güssing (Van Staden, Musco, 2010).

Dakle, Güssing model predstavlja strategiju decentralizovane, lokalne proizvodnje energije prilikom koje se koriste svi lokalni raspoloživi obnovljivi izvori u regionu. Ovaj model razvijen je na osnovu potrebe da se zaustavi depopulacija, da se poveća ekonomski rast i da lokalna zajednica bude nezavisna od fosilnih goriva i to je upravo ono što je Güssing pokušavao da ostvari još od ranih 90ih godina (www.eee-info.net). Ono što ovaj model čini univerzalnim i lako primenljivim na najrazličitije zajednice širom sveta jeste činjenica da svaki region raspolaže određenim obnovljivim izvorima u najrazličitijim količinama.

U roku od 2 decenije, Güssing model ostvario je izvanredne rezultate, preobrazivši nerazvijeni kraj u evropski centar za obnovljivu energiju, EEE Güssing, koji sufinansira Evropska unija. Austrijska savezna država Burgenland ima danas oko dvadesetak elektrana i elektroenergetskih postrojenja koja koriste šumsku i poljoprivrednu biomasu, kao i sunčevu energiju, koje pokrivaju oko pola energetske potrebe regiona. Oni pri tome ostvaruju

The town had no industry, no transportation infrastructure, a lot of fragmented rural areas, high unemployment rate and constant emigration of its population. Around 70% of the town's employees are traveling daily to work in Vienna and because of the lack of the higher level roads and no connections with Austrian Autobahn sistem, energy expenses were extremely high. At that moment dying city of Güssing barely managed to pay up about 8 million euros, which was the price for use of the fossil fuels at that moment. City officials realised that the money could stay in the region, instead of giving it to the surrounding regions in exchange for heating, electricity and more. In the 90s city development was focused on one hand to reduce energy consumption (energy-efficient light bulbs, improving insulation in buildings, etc.) and on the other hand – exploitation of local renewable energy sources – biomass from forestry and agriculture and solar energy. Güssing used the strategy of local production of energy from renewable sources that exist in the region. The course was, at first, to make an entire region independent when it comes to the use of fossil fuels in all public buildings – the attempt was to keep more money in the local economic scene and thereby revitalize the Güssing city.

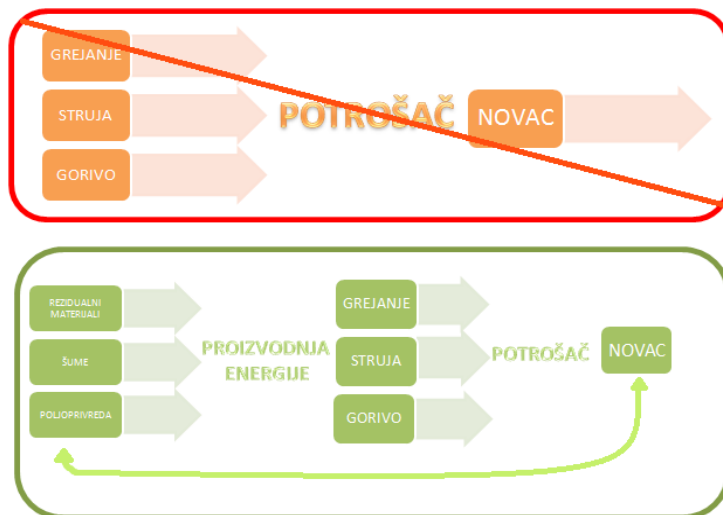
So, Güssing model represents a strategy of decentralized, local energy production which uses all available renewable energy sources in the region. This model was developed because of the need to stop depopulation, to increase economic growth and the need to make local community independent when it comes to use of fossil fuels – that is exactly what Güssing is trying to achieve since the early 90s. What makes this model universal and easily applicable in various communities around the world is the fact that each region has certain renewable sources in different amounts.

Within two decades, Güssing model achieved remarkable results, transforming underdeveloped region into European center for renewable energy, EEE Güssing, which is co-financed by the European Union. Austrian state of Burgenland, today, has around twenty power plants and electric power plants, that are using biomass and solar energy. The plants cover about half of the energy needs of the region. They generate around 18 million euros from energy sales, annually. EEE Güssing in cooperation with Technical University of Vienna is developing advanced technology gasification of biomass to produce electricity and heat, as well as second-generation biofuels.



prihode od prodaje energije u iznosu od oko 18 miliona evra na godišnjem nivou. EEE Güssing u saradnji sa Tehničkim univerzitetom u Beču razvija naprednu tehnologiju rasplinjavanja biomase za proizvodnju električne i toplotne energije, kao i biogoriva druge generacije (www.rmi.com).

The first plant for the production of thermal energy based on biogas was opened in 1996. All public buildings (schools, kindergartens, health center, etc) were connected to the heat network of Güssing that would later expand and today it includes roughly 50% of all households in Güssing, and many



Slika/Figure 2. Güssing model (Source: www.güssingrenewable.com)

Prvo postrojenje za proizvodnju toplotne energije na bazi Biogasa otvoreno je još 1996. godine. Sve zgrade javne namene (škole, vrtići, zdravstveni centar itd.) su u početku priključene na toplotnu mrežu Güssinga da bi se ona kasnije proširila i na 50% domaćinstava u Güssingu, kao i na mnoga industrijska postrojenja. Postrojenje koristi ostatke prerađivanja drveta (sitne komadiće drveta) čijom se termičkom obradom dobija toplotna energija koju većina stanovnika Güssinga i danas koristi za grejanje.

industrial plants. The plant uses wood processing residues (small pieces of wood), which are used to make thermal energy that most of the Güssing’s population uses to heat up their homes.

Although Güssing is relatively wooded region with 30% of its territory covered in forests, the town has to buy large quantities of wood mass from other regions to fulfill its industry, electricity and heat needs. Adequate forest management which is regulated after the development of the Güssing model has led to a reduction in demand for wood



Slika 3. Postrojenje za proizvodnju toplotne energije u Güssing-u (Figure 3. Plant for the production of thermal energy in Güssing (Source: Authors))

Iako je Güssing relativno šumovita regija sa 30% teritorije pokrivenom šumom, za potrebe kako industrije parketa tako i samih postrojenja za proizvodnju električne i toplotne energije potrebne su velike količine drveta pa tako Güssing kupuje drvenu masu i iz drugih regiona. Adekvatno gazdovanje šumama koje je uređeno nakon razvoja samog Güssing modela dovelo je do smanjenja potreba za drvetom iz drugih regiona.

Güssing je, 2001. godine, instalirao i gasifikaciono postrojenje za preradu biomase, koje koristi strugotinu i druge sitne delove drvene mase. Fabrika parketa koja je otvorena u samom Güssingu sve ostatke od prerade drveta cevima prenosi do pomenutog postrojenja gde drvena masa ide dalje u proces.

Ovo je bila prva fabrika te vrste u svetu. Postrojenje proizvodi u proseku 2 megavata električne energije i 4,5 megavati toplotne energije, što je više nego dovoljno energije za potrebe grada, dok troši samo trećinu biomase koja se stvara svake godine. Osim električne energije i toplotne energije postrojenje proizvodi Biogas, Biodizel i Biobenzin. Postrojenje se sastoji iz 3 međusobno povezana objekta. U prvom objektu vrši se tretman drvene mase na 400 C^o bez prisustva kiseonika uz pomoć katalizatora (olivina). Nakon dobijanja gasa on se u pomenutom objektu pročišćava i dalje transportuje u drugi objekat na metanizaciju u kojem se dobija 94% metan. U trećem objektu dobija se Biodizel i Benzin, ali se u njemu takođe Biogas dalje transformiše u električnu energiju. Na slici 4. prikazana je trafo-stanica iz koje se električna energija dalje transportuje ka korisnicima.

from other regions.

In 2001 Güssing installed a gasification plant for biomass processing, which uses wood chips and other small parts of wood mass. Parquet factory that opened in town transports all of the wood remains by pipes in gasification plant so that wood pulp can go into further process.

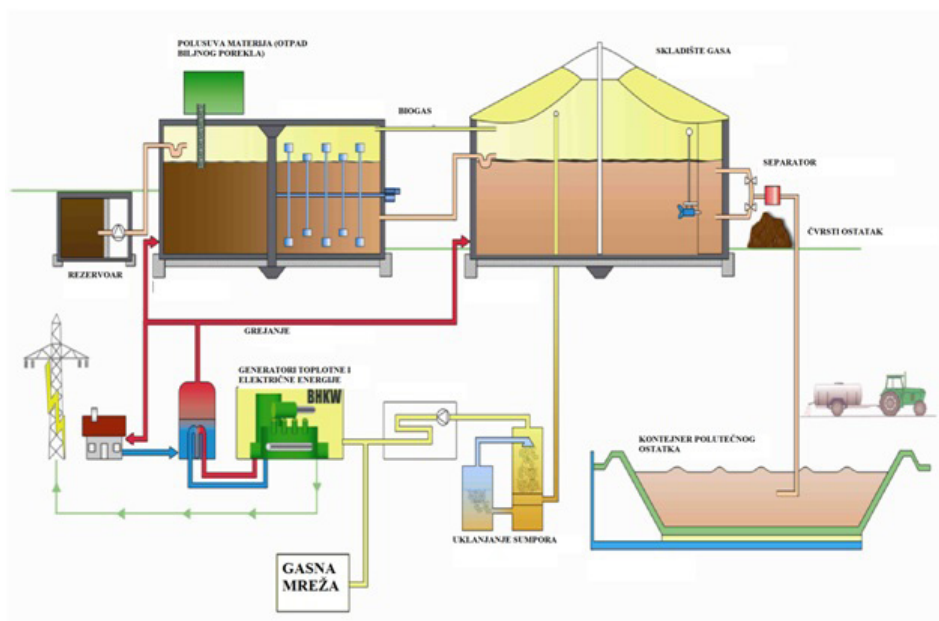
This was the first factory of its kind in the world. The plant produces an average of 2 megawatts of electricity and 4.5 megawatts of thermal energy, which is more than enough energy for the needs of the city, yet consumes only a third of the biomass generated each year. In addition to electricity and thermal energy, plant produces biogas, biodiesel and biopetrol. The facility consists of 3 connected buildings. In the first building wood mass is treated at 400 C^o without the presence of oxygen, using a catalyst (olivine). After getting gas in the aforementioned facility, gas is purified and then transported to another facility for methanisation, where product after treatment is 94% methane. The third building produces biodiesel and biopetrol, but it also continues to transform biogas into electricity. Figure 4 shows the power stations from which electricity is then transported to the users.

The city also has a factory that converts rapeseed in biodiesel, which is used by all gas stations and fuel stations in the district.

In 2004 in Güssing opened a plant for the production of biogas using waste from agriculture and other waste consisting of plants (green waste). This waste



Slika 4. Postrojenje za proizvodnju gasa u Güssingu
Figure 4. Plant for the production of biogas in Güssing
(Source: Authors)



Slika 5. Model postrojenja za proizvodnju Biogasa
 Figure 5. The model of plant for the production of biogas
 (Source: www.gussingrenewable.com)

Grad takođe ima i fabriku koja pretvara uljane repice u biodizel koji koriste sve pumpe i stanice za gorivo u okrugu.

U Güssingu se 2004. godine otvara i postrojenje za proizvodnju Biogasa koje za proizvodnju gasa koristi otpad iz poljoprivrede i drugi otpad biljnog porekla koji otkupljuje od stanovništva Gusinga po 24 €/t.

Ovo postrojenje je jedinstveno iz razloga što je konstruisano tako da oponaša kravlji želudac. Iz tog razloga se za proizvodnju gasa koristi biljni otpad koji se razlaže i tretira kao i u kravljem želucu i na taj način se proizvodi Biogas, a kao čvrsti i polučvrsti ostatak dobija se visoko kvalitetno đubrivo koje se besplatno ustupa poljoprivrednicima Güssinga. Na godišnjem nivou za potrebe proizvodnje gasa u ovom postrojenju iskoristi se 11t zelene mase od koje se dobije čak 2 miliona m³ Biogasa. Dobijeni gas se dalje transformiše u električnu i toplotnu energiju. Sva voda koja je potrebna u procesu kruži pa se tako štedi i na vodi. Na ovaj način formiran je ciklični sistem od kojeg svi u Güssingu imaju koristi.

U okviru EEE funkcioniše i Tehnološki centar Güssing, koji izrađuje programe i projekte energetskog pokrivanja terena na temelju obnovljivih izvora energije za lokalne zajednice u Austriji i inostranstvu.

Pored navedenih Güssing ima i brojna druga postrojenja za proizvodnju električne i toplotne energije. Sastav gradskog daljinskog grejanja ima 4 energane koje koriste šumsku biomasu i

is purchased from local residents at a price of 24 €/t.

This plant is unique because it is designed to mimic the cow stomach. For this reason, green waste is used for the production of biogas which is decomposed and treated as in the cow's stomach and thus the biogas produced. The solid and semi-solid residue is high quality fertilizer that is free for Güssing farmers. On an annual basis for the purpose of gas production at this facility 11t of green mass is used to gain as much as 2 million m³ of biogas. The resulting gas can be further transformed into electricity and heat. All the water that is required in the process is circulating thus saving the water. In this way a cyclic system is formed, from which everyone in Güssing benefit.

Functioning within the EEE is also Technology Centre Güssing, which produces programs and projects regarding renewable energy for local communities in Austria and abroad.

In addition to these, Güssing has a number of other plants for the production of electricity and heat. The composition of the city's district heating has 4 power plants using forest biomass and two power plants that use solar energy. They produce thermal energy for all households and all public buildings and more than half of industrial and commercial facilities. The system has been developed since 1996, and consumers pay 7,000 euros for the connection. Biomass for power plants is collected in a radius of 30 to 40 kilometers from the city, at a price 75 to 80 euros per tonne, which is relatively stable prices

dve energane koje koriste solarnu energiju. One opslužuju toplotnom energijom sva domaćinstva i sve javne zgrade i više od pola industrijskih i komercijalnih objekata. Sistem se razvija od 1996. godine, a potrošači plaćaju 7000 evra za priključak. Biomasa za pogon energane prikuplja se u radijusu od 30 do 40 kilometara od grada, po ceni 75 do 80 evra za tonu, što je relativno stabilna cena tokom velikog rasta i oscilacija cena nafte i plina na svetskom tržištu u protekloj deceniji. Güssing ima i proizvodnju solarnih fotonaponskih ploča. Selo Strem blizu granice sa Mađarskom ima bioplinsku energanu, koja iz 30t dnevnog poljoprivrednog otpada i brzorastućih biljaka, sa 250 hektara zemljišta proizvodi električnu (0,5 MW) i toplotnu (0,6 MW) energiju za potrebe stanovnika Strema i prodaju u električnu mrežu po povoljnim cenama (0,145 evra za kWh). Investicija je iznosila 2,25 miliona evra. Sve ovo praćeno je i izuzetno stabilnom i niskom cenom grejanja čime se ne mogu pohvaliti korisnici grejanja na fosilna goriva. Iz ovog razloga stanovništvo je uključeno i zainteresovano za dalji razvoj sistema (www.gussingrenewable.com).

during the high growth and fluctuations in oil and gas prices in the world over the past decade. Güssing has production of solar photovoltaic panels. Strem village near the Hungary border has a biogas power plant, which uses 30 tonnes of agricultural waste and fast growing plants a day for production of electricity (0.5 MW) and thermal (0.6 MW) energy for residents and strives to sell the electricity at favorable prices (0.145 euros per kWh). The investment amounted to 2.25 million euros. All this is accompanied by an extremely stable and low cost heating which can not boast of users of heating with fossil fuels. For this reason the population is involved and interested in the further development of the system.

In 2007, New York Times outlined the fact that Güssing is the first community in the European Union, which has managed to reduce carbon emissions by more than 90%, which helped to attract a large number of scientists, politicians and eco-tourists and all of them have invested in the community, each in their own way. A year later, Güssing has established a research institute with a focus on thermal and biological gasification and



Slika 6. Tehnološki centar Güssing
Figure 6. Technology Centre Güssing
(Source: Authors)

Godine 2007. NY Times je izneo činjenicu da je Güssing prva zajednica u Evropskoj uniji koja je uspela da smanji emisiju ugljenika za više od 90%, što je pomoglo u privlačenju velikog broja naučnika, političara i eko-turista i svi oni su investirali u zajednicu, svako na svoj način. Godinu dana kasnije Güssing je osnovao istraživački institut sa naglaskom na toplotnu i biološku gasifikaciju i proizvodnju druge generacije goriva. Iste godine nekoliko fabrika

production of second-generation fuels. That same year, several factories engaged in the production of photovoltaic and solar panels and production of solar energy were transferred in Güssing, which additionally increased its power of attraction. Today this small city produces significantly more energy than it uses. There are about 30 power plants using renewable energy sources. Annual revenues from energy sales are about 17 million euros. Güssing

koje se bave proizvodnjom fotonaponskih i solarnih panela i proizvodnjom solarne energije premešteno je u Güssing, što je dodatno povećalo njegovu privlačnu moć. Danas ovaj mali grad proizvodi znatno više energije nego što koristi. Postoji oko 30 elektrana koje koriste obnovljive izvore energije. Godišnji prihodi od prodaje energije su oko 17 miliona evra. Güssing model pokušali su da slede mnogi gradovi i naselja širom Austrije i sveta. Tako, danas, u Austriji ima više od 15 naselja koja su energetske nezavisna u sektorima elektrifikacije, grejanja ili transporta. Grad Güssing je pokazao da je korišćenje obnovljivih izvora energije ne samo moguće, već i ekonomski izuzetno korisno (www.cleantechnica.com).

ZAKLJUČAK

Güssing daje izvanredan primer kako obnovljivi izvori energije mogu zameniti konvencionalne izvore energije, da njihova primena može biti ekonomski isplativa i za energetske preduzeće i za samo stanovništvo (kroz niske i fiksne cene grejanja i struje) kao i da prelaskom na obnovljive izvore energije štetni uticaji na životnu sredinu se znatno smanjuju. Zbog svog cikičnog karaktera, Güssing model predstavlja i sredstvo podsticanja lokalne ekonomije. Uz sve navedeno potrebno je pomenuti i ekološki i energetske turizam koji su svakako ekonomski značajni za Güssing. Ako se uzmu u obzir resursi koji su korišćeni za proizvodnju energije (sunce, drvo, otpad iz poljoprivrede i drugi organski otpad itd.) jasno se vidi da lokacijski uslovi ne igraju glavnu ulogu (jedini uslov predstavlja površina pokrivena šumom). Finansiranje ovakvog projekta predstavlja najveći problem za realizaciju ali kako se i sam Güssing finansirao iz fondova EU tako bi i drugi gradovi mogli primeniti isti sistem finansiranja. Iz svega navedenog proizilazi i mogućnost primene ovog modela u Srbiji. Uz adekvatno obrazovanje, organizaciju i finansiranje ovakav projekat nije daleko od stvarnosti, a pozitivan primer Güssinga pokazuje da čak i nerazvijeni regioni mogu uz pomoć obnovljivih izvora energije podstaći svoj razvoj.

model was copied in many towns and villages throughout Austria and the world. So, today, in Austria there are more than 15 settlements that are energy independent in sectors of electrification, heating or transport. City Güssing has shown that the use of renewable energy is not only possible, but also economically very beneficial.

CONCLUSION

Güssing is an outstanding example of how renewable energy can replace conventional energy sources, their implementation can be economically viable for energy enterprises and for the population (the low and fixed prices for heating and electricity). By switching to renewable energy sources, harmful effects on the environment is considerably reduced. Because of its cyclical nature, Güssing model represents a means of stimulating the local economy. Additionally, it is necessary to mention, that environmental and energy-tourism are certainly economically significant for Güssing. If we take into account the resources that were used for the production of energy (solar, wood, waste from agriculture and other organic waste, etc.) it is clear that location conditions do not play a major role (the only requirement is the area covered by forests). Financing such a project is the biggest problem for the realization but as Güssing itself is financed from EU funds so all the other cities can apply the same financing system. This indicates the possibility of using this model in Serbia. With adequate education, organization and financing, such a project is not far from reality. A positive example of Güssing shows that even the underdeveloped regions can foster its development with the help of renewable energy sources.

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PROCES URBANIZACIJE U REPUBLICI AUSTRIJI - OD REGIONALNOG KA LOKALNOM -

THE PROCESS OF URBANISATION IN THE REPUBLIC OF AUSTRIA - FROM REGIONAL TO LOCAL -

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PROCES URBANIZACIJE U AUSTRIJI, MREŽA NASELJA I URBANE CELINE

Osnovni faktori urbanizacije

Republika Austrija je savezna republika koja se nalazi u centralnoj Evropi i koja se graniči sa Nemačkom, Češkom, Slovačkom, Mađarskom, Slovenijom, Švajcarskom i Lihtenštajnom. Zahvata površinu od 83.855 km² i broji 8.504.850 stanovnika. Članica je Evropske unije od 1995. godine. Glavni grad je Beč sa oko 1,8 miliona stanovnika (metro 2,2 miliona).

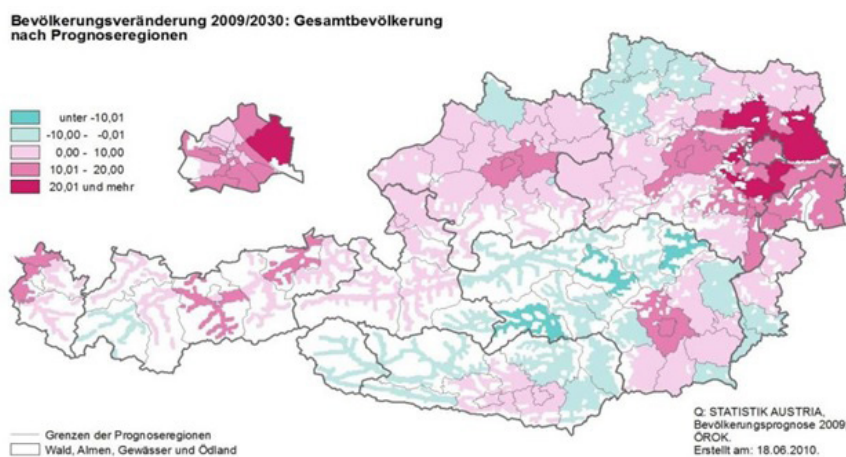
Političko uređenje Austrije sa 9 njenih pokrajina sa svojim zasebnim političkim, prirodnim i istorijskim karakteristikama iznedrilo je i neka drugačija upravljanja, pre svega sistema planiranja. Jedan od osnovnih uzroka formiranja mreže naselja jesu prirodne tj. topografske karakteristike terena. Austrija je pretežno planinska zemlja, sa izuzetkom dolina većih reka, kao i Dunavskog i delimično Panonskog basena. U skladu s tim, svi veći gradovi, koridori transporta i generalno mreža naselja, su razmešteni tako da se uklope u topografske karakteristike terena.

THE PROCESS OF URBANISATION IN AUSTRIA, NETWORK OF TOWNS AND URBAN AREAS

The main factors of urbanisation

The Republic of Austria is a federal republic located in Central Europe and bordered by Germany, the Czech Republic, Slovakia, Hungary, Slovenia, Switzerland and Liechtenstein. Its territory covers 83.855 km² with 8.504.850 inhabitants. Austria joined the European Union in 1995. The capital is Vienna with approximately 1.8 mil. inhabitants (metro 2.2 mil.).

The political system of Austria, along with its 9 federal states with their own political, natural and historic characteristics, created some other ways of governing, primarily the planning system governing. Some of the main reasons for creating the network of towns are country's natural, i.e. topographic characteristics of the relief. Austria is mainly mountainous country, with the exception of the big river valleys, as well as the Danube and partly Panonian basins. Accordingly, all big cities, transport corridors and generally network of towns were located so as to adapt to the topographic characteristics of the relief.



*Slika 1. Procena broja stanovnika
2009-2030. kao budući tok
urbanizacije*

*Figure 1. Estimated population
2009-2030, as a future result of
urbanization*

*(Source: Austrian Spatial Development
Strategy in a European perspective,
2010)*



Austriju možemo posmatrati kao „uspešno“ decentralizovanu državu, ali s druge strane i kao prilično centralizovanu, s obzirom na koncentraciju stanovništva u bečkom metropolitenu (oko 2,4 miliona) u odnosu na celokupan broj stanovnika, kao i sa udelom ekonomskih aktivnosti, koja premašuje trećinu državnog BDP-a (Schremmer C., 2010). S druge strane, ispravnije je i blaže reći da je Austrija u suštini policentrična država sa izrazitim urbanim centrom Bečom i nekoliko manjih gradova, centara regionalnog karaktera. Takvi centri su: Grac na jugu u pokrajini Štajerska, Linc u Gornjoj Austriji na severu, Salzburg u centralnim delovima i Insbruck u Tirolu na zapadu. Svi ovi gradovi predstavljaju urbana područja u svojim oblastima kao centri ekonomskih, naučnih i kulturnih vrednosti i svi se nalaze na udaljenosti manjoj od 60 km od državne granice što stvara uslove za transgraničnu saradnju. Ostala naselja su populaciono manja i čine lokalne samouprave, kojih u Austriji ima 2 354. Ruralni krajevi su sa aspekta starosne strukture u prilično nepovoljnom položaju i pored zadovoljavajućih uslova života i kvalitetne životne sredine (OECD, 2014).

Proces urbanizacije raste u Austriji sličnim nivoom kao i u drugim državama u Evropskoj uniji. Stopa urbanizacije iznosi oko 67%, što je nešto niže od zemalja na zapadu, ali i više od ostalih zemalja u Evropi. Veliki deo stope urbanizacije upravo je skoncentrisan u navedenim gradovima ali i peri – urbanim naseljima koja rastu velikim intezitetom (Eurostat, 2013).

Republika je odlično povezana putevima lokalnog, regionalnog i međunarodnog karaktera, koji predstavljaju i u istorijskom i funkcionalnom smislu osnovne uslove za formiranje naselja. Putevi koji su od značaja za aspekt urbanizacije u većem obimu su upravo putevi koji spajaju centre pokrajina međusobno i autoputevi koji vode do Beča.

Strateški dokumenti

Sistem planiranja bitno utiče na procese urbanizacije i formiranja naselja. U Austriji postoji nekoliko politika razvoja regionalnog, urbanog i ruralnog aspekta koje sve direktno ili indirektno utiču na procese urbanizacije. Regionalne i urbane aspekte razvoja pokriva „Austrian Spatial Development Concept“ (OROK). Koncept je usvojen 2011. i od 1971. se donosi na svakih 10 godina. Program se bazira na 3 principa. Princip implementacije iskazuje se kroz efektivnost i realističnost samog programa. Princip koncentracije, iako deluje apstraktno, cilj

Austria can be deemed „successfully“ decentralized, but, on the other hand, it can also be seen as considerably centralized, regarding the concentration of population in the Viennese metropolis (approximately 2.4 mil.) compared to the overall number of population, and also regarding the economic activity contribution of the metropolis that exceeds one third of the country's GDP (Schremmer C., 2010). However, it is more correct and put mildly defining Austria as a polycentric country with a prominent urban center – Vienna, and a few smaller cities, considered regional centers. Such centres are: Graz, located in the south, in the Styria state; Linz in the Upper Austria in the north; Salzburg in the center; and Innsbruck in the Tyrol state in the west. All these cities represent urban areas in their states, as they are centers of economic, scientific and cultural values, and they are all located no further than 60 km from the country's border, which creates conditions for cross-border co-operation. Other towns have less population and are local self-governments; there are 2 354 of them in Austria. Rural areas are, considered from the aspect of population age structure, at a disadvantage, despite their favourable living conditions and good environment (OECD, 2014).

The process of urbanisation is increasing in Austria at the similar level like in the most countries of the European Union. The urbanisation rate is approximately 67%, which is fairly lower than in the countries in the West, but higher than the rest of the European countries. A large part of the urbanisation rate is concentrated in abovementioned cities, but it also includes peri-urban towns that are rapidly growing (Eurostat, 2013).

Austria has an excellent network of local, regional and international roads that are in both historical and functional sense – basic conditions for founding towns. The roads which are of great importance for the aspect of urbanisation are largely those roads that connect centers of the states and those that lead to Vienna.

Strategic documents

The planning system significantly affects processes of urbanisation and building towns. There are a few developmental policies in Austria regarding regional, urban and rural aspects and all of them affect, directly or indirectly, the process of urbanization. Regional and urban developmental aspects are covered by „Austrian Spatial Development Concept“ (OROK). The concept was adopted in 2011; starting

ovog principa jeste pridavanje većoj pažnji upravo implementaciji i iznalaženju rešenja za izazove u prostoru. Poslednji princip jeste kooperacija, koja kao i svakom programu zahteva određenu dozu demokratičnosti i transparentnosti. Sam koncept se sastoji iz 3 sekcije. Uvodni deo definiše glavne ciljeve prostornog razvoja za narednih 10 godina. Drugi deo predstavlja takozvani Action Plan ÖREK koji sadrži akcije i propozicije koje se kasnije u implementaciji sprovode. Treći deo jeste sama implementacija. U okviru implementacije se formiraju timovi raznih stručnjaka kako bi se, pošto je sam koncept dugoročnog karaktera, i sprovodio u realnost (ÖREK, 2011).

RAZVOJ URBANE OSOVINE BEČ – BRATISLAVA I MEĐUSOBNA SARADNJA

Grad kao centar ekonomskih, socijalnih i kulturnih aktivnosti predstavlja osnovni pokretač svake države. Urbanizacija je proces koji zahvata sve razvijene regione ali i svet uopšte. Preko 70% stanovništva Evropske unije živi u urbanim sredinama i u skladu s tim, na gradovima je veliki pritisak da obezbede kako kvalitetne uslove za ekonomske aktivnosti i radna mesta, tako i zdravu sredinu za život ljudi u njima. Posledica takvog pritiska na gradove i upravu grada jesu veliki problemi sa raznih aspekata. Ublažavanje takvih posledica može se ogledati kroz međusobnu saradnju gradova tj. urbanih sredina. Svedoci smo širenja gradskih područja koja se „prirodno“ spajaju i postaju mega – gradovi i velike aglomeracije. U kontekstu toga, na nama je da proučavamo i pridodamo strategije i mišljenja kako poboljšati kvalitet života u gradovima uopšte i primeniti iste u međusobnoj saradnji, jer je to upravo jedan od instrumenata za ublažavanje problema s kojima se susreću.

Osnovni činioci razvoja i saradnje metropolitanskog područja Beča i Bratislave

Beč, prestonica Austrije sa oko 2,2 miliona stanovnika i Bratislava kao glavni grad Slovačke sa oko pola miliona stanovnika, imaju duge istorijske i funkcionalne oblike saradnje u raznim oblastima. Jedan od osnovnih činioca saradnje ova dva grada jeste njihova blizina (oko 60 km), što ih svrstava u dva najbliža glavna grada u Evropi. Međutim, odnos ove dve urbane sredine možemo ozbiljnije preispitati i pratiti poslednje dve decenije. Iako blizu, Beč i Bratislava su u periodu od 1945. do 1989. godine bili odvojeni u fizičkom, funkcionalnom, pa čak i ideološkom aspektu. Razlozi za to su prilike u

from 1971, it should be passed every 10 years. The programme is based on the three principles. The implementation principle is embodied through effectiveness and verisimilitude of the programme itself. The concentration principle, yet it seems abstract, has an objective to devote special attention to the implementation and finding a solution for the challenges in the area. The last principle is that of co-operation that requires a certain level of democracy and transparency. The concept itself comprises three sections. The introductory section sets the main objectives of spatial development for the next 10 years. The second section is, so-called Action Plan ÖREK, which includes actions and propositions that are later applied in the process of implementation. The third section is devoted to the implementation itself. As part of the implementation, teams of various experts are formed, so that, since the very concept is of longterm character, it would implement into reality (ÖREK, 2011).

DEVELOPMENT OF THE URBAN VIENNA- BRATISLAVA AXIS AND MUTUAL CO- OPERATION

A city as a center of economic, social and cultural activities is the main driving force of every country. Urbanization is a process that includes not only developed areas, but also the whole world. More than 70% of the European Union population lives in urban areas, thus cities are under the pressure to ensure both quality conditions for economic activities and jobs, and healthy living environment. This pressure put on the cities and city governments result in major problems in various aspects. The alleviation of such consequences can be reflected through the mutual co-operation of the cities, i.e. urban areas. We have all witnessed the expansion of urban areas that are „naturally“ attached to each other and become mega-cities and big agglomerations. In that regard, it is up to us to research and add strategies and opinions on how to improve the quality of life in the cities in general, and how to implement those strategies in mutual co-operation, for it is one of the instruments for alleviating the faced problems.

Crucial factors of development and co-operation of the metropolitan area of Vienna and Bratislava

Vienna, the capital of Austria with the population of approximately 2.2 mil inhabitants and Bratislava, the capital of Slovakia with the population of approximately 500.000 inhabitants have great



Evropi posle Drugog svetskog rata i pada Gvozdene zavese 1989. godine, koja je upravo sprečavala ova dva grada, pa i regiona, bližoj saradnji.

Ono što predstavlja srž razvitka prostora između ova dva grada kao određene urbane osovine u kojoj su skoncentrisane razne ekonomske i socijalne aktivnosti, jeste saobraćajna povezanost (autoput izgrađen 2007. godine) kao koridor koji služi za transport ljudi i dobara. Upravo ta povezanost modernim saobraćajnicama olakšava promet svih elemenata i resursa za brži razvoj kako urbane osovine, tako i samih gradova. Pored osnovnih veza i koridora vezivanja dva grada, sami centri odakle potiču sve aktivnosti se nalaze u prilično centralizovanim državama. Bitno je napomenuti da po broju stanovnika i bruto domaćem proizvodu, gradovi znatno učestvuju u ukupnom udelu u matičnim državama. Tako Bratislava učestvuje sa preko 30% BDP-a Slovačke što znatno govori i ekonomskim aktivnostima ovog grada (Jaššo M., 2007).

Formirajući takozvani „grad – region“, na periferijama ova dva grada se dešavaju procesi reurbanizacije. Ruralni predeli u okolini gradova sada postaju sve urbanizovaniji pogotovo u peri – urbanim delovima Bratislave. Razlog za to predstavlja pre svega širenje samog urbanog tkiva grada, ali i povećanja broja radnih mesta i kvaliteta života. S tim u vezi, na području sa obe strane Dunava se uvećavaju naselja sa urbanim odlikama života ljudi, dok su radna mesta stanovnicima tih naselja upravo u Bratislavi. Iako je ovakav način života vezan za gotovo većinu gradova u svetu, ovde se ti procesi pridodaju široj slici urbanizacije samog regiona i stvaranje upravo te urbane osovine između dva grada sa dobrim saobraćajnim uslovima kao osnovicom same urbanizacije.

Strateška dokumenta i programi za budući razvoj

S obzirom na obećavajući razvoj ovog regiona, austrijska i slovačka vlada kao i njihove lokalne samouprave donele su brojna strateška dokumenta i programe za poboljšanje uslova života i funkcionalnog razvoja uopšte. Evropska unija je prepoznala tu saradnju kao jednu od bitnijih činilaca razvoja, upravo kroz saradnju većih urbanih celina i sveopštem razvoju njihovih okolina.

„BAUM“ (Bratislava Umland management/ Bratislava Urban Regional Cooperation) je projekat inicijativa ili koncept, može se reći, koji daje okvirne smernice i instrumente za razvoj prostora

history of functional ways of co-operation in different fields. One of the main factors for co-operation between these two cities is the distance between them (around 60km), which makes them two closest capitals in Europe. However, the relationship of these two urban areas can be closely examined and followed in the past two decades. Even though they are located close to each other, in the period between 1945 and 1989, there was a huge gap between Vienna and Bratislava in the physical, functional, even ideological aspect. The reasons for that were the conditions in Europe, occurred after World War II and the fall of the Iron Curtain in 1989, which hindered the close co-operation between not only these two cities, but also the two regions.

What seems to be the core of the spatial development between these two cities as the specific urban axis that comprises concentrated various economic and social activities, is the traffic connection (the motorway built in 2007) as a corridor that serves as means of transportation of people and goods. It is the very connection by the modern roads that facilitates the circulation of all the elements and resources for the rapid development of both the urban axis and the cities themselves. Apart from the main connections and the corridors that link these two cities, the very centers where all the activities originate from are located in the fairly centralized countries. It is important to mention that with their population and gross domestic product, cities take considerable part in the overall contribution to the countries they belong to. Thus, Bratislava contributes with more than 30% GDP of Slovakia, which gives a clear picture of economic activities of this city (Jaššo M., 2007).

The processes of reurbanization take place on the outskirts of these two cities, forming so-called „city-region“. Rural areas that surround cities now become more more urbanized especially in peri-urban areas of Bratislava. The reason for that is primarily the expansion of the urban areas, but also the increase in the number of job vacancies and the quality of life. Thereby, there is an increase in number of towns with urban characteristics on both Danube banks, while their inhabitants have jobs in Bratislava. Even though this lifestyle is attributed to the majority of cities in the world, those processes are here added to the bigger picture – the urbanization of the region itself and the founding of the urban axis between the two cities with good traffic conditions as a base for the very urbanization.

između Beča i Bratislave, fokusirajući se na peri – urbanu zonu Bratislave koja inače pripada Republici Austriji. Jedinstven u tom aspektu, program koji se bavi razvojem opština u okolini grada Bratislave, sa karakterom prigradskih opština, a koje se nalaze u drugoj državi. Taj koncept obuhvata 14 opština u predgrađu Bratislave. Cilj same inicijative jeste funkcionalni razvoj i povezivanje tih opština u saradnji agrikulture, zaštite životne sredine, infrastrukture i poboljšanje kvaliteta života uopšte. Projekat su podržale lokalne samouprave, grad Bratislava kao i odeljenja za planiranje Burgenlanda i Donje Austrije (Schaffer H., Ringler C., Pürmayr K., 2008).

„Twin City“ koncept se bazira na funkcionalnom razvoju oba grada, uzimanjem i iskorišćavanjem socio – ekonomskih faktora ovog uglavnom homogenog regiona. Ostvarivanje koncepta traži saradnju sektorskih odeljenja lokalnih samouprava i država, nevladinih organizacija i uprave oba grada. Cilj programa se zasniva na širenju uticaja Beča i Bratislave kao izvora ekonomskih aktivnosti na okolne opštine i sam region. Aktivnosti se uglavnom odnose na javnu administraciju, privredne subjekte i građanske asocijacije (Schaffer H., Ringler C., Pürmayr K., 2008).

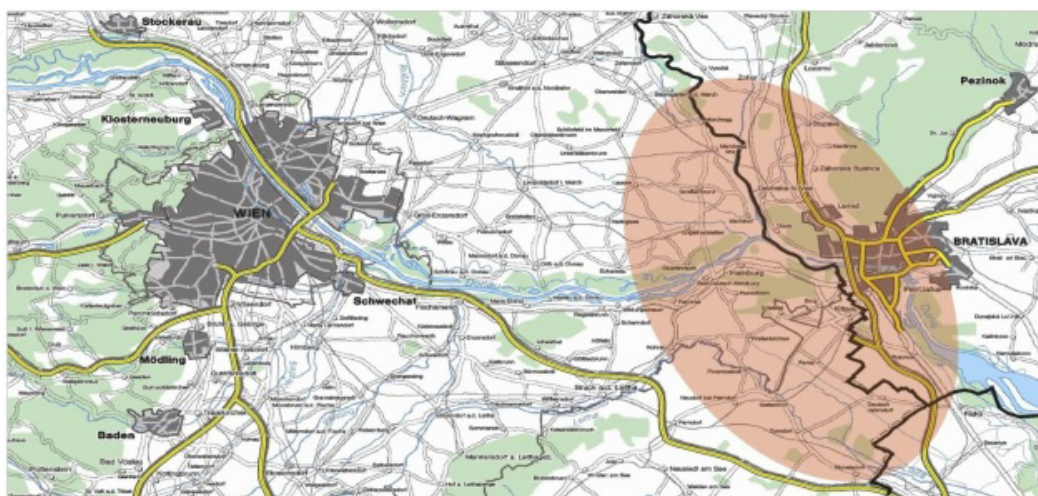
„Centrope“ koncept je dogovoren 2003. godine u Austriji i bavi se razvojem mnogo šireg regiona od regije Beča i Bratislave. Uključuje delove Austrije, Slovačke, Mađarske i Češke. Sveobuhvatni razvoj ovog regiona treba da obuhvati 6 miliona ljudi i aktivnosti su uglavnom zasnovane na transgraničnu saradnju među državama. Ovaj projekat je donet i kao strateški dokument jer ima za cilj razvoj velikog područja i prema kome treba da se vode

Strategic documents and programmes for the future development

Considering the promising development of this region, Austrian and Slovakian governments, as well as their local self-governments have passed numerous strategic documents and programmes for improving living conditions and functional development in general. The European Union has recognized that co-operation as one of the significant developmental factors, right through the co-operation of large urban areas and the overall development of their environments.

„BAUM“ (Bratislava Umland Management/ Bratislava Urban Regional Cooperation) can be defined as the project of initiatives or concept that gives rough guidelines and instruments for the spatial development on the territory between Vienna and Bratislava, focusing on the peri-urban area of Bratislava that in fact belongs to the Republic of Austria. Unique in that aspect, the programme addresses development of municipalities in the area surrounding the city of Bratislava, those of a suburban character that are located in another country. That concept comprises 14 municipalities on the outskirts of Bratislava. The main objective of this initiative is functional development and bringing those municipalities together under the co-operation in agriculture, environmental protection, infrastructure and improving the quality of life. The project was supported by the local self-governments, the city of Bratislava, as well as the departments for spatial planning of Burgenland and Lower Austria (Schaffer H., Ringler C., Pürmayr K., 2008).

„Twin City“ concept is based on the functional development of both cities, using socio-economic



Slika 2. „BAUM“ projekat
Figure 2. BAUM project

(Source: Urban and rural integrated areas – cross - border challenges and chances, 2013)



države i lokalne samouprave. On se oslanja kako na već postojeću saradnju graničnih regiona, ali i javne i privatne firme i organizacije, poboljšanje infrastrukture, kulture, marketinga na lokalnom nivou. Međutim, treba istaći da su granice i sam obuhvat područja regiona, više politički stvorene, s obzirom da prirodno ovaj region ne poseduje granice. Čineći se veštački stvorenim, propozicije ovog koncepta se više ogledaju u nekom vidu marketinga i same slike razvoja regiona. Ipak, sam položaj u centru Evrope, u već prilično razvijenom području, dugoročno omogućuje ravnomeran i prosperitetan razvoj (Filip S., Rozsa Z., 2012).

Saradnja i razvoj prostora između Beča i Bratislave u poslednje 2 decenije može da se opiše kao dinamična, integralna i strateški bitna, kako za oba grada, tako i za lokalne samouprave. Dokumenti, programi i inicijative Evropske unije upotpunjuju značaj prostora i daju šansu za dinamičniji rast i razvoj u narednim godinama. Upravljanje i nadležnost u celom prostoru u implementaciji programa predstavlja izazov u području usled sukoba brojnih opština i saveznih država u Austriji, ali i ne poklapanja istih ciljeva i metoda planiranja (Patti D., 2013).

URBANE ODLIKE GRADA GRACA

Urbane odlike i saobraćaj Grada Graca

Grac je, nakon Beča, drugi po veličini grad u Austriji i glavni grad savezne republike Štajerske. Nalazi se u jugoistočnom delu Austrije u podnožju Alpa, na reci Mur. Samo gradsko jezgro se obrazovalo na veoma povoljnom strateškom položaju, na prvim brdima Alpa, sa koga se lako mogla nadgledati okolna ravnica. Na 30 km južno od Graca je granica sa Slovenijom, dok se glavni grad Austrije, Beč, nalazi 200 km severno. Može se reći da grad ima dobar geografski položaj jer se nalazi na koridorima koji vode iz južne i jugoistočne Evrope ka Beču i ka severu Austrije, pa tako ima dobru povezanost sa ostatkom zemlje kao i sa zemljama u okruženju.

Grac kao drugi grad po veličini u Austriji ima preko 250 000 stanovnika, dok cela aglomeracija ima preko 400 000 stanovnika. On je kulturni i ekonomski centar regiona, a takođe je i značajni univerzitetski centar sa dugom tradicijom. Šest univerziteta, koliko se nalazi u Gracu, broje preko 44 000 studenata od kojih više od polovine dolazi iz inostranstva.

Grac ima veoma atraktivno gradsko jezgro, sa velikim pešačkim zonama, jedan od najočuvanijih istorijskih centara u srednjoj Evropi. Godine 1999.

factors of this, mainly homogenic region. The application of this concept requires co-operation between the sectoral departments of the local self-governments and the country, non-governmental organizations and governments of both cities. The objective of this programme is based on the influential growth of Vienna and Bratislava being the sources of economic activities on surrounding municipalities and the whole region. The activities mostly address public administration, companies and citizen associations (Schaffer H., Ringler C., Pürmayr K., 2008).

„Centrope“ concept was introduced in 2003, in Austria, and is focused on the development of a region much bigger than the one between Vienna and Bratislava. It includes parts of Austria, Slovakia, Hungary and the Czech Republic. The overall development of this region should comprise 6 mil people and the activities are mainly based on the cross-border co-operation between the countries. This project was introduced, like the strategic document, because it has as its objective the development of a large region and according to which countries and local self-governments should operate. The project relies upon the existent co-operation of the border regions, public and private companies and organizations, improvement of the infrastructure, culture, marketing on the local level. However, it is important to point out that the borders and the territory that is covered by the region are both established in favour of politics, given that naturally, this region does not have borders. Since they are artificially established, the propositions of this concept are reflected more in some form of marketing and the whole image of the regional development. Nevertheless, the Central European location in an already fairly developed territory, ensures a long-term steady and prosperous development (Filip S., Rozsa Z., 2012).

Co-operation and spatial development between Vienna and Bratislava, in the last two decades, can be described as dynamic, integral, and strategically important for both cities and local self-governments. Documents, programmes and initiatives of the European Union enhance the spatial importance and give chance for a more dynamic growth and development in the years to come. Administration and jurisdiction in the whole region in the process of the programme implementation is a challenge in this field due to the conflicts between numerous municipalities and federal states within Austria, but also the difference between objectives and planning methods (Patti D., 2013).

centralno jezgro grada je uvršteno na UNESCO listu svetske kulturne baštine. Nagrada je bila velika čast za Grac, ali je takođe predstavljala i veliki izazov da se u narednom periodu očuva takvo stanje centralne zone. To su donekle i uspeali, jer 2003. godine grad dobija odlikovanje kao kulturna prestonica Evrope, što se smatra najznačajnijom godinom u istoriji grada. Centralni deo grada je uvršten na UNESCO listu zbog izrazito različitih arhitektonskih stilova i njihovog harmoničnog uklapanja u celinu. Grad se nalazi na području gde se prepliću uticaji Centralne Evrope, Italije i balkanskih država, i iz tog razloga u centralnom delu grada ima preko 1000 zgrada koje su različitih stilova i starosti, od zgrada izgrađenih u gotskom stilu pa sve do savremenih modernih zgrada (Unesco WORLD HERITAGE GRAZ management plan, 2013). Gradsko jezgro kao i njegovu okolinu karakterišu niže zgrade i sakralne građevine. Nešto dalje od centralne zone zgrade su nešto više i većinom su iz druge polovine 20. veka, dalje u spoljnom prstenu su niže porodične kuće. Zanimljivo je da je najviša građevina u gradu crkva, visoka 109 m, a ne stambena ili poslovna zgrada. Još dve crkve spadaju u 9 najviših objekata u gradu, ostale su stambene i poslovne zgrade. Godine 1965. osnovana je Nova škola u Gracu, kao novi pravac u arhitekturi. Krajem 20. i početkom 21. veka nekoliko objekata oko univerziteta je građeno u ovom stilu. Savremene arhitekture su htele da ostave trag u moru stilova koji se mogu videti u Gracu, pa se poslednjih godina podižu zgrade izrazito modernističkih stilova. Neke od njih su Kunsthaus (kuća moderne umetnosti) muzej izgrađen u samom centru grada uz reku Mur, kao i Murinsel, ostrvo od stakla i čelika na samoj reci. Novi ekstremno moderni stilovi u samom centru grada narušavaju arhitektonsku i istorijsku vrednost koje gradsko jezgro ima. Ovo sa jedne strane predstavlja veliki problem u Gracu, jer je zbog rekonstrukcije krova jednog objekta u samom jezgru grada i narušavanja vizure krovova, otvorena velika polemika da li grad i dalje zaslužuje da se nađe na UNESCO listi. Sa druge strane ovakvi različiti arhitektonski objekti i stilovi čine Grac posebnim i veoma privlačnim gradom. Kako bi se ovakve stvari izbegle ili bar svele na minimum, 2013. godine je usvojen Plan upravljanja za područje koje spada pod UNESCO zaštitu.

Grad se prostire duž reke Mur u pravcu sever-jug, tako da reka deli grad na dva dela, istočni i zapadni. Ova dva dela su se nekada bitno razlikovala, dok se danas teži da se te razlike u što većoj meri smanje. U istočnom delu živi bogatije stanovništvo i uslovi života su bolji, jer za razliku od zapadne i severne

URBAN CHARACTERISTICS OF THE CITY OF GRAZ

Urban characteristics and the traffic of the City of Graz

Graz is, after Vienna, the second largest city in Austria and the capital of the federal state of Styria. It is located in the southeast Austria, at the foot of the Alps, on the Mur River. The center of the city was established at a very convenient strategic location, on the first hills of the Alps, that could easily be used for monitoring the plain. The border with Slovenia is located 30 km south from Graz, while the capital of Austria, Vienna is 200 km to the north. The geographical position of the city can be marked as good because it is located on corridors that lead from southern and southeastern Europe to Vienna and northern Austria and thus has good connection with the rest of the country as well as the surrounding countries.

Graz, being the second largest city in Austria has 250.000 inhabitants, while the whole agglomeration has over 400.000 inhabitants. The city is cultural and economic center of the region, and it also has a long tradition as a „university town“. Six universities, located in Graz, have over 44.000 students, more than half of them coming from abroad.

Graz has an attractive city center, with large pedestrian zones; it's one of the best preserved historical centers in Central Europe. In 1999, the city center was added to the UNESCO list of World Cultural Heritage Sites. That was a great honour for Graz, but at the same time it was a challenge to preserve such conditions in years to come. That was somewhat achieved, because in 2003, Graz got the title of Cultural Capital of Europe, which was the most important moment in the history of this city. The center of the city was added to the UNESCO list because of its emphatically different architectural styles and their harmonious co-existence with the surroundings. The city is located in the territory where the influences of Central Europe, Italy and the Balkan States intertwine, which is the reason why there are more than 1000 buildings in the city center, being of different styles and age; from the gothic ones to the contemporary modern ones (UNESCO World Heritage Graz Management Plan, 2013). The city center and its surroundings are characterised by low-rise and religious buildings. Somewhat further away from the central zone, buildings are slightly higher and mostly originate from the second half of XX century, while even further away, small family



strane na istoku nema velikih planina pa je prodor čistijeg vazduha veći. Sa zapadne strane reke Mur živelo je uglavnom radničko stanovništvo u prilično skućenom prostoru. Zbog već pomenutih planina i takvog načina gradnje uslovi života su bili daleko lošiji od istoka. Pokušaji obnavljanja ovog dela grada i nisu doneli neke pozitivne rezultate. Procesom džentrifikacije, posebno u delovima Lend i Gris, stvoreni su bolji uslovi za život, ali samim tim i skuplji. Dotadašnje radničko stanovništvo nije moglo da priušti sebi takav način života, zbog toga dolazi do iseljavanja stanovništva u širu zonu, a na njihovo mesto dolazi bogatije stanovništvo. Ako uporedimo popise stanovništva 1991., 2001. i 2011., možemo da vidimo da u periodu 1991/2001 broj stanovnika grada opada, dok u periodu 2001/2011 godine broj stanovnika raste. Razlog ovakvim trendovima jeste preseljenje stanovništva iz centra grada na periferiju. Između 1991. i 2001. izražen je proces suburbanizacije, odnosno širenje grada, a razvoj saobraćaja i bolji uslovi života jesu privlačili stanovništvo u šire zone. U periodu posle 2001. godine dolazi do procesa reurbanizacije, odnosno vraćanja stanovništva u centralne zone. Međutim za razliku od prethodnog perioda gde je u jednom stanu živela višečlana porodica, u poslednjoj deceniji je situacija malo drugačija i sve se više teži individualnom stanovanju. Tako se u Gracu javlja velika potražnja za stanovima u poslednjih nekoliko godina. Broj stanovnika od početka 21. veka konstantno je u porastu i predviđa se da će do 2050. godine u širem okruženju grada živeti preko 500 000 stanovnika. Jedini veći slobodan prostor koji je adekvatan za proširenje grada je južno i jugoistočno u odnosu na grad, dok se neke manje slobodne površine nalaze u gradu. Proširenje u ovim pravcima bi išlo na štetu poljoprivrednog zemljišta koje je već više decenija u opadanju. Gradu preostaje da zaštiti poljoprivredno zemljište u najvećoj mogućoj meri i koliko je to moguće orijentiše se na brownfield lokacije, što gradska vlada i radi. U gradu ima nekoliko takvih lokacija koje su opremljene infrastrukturom i koje su pogodne za izgradnju novog poslovnog ili stambenog prostora. Na ovaj način bi se usporilo širenje grada i oduzimanje poljoprivrednih površina. Gradska vlada je odlučila da u borbu sa manjkom zemljišta krene prvo na zapadnoj strani grada. U okviru „Smart City“ projekta, o kome će biti reči u daljem tekstu, određeno je nekoliko lokacija za obnovu i za njih su donešeni detaljni planovi.

houses are located. It is interesting that the tallest building in the city is the church, which is 109m tall, and not some residential or office building. Two more churches are among the nine tallest buildings in the city, the rest is residential and office buildings. In 1965, the New school of Graz was founded, as a new architectural trend. At the end of XX century and the beginning of XXI century, several objects around the university were built in this style. Contemporary architects wanted to leave a trail among the numerous styles that can be seen all over Graz, so in the recent years all the objects have been built in the modern style. Some of them are Kunsthaus (house of modern art), a museum constructed in the city center, right next to the Mur River, or Murinsel, an island made of glass and steel situated in the river. New, extremely modern styles that can be found in the very center of the city, disparage architectural and historical value of the center. This is, on the one hand, a massive problem for Graz, because the reconstruction of the roof of one of the objects in the city center and disturbing the complete look of the rooves, an important question has been raised – does the city still deserve its spot on the UNESCO list? On the other hand, these various architectural objects and styles are the reason why Graz is such an attractive and unique city. In order to avoid or at least minimise such problems, the Management Plan was adopted in 2013, that applies to the region under the UNESCO.

Graz is situated on the Mur River in the north-south position, so that the river divides the city in two parts - eastern and western. In the past, there was a significant difference between these two parts, while nowadays people tend to overcome those differences. Unlike the western and northern parts of the city, the eastern part of the city is not covered in big mountains and therefore there is more fresh air and living conditions are better, so the rich live in the east. Because of the aforementioned mountains and the building styles, living conditions are much worse in all the other areas of the city. Many attempts of reconstruction this part of the city proved to be unsuccessful. The process of gentrification, especially in the districts of Lend and Gries, introduced better living conditions, but at the same time more expensive. Then people who worked couldn't afford such a lifestyle, which led to displacement of people into the broader area, and the rich come to their place. If we compare the census of 1991, 2001 and 2011, we can conclude that the population showed a decreasing trend in the period between 1991 and 2001, while in the period between 2001 and 2011,

“Smart City” Projekat

Politika Grada je takva da podržava transformaciju zapuštenih idustrijskih i adaptaciju slobodnih neiskorišćenih prostora u novu mešovitu namenu stanovanja i rada. Evropski projekat „Smart City“ u osnovi ima baš takvu politiku da stvori nove konkurentne delove grada u kojima će se preplitati dve glavne funkcije stanovanje i rad i omogućiti uključivanje svih ostalih funkcija koje su potrebne da bi kvalitet života u ovim delovima grada bio na višem nivou. Politika se zalaže za što veće korišćenje obnovljivih izvora energije. Ovakva strategija ima za cilj da privuče različite korisnike i aktivnosti, kako ovi delovi grada ne bi postali samo stambena monofunkcionalna naselja (<http://www.european.at/115.html>).

Prvobitno su bile definisane tri potencijalne lokacije za ovaj projekat. To su „Mur West“ prostor oko reke Mur južno od centralne zone, „Messe Quadrant“ takođe južno od centralne zone, ali je celom površinom na istočnoj strani reke, i treća lokacija je „Graz-Mitte“ prostor u zapadnom delu grada. Već je pomenuto da će se projekat prvo primeniti na lokaciji u zapadnom delu grada. Lokacija je po površini značajno veća od ostale dve, zauzima 477 ha nekadašnje industrijske zone Graca. Kako je ovo veoma velika površina, projekat je podeljen na dva dela, prvi je severni deo oko železničke stanice, koji će se raditi prvi, dok drugi južni deo pripada nekadašnjoj pivari „Reininghaus“. Na prostoru nekadašnje pivare se pored industrijskih postrojenja nalaze i slobodne parcele, što ovaj prostor čini još atraktivnijim. U budućnosti bi ovaj prostor trebalo da postane „novi“ centar grada i tako rastereti staro jezgro grada.

Nacionalni fond za klimatske promene i obnovljive izvore energije pomaže u sprovođenju ovog projekta. Korišćenjem novih tehnologija i obnovljivih izvora energije doprinosi se očuvanju resursa, kao i stvaranju novog kvalitetnog stambenog i javnog prostora. Primenom novih tehnologija omogućava se stvaranje energije za čitavo područje na lokalnom nivou, pa tako ovi delovi grada postaju energetska nezavisni. Zgrade koje budu projektovane u ovom delu biće izgrađene od materijala koji će omogućiti da zidovi i krovovi proizvode energiju kroz solarne panele, a ujedno oni će biti i jako dobri izolatori od buke. Ovakve nove tehnologije za „grad bez zagađenja“ nisu ranije korišćene u Gracu. Pored stambene i komercijalne zone u okviru projekta planirani su i objekti kulture, nauke i obrazovanja kao što je „Science Tower“. Ova kula predstavlja 60

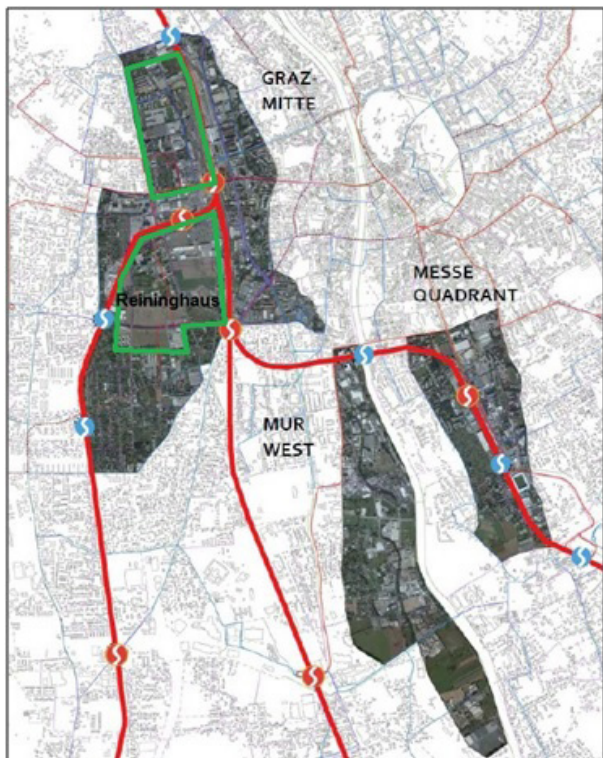
that number was increasing. The reason for such trends is displacement of the population from the city center to the outskirts. Between 1991 and 2001, the process of suburbanization was quite prominent; which meant the city growth, while the traffic development and better living conditions attracted the population into the broader areas. During the period after 2001, the process of reurbanization occurred, which meant that people were moving back to the city. However, unlike the previous period when a large family lived in one apartment, in the last decade the situation has changed and people are more inclined to live on their own. Thus, there has been an increase in interest for apartments in Graz lately. Since the beginning of XXI century, the population has showed a constantly growing trend and it is predicted that by 2050, there will have been more than 500.000 people living in the Greater Graz area. The only available territory suitable for the city expansion is to the south and southeast from the city, while some smaller areas are located within the city. The expansion in these directions would be disadvantageous for the farming areas that has been decreasing for the past few decades. It is up to the city to protect the farming areas the best it can and to focus on the brownfield locations as much as possible; the government already does that. There are several such locations in the city, equipped with infrastructure and suitable for building new residential and office objects. This would decelerate the city expansion and using the farming areas. The government has decided to face this problem of area shortage in the west first. Within the „Smart City“ project, which is to be mentioned, a few locations have been chosen for reconstruction, for which detailed plans were introduced.

Smart City Project

The policy of the city doesn't support the transformation of the derelict industrial and adaptation of the available unused areas into the new combination of residential and office building. The European project „Smart City“ is based on such policies, aiming to create new competitive city areas that would have two functions, serving for living and work, and that would enable the inclusion of all the other functions required for improvement of the quality of life in these city areas, The policy advocates increased use of the renewable energy sources. Such strategy has an aim to attract different customers and activities so that these city areas wouldn't become just a residential monofunctional neighbourhoods (<http://www.european.at/115.html>).



m visoku građevinu koja će služiti za razna naučna istraživanja. Ako svemu tome dodamo i velike zelene površine i održivu urbanu mobilnost, dobijamo u punom smislu reči, „Smart City“ (<http://www.smartcitygraz.at>).



Slika 3. Potencijalne lokacije za projekat „Smart City“ i prioritetni prostori za sprovođenje projekta (zeleno)
 Figure 3. Possible locations for the “Smart City” project and priority locations for project implementation (green)
 (Source: Smart City Project Graz, EU CORE NET CITIES CONGRESS, 2014.)

Saobraćaj

Grac je jedan od gradova koji sprovedi strategiju održive urbane mobilnosti. Razgranata mreža autobusa koja je dopunjena sa osam tramvajskih linija čini da snalaženje u Gracu bude jednostavno i bez automobila. Grad ima najveću pešačku zonu u Evropi i bio je aktivan u promovisanju javnog prevoza, kao i vožnji biciklom i pešačenja, posebno u poslednjih nekoliko godina. Međutim, učešće automobila je i dalje veoma visoko i nastavlja da bude glavni izvor zagađenja vazduha. Grac je prvi grad u Evropi koji je uveo ograničenje brzine u gradu na 30 km/h, osim na glavnim ulicama. Ovim i raznim drugim merama i instrumentima grad se bori protiv porasta broja automobila u gradu i povećanog zagađenja koje oni prouzrokuju, što predstavlja najveće saobraćajne probleme u gradu (Reggio Emilia, 2010).

Originally, three potential locations were set for this project. Those are „Mur West“, which is an area around the Mur River to the south from the center, „Messe Quadrant“ also to the south from the center, but covers the river bank to the east, and the third location is „Graz-Mitte“ an area stretches on the west edge of the city. It has already been mentioned that the project will firstly be implemented in the western area. The location covers bigger area than the other two, it stretches across 477 ha of the former industrial zone of Graz. As this is a large area, the project is divided into two parts; the one is set in the north, around the train station, and this part will be started with, while the other part is situated in the south, covering the area around the then brewery „Reininghaus“. The area of the then brewery comprises both industrial plants and available land, which makes this area even more attractive. In the future, this area should become the „new“ city center and thus clear the old one.

The National fund for climate changes and renewable sources of energy helps the implementation of this project. Resources preservation, as well as creating the new quality residential and public objects is achieved by the use of the new technologies and renewable sources of energy. The application of the new technologies enables the creation of energy for the whole region on the local level, thus these cities become energy independent. Buildings that should be projected in this area are to be made of special material that will enable walls and rooves to produce energy through solar panels, while at the same time being soundproof. Such new technologies for „the city with no pollution“ haven't been used before in Graz. Apart from the residential and commercial zone, the objects of culture, science and education, such as „Science Tower“ have also been planned under this project. „Science Tower“ is a 60m tall building that should be used for scientific research. If we add up to this vast green areas and sustainable urban mobility, we have, as its name suggests „Smart City“ (<http://www.smartcitygraz.at>).

Traffic

Graz is one of the cities that implement the strategy of sustainable urban mobility. An extensive bus network along with Graz tram network, consisting of 8 tram lines, make the movement around Graz easier even without a car. The city has the largest pedestrian zone in Europe, and has been active in promoting public transport as well as the bike riding and walking, especially during the last few

Razne saobraćajne politike koje grad primenjuje obuhvataju brojne mere za poboljšanje saobraćajne situacije u gradu. Proširenjem pešačke zone se zabranjuje saobraćaj motornim vozilima iz centra grada i favorizuje pešačenje i vožnja bicikla. Ovo takođe veoma utiče na životnu sredinu, smanjuje se zagađenje vazduha kao i buka. Procentualni udeo pešačenja i vožnje biciklom u ukupnim putovanjima u prethodnim godinama je u porastu. Grac je prvi grad u Austriji koji je počeo da koristi parking politiku. Ona se sprovodi kroz više različitih mera, jedna od njih je i sama visoka cena parking mesta u centralnim delovima, što demotivise korišćenje automobila, dok se jedna odnosi na povlastice za takozvana „čista“ vozila. Ovi automobili imaju povlastice kada su parking mesta u pitanju, odnosno što manje emitovanja CO₂ niže su cene parkinga. Taksisti imaju posebnu obuku koja ima za cilj da poveća svest o štetnosti CO₂ i povoljnosti korišćenja bio-dizela. Većina taksi vozila u Gracu već koriste bio-dizel i električnu energiju. Takođe, autobusi su u postupku prelaska sa korišćenja dizel goriva na obnovljive izvore energije. Od marta 2008. godine, Grac ima novi set ambicioznih ciljeva kao što je smanjenje procentualnog udela automobila sa trenutno 48% do 40% (<http://sootfreecities.eu/city/graz>).

Što se tiče saobraćajnih politika, Grac zauzima značajno mesto u Evropi u ovoj oblasti. U prethodnim decenijama su postigli zapažene rezultate u smanjenju korišćenja automobila i smanjenju zagađenja vazduha. Veliki je udeo biciklista i pešaka u ukupnim putovanjima u gradu, dok je javni gradski prevoz na zavidnom nivou.

Ako se ovakvi trendovi planiranja i sprovođenja politika nastave i u predstojećem periodu, Grac će imati svetlu budućnost.

KOMPARACIJA PROCESA URBANIZACIJE BEČKOG I BEOGRADSKOG METROPOLITENA

Različite istorijske okolnosti dovode do isticanja i produbljanja razlika

Tekući kroz Evropu i spajajući njene delove, reka Dunav prožima i integriše različita podneblja, raznolike indentitete, istorije i upravo svoj značaj pronalazi u činjenici da razlike pretvara u celinu, ujedinjujući ih, a ne oduzimajući im specifičnosti.

Beograd i Beč, dva geografski bliska pojma, istorija je spletom događaja odvojila i učinila razlike u pogledu kulture, običaja, mentaliteta i duha naroda

years. However, the car circulation is still at a very high rate and still is the main air polluter. Graz is the first European city that introduced a speed limit of 30km/h in the city, except for the main streets. By using these and many other measures and instruments the city is fighting against the increase in the number of cars in the city as well as against the increased pollution they cause, which are some of the main traffic problems in the city (Reggio Emilia, 2010).

Many traffic policies that the city implements comprise numerous measures for improvement of traffic conditions in the city. By expanding the pedestrian zone, the traffic for cars is prohibited in the city center and walking and bicycle riding are preferred. This also largely affects the environment, the air pollution and noises are decreased. In the recent years, the percentage of pedestrians and bicycle riders has shown an increasing trend. Graz is also the first city in Austria to have started using the parking policy. It is implemented through several different measures, one of them being the expensive price for the parking lot in the center, which discourages the use of cars, while the other one refers to the privileges of so-called „clean“ vehicles. These privileges comprise parking lot prices – the lesser CO₂ emission, the cheaper parking lot price. Taxi drivers undergo special training that aims at the increasing awareness of the hazardous effects of CO₂ and the advantages of using bio-diesel. The majority of taxi drivers in Graz already use bio-diesel and electric power. Also, buses are in the process of changing diesel petrol for renewable sources of energy. From March 2008, Graz has a new set of ambitious goals, such as decrease of percent of cars, from the current 48% to 40%.

In regard to the traffic policies, Graz is in the very convenient position in Europe in this field. During the past decades, significant results have been achieved, concerning decrease in car use and decrease in air pollution. There is a lot of pedestrians and bicycle riders in the streets and the number of commuters on public transport is also fairly big.

Should these planning and policy implementation trends continue in the period to come, Graz could have a bright future.



njihovih žitelja. Izgled i stil ova dva grada sa njihovim objektima, trgovima i parkovima upravo predstavlja odraz te diferencijacije.

Tokom srednjeg veka Beograd su markirali raznoliki uticaji. Doživeo je period cvetanja za vreme vladavine srpskih vladara, despotu Stefana Lazarevića konkretno (1403 - 1427). Beograd je tada ne samo prestonica srpske države, već i najvažniji privredni, kulturni i verski centar. Grade se: Mitropolitska crkva, nova tvrđava (citadela), despotov dvorac, bolnica i biblioteka. Pretpostavlja se da je grad tada mogao brojati 40-50 hiljada žitelja. Nakon perioda prosperiteta, Beograd je postao objekat turske vlasti i zuluma nakon što je prethodno spaljen. Osvajajući su tokom skoro 5 vekova boravka, ostavili svoj pečat u pogledu ušorenih ulica, nepravilne matrice grada, izgrađenih džamija, saraja, označivši ga kao orijentalni grad. Odlaskom Turaka, nastupa period rađanja beogradskog urbanizma sa svim težnjama ka redu i efikasnosti gradnje i zdravijim uslovima života. Uzor je pronađen u ortogonalnom modelu sa upisanim krstom kao načinu organizovanja naselja. Pomoć je tražena od austrijskih inženjera, geodeta i arhitekata. Ugledom na evropske zemlje uvedeni su pojmovi opšteg interesa, regulacionog i nivelacionog plana. Plan obnove Beograda u šancu (1866), delo urbaniste Emilijana Josimovića, predstavlja ponovno rađanje ortogonalne šeme sa elementima precizne regulacije i poboljšanog uslova saobraćaja. Prelaskom u 20. vek celovita regulacija daje prednost parcijalnoj, što objašnjene pronalazi u nemogućnosti ili možda čak i neumeću da se sprovede celovita regulacija tadašnjeg Beograda. Francuski urbanista Šenbron svoje znanje pokazao je pokušajem spajanja fragmenata i stvaranjem plana iz snova Beograda koji osim osovina Terazija - Slavija - Savinac - Studentski trg - Takovska ulica - Bulevar) ne ostavlja materijalnog traga. Tek 1921. Beograd dobija svoj prvi Generalni plan. Tokom socijalizma prevladuje gradnja na osnovu generalnog plana i građevinskog zakonika sa dominacijom društvenog vlasništva i nepostojanjem privatnog zemljišta u okviru grada. Period tranzicije sa političkom i ekonomskom krizom tokom 90-ih godina dovodi do divljanja bespravne i besplanske izgradnje. Istorijski tokovi uticali su na pojavu „kiča“ i trenutno stanje urbanističke slike Beograda gde su sukobljeni duboki koreni neefikasnog planiranja, nedostatak urbanističke kulture građana, moderna, masovna, a neestetska gradnja, nepoštovanje zakona iz oblasti graditeljstva i planiranja sa visokim težnjama ka evropskom i modernom stilu, visokobudžetnim i zahtevnim projektima (<http://www.urbel.com>)

THE COMPARISON OF THE PROCESS OF URBANIZATION BETWEEN VIENNESE AND BELGRADE METROPOLIS

Different historic circumstances lead to the emphasis and highlighting of the differences

By flowing throughout Europe and connecting its regions, the Danube river pervades and integrates different climates, identities, histories and its significance hides within the fact that it transforms differences into unity, bringing them together, but not taking away their uniqueness.

Belgrade and Vienna, two geographically close notions, history separated, by a combination of circumstances, and made them different in terms of culture, customs, mentality and the spirit of their inhabitants. The appearance and style of these two cities with their buildings, squares, and parks is a reflection of that differentiation.

During the medieval age, Belgrade was marked by various influences. It reached the heyday during the reign of Serbian rulers, for eg despot Stefan Lazarevic (1403-1427). At that time, Belgrade was not only the capital of Serbia, but also the most important economic, cultural and religious center. Metropolitan church, new fortress (Citadella), Despot's palace, hospital and library are some of the objects built in this period. It is estimated that the city could have had 40-50.000 inhabitants. After the period of prosperity, Belgrade was conquered by Ottoman empire, tortured and burned. Conquerors were present for five centuries; they left their trail in terms of perpendicular streets, incorrect city planning, mosques, saris, marking Belgrade as an oriental city. When Turks left, Belgrade started the period of urbanization, with all inclinations to the order and effective building as well as the healthier living conditions. A role model was found in an orthogonal model with a symbol of cross as a way of organizing towns. Help was rendered by the Austrian engineers, geodetic workers and architectures. Looking up to the European countries, the terms of common interest, regulational and leveling plan were introduced. The book Plan obnove Beograda u šancu (1866), by the urbanist Emilijan Josimović, is a rebirth of orthogonal pattern with the elements of precise regulation and improved traffic conditions. At the beginning of XX century, the comprehensive regulation gives advantage to the partial regulation, which can be explained by the inability or maybe even incompetence to implement the comprehensive regulation of the then Belgrade. French urbanist

Grad Beč predstavlja urbanističko delo, konstantno oblikovano i transformisano kroz istorijske periode. Nastao kao keltsko naselje, svoj značaj pronalazi u doba dinastije Babenberg kada postaje i prestonica Austrije koja se u tom periodu odvojila od Bavorske i postala nezavisno vojvodstvo. Od tog perioda pa na dalje predstavljao je metu austro-nemačkih careva od čega je najprisutnije previranje Habzburgovaca. Beč je grad koji je tokom svog dugog postojanja preživio kugu, požare, najezdu skakavaca, predstavljao je centar kongresa nakon pada Napoleona Bonaparte, bio objekat iskaljivanja mržnje i uništavanja tokom dva svetska rata. Sve to, uticalo je na formiranje urbanističke slike i kulture samog grada.

Zlatno doba građevinarstva i izgradnje nastupilo je tokom 18. veka. Došlo je do potpune rekonstrukcije građevina i gradskih celina u stilu baroka, te su tako izgrađeni mnogobrojni dvorci i palate za plemiće od kojih su najpoznatije palata Šenbrun (nem. Schloss Schönbrunn), Lihtenštajn (nem. Liechtenstein), Švarcenberg (nem. Schwarzenberg) kao i Belvedere (nem. Schloss Belvedere), raskošna palata sagrađena za austrijskog princa Eugena Savojskog. Potrebno je napomenuti i izgradnju nasipa dugačkog 13.5 km koji je razdvajao prva predgrađa od spoljašnjih, tj. udaljenijih. Novom reorganizacijom grada nasip je srušen 1894. godine a njegovi ostaci se mogu mestimično i danas videti duž bečkog pojasa. Rušenjem gradskih zidina 1858. godine, sagrađen je bečki Ring (prsten) ili nem. Ringstraße koji danas predstavlja raskošnu aveniju koja kruži oko centralnog dela Beča. Ova ulica dala je presudan pečat čitavog jednog perioda arhitektonskom stilu Austrijske prestonice. Zahvaljujući tome je u istoriji umetnosti uveden termin „stil bečkog Ringa“ (<https://www.wien.gv.at>)

Prelaskom u 20. vek i ratovima koji su nastupili, uništena je približno jedna petina gradskog urbanog prostora. Kasnije, kako su okončana agresivna dejstva, 1964. godine izgrađen je Dunavski toranj, a nešto kasnije kompleks zgrada Ujedinjenih nacija, obzirom da je Beč postao jedno od središta. Razvoj gradske infrastrukture ogleđa se u izgradnji podzemne železnice te je još 1978. godine otvoren prvi deo prve linije, dok radovi na usavršavanju i proširenju podzemne mreže vozova traju neprekidno do današnjih dana (<http://www.tvbest.rs>)

Za razliku od Beograda koji se bori sa greškama prošlosti, bespravnom izgradnjom i potenciranjem razvoja urbanističke kulture, Beč predstavlja jedan od gradova sa najvišim kvalitetom života na svetu. Naravno, to ne znači da Beograd nema svoje

Chenbron showed his knowledge by connecting the fragments and creating a dream plan of Belgrade that left no trail, apart from its base – Terazije – Slavija – Savinac – Studentski trg – Takovska ulica – Bulevar. Only in 1921 did Belgrade get its first General plan. During the socialism, building was implemented according to the general plan and construction set of rules with the domination of social ownership and non-existence of the private land within the city. The period of transition with political and economic crisis during 1990s led to the unlawful and construction without a plan. Historical periods influenced the emersion of “kitsch” and the current circumstances of the urban image of Belgrade where there is a confrontation between the very roots of inefficient planning, lack of the urban culture of people, modern, mass, yet non-aesthetical construction, violation of the construction and planning law with the inclinations toward the European and modern styles, expensive and demanding projects (<http://www.urbel.com>).

Vienna is an urban work of art, constantly shaped and transformed throughout the historic periods. It was established as a Celtic settlement, and gained its importance during the dynasty Babenberg, when it became the capital of Austria that got separated from Bavaria and became an independent duchy. From that period on, Vienna was a target for Austrian – German emperors – the most famous being the House of Habsburg. Vienna is a city that survived plague, fire, locust invasion, it was a center of the congress at the time of Napoleon Bonaparte, it was an object of hatred and destroying during the two World Wars. All of those things affected the creation of an urban image and culture of the city itself.

Construction and building heyday happened in XVIII century. All the buildings were reconstructed and rebuilt in the spirit of baroque, thus many palaces and castles were built, the most famous being – Schloss Schönbrunn, Liechtenstein, Schwarzenberg and Schloss Belvedere, a lavish palace built for Austrian Prince Eugene of Savoy. It is also important to mention the construction of embankment, 13.5km long that separated the first outskirts from the outer ones, i.e. those further away. The embankment was pulled down during the new reorganization of the city in 1894, but its remains can still be seen along the Viennese zone. The demolition of the city walls, in 1858, The Viennese Ring that is now a lavish avenue that encircles the city center. This street gave architectural style of the Austrian capital a crucial and signature touch of a whole new era. Owing to



vrednosti, problem je samo što umesto da se one čuvaju, ističu i pretvaraju u brend, one su izložene zapuštanju. Prisutne su reči i obećanja a ne dela. Upravo poenta je u upoređivanju i pronalasku sličnosti pa i razlika ova dva dunavska grada, kako bi se pristupilo međusobnom upoznavanju, učenju pa i produblivanju saradnje u cilju organizovanije i zdravije urbanističke budućnosti.

Možemo li bečki sistem planiranja smatrati modelom kojim Beograd teži, stvaramo li urbanističku kulturu?

Beč ima specifičan sistem planiranja. Ne rade se planovi za svaku opštinu pojedinačno, ne gubi se vreme, već se planira onako kako se grad razvija.

Na svakih deset godina Skupština Beča usvaja Strategiju razvoja grada i to je osnovni zakonski okvir za urbanističko planiranje. Ona se radi gotovo tri godine. U njoj su definisane "ciljne oblasti", odnosno neizgrađena područja koja treba "oživeti" i za njih se rade planovi regulacije, koji se mogu menjati vrlo brzo i efikasno, ukoliko je to u interesu grada (tako će 228 hektara stare železničke stanice u Beču biti pretvoreno u novo atraktivno stambeno naselje). Nakon formiranja tih "ciljnih oblasti", iz gradske kase Beča gradi se infrastruktura, finansiraju socijalne ustanove, vrši se komunalno opremanje, a nakon toga Grad poziva investitore da grade stambene i komercijalne objekte. Tokom same izrade Strategije prisutna je participacija građana u cilju razmene mišljenja i pronalaska najboljih rešenja. To je jedan od najefikasnijih principa urbanističkog planiranja u Evropi, koji se može primeniti u svakom gradu (naravno ukoliko postoje realne mogućnosti).

Uvođenje ranog javnog uvida (posle odluke, a pre nacрта) u sistem planiranja naše zemlje, predstavlja težnju ka većoj saradnji vlasti, stručnih lica i građana, upravo po uzoru na evropski sistem. Trenutno, Urbanistički zavod Beograda radi planove Generalne regulacije za ceo grad i to će trajati još nekoliko meseci. Uporedo sa tim, rade se planovi Detaljne regulacije za svako područje, gde trenutno ne postoje. To je veliki zadatak, jer je Beograd jedina prestonica koja nije pokrivena planovima, a to značajno usporava svakog investitora pri dobijanju dozvole, ulaganju ili podizanju kredita. Grad Beč upravo konstantnom revitalizacijom razvija svoj urbani prostor, snižava cenu zemljišta i tako lokaciju čini primamljivom za ulaganje (<http://www.arhitektura.rs>)

Stručnjaci grada Beča mnogo pažnje poklanjaju regulacionim linijama ulica, zatim građevinskim

that, the term "Viennese Ring style" was introduced in the history of art (<https://www.wien.gv.at>)

All the wars of XX century destroyed almost 20% of the city urban area. Later on, when the aggression was stopped, The Vienna Donauturm was built in 1964 – a tall tower on the Danube river bank, and shortly after, United Nations office complex was built, since Vienna became one of the headquarters. The development of the city's infrastructure can also be seen through building an underground metro system; in 1978, the first part of the line was open, even though the works on improving and enlarging have continuously been ongoing to this day (<http://www.tvbest.rs>).

Unlike Belgrade that is still trying to fight the mistakes from the past, unlawful construction and emphasizing the development of urban culture, Vienna is one of the cities with the best quality of life in the world. However, this does not mean that Belgrade doesn't have its own values, but the problem is that instead of preserving and emphasizing them, they are let fall into derelict state. There are promises, but no one takes action. Therefore, the point is finding similarities and differences and comparing these two Danubian cities so as to achieve a higher level of not only familiarity between them, but also learning and encouraging better co-operation with an aim of creating a more organized and healthier urban future.

Could the Viennese planning system be taken as a model that Belgrade should incline to; are we creating an urban culture?

Vienna has a unique planning system. Plans are not made for each municipality respectively, which would be wasting time; instead, plans are made as the city develops.

Every ten years, the Parliament in Vienna adopts a City Development Strategy, which is the fundamental framework for urban planning. The process of its creation lasts for three years. It defines "target areas", that is, undeveloped areas that need to be "brought to life" and then regulatory plans are made, which cannot be changed quickly and efficiently, if it is in the city's interest (thus, 228ha of an old railway station in Vienna will be transformed into an active residential area). After the "target areas" have been formed, the city budget finances the new infrastructure, social institutions, utility equipping, and then, the city invites the investors to build new residential and office objects. Citizens participate

linijama prema ulici, spoljnim i unutrašnjim, vode računa o spratnosti i visini objekta u odnosu na osunčanje zavisno od zone u kojoj se objekat nalazi. Naravno da se podrazumevaju gustine, indeksi, infrastruktura, priključci na infrastrukturu, površine za parkiranje, zelene površine i garaže. Značajno je istaći da plan, kada se usvoji, striktno se sprovodi. Interesantnu činjenicu predstavlja i to što grad Beč, koji je prepun objekata iz nasleđa, ima veoma mnogo sluha za očuvanje identiteta. Prilikom rekonstrukcije ili revitalizacije objekta ne narušava se fasada i spoljni izgled, kao ni relacije između objekata. Koliko god je moguće, brine se o odnosu između izgrađenog i neizgrađenog prostora i to predstavlja jedinstvenu celinu, dok se unutar objekta rade najsavremenija ostvarenja.

Naravno ovi pojmovi nisu strani urbanizmu Beograda, prisutni su i primenjuju se. Beograd se može pohvaliti školovanim stručnjacima iz oblasti urbanizma i arhitekture ali problem je u samoj kulturi i pristupu celokupnom sistemu planiranja. Prisutna je bespravna izgradnja, korupcija i manipulacija što dovodi do narušavanja propisanog urbanistikog izgleda, čineći Beograd prostorom koji planiraju privatni investitori i interesi sa potencijalnim širenjem „kiča“.

Beograd je grad koji ima veliku površinu nerazvijenog zemljišta kao i dunavsko priobalje te ima idealan primer kako se može brzo ali srazmerno pravilima razvijati i privlačiti investitore uz aktivno učešće građana i stručnjaka.

in the process of creation of this document by exchanging opinions and finding the best solution. This is one of the most effective principles of urban planning in Europe that can be applied in every city (if there are realistic possibilities to do so).

Introduction of an early public insight (after the decision, but before the draft) in urban planning system of our country is a tendency for an increased co-operation between the government, the experts and the citizens, which is an idea that originates from the European system. The Urban Planning Institute of Belgrade is currently drawing up General regulation plans for the whole city and that will last for the next few months. At the same time, they are drawing up Detailed regulation plans for each area, where they don't exist at the moment. That is an important task, because Belgrade is the only capital that is not covered by the plans, which is something that significantly decelerates all interested investors in obtaining a permit, investing or taking out bank loans. Vienna is the city that uses constant revitalization to develop its urban areas, lower land prices and therefore making the location more attractive for the investors (<http://www.arhitektura.rs>).

The experts of Vienna devote meticulous attention to the regulatory lines of the streets, the structural lines toward the streets, inner and outer, they also pay attention to the number of floors and the height of the objects with regard to the natural lighting, depending on the zone of its location. Furthermore, density, indices, infrastructure, infrastructure connectors, parking lots, green areas and garages are all considered. It is important to mention that once adopted, the plan is strictly implemented. An interesting fact is that Vienna, the city full of objects as part of its hereditament, has a very good sense for identity maintenance. During the reconstruction or revitalization of an object, facade and appearance of that object stay intact, as well as the relations between the objects. Within the objects, the attention is focused on using all state-of-the-art achievements, while the relation between what is built and what is not is in focus when considering the outer appearance; it is taken into consideration and the relation between the old and the new should be regarded as a unity, as much as possible.

The urbanization Belgrade is familiar with these terms, of course; they exist and are in use. Belgrade can be proud of its educated experts in the field of urbanization and architecture, but the problem lies in the very culture and the approach to the overall



planning system. There is still unlawful construction, corruption and manipulation, which is detrimental to the stipulated urban image, thus making Belgrade a place for private investors planning and interests of possible expansion of "kitsch".

Belgrade is a city with vast undeveloped areas but also a city on the banks of the Danube, which can be used as a great example to show how it can develop rapidly but lawfully and attract investors with active participation of its citizens and experts.

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ZAŠTITA PRIRODE I ŽIVOTNE SREDINE AUSTRIJE

NATURE CONSERVATION AND ENVIRONMENT PROTECTION OF AUSTRIA

Ljubica Petrović, Iva Mališić, Ana Mandić, Marija Pavlović

Civilizovano društvo, kao što je Austrija, koje vodi računa o svom životnom okruženju ne samo u kratkoročnom, već i u vremenskom periodu koje će biti realnost za buduće generacije, posebnu pažnju posvećuje adekvatnom planiranju prostora, a u skladu sa tim i njegovoj zaštiti i smanjenju pritisaka na životnu sredinu prouzrokovanu delatnostima poput energetike, saobraćaja, poljoprivrede, turizma. Poseta Austiji bila je jedinstvena prilika da uvidimo kako različiti aspekti korišćenja prostora i njegovog uređenja vode ka zaštiti životne sredine, i kao takva predstavlja neodvojivu komponentu od prostornog planiranja.

UVOD

Jedno od osnovnih načela razvoja Austrije, još od ranih 70-tih godina prošlog veka, jeste koncept zaštite prostora. Ciljevi i politike zaštite integrirani u sistem planiranja kako na nacionalnom, tako i na pokrajinskom i lokalnom nivou, usloveli su da Austrija u poređenju sa ostalim zemljama Evrope ima vodeću ulogu u oblasti zaštite životne sredine.

Osnovni principi zaštite životne sredine u Austriji su racionalno korišćenje resursa, prevencija i kontrola zagađenja i integracija zaštite i ekonomskih aktivnosti prilikom planiranja prostora.

Glavnu institucionalnu odgovornost u oblasti zaštite životne sredine Austrije ima Federalno Ministarstvo poljoprivrede, šumarstva, životne sredine i vodoprivrede i predstavlja primer dobro organizovane institucije sa posebno izdvojenim Sektorom za politiku zaštite životne sredine (Allgemeine Umweltpolitik) u okviru koga se izdvajaju sledeća odeljenja:

- Savet za životnu sredinu;
- Odeljenje za supstance u vezi sa zaštitom životne sredine;
- Odeljenje za sredstva za zaštitu bilja i osiguranje kvaliteta;

Civilized society, such as Austria, which takes care of their environment not only in the short term, but also in the period of time that will be a reality for the future generations, pays special attention to proper spatial planning as well as the protection of the used environment and reducing the pressure to environment caused by activities such as energy, transport, agriculture, tourism. Our visit to Austria was a unique opportunity to see that different aspects of the use of space and its design lead to the protection of the environment, which represents an inseparable component of spatial planning.

INTRODUCTION

One of the basic principles of the development of Austria, since the early 70's of the last century, is the concept of the environmental protection. Objectives and policy of this protection are integrated into the planning system at the national as well as the provincial and local level, which caused Austria, compared to other European countries, to gain a leading role in the field of environmental protection.

Basic principles of environmental protection in Austria are the rational use of resources, prevention and control of pollution as well as the integration of protection and economic activities into the space planning.

The main institutional responsibility in the field of environmental protection has Austria Federal Ministry of Agriculture, Forestry, Environment and Water Management and it presents an example of well-organized institution with a separate Sector for the environmental policy (Allgemeine Umweltpolitik) within which the following departments stand out:

- Council for the Environment;
- Department of the substances related to the protection of the environment;
- Department of plant protection products and quality assurance;



- Odeljenje za kontrolu zagađenja vazduha i zaštita od klimatskih promena;
- Odeljenje za transport, migracije i zaštita od buke;
- Odeljenje za ekonomiku životne sredine i energije;
- Odeljenje za zaštitu od zračenja;
- Odeljenje za odnose sa EU u vezi sa zaštitom životne sredine;
- Odeljenje za međunarodne poslove zaštite životne sredine;
- Odeljenje za zaštitu životne sredine, upotrebu hemikalija, procenu rizika i upravljanje rizikom.

Zakonodavni okvir usaglašen je sa zakonodavstvom EU a oblikovan je od strane Austrijskog federalnog pravnog sistema pri čemu su odgovornosti podeljene prema nivoima teritorijalne vlasti – nacionalni nivo, pokrajinski (devet pokrajina) i lokalni nivo (opštine). Određene oblasti upravljanja životnom sredinom i ekološkim problemima podeljene su prema nacionalnom, odnosno pokrajinskom značaju. Tako na primer, izgradnja i održavanje plovnih puteva predstavlja punu odgovornost Države (Federalna uprava) dok je oblast očuvanja prirode u ingerenciji Pokrajina, a odnose se na donošenje propisa i aktivnosti koje se tiču očuvanja i unapređenja postojećeg stanja. U pojedinim oblastima, kao što su upravljanje otpadom i šumarstvo, nadležnosti su podeljene tako da Država donosi propise a Pokrajine ih sprovode u svojim teritorijanim okvirima.

U oblasti zaštite životne sredine, Država Austrija usvojila je sledeće Zakone: Zakon o proceni uticaja na životnu sredinu, Zakon o upravljanju otpadom, Zakon o upravljanju vodama (sa više od 35 podsistemskih zakona u ovoj oblasti), Zakon o uređenju kontaminiranih područja, Zakon o šumama, Zakon o uticaju zagađenja vazduha, Zakon o životnoj sredini, Zakon o zagađenju vazduha iz kotlarnica, Zakon o mineralnim resursima. Uzimajući u obzir administrativnu podelu, zakonodavni sistem uključuje posebne Zakone koji se donose na nivou svih pokrajina pa se tako izdvajaju Zakoni o upravljanju otpadom, Zakoni o izgradnji, Zakoni o zaštiti prirode, Zakoni o planiranju korišćenja prostora i dr. za sve pokrajine na teritoriji Austrije.

OBNOVLJIVI IZVORI ENERGIJE

Na međunarodnom nivou Austrija se nalazi u samom vrhu po korišćenju alternativnih izvora energije. Udeo korišćenja obnovljivih izvora energije

- Department of air pollution control and protection from climate change;
- Department of transportation, migration and protection against noise;
- Department of environment and energy economics;
- Department of radiation protection;
- Department of relations with the EU regarding the protection of the environment;
- Department of International Affairs concerning the environment;
- Department of Environmental Protection, the use of chemicals, risk assessment and risk management.

The legislative framework is in tune with the EU legislation. It was designed by the Austrian Federal legal system whereby the responsibilities are divided according to the levels of territorial authorities - national level, the provincial (nine provinces) and local level (municipalities). Jurisdictions in specific areas of environmental management and environmental problems are divided according to the national or provincial significance. For example, the construction and maintenance of waterways is the full responsibility of the State (federal government) while the area of nature conservation is in the jurisdiction of provinces in terms of the adoption of regulations and activities related to the preservation and improvement of the existing situation. In some areas, such as waste management and forestry, the responsibilities are divided so that the state adopts the regulations and the provinces implement them in their territories.

The main legislation in the field of environmental protection for the territory of the State of Austria are: law on the assessment of environmental impact, law on waste management, law on water management (with more than 35 sub-system laws in this area), the law on the organization of contaminated areas, law on forests, law on the impact of air pollution, environmental law, law on air pollution from boilers, law on mineral resources. Taking into account the administrative division, the legal system includes specific laws which are passed at the level of all provinces, thus there are laws on waste management, building laws, laws on environmental protection, laws on the use of space planning etc. for all the provinces in the territory of Austria.

RENEWABLE ENERGY SOURCES

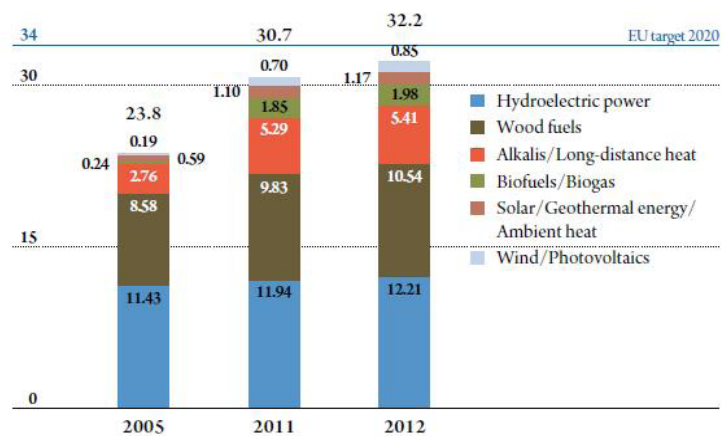
At the international level, Austria is at the top considering the use of alternative energy sources.

iznosio je 22,7% (2004.god) a 32,1% (2012. godine) i beleži najprogressivniji porast među zemljama EU. U kratkoročnom budućem periodu, očekuje se da Austrija dostigne EU standard od 34% korišćenja obnovljivih izvora do 2020. god. Najznačajniji obnovljivi izvori energije su biomasa i otpad, energija vode, dok se u velikoj meri koriste i energija sunca, vetra, geotermalna energija (Slika 1).

The share of renewable energy sources accounted for 22.7% (2004) and 32.1% (2012) and recorded the most progressive increase among the EU countries. In the short-term future, it is expected that Austria reached the EU standard of 34% of the use of renewable sources by 2020. The most important renewable energy sources are biomass, waste and hydropower, while solar energy, wind and geothermal energy are also widely used (Figure 1).

RENEWABLE SOURCES OF ENERGY

Share in final energy consumption (acc. to EU Directive) in percent



Slika 1. Procentualni udeo korišćenja obnovljivih izvora energije u Austriji
 Figure 1. Percentage share of the use of renewable energy sources in Austria
 (Source: Data, facts and figures, 2014)

U kontekstu priče o obnovljivim izvorima energije i njihovom značaju za razvoj i zaštitu područja, nemoguće je ne pomenuti Güssing model. Gradić sa svega 4.000 stanovnika u regionu Burgenland, 80-ih godina bio je jedan od najsiromašnijih u Austriji, gde se većina domaćinstava grejala na lož ulje ili ugalj, i gde nije postojala ni toplovodna mreža ni gasovod, danas čak 200% električne energije dobija iz obnovljivih izvora energije i predstavlja područje sa najvećom proizvodnjom energije za sopstvene potrebe u Evropi. Primenjene tehnologije (metode) su biomasa, biogas i solarne instalacije.

While talking about renewable energy sources and their importance for the development and protection of the area, it is impossible not to mention Güssing model. The small town with only 4000 inhabitants in the region of Burgenland, was one of the poorest town in Austria in the 80s. The majority of households were heated with fuel oil or coal, and there were no hot water network and gas pipelines. Today, 200% of the electricity is produced from renewable energy sources and is an area with the highest energy production for own needs in Europe. Applied Technologies (methods) are biomass, biogas and solar installations.

Procena uticaja korišćenja obnovljivih izvora energije na emisiju CO₂ u Güssing-u je da je 2009. godine iznosila 22.500t a 1996. godine, kada je projekat skoro započet, iznosila 37.000t što predstavlja smanjenje od 1024,64 t/god (Slika 2).

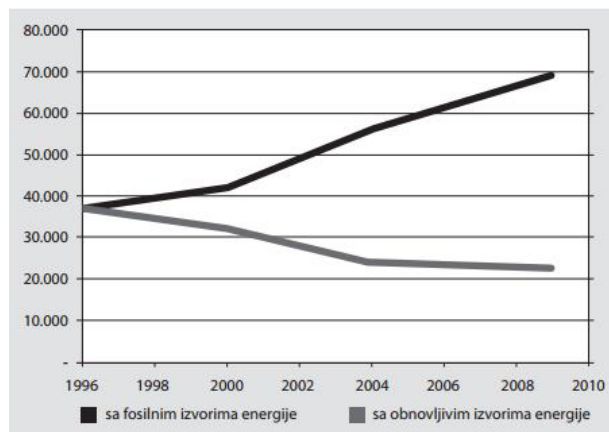
Let's assess the impact of renewable energy on CO₂ emissions in Güssing: in 2009 it was 22.500t, in 1996, when the project has began, it was 37.000t, which represents a decrease of 1024.64 tons/year (Figure 2).

Evropski centar za obnovljive izvore energije (Europäisches Zentrum für Erneuerbare Energie, EEE), osnovan 1996, služi kao centralni koordinator realizacije projekata kao što je "Güssing model" i brojnih zadataka koje iz toga proizilaze. Sedište Evropskog centra za obnovljive izvore energije je smešteno u zgradi „Tehnološkog centra u Güssingu

The European Centre for Renewable Energy (Europäisches Zentrum für Erneuerbare Energie EEE), established in 1996, serves as a central coordinator of the realization of projects such as "Güssing Model" and numerous tasks that arise from it. The seat of the European Centre for Renewable



koji se bavi tehnologijama za očuvanje životne sredine“, koji je ustanovljen u saradnji sa Federalnom provincijom Burgenland. Osnovana je i mreža regionalnih, nacionalnih i međunarodnih partnera kako bi se podelilo iskustvo u oblasti obnovljivih izvora energije.



Slika 2. Emisija CO₂ u Güssing-u
Figure 2. CO₂ emissions in Güssing
(Source: Haselsberger, 2010)

UPRAVLJANJE OTPADOM

Upravljanje otpadom u Austriji ima dugu tradiciju. Odvojeno skupljanje iskoristivih delova otpada - papira, plastike, stakla, metala, tekstila. započeto je 1995.godine. Zakonom o upravljanju otpadom je od 2004. god zabranjeno odlaganje neobrađenog otpada na deponije i od tada se pojačava izgradnja postrojenja za mehaničko-biološki tretman otpada (MBO), spaljivanje otpada i primenjuju se moderne tehnologije u postrojenjima za obradu otpada.

Politika separacije otpada se u Austriji primenjuje od 1995. godine a količina odvojeno sakupljenog biorazgradivog otpada iznosila je 105 kg/stanovniku (2008. godine). Procentualni udeo reciklaže u Austriji iznosi čak 63% što je svrstava na prvo mesto u Evropi, dok procenat reciklaže biorazgradivog otpada iznosi 33%. Od 1991. godine sav komunalni otpad koristi se u postrojenjima za insineraciju otpada za daljinsko grejanje. Uvažavajući svoje politike ponovne upotrebe otpada i preusmeravanja biorazgradivog otpada sa deponija, Austrija je 50% ukupne količine otpada odlagala na deponije (75% 2006. godine) dok su projekcije za 2016. godinu 35% otpada koji će se deponovati.

Značaj koji ovakav sistem upravljanja otpadom ima na kvalitet životne sredine vidi se iz redukcije emisije gasova sa efektom staklene bašte koji su u direktnoj korelaciji sa upotrebom energije (toplotne i električne) iz postrojenja za spaljivanje otpada,

Energy is located in the Technology Center building in Güssing, which deals with technologies for the conservation of the environment, which was established in cooperation with the Federal Province of Burgenland. A network of regional, national and international partners was established in order to share experiences in the field of renewable energy.

WASTE MANAGEMENT

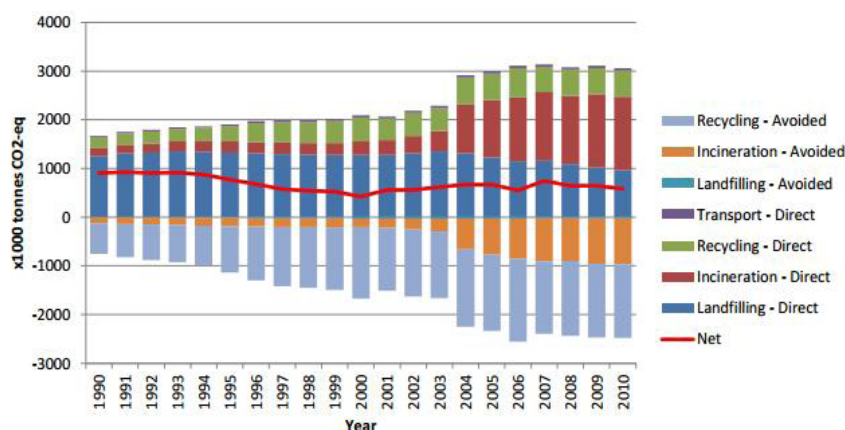
Waste management in Austria has a long tradition. Separate collection of reusable components of waste - paper, plastic, glass, metal and textiles started in 1995. Waste management law of 2004 banned the disposal of untreated waste in landfills and since then it enhances the construction of mechanical-biological waste treatment plants (MBT), incinerators and modern technologies are applied in plants for waste treatment.

The policy of waste separation is applied in Austria since 1995 and the amount of separately collected biodegradable waste was 105 kg/per capita (in 2008). The percentage share of recycled waste in Austria is 63% which puts it in first place in Europe, while the percentage of recycled biodegradable waste is 33%. Since 1991, all municipal waste is used in waste incineration plants for remote heating. Taking into account its policy of reuse of waste and diverting biodegradable waste from landfills, Austria has 50% of the total amount of waste deposited in landfills (75% in 2006) while the projection for the year 2016 is 35%.

The importance of this system of waste management considering the quality of the environment is evident from the reduction of emissions of greenhouse gases, which is directly correlated with: the use of energy (heat and electricity) from the incinerators; electricity generation using landfill gas or methane from the anaerobic digestion process; recycling of biodegradable waste (including the garden waste),



Slika 3. Postrojenje za spaljivanje otpada u centru Beča
Figure 3. Waste Incineration in the heart of Vienna
(Source: Authors)



Slika 4. Redukcija emisije CO₂ prouzrokovana različitim tretmanima otpada u Austriji
 Figure 4. Reduction of CO₂ emissions caused by different treatments of waste in Austria
 (Source: Data, facts and figures, 2014)

proizvodnje električne energije iz deponijskog gasa ili metana iz procesa anaerobne digestije, reciklaže biorazgradivog otpada (uključujući i baštenski), papira, stakla, metala, plastike, tekstila i drveta koji se primenjuju u Austriji (Slika 4).

Austrijska prestonica već godinama predstavlja uzor u oblasti moderne ekonomije otpada na međunarodnom nivou. Teme kao što su smanjenje otpada, reciklaža, čiste ulice, ali pre svega, termička obrada, duboko su ukorenjene u svesti stanovništva.

Postrojenje za spaljivanje otpada Pfafenau koja je započela sa radom 2008. godine, visokotehnološko je postrojenje za sagorevanje otpada svetskog formata kod kojeg je proces zbrinjavanja i korišćenja otpada po ekološkim standardima zagarantovan. U spaljivaonici se na godišnjem nivou sagori 250.000 tona otpada (32 tone po satu) a emisija štetnih gasova ostaje za 90 odsto ispod zakonom propisanih graničnih vrednosti.

ZAŠTITA OD BUKE

Saobraćaj predstavlja jedan od najvećeg emitera buke u životnoj sredini. Savezna Vlada i pokrajinske Vlade Austrije postupak planiranja, implementacije, održavanje i finansiranje politike zaštite od buke sprovode od 1998. godine a od 2005. godine Austrija je pokrivena zaštitnim pojasevima od buke u dužini od 2,200 km duž autoputeva i puteva prvog reda i 820 km železnica. Sve to čini 80% pokrivenosti zaštitnim pojasevima od buke od ukupne saobraćajne infrastrukture (Slika 5).

ZAŠTITA PRIRODE – KONCEPT VAHAU DOLINE DUNAVA

Vahau živopisna dolina, koja se nalazi između gradova Kremsa i Melka, duga je oko 33 km. Ova

paper, glass, metals, plastics, textiles and wood, which are used in Austria (Figure 4).

For years, the Austrian capital presents a role model in the field of modern economics of waste on the international level. Topics such as waste reduction, recycling, clean streets, but most of all, heat treatment, are deeply rooted in the consciousness of this population.

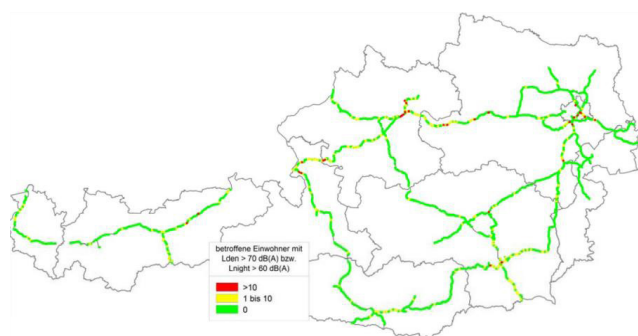
Pfafenau waste incinerator, which began its work in 2008, is a high-tech plant for waste incineration in which the process of disposal and use of waste is according to the high environmental standards. The incinerator annually burns 250,000 tonnes of waste (32 tons per hour) and emissions remains 90 percent below the legally prescribed limit.

PROTECTION AGAINST NOISE

Transport is one of the largest emitters of noise in the environment. The Federal Government and the Provincial Governments of Austria conduct the planning, implementation, maintenance and financing of policies concerning the noise protection since 1998. Since 2005, Austria uses protective barriers to stop the noise coming from the highways and main roads, over a length of 2,200 km, as well as 820 km of railways. These roadside noise barriers cover 80% of the overall transport infrastructure in Austria (Figure 5).

NATURE PROTECTION – CONCEPT OF WACHAU DANUBE VALLEY

Wachau picturesque valley, which is situated between Krems and Melk, it is about 33 km long. This section includes the valley hills surrounding Dunkelsteinerwald (Dunkelsteiner woods) and southern Waldviertel. The Danube River flows



Slika 5. Pokrivenost saobraćajne infrastrukture zaštitnim pojasevima od buke
 Figure 5. Transport infrastructure covered with roadside noise barriers
 (Source: Upper Austrian Environmental Report, 2013)

deonica doline uključuje brda, okolnih Dunkelsteiner Vald (Dunkelsteiner šuma) i južni Valdviertel. Reka Dunav protiče severno – severoistočno od Melka kroz meander koji teče jugoistočno, a zatim istočno pored grada Krems. Njegove obale obiluju veličanstvom arhitekturom, živopisnim gradovima i selima i bujnim vinogradima. Svako ko ceni umetnost i finu hranu, kao i ljubitelji prirode i zdravog načina života, naći će ovde obilje atrakcija. Pejzaž Dunavom je posebno šarmantan kada se posmatra sa broda. Ovaj ocharavajući krajolik uz Dunav poznat je po uzgajanju kajsija i grožđa, od kojih se prave alkoholna pića i kvalitetna vina.

Vahau dolina, pored vizuelnog, pruža i mogućnost uživanja u brojnim tragovima arhitekture od praistorije do danas. Očigledni su i tragovi kontinuirane evolucije poljoprivredne proizvodnje, uglavnom vinove loze. Zbog svoje arhitektonske, ali i poljoprivredne istorije, Vahau se nalazi na UNESCO-voj listi svetske baštine na osnovu kriterijuma II i IV.

Kriterijum II – Vahau je izuzetan primer rečnog pejzaža omeđen planinama sa očuvanim dokazima duge istorijske evolucije.

Kriterijum IV – arhitektura, ljudska naselja i poljoprivredno korišćenje zemljišta u Vahau dolini, živopisno ilustruju srednjevekovni krajolik koji je harmonično evoluirao tokom vremena.

Vahau pejzaž je očigledan primer sinergije netaknute prirode i ljudskog faktora, gde priroda nije izgubila na vrednosti i lepoti. Vahau dolina predstavlja univerzalnu vrednost kombinacije prirode i čoveka. Geografija i biodiverzitet ovog područja su dosta cenjeni. Vahau je mozaik glavnih rečnih staništa i pritoka, vodovodnih sistema, suvih pašnjaka i bogate vrste šuma, prirodnih staništa i kulturnih pejzaža, obeležen preplitanjem Panonskog i Alpskog uticaja. Stanište je mnogih retkih i endemičnih vrsta.

north - northeast of Melk through the meander which flows southeast and then east near the town of Krems. Its banks are rich in splendid architecture, picturesque towns and villages and lush vineyards. Anyone who appreciates art and fine food, as well as lovers of nature and healthy lifestyle, will find plenty of attractions here. Danube landscape is particularly charming when viewed from the boat. This enchanting landscape along the Danube is famous for growing apricots and grapes, which are used for spirits and wines.

Wachau Valley, in addition to the visual impression, provides the opportunity to enjoy many traces of architecture from prehistory to the present. The traces of the continuing evolution of agricultural production, mainly the production of vines, are evident as well. Because of its architecture, but also agricultural history, the Wachau is on UNESCO's World Heritage List on the basis of criteria II and IV.

Criterion II - Wachau is an outstanding example of river landscape surrounded by mountains with preserved evidence of a long historical evolution.

Criterion IV - architecture, human settlements and agricultural use of the land in the Wachau valley, vividly illustrate the medieval landscape that harmoniously evolved over time.

Wachau landscape is an obvious example of synergy of nature and the human factor, where nature has not lost its value and beauty. Wachau Valley combines nature and manmade objects and it has a universal value. Geography and biodiversity of this area are very appreciated. Wachau is a mosaic of main river habitats and tributaries, water systems, dry grasslands and forests rich in species, natural habitats and cultural landscapes, marked by the interweaving of Pannonian and Alpine influences. It is the habitat of many rare and endemic species.

Wachau shows a rare example of the interaction

Vahau pokazuje redak primer interakcije između ljudskih, ekonomskih i kulturnih aktivnosti. Postoji značajna korelacija između tipologije arhitektonskih spomenika i karakteristika pejzaža. Mnogi periodi istorije čovečanstva se ogledaju u prepoznatljivim i kvalitetnim gradovima gde dominiraju crkva, manastiri, zamkovi i ruševine. Sve su to spomenici, koji su tokom svoje duge istorije ostali nepromenjeni, a i dalje se nalaze usred jednog fantastičnog prirodnog ambijenta.

U okviru postojećeg obrasca evropskih rečnih pejzaža, Vahau je sačuvala visok stepen istorijskog integriteta i autentičnosti bez industrijske i tehnološke intervencije i štetnih uticaja na svoje okruženje. U vreme kada su mnogi od evropskih tradicionalnih mesta i pejzaža ugroženi i nepovratno promenjeni, istorijski kulturni pejzaž Vahau doline predstavlja izuzetan primer plodne saradnje između delovanja čoveka i netaknute prirodne sredine.

Mešavina Panonske i kontinentalne klime dovodi do značajnih temperaturnih varijacija između dana i noći. Varijacije u temperaturi dodatno su naglašene hladnim vazduhom koji dopire sa bočnih strana doline i od Valdviertel regiona na severu čije struje prolaze kroz Vahau dolinu kao „kroz otvoren prozor“. Stalna cirkulacija vazduha proizilazi iz susreta različitih vazдушnih struja kao i smenom toplih dana i hladnih noći. Iz šumovitih brda stalno se širi aromatičnost šumskog vazduha a iz vinograda aroma loze i kvalitetnog voća.

Geološke i klimatske karakteristike ovoga kraja odrazile su se i ogledaju se u raznolikosti flore i faune. Suva staništa u Vahau dolini su utočišta za visoko ugrožene vrste. Flora obuhvata Vahau retkosti kao što je čuveni Stipa Pinnata (kobilje) i Jadranski gušter - orhideje koje uspevaju u suvom grmlju i na rubovima šuma. Cvetovi su jarkih boja i izmešani su sa drvećem i žbunjem.

Vahau dolina obiluje pejzažima izuzetne lepote koji su tokom istorijske evolucije, duge više od dva milenijuma, uspeli da opstanu. Do radikalne promene u pejzažu Vahau doline došlo je oko 800.godine kada su u bavarskim i salzburškim manastirima nastali prvi zasadi vinove loze.

Često ovaj krajolik porede i sa vinogradarskim pejzažom srednje Rajne i Mosel doline u Nemačkoj. Međutim, oni nisu uspeli da sačuvaju svoj osnovni istorijski karakter i tragove viševjekovne istorije i kulture, kao Vahau. Najbliže, Vahau može da se poredi sa italijanskim kulturnim pejzažem Cinqueterre (takođe upisan u Listu svetske baštine)



*Slika 6. Vahau dolina, Dunav
Figure 6. Wachau Valley, Danube
(Source: Authors)*

between the human, economic and cultural activities. There is a significant correlation between the typology of architectural monuments and landscape characteristics. Many periods of human history are reflected in the distinctive, high-quality towns dominated by churches, monasteries, castles and ruins. All of these monuments, which in their long history remained unchanged, still are in the midst of a fantastic natural environment.

As part of a pattern of European river landscapes, the Wachau has maintained a high degree of historic integrity and authenticity without industrial and technological interventions and adverse impacts on its environment. At a time when many of Europe's traditional places and landscapes are at risk and irreversibly changed, historical cultural landscape of the Wachau Valley is an excellent example of fruitful cooperation between human action and pristine natural environment.

A mixture of Pannonian and continental climate leads to significant variations in temperature during the day and night. Variations in temperature are accentuated by cold air which reaches the sides of the valley and from the Waldviertel region in the north, whose current pass through the Wachau valley as through "the open window." Permanent air circulation arises from the meeting of different air currents as well as the alternation of warm days and cold nights. From the forested hills the aroma of forest air, grape vineyards and quality fruits is constantly expanding.

Geological and climatic characteristics of this region reflected in the diversity of flora and fauna. Dry habitats in the Wachau Valley are havens for highly endangered species. The flora includes Wachau rarities such as the famous Stipa pinnata (feather

gde postoji ista harmonična povezanost između vode, planinskih venaca i ljudskih naselja.

Međutim, u poslednjih nekoliko decenija (usled eksploatacije šljunka i drugih intervencija, nestanka bočnih kanala i odsecanja rečnih odbrana zbog poplava) došlo je do promene glavnog toka reke Dunav. Sa padina se prostiru suvi pašnjaci i sve više unosni voćnjacima i vinogradi. Intenzivno gazdovanje šumama i uvođenje neautohtonih vrsta sve više utiče na nagib i plavljenje šumskih delova doline.

Predeo sa blagim nagibom od Melka do Kremisa vodi kroz naj slikovitiji potez Vahau doline, zbog čega je veoma popularan među ljubiteljima biciklizma. Vožnja bicikla moguća je na južnoj i na severnoj strani reke. Prednost južne strane je i ta što pored reke postoji namenski betonirana biciklistička staza. Ova strana je i mnogo tiša jer prolazi kroz ruralni predeo sa mnogo vinograda. Severna strana ima više atrakcija ali i gušći saobraćaj. Sa jedne na drugu stranu Dunava moguće je preći trajektom koji za prevoz ljudi i automobila svakodnevno saobraća.



Slika 7. Biciklistička staza pored Dunava
Figure 7. Bike path along the Danube
(Source: Authors)

Pre nekoliko decenija u delu toka reke Dunav kod Vahau doline, došlo je do migracije rasprostranjenih vrsta riba. Broj riba je drastično opao a do tada je Dunav brojao i preko 100.000 riba u slobodnom toku reke. Istraživanje, sprovedeno u okviru LIFE projekta "Stanište lososa Dunav", otkrilo je da je u 2002. godini bilo između 3.000 i 7.000 riba. Regulisanjem Dunava i stvaranjem brane došlo je do preraspodele opterećenja. To je izazvalo ravnomerniji odliv šljunka i smanjenje površine šljunkovitih ostrva a samim tim i produbljavanja korita reke Dunav za oko 1,5cm godišnje. Delovi broskog kanala

grass) and the Adriatic lizard - orchids that thrive in dry shrubbery and on the edges of forests. The flowers are brightly colored and mixed with trees and bushes.

Wachau Valley is full of landscapes of exceptional beauty that during the historical evolution, which lasted for more than two millennia, have managed to survive. A radical change in the landscape of the Wachau valley occurred about year 800 when in the Bavarian and Salzburg monasteries first vines were planted.

This landscape is often compared to the winegrowing landscapes of middle Rhine and the Mosel Valley in Germany. However, they have not managed to preserve their essential historic character and traces of centuries long history and culture so successfully as the Wachau. Wachau can be closely compared to the Italian cultural landscape Cinque Terre (also on the World Heritage List), where there is the same harmonious relationship between water, mountain ranges and human settlements.

However, in recent decades (due to the exploitation of gravel and other interventions, the disappearance of side canals and cutting off the river defenses due to flooding) there has been a change in the main stream of the river Danube. Dry pastures can be seen on the slopes with increasingly lucrative orchards and vineyards. Intensive forest management and the introduction of non-native species are increasingly affecting the slope and flooding of the forest parts of the valley.

Landscape with a gentle slope from Melk to Krems leads through the most picturesque Wachau Valley, and thus it is very popular among bikeriders. Bicycling is possible in the south and on the north side of the river. The advantage of the south side is that there is a paved bike path along the river. This side is much quieter as it passes through a rural area with many vineyards. North side has more attractions but also a bit heavier traffic. There's a possibility to cross the Danube with a ferry which transports people and cars on a daily basis.

A few decades ago, in a part of the river Danube in the Wachau valley, there was a widespread migration of fish species. The number of fish has fallen drastically, but then the Danube counted over 100,000 fish in its free flow. The survey, conducted within the LIFE project, called "Danube: salmon Habitat", revealed that in 2002 there were between 3,000 and 7,000 fish. By regulating the Danube and the creation of the dam, a redistribution of loads occurred. This

se redovno kontrolišu za navigacione svrhe kako bi se garantovala minimalna dubina za plovnost brodovima.

Zaštita prirode, pejzaža i predela Vahau doline ogleda se kroz očuvanje, obnovu i razvoj tipičnih vrsta i staništa Vahau doline, a posebno kroz slobodan proticaj reke Dunav. Što se tiče saobraćaja, kako bi se poboljšao kvalitet života, smanjilo zgađenje i buka, potencira se na alternativnom saobraćaju (bicikl, brod). Naglasak je na zaštiti prirode, posebno šuma i voća koje imaju značajnu ulogu u ekonomiji ove regije. Istovremeno se prati i unapređenje biodiverziteta šume s obzirom na njihovu ekonomsku i rekreativnu vrednost. Vahau kulturni pejzaž je nastao kao rezultat ljudskog korišćenja i delovanja i iz tog razloga poljoprivredni proizvođači iz ovog kraja maksimalno su uključeni u realizaciju mera za očuvanje autentičnosti Vahau doline. Cilj je da se očuva i unapredi prirodni i kulturni pejzaž doline sa svim svojim kulturnim i istorijskim lokacijama i bogatstvima prirode. Očuvanje prirode znači raditi odgovorno pa je posebno važna podrška svih odgovornih u ovoj oblasti.

Vahau dolina je deo Evropske mreže zaštićenih područja poznatog kao Natura 2000. Njen cilj je da očuva biološku raznovrsnost u Evropi i obavezuje svaku državu članicu Evropske unije da na svojoj teritoriji obezbedi adekvatan status zaštite ugroženih vrsta i tipova. Putem implementacije Natura 2000 Evropska komisija odobrila je projekat Nature life u jesen 2003.godine koji je finansiran od strane Evropske unije.

Iako postoji značajna zaštita nizom zakona, za njihovu implementaciju su važni propisi i tela na federalnom, državnom i opštinskom nivou. Postoje preporuke od strane ICOMOS-a za formiranjem koordinacione komisije koja bi nadgledala nastavak zaštite i očuvanja pejzaža kao celine. Za zaštitu područja (područja za očuvanje prirode, rezervati prirode i spomenici prirode), odgovornost za celokupno upravljanje povereno je Pokrajinskom Odeljenju za zaštitu prirode, sa sedištem u St. Poltenu. Na lokalnom nivou upravlja radna grupa za zaštitu Vahau doline koja se nalazi u Durnsteinu.

Obilazak Vahau doline za studente Geografskog fakulteta predstavlja iskustvo učenja na terenu. Posebno je upečatljivo to što je ova dolina bila naseljena i u praistorijsko doba a čitav krajolik sa vinogradima, koji potiču iz IX veka, i dalje čine morfološku strukturu doline. Na svakom koraku

caused a more balanced outflow of gravel and the reduction of gravel islands and thus the deepening of the riverbed of the Danube river for about 1.5 cm per year. Parts of the canal are regularly monitored for navigational purposes in order to guarantee minimum depth for the navigability of ships.

Protection of nature, landscapes and regions of Wachau Valley is reflected through the preservation, restoration and development of typical species and habitats of Wachau valley, especially through the free flow of the Danube River. Regarding the traffic, in order to improve the quality of life, reduce noise and pollution, the focus is on alternative transportation (bike, ship). The emphasis is on nature protection, especially forests and fruits that have a significant role in the economy of the region. At the same time, the improvement of biodiversity of forests is monitored with regard to their economic and recreational value. Wachau cultural landscape is the result of human use and activity and that's why farmers from this region are completely involved in the implementation of measures to preserve the authenticity of the Wachau Valley. The aim is to preserve and enhance the natural and cultural landscape of the valley, with all its cultural and historical sites and treasures of nature. Nature conservation means working with responsibly and support from all those responsible in this area is especially important.

Wachau Valley is part of the European network of protected areas known as Natura 2000. Its aim is to preserve biological diversity in Europe and obliges each Member State of the European Union on its territory provide adequate protection status of endangered species and habitats types. Through the implementation of Natura 2000, the European Commission approved the project called Nature Life in fall 2003, which is funded by the European Union.

Although a number of laws ensure a significant protection, regulations and bodies at the federal, state and municipal level are important for their implementation. There are recommendations by ICOMOS to establish coordination committee that would oversee the continued protection and preservation of the landscape as a whole. In order to protect these areas (nature conservation areas, nature reserves and natural monuments), the responsibility for the overall management is entrusted to the Provincial Department of Nature Protection, based in St. Polten. The working group for the protection of the Wachau Valley, which is located in Durnstein, operates on the local level.



se primećuje veza između prirode i čoveka koji nije narušio njenu lepotu a opet joj je dao svoj pečat. Sačuvavši autentičnost doline, stiče se utisak da je čovek uspeo da joj se zahvali na svim dobrobitima koje reka, šuma, livada, vinova loza, voće, vazduh, pružaju ljudskoj vrsti, a da je kao retko kad, čovek uspeo da ih prilagodi sebi, a opet sačuva u svom gotovo netaknutom obliku.



Slika 8. Studenti Geografskog fakulteta u poseti Vahao dolini

Figure 8. Students of the Faculty of Geography visiting the Wachau valley
(Source: Authors)

For the students at the Faculty of Geography, the tour of the Wachau Valley represents a learning experience in the field. It is particularly striking that this valley was inhabited in prehistoric times and that the whole landscape with vineyards, dating from the ninth century, continues to make the morphological structure of the valley. At each step we can see the connection between nature and the man who did not break off her beauty but instead he gave her his seal. Since the man preserved the authenticity of the valley, one gets the impression that this man succeeded to thank her for all the benefits that rivers, forests, meadows, vines, fruit, air, provide for the human species, and that, as rarely is the case, the man managed to adapt these to himself, and yet retain it in its almost intact form.

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TURIZAM I KULTURNO-ISTORIJSKO NASLEĐE ISTOČNE AUSTRIJE

TOURISM, CULTURAL AND HISTORICAL HERITAGE OF EASTERN AUSTRIA

Branko Protić, Dragan Nedić, Vladimir Maksimović, Đorđe Čolaković

UVOD

Austija poseduje veliki turistički potencijal, koji se zasniva na bogatom istorijskom nasleđu, predivnim gradovima i kulturno-istorijskim spomenicima, planinama i zimskim sportovima. Posebno se ističe Istočna Austrija sa predivnom dolinom Dunava, u kojoj se nalaze brojna naselja podizana u posebnim uslovima i posebnom duhu, vinogradi, voćnjaci i mnoštvo očuvanih manastira.

GRAC

Fantastičan grad smešten u južnom podgorju Alpa na obali reke Mure koja u ovom delu Austrije do tada stišnjena Alpima, prelazi u štajersku ravnicu, koja predstavlja krajnje zapadni obod Panonske nizije. Ovaj drugi po veličini grad Austrije, predstavlja upravni, privredni, industrijski, obrazovni i kulturni centar Štajerske, po površini druge najveće pokrajine u Austriji, koja simbolično predstavlja "zeleno srce" ili austrijsku „Šumadiju“ budući da tri četvrtine njene površine čine šume, livade i vinogradi.

Sam Grac koji se prostire na površini od 127,56 km² ima oko 270.000 stanovnika, dok čitava gradska aglomeracija broji nešto više od 320.000 stanovnika.

Kroz istoriju grada menjali su se različiti uticaji. Naselje je formirano na raskršnici puteva za vreme vladavine grofa Otokara III Traungovca u 12. veku, kada se Nemci naseljavaju na ovom području i osnivaju Štajersku marku, kao pograničnu oblast ka slovenskom življu na jugu i istoku. Upravo u to vreme dobija nemački karakter i Gradec prelazi u Grac i postaje prestonica Štajerske. Habsburgovac Leopold III proglasio je 1379. godine Grac prestonicom svoje države, a car Fridrik III je deset godina iz Graca kao prestonice vladao nemačkim delom Svetog Rimskog Carstva. Car Ferdinand I je svom sinu Karlu II dao na upravu austrijske zemlje (Štajerska, Koruška, Kranjska i Istra), a on je 1564. godine odabrao upravo Grac za glavni grad zemalja kojima je vladao. U 16. veku u gradu se oseća uticaj italijanske renesanse, koji se i danas vidi u gradskoj

INTRODUCTION

Austria has a great tourism potential, which is based on a rich historical heritage, beautiful cities and cultural and historical monuments, as well as mountains and winter sports. Particularly noteworthy is the Eastern Austria with a beautiful valley of the Danube, in which there are numerous numerous villages built in the special conditions and special spirit, vineyards, orchards and numerous preserved monasteries.

Fantastic city located in the southern foothill of the Alps on the river Mura. To this part of Austria Mura is compressed by Alps, and here it is crossing into the Styrian plain, which is the far western end of the Pannonian Plain. This second largest city of Austria, is the administrative, economic, industrial, educational and cultural center of Styria. By its surface it is the second largest province in Austria, which symbolically represents the "green heart" or the Austrian "Sumadija" since three-quarters of its area consists of forests, meadows and vineyards.

City of Graz, which covers an area of 127.56 square kilometers has about 270,000 inhabitants, and whole urban agglomeration of Graz has more than 320,000 residents.

Throughout the history of city there were a plenty of different influences. The settlement was established at the crossroads during the reign of Earl Otokar III in the 12th century. In same time the Germans settled this area and established Styria, as the border area towards the Slovenian population on the south and east. That was the period when Slovenian Gradec received a German character and change over in Graz and became the capital of Styria. Habsburg Leopold III proclaimed in the year of 1379. Graz for capital of his state. Emperor Frederick III ruled the with german part of Holy Roman Empire for ten years from Graz as capital. Emperor Ferdinand I, gave to his son Charles II on the government Austrian countrys (Styria, Carinthia, Carniola and Istria) and in 1564. he decided to chose the city of



matrici i staroj gradnji. To je upravo period kada grad postaje kulturno i naučno središte.

Značajna godina u istoriji grada je 1585. godina. Kada je osnovan Univerzitet u Gracu, danas širom sveta veoma poznat i cenjen. I upravo od 16. veka Grac do današnjih dana predstavlja prestižni univerzitetski centar, na kojem su studirali brojni naučnici i nobelovci. Dovoljno je spomenuti sa naših prostora samo Nikolu Teslu i Ivu Andrića. Danas u Gracu postoji 6 univerziteta što ga stavlja na drugo mesto najvećih obrazovnih centara u Austriji, koje pohađa približno 50.000 studenata, od čega je više od 80% stranaca, i to pretežno iz balkanskih zemalja.

Graz for capitol of countries which he reigned. In the 16th century the city feels the influence of the Italian Renaissance, which can still be seen in the urban matrix and on the old buildings. Precisely, it was the period when the city becomes a cultural and scientific center.

Important year in the history of the city was 1585. year. In that year it was founded University of Graz, today all around the world, very well known and appreciated. And right from the 16th century until today Graz represents a prestigious university center, where studied many World known scientists



Slika 1. Znamenitosti Graca
 Figure 1. Sights of Graz
 (Source: en.wikipedia.org; www.graztourismus.at; www.graz-cityofdesign.at)

Naravno bilo je i loših perida u istoriji grada, a posebno se pamte upadi Turaka 1529. i 1532. godine, koji su bili kratkotrajni, i nisu zaustavili razvoj grada. Takodje i tokom Drugog svetskog rata Grac je pretrpeo štete usled bombardovanja, ali tom prilikom je svega 16% građevina u gradu bilo uništeno ili oštećeno. Na sreću, staro gradsko jezgro nije bilo značajnije taknuto, pa je sačuvano do danas.

Smešten na mestu gde se susreću najrazličitiji uticaji, srednjevropski, italijanski, balkanski Grac ih je sve pomirio i povezao jedinstvenu gradsku celinu, tako da u starom gradu danas ima preko 1000 građevina različitih stilova, od gotičkih do modernih, što je ujedno uticalo da istorijsko središte Graca – gradsko jezgro bude upisano na UNESCO-voj listi svetske baštine od 1999. godine kao primer skladno povezanih građevina tipičnih za različita istorijska razdoblja i epohe, i brojnih umetničkih stilova. Godine 2003. Grac je bio proglašen za evropsku

and Nobel Laureates. For instance we can mention Nikola Tesla and Ivo Andric from our region. Today in Graz there are 6 universities which puts the city on the second place in the biggest training centers in Austria, which are attended by about 50,000 students. More than 80% of students are foreigners, mostly from Balkan countries.

Of course, there were also and bad delivery period in the history of the city. As especially bad memories was the invasions of the Turks in 1529. and 1532., which was short-lived, and did not stop the development of the city. Also during World War II Graz suffered damage due to the bombing, but on that occasion only 16% of buildings in the city were destroyed or damaged. Fortunately, in the old town center there was no significant cracks, and it's preserved until today.

Located at the point of meeting of the most diverse influences, Central European, Italian, Balkan, Graz

prestonicu kulture, a Savet Evrope je u više navrata znao da prepozna očuvanje urbanog nasleđstva, tako da je grad osvojao mnogobrojne nagrade na tom planu.

Za sam Grac od posebnog značaja jeste turizam. Kongresne, sajamske i druge aktivnosti samo potpomažu razvoj turističkih potencijala Graca. I zaista, turista ovde ima toliko toga da vidi, da uživa u gradu okupanom u zelenilu, jedino što mora voditi računa da u tom uživanju ne zaluta na neku od biciklističkih staza, jer će tad biti u velikoj opasnosti koju predstavljaju užurbani biciklisti kojih ima na sve strane, čini se da su opasniji od motornih vozila.

Najbolji pogled na grad je sa *Schlossberg*-a (tvrđava na brdu). U kondicionoj šetnji stigli smo na ovo prelepo mesto, odakle se pruža pogled na čitav grad. Tu saznajemo da ukoliko ikada budemo u prilici da kupimo nekretninu u gradu to učinimo „isključivo“ u njegovom istočnom delu zbog daleko povoljnije ekološke slike (vetar koji provetrava), što je uslovalo da u tom delu budu skoncentrisane zdravstvene ustanove, univerziteti... Postoji nekoliko načina da stignete do vidikovca kod Sat kule na *Schlossbergu*. Jedan možda i najatraktivniji je gradska uspinjača koja vas dovodi do vrha *Schlossberg*, udobno i za nekoliko minuta, nudeći prekrasan pogled na grad. Tu je i *Schlossberg* lift, kojim se od *Schlossberg* placa do Sat kule može stići za manje od 30 sekundi. Pešaka se kroz park, laganom šetnjom sa konstantnim usponom, može stići za par minuta, dok oni odvažniji mogu krenuti uz stepenište od 260 stepenica sa *Schlossberg* placa stignu do Sat kule u zavisnosti od kondicije u dužem ili kraćem roku.

Jedino što nam je sa tog istog mesta možda zasmetalo u smislu da nas vraća u surovu realnost, bio je pogled u zapadni deo grada i objašnjenje fenomena urbane džentriifikacije kao procesa naseljavanja stanovništva viših ekonomskih slojeva u radnička naselja ili naselja u kojima žive stanovnici niže ekonomske moći. Fenomen nastaje kao posledica urbane obnove delova grada, što rezultira iseljavanjem postojećeg stanovništva koje ne može priuštiti povećane visine rente, cene nekretnina i poreza na nekretnine, a ovde se u praksi može i videti. Naš ljubazni domaćin Prof. Fischer Wolfgang, ukazao nam je upravo na zapadne delove Graca gde je ovaj proces više nego uočljiv i koji svedoči o tome da je i Grac mesto raslojavanja i podela.

Od ostalih nezaobilaznih turističkih atrakcija posebno se ističe veliki je broj dvoraca, tvrđava *Riegersburg* sa muzejem, dvorac *Herberstein*

all of them reconciled and linked the unique urban unity. In the old city there is over 1.000 buildings of different styles, from Gothic to modern, which is also influenced that historical center of Grac - city core is classified on UNESCO's World Heritage List since 1999. as an example harmoniously connected buildings typical of different historical eras and epochs and various artistic styles. In 2003, Graz was named for the European Capital of Culture. The Council of Europe has repeatedly known to recognize the conservation of urban inheritance, so that is why the city was achieve numerous awards in this field.

Tourism have special importance for Graz. Congress, exhibition and other activities only support the development of tourism potentials of Graz. There is so much things to see, to enjoy in the city bathed in the green. The only thing you must have on your mind is that you need to be very carefull that in the enjoyment not to wandering into one of the bike paths, because that can be grave danger caused with high level of cyclists all around the city, which seem to be more dangerous than motor vehicles.

The best view on the city is from the *Schlossberg* (the fort on the hill). In recreation walking we arrived at this beautiful place from which offering a fantastic view on whole city. There we had learn that if we ever have the opportunity to buy real estate in the city to do that "exclusive" in it's eastern part because of better environmental image (the wind ventilates). That is the reason that in this part of Graz will be concentrate health care institutions, universities ...

There several ways to get to the lookout point - Clock Tower on the *Schlossberg*. One of them perhaps, the most attractive is city funicular that takes tourists to the top of the *Schlossberg* comfortably for several minutes, offering a breathtaking view on the city. There is also a lift which takes tourists from *Schlossberg* square to the Clock Tower for less than 30 seconds. Third way is easy walk uphill through the park wich take a few minutes. For the ones with sport spirit there are 260 stair from *Schlossberg* square directly to the Clock Tower. Journey will last longer or shorter period, depending of fettle.

The thing which took us back to harsh reality, from this beautiful viewpoint, was the view of the western part of the city and an example of the phenomenon of "urban gentrification". It is the process in which the population of higher economic classes surpress workers settlement areas or parts where people of lower economic power live. The phenomenon



s impresivnim parkovima i zoološkim vrtom, Kunsthaus Graz ("Kuća umetnosti") je muzej moderne umetnosti koji su dizajnirali Peter Cook i Colin Fournier, a nalazi se pored reke Mure, Murinsel ("ostrvo na reci Muri") je umetničko ostrvo od čelika s restoranom, otvorenim kazalištem i igralištem, koji je dizajnirao američki arhitekta Vito Acconci. Bazilika Mariatrost iz 1724. godine je kasnobarokna crkva na istočnom kraju grada. Crkva Isusovog Srca (Herz Jesu Kirche) iz 1887. godine je najveća crkva u Gracu koja ima treći najviši toranj, u Austriji sa 109 m visine u neogotičkom stilu.

GUSING

Živopisni gradić Gusing (Güssing) smešten je u regionu Burgenland, njegovom južnom delu i predstavlja njegov pravi dragulj. Rasut po brežuljcima, u podnožju istorijskog zamka, do kraja 80-tih godina prošlog veka bio je jedan od najsiromašnijih gradova u Austriji, i to pre svega zahvaljujući izuzetno nepovoljnom geografskom položaju i infrastrukturi lošeg kvaliteta. Jednom rečju bio je skrajnut, što je uticalo da stanovništvo emigrira u velikom broju - gotovo 70% u potrazi za poslom. Najveći rashodi na ovoj teritoriji beleženi su u obezbeđivanju energenata, budući da se većina domaćinstava grejala na lož ulje ili ugalj. U gradu i njegovoj okolini nije postojala ni toplovodna mreža ni gasovod, ali 1992. stvari se menjaju iz korena. Tada počinje revolucija koju započinju gradonačelnik Peter Vadasz i inženjer Reinhard Koch.



Slika 2. Dvorac Gusing
Figure 2. Güssing Castle
(Source: en.wikipedia.org)

Za dvadesetak godina, Gusing je doživeo preobražaj od nerazvijenog kraja u evropski i svetski centar za obnovljive vidove energije, postao za 40 % razvijeniji od najrazvijenijeg regiona u Austriji upravo zahvaljujući visokim tehnologijama i proizvodnji energije obnovljivim resursima.

occurs as a result of urban renewal of the city, resulting in the expulsion of the existing population who can not afford the increased height of rents, housing prices and real estate taxes. Here we saw some of these results. Our polite host Prof. Wolfgang Fischer, pointed to us western parts of Graz, where this process is more than evident and that testifies that the city of Graz is the place of disintegration and division.

Among other must-see tourist attractions in Graz are: large number of castles, the fortress of Riegersburg with the museum, the castle of Herberstein with impressive parks and the zoo, Kunsthaus Graz ("House of Art") - museum of modern art, which was designed by Peter Cook and Colin Fournier, located by the river Mura, Murinsel ("island on the river Mura") is artistic island made of steel with a restaurant, an open theater and playground, which was designed by American architect Vito Acconci. Mariatrost Basilica from 1724. is, the late Baroque church at the eastern end of the city. Church "Heart of Jesus" from 1887. is the largest church in Graz, which has the third highest tower in Austria with 109 m height in neo-Gothic style.

GÜSSING

The picturesque town of Güssing is located in the Burgenland region, its southern part and is its real gem. Scattered on the hills, at the foot of the historical castle, by the end of the 80s of the last century was one of the poorest towns in Austria, primarily due to the extremely unfavorable geographical location and infrastructure of poor quality. Güssing was sidelined, which contributed that the population emigrated in large numbers - almost 70% were looking for work. The largest expenditure in this area were recorded in energy supply, because the majority of households heated with fuel oil or coal. In the town and its environs there was no hot water network nor gas, but in 1992 things changed forever. Then begins the revolution starting mayor Peter Vadasz and engineer Reinhard Koch.

For twenty years, Güssing has undergone a transformation from an undeveloped region into the European and world center for renewable forms of energy, has become 40% more developed than the most developed region in Austria thanks to the high technology and the production of renewable energy resources.

This is the fundamental cause why today over 50,000 people by year visit this place, mostly at seminars on renewable energy sources. It's a multiple increase

To je osnovni uzrok da danas preko 50.000 ljudi godišnje poseti ovo mesto, pretežno na seminarima o obnovljivim izvorima energije. Reč je višestrukum povećanju u odnosu na raniji period, tokom kojeg se lokalna ekonomija bazirala na poljoprivredi, gde je bila prepoznatljiva po proizvodnji kukuruza, suncokreta i eksploataciji drvene mase kao nosećeg stuba.

Dugo vremena grad je bio na marginama razvoja i loša povezanost i loša saobraćajna infrastruktura nisu mogle da privuku turiste. Sada ljudi sami žele da dodju.

Grad dodatni prihod obezbeđuje kroz eko-turizam, budući da je, ne samo širom Austrije, poznat kao eko-grad. Danas na polju turističke ponude Gusing nudi mnogo više. Gastronomski i vinski raj trenutno nudi brojne kulturne lokacije i dobru infrastrukturu koja uključuje savremene istraživačke kapacitete, savremenu bolnicu i fantastičan sportsko-rekreativni centar.

Kada je reč o turističkoj ponudi dominantno mesto, u gradu koji broji blizu 4.000 stanovnika, ima dvorac Gusing, koji je ujedno simbol čitavog Burgenlanda. Izgrađen je daleke 1157. i predstavlja najstariji dvorac u ovom kraju.

Gosti danas mogu u hotelima očekivati tople sobe, koje se greju i snabdevaju energijom iz obnovljivih izvora. Bez obzira iz kog pravca se približavali gradu, dvorac koji je sagrađen na uzvišenju iznad grada, koje je zapravo kupa ugašenog vulkana, ponosno pozdravlja posetioce koji dolaze u Gusing ma otkuda oni bili. Posle nekoliko osvajanja i promena vlasnika, dvorac je od 1524. godine u vlasništvu Batiani porodice. Dvorac je popularna destinacija, budući da se sa uzvišice na kojoj je lociran pruža predivan pogled na nepreglednu Mađarsku niziju.

Velika atrakcija u Gusingu je Franjevački samostan. U poslednjih nekoliko godina je postao destinacija za mnoge hodočasnike, posebno iz Mađarske.

O dugoj istoriji ovog mesta svedoče brojni muzeji i znamenitosti gde se posebno ističu vinski podrumi u Heiligenbrunu, muzej vina Moschendorf, istorijski muzej u Bildeinu, muzej poljoprivrednih tehnologija u Svetom Mihaelu.

U Gusingu mogu da računaju na miksa romantke, koja sa sobom nosi istorijsko nasleđe ovog kraja i moderne, vrhunske tehnologije, koja je ovde na dohvata ruke.

Kongresni turizam okuplja eksperte, studente, čak i predavanjima koja se uglavnom održavaju

comparing to the previous period, during which the local economy was based on agriculture, where it was recognized for production of maize, sunflower and exploitation of timber mass as support pillar.



Slika 3. Postrojenje za proizvodnju električne energije
Figure 3. Plant for the production of electricity
(Source: Authors)

For a long time the town was on the margins of development and together with poor connectivity and poor transport infrastructure affected that Gusing have not been able to attract tourists. Now people themselves want to come.

The city provides extra income through eco-tourism, since it is known as an eco-city not only throughout Austria. Today, in the field of tourism offer, Gusing can give much more. Food and wine paradise now offers a number of cultural sites and good infrastructure including modern research facilities, modern hospital and a fantastic recreation center.

Dominant position in tourist industry of town that have nearly 4,000 residents, has a castle Gusing, which is also the symbol of the entire Burgenland. It was built in 1157. year and it's the oldest castle in the region.

Today guests in Gusing hotels can expect warm rooms, which are heated and supplied with energy from renewable sources. No matter from which direction approached the town, the castle which was built on a hill above the town (actually a dormant volcano Cup), proudly welcomes visitors who come to Gusing no matter from where they are. After several changes of owners and conquerors, the castle from 1524. Year is owned by Batian family. The castle is the most popular destination, because of beautiful view on the vast plains of Hungary.

u tehnološkom centru ali mogu biti još i u zamku ili na nekoj od lokacija partnerskih preduzeća, gde se može prisustvovati proizvodnom procesu u okviru brojnih demonstracionih elektrana u gradu i regionu, postrojenja za proizvodnju biodizela od uljane repice, dva mala sistema za daljinsko grejanje na biomasu za određene delove Gusinga, u okviru sistema za daljinsko grejanje na gorivo dobijeno iz drveta za snabdevanje celog grada toplotnom energijom i postrojenja koje koristi tehnologiju gasifikacije biomase. Turistički vodiči – stručnjaci tehnološkog centra, organizuju obilaske objekata i postrojenja, prezentuju turistima i posetiocima sam model, a sve to na nekoliko stranih jezika, a najčešći su nemački, engleski, mađarski i slovački.

Gusing je zasigurno mesto gde je eko-energija više od same ideje. To je mesto gde te ideje postaju stvarnost, a korisnici produkata tih ideja imaju neverovatnu dobit.

VAHAU DOLINA

Vahau (nem. Wachau) je živopisna dolina u Austriji pored Dunava. Ona je jedna od najčešćih turističkih destinacija u Donjoj Austriji, a nalazi se između gradova Melk i Krems. Duga je 30 km i naseljena je još od praistorijskih vremena. Poznato mesto koje privlači turiste je *Dürnstein*, gde je prema pričama vojvoda Leopold V držao u zarobljeništvu engleskog kralja Ričarda Lavlje Srce.

Vahau je poznat po proizvodnji kajsija i grožđa od kojih se prave alkoholna pića i vino. Takođe, kroz dolinu prolazi jedna od najlepših i najživopisnijih biciklističkih ruta u Evropi. Ruta polazi iz Nemačke

The big attraction in Gusing is Franciscan monastery. In the last few years it has become a destination for many pilgrims, especially from Hungary. A long history of this place with its numerous museums and attractions where particular emphasized Heiligenbrunn wine cellars, wine museum Moschendorf, Historical Museum in Bildein, a museum of world agricultural technologies.

In Gussing visitors can count on a mix of romantic, which carries with it historical heritage of the area and a modern, cutting-edge technology, which is here just at your fingertips.

Tourism seminars brings together experts, students, students in lectures, which are usually held at the technology center, but can be even more in the trap or at one of the locations of partner companies, where they can attend the production process within a number of demonstration plants in the region, production plant biodiesel from rapeseed, two small district heating systems to biomass for certain parts of Gussing within the district heating system on fuel obtained from wood to supply the entire town of thermal energy and plant using biomass gasification technology. Tour guides and experts in the technology center, perform presentations and a tour of facilities. You can hear various languages German, English, Hungarian, Slovak.

Gussing is certainly the place where the eco-energy is much more than just ideas. It is a place where these ideas become reality, and users of these products have incredible ideas being.



Slika 4. Karta Vahau doline sa glavnim turističkim i kulturno-istorijskim lokalitetima
 Figure 4. Map of the Wachau Valley with the main tourist, cultural and historical sites
 (Source: <http://www.donau.com/en/wachau-nibelungengau-kremstal/>)

prateći tok Dunava prolazi preko ove regije do Beča i kasnije nastavlja do Budimpešte. Vahau dolina se nalazi na UNESCO-voj listi svetske baštine u znak priznanja za njegovu arhitektonsku i poljoprivrednu istoriju.

Našim prolaskom kroz Vahau dolinu, uvideli smo da su turizam i kulturno nasleđe ovog područja dobro valorizovani i da predstavljaju veoma važan element u funkcionisanju kako regije, tako i pojedinačnih naselja u njoj. U ove oblasti se znatno ulaže, a što je najbitnije imaju veoma veliku i važnu podršku od strane države. Turizam ovog područja ne samo da afirmiše kulturne vrednosti (a posebno očuvanje autohtonih kulturnih vrednosti) već ostvaruje značajan finansijski efekat, koji je posebno važan za stanovništvo i lokalne ekonomije.

WACHAU VALLEY

Wachau is a picturesque valley in Austria next to the Danube. It is one of the most common tourist destinations in Lower Austria, situated between Melk and Krems. It is 30 kilometers long and has been inhabited since prehistoric times. Well known place that attracts tourists is Dürnstein, where according to stories Duke Leopold V held in captivity of the English king Richard the Lionheart.

Wachau is known for its production of apricots and grapes from which they produce alcoholic beverages and wine. Also, through the valley passes the one of the most beautiful and picturesque bike routes in Europe. The route starts from Germany following the Danube, passes through this region to the Vienna and later continues to Budapest.



Slika 5. Pejzaži Vahau doline

Figure 5. Figure 5. Landscapes of Wachau Valley

(Source: colloquium.cochrane.org; www.flickr.com; www.alliancewine.com; www.airvienna.com)

Dürnstein



Dürnstein je malo mesto na obali Dunava na oko 90 km udaljenosti od Beča. On je zapravo fizički i populaciono, sa svega oko 800 stanovnika, najmanje mesto u Austriji koje ima status grada. Zajedno sa vinskim selima Gornjim i Donjim Lioben-om smatra se jednim od najromantičnijih mesta duž Dunava. Iako je malo naselje, poseduje dosta turističkih i kulturno-istorijskih znamenitosti. Najvažnija je svakako ruševina starog dvorca na steni iznad današnjeg naselja (sagrađen od strane von den Kuenringern (Hadmar I) između 1140-1145 god.), u kojem je prema pričama, 1192-1193. godine, bio zatočen engleski kralj Ričard Lavlje Srce. Sa te tačke pruža se predivan pogled na dolinu Dunava prekrivenu voćnjacima i vinogradima. Pored dvorca tu je i manastir Augustinskog kanona, prvobitno podignutog na stenovitoj litici visoko iznad Dunava 1410. godine a kasnije, početkom 18. veka, prerađen

Wachau Valley is on the UNESCO World Heritage List in recognition of its architectural and agricultural history.

While passing through the Wachau valley, we saw that the tourism and cultural heritage of this area are well valorized and that they represent a very important element in functioning of the region, as well as individual settlements in it. This area has a significant investment, and most importantly have a very big and important support from the state. Tourism in this area not only to promote cultural values (especially the preservation of indigenous cultural values) have already achieved a significant financial impact, which is particularly important for the population and the local economy.

Dürnstein

Dürnstein is a small town on the Danube around 90 km away from Vienna. Physically and by its population (around 800 inhabitants) this is actually the smallest place in Austria which has the status

u prelep barokni manastir kakav je danas. Tu je još i Gradska kuća (nem. Rathaus) u kojoj se nalazi kancelarija gradonačelnika i lokalna administracija, koja je jedna od najstarijih u zemlji.



Slika/Figure 4. Dürnstein
(Source: www.donau.com)

Mesto je skoro u potpunosti podređeno turizmu i od njega živi velika većina domaćinstava. U njemu se nalazi samo jedan veći hotel i nekoliko privatnih pansiona sa sobama za smeštaj turista, kao i mnoštvo prelepih restorana, vinskih podruma, suvenirnica i prodavnica svih domaćih proizvoda sa područja Vahau doline.

Krems

Krems na Dunavu (nem. *Krems an der Donau*) nalazi se u Vahau dolini, slikovitom kraju u kojemu Dunav vijuga među zelenim brdima i dolinama na kojima se prostire mnoštvo vinograda i voćnjaka, po kojima je ova oblast i poznata. Od Beča je udaljen manje od sat vremena vožnje (oko 75 km), što ga čini idealnim izletničkim odredištem za stanovnike i turiste koji borave u austrijskoj prestonici.

Krems je jedan od najstarijih austrijskih gradova. Prvi put se spominje 995. godine, a zna se da je gradska župa osnovana 19 godina kasnije. Mesto *Stein*, nekada spojeno s Kremсом, pa odvojen grad, a danas ponovo sastavni deo Kremса, prvi put spominje se 1072. godine.

Tokom Srednjeg veka područje je bilo važno trgovačko središte pa se Krems brzo razvijao. Doseljavali su se trgovci, gradili su se manastiri i crkve, nicali su nove kuće. Srednjevekovno istorijsko jezgro ostalo je odlično očuvano do današnjih dana i u njemu možete uživati ako prošetate 'Gornjim gradom', odnosno od *Štajnove kapije* do Gradske katedrale. U najstarijem gradskom jezgrou nalazi se *Gozzoburg*, palata/vila iz kasno romaničkog vremena koju je podigao jedan od najbogatijih trgovaca tog područja, *Gozzo* od Kremса, oko 1235. godine.

of a town. Along with the wine villages of Upper and Lower Lioben it is considered one of the most romantic places along the Danube. Even though this is a small settlement it has plenty of tourist, cultural and historical attractions. The most important is certainly the ruins of an old castle on a rock above the present village (built by von den Kuenringern (Hadmar I) between 1140-1145), which is based on short stories, 1192-1193. , was detained the English King Richard the Lionheart.

From that point there is a beautiful view over the Danube valley covered with orchards and vineyards. Near the castle there is a monastery of the Augustinian Canons, originally built on a rocky cliff high above the Danube in 1410 and later, in the early 18th century, reworked in a beautiful baroque monastery as it is today. There is also the Town Hall (ger. *Rathaus*) where is the mayors office and the local administration, which is one of the oldest in the country.

Place is almost entirely focussed on tourism and gives a livelihood to most of the households. There is only one major hotel and several private pensions with rooms for tourist accommodation, as well as a plenty of beautiful restaurants, wine cellars, souvenir shops and all the local products from the area of the Wachau valley.

Krems

Krems on the Danube (*Krems an der Donau*) is located in Wachau valley, a picturesque area where the Danube meanders among the green hills and valleys, covered with a multitude of vineyards and orchards, for which this area is well-known. From Vienna is located less than an hour's drive (around 75 km), making it an ideal excursion destination for residents and tourists who are staying in the Austrian capital.

Krems is one of the oldest Austrian cities. It was first mentioned in 995, and it is known that the city parish was founded 19 years later. Place *Stein*, formerly connected with Krems, and later separated with the city, today once again is an integral part of Krems, first mentioned in 1072.

During the Middle Ages the area was an important trading center so Krems is developed rapidly. In that time, merchants settled, many monasteries and churches were built and houses were spreaded around.

The medieval historic core remained in perfect condition until the present day, and it can be enjoyed

Danas je ova prelepa zgrada, koja je kroz istoriju prerađivana u tri navrata, pretvorena u muzej, koji predstavlja jednu od turistički najatraktivnijih lokacija u Kremstu.

Nakon Tridesetogodišnjeg rata celo područje polako gubi na važnosti, ali pozitivna stvar za lokalno stanovništvo bila je ta što Krems nakon toga nije bio teže oštećen i porušen u raznim sukobima i

if you take a walk "Upper Town", or from *Stain gate* to the town cathedral. In the oldest city core is *Gozzoburg* palace from the late Romanesque time which was founded by one of the richest merchants of the area, *Gozzo* of Krems, around 1235. Today, this beautiful building, which was renovated on three times, was turned into a museum, which is one of the most attractive tourist sites in Krems.



Slika 5. Krems na Dunavu

Figure 5. Krems an der Donau

(Source: <http://www.donau.com/en/wachau-nibelungengau-kremstal/>)

ratovima, te je sačuvao svoju bogatu kulturno-istorijsku baštinu. Zahvaljujući tome, 2000. godine uvršten je na UNESCO-ov Popis svetske baštine kao deo Kulturnog pejzaža doline Wachau.

Stift Melk

Manastir Melk (nem. *Stift Melk*) je benediktinski manastir smešten na stenovitom rudnom izdanku iznad naselja Melk u Donjoj Austriji, sa predivnim pogledom na Dunav i Vahau dolinu.

Opatija je osnovana davne 1089. godine kada je Leopold II ustupio jedan od svojih dvoraca benediktanskim monasima iz manastira Lambach. Manastirska škola i gimnazija osnovane su u 12. veku, a manastirska biblioteka ubrzo je postala nadaleko poznata po svojom širokom kolekcijom rukopisa. Manastirski skriptorijum postao je jedna od glavnih lokacija za produkciju rukopisa u tom dobu. U petnaestom veku manastir postaje centar pokreta Melk reforme koja je ojačala monaški život Austrije i Južne Nemačke.

Današnji barokni manastir je sagrađen između 1702. i 1736. po dizajnu Jakoba Prandtauer-a. Posebno je vredna pomena manastirska crkva sa predivnim freskama i biblioteka sa mnoštvom srednjevekovnih rukopisa uključujući i čuvenu kolekciju muzičkih rukopisa i fresaka priređenih od strane Pola Troger-a.

After the Thirty Years War the whole area is slowly started to lose its importance, but a positive thing for local people was that Krems after that was not badly damaged and destroyed in various conflicts and wars, and it has preserved rich cultural and historical heritage. As a result, in 2000 has been included in the UNESCO list of world heritage as part of the cultural landscape of the Wachau valley.

Stift Melk

Monastery Melk (Stift Melk) is a Benedictine monastery situated on a rocky offset of mine deposits above the village of Melk in Lower Austria, with a beautiful view of the Danube and the Wachau valley. Abbey was founded in 1089 when Leopold II ceded one of his castles Benedictine monks from the monastery of Lambach.

The monastery schools and grammar schools were founded in the 12th century, and the monastic library soon became widely known for its broad collection of manuscripts. The monastery scriptorium became one of the main locations for the production of manuscripts at that age. In the fifteenth century, the monastery became the center of Melk Reform movement which has strengthened the monastic life of Austria and Southern Germany.

Because of its fame and academic significance, Melk managed to avoid decomposition during the reign

Zbog svoje slave i akademskog značaja, Melk je uspeo da izbegne raspad u periodu vladavine cara Josifa II, kada je većina austrijskih manastira bilo zauzeto i razrešeno svojih verskih funkcija. Opatija je takođe opstala i tokom Napoleonovih ratova, a posebno u periodu II Svetskog rata kada je škola i veliki deo manastira zaplenjen od strane države.

Manastirska škola je vraćena posle Drugog svetskog rata i sada u njoj nastavu pohađa 900 učenika oba pola.

Poseban utisak ostavlja fascinantan muzej koji pokriva kompletnu istoriju ali i današnji život manastira: carsko stepenište i carske palate/prostorije, mermerni hodnik i biblioteku, nezaboravni pogled na Dunav i Vahau dolinu sa velikog manastirskog balkona, kao i crkvu u baroknom stilu sa predivnim freskama koje su delo J.M. Rotmajera. Takođe, pored samog manastira nalazi se i predivan park sa elegantnim baroknim paviljnom, Benediktanskim putem (Benedict Path) i „stenama koje govore“ (Speaking Stones) i rajskom baštom koja je divno mesto za odmor i opuštanje.

BEČ

Šta novo napisati o Beču? Kako dočarati grad nekome ko ga nije posetio, ili ga predstaviti drugim bojama njegovim ljubiteljima? Evropska prestonica kulture, nekadašnje sedište Habzburškog carstva, grad na Dunavu, mesto ukrštanja mnogih

of Emperor Joseph II, when most of the Austrian monastery was busy and allowed their religious functions. Abbey was also survived during the Napoleonic wars, and especially in the period of World War II when the school and a large part of the monastery were confiscated by the state.

The monastery school was returned after the Second World War and now have 900 students.

The strong impression is given by fascinating museum that covers the complete history and also contemporary life monasteries: imperial staircase imperial palace / rooms, marble hall and library, an unforgettable view of the Danube and the Wachau Valley with a large monastery balcony and church in the baroque style with beautiful frescoes which the work of JM Rotmajera. Also, next to the monastery there is a beautiful park with an elegant baroque pavillion, Benedictine way (Benedict Path) and “rocks that speak” (Speaking Stones) and heavenly garden which is a wonderful place for rest and relaxation.

VIENNA

Is there anything new that could be written about Vienna? How could one describe this city to someone who has never been there or simply present it in a different way to someone who is already in love with it? The European capital of culture, the former capital of the Habsburg Empire, a city on



Slika/Figure 8. Stift Melk

(Source: www.stiftmelk.at; www.sacred-destinations.com; www.panos.at)

kultura, vera, bitaka... Svakako glavna odluka jeste pluralizam kako u arhitekturi, muzici, drugim vidovima umetnosti, tako i u istoriji i drugim oblastima od uticaja na život njegovih stanovnika. Danas je Beč deseti najveći grad Evropske unije, političko, ekonomsko i kulturno središte Austrije i mesto odakle se šire razvojni impulsi u ostale krajeve države, uprkos činjenici da Austrija počiva na federalnom uređenju odnosno delimičnoj nezavisnosti i samoupravi njenih federalnih država. Povoljan položaj, na raskršću puteva između istoka i zapada, dominantno je uticao na njegov razvoj.

Istorija Beča počinje pre oko 4000 godina, dok prvi pisani istorijski izvor datira iz 13. veka. Beč je jedna od najstarijih metropola Evrope i zahvaljujući njegovom položaju i značaju on je vekovima imao ulogu u kreiranju političke scene Evrope. Na području današnjeg Beča, prvobitno se nalazilo keltsko naselje Vedunia, pa se pretpostavlja da germanski naziv grada Vienna potiče od njega. U 1. veku nove ere Rimljani su, na prostoru centralnog gradskog jezgra, izgradili vojno utvrđenje (kastrum) u cilju odbrane tadašnje provincije Panonije. Rimljani su se ovde zadržali sve do 5. veka. Prvo originalno spominjanje Beča nalazimo još 881. godine iz Salzburških anala dok uspon Beča počinje nakon pobeđe Otona I u bici protiv Mađara 955. godine. Već u 11. veku grad postaje važno trgovačko sedište. Za vreme dinastije Habsburgovaca Beč stiže svu svoju slavu i tokom ovog perioda on čak postaje i sedište imperatora Svetog rimskog carstva. Tokom prošlog milenijuma Beč je bio na putu mnogih osvajača od kojih se ističu pre svega oni sa istoka –Turska. Stoga je Beč bio prinuđen da razvije moderne vidove odbrane i uređenja što se pokazalo istorijski opravdano.

Osamnaesti vek je bio zlatno doba izgradnje u Beču, period njegovog uspona i procvata. Došlo je do potpune rekonstrukcije građevina i gradskih celina u stilu baroka te su tako izgrađeni mnogobrojni dvorci i palate od kojih su najpoznatije palata Šenburn, Lihtenštajn, Švarcenburg kao i Belvedere. Izgradnja se međutim, odvijala i izvan gradskih zidina. Sa procvatom grada i gradskog života, Beč je ubrzo postao i jedan od najvažnijih kulturnih centara Evrope, najviše na polju klasične muzike čiji su najznačajniji predstavnici Jozef Hajdn, Volfgang Amadeus Mocart, Ludvig van Betoven i Franc Šubert. Nakon pada Napoleona (u njegovim ratovima grad je dva puta osvojen) u Beču je 1814/1815. održan Bečki kongres kojim je uspostavljena nova politička mapa Evrope. 1858.

the river Danube, the crossroads of many cultures, religions, battles... All in all, the main characteristic of the city remains its miscellany not only in architectural styles, music and other art forms, but also in history and other fields that affect lives of its citizens. Nowadays, Vienna is the tenth largest city of the European Union; political, economic and cultural centre of Austria and the place where all the development impulses start spreading towards the other parts of the country, despite the fact that Austria is based on the federal principle, i.e. partial independence and self-government of its federal states. The city's convenient location, situated at the crossroads between the east and the west, predominantly affected its development.

The history of Vienna started about 4000 years ago, while the first written document originates from the 13th century. Vienna is one of the oldest European metropolises and owing to its location and significance, it has always played a role at the Europe's political scene. In the territory of present Vienna, there was originally a Celtic settlement Vedunia, therefore it is believed that Germanic name of the city – Vienna – was derived from it. In the 1st century AD, in the central area, the Romans fortified the city (built a castrum) intending to protect the then capital of Pannonia. The Romans stayed in this territory until the 5th century. The first mention of Vienna can be traced back to 881, in the Salzburg annals, while the rise of Vienna started after the victory of Otto I - in the battle against the Hungarians in 955. As early as in the 11th century, the city became the trade centre. In the period of the Habsburg Empire, Vienna won all its glory and during this time it even became the capital of the Roman Empire. In the previous millennium, Vienna was in the way of many emperors, among which probably the most prominent role had those coming from the east – the Turks. Thus, Vienna had to develop modern defence mechanisms and organisation, which proved to be historically justified.

The heyday of Viennese architecture, as well as its heyday in every other aspect was in the 18th century. Many buildings and city areas were remodelled in baroque style, so a lot of castles and palaces were built, the most popular being – the Schönbrunn palace, the Lichtenstein castle, the Schwarzenberg castle and the Belvedere palace. However, architecture was flourishing outside the city borders as well. Owing to its development and, at the same time its quality of living, Vienna soon became one



godine srušene su gradske zidine koje su okruživale centar grada i na tom mestu je izgrađen Bečki Ring. Ova ulica jedinstvena je u svojoj monumentalnosti i dala je presudan pečat u čitavom jednom periodu Beča. U razdoblju od 1890-1910. Beč doživljava svoj kulturni vrhunac, to je period takozvane Bečke Moderne. Nakon Prvog svetskog rata proglašena je Republika Austrija i Beč dobija status zasebne Austrijske države. Tokom drugog svetskog rata iz Beča je proterano oko 120.000 Jevreja. Tokom rata uništena je približno jedna petina urbanog prostora, između ostalog stradalo je i zdanje Bečke opere i muzej Albertina. Beč je nakon rata bio podeljen na 4 zasebna sektora između Sovjetskih i Američkih trupa, Ujedinjenog kraljevstva i Francuske. Nakon završetka rata u Beču je usledio opšti privredni uspon i obnova, u čemu je veliku ulogu odigrao i Maršalov plan. Trupe savezičkih sila povukle su se definitivno iz grada do proleća 1955. godine, da bi potom 15. maja iste godine Austrija usvajanjem ustava konačno povratila i potpuni suverenitet nad svojom teritorijom. Nakon toga grad do današnjih dana prima veliki broj emigranata čime njegov etnički sastav postaje izuzetno raznolik. On postaje sedište brojnih međunarodnih organizacija. Druga polovina 20. veka predstavlja i najduže mirnodopsko razdoblje u istoriji grada koje je dovelo do razvoja Beča u modernu, prema svetu otvorenu metropolu. Beč se nadalje širi i biva izmenjen duhom modernizma. Dobija modernu železnicu, nebodere na severnoj obali Dunava i brojne uređene zelene površine u gradu. Umetnost i kultura imaju dugu tradiciju u Beču. Posebnu vrednost i međunarodni značaj ima kulturno stvaralaštvo na polju muzike čiji su utemeljitelji bili svetski poznati kompozitori i muzičari. Shodno tome, Beč važi za svetski glavni grad muzike. U svetskim razmerama su poznati Bečki valcer, Hor bečkih dečaka, tradicionalne muzičke manifestacije kao što je Novogodšnji koncert bečke filharmonije, bečki balovi. Mnogobrojna kulturna zaostavština kako Austrijska tako i svetska, nalazi se unutar brojnih muzeja u gradu zbog čega ga i karakteriše nadimak "Grad muzej". Beč je poznat i na polju literarnog stvaralaštva, alternativnih formi kulturnog izražavanja, boemstvu, tradicionalnoj kuhinji i mnogobrojnim kafeima. Scenska umetnost ima posebno dugu tradiciju i važno mesto na polju kulture i umetnosti u Beču. Pored Dvorskog pozorišta jedne od najeminentnijih pozorišnih scena nemačkog govornog područja, poznati su i Narodno pozorište prestižno Jozefštatsko pozorište kao i Pozorište na bečkoj reci. Bečka državna opera je jedna od najpoznatijih operskih kuća na svetu.

of the most important cultural centres of Europe, mostly in the field of classical music with musical luminaries such as – Joseph Haydn, Wolfgang Amadeus Mozart, Ludwig van Beethoven and Franz Schubert. After the fall of Napoleon (during the Napoleonic wars, Vienna was conquered twice), the city hosted the Congress of Vienna in 1814/15, which drew a new political map of Europe. The city walls that had surrounded the city centre were demolished in 1858 and later replaced by The Ring Road (German: Ringstraße). This street is unique for its monumentality and played an essential role in a whole period of history of Vienna. In the period between 1890 and 1910, Vienna reached its cultural peak, so-called Viennese Modern Age. After World War I, the Republic of Austria was founded and Vienna became of the nine states of Austria. During World War II, about 120.000 Jews were expelled from Vienna. During that period, about 20% of urban area was destroyed; the Vienna opera house and the Albertina museum were one of those buildings. After the war, Vienna was divided into sectors by the four powers – the USA, the Soviet Union, the UK and France. Shortly after the war, Vienna witnessed economic boost and revitalisation; the Marshall plan significantly contributed to this. The troops of Allied Forces finally withdrew from the country by spring of 1955, and then, on the 15th May, the Austrian State Treaty was signed, which helped Austria regain full sovereignty over its country. Since then, Vienna has accepted a large number of immigrants, which results in great ethnic diversity. After this event, Vienna became the capital of many international organisations. The second half of the 20th century is the longest period of peace in the history of Vienna that made it a modern metropolis, open to the world. The city kept growing and changing in the modern spirit; new railway was constructed, as well as many skyscrapers on the northern bank of the river Danube and many decorated urban green areas. Art and culture have a long tradition in Vienna. Special value and international importance can be attributed to the field of music, marked by many musical luminaries. Thus, Vienna is considered the world's capital of music. The Viennese Waltz, the Vienna Boys' Choir, traditional events such as The Vienna Philharmonic New Year's Concert and the Vienna balls are worldwide popular. Important cultural heritage, belonging both to the world and Austria, can be found in a large number of museums, which is the reason why Vienna is also known as "The Museum City". Vienna is also known for its literature, alternative forms of cultural expression,

Pored nje značajna je i Narodna opera, poznata pre svega po tipičnim bečkim operetama, ali i klasičnim mjuziklima. Bečku arhitekturu karakteriše šarolikost stilova mnogobrojnih istorijskih epoha počevši od romanske Rupretove crkve, preko gotске katedrale Svetog Stefana i barokne Karlove crkve, do građevina iz doba klasicizma i moderne. Posebno treba izdvojiti arhitekturu do pred kraj 19. veka koja je i u ostalim gradovima Monarhije poput Praga i Budipešte ostavila autentično arhitektonsko obeležje. Primeri iz ovog perioda su neogotska kao i posebno interesantna i retka arhitektura neorokokoa koja se upotrebljavala uglavnom u unutrašnjosti zdanja u obradi enterijera. Jugendstil je najbolje uočljiv na čuvenoj zgradi Secesije, stanici podzemne železnice Karlov trg kao i crkvi Sv. Leopolda Otoa Vagnera. Od 2001. godine kulturno-istorijsko jezgro Beča je na listi centara kulturne baštine od posebnog značaja i pod zaštitom UNESKO-a. Sve navedeno Beč svrstava u jedne od najposećenijih gradova na svetu. Samo Bečke muzeje godišnje poseti preko 8

bohemian lifestyle, traditional cuisine and numerous cafes. The performing arts have long tradition and special value in the field of art and culture in Vienna. Apart from Burgtheater, which is considered one of the best theatres in the German-speaking world, the National Theatre, the Theatre in der Josefstadt and the Theatre an der Wien also enjoy good reputations. The Vienna State Opera is one of the most popular opera houses in the world. However, the Vienna Volksoper is also important and famous primarily for typical Viennese operetta, but also for classical musicals. The Viennese architecture is characterised by the multitude of architectural styles, marked by different epochs such as – the Romanesque Ruprechtskirche, the Baroque Karlskirche, and St. Stephen’s gothic Cathedral, and many other from the Classicism and the Modern age. It’s important to mention the architecture from the period up until the end of the 19th century, which left important traces in the other cities of the Monarchy as well, such as: Prague and Budapest. Examples from this



Slika 9. Znamenitosti Beča

Figure 9. Sights of Vienna

(Source: ringview.vienna.info; www.raileurope.com; www.alterra.cc; www.internationaltravellermag.com and authors)



miliona ljudi što doprinosi velikim prihodima od turizma (preko 4 milijarde evra).

BRATISLAVA

Smešten na obali Dunava ovaj mali kraljevski grad oduvek je bio jedan od kulturnih centara srednje Evrope. Kao središte viševekovne kulture grad danas obiluje kulturno istorijskim nasleđem koje je većinom smešteno u starom delu grada. Njegov pogranični položaj i blizina Beča (60km) odnosno jedinstven slučaj tako male udaljenosti dve prestonice omogućava mu, kako danas tako i u prošlosti, razne oblike povezanosti i saradnje sa Bečom. Danas jedna od manjih evropskih prestonica, Bratislava (nekad su je Sloveni zvali Požun a od 1919. godine nosi današnji naziv) predstavlja moderan grad koji svoju bogatu istoriju koristi na najbolji način.

Prvi nalazi stalnog naselja na ovom području datiraju iz razdoblja mlađeg kamenog doba, Sloveni su ovde stigli u 5. i 6. veku a pre toga je sve do 4. veka grad bio u okviru rimskog graničnog odbrambenog sistema Limes Romanus. U 10. veku područje Bratislave postaje deo Kraljevine Ugarske i postaje važno privredno i upravno središte. Zbog svog strateškog položaja više puta je napadan ali mu je položaj sa druge strane, doneo i veliki politički značaj i omogućio privredni razvoj. Za vreme vladavine Marije Terezije u 18. veku, broj stanovnika se utrostručio, grad dobija novi oblik odnosno brojne građevine, palate, samostane i postaje najvažniji grad na prostoru današnje Slovačke i Mađarske. Događaji u narednom veku ispisali su još jednu stranicu u istoriji Bratislave, ostavljajući nove obrise i poglede na grad. Početkom veka u gradu je potpisan Požunski mir između Austrije i Francuske dok je samo nekoliko godina kasnije Bratislavski zamak uništen u Požaru. Kao posledica industrijskog zamaha grad 1840. dobija i prvu železnicu na konjsku vuču, otvara se prva banka na prostoru Slovačke i gradi se prvi stalni most u gradu – Stari most koji je izgrađen 1891. Vremenom se uspostavljaju i modernije veze sa Bečom i Peštom. Nakon Prvog svetskog rata i osnivanja Čehoslovačke grad je u junu 1918, postao deo novostvorene države (uprkos opiranju njenih prestavnika) a 1919. godine postaje glavni grad Slovačke i sedište njenih institucija. Nakon drugog svetskog rata Čehoslovačka postaje komunistička država i deo Istočnog bloka što značajno utiče na "sliku" grada. Krajem dvadesetog veka Slovačka stiče nezavisnost i okreće se Evrointegracijama čime započinje novi period u istorijatu i kulturnom razvoju Bratislave.

period are neo-gothic and especially interesting and rare neo-rococo architecture, which was usually used for the decoration of the interiors. The Jugendstil architecture can be shown through the examples of – The Vienna Secession, Karlsplatz Stadtbahn Station and the Church of St. Leopold by Otto Wagner. Since 2001, the city centre was designated a UNESCO World Heritage Site. Vienna's cultural heritage makes it one of the most visited cities in the world. Only Viennese museums are visited by 8 mil people per year, which contributes to the high tourism revenue (over 4 bil EUR).

BRATISLAVA

This small city, straddling the River Danube, has always been one of the cultural centres of Central Europe. Having centuries of cultural history, Bratislava is the home of great cultural and historic heritage, which is mainly located in the Old Town. The city's location near the border and relatively close to Vienna (60km), that is, the unique case of the two capitals being so nearby each other is the main factor of its various co-operation with Vienna, as now so in the past. Bratislava (once called Pressburg (Požun by Slovaks), while it's had the present name since 1919), one of the small European capitals is a modern city that uses its rich history in the best possible way.

The first known permanent settlement of this area originates from the Neolithic era; the Slavs arrived here between the 5th and 6th century, while until that the city had been part of the Roman border defence system – Limes Romanus. In the 10th century, the territory of Bratislava was made a part of the Kingdom of Hungary, and became an important economic and administration centre. It was attacked a number of times for its geopolitical position, but on the other hand, that position made it politically important and enabled economic development. During the reign of the Queen Maria Theresa in the 18th century, the population tripled, many new buildings, palaces and monasteries were built and the city became the most important city in the territory of present-day Slovakia and Hungary. The events that occurred in the following century added to the history of Bratislava, leaving a new image of the city. In the early 19th century, The Peace of Pressburg was signed between Austria and France, while only a few years afterwards the Bratislava Castle was ruined in fire. As a result of a rapid industry development, the first horse-drawn railway was built in 1840, the first bank in present-day

Današnja silueta Bratislave određena je pre svega njenim položajem na Dunavu ali i tragom svakog perioda kroz koji je grad prolazio. Na istočnoj strani grada (grad podeljen Dunavom) nalazi se staro jezgro grada i većina kulturno-istorijskih građevina, dok je sa zapadne strane noviji deo grada, poznat kao Petržalka, koji se odlikuje brojnim neboderima i stambenim blokovima. Vezu između dva dela grada predstavljaju pet mostova. Staro jezgro Bratislave odiše istorijom i ostavlja utisak bogate i burne prošlosti kroz koju je grad prošao.

Kako brojnim srednjoevropskim prestonicama tako i Bratislavom dominira stari dvorac - *Bratislavský hrad*. Njegov položaj na brdašcu 100 metara iznad Dunava, gotsko nasleđe i dugovečnost obzirom da se prvi put spominje u 10. veku kada je postao kraljevska rezidencija odredili su ga kao znamenitost broj jedan u čitavom gradu. Ovaj zamak često nazivaju "naopačke okrenutim stolom" zbog kula koje deluju kao noge stola kada ga okrenemo naopačke. Godine 1811. austrijski vojnici su se napili i dvorac je izgoreo do temelja. Komunisti su ga obnovili 50-ih godina 20. veka ali i dan danas se izvode radovi na rekonstrukciji i obnovi. Danas se u dvorcu nalazi muzej. Odmah do dvorca nalazi se zgrada slovačkog parlamenta s koje se pruža prekrasan pogled na grad i Dunav, a navodno se kada je vedro vreme mogu videti Austrija i Mađarska.

Sa užim centrom grada i njegovim tajnama nas je upoznao sjajan vodič Juraj Berdis, inače po zanimanju arhitekta, prostorni planer i profesionalni turistički vodič. Ono što je kod centra neobično i što nam prvo zapalo za oko, su neobični spomenici/kipovi. Čumil Spomenik, Paparaco Fotograf, Napoleonov Vojnik i Lepi naci su spomenici malih dimenzija, svaki sa svojom pričom a kao najpoznatiji se izdvaja Čumil. On reprezentuje radnika koji proviruje iz šahta. Prema rečima Juraja, do dan danas nije odgonetnuto zašto on viri iz šahta, neko kaže da se odmara od rada, drugi da gleda prolaznicama ispod suknje ili možda samo "zabušava" u radno vreme.



Slika 10. Čumil/Figure 10. Chumil
(Source: Authors)

Slovakia was founded and the city's first permanent bridge ("Old Bridge") was built in 1891. With time, Bratislava established modern ties with Vienna and Pest. After World War I and the formation of Czechoslovakia, the city was incorporated into the new state in June 1918 (despite its representatives' reluctance); while in 1919, it became the capital of Slovakia and its institutions. After World War II, Czechoslovakia became a Communist country and a part of the Eastern Bloc, which affected the image of the city significantly. In the late 20th century, Slovakia achieved independence and turned to the European integration, which marked a new period in the history and cultural development of Bratislava.

The city's image, as we know it, is determined primarily by its location – straddling the river Danube, but also by every trace that each period in history left. On the eastern side of the city (divided by Danube), there is the Old Town where most historical and cultural buildings are concentrated, while for the western side, where the New Town is (also known as Petržalka), skyscrapers and residential buildings are characteristic. These two towns are connected by five bridges. The Old Town is redolent of history and its rich and colourful past.

Just like any other capital, Bratislava has its main castle - Bratislavský hrad. The castle stands on a hill, about 100m directly above the river Danube; it's a Gothic heritage with long history (it was first mentioned in the 10th century, when it became the king's residency), which makes it the main tourist attraction in Bratislava. This castle is often referred to as "the upside down table" because of its towers that give it that look. In 1811, the Austrian troops attacked the castle and it burned into flames. The Communists restored the castle in 1950s, but the restoration continues to this day. There is a museum inside the castle now. The Slovak parliament is located right next to the castle, where the beautiful landscape of the city and Danube can be seen from, while, allegedly, when the weather is clear, Austria and Hungary can also be seen.

An excellent touristic guide, who is also an architect and a spatial planner – **Juraj Berdis** showed us the city centre and revealed its secrets. The unusual things that we noticed first were strange monuments/statues. The monument to plumber *Chumil*, the *Statue of Papparazzo*, the *Napoleon's Army Soldier Statue*, the *Schoner Nazi Statue* are all small and each one of them has their own story, but the best know is Chumil. It is a monument to a plumber; some people claim it represents a man taking a break from hard

Od srednjovekovne zaostavštine u centru grada, svojim položajem, grandioznošću u malom ali kompaktnom centru grada, izdvaja se Mihaelov toranj. On je ostatak odbrambenog sastava grada izgrađen je početkom 14. veka i nekad je predstavljao osmatračnicu dok se danas u njemu nalazi izložba oružja. Nakon par minuta pešačenja, stigli smo na glavni trg – *Hlavne nemestie*. Središtem trga dominira Rolandova fontana kao i Gradski muzej. Dalji obilazak centra grada pokazao nam je da Bratislava pored svoje bogate istorije i lokalnog, kao svoje prihvata i globalno, što smo zapazili kroz spomenik Hansu Kristijanu Andersenu koji je posetio Bratislavu i o njoj govorio biranim rečima. Takođe, nedaleko od *Hviezdoslav*-ovog trga nalazi se statua Zvončice, poznate vile iz priče o Petru Panu. Od sakralnih objekata najveću pažnju nam je privukla crkva *Sv. Elizabete* ili kako je popularno zovu Plava crkva koja je ime dobila po netipičnoj boji fasade.

Turistička ponuda grada se ogleda kako kulturno-istorijskim nasleđem tako i modernim - pabovima, pivnicama, klubovima, prodavnicama, hotelima. U tom smislu, Bratislava i dalje zaostaje za drugim evropskim prestonicama. Međutim, nakon ulaska Slovačke u EU, dolazi do većeg ulaganja u turizam i

work, while others judge him for peeking under the skirts of passers-by while he should be working.

The Michael's Tower is another piece of medieval heritage in the city centre; very prominent for its location and grandiosity in such a small city centre. The Tower is what remained from the city's defense systems, built in the early 14th century; it was once a watchtower, while today it hosts weapon exhibitions.

After a few minutes' walk, we got to the main square - *Hlavne nemestie*. The main landmarks found in the square are the Roland Fountain and the Bratislava City Museum. Later on the tour, we could see that Bratislava not only has a rich local history, but it also accept the global historical landmarks, which proved the statue to Hans Christian Andersen, who had once visited Bratislava and described it beautifully. Also, not far from *Hviezdoslav square*, there is a statue of *Tinkerbell*, a fairy from the story of Peter Pan. Out of religious buildings, we primarily noticed St. Elisabeth church, also known as „the Blue Church“, for its unusual facade.

Tourist attractions include both, the cultural heritage and the modern age pubs, clubs, shops, hotels. In that sense, Bratislava was still lagging behind the European capitals. However, when Slovakia became



Slika 11. Znamenitosti Bratislave

Figure 11. Sights of Bratislava

(Source: www.slovakia.com; www.petefox.net; www.bratislava-slovakia.eu; and authors)

bolje propagande što iz godine u godinu privlači sve veći broj turista. U prilog tome pored pristupačnih cena (čak i za naše uslove) govori i jeftin i pouzdan gradski saobraćaj, razne manifestacije tokom godine, raznovrsnost ponude.

Ograničeno vreme koje smo imali u Bratislavi, onemogućilo nam je da posetimo i druge delove grada i vidimo još neke od znamenitosti koje ovaj predivan grad poseduje. Svakako, ukoliko budemo u prilici, sa radošću ćemo ga opet posetiti i možda ga doživeti u nekom drugom svetlu. Ali jedno je sigurno: Njegova čar je u umeću njegovih vladara i uprave da tokom vekova očuvaju "tragove" prošlih vremena i organski ih povežu sa novim, odajući kod posetilaca utisak modernog grada otvorenog za svakoga.

BEČ - BRATISLAVA

"Prostor za sve" je moto Koncepta prostornog razvoja Austrije 2011, koji takođe treba shvatiti kao poziv da stanovništvo, predstavnici interesnih grupa i stejkholdera aktivno diskutuju i da se uključe u prostorno planiranje (Austrian Spatial Development Concept, 2011). Navedeni liberalan pogled na odnose u prostoru (prevažodno u Austriji) dolazi do izražaja naročito nakon pada Gvozdena zavese, kada počinju da jačaju ekonomske i saobraćajne veze suseda, nekad podeljenih po više osnova, a naročito ideološkoj. Dve prestonice, u prošlosti povezane tramvajskom linijom danas su obzirom na njihovu prostornu bliskost uslovljene su da tešnje saraduju. U tom kontekstu ističu se projekat „BAUM“ i koncepti „Centrope“ i „Twin City“. Prva dva strateški posmatraju prostor i nastoje da postave okvir za zajedničku saradnju i više oblasti, između ostalog i u turizmu i kulturi. „Twin City“ koncept Beč i Bratislavu posmatra kao bratske gradove te stoga pokušava da utiče na koordinirano ili zajedničko planiranje njihovog razvoja. Iako ovaj koncept nije obavezujući u pravno-regulativnom smislu njime se potencijal ovih gradova i njihova blizina nastoje što više iskoristiti. Pored prostorne, njihova kulturno – istorijska povezanost je od izuzetne važnosti. Stoga, je Twin city pokušaj vrednovanja i isticanja zajedničkih snaga i u tom smislu kao indikativan primer se javlja "Twin city liner", odnosno brod koji više puta dnevno plovi na relaciji Beč - Bratislava i osim funkcionalne i turističke uloge ukazuje na izuzetnu kulturnu baštinu oba grada.

Posmatrajući oba grada, u užem i širem kontekstu evidentna je namera svih njihovih struktura, od stanovnika do uprave da zaštite svoje nasleđe,

a Member State, more has been invested in tourism and better advertisement which attracts more and more tourists each year. Apart from low prices (even for our standards), there are some advantages of visiting Bratislava, such as: cheap and safe public transport, a large number of events throughout the year, the variety of offers.

We were limited with time, so we couldn't visit other parts of this city that Bratislava has to offer. However, if we ever have the chance, we would be glad to visit it again and maybe see it in some other light. One thing is certain: its beauty lies in the ability of its rulers and government to preserve the "traces" of the past and incorporate them in the present, thus leaving the impression of a modern city open to everyone.

VIENNA - BRATISLAVA

"Space for All" is a motto of the Austrian Spatial Development Concept (2011), which should be taken as an invitation for citizens, interest groups representatives and stakeholders to actively discuss and participate in spatial planning (Austrian Spatial Development Concept, 2011). Aforementioned liberal vision of spatial relations (mainly in Austria) was especially foregrounded after the fall of the Iron Curtain, when the economic ties and traffic connection with the neighbouring countries started to flourish; those neighbouring countries that we used to have many differences with, especially those based on ideologies. Two capitals, once connected by one tramline, now, given the spatial distance between them, can develop greater co-operation. Pertaining to that, we have project "BAUM" and concepts "Centrope" and "Twin City". The first two consider space strategically and tend to set a framework for a mutual co-operation in several fields, even in the field of tourism and culture. "Twin City" Concept considers Vienna and Bratislava two related cities, and therefore tends to influence co-ordinated or mutual development planning. Even though this concept is not legally or regulatory binding, it tends to optimally use the potential of both cities, as well as the distance between them. Apart from the spatial, the cultural and historical ties between these countries are of great importance. Thus, "Twin City" tries to value and highlight mutual strength and in that sense, the appropriate example is "Twin City Liner", i.e. the ship that goes from Vienna to Bratislava a few times a day and besides having functional and touristic role, it also indicates the exceptional cultural heritage of both cities.



stavljajući ga ispred kratkoročnih interesa. Prostor se štiti, adekvatno valorizuju fokalne tačke u njemu, reperi koji mu daju identitet, dušu, i za razliku od iskustava u planiranju i razvoju naših gradova, razmišlja se strateški u svakoj oblasti, sa jednim ciljem koji tokom vremena ne iščezava – da se za buduće generacije sačuvaju najvažnije vrednosti, ne samo materijalne, istorijske, već i one kulturne, lokalne, koje govore o nekim davnim vremenima na neki novi način.

Comparing these to cities, in general and precise sense, the intention of all of their structures is transparent – from the citizens to the government – they want to preserve their heritage, setting it before the short-term interests. The space is spreading, its focal points are adequately valorised, as well as the features that give it the identity, soul, and unlike the experience in planning and development of our cities, strategic thought can be found in every field, while having only one firm goal in mind – to preserve the most important values for the future generations, not only material and historical, but also the cultural and local ones; those that tell us about the past times but in a modern way.



Slika/Figure 12. „TWIN CITY LINER“ Vienna - Bratislava

(Source: www.mbi.eu; www.wieninternational.at; www.canosthome.at; www.webheimat.at; www.wien.info)

Schlosshof

Schlosshof se nalazi na samom istoku Austrije i predstavlja jedan od njenih najpoznatijih dvorova. Poznat je pre svega po vladavini Marije Terezije. Schlosshof se prostire na preko 50 hektara i nalazi se u Donjoj Austriji. Veličanstvenog je izgleda i predstavljao je letnju rezidenciju za plemiće. U okviru svog kompleksa izdvajaju se prelepe bašte, vrtovi i fontane. Prvobitna namena koju je imala ova rezidencija bila je kuća za lov Eugena Savojskog. Glavni arhitekta, koji je uredio kompleks ovog velelepnog zdanja, bio je Johan Lukas fon Hilderbrant. Tokom izgradnje kompleksa imao je neograničene resurse, jer je Eugen Savojski bio jedan od najuspešnijih generala i najbogatijih ljudi tog vremena. Sredstvima koje je obezbedio Savojski i znanjem Hilderbranta nastala je rezidencija koju danas poznajemo. Stotine radnika, zanatlija i baštovana godinama su realizovali Hilderbrantove planove. Sam dvor, imao je preko 200 članova osoblja koje je radilo na održavanju i po završetku radova. Do 1730. godine najveći deo posla je bio završen i kao rezultat stvoreno je jedno od najimpresivnijih baroknih umetničkih/arhitektonskih dela. Sama ideja baroka ostvarena je kroz ovo kulturno nasleđe. Schlosshof zaista predstavlja jedan “raj na zemlji”, a simetrija oblika, kao jedna od odrednica baroka, zapaža se vrlo jednostavno.

Schlosshof

Schlosshof is located on the eastern edge of Austria and represents one of its most famous castles. It is well known, above all, by the rule of Mary Teresa. Schlosshof is situated on over 50 ha, in Lower Austria. It has a magnificent look which represented a summer retreat for the nobility. Within the complex there are beautiful gardens, patios and fountains. The main purpose of this residence, at first, was to serve as a hunting lodge for Eugen of Savoy. The chief architect who decorated the complex of this castle was Johan Lucas von Hilderbrant. During the building period he had unlimited resources, because Eugen of Savoy was one of the most accomplished generals and richest people of that age. With the funds that Eugen invested and with Hilderbrant's knowledge this residence, as we know it today, came to life. Hundreds of workers, craftsmen and gardeners worked on Hilderbrant's plans for years. The castle itself had over 200 staff members working on maintenance and serving after the work had been finished. Until 1730, most of the work was complete and there stood one of the most impressive baroque works of art/architecture, as a result. The very essence of baroque has come to life through this cultural heritage. Schlosshof is indeed a “paradise on Earth” and the symmetry of shapes, one of the main characteristics of baroque, is clearly seen.

U 19. veku prostor dobija novu namenu. Imperator Francis Josef pretvara kompleks u poligon za vojnu obuku, a prethodni sjaj i lepota samog zdanja gotovo da nestaju. U bliskoj istoriji, Schlosshof je bio pod vojnom upravom, a uz pomoć države pretvoren je u kulturni objekat republike Austrije. Prve ozbiljne mere, preduzete da se ovo zdanje revitalizuje, bilo je 2002. godine, a 2005. godine mesto je konačno otvoreno za posetioce. Mesto gde su nekad živeli Eugen Savojski i Marija Terezija postalo je pravi užitak za sve domaće i strane turiste, a barokni stil života i bogato kulturno nasleđe koje se ovde zapaža ostavlja mnogo jači utisak nego bilo koji muzej.

In the 19th century this spacious property gets a new purpose. Emperor Francis Josef turned this complex into a military training ground, thus the castle loses most of its glory and beauty. More recently, Schlosshof was under military government and with the help of the state it was turned into a cultural monument of the Republic of Austria. The initial measures taken to renew the castle were taken in 2002, while the property was opened for public in 2005. The place where Eugen of Savoy and Mary Teresa used to live has become a true pleasure for both domestic and foreign tourists, while the baroque lifestyle and the rich cultural heritage seen here, leave a much more impactful impression than any other museum.



Slika 13. Schlosshof nekad (gore) i sad (dole)
Figure 13. Schlosshof before (up) and now (down)

(Source: www.bratislavaattractions.com; commons.wikimedia.org; www.regionmarchfeld.at; www.schlosshof.at)

NEUSIEDL AM SEE

Neusiedl am See je mesto koji se nalazi u istočnoj Austriji u pokrajini Brugenland i sedište je okruga Nojzidl. Nalazi se jugoistočno od Beča, tj. između Beča i Bratislave. Naselje je poslednjih decenija postao veoma važno i atraktivno turističko mesto u Austriji, a nalazi se na Nežiderskom jezeru. Jezero i okolina, područje koje se nalazi između Austrije i Mađarske i koje predstavlja Nacionalni park (zaštićen od strane UNESCO-a) prostire se na površini od 747 km². Jezero je močvarno i plitko, površine oko 183 km², a dubooko svega 1,8 m. Jezero predstavlja orintološku stanicu i privlači veliki broj ljubitelja ptica i prirode, ali takođe na njemu je odlično razvijen rekreativni turizam, pa stanovnici Beča, ali i Bratislave, često odlučuju da svoj slobodan vikend provedu baš ovde. Jezero je poznato po surfovanju uz pomoć vetra kao i brojnim manifestacijama vezanim za jedriličarstvo. Takođe, u letnjim mesecima jezero se pretvara u kupalište. Prostor oko jezera dobro je iskorišćen i ima brojne sadržaje, počev od hotela, marine, zabavnog parka, restorana i barova na prelepo uređenoj plaži, tako

NEUSIEDL AM SEE

Neusiedl am See is a place in Eastern Austria, more precisely the Brugenland region and is the main seat of the Neusiedl county. It is situated rather southeasternly from Vienna, more precisely between Vienna and Bratislava. The town, most recently, has become a very attractive and important tourist destination in Austria situated on the Neusiedl am Seelake. The lake and its vicinity, the area between Austria and Hungary which represents a National park (protected by UNESCO) spans an area of 183 km², while being only 1.8 m deep. The lake is an ornithological station which attracts a lot of bird and nature enthusiasts, but also has a very well developed recreational tourism, meaning that residents of both Vienna and Bratislava often decide to spend their weekends in this place. The lake is also known for windsurfing and numerous yachting manifestations. Also, during the summer, the lake becomes a bathing place. The area around the lake is very well utilized with many utilities, starting with hotels, the marina, amusement park, restaurants and bars on a beautifully organized beach, thus meeting



da zadovoljava potrebe turista svih kategorija i svih uzrasta. Samo naselje je ruralnog tipa, ali pored već dobro valorizovanog područja postoji još mnogo prostora za dalji razvoj turizma.

Za srpsku istoriju je Nojzidl značajan jer je ovde u Prvom svetskom ratu postojao logor u kom je stradalo više hiljada Srba, u čiji je pomen i podignut spomenik u centru naselja.

the needs of all types of tourists and ages. The very town itself is rural and even though the area is well developed, there are a lot of opportunities to further improve the tourism.

When it comes to Serbian history, Neusiedl am See is very important because there used to be a camp here where several thousand Serbs lost their lives, and in their honor, a commemoration monument has been built at the very town centre.



Slika/Figure 14. Neusiedl am See
(Source: www.bauernmarkt-neusiedl.at;
www.welt-atlas.de; and authors)

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ASPERN SEESTADT

Milan Radović

UVOD

Ulaskom Austrije u Evropsku uniju 1995. godine, grad Beč ulazi u mehanizam konstantnog progresivnog rasta i razvoja, i jača svoju poziciju centra na istoku Unije, postajući meka za brojne doseljenike i investore. Integraciju austrijskih suseda Češke, Slovačke i Mađarske 2004. godine u EU, asocijacija za planiranje istočne Austrije (nem. Planungsgemeinschaft Ost) i grad Beč, prepoznali su kao idealan uslov za jačanje urbane aglomeracije Beča, ali i regiona Donje Austrije i Burgenlanda korišćenjem prednosti koje im resursi i zajedničke mogućnosti razvoja pružaju, uspostavljanjem održivih veza i zajedničkih ciljeva u centralno evropskom regionu "CENTROPE", čime Beč i zvanično postaje centar-prestonica centralne Evrope.

Ovakav sled događaja inicirao je da grad Beč 2005. godine usvoji novi plan za urbani razvoj (The Urban Development Plan-STEP 05), koji za cilj ima odgovor "Kako će i kako bi trebalo Beč da izgleda u budućnosti?". Rezultat zajedničkog delovanja u novom planu je definisanje 13 ključnih zona - delova grada koji predstavljaju prioritet za budući razvoj Beča. Programi za ključne oblasti definišu ciljeve razvoja, mere i instrumente za njihovu realizaciju.

Jedan od 13 ključnih prioriteta bio je i projekat produženja metro linije U2 do starog aerodroma Aspern i kompletna izgradnja novog gradskog urbanog centra Aspern Seestadt. Novi urbani centar Beča, na površini od 240 hektara na prostoru bivšeg aerodroma, pored stambenih zona, imaće i objekte za proizvodnju, trgovinu, usluge, istraživačke centre, objekte za sport i rekreaciju i ostale prateće sadržaje koji će omogućiti nesmetani život i rad njegovih stanovnika. Značaj izgradnje ovog urbanog centra ogleda se i u planu da on postane regionalni centar koji će povezivati Beč i Bratislavu.

RAZVOJ IDEJE O ASPERN SEESTADT-U

Početakom devedesetih godina prošlog veka, rast ekonomije i celokupan razvoj Austrije pratio je i demografski rast Beča. Usled velikog pritiska na postojeće stambene zone i celokupnu gradsku infrastrukturu, gradske službe za planiranje i razvoj donele su odluku da intenziviraju razvoj na prostoru leve obale Dunava.

INTRODUCTION

Joining Austria to the European Union in 1995, the city of Vienna has entered in the mechanism of constant progressive growth and development, and strengthening its position in the center of the east of EU, becoming a mecca for many immigrants and investors. Integration of Austrian neighbors Czech Republic, Slovakia and Hungary in 2004 in the EU, Planning association of eastern Austria (ger. Planungsgemeinschaft Ost) and the city of Vienna, recognized as the ideal conditions for strengthening the urban agglomeration of Vienna, and the region of Lower Austria and Burgenland taking advantage of that their resources and joint development opportunities provided by the establishment of sustainable linkages and common goals in the central European region "CENTROPE" in Vienna, which officially becomes the center of the capital of central-Europe.

Such a sequence of events initiated that city of Vienna in 2005 adopt a new plan for urban development (The Urban Development Plan-STEP 05), which aims to answer is "How will and how should city of Vienna looks in the future?". The results of joint action in the new plan is the definition of 13 key zones - areas of the city that are a priority for the future development of Vienna. Programs for key areas define development objectives and measures and instruments for their implementation.

One of the 13 key priority was the project of extending metro line U2 to former airport Aspern and complete construction of the new city's urban center Aspern Seestadt. The new urban center of Vienna, on an area of 240 hectares on the former airport, except residential areas, will also have facilities for production, trade, services, research centers, facilities for sport and recreation and other supporting facilities that keeps the life and work of its inhabitants. The importance of the construction of this urban center is reflected in the plan that it become a regional center that will connect Vienna and Bratislava.

DEVELOPMENT OF IDEAS ABOUT ASPERN SEESTADT

In the early nineties, economic growth and overall development of Austria was followed by



Tada ruralni prostor na potezu Aspern-Essling, koji je godinama bio indirektno izolovan (granično područje sa Slovačkom u periodu postojanja gvozdene zavese), počeo je ekspanziju izgradnjim individualnih stambenih objekata. Kako se izgradnja povećavala usledili su i sve veće potrebe za novim površinama za izgradnju kao i potrebe za infrastrukturom. Nakon dugog ispitivanja lokacija u samom Aspernu, doneta je odluka da se celokupan prostor napuštenog aerodroma prenameni za izgradnju novog naselja. Godine 1995., urbanisti grada Beča i predstavnici Bečke privredne agencije, nakon održanog međunarodnog konkursa, izabrali su koncept arhitekta Rudigera Lainera za urbani razvoj tog prostora. Konceptom je obuhvaćen prostor od 130ha na kome je predviđena izgradnja stambenih objekata za potrebe deset do dvanaest hiljada stanovnika, sa pratećom infrastrukturom i javnim službama, kao i industrijske zone sa približno šest hiljada radnih mesta uz očuvanje velikih slobodnih površina. Ovaj koncept nije u potpunosti zaživeo. Njegovu realizaciju stopirala su prevelika finansijska sredstva koja su bila potrebna za realizaciju velikih infrastrukturnih objekata. Ono što se realizovalo iz ovog koncepta jeste skromno povećanje postojeće industrijske zone na jugu koju koristi fabrika Dženeral Motors. Odluka Beča da konzervira prostor aerodroma, pokazaće vreme, predstavljajući osnovu za razvoj Beča deceniju kasnije.

PLANIRANJE ASPERN SEESTADT-A

Retka je prilika da se planira prazan prostor bez postojećih elemenata i struktura i, uslovno bez, prethodne istorije. Prostor napuštenog aerodroma nakon uklanjanja piste predstavlja "tabula rasa" za planere. Potrebno je razviti novu urbanu strukturu i uskladiti njen odnos prema životnoj sredini, za šta je pored znanja i veština potrebna i doza samopouzdanja kod samih planera.

U okviru izrade plana za urbani razvoj Beča STEP 05 čija je izrada trajala nešto manje od dve godine, planeri i timovi koji su radili na njegovoj izradi održali su preko 20 sastanka sa predstavnicima javnosti na kojima su slušali njihove potrebe, ideje i želje i prezentovali im moguća rešenja za ostvarnje istih.

Nakon prezentovanja odluke da se na prostoru napuštenog aerodroma izgradi moderan i funkcionalni grad, kao i da ta ideja predstavlja jednu od 13 ključnih tački za urbani razvoj Beča, građani su sa zadovoljstvom prihvatili ali i odmah ukazali na potrebu da se na toj lokaciji, pre svega mora

the demographic growth of Vienna. Due to large pressure on the existing residential area and the entire city infrastructure, city departments for the planning and development have brought a decision to intensify the development of the area of left bank of the Danube.

Rural area stretching on line Aspern-Essling, which was indirectly isolated (border area with Slovakia in the period of the Iron Curtain), began with extensive construction of individual residential houses. As the upbuilding grew ensued and the growing demand for new areas for construction and infrastructure needs. After a test location in the Aspern, it was decided that the entire space of the abandoned airport reassign for new settlements. In 1995, urban planners of City of Vienna and representatives of Vienna Business Agency, following the international competition, chose the concept of architect Rüdiger Lainer for urban development of the area. Concept covered an area of 130 hectares in which envisions construction of housing units for ten to twelve thousand people, with infrastructure and public services, as well as industrial zones with approximately six thousand jobs while preserving free areas. This concept was not fully operational. His realization of hitchhiking are large financial resources that were necessary for the realization of major infrastructure facilities. Modest increase in the existing industrial zone in the south used by the factories of General Motors is realized in this concept. Decision of city of Vienna conserve area of the former airport, time will form, represents the basis for the development of Vienna decade later.

PLANNING OF ASPERN SEESTADT

This is a rare opportunity to plan empty area, without existing elements and structures, and without prior history. Abandoned airport, after the removal of runway, present a "tabula rasa" for planners. It is necessary to develop a new urban structures and align its relationships with environment, which, beside knowledge and skills, required adose of confidence in planners itself.

In the preparation process of The Urban Development Plan-STEP 05, whose production lasted less than two years, planners and teams who have worked on its creation held over 20 meetings with representatives of the public, where they listened their needs, desires and ideas and presenting them possible solutions for the accomplishment of them.

After presentation of decision that on area of the abandoned airport will be built modern and

unaprediti saobraćajna infrastruktura. Uočena potreba za novom saobraćajnom infrastrukturom predstavljaće okosnicu izgradnje novog naselja i motor razvoja celokupnog okruženja.

Odmah nakon usvajanja plana za urbani razvoj, počela je priprema na izradi master plana za lokaciju napuštenog aerodroma. Nakon ekspertske konsultacije i konsultacije sa javnošću i ostalim zainteresovanim stranama, Grad Beč je definisao osnovne ciljeve koji moraju biti zadovoljeni prilikom izrade novog master plana:

- jasno definisanje šta, ko i kako treba da gradi na toj lokaciji (ovaj cilj zahtevao je detaljnu analizu lokacije, analizu tržišta nekretnina, uklapanje budućih objekata u okruženje i td.);
- kreiranje nezavisnog urbanog centra (izgrađeno naselje na površini od 200ha uz kompletno izgrađenu infrastrukturu, pre svega saobraćajnu: metro liniju, regionalnu železnicu, obilaznicu sa petljom za uključenje na autoput, sa velikim brojem radnih mesta i širokim spektrom usluga i funkcija treba da zadovolji formu i da postane novi gradski okrug);
- kreiranje regionalnog centra (sadržajima, visokim stepenom razvijenosti, svojim položajem i opštim kvalitetom života novo naselje treba da se izdigne sa lokalnog nivoa i postane urbani regionalni centar sa međunarodnim kompanijama, obrazovnim i istraživačkim institucijama i organizacijama);
- integrisanje budućeg centra sa prirodnim okruženjem (prilikom izgradnje objekata i celokupnog naselja treba voditi računa da se omogućiti pristup zelenim i otvorenim površinama i da se neugrožava prirodno okruženje);
- obezbeđivanje kvalitetnih i funkcionalnih javnih površina (ovaj zahtev se odnosi pre svega na planiranje mreže ulica koje će najviše koristiti pešaci i biciklisti usled odluke da novo naselje bude što je više moguće orijentisano ka upotrebi nemotorizovnog prevoza) i
- dostupnost za sve (obezbeđivanje sadržaja, uslova i mogućnosti za život i rad svim populacionim grupama).

Ekspertske tim za izradu master plana izabran je na konkursu. Konkurs se sastojao iz dve faze. U prvoj fazi od potencijalnih kandidata traženo je da predstave koncept prostornog i urbanističkog rešenja lokacije sa planom saobraćaja, kao i da dostave svoja iskustva i relevantne reference. U drugoj fazi, konkursna komisija pozvala je deset timova da im ponovo dostave svoje koncepte ali

functional city, and that this idea is one of the 13 key points for urban development of Vienna, citizens gladly accepted this idea but immediately pointed needs to improve the transport infrastructure at this location. The perceived need for new transport infrastructure will present the backbone of the construction of new settlements and engine of development of the entire environment.

Immediately after the adoption of the plan for urban development, preparation for master plan for site of the abandoned airport has started. After consultations with experts, public and other interested parties, the City of Vienna has defined the basic objectives that must be met into new master plan:

- clearly defining what, when and how to built at that location (this goal required a detailed analysis of the location, analysis of real estate market, integration of future facilities in the environment, etc.);
- creation of an independent urban center (settlement built on an area of 200 hectares with a fully developed infrastructure, especially transport: metro line, regional railroads, bypass with loop to highway, a large number of jobs and a wide range of services and functions for a new city district);
- creation a regional center (facilities, high level of development, location and the quality of life of new settlement must be raised from local level and become a regional urban center with international companies, educational and research institutions and organizations);
- integration of future center with the natural environment (during the construction of objects and entire settlements should provide access to green and open areas and that does not endanger natural environment);
- provision of quality and functional public spaces (this requirement applies primarily to the planning of the streets grid which will be most used by pedestrians and cyclists due to the decision that new settlement will be oriented to non motorized transport)
- accessibility for all (provision of content, conditions and opportunities for life and work to all population groups).

The expert team for master plan creation was selected on competition. The competition consisted of two phases. In the first phase from potential candidates was requested to present a concept of spatial and urban design of area, with traffic plan and



sa predlogom arhitektonskog rešenja, planom zelenih površina i predlogom plana okruženja. Novembra 2005. godine komisija za planove Grada Beča zajedno sa timom za sprovođenje konkursa, na osnovu zadovoljenja kriterijuma konkursa poverila je izradu master plana švedsko-nemačkom konzorcijumu Tovatt Architects & Planners (SWE) i N+Objektmanagement GmbH (D).

Master plan je nakon brojnih revizija i javnih prezentacija usvojen je 2007. godine i predstavlja sredstvo koje za cilj ima kreiranje novog gradskog urbanog centra Beča na prostoru od 240 ha, sa velikim stambenim površinama (8500 stanova za 20000 novih stanovnika) uklopljenih sa prostorom za 20000 radnih mesta u komercijalnim i uslužnim delatnostima, kulturi, nauci, istraživanju i obrazovanju..., koji je saobraćajno idealno povezan i čini jedinstveni multimodalni čvor (metro linija sa dva stajališta, tramvajska i dve autobuske linije, Park & Ride objekti, železnička stanica, izlaz na autoput...), okružen i prožet zelenilom sa jedinstvenom akvatorijom koja integriše prostor u jedinstvenu celinu, sa slobodnim prostorima za sport i rekreaciju, i koji je prijateljski nastrojen prema pešacima i biciklistima.

REALIZACIJA I IMPLEMENTACIJA MASTER PLANA

Zbog same veličine projekta i potrebnih finansijskih sredstava, realizacija master plana realizuje se kroz 4 međusobno uslovljene faze.

Kako bi se ovaj projekat veka, kako ga nazivaju gradski većnici Beča, završio na vreme formirano je posebno preduzeće WIEN 3420. Preduzeće je nastalo kao projekat javno privatnog partnerstva i poveren mu je zadatak da se stara o razvoju najvećeg urbanog razvojnog projekta u Beču. Preduzeće je zaduženo i za pronalaženje investitora i partnera za izgradnju stambenih i komercijalnih objekta kao i prodaju nekretnina. Još jedan zadatak ovog preduzeća je i promocija ovog projekta u saradnji sa profesionalnim udruženjem CITYlab.

Finansiranje ovoj skupog projekta vrši se malim delom iz budžeta Beča - prevashodno se iz ovih sredstava finansira infrastrukturno opremanje lokacije, a većim delom iz fondova EU. Sam projekat, tj. pojedine blokove namenjene komercijalnim delatnostima unutar novog centra, prepoznali su i sami investitori i sami se uključili u finansiranje izgradnje.

to submit their experiences and relevant references. In the second phase of competition, selection committee has invited ten teams that they re-submit their concepts but with the proposal of architectural design, plan for green areas and a draft plan environments. In November 2005, the commission for plans of the City of Vienna, together with the team for the implementation of the competition, on the basis of meeting the criteria of the competition entrusted the preparation of the master plan to the Swedish-German consortium Tovatt Architects & Planners (SWE) and N+Objektmanagement GmbH (D).

Master plan, after numerous revisions and public presentation, was adopted in 2007 and represents a tool for aims to create a new urban center of the city of Vienna in the area of 240 hectares, with large residential areas (8500 flats for 20000 new inhabitants) embedded with space for 20000 jobs in commercial and service industry, culture, science, research and education..., which is ideally connected and makes a unique multi-modal node (subway line with two stops, tram and two bus lines, Park & Ride facilities, railway station, access to the highway...), surrounded by greenery and imbued with a unique aquatoria that integrate space into a unified whole, with open spaces for sport and recreation, friendly to pedestrians and cyclists.

REALIZATION AND IMPLEMENTATION OF MASTER PLAN

Due to size of the project and necessary financial resources, the realization of the master plan is implemented through four interacting phases.

To ensure that this project of the century, as city councilors of Vienna call this project, completed on time is formed a separate company WIEN 3420. The company was established as a project of public-private partnerships, and its tasked to ensure the development of the largest urban development project in Vienna. The company is responsible for finding investors and partners for the construction of residential and commercial building and real estate. Another task of the company is to promote this project in cooperation with professional associations CityLab.

Financing this expensive project is carried out by small part of city of Vienna budget, - primarily from these funds is financing infrastructure equipment of location, and for the most part from EU funds. The project itself, ie. individual blocks intended for

IDENTITET I BREND ASPERN SEESTADT-A

U završnim fazama izrade master plana gradski većnici Beča intezivno su počeli da razmišljaju kako će privući nove stanovnike u novo naselje koje za cilj ima da postane novi urbani centar. Postavljalo se pitanje kako zaintrigirati pojedinca da počne da razmišlja o preseljenju i kupovinu nekretnine u naselju bez duše i duha, prepoznatljivosti i do tada neatraktivnost.

Sagledavnjem master plana uočeno je da osnovni element novog centra je planirana akvatorija - jezero koje se nalazi u centru naselja. Odmah je predloženo da se novom gradskom urbanom centru da ime Aspern Seestadt (Aspern grad na jezeru). Nakon prezentovanja ideje o imenu obrađivačima plana i interesnim i zainteresovanim grupama i pozitivnih reakcija odlučeno je da se krene u korporativno kreiranje identiteta i brenda Aspern Seestadt-a.

Početna faza u kreiranju identiteta Aspern Seestadt-a bilo je pronalaženje svih njegovih jedinstvenosti koje ga čine drugačijim od ostalih. Kako je Aspern Seestadt bio samo ogroman prostor bez jasno izgrađenih i vidljivih elemenata, bez istorije, pristupilo se kreiranju identiteta sa težnjom da se ukaže šta će novi grad biti. Tako je definisano da će novi identitet Aspern Seestadt biti njegova arhitektura, funkcije, usluge i budućni stanovnici koje će krasiti moderan i urban stil života.

U kreiranju identiteta i brenda veliku ulogu dobilo je preduzeće WIEN 3420 koje se stara o realizaciji ovog projekta urbanog razvoja. Oni su za potrebe ovog projekta angažovali celokupan tim marketinških eksperata koji su imali za cilj da kreiraju identitet i naročito brend novog grada. Za potrebe ostvarenja cilja nastale su brojne publikacije koje promovišu novi grad. Ideje i vizije Aspern Seestadt-a prezentovane su na brojnim gradskim i regionalnim dešavanjima kao i na međunarodnim sajmovima. Rezultat je da je celokupna javnost CENTROPE regiona upoznata sa novim projektom.

Aspern Seestadt u širem regionalnom značaju predstavljaće novi brzo rastući centar u CENTROPE regionu. Grad koji se nalazi u sredini osovine razvoja CENTROPE regiona, na pola puta između Beča i Bratislave lako bi mogao da se izdigne iznad svojih potencijala i očekivanja i da privuče veliki broj investicija jer pruža mogućnost ulaganja u održivu ekonomiju, mogućnost ulaganja u obnovljive izvore energije kao i investiranje u same komercijalne objekte unutar grada. Moderan grad bi mogao da privuče značajan broj novih rezidenata koji bi pratili

commercial services within the new center, was recognized by the investors and themselves become involved in financing the construction.

IDENTITY AND BRAND OF ASPERN

In the final phases of creation a master, city councilors of Vienna intensively began they began to think about how attract new residents in the new settlement which aims to become a new urban center. The question was how to intrigued the individual to start thinking about moving and buying real estate in the settlement without soul and spirit, recognition and until then unattractiveness.

By reviewing the master plan, it was noted that based element of the new center is planned aquatoria/lake located in center of the settlement. Immediately a new city urban center get a name Aspern Seestadt (Aspern - city on the lake). After presentation of ideas about name and positive feedback it was decided to embark on creation corporate identity and brand Aspern Seestadt.

The initial stage of creating the identity of Aspern Seestadt was finding all of its uniqueness that make it different from the others. As Aspern Seestadt was just a huge area without clearly constructed and visible elements, without history, approached the creation of identity with a tendency to point out what will be a new city. Its defined that the new identity Aspern Seestadt be his architecture, functions, services and future residents who will adorn modern and urban lifestyle.



Slika 1. Ilustrativni prikaz budućeg izgleda Aspern Seestadt-a
Figure 1. Illustration of the future look of Aspern Seestadt
(Source: www.wien3420.at)

In creating a brand and identity a major role was given to company WIEN 3420 which takes care of the realization of this urban development project. For the purposes of this project they hired a whole team of marketing experts who have aimed to create

trend investiranja i da izazove neku vrstu pozitivnog “Aspern efekta”.

Kreiranje brenda kao proces koji prati i koristi identitet za svoju funkciju prezentovanja proizvoda daleko je više napredovao. Gotovo sve funkcije, objekti, sadržaji i elementi su brendirani kao jedinstveni proizvod Aspern Seestadta. O značaju i ulozi brenda u promociji novog centra govori i publikacija Brand book Aspern u kojoj su opisani i prezentovani svi brendovi Aspern Seestadta. Osmišljen je i jedinstveni moto novog urbanog centra koji glasi “celokupan život” (eng. Full life) koji kratko i jasno ukazuje na mogućnosti novog urbanog centra.



Slika 2. Deo područja Aspern Seestadt-a 2012. i 2015. godine
Figure 2. Part of the Aspern Seestadt area in 2012 and 2015
(Source: author)

ZAKLJUČAK

Aspern Seestadt je najveći projekat urbanog razvoja u Evropi. Kako projekti na lokalnom nivou prezentuju stanje ekonomije na nacionalnom nivou, još jedan izvesni period Srbija neće moći da računa na slične projekte, iako bi njihova izgradnja bila opravdana.

Za razliku od Aspern Seestadt-a čija ideja za izgradnju je stara više od dve decenije a realizuje se u poslednjih par godina, jer lokalne vlasti nisu želeli da zakorače u realizaciju projekta i da zbog nedostatka novca ne završe projekat, u našoj zemlji nastavlja se tradicija instant planiranja i izgradnje objekata stanovanja bez pratećih sadržaja.

an identity and especially the brand of new city. For the purposes of achieving the objective caused numerous publications that promote new city. Ideas and visions of Aspern Seestadt have been presented at numerous of city and regional events as well as at international fairs. The result was that the general public of CENTROPE region was familiar with the new project.

Aspern Seestadt in the wider regional importance will represent new fast-growing center in the CENTROPE region. City located in the middle of development axis of CENTROPE region, halfway between Vienna and Bratislava could easily rise above their potential and expectations and to attract a large number of investment options such as investing in a sustainable economy, the possibility of investing in renewable energy sources as investment in the commercial facilities within the city. The modern city could attract a significant number of new residents who would monitor the trend of investment and cause some sort of positive “Aspern effect”.

Brand creation as a process that tracks and uses the identity for its function presentation of products is far more advanced. Almost all functions, objects, contents and elements are branded as a single product of Aspern Seestadt. The importance and role in promoting of new city center brand is publications Brand book Aspern in which are described and presented all Aspern Seestadt brands. It is designed unique motto of the new urban center „Full life” that briefly and clearly indicates the possibility of a new urban center.

CONCLUSION

Aspern Seestadt is the largest urban development project in Europe. How projects at the local level present state of the economy at the national level, another certain period Serbia will not be able to count on similar projects, even though their construction was justified.

Unlike Aspern Seestadt which idea is more than two decades old and is implemented in the last few years, because the local authorities did not want to step in the realization of the project and due to the lack of money does not complete the project, in Serbia continues with tradition of „instant planning” and construction of settlements without the accompanying facilities.

Professional public in Serbia lately is faced with growing evasion of state and local government

Profesionalna javnost u Srbiji u poslednje vreme suočena je sa sve izraženijim izbegavanjem državnih i organa lokalne samouprave da prostori ili građevine koje su od bitnog interesa za grad budu predmet javnog stručnog nadmetanja i provere. U projektima novih urbanih centara/naselja u Srbiji jasno se vidi nedostatak idejno čvrsto utemeljenog principa koji treba da potvrde specifičnost prostora na kojem se realizacija projekata odvija. Ne postoji šematičnost, olako se ponavljaju isti elementi fizičke strukture, međuprostor nije uređen po značaju i po nameni, izostaju gradski elementi poput ulica, trgova, zelenih površina i parkova, objekata za sport i rekreaciju... Objekti socijalne infrastrukture su retki, dok za objekte kulture ne postoji ni ideja. Ovakvim pristupima dobijaju se celine koja ne poseduje potrebnu dinamičnost i raznovrsnost, kao ni stepenovanje najvažnijih elemenata prostora. Treba više pažnje posvetiti humanosti prostora, zaštititi životne sredine, odnosno stvaranje ambijenta za kvalitetan život budućih stanara.

Ovakvi propusti u našoj zemlji pravdaju se hitnošću za realizacijom projekta. U Austriji, prilikom realizacije projekata koji su od bitnog značaja za grad, bilo da se grade iz državnih ili lokalnih sredstava ili fondova EU, uobičajene su veoma duge i stroge stručne i građanske debate. Na nivou grada ili čak države osnivaju se saveti, odbori, koji su sačinjeni od eksperata sa velikim iskustvom i oni donose preporuke, koje su savetodavnog karaktera. U Beču postoji praksa da se celokupna stručna javnost mora složiti sa projektom (npr. odobrenje projekta od strane stručnog i profesionalnog udruženja), ali i predstavnici građana.

Pravovremeno rezervisanje prostora ostavilo bi dovoljno vremena za rešavanje imovinsko-pravnih pitanja i omogućilo bi se dugoročno planiranje koje bi moglo da simulira sve moguće negativne posledice i tako ih izbegne prilikom same realizacije projekata.



Slika 3. Izgrađeni deo Asperna sa vidikovca na jezeru
Figure 3. Constructed part of Aspern from the lookout on the lake
(Source: author)

bodies that areas or structures that are of considerable of interest for the city to be subject to public expert review. The projects of new urban centers/settlements in Serbia clearly see the lack of conceptual firmly grounded principles which should confirm the specificity of the area where the implementation of projects takes place. There is no shema, easily repeated the same elements of the physical structure, the space is not regulated by relevance and purpose, lacking urban elements such as streets, squares, green areas and parks, facilities for sports and recreation... Social infrastructure facilities are rare, for objects in function of culture there is no idea. Such approaches are obtained continent which does not have the necessary dynamism and diversity, as well as the grading of the most important elements of space. More attention should be given to humanity, space, environmental protection, and creating an environment for quality of life of future tenants.

These flaws in Serbia are justified by the urgency for realization of the project. In Austria, during the implementation of projects that are essential to the city, whether they are built from state, local or EU funds, are common very long and rigorous professional and public debate. At the level of the city or even state, a council, committees, which are composed of experts with extensive experience and they make recommendations, which are advisory only. In Vienna there is a practice that the entire professional community must agree with the project (eg. approval of the project by an expert and professional associations), as well as representatives of the citizens.

Timely provision of space would have left enough time for resolving property issues and enable to long-term planning that could simulate all possible negative consequences and so avoid them during the project implementation.

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