



Municipal Infrastructure Support Programme

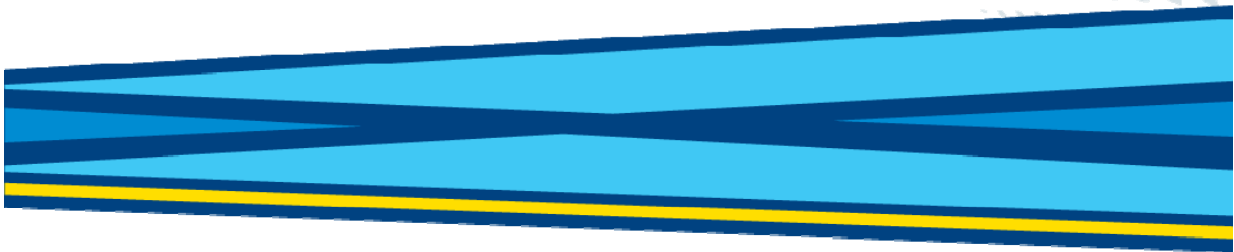
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Building together for the future

Industrial zone "Jug" in Vladicin Han

VOLUME 3 : ANNEXES



www.misp-serbia.rs

Municipality Vladicin Han

December 2011

Final version

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Annex 1

Market research of industrial zones in Serbia and in the Region



December 2011
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FS IZ Vladicin Han
Final version



Market research of industrial zones in Serbia and in the Region

September, 2011

PREPARED BY:
Valuation and Advisory Services Department

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GENERAL ANALYSIS



GENERAL INFORMATION ABOUT SERBIA

Republic of Serbia covers an area of 88,361 sq km. According to the latest census from 2002 the Republic of Serbia has population of about 7.5 million people, which makes the population density of 115 inhabitants per square kilometer. Republic of Serbia consists of two autonomous provinces: Vojvodina, with the administrative center, Novi Sad, and Kosovo and Metohija, with the administrative center, Pristina. Republic of Serbia is divided into the territory of Belgrade and 29 administrative districts, which are further divided into local governments-municipalities.

80% of territory of the Republic of Serbia is located in the Balkan Peninsula, in Southeast Europe, and 20% in the Pannonia Plain, in Central Europe. Serbia is located at the intersection of Pan-European Corridor 10 and 7, on the way from Europe to Asia. Corridor 10 is one of the most important transport corridors passing through Serbia, with the start point in Salzburg, via Belgrade and Nis, where a branch continues to Thessaloniki, Sofia and Budapest.

SELECTED DEMOGRAPHICS AND ECONOMIC PARAMETERS		
Jurisdiction	City of Belgrade	Serbia
Population		
2002 Census	1,576,124	7,498,001
1991-2002 % Change	1.50%	-1.10%
2009 Estimate	1,635,132	7,334,937
2002-2009 % Change	3.70%	-2.20%
Employment		
2009 Unemployment Rate	13.40%	16.60%
2010 Unemployment Rate	15.80%	19.20%
2011 Unemployment Rate	18.90%	19.50%
Income		
2009 Average per Employee	EUR 413	EUR 412
2010 Average per Employee	EUR 327	EUR 330
H1 2011 Average per Employee	EUR 444	EUR 374

Source: Statistical office of the Republic of Serbia

ECONOMIC AND POLITICAL OVERVIEW

Serbia has submitted a request to the EU Council for the EU membership in last quarter of 2009. On 25 October 2010 EU Council issued a unanimous decision on forwarding the request of the Republic of Serbia for EU membership to European Commission and asked to draft an opinion on our country's readiness to start membership negotiations. It is expected that the European Commission will give its opinion on Serbia's membership by the end of 2011.

Current Serbian president, Boris Tadic came to a function of the President of the Republic of Serbia in July 2004, and then in February 2008 he was reelected. After parliamentary elections in May 2008 Mirko Cvetkovic, was elected as the new Prime

Minister of the Republic of Serbia Serbia who came to a function of the prime minister in July 2008.

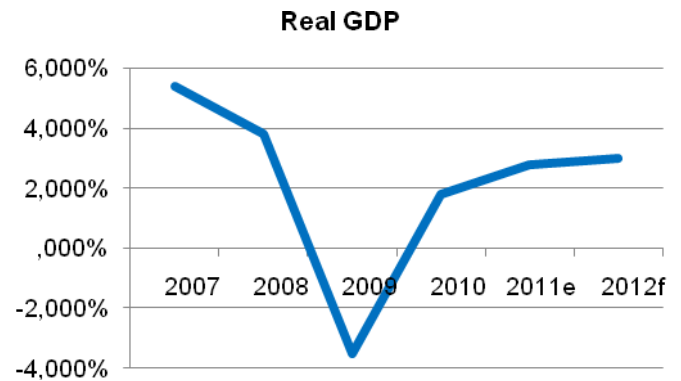
The following table we present the main economic indicators of Serbia for the period from 2007 to 2012f:

EKONOMIC INDICATORS						
	2007	2008	2009	2010E	2011F	2012F
Real GDP (EUR billion)	28,8	33,4	29,9	29,6	32,9	34,3
Real GDP (%)	5,4	3,8	-3,5	1,8	2,8	3
GDP per capita (EUR)	3,900	4,545	4,099	4,072	4,543	4,752
CPI (% , yoy, May 11))	6,5	11,7	8,4	6,3	10,9	6,7
Unemployment (%)	18,1	13,7	16,1	20,0	19,5	18,8
Net FDI (EUR billion)	1,8	1,8	1,4	0,9	2,2	2,0
FDI (% GDP)	6,3	5,5	4,6	2,9	6,7	5,8
External debt (EUR billion)	17,8	21,8	22,8	23,8	25,0	27,0
External debt (% GDP)	61,8	65,3	76,1	80,3	75,9	78,7
Exchange rate against USD	58,34	55,40	67,45	77,73	72,92	75,00
Exchange rate against EUR	79,98	81,49	94,05	103,12	105,00	111,00

Source: National Bank of Serbia, Bank of Austrije Raiffeisen Bank

GROSS DOMESTIC PRODUCT - GDP

After the decrease trend of GDP of 3.5% in 2009, in all quarters in 2010 it was recorded the positive growth of GDP, compared with the same quarters the year before. A slight increase in economic activity of 0.4% was recorded in the first quarter of 2010, as well as continued significant growth rate during the second and third quarter of 2010 of about 1.7% and 3.1%, respectively. In the last quarter of 2010 it was recorded a slowdown of GDP growth when it was estimated at 1.7%, In the last quarter of 2010, slowdown of GDP growth was caused by the decline of agricultural and industrial production, construction activity and in trade turnover. GDP growth for the 2010 was 1.8%. Drivers of GDP growth in 2010 were foreign demand and depreciation of national currency, which had a positive impact on export growth. According to the National Bank of Serbia, the estimated GDP in 2010 reached 28.8 billion Euros, while by the end of the first quarter of 2011 estimated GDP amounted to 7:09 billion Euros It is estimated that in the first quarter of 2011 economic activity recovered seasonally adjusted GDP growth was 1.5% and 3.4% y o y.



Source: Raiffeisen Bank

Economic activity in Serbia is slowly recovering. Economic activity has not yet returned to the level before the economic crisis. On the supply side, the industry generates growth and on the demand side growth is generated by investment and exports, while private consumption, whose decline began in the second half of last year, continues to decline during the first half of 2011.

The share of exports in GDP was about 35%, while the share of imports accounted for over 50% of GDP, which means that the export-import ratio was about 66% in the first quarter of 2011.

INFLATION AND EXCHANGE RATE

During 2010 inflation grew from 4.8% as observed in January to 10.3% observed in December, which means it exceeded the target rate of National Bank of Serbia (6% + / - 2%). The most important factors which affected the growth of inflationary pressures in 2010 were bad agricultural season and lower transmission effect of depreciation and recovery in overall demand.

At the end of the first quarter of 2011 it was recorded a growth of consumer price index of about 5.5% (in January was recorded an increase on a monthly basis of +1.4%, in February and March +1.5% +2.6%. About 65% of growth index refers to the increase in prices of food products, fruits and vegetables, which are a consequence of poor agricultural season in 2010, higher imports and higher exports, which was encouraged by increasing prices of primary agricultural products in world market (which was a result of less supply of primary agricultural products in domestic market). During the first quarter of 2011, the significant cost pressures on food manufacturers have resulted in an increase of consumer prices. In addition to food prices, a significant impact on inflation had regulated prices, above all price increase of cigarettes and electricity. Hence, the price increase of food products, cigarettes and electricity, accounted for 80% of the total inflation in the first quarter of 2011. Monthly growth of the consumer price index in April was +1.1% and in May was recorded a slowdown in the monthly index and growth amounted to 0.4%. In the second quarter, according to estimates of the National Bank of Serbia, food prices will have the greatest impact on inflation.

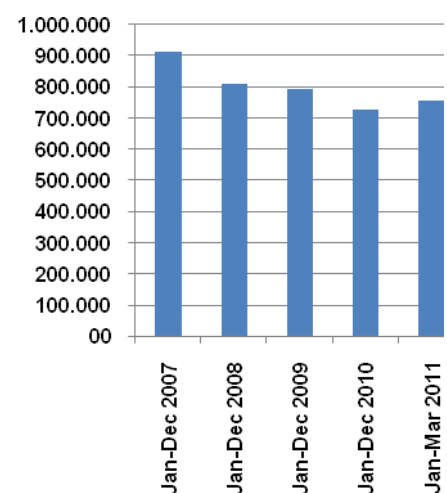
The annual inflation during the first half of 2011 reached the highest level in April, with a growth of +14.7%, which exceeded the target set by the National Bank of Serbia, 5.6% +

/ -1.9%, after which was recorded a declining trend in inflation +13.4% in May (NBS goal was 5.4%+/-1.8%) and +12.7% June (NBS goal was 5.3%+/-1.8%). Appreciation of RSD started in late 2010 and continued during the first and second quarter of 2011. In the period December - May 2011 RSD strengthened against the euro by about 9%. Middle exchange rate against euro in January-June 2011 is amounted to 105.2258, 103.4472, 103.3375, 101.4851, 98.3579 and 96.4778 respectively. Strengthening of the dinar is the result of capital inflows from abroad, particularly portfolio investment inflows during the first quarter of 2011 amounted to 520 million (in Q1 2010. inflow of portfolio investment amounted to 38 million Euros).

FOREIGN DIRECT INVESTMENT – FDI- IN SERBIA

Thanks to the accelerated process of privatization and efforts aimed to improving the economic climate since 2000 the Republic of Serbian has managed to attract significant foreign direct investment. The significant inflow of foreign direct investment in 2006 was the result of the sale of mobile operator Mobi 63 to Norway Company Telenor for 1.513 billion Euros. In January 2008, Russia and Serbia signed a gas agreement on merging the Serbian Oil Industry (NIS) and GazpromNeft. GazpromNeft has paid 400 million Euros for a 51% of NIS share in January 2009. An additional 500 million Euros GazproNeft invested in modernization and development of NIS. In September 2008 the Serbian government has signed a contract with the Italian company Fiat on the establishment of joint venture companies. Estimated value of that investment amounted to 950 million Euros. In 2010 the company from South Korea, Yura, has begun producing the car components in Serbia. In order to increase foreign direct investment the government has issued an amended the Regulation on conditions and ways of attracting foreign direct investment 2010. According to the Ministry of Finance of Serbia net foreign direct investment in 2010 amounted to 860 million Euros, which is about 37% less compared to 2009 (1,373 million). In the period January-April 2011 the value of foreign direct investment in Serbia reached 419.5 million Euros.

NET FDI



Source: Statistical Office of the Republic of Serbia, National Bank of Serbia, Ministry of finance of Republic of Serbia

UNEMPLOYMENT

Although the economy of the Republic of Serbia recorded a slight recovery in 2010 it did not affect the improvement in the labor market. Employment indicators continue slow negative trends during the first quarter of 2011. According to the Labour Force Survey from April 2011 the unemployment rate, which is the share of unemployed in the total active population (employed and unemployed) in the Republic of Serbia amounted to 22.2%. The unemployment rate in the Belgrade region was 18.9% and 22.9% in Vojvodina.

The employment rate (the percentage of employees in the total population aged 15 to 65 years) in April 2011 amounted to 36.2%.

The unemployment rate in the period April 2010 - April 2011 has risen by 3%, while the employment rate decreased by 1.9%. The unemployment rate in the period October 2010 - April 2011 recorded a growth of 3% and the employment rate fell by 1.5%.

	October 2009	April 2010	October 2010	April 2011
Unemployment rate	16,6 %	19,2 %	19,2 %	22,2 %
Employment rate	40,8 %	38,1 %	37,7 %	36,2 %
The rate of informal employment	20,6 %	19,8 %	19,6 %	19,9 %

Source: Statistical Office of the Republic of Serbia

OVERVIEW OF RECENTLY DEVELOPED INDUSTRIAL ZONES IN SERBIA



INTRODUCTION

Serbian industry has spatial organization in accordance with previous development policy and territorial goals of industry. As a consequence of global economic and financial crisis, as well as influence of transitional recession, in the cities of Serbia powerful process of deindustrialization has been recorded. This resulted in big territorial divergence and concentration of industrial capacities mostly in region of Belgrade, which had strong domination in past decades, as well as regions of Novi Sad and Nis. Above mentioned industrial spatial organization, concentration, polarization and specialization of industrial structure into urban cities and along the corridors of thoroughfares caused big regional differences.

The territorial development of the Republic of Serbia and new industrial policy, in accordance with EU industrial policy, should be based on the principles of competitiveness and sustainability. This process should comprise the dynamic changes of the spatial structures of cities and regional wholes, in the emergence of new economic poles in urban areas, new location-spatial forms of industry and economic activity. The contemporary regional/territorial industrial development based on sustainability implies the implementation of instruments of industrial zones and parks as models of regional and urban development. The development strategies and disposition of industrial zones and parks of different ranks in Serbia and their allocation should respect macro-location factors and criteria, the capacity for organizing creative resources of a region, regional and metropolitan advantages.¹

The key problem of industrial and economic development in Serbia existed in the period before the global economic and financial crisis, which has been a consequence of transitional recession process and changes in the wider surroundings, with an influence on the polarization and concentration of spatial development. The key problems came from unsatisfactorily competitive economy and industry, not transformed contemporary structure, slow pace of transitional process of privatization and restructuring of firms. Among above mentioned problems of industrial and economic development in Serbia, it should be noted that the following problems: low level of economic and industrial activity, huge regional differences in development and disposition of industrial capacities, low investment level, high unemployment rate, a lagging in innovations and new technologies, as well as inadequately equipped infrastructure of industrial sites, are of great importance.

Period from 2001 to 2008 were characterized by structural changes in Serbian industry regarding the begging of the process of reforms of economic subjects, low level of industrial production (on average 2,1% annually), growth of work productivity rate by 10,8% as a consequence of its competitiveness, followed by large share of food processing and chemical industries in the gross domestic product, decrease of industrial employment from 1996 to 2008 by approximately 300.000 persons. In accordance to data from 2008, approximately 181.000 firms were registered in the Republic of Serbia, out of which 3,4% (or 6.150) were in industry. Furthermore, in 2008 in Serbia approximately 25% (or 494.000) were in industry which is compared to 1996 at a lot lower level when it amounted to about 42%. Privatization, restructuring and bankruptcy process has been most intensive in the industry, which resulted in downsizing of number of employees and impact on the spatial imbalance in the regional development of the

¹ Lisbon revisited, 2004, EC, 2003, Savic, Zekovic, 2004

Republic of Serbia. Majority of the bankrupted firms are from the textile industry, wood, metals and food processing industry, the production of metal products and machines, electronic industry, etc. Regional disparities in industrial development and the gap between the Belgrade region and the undeveloped regions have extended.

Main indicators of industrial growth in Serbia in period 1996-2008			
Indicators	1996	2008	Difference 2008/1996
Industrial share in the national income of the Republic of Serbia (%)	31,05	34,05	+ 4
Industrial share in total employment in the Republic of Serbia (%)	41,62	24,61	- 17,01
The number of employed in industry	813.195	493.867	- 319.328
The total number of employed	1.953.678	2.006.047	+ 52.369

Source: *Regional competitiveness and territorial industrial development in Serbia, Zekovic, S.*

Indicators of change of industrial growth and concentration of industry in Belgrade for the period 1996-2008			
Indicators	1996	2008	Difference 2008/1996
Share of national income of Belgrade's economy in the national income of the Republic of Serbia (%)	24,14	33,74	+ 9,6
Share of total number of Belgrade's employees in the total number of employed in the Republic of Serbia (%)	24,01	31,24	+ 6,23
Share of Belgrade's industry in the national income of the industry of the republic of Serbia	22,61	25,32	+ 6,23
Share of employees in the Belgrade's industry in the total number of employees in the industry of the Republic of Serbia (%)	15,23	16,37	+ 1,14

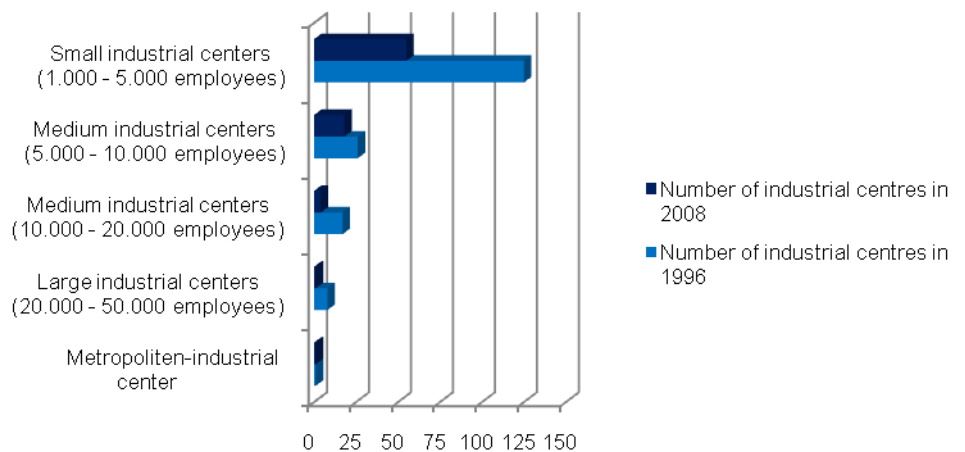
Source: *Regional competitiveness and territorial industrial development in Serbia.*

As before mentioned, the consequence of the process of transitional of recession is big decrease of total number of employees, as well as decrease of the industrial employment in Serbia in period from 1990 to 2008. The reduced number of employees in Serbia in that period amounted to approximately 407.000 persons, out of which the majority of reduced employees were from the industry (78,6%). Large industrial parks that were employing of about 20.000 persons were reduced from 9 to 2 in the period from 1996 to 2008, followed by medium industrial centers (with 10.000-20.000 employees) were reduced from 17 to 4, as well as medium industrial centers (with 5.000-10.000 employees) were reduced from 26 to 18. Downsizing of industrial centers in Serbia is a consequence of large regional spatial differences.

Changes in the number of industrial centers in Serbia in the period from 1996 to 2008			
Size of industrial centre by numbers of industrial employees	Number of industrial centres in 1996	Number of industrial centres in 2008	Difference 2008/1996
Metropolitan-industrial center (more than 50.000 employees)	1 (Belgrade)	1 (Belgrade)	0
Large industrial centers (20.000 - 50.000 employees)	8 (Novi Sad, Nis, Krusevac, Subotica, Kragujevac, Pancevo, Smederevo and Leskovac)	1 Novi Sad)	- 7
Medium industrial centers (10.000 - 20.000 employees)	17 (Zrenjanin, Kikinda, Sombor, Sremska Mitrovica, Lazarevac, Pozarevac, Uzice, Kraljevo, Cacak, Sabac, Loznica, Valjevo, Trstenik, Jagodina, Bor, Vranje, Prot and Pristina)	4 (Subotica, Pancevo, Kragujevac and Nis)	
Medium industrial centers (5.000 - 10.000 employees)	26	18 (Kikinda, Zrenjanin, Pancevo, Valjevo, Sabac, Smederevo, Pozarevac, Jagodina, Trstenik, Uzice, Cacak, Kraljevo, Krusevac, Prot, Leskovac, Vranje and Bor)	- 8
Small industrial centers (1.000 - 5.000 employees)	125 (with Kosovo and Metohija)	55 (w ithout Kosovo and Metohija)	- 70

Source: Strategy of Spatial Development of Serbia by 2020

In the graph below is presented deindustrialization in Serbia regards to size of industrial centers in period from 1996 to 2008.



Source: Strategy of Spatial Development of Serbia by 2020

Along the Danube and Sava rivers area, as well in the area of Big, West and South Morava rivers, the number of industrial employment in 1991 amounted to 420.000 which took 46% of total industrial employment in Serbia. In 2008 number of industrial employees in above mentioned area was 345.000 or approximately 65% of total industrial employment in Serbia.

Spatial concentration of industry in the regions of Belgrade and Novi Sad is a result of global inefficiency of production factors, as well as lack of engagement of recourses by

the undeveloped regions, such as Southern Serbia, the region of Stari Ras, or the result of the transactional recession process in Eastern Serbia and parts of Central Serbia.

In the previous period there has been further concentration of industry in the regions of Belgrade and Novi Sad. The suburban area of metropolitan is characteristic by stronger dynamical development and structural changes as well. As a result of the process of globalization of economy, in which are foreign direct investment are driver of structural and spatial changes, the development of the metropolitan suburbia is intensified. As Belgrade metropolitan area is faced to lack of space for economic purposes, surrounding areas of municipalities which are located along the highway have opportunities for huge industrial development.

The Spatial Plan of the Republic of Serbia from the year 1996 with concept of decentralization of industrial activity has not been realized because of socio economic problems, development problems in industry, transitional recession process, market factors, general macroeconomic policy, lack of industrial and regional policy, as well as policy of competition and innovation.

The Spatial Plan of the Republic of Serbia 2010-2014-2020 implies spatial distribution and development of industry with the basic goal of revival, increasing sector and territorial competitiveness and employment, by providing favorable general, infrastructural and spatial conditions, as well as its even spatial distribution adjusted to the potential of regional, urban and rural areas, and to demands of climate change and reducing pressure on resources.

The strategic priorities of the Spatial Plan of the Republic of Serbia until 2014 include the following:²

- Industrial revival, establishing a better legal and institutional framework in relation to neighboring regional, EU and other markets, promotion of international cooperation and multilateral governance including rules of the international trade and financial system, incentives for the allocation of facilities, sustainable business, the use of clean energy and improved technology.
- Building program of “industrial infrastructure” that includes TENs, main and regional roads, IKT network, hydro-technical infrastructure, as well as construction and equipping of industrial sites, industrial zones, industrial parks, free zones (creation of strategic development plans for IZ, IP and FZ.);
- Establishing a new national policy of industrial development, development of high-tech industry and the promotion of horizontal industrial policy based on an integrated approach to competitiveness in the field of knowledge, markets and entrepreneurship, social and economic cohesion, infrastructure conditions, promotion of clean technologies, sustainable development, investment in education, research and development. The priority incentive is the policy of competitiveness, eco-innovation, energy efficiency, better technology and entrepreneurship.
- Regional development of the industry treats the development of clusters and the accessibility of technical infrastructure.

² The Spatial Plan of the Republic of Serbia 2010-2014-2020, Belgrade, July 2010

- Preparing the Strategy of territorial development of industry for the promotion of regional industrialization outside the metropolitan areas of Belgrade and Novi Sad in order to identify and support specific areas and corridors where needs and economic potential exist.
- Preparing the Strategy of brown fields on the basis of the cadastre of brown fields in all municipalities and cities in Serbia.
- Participation in the transnational cooperation program South East Europe (IPA) in the areas of developing innovative approaches and entrepreneurship and establishing areas of sustainable growth.

The Spatial Plan of the Republic of Serbia for the period from 2010 to 2020 projects the development of high tech economic activities in the areas of Belgrade, Novi Sad, Nis, Krusevac, Pancevo, Trstenik, Kragujevac and Subotica.

Free zones, industrial zones, technological parks, as new spatial forms, were comprised in spatial structure and organization of industry.

INDUSTRIAL ZONES

An industrial zone is a collective location, or limited space belonging to a greater number of enterprises from the equal or different industries. Industrial zone is used to provide land for industrial activities carried out in the town sites. Industrial zone can also be defined as a location form of business infrastructure, which apart from the other spatial forms (industrial and technological parks or free zones), represents important instrument for drawing investments into the region or country. As an instrument for attracting foreign direct investments, existence and development of industrial zones should decrease the territorial disparities.

In Serbia there is not much available area for industrial development in the cities in the form of infrastructural organized locations. Investors are mostly offered individual undeveloped locations. In sense of providing attractive industrial sites in towns, Serbia has strong competition in the neighboring countries in the category of green field investments. Green field investments occur when multinational companies enter into developing countries to build new factories and/or stores. Developing countries often offer prospective companies tax-breaks, subsidies and other types of incentives to set up green field investments. Green field investments are very important factor in the growth of the national economy.

Regards to the type of investment and the establishment, construction and developing of zones, there are green field and brown field zones.

- Greenfield zones represents an area of agricultural or forest land, or some other undeveloped site earmarked for commercial development or industrial projects. This type of industrial zones means construction on undeveloped localities.
- Brownfield zones represents erstwhile commercial or industrial site, usually abandoned or devastated. Brownfield investments are very important instrument of functional and urban transformation of a large area in Serbian cities.

Industrial zones are the key instrument of industrial, regional and spatial development policies of Serbia in accordance with European industrial policy, regarding regional competitiveness and accessibility, an employment growth, eco-restructuring of

production, development of small and middle firms, development of low carbon production and technological innovations transfer and encouragement of competition.

Development of industrial zones in Serbia is still in the initial phase. Potential foreign investors have an interest in moving parts of their production from basic location as a consequence of attractive macro and micro location factors.

In the table below are presented important factors that have great influence on potential foreign investors in decision making regarding allocation of foreign direct investments.

Important factors for decision making regards to allocation of foreign investments	
Key factors	Other factors
Political and macro-economical stability	Access to airports
Supply and costs of highly-educated workforce	Quality of road infrastructure
Quality telecommunications	Prices of energy sources
Quality of banking and financial services	Presence of other investors from the same business activity
Labor legislation	Rail, road and marine infrastructure
Corporative taxes	Natural goods and resource
Attitude towards foreign investors	Cost of low-qualified workforce
Investment stimuli	

Source: *Regional competitiveness and territorial industrial development in Serbia*

The favorable economic conditions for development and created economic capacities are not equally distributed in all areas in Serbia, as resulted in not equal conditions for entering of new investments and economic development. That is why regional and territorial disparities became large regards to economic development of Serbia. Emphasis should be placed on less developed areas with influence on creating better economic and social infrastructure to mitigate these imbalances. Disparities of industrial and economical development between different areas in Serbia, caused migration process from undeveloped to more developed regions, and from rural to urban areas.

In order to mitigate the consequences of the before mentioned migration processes, in the Spatial plan of the Republic of Serbia 2010-2014-2020 are presents strategic priorities until 2014 which refers to connecting rural areas with urban areas on the functional basis, where spatial and economic possibilities exist, by planning and program activities on the regional and local level. Furthermore, recon structuring and building the local road network and local infrastructure with priority of centres of the community of villages, reorganization of mobile public services and organization of specific modes of transport. In terms of development opportunities in rural areas in Spatial plan of RS is put emphasis on strengthening of entrepreneurship by plans for encouraging the development of small and middle size firms, as well as projects for processing

agricultural products in the regional context, creating cluster systems and networks of retail centers for local products. It should be noted that development and renewal of rural areas in Serbia in sustainable and socially rational manner is very important for total and balanced territorial development of the Republic of Serbia. Renewal of cities and villages in rural areas in economic, physical and social way would affect on stopping depopulation in these areas, as well as achieving a higher quality of life in them.

RECENTLY DEVELOPED INDUSTRIAL ZONES

INDUSTRIAL ZONE JAGODINA

Jagodina is a city and municipality located in Central Serbia on the banks of River Belica. It was given the status of a city in 2008. It is the administrative centre of the municipality of Jagodina, which is spread over 470 sq km. Jagodina is located 140 km from Belgrade and 100 km from Nis. All capital and major cities of Southeast and Central Europe such as Budapest, Zagreb, Sofia, Bucharest, Thessaloniki, are less than 500 km away from Jagodina. Through Jagodina passes the electrified railway line, which connects Central Europe with southern Europe and Asia.

For Jagodina is characteristic a natural potential for agricultural development encouraged by climatic and soil conditions. The most common agriculture sectors are cattle farming, agriculture, horticulture and viticulture. Jagodina territory is characterized by a great potential and the beginning of producing high quality organic food.

In the following table we have presented selected demographic and economic parameters for Jagodina and the Republic of Serbia:

SELECTED DEMOGRAPHIC AND ECONOMIC PARAMETRES		
Jurisdiction	Jagodina	The Republic of Serbia
Population		
1991 Census	77.000	7.581.437
2002 Census	70.894	7.498.001
1991-2002% Change	-7,92%	-1,10%
Income		
2009 Average per employee	EUR 273	EUR 337
2010 Average per employee	EUR 262	EUR 330
Employment		
2010 Unemployment rate	20,50%*	19,20%
2011 Unemployment rate	22,00%*	19,50%

*Please note that unemployment rate data is given for the region of Sumadija

Source: Statistical Office of the Republic of Serbia, Raiffeisen Bank

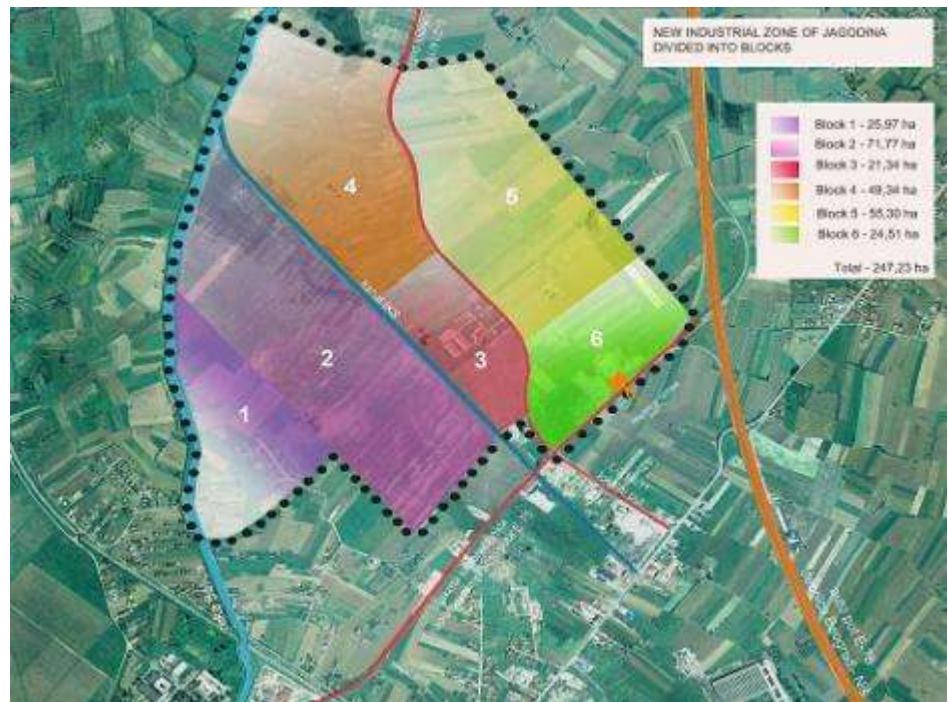
Location and size of the Industrial Zone in Jagodina

Industrial zone in Jagodina is positioned 500 m from the Pan-European Corridor X and 350 m from the toll gate.

Jagodina contains of approximately 150 hectares of land available for the construction of industrial zones. Land lots within the industrial zones of Jagodina are generally the sized from 3 to 5 ha, but they can occupy an area of over 5 ha as well.

The municipality of Jagodina is responsible within its industrial zone for the following, in order to attract potential investors:

- For giving land lots to potential investors free of charge;
- For the utilities within the industrial zone which must be free of charge for the potential investors;
- For providing a complete infrastructure within the industrial zone;
- For providing quick and efficient issuance of building permits for construction within the industrial zone;



Source: Colliers research, www.newbalkan.com.

Existing Infrastructure

Infrastructure within the Industrial Zone in Jagodina comprises the following:

- In terms of the utility infrastructure, the zone comprises adequate water supply network, as well as rain and sewage network.
- In terms of transportation infrastructure it is related to provide adequate access roads to the industrial zone, as well as internal roads within the industrial zone.

- In terms of energy infrastructure it implies the existence of transmission lines, gas pipelines and heating pipelines.
- Other infrastructure within the industrial zone provided by the City Council of Jagodina are related to the telecommunications and “one stop shop”, or acquiring of necessary documentation by the potential investors at one place.

Prices

- Potential investors are leasing developing land lots in period of 100 years, free of charge, but with the requirement of potential investors for obtaining land lots is to employ 23 workers per hectare of land acquired, or 8 workers in the first year of operation and 15 workers in the second year of operation.

Currently present investors

CURRENTLY PRESENT INVESTORS IN THE NORTHEAST INDUSTRIAL ZONE IN JAGODINA	
Company	Activity
Paskal	Service for precision engineering
Stocar-Stapar doo	Cattle farming

Source: Colliers Research

Potential investors

According to information from the municipal office of Jagodina, investors who have shown interest and are currently being negotiated are companies in the field of bio-energy and companies which perform assembly of vehicle such as trucks and busses.

Incentives

Incentives which the city of Jagodina gives, in order to attract potential investors include the following:

- For giving development land lots to potential investors free of charge, but with the requirement of potential investors for obtaining land lots is to employ 23 workers per hectare of land acquired, or 8 workers in the first year of operation and 15 workers in the second year of operation. 95% of hired employees must be from the territory of the Jagodina municipality.
- For the utilities within the industrial zone which must be free of charge for the potential investors;
- For providing a complete infrastructure within the industrial zone;
- For providing quick and efficient issuance of building permits for construction within the industrial zone;

Tax incentives that are given by the Republic of Serbia in order to attract potential investors include the following:

- The lowest income tax - 10%;
- The lowest income tax - 12%;
- Ten years exemption from tax on investments;
- Tax credit of up to 80% of the amount invested in fixed assets;

Financial incentives that are given by the Republic of Serbia in order to attract potential investors include the following:

FINANCIAL INCENTIVES				
	Production	Services	Research and Development	The automotive electronics industry and telecommunications
The available funds for each newly created job	EUR 2.000 - 5.000	EUR 2.000-10.000	EUR 5.000-10.000	State support of 25% of the total investment for projects that are worth more than 100 million euros and employing more than 1,000 new workers
The minimum of investments	EUR 1-3 millions (Depending on the unemployment rate in the municipality in which is going to be invest)	EUR 500.000	EUR 250.000	
The minimum number of newly created jobs	50	10	10	

Source: Colliers Research

The type and purpose of facilities that could be built in Industrial Zone in Jagodina:

- Within the industrial zone is allowed to be built all profiles of properties except the mega market profile.

INDUSTRIAL ZONE INDJIJA

Indjija is a town and a municipality located in the northern part of Serbia in the province of Vojvodina in the district of Srem. The town covers an area of approximately 385 square meters and is surrounded by approximately 11 settlements. The population of the town and municipality is approximately 26,000 and 50,000 respectively according to the most recent census conducted in 2002. Indjija is positioned along the Highway E-75 (Pan-European Corridor X) and along the Danube River (European Water Corridor VII).

The local economy of Indjija comprise 2.700 companies, out of which 85% are small enterprises, 14% are medium-sized enterprises while 1% is related to large enterprises. Agriculture, industry and small businesses are the main factors of economic development (craft shops, small and medium enterprises). In order to provide space for development of industrial and small business, two industrial zones were created: Zone in the northeastern part of Indjija and Zone in the southeastern part of Indjija according to

the General Urban Plan for Municipality of Indjija Both industrial zones have Regulation plans in which are more detailed presented items of the General Urban Plan of Indjija. Both zones feature excellent position along the European international highway E-75, which connects the cities Valdo (Norway) with Athens (Greece). The route through Serbia includes the country largest regional cities Subotica, Novi Sad and Nis, as well as the capital Belgrade.



Source: www.indjija.net

In the following table we have presented selected demographic and economic parameters for Indjija and the Republic of Serbia:

SELECTED DEMOGRAPHIC AND ECONOMIC PARAMETRES		
Jurisdiction	Indjija	The Republic of Serbia
Population		
1991 Census	23.061	7.581.437
2002 Census	26.247	7.498.001
1991-2002 % Change	13,80%	-1,10%
Income		
2009 Average per employee	EUR 296	EUR 337
2010 Average per employee	EUR 281	EUR 330
Employment		
2010 Unemployment rate	13,12%*	19,20%
2011 Unemployment rate	18,90%*	19,50%

*Please note that unemployment rate data is given for the region of Belgrade

Source: Statistical Office of the Republic of Serbia, Raiffeisen Bank

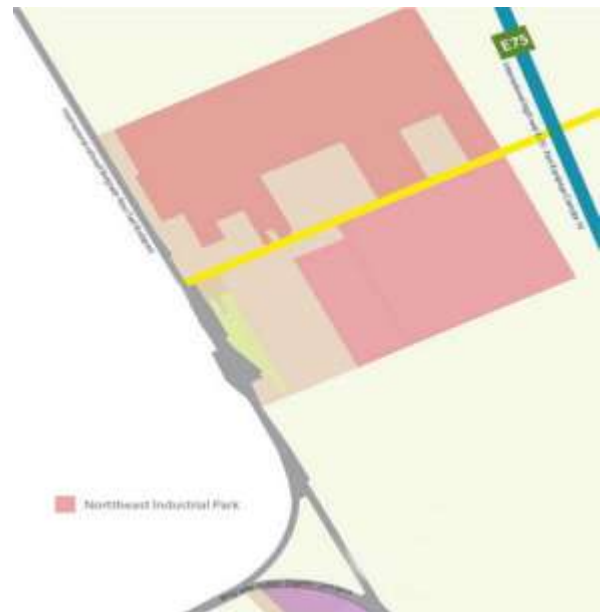
Northeast Industrial Zone in Indjija

Location and size of Northeast Industrial Zone in Indjija

Northeast Industrial Zone is located 2 km away from the center of Indjija. It is located between the Indjija settlement and highway E-75 Belgrade-Novı Sad.

Northeast Industrial Zone of Indjija occupies an area of approximately 282 hectares. 70 years ago has begun the regulation and construction of this industrial zone. Currently in the zone has been built and operates approximately 30% of total capacity of the zone.

The zone is also intended to become trade free zone, which will enable free trade with final products and raw resource materials.



Source: www.indjija.net

Existing Infrastructure

Infrastructure within the Northeast Industrial Zone of the Indjija comprises the following:

- In terms of utility infrastructure, the zone is fully equipped. It has built rain and sewage networks up to 60%, as well as water supply network.
- In terms of transportation infrastructure the zone spreads along the regional road R109 (Ruma-S.Slankamen). Railway Belgrade-Novı Sad, positioned along the international Corridor 10 is located west from the zone. The route of the highway E-75 which is located in close proximity to the zone provides an easy access to the industrial zone from the direction of Belgrade and Novi Sad.
- In terms of energy infrastructure it implies the existence of steel gas pipelines.
- In terms of electricity infrastructure, it is already present within industrial zone;

Planned infrastructure

Planned infrastructure within the Northeast Industrial Zone in Indjija includes the following:

- In terms of utility infrastructure it is planned a completion of the remaining 40% of sewerage collector;
- In terms of energy infrastructure it is planned a construction of power substations for the entire industrial zone and potential investors should build small power substations on the plots for their purposes;
- In terms of transportation infrastructure, in the area of the industrial zone is planned development of south-eastern part of Indjija’s Ring (Bypass) road

Incentives

Incentives which the municipality of Indjija gives, in order to attract potential investors include the following:

- The lowest income tax - 10%;
- The lowest income tax - 12%;
- Tax exemption for investors with investments of more than 8 million Euros
- Tax exemption for investors who provide the opening of 100 new working positions;
- Support of the municipality of Indjija to potential investors in applying to obtain funds in amount of EUR 2.000 to 10.000 per each open working position with investment funds and organizations;
- By Regulation of construction land are regulated conditions of purchasing the land.

Currently present investors

In the following table we presented list of present investors in the Northeast industrial zone in Indjija:

CURRENTLY PRESENT INVESTORS IN THE NORTHEAST INDUSTRIAL ZONE IN INDJIBA	
Company	Activity
Thyssen Krupp	Construction and industry with semi-finished products made from steel, stainless steel and non-ferrous metals.
Monbat	Factory for processing lead-acid batteries and making lead-based alloys.
Henkel Ceresit	Factory for producing construction adhesives powder
Farmina Pet Foods	Factory for producing pet food

Monus	Factory for cigarette production
Terra Production	Factory for filling soft drinks
Maxim	Factory related to hot galvanization
Mk Group-A.D. Agrounija	Facility for agricultural production

Source: Colliers Research

Potential investors in the Industrial Zone:

We have presented below list of investors who have shown interest in investing in the Northeast industrial zone in Indjija:

POTENTIAL INVESTORS IN THE NORTHEAST INDUSTRIAL ZONE IN INDJIIJA	
Company	Activity
Martini	Italian construction company
Galenika Magmasil	Production of plastic and glass
Grunfos	Danish manufacturer of a wide range of centrifugal pumps and systems for water applications in industry, irrigation, heating and wastewater treatment
Outlet Centre Indjija	Retail
It Park by Indian Embassy Group	Technological park

Source: Colliers Research

Prices of land in the Northeast Industrial Zone in Indjija

In the table below we have presented the price of land in the Northeast Industrial Zone in Indjija

INDJIIJA	
Industrial zone	Sales price of land
Northeast Industrial Zone; Indjija	App EUR 17-18/sq m*

*Please note that subject land price is price with 50% footprint development index

Source: Colliers Research

The type and purpose of facilities that could be built in the Northeast Industrial Zone in Indjija includes following

- small business and manufacturing trades;
- small commercial complexes;
- medium and large complexes
- storage and warehousing
- commercial facilities;

Southeast Industrial Zone in Indjija

Location and size of Southeast Industrial Zone in Indjija

Southeast Industrial Zone of Indjija is located 1,5 km away from the center of Indjija, along the main road M22 / 1 in the direction towards Belgrade. The main road M22/1 connects the industrial zone with environment.

Southeast Industrial Zone of Indjija occupies an area of approximately 100 hectares. This industrial zone has started to be regulated and built about 30 years ago, and currently in the zone has been constructed and operates about 50% capacity of the entire zone.



Source: www.indjija.net

Existing Infrastructure

Infrastructure within the Southeast Industrial Zone of Indjija includes the following:

- In terms of utility infrastructure, the zone is fully equipped. It has built sewage networks, as well as water supply network
- In terms of transportation infrastructure, within the area of the industrial zone, service roads are provided for serving locations and connect them with the main road M22 / 1 in direction Belgrade-Novı Sad.
- In terms of energy infrastructure it implies the existence of steel gas pipelines needed capacity.

Planned infrastructure

Planned infrastructure within the Southeast Industrial Zone of Indjija includes the following:

- In terms of transportation infrastructure, in the area of the industrial zone is planned development of Indjija’s Ring (Bypass) road, which will with one part stretch through this zone. Aside from proving environment efficient with dislocation of transit traffic from the Indjija city center, it will also provide additional road connection of Southeastern and Indjija industrial zone to the surrounding area and other adjacent traffic routes.

The type and purpose of facilities that could be built in the Southeast Industrial Zone of Indjija includes following

- Development and construction of "clean" industries and warehouses.

Incentives

Incentives which the municipality of Indjija gives, in order to attract potential investors include the following:

- The lowest income tax - 10%;
- The lowest income tax - 12%;
- Tax exemption for investors with investments of more than 8 million Euros
- Tax exemption for investors who provide the opening of 100 new working positions;
- Support of the municipality of Indjija to potential investors in applying to obtain funds in amount of EUR 2.000 to 10.000 per each open working position with investment funds and organizations;
- By Regulation of construction land are regulated conditions of purchasing of land.

Currently present investors in industrial zone:

In the Southeast industrial zone in Indjija are mainly located plants and factories that employ 30 to 50 workers. Currently in the zone there are no free land lots for sale.

In the following table we presented list of present investors in the Southeast Industrial Zone in Indjija:

CURRENTLY PRESENT INVESTORS IN THE SOUTHEAST INDUSTRIAL ZONE IN INDJIJA	
Company	Activity
Swisslion Takovo	Food industry, production of cocoa, chocolate and confectionery products.
Apatinska Pivara	Production of beer
Fabrika vode Indjija	Production of drinking water
Tehnoexport	Production of flexible pipes and siphons

Source: Colliers Research

Prices of land within the Southeast Industrial Zone in Indjija

In the table below we have presented the price of land in the Southeast Industrial Zone in Indjija:

INDJIJA	
Industrial zone	Sales price of land
Southeast Industrial Zone; Indjija	App EUR 30/sq m

Source: Colliers Research

INDUSTRIAL ZONE “MALI BAJMOK” IN SUBOTICA

Subotica is a city and municipality in northern Serbia in the Autonomous Province of Vojvodina. It is positioned approximately 10 km from the Hungarian border. Subotica is the second largest city in the AP of Vojvodina, following Novi Sad. It is also the fifth largest city in Serbia (discounting Kosovo) after Belgrade, Novi Sad, Nis, and Kragujevac. It is also the administrative centre of the North Backa District.

In the following table we have presented selected demographic and economic parameters for Subotica and Serbia:

SELECTED DEMOGRAPHIC AND ECONOMIC PARAMETRES		
Jurisdiction	Subotica	The Republic of Serbia
Population		
1991 Census	150.534	7.581.437
2002 Census	148.401	7.498.001
1991-2002 % Change	-1,40%	-1,10%
Income		
2009 Average per employee	EUR 322	EUR 337
2010 Average per employee	EUR 310	EUR 330
Employment		
2010 Unemployment rate	20,9%*	19,20%
2011 Unemployment rate	22,9%*	19,50%

*Please note that unemployment rate data is given for the region of AP Vojvodina

Source: Statistical Office of the Republic of Serbia, Raiffeisen Bank



Source: Colliers research

Location and size of the Industrial Zone Mali Bajmok

Industrial zone Mali Bajmok is in the property of the City of Subotica. It is located along the Main Road M.17.1 (Subotica – Sombor). The zone is positioned 1km from the Pan-European Corridor X, which is one of Europe’s most important roadways, connecting Western and Northern Europe to Southern and Eastern Europe and eventually Asia. Mali Bajmok zone is 10 km away from the International border crossing “Kelebija”, as well as 5 km away from the city centre of Subotica, railway and bus station.

Industrial zone Mali Bajmok in Subotica encompasses an area of 53 hectares.



Source: Google earth, Colliers research

Existing Infrastructure

Infrastructure within the industrial zone Mali Bajmok, finished through the first development phase (23 hectares) includes the following:

- In terms of utility infrastructure, water supply network is established within industrial zone, as well as rain and sewage networks.
- In terms of IT infrastructure, Telekom Serbia Company has established the optic cable on the location. This will allow all necessary demands regarding telecommunications, Internet and other high IT.
- In terms of energy infrastructure it implies the existence of electrical energy and natural gas pipelines needed capacity.
- In terms of transportation infrastructure, in the area of the industrial zone are established the main roads, with width of 6-7 m, along with the public lightening and sidewalks.

Planned Infrastructure

Dynamics for completing infrastructural facilitation of the industrial zone depends on the dynamics of the investors arrivals.

The type and purpose of facilities that could be built in the Industrial Zone Mali Bajmok includes following:

- Business facilities;
- Business and production facilities;
- Business and storage facilities;
- Production and storage facilities;
- Business, production and storage facilities;

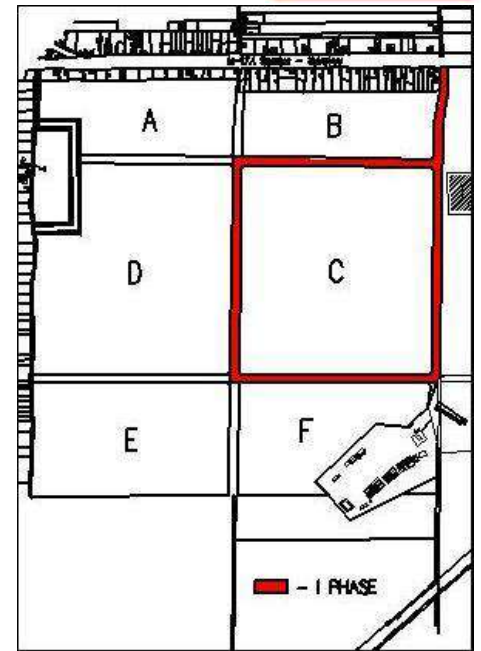
In the following text we presented some more requirements for building and land planning for the Industrial Zone Mali Bajmok:

- The maximum occupancy index: 40%
- The maximum construction index: 1,40
- The maximum level of use of the land is 70%, counting all the high rise facilities along the internal roads and parking lots.
- The percentage of greenery : 30%
- Maximum permitted height and floors of buildings within the industrial zone:

The maximum allowed number of floors for office facilities within the industrial zone is Gf+2f.

In terms of height of facilities, distance from ground level to the roof may be maximum 12m, with exceptions for facilities with specific floors the height can be up to maximum 16m.

- In terms of parking space the requirement on the land is one parking space or one garage space on 70 sq m of useful space.



Source: Colliers research

Incentives

Incentives which the city of Subotica gives, in order to attract potential investors include the following:

- Benefits for the land
There is a possibility to gain a discount in the case that Investor justifies the Decree on the terms and manner under which local self-Government may dispose or lease construction land at the price or rent that is below the market value.
- Fee for the infrastructure (water, sewerage, roads, sidewalks and lighting) is approximately EUR 14 per sq m per net area of the building. In the case of one-time payment, the city of Subotica is giving a discount of 20%. Based on the Mayor's proposal, this fee can be reduced in the case of the strategic investor.
- Incentives per employee are from National Agency's Siepa Programme.
- Incentives per employee regarding training programs are from National Employment Agency.

Currently present investors in the Industrial Zone:

The industries within the industrial zone in Subotica can be characterized as an industry without chimneys. The most represented industries in the industrial zone Mali Bajmok are manufacturing and assembling of car parts and mechanical engineering.

The highest percentage of future potential investors within the industrial zone in Subotica will belong to industries that are already most visible in the zone. It is announced an investment of about 24 million Euros in the next two years in the "Siemens Subotica" the windmill factory, currently the biggest export industry in town is and it is the biggest brown field investment so far.

In the following table we presented the list of present investors in the industrial zone Mali Bajmok in Subotica:

CURRENTLY PRESENT INVESTORS IN THE INDUSTRIAL ZONE "MALI BAJMOK" IN SUBOTICA		
Company	Activity	Comment
Norma Group	Production of components for the automotive industry	Beginning of the production in July 2011.
Dunkermotoren	Production of the micromotors	Dunkermotoren Company is currently operating in the Tax -Free Zone, next to the industrial zone Mali Bajmok. Company will be located in the industrial zone from the March 2012.
Continental Contitech	German; Production of the components for the automotive industry	Realization of the implementation of the investment is scheduled for the Q1 2012.

Source: Colliers research

Prices of land in the Industrial Zone Mali Bajmok in Subotica

In the table below we have presented the price of land in the industrial zone Mali Bajmok in Subotica:

SUBOTICA	
Industrial zone	Sales price of land
Mali Bajmok; Subotica	App EUR 10/sq m*

*Estimated price given by the Ministry of Finance, Republic of Serbia

Source: Colliers research

INDUSTRIAL ZONE IN LAJKOVAC

Lajkovac is a town and municipality in the district of Kolubara in Serbia. According to the census from 2002 in the town Lakovac lived 3443 people (according to census from 1991 there were 3428 inhabitants). Valjevo is situated in a valley high Kolubara. Lajkovac is located on the left side of the river Kolubara. Lajkovac and Belgrade are connected by regional road Ibarska magistala with length of 69 km. Lajkovac is positioned 27 km away from the city of Valjevo. The municipality of Lajkovac is bordering with following cities: Lazarevac, Valjevo, Ubom and Ljig. Highway Belgrade-South Adriatic council will pass through the municipality of Lajkovac.

In the following table we have presented selected demographic and economic parameters for Lajkovac and Serbia:

SELECTED DEMOGRAPHIC AND ECONOMIC PARAMETRES		
Jurisdiction	Lajkovac	The Republic of Serbia
Population		
1991 Census	n/a	7.581.437
2002 Census	17.062	7.498.001
1991-2002 % Change	n/a	-1,10%
Income		
2009 Average per employee	EUR 449	EUR 337
2010 Average per employee	EUR 440	EUR 330
Employment		
2010 Unemployment rate	20,50%*	19,20%
2011 Unemployment rate	22,00%*	19,50%

*Please note that unemployment rate data is given for the region of Central and West Serbia

Source: Statistical Office of the Republic of Serbia, Raiffeisen Bank








Location and size

The municipality of Lajkovac adopted in 2005 a Detailed Regulation Plan for “The Industrial Zone Lajkovac” for small and medium sized enterprises with. The zone includes the existing economic area but as well there is about 70 hectares of undeveloped land. The industrial zone comprises the cadastral parcel in Lajkovac and Jabucje and it is located in near proximity of the regional road Ibarska magistrala 65 km away from Belgrade. An area of the industrial zones to the north is bordering to the railroad Belgrade-Bar, the western boundary represents corridor as a railroad Belgrade-Bar, on the southern border of the zone is planned bypass road M-4 (Belgrade-Valjevo), while the eastern boundary runs from the future intersection of M-4 and the bypass channel to the Belgrade-Bar railway.

Industrial zone in Lajkovac encompasses an area of 104,5 hectares.



Legend

-  Boundaries of Detailed regulation plan
-  Boundaries of public construction land
-  Planned transportation infrastructure
-  Water land
-  Railway land
-  Public construction land
-  New border point

Source: Colliers research, www.lajkovac.org.rs

Existing Infrastructure

Infrastructure within the Industrial Zone in Lajkovac includes the following:

- In terms of transportation infrastructure, in the area of the industrial zone is established Belgrade road M-4, as well as roads that are positioned parallel with Belgrade by the Belgrade-Bar railway.

Planned Infrastructure

Planned infrastructure within the Industrial Zone in Lajkovac includes the following:

- In terms of transportation infrastructure, it is planned a construction of secondary roads to provide access to all construction lots within the industrial zone as well as construction of the extension of industrial track through the entire industrial zone;
- In terms of energy infrastructure it is planned a construction of power station;
- In terms of utility infrastructure it is planned a construction of sewerage collectors in the northern and southern parts of the industrial zone. Both collectors are connected against the plant for wastewater.

The type and purpose of facilities that could be built in the Industrial Zone in Indjija includes following

In the following table we have presented the current purpose of land lots within industrial zone in Lajkovac:

THE PURPOSE OF LAND LOTS WITHIN INDUSTRIAL ZONE IN LAJKOVAC		
	The purpose of land lots	An area (hectares)
Construction land	Residential area	4,36
	Business facilities	2,06
	Business and production facilities	12,82
	Greenery	1,24
	Undeveloped land	67,01
Public construction land	Existing roads	11,52
	Railway land	3,67
	Channel	1,77
Total		104,45

Source: Colliers Research

In terms of planned purpose within the industrial zone, it is planned construction of a terminal for loading and unloading operations, which will be located along the railway ramp.

Incentives:

Incentives which the municipality of Lajkovac gives, in order to attract potential investors include the following:

- The municipality Lajkovac provides benefits for obtaining building permits within industrial zone;
- Land agency fee for small and medium enterprises are reduced by 50% to 90% depending on the number of newly opened working positions;
- The municipality of Lajkovac has exempted investors of fees for property development and property taxes by 50%.

Currently present investors in the Industrial Zone:

In the following table we presented the list of present investors in the Industrial Zone in Lajkovac:

CURRENTLY PRESENT INVESTORS IN INDUSTRIAL ZONE IN LAJKOVAC	
Company	Activity
Vindija doo Varadzdin	Industry for production and meat processing
Ingrapomni doo Beograd	Company engaged in engineering, construction, wholesale and retail
Invest-Import AD Beograd	Electroinstalation company

Source: Colliers Research

Potential investors in the Industrial Zone:

We have presented below list of investors who have shown interest in investing in the industrial zone in Lajkovac:

POTENTIAL INVESTORS IN THE INDUSTRIAL ZONE IN LAJKOVAC	
Company	Activity
Karnak doo Belgrade	“One-stop-shop” in the complex fields of real estate trade and foreign investments on building up the locations that are in official city planning designated as the zones for building large business objects;
Pima doo Cacak	Company engaged in recycling and export of waste PET materials
Henkomerc Group, Belgrade	Company engaged in wholesale trade, engineering and services;

Source: Colliers Research

Prices of land in the industrial zone in Lajkovac:

In the table below we have presented the sales and rental prices of land in the industrial zone in Lajkovac:

LAJKOVAC		
Industrial zone	Sales price of land	Rental prices of land
Industrial zone Lajkovac	App EUR 5/sq m	App EUR 1/sq m

Source: Colliers Research

INDUSTRIAL ZONE IN KRAGUJEVAC

Kragujevac is the fourth largest city in Serbia and the main city of the Sumadija region as well as an administrative centre of Sumadija District. It is situated on the banks of the Lepenica River.

City of Kragujevac is the main driver of space development, or an integrated economic, social and environmental development. It is positioned on the halfway between two development corridors. Kragujevac is connected to Pan-European Corridor X, in the direction of Belgrade-Nis, on the 29th km, in Lapovo. At approximately the same distance is positioned the West Morava River corridor. Along these corridors there is a large infrastructure network system that integrates space, settlements, facilities and functions in settlements. Dominant industries in Kragujevac are: vehicle industry, textile industry, production of food, service sector and wood industry. The biggest investors within city of Kragujevac are: FIAT (automotive industry), Megre (German milk industry) Jonson Control (production of seats), Siget (France, Production of plastic components for the automotive industry), Promoma iveto (Italia, Production of car interiors), Plaza (Izrael, Business centre), Merkator (Slovenia, Trade), Supernova (Germany, Trade), etc.

In the following table we have presented selected demographic and economic parameters for Kragujevac and Serbia:

SELECTED DEMOGRAPHIC AND ECONOMIC PARAMETRES		
Jurisdiction	Kragujevac	The Republic of Serbia
Population		
1991 Census	180.084	7.581.437
2002 Census	197.000	7.498.001
1991-2002 % Change	+ 9,4%	-1,10%
Income		
2009 Average per employee	EUR 322	EUR 337
2010 Average per employee	EUR 307	EUR 330
Employment		
2010 Unemployment rate	20,50%*	19,20%

2011 Unemployment rate	22,00%*	19,50%
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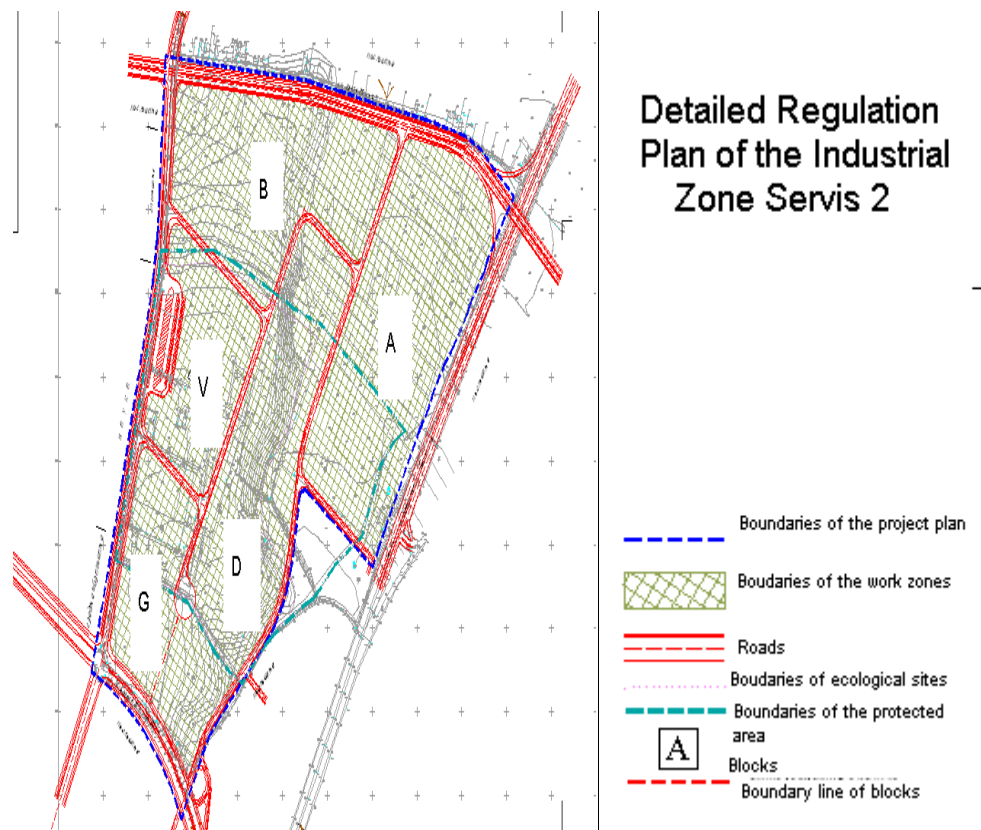
*Please note that unemployment rate data is given for the region of Sumadija District and Western Serbia;

Source: Statistical Office of the Republic of Serbia, Raiffeisen Bank

Location and size

Industrial Zone Servis 2

The industrial zone Servis 2 covers the area between the highway and following streets: Miodraga Vlajica Suke, Save Kovacevica and Brace Nikolic. Servis 2 is the most attractive zone in Kragujevac. Zone Service 2 is a spatial unit, divided into the six blocks of different sizes. It is only 1,2 km far away from the city centre.






Source: www.urbanizam.co.rs

Industrial Zone Petrovac

The industrial zone Petrovac covers an area in the city of Kragujevac, between the streets International Brigades and Kanica, Ugljesnica River and the complex of Rasadnik Company. Petrovac zone is a spatial entity, which is divided by service road and between them are defined developing land lots.



Boundary of the plan to the boundary of the public and other land

-  Boundaries of the project plan
- Public construction land
-  Roads
- Other construction land
-  Constructions blocks

Source: www.urbanizam.co.rs

In the following table we have presented list of Industrial Zones in the city of Kragujevac with total and available areas of industrial zones.

INDUSTRIAL ZONES IN KRAGUJEVAC				
Industrial zone	An area of industrial zone (sq m)		Ownership (%)	
	Total area (sq m)	Available area (sq m)	Private	State
Servis 2	624.900	78.700	0%	100%
Petrovac	69.900	2.000	0%	100%

Source: Colliers Research

Existing Infrastructure

Infrastructure within the industrial zone Servis 2 in Kragujevac includes the following:

- In terms of utility infrastructure, water supply network is established within industrial zone, sewage network as well as rain canalization network running through the service roads;
- In terms of energy infrastructure industrial zone is equipped with electro energetic network, as well as gas distribution network;
- In terms of other infrastructure, industrial zone is equipped with telecommunication network, as well as public lightening.

- In terms of transportation infrastructure, access to zone is provided from the main roads Batocina-Kragujevac and Petrovac, and from the streets: Miodrag Vlajica Suke and Sava Kovacevic. Traffic through the zone is provided through the newly built service roads.

Infrastructure within the industrial zone Petrovac in Kragujevac includes the following:

- In terms of utility infrastructure, water supply network is established within industrial zone, sewage network as well as rain canalization network running through the service roads;
- In terms of energy infrastructure industrial zone is equipped with electro energetic network, as well as gas distribution network ;
- In terms of other infrastructure, industrial zone is equipped with telecommunication network, as well as public lightening.
- In terms of transportation infrastructure, access to zone is provided from the streets: Internacionalnih brigada and Konicove. Traffic through the zone is provided through the service roads.

Planned infrastructure

According to the General Plan of the City of Kragujevac 2015, planned infrastructure within the zone Service 2 involves completing the networks of water supply, sewage and rain canalization, and the provision of electric power networks, telecommunications and gas supply network, which will be conducted through special programs for public companies. Connecting objects to the planned infrastructure within the zone will be carried out in direct relations between public companies and consumers.

Planned infrastructure within the Industrial Zone Servis 2 in Kragujevac includes the following:

- In terms of utility infrastructure, it is planned construction of rain canalization network of 2.166 m and sewage network of 2.166 m, as well as water supply network of 2.166 m;
- In terms of transportation infrastructure, it is planned completion of roads in length of 15.162 m² and sidewalks in length of 6.498 m². It is also planned a construction of public parking for cars and trucks.
- In terms of energy infrastructure, it is planned a completion of gas distribution network in length of 5 km. It is also planned a construction of 5 power stations of 10/0,4 KV/KV and 1 power station of 110/10KV/KV. If during implementation of the plans is needed a construction of new substations, their construction will be carried out on the development land lots or as part of the planned facilities, which demonstrate the need for more power than the existing power station can provide.
- In terms of telecommunications, it is planned to provide in the primary telecommunications network another 500 connections.

According to the General Plan of the City of Kragujevac 2015, planned infrastructure within the zone Petrovac involves completing the networks of water supply, sewage and rain canalization, and the provision of electric power networks, telecommunications and gas supply network, which will be conducted through special programs for public companies

Planned infrastructure within the Industrial Zone Petrovac in Kragujevac includes the following:

- In terms of utility infrastructure, it is planned construction of rain canalization network of 1.120 m and sewage network of 1.120 m, as well as water supply network of 1.120 m;
- In terms of transportation infrastructure, it is planned completion of roads in length of 11.772 m² and sidewalks in length of 1.680 m².

The type and purpose of facilities that could be built in the Industrial Zones in Kragujevac

According to General Plan of Kragujevac 2015 industrial zone Servis 2 is divided into public and other development land, which is divided into blocks by internal roads. Within these blocks it is possible to form working units on a total area of approximately 45 hectares. Public land within the industrial areas comprises roads and parking area, on the total area of about 18 hectares.

Area of this zone is dedicated to groups of business activities, which require specific organizational, spatial and access conditions, particularly in the area along the highway. The type and purpose of facilities that could be built in the industrial zone Servis 2 in Kragujevac implies the possibility of:

- Shopping centers;
- A mixed-use business;
- Service activities
- It is also possible commercial housing, temporary and permanent, which does not include adequate infrastructure.

In this zone it is not possible developing of production programs in the field of:

- Ferrous and non-ferrous metallurgy;
- Timber and chemical industries;
- As well as any activities which production may negatively affect the living and working environment;
- Greenery;
- Supporting facilities of transportation and utility infrastructure;

According to General Plan of Kragujevac 2015 industrial zone Petrovac is divided into public and other development land, which is divided into blocks by internal roads. Within

these blocks it is possible to form working units on a total area of 5.296 hectares. Public land within the industrial areas comprises roads on the total area of about 1.6 hectares.

The type and purpose of facilities that could be built in the Industrial Zone Petrovac in Kragujevac implies the possibility of:

- Creating of small and medium enterprises;
- A mixed-use business;
- Creation of technological industrial centers;
- Creation of business incubator centers;
- Service activities
- It is also possible commercial housing, temporary and permanent, which does not include adequate infrastructure.
- Greenery;
- Supporting facilities of transportation and utility infrastructure;

Incentives:

Incentives which the municipality of Kragujevac gives, in order to attract potential investors include the following:

- The rental price of development land intended for construction of residential, commercial and mixed-use objects

The right to reduce the rental price that was subject of the bid is possible depending on the number of employees and the price of the newly opened working position:

1. For number of 20-50 employees, price is EUR 2.500 per employee;
 2. For number of 51-200 employees, price is EUR 5.000 per employee;
 3. For number of over 200 employees, price is EUR 7.000 per employee,
 4. For number of over 20 employees, in sector of IT solutions and of software engineering, price is EUR 15.000 per employee;
 5. Foreign companies that intend to build a representative office for the territory of the Republic of Serbia in the city of Kragujevac, have right for reducing the rental price, or right on secured price of EUR 10.000 per hectare, but only for the area up to t 1 hectare, with condition to employ more than 20 employees;
 6. According to the statement of the rental price reduction, the rental price cannot amount less than EUR 100 per acre (1m² = EUR 1), regardless of the zone where the development land is located;
- Rent agency fee for the development land
Rent agency fee for the development land involves the construction of residential or business premises, and the term of construction involves construction work, construction, expansion and upgrade. The rent agency fee is determined according to the following table in Euros, according to the zones, as the sum of primary and secondary investments.

Zone	Primary investments		Secondary investments	
	Primary investments (eur/sq m)	Family Housing (eur/sq m)	Multi-family Housing (eur/sq m)	Commercial space (eur/sq m)
Extra	10	27	40	60
Zone I	10	16	30	50
Zone II	10	14	27	40
Zone III	10	13	24	35
Zone IV	6	4	10	15
Zone V	6	0	8	4

Source: The Municipal Office of Kragujevac

Incentives which the Republic of Serbia gives, as grants for the development of zone, in order to attract potential investors include the following:

- Investments in manufacturing sector
For the opening of newly 50 working positions in period of 3 years, the government gives EUR 2.000-5.000 per employee depending on the unemployment rate in the municipality and the worth of investment in the municipality (awarded for investment of EUR 1-5 million).
- Investments in service sector, which may be subject of international trade
Minimum investment amounts to EUR 1 million, as well as opening of 10 new working positions within 3 years from the date of allocation of funds. The government gives EUR 2.000-10.000 per newly opened working position.
- Investments in research and development sector
Minimum investment amounts to EUR 1 million, as well as opening of 10 new working positions within 3 years from the date of allocation of funds. The government gives EUR 5.000-10.000 per newly opened working position.

Currently present investors in the industrial zones in Kragujevac:

In the following tables we presented the lists of present investors in the industrial zones Servis 2 and Petrovac in Kragujevac:

PRESENT INVESTORS WITHIN INDUSTRIAL ZONE SERVIS 2			
Company	Activity	Number of employees	Investment (eur)
TPV Sumadija	Production of car parts	93	1.000.000
Tus	Trade	145	5.000.000
Merkur	Trade	164	7.000.000
Total auto	Vehicle industry	18	700.000
Forma Ideale	Production of furniture	916	2.200.000

PRESENT INVESTORS WITHIN INDUSTRIAL ZONE PETROVAC			
Company	Activity	Number of employees	Investment (eur)
Kolibris	Production of clothes	29	350.000
Trnava promet	Trade	244	1.050.000
Harmoent	Production of building material	44	525.000
Grafostil	Printing office	25	420.000
Mi-metal	Production of building material	9	700.000
OZTR Reli	Production of car parts	12	210.000
Agrokop	Agriculture	8	280.000
Jelovica	Production of furniture	38	490.000
Cukovic	Production of furniture	21	595.000

Source: The Municipal Office of Kragujevac

Prices of land in the Industrial Zones in Kragujevac:

In the table below we have presented the averagesales prices of land in the industrial zones Servis 2 and Petrovac in Kragujevac:

Average sales prices in industrial zones in Kragujevac	
Industrial zone	Average sales price (eur/sq m)
Servis 2	100
Petrovac	60

Source: The Municipal Office of Kragujevac

FREE ZONE CONCEPT



FREE ZONE CONCEPT

The concept of a free zone is an area enclosed by a fence or wall, with controlled entry and exit, within which are granted certain economic and financial incentives in order to facilitate market trading, such as:

- Exemption from import duties and taxes, and other trade restrictions and formalities;
- Tax exemption, such as VAT, excise taxes, property taxes, income taxes, etc;
- Exemption from regulation, which relates to minimum wages, social payments, working conditions, etc;
- Cheap services in terms of water, insurance, electricity, etc;
- Existence of infrastructure for efficient handling and storage loading;
- Granting government aid;

The free zone is the most common name for the zone in which under favorable conditions performs the supply, storage, industrial production, and processing of goods, etc., during the transport process. The essence of a free zone area is that it can apply special measures of customs supervision and special exemptions in customs procedures, concerning the free circulation of goods without payment of customs duties and taxes. Free zones comprise property, or land, buildings and other real estate in a particular location, as well as rights and obligations in relation to that property (ownership, right to use). The entrance to the free zone is controlled by the customs authorities, so that goods can be stored, resold, processed or exposed, provided that the re-export to other countries, will not subject to customs of the host country.

Activities within the free customs zones include the following:

- Warehousing and re-export;
- Processing of goods;
- Industrial production;
- Transport services;
- Wholesale trade and commission trade;
- Banking services;
- Insurance and reinsurance of property and persons;

Free zones model can be applied in all countries that are developing, in order create conditions for economic development by regulating of these zones. Regulation of free zones is based on the investment policy, related to attractive business located within the zone, with high employment, low capital investment, a brief period of activation and return of capital. The development of free zones and enterprises within them is a driver and a strategic factor for economic development of the developing countries. Free zone concept brings great benefits to companies which are operating within free zones, by

increasing their market competitiveness, achieved through the benefits of free zones, which lower costs of doing business. This refers to the before mentioned exemptions from taxes, customs duties, import taxes on inputs, lower costs of local labor, as well as lower costs of land leasing and lower costs of connecting to the infrastructure.

FREE ZONE CONCEPT IN SERBIA

Strategy for the Development of Free Zones in Serbia for the period 2011-2016 is the first strategic document of the development of free zones, which defines the main directions of development of free zones, as well as ways of their realization in the future. The strategy is based on the need to accelerate economic development and the rounding of the transition process towards market economy. The strategy is intended for achieving sustainable economic development that will ensure competitiveness and better economic performance of the economy, attracting direct investments, both foreign and domestic, raising living standard, as well as a creation of suitable infrastructure and other factors that would encourage the economic development of the Republic of Serbia. The strategy accepts the basic principles of leaving the existing conditions by building more efficient free zones as an instrument for enhancing economic competitiveness and growth of knowledge through the recruitment and use of modern technology. Free zones represent the first open window of economies in transition, which favors foreign investments. Free zones enable the fastest attracting of direct investments in new equipment and modernization of production processes, which are the key of improvement competitiveness and achieving greater exports. Creating a favorable climate for foreign investment is a prerequisite for attracting them. Free zones are usually defined as an instrument of economic policy towards economic development through increased investment inflows, export growth and consequently improve the country's balance of payments and employment growth. Free zones are significant creators of new work positions, the holders of technological development and foreign investments.

Concept implementation of free zones contributes to achieving the following goals defined by the Regional Development Strategy of the Republic of Serbia for the period 2007-2012:

- Raising of regional competitiveness;
- Reducing regional disparities and poverty;
- Construction of regional infrastructure.

Current development of free zones in the Republic of Serbia was unsatisfactory and did not meet expectations. Business within free zones in the Republic of Serbia have been based on providing services of storage and worked as trade free zones.

Free zones are physically enclosed and marked part of the Republic of Serbia, and are specialized for the performance of manufacturing industries, as well as service industries.

In 2009 in the Republic of Serbia were operating 4 free zones - FZ Pirot, FZ Subotica, FZ Novi Sad and FZ Zrenjanin. In late 2009 the Serbian government has approved the designation of the area for two more free zones – FZ Kragujevac and FZ Sabac. At the end of 2010 Serbian government gives approval for designation of the area of a free

zone Uzice in Sevojno. There are currently in preparing phase the two more free zones in the Republic of Serbia – FZ Nis and FZ Smederevo. Within the free zones, all types of business and industrial activities can be performed, including manufacturing, warehousing, packaging, trade, banking and insurance. Free zones may be established and they can be navigated by domestic and foreign companies. Earnings and revenues that are realized within a free zone may be transferred to any country, including Serbia, freely without prior approval and without payment of any taxes, duties or fees. In this way, it creates huge opportunities for cooperation between domestic and foreign industries.

In the following text are presented the general benefits that exist in the Republic Serbia for foreign investors:

- Locations in the Corridor X, which connects Europe to the Middle East;
- Free trade agreement with countries of South Eastern Europe – CEFTA;
- Free trade agreement with EFTA countries;
- Free trade agreement with Belarus and Kazakhstan;
- Free Trade Agreement with Turkey;
- Free Trade Agreement with Russia;
- Unemployed, educated and cheap labor force;
- Short procedures for establishing the company, which now takes 15 days;
- Simplified regulations on foreign trade and foreign investment;

In the following text we have presented several free zones in the Republic of Serbia.

FREE ZONE PIROT

Location and size

The free zone Pirot is located on Serbia's eastern gateway to the Middle East. One of the benefits of this location is its close proximity to E-80 and Corridor 10 international roadways, which represent the shortest link between Europe and Asia. The zone operates within the city of Pirot industrial zone.

The free zone Pirot encompasses an area of 65 hectares. Production area takes 121.000 sq m and almost 20.000 sq m is for open and closed space storage. There are the additional 9.255 sq m of office space.

Business activities and services in the free zone

The free zone Pirot currently has 8 manufacturing programs, of which the most dominant the production of tires, Michelin, allowing the use of free zones as an export processing zone.

Services within the free zone Pirot include the following:

- Users support has to ensure and protect business activities;

- Domestic and foreign shipping services;
- Loading and reloading of goods;
- Container terminals
- Warehousing and storage (indoor and outdoor);
- „One stop shop“ organization-meaning that the zone's clients can handle all Customs permits and administrative procedures related to the flow of goods through the zone in one location;

FREE ZONE SUBOTICA

Location and size

The free zone Subotica is located in the northern part of Serbia and the province of Vojvodina -next to the border with Hungary and the European Union. The E-75 international highway passes through Subotica and represents a major pan-European road that leads from north to south and connects with an international road network heading to the Near East. The existing rail line that passes through Subotica is an integral part of the European rail network.

The free zone Subotica encompasses an area of 15 hectares. It possesses 13.000 sq m of production space, 26.000 sq m of closed storage space, and 313 sq m of office space.

Infrastructure

Infrastructure within the free zone Subotica includes the following:

- City water supply
- Road network within the free zone;
- Two transformer sub-stations with 2x630 KwA capacities;
- Telephone lines;
- Projected connection to local gas lines;

Business activities and services in the free zone

Within the free zone Subotica, users can engage in a wide range of activities, including production, warehousing, reloading and packing goods, banking, finance, insurance services, and travel services. In the zone all activities that do not pollute the environment are permitted.

Free Zone Subotica offers a host of services to its users, such as:

- Shipping;
- Loading and unloading;
- Insurance;
- Freight forwarding;

- Marketing;

FREE ZONE NOVI SAD

Location and size

The free zone Novi Sad is located in the city of Novi Sad, the capital of Vojvodina province with international harbor on the Danube River. The traffic of the zone is directly connected with Pan- European corridor no.10 and train line Vienna-Budapest-Belgrade. The distance from the border crossings to the neighboring countries (Croatia, Bosnia, Romania and Hungary) is about 80 km.

The free zone Novi Sad encompasses 10 hectares of development land.

Infrastructure

Infrastructure within the free zone Novi Sad includes the following:

- Complete utility infrastructure (water and sewer network) ;
- Direct links to international road, rail and river ways;
- An electric energy supply of 650 kW with additional capacity available;
- A natural gas network;
- Standard fire and lightning protection,
- Telephone and ISDN lines;

Services within the zone

Services within the free zone Novi Sad include the following:

- Land leases for land intended for industrial and commercial construction with guaranteed fixed terms for up to 60 years;
- Rental of storage and office space in buildings owned by the free zone Novi Sad;
- Loading, unloading and reloading of goods-provided by a special department within the free zone;
- Availability of a customs terminal for quicker and simpler customs procedures;
- 24-hour security;
- Administration;
- Freight forwarding;
- Agency services;

FREE ZONE SABAC

Location and size

The position of the free zone is favorable for all investors who generate their business outside the borders of Serbia. Distance from the highway E70 is 25 km. The zone is distanced from the Bosnian border about 30 km, from the Croatian border about 70 km, Romanian border about 200 km and from the Hungarian border 190 km.

The free zone Sabac encompasses an area of 3.991 sq m and it is expected to be expanded by the end of the year. Free Greenfield area within the zone comprises an area of around 2,3 hectares.

Infrastructure

Free outdoor storage space takes up an area of 6.700 sq m and indoor storage space of 5.000 sq m. Commercial building area takes up an area of approximately 550 sq m.

Free zone Sabac is fully equipped with infrastructure with wide range of logistic services.

Business activities and services within the free zone

The main economic potential within the free zone Sabac is fertile agricultural land and waters of the River Sava and Drina River which contribute to multiple trades.

Services within the free zone Sabac include the following:

- Freight forwarding offices ;
- Insurance companies, postal and banking services;
- Storing service (open and indoor storages);
- Wide range of logistic services;

INDUSTRIAL ZONES IN THE REGION



INDUSTRIAL ZONES IN BULGARIA

Development of industrial zones in Bulgaria is very important for economic development of Bulgaria and attracting new investors through a system of incentives formulated mainly in the Encouragement of Investment Act and Corporate Income Tax Law. Bulgarian state is making efforts to stimulate Green field investments within industrial zones. By the experience of the Central and East Europe, industrial zones are centers for foreign and local production enterprises development, with goal for attracting new investors and investments and development of local economies.

In the text below are presented the advantages, benefits and incentives of investing in Bulgaria³:

- Stable political environment and low country risk;
- Stable macroeconomic environment;
- Tax incentives (10% tax on corporate profits; 0% corporate tax in high unemployment areas; 10% flat tax on personal income);
- Low labor and operating costs;
- Investment incentives;

Investment incentives under the Investment Promotion Act

- ❖ There are two classes of eligible investment for investment support depending on the investment amount:
 - Class A: minimum BGN 32 million (EUR 16,3 million);
 - Class B: minimum BGN 16 million (EUR 8,2 million)
- ❖ The incentives depend on the investment class obtained include:
 - Financial aid for construction of physical infrastructure elements for Class A;
 - Personalized administrative services for Class A;
 - Financial aid for training aimed at attainment of professional qualification by the employed staff for both Class A and Class B;
 - Faster administrative services for both Class A and Class B;
 - Sale or establishing against consideration of limited real rights on private state or municipal property, without a tender or an auction both Class A and Class B;
- ❖ Investment incentives for priority investment projects:
 - Opportunities for other forms of state aid, institutional support, public-private partnerships or joint-ventures.
- ❖ Investment incentives for industrial zones:

³ Ministry of Economy and Energy of the Republic of Bulgaria

- Different type of transactions between the investor and the legal entity established for the purposes of construction and development of industrial zones.

Tax incentives

- ❖ Incentive for manufacturing activities in high unemployment municipalities

The amount of the annual corporate income tax due by entities on their profits from manufacturing may be partly or fully reduced if the activities are carried out in municipalities with high unemployment.

There are a number of specific eligibility conditions for applying the incentive (including conditions imposed under the EU state aid rules).

- ❖ VAT Incentive for large investment projects

Entities investing in a large investment project can benefit from a faster recovery of VAT and self-charge of VAT on importation of certain goods.

There are a number of specific requirements for applying the VAT incentive, including the need of obtaining authorization from the Bulgarian Ministry of Finance.

INDUSTRIAL ZONES

According to official data⁴, on the territory of Bulgaria there are 35 industrial zones, which are divided into 20 regions. Industrial zones in Bulgaria comprise an area of approximately 14.958.952 sq m.

In the following text we have presented the most representative industrial zones in Bulgaria.

INDUSTRIAL ZONE KARDZHALI-SOUTH

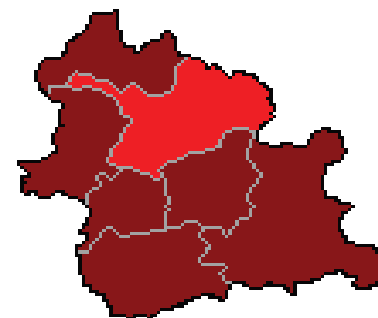
Location and size

The industrial zone is located in the southern part of Kardzhali Region, next to the first-class road I-5 Haskovo-Kardzhali which is part of the Pan-European transport corridor 9 (Helsinki-Rousse-Makaza-Alexandroupolis), that is connecting the region with the markets in Greece and Turkey. The zone is located about 3 km away from the closest city Kardzhali.

Industrial zone Kardzali-south encompasses an area of 600.000 sq m.

In the following picture is presented industrial zone Kardzhali-south in the Kardzhali Region.

⁴ Ministry of Economy and Energy of the Republic of Bulgaria



Source: Ministry of Economy and Energy of the Republic of Bulgaria

Land status within industrial zone

A part of the industrial zone is agricultural land and the other part is ready for industrial purposes. Land within industrial zone is in ownership of the municipality of Kardjali. Potential expansion of the zone is possible by purchasing neighbouring private land

Existing infrastructure

Infrastructure within the industrial zone Kardzhali-south includes the following:

- In terms of energy infrastructure within industrial zone electricity is distanced 2 km away from the zone, which will represent additional cost for potential investors or municipality; gas distribution network is still not established within zone and it is much distanced from the zone, approximately 60 km from the closest gas pipeline.
- In terms of utility infrastructure within industrial zone, water supply network is established. Sewage network is still not established within the zone.

Currently present investors in the industrial zones Kardzhali-south

Leading sectors within the Kardzhali Region are

- Agriculture – tobacco and vegetables growing, stock-breeding
- Machine building and production of equipment for the mining industry;
- Mining industry based on ferrous and non-ferrous resources;
- Processing industry – tobacco production, food and beverages, wood processing, textiles, clothing and shoe production;
- Trade and services;

The industrial zone Kardzhali-south represents an extension to the south of the existing industrial zone, where industrial companies and warehouses operate.

In the following table we have presented the list of present investors in the Industrial Zone Kardzhali-south:

CURRENTLY PRESENT INVESTORS IN THE INDUSTRIAL ZONE	
Industrial Zone Kardzhali-south	Activity
Arda Instrument	Manufacture of industrial process control equipment
Formoplast	Manufacture of special purpose machinery
ARZ Kapitan Petko	Production of agricultural machinery
Bistrets	Production of waste treatment facilities
ViK warehouse	Local water and sewage provider
Bulgartabak warehouses	Tobacco processing

Source: Ministry of Economy and Energy of the Republic of Bulgaria,

Bulgarian Chamber of Commerce and industry

Advantages within the industrial zone Kadzhali-south

Industrial zone Kadzhali-south offers following advantages to existing and potential investors:

- Existing developed infrastructure;
- Convenient location, proximity to the Pan-European transport corridor 9;
- Free, available qualified labour force;
- Low investment and manufacturing costs;
- The region has good development perspective;
- The central location of Kardjali in the Rhodope mountains makes it a natural center for a market of 350,000 consumers in 3 districts (Kardzhali, Haskovo and Smolyan);

INDUSTRIAL ZONE GENERAL TOSHEVO

Location and size

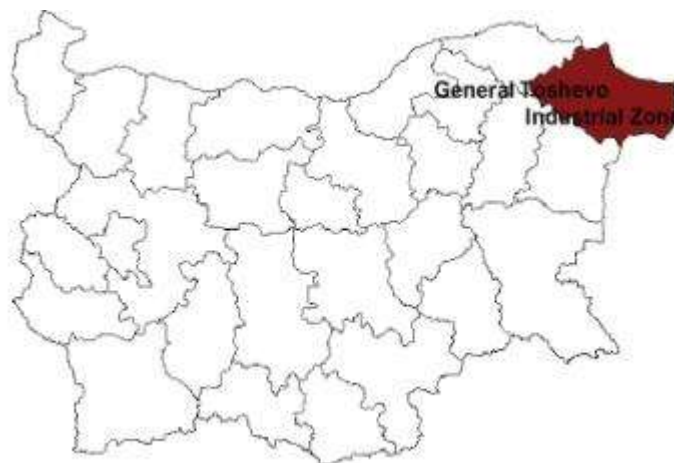
General Toshevo industrial zone is positioned in the Dobrich Region, the North-Eastern Bulgaria. General Toshevo municipality, within is located industrial zone General Toshevo, is an agrarian region with a potential for development of food industry and manufacturing. Attracting of investors and investments are basic priorities of the Municipal plan for development regarding enlargement and creating new industrial plants. Industrial zone General Toshevo is distanced 25 km from Dobrich City, which represents the closest city. The closest highway is Hemus motorway A1, and is positioned 80 km from the industrial zone. The zone is located 1 km away from the Railway Station General Toshevo,

Industrial zone General Toshevo encompasses an area of 112.384 sq m.

General Toshevo industrial zone is divided into two zones, South East industrial zone and North West industrial zone.

The Northwest industrial zone is approved for financing and the Southeast industrial zone is 1 km away from the international railway line.

In the following picture we have presented industrial zone General Toshevo:



Source: Ministry of Economy and Energy of the Republic of Bulgaria

Existing infrastructure

Existing infrastructure within the industrial zone General Toshevo includes the following:

- In terms of utility infrastructure, water supply network is established within industrial zone, as well as sewage network;
- In terms of energy infrastructure industrial zone is equipped with electro energetic network, as well as gas distribution network which is distanced 2 km away from the zone, which will represent additional cost for potential investors or municipality;
- In terms of other infrastructure, industrial zone is equipped with telecommunication network;

The priority Municipality General Toshevo is modernization of existing infrastructure in future, which will have positive impact on attracting investors, which will certainly affect the development and competitiveness of the local economy.

Land status within industrial zone

Land in industrial zone has status of industrial land. Land within industrial zone is in ownership of the municipality of General Toshevo.

Currently present investors in the industrial zones General Toshevo

Leading sectors within the Dobrich Region are:

- Food and beverages;
- Light industry;
- Machine building - car batteries, semi-trailers and containers, agricultural machinery, radiators and filters for vehicles, plastic articles for machine building and food industry;

The structure of local economy within General Toshevo industrial zone is mostly determined by agriculture. Northwest industrial zone is approved for financing. In Southeast industrial zone, there is an interest for new production, particularly for growing vegetables, mushroom and flowers. These two zones are mostly intended for warehousing and production.

In the tables below we have presented the table with list of currently present investors in the Northeast industrial zone and Southeast industrial zones of General Toshevo industrial zone:

CURRENTLY PRESENT INVESTORS IN THE SOUTHEAST INDUSTRIAL ZONE IN GENERAL TOSHEVO	
Company	Activity
Hera GT	Production of shoes
Skitia 1 GT	Production of electrical instruments
Express 2000 GT	Public transport
Euroholz	Production of garden furniture and wooden houses

Source: Ministry of Economy and Energy of the Republic of Bulgaria

CURRENTLY PRESENT INVESTORS IN THE NORTHEAST INDUSTRIAL ZONE IN GENERAL TOSHEVO	
Company	Activity
Geoterm	Trade with fuel and agricultural production
Keramik GT	Production and trade with ceramics
Bozur Enco Stoyanov	Corn production and services
State reserve- Varna, base General Toshevo	Corn saving

Source: Ministry of Economy and Energy of the Republic of Bulgaria

INDUSTRIAL ZONE LETNITSA

Location and size

Industrial zone Letnitsa is located in the Letnitsa town, in the municipality of Letnitsa. The zone is located within in the Lovech Region, in the North-Central Bulgaria. The zone is distanced 30 km from the closest city with population of over 50.000 inhabitants, Lovech. The closest highway is Hemus motorway A2 is positioned 10 km away from the zone. The zone has good accessibility by car and train, because it is bordering a road and a railway.

Industrial zone Letnitsa encompasses an area of 541.000 sq m with possibility of expansion.

In the following picture we have presented industrial zone Letnitsa:



Source: Ministry of Economy and Energy of the Republic of Bulgaria

Existing infrastructure

Existing infrastructure within the industrial zone Letnitsa includes the following:

- In terms of utility infrastructure, water supply network is bordering the industrial zone, as well as sewage network;
- In terms of energy infrastructure industrial zone electro energetic network is bordering the zone, and gas distribution network is established within the zone.
- In terms of other infrastructure, industrial zone is equipped with telecommunication network (optical cables);

Land status within industrial zone

Land in industrial zone has status of industrial land. Land within industrial zone is in ownership of "Industrial Park Letnitsa" ltd, which is a Public-Private Partnership (PPP) initiative. The park will provide attractive conditions for building factories, logistic warehouses and other service facilities. The project is supported by the local

municipality, Invest Bulgaria Agency (IBA), the Bulgarian Industrial Association (BIA) and the Bulgarian Chamber of Commerce and Industry (BCCI)*⁵.

Advantages within the industrial zone Letnitsa

“Letnitsa Industrial Park” Ltd. is the managing company of the industrial the park and providing following full service for the investors within the zone:

- Institutional support by local and central authorities;
- Providing industrial sites for building;
- Issuing all preliminary construction permits;
- Design and construction of industrial warehouses according to investors' specifications
- Full engineering services;
- Providing industrial space for sale or rent;
- HR services;

Applied incentives in this region are tax incentives, 0% corporate tax for manufacturing enterprises.

Currently present investors in the industrial zone Letnitsa:

Leading sectors within the Lovech Region are:

- Food and beverages;
- Production of machines and equipment;
- Wood processing and furniture production;
- Trade and services;

In the municipality of Letnitsa agriculture is a leading economy sector, particularly cultivation of grain, industrial and fodder crops. The municipality has traditions in the growing of fruits and vegetables as well. Agricultural land in the municipality of Letnitsa encompasses an area of approximately 11 hectares.

In the following table we have presented the table with list of currently present investors in the industrial zone Letnitsa:

CURRENTLY PRESENT INVESTORS IN THE INDUSTRIAL ZONE	
Industrial Zone Letnitsa	Activity
Letnitsa Ltd	Processing of fruits and vegetables
Keramika 98 Ltd	Production of bricks
Gardenya Ltd	Production, purchase and sale of agricultural products
SE AJD – D. Machuganov	Production of agricultural products
SM Ltd	Production of textile

Source: Ministry of Economy and Energy of the Republic of Bulgaria

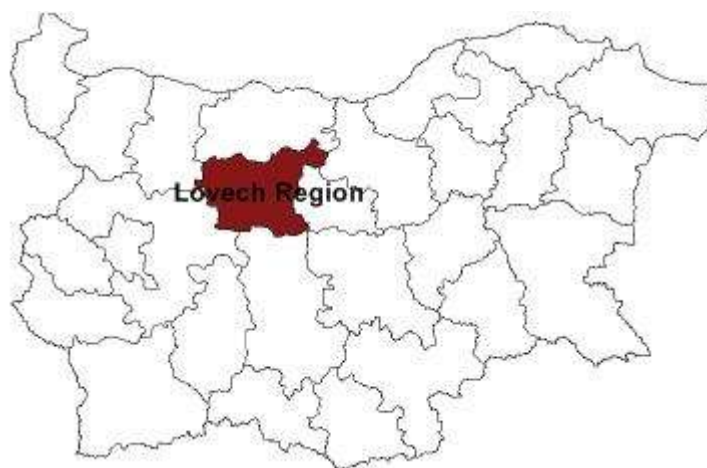
INDUSTRIAL ZONE TROYAN

Location and size

Industrial zone Troyan is located in the municipality of Troyan, which is part of Lovech Region. Zone is positioned in North-Central part of Bulgaria. Troyan zone is distanced 30 km from the closest city with population of over 50.000 inhabitants, as well as 15 km away from the closest highway- Hemus motorway A2. The zone has good accessibility by car and train, because it is bordering a road and a railway.

Industrial zone Troyan encompasses an area of 125.480 sq m with possibility of expansion.

In the following picture we have presented Lovech Region within is located the industrial zone Troyan:



Source: Ministry of Economy and Energy of the Republic of Bulgaria

Existing infrastructure

Existing infrastructure within the industrial zone Troyan includes the following:

- In terms of utility infrastructure, water supply network is bordering the industrial zone, as well as sewage network;

- In terms of energy infrastructure industrial zone electro energetic network is bordering the zone, and gas distribution network is established within the zone.
- In terms of other infrastructure, industrial zone is equipped with telecommunication network (optical cables);

Land status within industrial zone

Land in industrial zone has status of agriculture land. Land within industrial zone is in ownership of the municipality of Troyan.

The Troyan zone project is a Public initiative and it will provide attractive conditions for construction of factories, logistic warehouses and other service facilities.

Advantages within the industrial zone Troyan

Troyan zone is providing following full service for the investors:

- Institutional support by local and central authorities;
- Providing industrial sites for building;
- Issuing all preliminary construction permits;
- Design and construction of industrial warehouses according to investors' specifications;
- Full engineering services;
- Providing industrial space for sale or rent;
- HR services;

Incentives which authorities are giving to certified investment projects under Investment Encouragement Act (IEA):

- Speeded-up administrative procedures and issuing of permits;
- State subsidy for infrastructure up to the border for class A investments;
- Individual administrative services for class A;
- State subsidy for training and qualification of staff for class A and B investment projects;

Currently present investors in the industrial zone Troyan:

The leading sectors within the Lovech Region are:

- Food and beverages;
- Production of machines and equipment;
- Wood processing and furniture production;
- Trade and services;

Industry is the leading economy sector within the Troyan industrial zone.

In the following table we have presented the table with list of currently present investors in the industrial zone Troyan:

CURRENTLY PRESENT INVESTORS IN THE INDUSTRIAL ZONE	
Industrial Zone Troyan	Activity
Actavis	Development, manufacture and sale of first-class generic pharmaceuticals.
Elma- In 1997 ELMA AD	The company has: <ul style="list-style-type: none"> • Foundry shop for the production of cast iron frames; • Metal sheeting shop for the production of aluminum frames, punching and the production of active motor parts;

Source: Ministry of Economy and Energy of the Republic of Bulgaria

INDUSTRIAL ZONES DOLNA MITROPOLIA

Location and size

The industrial zone Dolna Mitropolia is located in Dolna Mitropolia municipality, which is part of Pleven Region. Pleven Region has a direct access to the Danube river by two ports: Somovit and Nikopol. Zone represents the central location of Dolna Mitropolia zone in the North-Central part of Bulgaria. The zone is distanced about 160 km from the capital Sofia and approximately 7 km from Pleven, which represents one of the most important transport locations in North Bulgaria. After the closest highway, Hemus motorway is completed, the distance between the zone and Hemus motorway will be only 6 km.

Industrial zone Dolna Mitropolia encompasses an area of 2.302.494 sq m.

In the following picture we have presented Pleven Region within is located the industrial zone Dolna Mitropolia:



Source: Ministry of Economy and Energy of the Republic of Bulgaria

Existing infrastructure

Existing infrastructure within the industrial zone Dolna Mitropolia includes the following:

- In terms of utility infrastructure, water purifying station is established within industrial zone, with a capacity to meet the needs of an industrial production, as well as sewage network;
- In terms of energy infrastructure industrial zone is equipped with electro energetic network, as well as gas distribution network;

Land status within industrial zone

Land in industrial zone has status of industrial land. Land within industrial zone is in ownership of the municipality of Dolna Mitropolia.

Advantages within the industrial zone Dolna Mitropolia

The industrial zone Dolna Mitropolia offers following advantages for the existing and potential investors:

- Available qualified labour force;
- Low investment and manufacturing costs;
- The region has good development perspective;
- Proximity to the big consuming centres like Veliko Tarnovo, Lovech, Gorna Oriahovitsa and Pleven is favourable for the future economic expansion of the region;

Currently present investors in the industrial zone Dolna Mitropolia

The leading sectors within the Pleven Region are:

- Trade, repairs, technical and public services;
- Agriculture, forestry and fishing;
- Construction;
- Transport and communications;
- Light industry;
- Food and beverage production;
- Wood processing;

In the following table we have presented the table with list of currently present investors in the industrial zone Dolna Mitropolia:

CURRENTLY PRESENT INVESTORS IN THE INDUSTRIAL ZONE	
Industrial Zone Dolna Mitropolia	Activity
Bulgarian sugar	Production of sugar
Zvezda	Production of oil
CEZ Distribution Bulgaria AD	Maintenance of the electricity network
Railway Station	Railway

Source: Ministry of Economy and Energy of the Republic of Bulgaria

INDUSTRIAL ZONE RUSSE

Location and size

Industrial zone Russe is located in the Russe municipality, which is part of Russe Region. The zone is located in the North-Central part of Bulgaria. The zone is in proximity to Port Russe - East, the Danube Bridge and the Russe Free Zone. It is one hour of highway drive from capital Bucharest, which represents one of the largest markets in Southeast Europe. Russe industrial zone is positioned at the intersection of two Pan-European Corridors: no 7 and no 9. The closest highway, Hemus motorway A2 is 130 km away from the zone. The zone has excellent transport access by roads, railway (adjacent to the national railway corridor 9 and corridor 4) and by water.

Industrial zone Russe encompasses an area of 640.000 sq m.

In the following picture we have presented industrial zone Russe:



Source: Ministry of Economy and Energy of the Republic of Bulgaria

Existing infrastructure

Existing infrastructure within the industrial zone Russe includes the following:

- In terms of utility infrastructure, water purifying station is established within industrial zone, with a capacity to meet the needs of an industrial production, as well as sewage network;

- In terms of energy infrastructure industrial zone is equipped with electro energetic network, as well as gas distribution network;
- In terms of other infrastructure, industrial zone is equipped with telecommunication network.

Land status within industrial zone

Land in industrial zone Russe has status of industrial land. Land within industrial zone is in ownership of the municipality of Russe municipality, which is developer of the zone as well.

Advantages within the industrial zone Russe

The industrial zone Russe offers following advantages for the existing and potential investors:

- The zone represents the largest Bulgarian port on the Danube river and an international and logistics hub;
- One of the most diverse and balanced economies in Bulgaria;
- Skilled and available labour force in engineering sciences;
- Low cost of living and low operational costs region-wide;

Currently present investors in the industrial zone Russe

The mayor drivers of growth of economy of Russe Region includes following:

- Industry and its increasing export orientation;
- Investment growth;
- Light industry (sewing, textiles and food and beverages) with a major share in the economy of Russe;
- Oil-processing and chemical industries;
- Machine building and metal-working;

The industrial zone Russe is planned for industrial purposes which include manufacturing and warehousing.

In the following table we have presented the table with list of currently present investors in the industrial zone Russe:

CURRENTLY PRESENT INVESTORS IN THE INDUSTRIAL ZONE	
Industrial Zone Russe	Activity
Montupet	French factory that produces automotive parts
Keros Ceramica	Spain factory of ceramic tiles

Source: Ministry of Economy and Energy of the Republic of Bulgaria

INDUSTRIAL ZONE SHUMEN

Location and size

The industrial zone is located in the Shumen municipality which belongs to Shumen Region, positioned in the North-Eastern part of Bulgaria. The zone is situated in the Beshtepe tabia countryside near Shumen town. The closest highway, Hemus motorway, is distanced only 2,3 km from the zone.

The industrial zone Shumen encompasses an area of 120.000 sq m, with the potential of expansion up to 2.877.149 sq m and potential of creating a high tech industrial park in future.

In the following picture is presented industrial zone Shumen:



Source: Ministry of Economy and Energy of the Republic of Bulgaria

Existing infrastructure

Existing infrastructure within the industrial zone Shumen includes the following:

- In terms of utility infrastructure, water supply network is established within industrial zone. Sewage network is still not established within the zone;
- In terms of energy infrastructure industrial zone is equipped with electro energetic network, as well as gas distribution network;
- In terms of other infrastructure, industrial zone is not yet equipped with telecommunication network.

Land status within industrial zone

Land in industrial zone has status of agricultural land, but the status will be changed to industrial land after the depositing of some additional documentation.

Land within industrial zone is in ownership of the municipality of Shumen.

Advantages within the industrial zone Shumen

The industrial zone Shumen offers following advantages for the existing and potential investors:

- Proximity of the zone to roads, airports, river and sea ports;
- Skilled labour force;
- Traditions in light industry manufacturing;
- Good opportunities for agricultural development;
- Free land lots within zone for investment;
- Attractive prices of land and available real estate properties;
- Clean environment in the region;
- Business support from the local authorities;

Currently present investors in the industrial zone Shumen

The leading sectors within the Shumen Region are

- Food & beverages;
- Trade, repairs and technical services ;
- Processing industry, such as mechanical engineering, non-ferrous metallurgy, chemical industry, tobacco, glass & porcelain production, wood processing and textiles;
- Construction ;
- Logistics ;
- Agriculture;
- Electricity and heating generation;.

In the following table we have presented the table with list of currently present investors in the industrial zone Shumen:

CURRENTLY PRESENT INVESTORS IN THE INDUSTRIAL ZONE	
Industrial Zone Shumen	Activity
Biogroup AD -USA investment fund "ICS International Consulting" SP	Construction of a solid waste and biomasses treatment plant
Agrotech Group	Silk production

Source: Ministry of Economy and Energy of the Republic of Bulgaria

INDUSTRIAL ZONE TARGOVISHTTE

Location and size

The industrial zone is located in the Targovishte municipality which belongs to Targovishte Region. The zone is located in the North-Eastern part of Bulgaria. Targovishte zone is 41 km from the Shumen town, the closest city. The Hemus motorway is distanced also 41 km from the zone.

Targovishte industrial zone encompasses total area of 113.581 sq m and it is divided into three plots (I - 37,186 sq m, II - 63,191 sq m, III - 13,204 sq m), with a possibility of expanding the zone on additional 53.000 sq m of private land lots.

In the following picture is presented industrial zone Targovishte:



Source: Ministry of Economy and Energy of the Republic of Bulgaria

Existing infrastructure

Existing infrastructure within the industrial zone Targovishte includes the following:

- In terms of utility infrastructure, water supply network is established within industrial zone. Sewage network is in process of construction within the zone;
- In terms of energy infrastructure industrial zone is equipped with electro energetic network, as well as gas distribution network; the gas heating station is distanced 50 m from the zone. A gas heating station is planned to be constructed on the second plot within the zone.
- In terms of other infrastructure, industrial zone is equipped with telecommunication network. The zone has access to all three mobile communications networks;
- In terms of transportation infrastructure, in the area of the industrial zone are established with road network, as well as railway line. The zone is located along the Targovishte railway station in the direction of Varna;

Land status within the industrial zone

Land in industrial zone has status of industrial land.

Land within industrial zone is in ownership of the municipality of Targovishte.

Advantages within the industrial zone Targovishte

The industrial zone Targovishte offers following advantages for the existing and potential investors:

- Speeded-up administrative procedures and permit issuing;
- State subsidy for infrastructure up to the border for class A investments;
- Individual administrative services for class A;
- State subsidy for training and qualification of staff for class A and B investment projects;

Currently present investors in the industrial zone Targovishte

The leading sectors within the Targovishte Region are:

- Agriculture;
- Construction ;
- Food and beverages ;
- Wood processing and furniture production;
- Machine building and metal working;
- Glass manufacture;
- Processing of wheat and cereals;
- Textiles;
- Trade and services;

The type and purpose of facilities that could be built at the third land lot within the zone implies the possibility of warehouses.

In the following table we have presented the table with list of currently present investors in the industrial zone Targovishte:

CURRENTLY PRESENT INVESTORS IN THE INDUSTRIAL ZONE	
Industrial Zone Targovishte	Activity
Trakya Glass Bulgaria LLC	Construction and design of flat glass and other glasswear
Vinprom Targovishte 96:	Retail sale of alcoholic and other beverages
LVK – Vinprom JSC	Production of wine

Source: Ministry of Economy and Energy of the Republic of Bulgaria

INDUSTRIAL ZONES IN CROATIA

In the text below we have presented incentives in the Republic of Croatia.

INVESTMENT INCENTIVES ACT

This Act regulates incentives for the investments of domestic and foreign legal or natural persons with the objective of stimulating economic growth, development and the achievement of the economic policies of the Republic of Croatia, its involvement in international trade flows by increasing exports and the strengthening of the Croatian economy's competitiveness. An investment incentive in the sense of this Act is a system of incentive measures and tax and tariff concessions.

Investors can benefit from various types of incentives as defined by Investment Promotion Act:

- Tax and Customs benefits
- Support for opening new workplaces
- Support for the training and re-training of employees
- Support for the development of Technology and innovation centers
- Support for the strategic business support activities
- Special incentives for large investment projects

The above mentioned incentives may be used by foreign and domestic investors investing at least EUR 300.000.

Incentives defined by the new Investment Promotion Act relate to:

- Business activities in production and processing
- Technology and innovation centers
- Strategic business support activities

The minimum investment period and the related opening of new work places, connected to the investment, should be 5 years. It means that the period in which the incentives are used cannot be shorter than the investment period itself.

The application for the incentives approval should be submitted to the Ministry of Economy, Labor and Entrepreneurship before investing.

TAX INCENTIVES

Investment Value (million EUR)	Minimun new opened work positions	Max period of use	Beneficial Profit Tax Rate
0,3 - 1,5	10	10	10%
1,5 - 4	30	10	7%
4 - 8	50	10	3%
> 8	75	10	9%

Source: www.croinvest.org

Regular profit tax rate in Croatia is 20%

EMPLOYMENT INCENTIVES

Unemployment Rate	Max. Amount of Support Regarding Eligible Costs for Opening New Work Positions	Increase for the Technology and Innovation Centers	Increase for the Strategic Business Support Activities
< 10%	10% (EUR 1.500)	50% (EUR 750)	25% (EUR 375)
10 - 20%	10% (EUR 1.500)	50% (EUR 1.000)	25% (EUR 500)
> 20%	10% (EUR 1.500)	50% (EUR 1.500)	25% (EUR 750)

Source: www.croinvest.org

INCENTIVES FOR ELIGIBLE TRAINING AND RE-TRAINING COSTS

The investor who is opening new workplaces will be approved a non-refundable financial support for eligible costs regarding the training and re-training of employees.

	Special Training	General Training
Large Entrepreneurs (more than 250 employees)	up to 35% of eligible costs	up to 60% of eligible costs
SMEs (up to 250 employees)	up to 45% of eligible costs	up to 80% of eligible costs

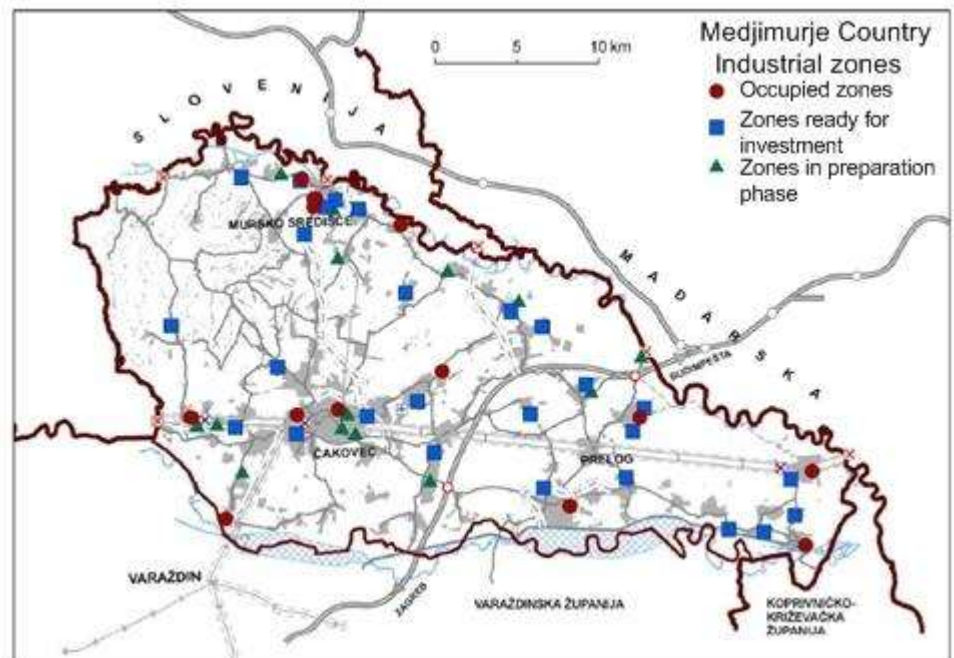
Source: www.croinvest.org

Eligible costs concerning the training and re-training could be the tutoring costs, travel expenses, other operating expenses, write-off costs of equipment and devices according

to their use for the purposes of training, costs of counseling in connection with the project of the improvement of knowledge and costs concerning the participants in such project.

INDUSTRIAL ZONES IN MEDJIMURJE COUNTRY REGION

According to official data from 2011, within part of Croatia, Medjimurje country from official data, there are 56 industrial zones, of which 14 are occupied zone, under which are considered as zones within which all land lots are sold to investors, and they have already started their activities or are being in the phase of preparation for starting the activities. 27 industrial zones are ready for investment and within these zones the ownership of land is regulated, as well as the detailed regulation plan. In terms of infrastructure within the zones which are ready for investments, it is established or is in the completion phase, which will be finished latest in next 12 months. 15 zone at the territory of Medjimurje is being prepared and under these zones are considered the zones where is in process of development of spatial plans and documents for the infrastructure.



Source: Industrial zone development plan for the period from 2008 to 2012 – Municipality of Medjimurje

We have presented most representative industrial zones within Medjimurje in the text below.

INDUSTRIAL ZONE PRELOG-NORTH – MUNICIPALITY OF PRELOG

Location and size

Industrial zone Prelog – North is located in lower part of Medjimurje, along the river Drava. Prelog – North zone is positioned along municipality road 2033 and 8 km away from the entrance to highway Gorican – Zagreb.

Industrial zone Prelog - North encompasses an area of 19,18 hectares, out of which 14,68 hectares is occupied and 4,53 hectares is available (4 parcels that can be

connected). The zone Prelog – North have potential of expansion. In accordance with needs the zone will be expanded in accordance with the borders of settlements and water protection areas.

In the following picture is presented industrial zone Prelog-North:



Source: Industrial zone development plan for the period from 2008 to 2012 – Municipality of Medijimurje

Ownership structure of the industrial zone

The land is in ownership of city of Prelog and several enterprises.

Existing infrastructure

In terms of infrastructure within the industrial zone Prelog – North, the zone is fully equipped with infrastructure

- In terms of utility infrastructure, water supply network is established within industrial zone as well as rain and sewage network;
- In terms of energy infrastructure industrial zone is equipped with electro energetic network, as well as gas distribution network;
- In terms of transport infrastructure, the zone is established with main roads;

Currently present investors in the industrial zone Prelog - North

In the following table we have presented the table with list of currently present investors in the industrial zone Prelog – North:

CURRENTLY PRESENT INVESTORS IN THE INDUSTRIAL ZONE	
Industrial Zone Prelog-North	Activity
L&P Tehnologije d.o.o.	Production of furniture - in 100% ownership of Leggett & Platt
GKP PRE-KOM d.o.o.	City utility company
Jurčec Transporti	Transport company

AAS Polimeri d.o.o.	Production of tubes and pipes-plastic and rubber, plastic - industrial products, plastic - household objects, plastic - semifinished products and plastic coatings and tiles
Međimurjeplet d.d.	Trade company
Stolarija Zvonarek	Production of wood components
Econ d.o.o.	Construction of ventilated facades and ventilated facades materials, as well as construction of metal structures

Source: Industrial zone development plan for the period from 2008 to 2012 –

Municipality of Medjmurje

INDUSTRIAL ZONE SOUTH – MUNICIPALITY OF KOTORIBA

Location and size

Industrial zone South is located in the municipality of Kotoriba, which is positioned in extreme south eastern part of Medjmurje, along the river Mura, which is also the state border with Hungary. In the proximity of the zone is passing the road Kotoriba - Donji Vidovec, as well as significant railroads that connect the zone with the rest of the Croatia and the Republic of Hungary, as well.

Industrial zone South in Kotoriba encompasses an area of approximately 190.815 sq m, out of which is 73.638 sq m of land within the zone available. The zone has possibility of expanding on 80 hectares of state land that borders the existing zone, South in Kotoriba municipality.

In the following picture is presented industrial zone South in Kotoriba:



Source: Industrial zone development plan for the period from 2008 to 2012 –

Municipality of Medjmurje

Ownership structure of the industrial zone

The land is in total ownership of municipality of Kotoriba.

Existing infrastructure

This industrial zone is being developed in phases according to specific needs.

Existing infrastructure within the industrial zone South in Kotoriba developed in first phase includes the following:

- In terms of utility infrastructure, water supply network is established within the approximately 65 % of industrial zone;
- In terms of energy infrastructure in industrial zone the power station is set. The purpose of building a power station will be based of actual demand for electricity from potential investors. Gas distribution network is established within the whole zone;
- In terms of transport infrastructure, the approximately 65 % of industrial zone is established with main roads. It is planned the construction of new road that will connect directly to the A4 motorway (Gorican - Rijeka) and thus facilitate the transport from Hungary to the Croatian inland.

Currently present investors in the industrial zone South in Kotoriba

In the following table we have presented the table with list of currently present investors in the industrial zone South in Kotoriba:

CURRENTLY PRESENT INVESTORS IN THE INDUSTRIAL ZONE	
Industrial Zone South in Kotoriba	Activity
MTC Cakovec	Production of underwear and socks
Kruhek d.o.o.	Production of systems, industrial recorders, industrial controllers, field instruments, analytical instruments, etc
MA-SA d.o.o.	Wholesale, transport of goods services
Agricultural cooperative Cakovec	Agriculture

Source: Industrial zone development plan for the period from 2008 to 2012 –

Municipality of Medjmurje

INDUSTRIAL ZONE SOUTH DEKANOVAC

Location and size

Industrial zone South Dekanovac is located in the municipality of Dekanovac, which is positioned in north eastern part of Medjmurje. The zone is positioned along the main

road Murska magistrala, which connects north western part of Medjimurje with its lower part. The zone is 10 km away from the highway.

Industrial zone South Dekanovac encompasses an area of 20.189 sq m. The area of the zone is divided into 5 land lots, out of which 3 are available.

In the following picture is presented industrial zone South Dekanovac:



Source: Industrial zone development plan for the period from 2008 to 2012 – Municipality of Medjimurje

Ownership structure of the industrial zone

Ownership of the remaining 3 available land lots within the zone is currently in the process of property restitution from the Republic of Croatia.

Existing infrastructure

In terms of developed infrastructure, all infrastructures within the industrial zone South Dekanovac is in completion phase of construction. The sewage network is not yet established within the zone, whose construction will be decided at the municipal level.

Currently present investors in the industrial zone South Dekanovac

In the following table we have presented the table with list of currently present investors in the industrial zone South Dekanovac:

CURRENTLY PRESENT INVESTORS IN THE INDUSTRIAL ZONE	
Industrial Zone South Dekanovac	Activity
Horvat-teks d.o.o.	Production of motorbike sportwear
Telemont d.o.o.	Telecommunication company
Lisko Lisjak	Production of agricultural products; agricultural services

Source: Industrial zone development plan for the period from 2008 to 2012 – Municipality of Medjimurje

INDUSTRIAL ZONE MALA SUBOTICA

Location and size

Industrial zone Mala Subotica is located at the territory of municipality of Mala Subotica, in the central part of the County of Medjimurje. Entrance to the highway Gorican-Zagreb is distanced 2 km away from the zone. In near proximity is located country road.

Industrial zone Mala Subotica encompasses an area of 15,9 hectares. 6 land lots within the zone with an area of approximately 10 hectares are available for the sale to potential investors and they are located at the entrance to Mala Subotica, from the direction of Cakovec. There is a possibility of expanding an area of the industrial zone.

In the following picture is presented industrial zone Mala Subotica:



Source: Industrial zone development plan for the period from 2008 to 2012 –

Municipality of Medjimurje

Ownership structure of the industrial zone

The remaining 6 available land lots within the zone are in ownership of the Municipality of Mala Subotica.

Existing infrastructure

In terms of developed infrastructure, all infrastructures within the industrial zone Mala Subotica is established. The public lightning is not yet established within the zone. In terms of transportation infrastructure, access roads to the industrial zone were built and it is planned to build roads through the zone in the future.

Currently present investors in the industrial zone Mala Subotica

In the following table we have presented the table with list of currently present investors in the industrial zone Mala Subotica:

CURRENTLY PRESENT INVESTORS IN THE INDUSTRIAL ZONE

Industrial Zone Mala Subotica	Activity
Haix shoes	German production of shoes
Medjimurje graditeljstvo	Construction activity
Bajric d.o.o.	Trade company

Source: Industrial zone development plan for the period from 2008 to 2012 –

Municipality of Medjimurje

Within the zone currently is employed over 400 people and most of the employees work in German company Haix shoes, which produces shoes.

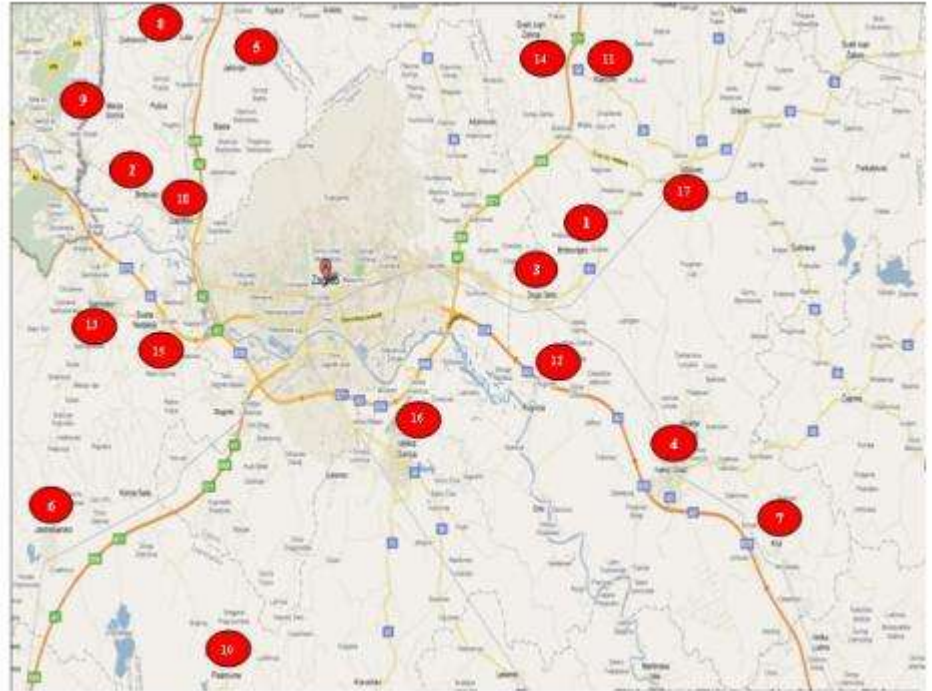
INDUSTRIAL ZONES IN ZAGREB COUNTRY

Zagreb County with population of approximately 1.1 million inhabitants represents one of the most desirable places for business activity in Republic of Croatia. Immediate modern road connections, major railway paths, international highways, closeness to major Croatian Airport and major sea Harbour Rijeka are advantages that subject region provides to the potential investor. Other important factor such as access to skilled employees, access to and prices of raw material and suppliers, closeness of the market and environmental and living standards are reasons for attracting potential investor in this region.

Zagreb County region can be considered as most developed county in Republic of Croatia in terms of industrial zones. These zones were created for promotion and development of small, medium and large scale projects of industrial, manufacturer, commercial, logistics or any other type of businesses activity which is allowed by the urbanity rules. Main purpose of these zones is to attract foreign and domestic capital to be invested in new production activities as well as in any other business activity which will employ people and develop the immediate region where is located.

Zagreb County region at the moment have 18 established, with total area of approximately 2.133 hectares, fully functional industrial zones equipped mostly with all necessary infrastructure systems. It should be noted that big problem is related to the size of the land plots. In most of the industrial zones, land lots are privately owned and are not big enough for construction of industrial or any other business facility. Process of re-parceling can take couple of years what is the biggest turn away for investors willing to start the business.

In the following picture we have presented the map of existing industrial zones in Zagreb Country region, as well as the legend of the map..



Legend of the map

Number	Zone/Location
1.	Brckovljani/Prikaraj
2.	Drenj/Kljuc
3.	Dugo Selo
4.	IvanicGrad
5.	Jakovlje
6.	Jastrebarsko
7.	Kriz
8.	Luka
9.	Kraj Donji
10.	Pisarovina
11.	Rakovec/Mlaka
12.	Rugvica
13.	Samobor
14.	Sv. Helena
15.	Sv. Nedjelja
16.	Velika Gorica
17.	Vrbovec
18.	Zaprešić

Source: Colliers Research

In the text below we have presented several industrial zones located within the Zagreb Country Region.

INDUSTRIAL ZONE LUKA

Location and size

Industrial zone Luka is located about 30 km north-west from capital city of Zagreb. The zone is divided into three zones. The first zone is located along the new bridge over the Krapina River, the second extends on the southern side of the municipality while the third one is west from the railway line Zagreb-Krapina. All three zones are located along way Zagreb-Maribor-Vienna (E59, A2) international highway. The zones are positioned about 10 km away from the state border with the Republic of Slovenia and 180 km away from the Rijeka harbor.

Industrial zone Luka encompasses an area of approximately 64 hectares, and currently with no intention of extending the zones.

In the following map we have presented the industrial zone Luka.



Source: Google maps, Colliers Research

Ownership structure of the industrial zone

The land within industrial zone Luka is in totally in private ownership.

Existing infrastructure

Existing infrastructure within the industrial zone Luka includes the following:

- In terms of utility infrastructure, water supply network, as well as sewage network are established within the zone;
- In terms of energy infrastructure in industrial zone is equipped with electro energetic network, as well as gas distribution network.
- In terms of transport infrastructure, the zone is equipped with roads.
- In terms of other infrastructure, industrial zone is equipped with telecommunication network, as well as public lightening.

Incentives

Incentives in Enterprise zone Luka at the moment are not available for possible investors but will be discussed at the beginning of next year according to municipality officials.

The latest transactions within the zone

Last transaction within the zone Luka happened with company Euros which both industrial land for their own needs.

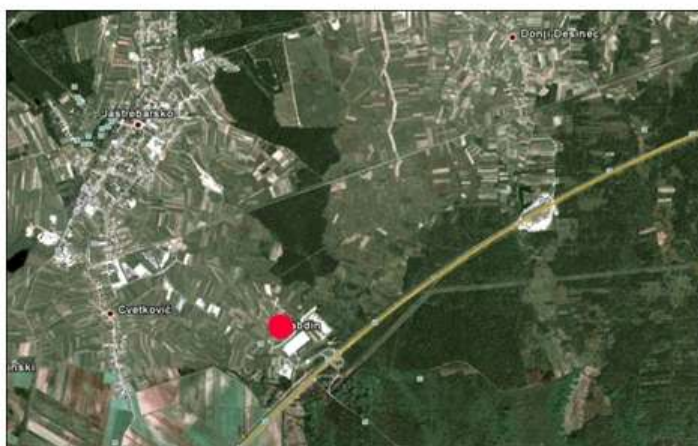
INDUSTRIAL ZONE JASTREBARSKO-JALSEVAC

Location and size

Industrial zone Jastrebarsko-Jalsevac is located about 20 km south-west from the capital city of Zagreb right next to Rijeka-Zagreb-Budapest (E65, E71, A1) international highway. Zone is 120 km away from Rijeka Harbor, 30 km away from Republic of Slovenia state border and 100 km away from the Republic of Hungary state border. International railway path M202 is less than 1 km away from the zone.

Industrial zone Jastrebarsko-Jalsevac encompasses an area of approximately 300 hectares, out of which is about 100 hectares available for sale. Currently there is no intention of extending the zone.

In the following picture we have presented the industrial zone Jastrebarsko-Jalsevac.



Source: Google maps, Colliers Research

Ownership structure of the industrial zone

The most land lots within industrial zone Jastrebarsko-Jalsevac are privately owned, (approximately 90% of total land within the zone), while only few of them, which makes about 10% of total land is owned by the municipality.

One of the bigger owners is company Immorent which planned to construct modern logistics park but due to financial conditions on the market project is temporary cancelled.

Existing infrastructure

Existing infrastructure within the industrial zone Jastrebarsko-Jalsevac includes the following:

- In terms of utility infrastructure, water supply network, as well as sewage network are established within the zone;
- In terms of energy infrastructure in industrial zone is equipped with electro energetic network, as well as gas distribution network.
- In terms of transport infrastructure, the zone is equipped with roads.
- In terms of other infrastructure, industrial zone is equipped with telecommunication network, as well as public lightening.

Incentives

Incentives regarding the communal contributions according to municipality officials are adopted and are available in form of discount of 50% what represents 4,10 EUR per m³. Incentives on communal remuneration are available in form of discount (100% in first year, 75% in second and 25% in third year of business activity).

INDUSTRIAL ZONE JAKOVLJE

Location and size

Industrial zone Jakovlje is located about 25 km south-west from the capital city of Zagreb. The zone is divided into three smaller zones: North 1, North 2 and South. The zones are positioned alongside Vienna-Maribor-Zagreb (E59, A2) international highway. Rijeka Harbor is 185 km away from the zones while state border with Republic of Slovenia is 15 km away from the zone. International railway path R201 Zagreb-Zabok-Varazdin is 3 km away from the zone.

Industrial zone Jakovlje is comprised of three smaller zones (North 1, North 2 and South zone) in sizes from 7, 11 and 15 hectares, respectively, out of which available land for sale comprises of approximately 20 hectares.

In the following picture we have presented the industrial zone Jakovlje.



Source: Google maps, Colliers Research

Ownership structure of the industrial zone

The land within industrial zone Jakovlje is in totally in private ownership.

Existing infrastructure

Existing infrastructure within the industrial zone Jakovlje includes the following:

- In terms of utility infrastructure, water supply network. as well as sewage network is in completion phase of construction;
- In terms of energy infrastructure in industrial zone is equipped with electro energetic network, as well as gas distribution network.
- In terms of transport infrastructure, the zone is equipped with roads.
- In terms of other infrastructure, industrial zone is equipped with telecommunication network. Public lightening is in process of construction.

Incentives

Incentives on communal contributions are available in form of discount up to 50%. Those incentives are negotiable with municipality officials after the project is being presented.

Currently present investors in the industrial zone Jakovlje

The only project so far started in this zone is construction of new factory from Company Eurocable Group d.d.

INDUSTRIAL ZONE IVANIC-GRAD

Location and size

Industrial zone Ivanic-Grad is located about 45 km south-east aloof from the capital city of Zagreb and it is comprised of three zones: South, East and North. The zones are located right next to Bregana-Zagreb-Lipovac (E70, A3) highway. International railway path M103 Ljubljana-Zagreb-Belgrade and Ljubljana-Zagreb-Budapest passes through these three zones. State border with Republic of Slovenia is 75 km away while state border with Republic of Hungary is 125 km away from the zones.

Industrial zone Ivanic-Grad encompasses total area of 554 hectares, out of which is approximately 240 hectares available for sale. At the moment there is no intention of further expansion of these three zones. As it is mentioned before, the zone is divided into three zones: The South zone with an area of 136 hectares, The East zone with an area of 304 hectares and The North zone with an area of 114 hectares.

In the following picture we have presented the industrial zone Ivanic-Grad.



Source: Google maps, Colliers Research

Ownership structure of the industrial zone

Approximately 140 hectares of available land belongs to City of Ivanić-Grad while rest of the land (100 hectares) is privately owned.

Existing infrastructure

Existing infrastructure within the industrial zone Ivanić-Grad includes the following:

- In terms of utility infrastructure, water supply network, as well as sewage network are established within the zone;
- In terms of energy infrastructure in industrial zone is equipped with electro energetic network, as well as gas distribution network.
- In terms of transport infrastructure, the zone is equipped with roads.
- In terms of other infrastructure, industrial zone is equipped with telecommunication network, as well as public lightening

Incentives

Incentives regarding communal contributions of EUR 6,16 per m³ are available in form of discounts divided into three categories:

- Size of investment (5% on investments bigger than EUR 2.750.000);
- Type of activity (industrial 10%);
- Number of newly employed workers (5% on more than 100 newly opened working positions);

Incentives regarding communal remuneration are available in form of 100% discount in first year, 75% in second, 50% in third and 25% in fourth year of business activity.

The latest transactions within the zone

The last transaction happened with company called INGRA which bought industrial land lot.

INDUSTRIAL ZONE PRIKRAJ BOZJAKOVINA-BRCKOVLJANI

Location and size

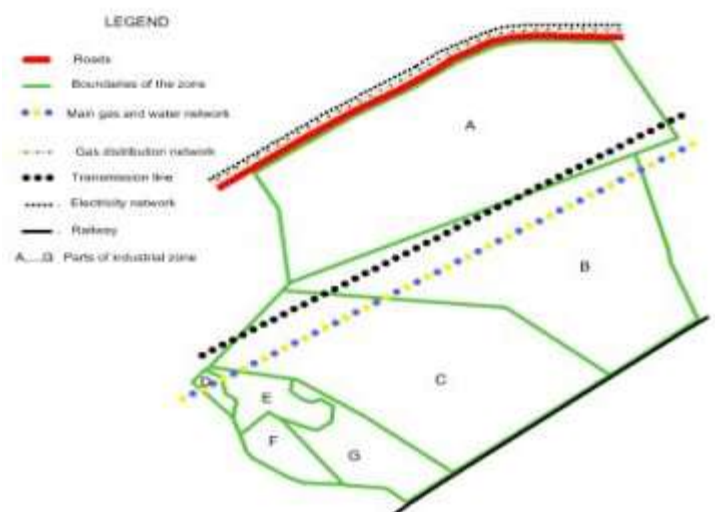
Industrial zone Prikraj-Bozjakovina is located about 20 km north-east from city of Zagreb in municipality of Brckovljani. Zone is situated alongside Bozjakovina economic system on the county road Z 3074 which leads toward Bregana-Zagreb-Lipovac (E70, A3) highway. On the other side, county road Z 3017 leads toward Pan-European traffic corridor 5B, Rijeka-Zagreb-Budapest (E65, E71, and A4) highway. The zone is 9 km away from entry to the A4 highway and 22 km away from the entry to the A3 highway. International railway path M201 is 3 km away from the zone.

Industrial zone Prikraj-Bozjakovina encompasses an area of approximately 75 hectares, out of which is 42 hectares available for sale. There is an intention of expansion of the current enterprise zone Bozjakovina of 23 hectares of land which is located right next to it.

In the following map and picture we have presented the industrial zone Prikraj-Bozjakovina.



_Source: Google maps, Colliers Research



Source: www.brckovljani.hr

Ownership structure of the industrial zone

The land within industrial zone Prikraj-Bozjakovina is in totally in ownership of the municipality.

Existing infrastructure

Existing infrastructure within the industrial zone Prikraj-Bozjakovina includes the following:

- In terms of utility infrastructure, water supply network, as well as sewage network are established within the zone;
- In terms of energy infrastructure in industrial zone is equipped with electro energetic network.
- In terms of transport infrastructure, the zone is equipped with roads.
- In terms of other infrastructure, industrial zone is equipped with telecommunication network.

Incentives

Incentives regarding the communal contributions according to municipality officials are adopted and are available in form of discount up to 40% in case that building permit is acquired in 15 months period after the ownership of land from the municipality to investor is transferred. Incentives regarding the communal remuneration are not available at the moment.

The latest transactions within the zone

The last transaction happened in this zone was with the company called DTR which bought 10 hectares of land within the zone.

OLD INDUSTRIAL COMPLEXES



OLD INDUSTRIAL COMPLEXES

In the former Yugoslavia, after the abolition of the Law on Associated Labor and especially after the implementation of ownership transformation and privatization of socially owned enterprises, there is the break-up of old industrial zones. The old industrial zones in Serbia were the core of its republican and regional economic development. The old industrial complexes were spread out at intersections main roads, near the railway areas and rivers. Old industrial complexes were represented by the concentration of factory and administrative, engineering, commercial and marketing operations halls and warehouses for raw materials and finished products. During the industrial transition process, old industrial complexes have been hit so far. Previous industrial giants today are inflexible systems with outdated technology, unused capacities, etc. A large number of these companies have successfully been restructured, while the rest of them filed for bankruptcy, such as enterprises in sectors of production of transportation vehicles, electronic industry, non-ferrous metallurgy, cellulose production, production of paper, food processing complex, etc. These zones were well equipped and infrastructure connected to the necessary utility and power networks. Among the biggest industrial areas were those that were located in large cities such as Belgrade, Novi Sad, Nis, Kragujevac, Zrenjanin, Sabac, Kikinda, Valjevo, etc. As well, in smaller Serbian cities (Sombor, Sremska Mitrovica, Pirot, Apatin, Pozarevac, etc) old industrial zones have been concentration production facilities and they represented systems of economic and social development of their environment. These old industrial complexes command with huge, more or less neglected complexes that have a brown field character on very attractive populated locations. For example In Sombor in nineties of last century, after the transition and ownership transformation of SOEs, as well as in other cities of former Yugoslavia and Serbia, failed or significantly economically weakened large number of business enterprises. It is primarily the Agricultural Combine "Sombor", then the giants of the food industry and its manufacturing - Factory of ready meals and meat products "Panonka", Oil Industry "Inus" , Production of cattle food Zadrugarka, Production and seed processing "Seme-Sombor",. In this decay, a similar fate had a metal factory production "Bane Sekulic" and battery factory "Trepca". In Sombor in these years of transition collapsed the textile factory and woolen knitwear factory "Vesna", as well as production of gloves and other leather accessories "Red Star". In Pozarevac in nineties of the last century, after the transition and ownership transformation of SOEs, failed or weakened, many business enterprises, such as: Meat industry, "Voce produkt", Production of cattle food, Garment factory "Ceba etc. Old industrial areas were urban, architectural and environmental sites regulated. It was concerned about the protection of nature and the specific environment. Today, some of these objects are taken over by foreign and domestic investors. Old industrial complexes still present important development potential for a possible conversion and development of new production or service industry as models of new industrial zones or parks.



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Annex 2

Water and sewerage tariffs in Vladicin Han



**JP ZA VODOSNABDEVANJE
I KANALIZACIJU
«VODOVOD»
VLADIČIN HAN**

CENOVNIK PROIZVODA I USLUGA

**CENOVNIK ZA UTROŠENU VODU IZ GRADSKE MREŽE I ZA KORIŠĆENJE
KANALIZACIJE**

Red. broj	Kategorija korisnika	Jed. mere	Cena vode	Cena kanal.
1	Domaćinstva, dozvoljena količina 5 m ³ po članu	m ³	32,00	9,50
2	Domaćinstva koja u toku meseca potroše više od dozvoljene količine vode, razliku plaćaju po ceni	m ³	76,00	9,50
3	Ustanove	m ³	57,00	9,50
4	Ostali korisnici	m ³	76,00	17,50
5	Domaćinstva koja koriste vodu sa sopstvenih vodova a priključeni su na kanalizaciju, obračunava se po članu 5 m ³	m ³		9,50
6	Tekuće održavanje vodovodne mreže	Po vodomeru	50,00	

POSEBNE KOMUNALNE USLUGE

Red. broj	VRSTA USLUGA	Cena
1	Priključna taksa na vodovodnu mrežu od 1"-2"	13.897,00
2	Priključna taksa na vodovodnu mrežu od 2"-ø 200	23.162,00
3	Priključna taksa na kanalizaciju	9.265,00
4	Priključna taksa poslovnog prostora na vodovodnu mrežu od 1"-2"	21.546,00
5	Priključna taksa poslovnog prostora na vodovodnu mrežu od 2"-ø200	35.910,00
6	Priključna taksa poslovnog prostora na kanalizaciju	18.530,00
7	Odvajanje dvojnog priključka i registracija potrošačkog broja	7.182,00
8	Troškovi ponovnog priključenja zbog isključenja sa vodovodne mreže (zbog neplaćenih računa, po nalogu sanitarne inspekcije i sl.) za fizička lica	7.182,00
9	Troškovi ponovnog priključenja zbog isključenja sa vodovodne mreže (zbog neplaćenih računa, po nalogu sanitarne inspekcije i sl.) za pravna lica	14.364,00
10	Izdavanje saglasnosti na projektnu dokumentaciju za fizička lica čiji objekat ima osnovicu do 100 m ²	7.182,00
11	Izdavanje saglasnosti na projektnu dokumentaciju za fizička lica čiji objekat ima osnovicu preko 100m ²	14.364,00
12	Izdavanje saglasnosti na projektnu dokumentaciju za pravna lica	23.162,00
13	Izlazak na licu mesta radi davanja uslova priključka i saglasnosti udaljenosti do 2 km	1.724,00
14	Izlazak na licu mesta radi davanja uslova priključka i saglasnosti udaljenosti do 5 km	2.011,00
15	Izlazak na licu mesta radi davanja uslova priključka i saglasnosti udaljenosti preko 5 km	2.442,00

Na sve stavke u cenovniku zaračunava se porez na dodatu vrednost predviđena zakonom o PDV-u za komunalne usluge.

JP «VODOVOD»



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Annex 3

Waste collection tariffs in Vladicin Han





PORR – WERNER & WEBER – LESKOVAC D.O.O.
 Ul. Sime Pogačarevića br. 3, 16000 Leskovac
 Tel.Fax: 016 245302, 234541



Na osnovu člana 2. i člana 3. Ugovora o poveravanju posla sakupljanja, odvoženja i deponovanja smeća br.2074 od 02.10.2008. godine, zaključenog između Opštine Vladičin Han, Kompanije Porr – Werner & Weber doo Niš i Društva PWW – Leskovac doo i Memoranduma o budžetu o ekonomskoj i fiskalnoj politici za 2009. godinu sa projekcijama za 2010. i 2011. godinu, Zaključka Opštinskog veća opštine Vladičin Han broj 06-4/5/2011-01 od 04.02.2011. godine, Direktor PWW – Leskovac doo overava sledeći:

CENOVNIK -VLADIČIN HAN-

P.W.W.-LESKOVAC DOO

BR. 352/1

04. 02. 20 11 God.

LESKOVAC

KATEGORIJA KORISNIKA

Cena
sakupljanja
i odvoza smeća

I Domaćinstva

1. Po članu domaćinstva
2. Dvorišno – vrtno smeće – paušalno

II Pravna lica

- | | |
|--|-----------------------------------|
| 1. Pravna lica koja se bave industrijskom proizvodnjom | 5,11 din./m ² – 5,52 |
| 1a. Preko 1000 m ² ukupne površine za saobraćajnice, parking prostor i trotoare | 2,56 din./m ² – 2,76 |
| 2. Pravna lica koja se bave zanatskom proizvodnjom | 7,67 din./m ² – 8,28 |
| 3. Pravna lica koja se bave ugostiteljstvom, trgovinom i uslugama | 9,50 din./m ² – 10,26 |
| 3a. Preko 1000 m ² ukupne površine za saobraćajnice, parking prostor i trotoare | 4,75 din./m ² – 5,13 |
| 4. Fakulteti, škole, ustanove i vojska | 6,93 din./m ² – 7,48 |
| 5. Javna i javno komunalna preduzeća, organi uprave, državne ustanove | 11,32 din./m ² – 12,22 |



PORR – WERNER & WEBER – LESKOVAC D.O.O.
Ul. Sime Pogačarevića br. 3, 16000 Leskovac
Tel.Fax: 016 245302, 234541



6. Banke, agencije, osiguravajuća društva, predstavništva, preduzetnici koji se bave trgovinom, ugostiteljstvom i uslugama

16,82 din./m² - 18,16

III Deponovanje smeća

Napomena: Cene usluga date su bez PDV-a koji je 8% za ove usluge.
Cenovnik se primenjuje i važi počev od 01.01.2011. godine.

U Leskovcu,
04.02.2011.g.

PWW – Leskovac DOO
Direktor
Slobodan Cvetković



Slobodan Cvetković



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Annex 4

Environmental and social impact assesement





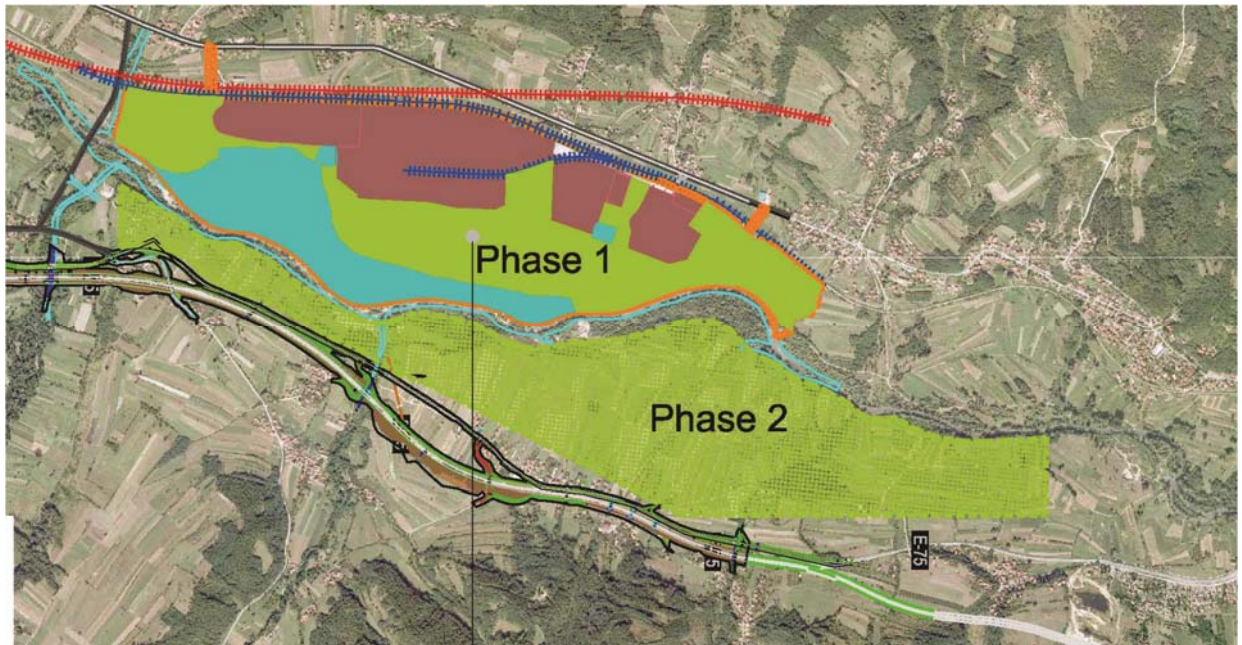
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Industrial zone "Jug" in Vladicin Han

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT



Municipality Vladicin Han

28th December 2011

Draft

CRIS 223 – 292 (08/SER01/13/21)

P2011-2



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ROYAL HASKONING



International



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Document title Industrial zone "Jug" in Vladicin Han
Environmental and Social Impact Assessment

Document short title ESIA FS IZ Vladicin Han

Status Draft

Date 28 December 2011

Project name Feasibility Study – Development of industrial zone in Vladicin Han

Project number CRIS 223 – 292 (08/SER01/13/21)

Client Municipality Vladicin Han

Reference number P2011 - 2

Drafted by Branislav Sekulovic

Checked by

Date/initials check

Approved by

Date/initials

29, December, 2011
ESIA Vladicin Han
Draft
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List of Acronyms and Abbreviations

Acronyms & Abbreviation	Description
a.s.l	above sea level
BOD	Biological Oxygen Demand
COD	Chemical Oxygen Demand
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ESIA	Environmental and Social Impact Assessment
EU	European Union
FS	Feasibility Study
GWL	Groundwater Level
IBA	Important Bird Areas
MAC	Maximum Allowed Concentrations
RHMZRHMI	Republic Hydro-Meteorological Institute
TSS	Total Suspended Solids

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1 INTRODUCTION

1.1 Background

This Environmental and Social Impact Assessment (ESIA) Report is undertaken as a part of Feasibility Study (FS) related to the Project of redevelopment of the existing industrial zone “Suva Morava” in Vladicin Han , Serbia. The FS and related ESIA Report are prepared by the consortium Eptisa Group, Royal Haskoning and VNG as a part of the MISP (Municipal Infrastructure Support Programme), financed by EU and managed by the Delegation of the European Union to the Republic of Serbia. MISP assists municipalities in Serbia in the preparation of project documentation and implementation of municipal infrastructure projects.

The ESIA Report relates to the environmental and social aspects of this project. It is focused on the overall environmental sensitivity of the proposed location and identifies potential environmental and social concerns and benefits related to this project. This report does not refer to any specific industry, because at this stage of the project is not known what the industry will be present in the future industrial zone. This report has identified and analyzed general expected environmental and social impacts and based on that diversity of mitigation measures were defined and proposed. It is recommended that mitigation measures resulted from this ESIA Report should be incorporated into the further stages of project development (Conceptual Design, EIA, Main Design etc).

The ESIA Report was prepared in the period July 2011 – December 2011. Environmental team that worked on this Study included international and local environmental experts supported by other project team members (construction engineers, architects, social expert, etc).

1.2 EIA Procedure in Serbia

Since 2004 there has been in Serbia a process of convergence to the European Union through the transposition of EU legislation that will greatly facilitate the implementation of this requirement. Recently enforced EIA legislation, fully harmonized with the EU Directive 97/11/EC, includes the following documents:

- Law on Environmental Impact Assessment (Official Journal of RS, No. 135/2004)
- Decree on determining the List of projects for which the Environmental Impact Assessment is mandatory and the List of projects for which the Environmental Impact Assessment may be required (Official Journal of RS, No. 114/2008)
- Regulation on the procedure for public participation concerning EIA Study (Official Journal of RS, No. 69/2005)
- Regulation on the contents of the formal request for determining the necessity of EIA and the contents of the formal request for determining the scope of an EIA Study (Official Journal of RS, No. 69/2005)



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- Regulation on the contents of an Environmental Impact Assessment Study (Official Journal of RS, No. 69/2005)

The full EIA procedure set in the 2004' Law on EIA comprises the phases of screening, scoping, assessment and public consultation. The formal EIA procedure in Serbia is not started until the stage of the project when the permits for commencement of construction works and operation are applied for.

Environmental aspects of the project of development of industrial zone in Vladicin Han are analyzed by the Strategic Environmental Impact Assessment (SEIA) process. SEIA was done in 2010 referred to the Detailed Regulation Plan for Industrial zone Suva Morava. SEIA Report was prepared by Serbian urban planning company Juginus, Belgrade.

One of the recommendations of the SEIA Report indicated that all of the future projects/developments within the industrial zone (new industrial facilities) need to be the assessed through the project specific EIA process, adopted by municipal environmental authority.



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2 PROJECT DESCRIPTION

2.1 Background

The project area (Figure 2.1) is located about 330 km south of Belgrade and is located in the town of Vladicin Han, situated in the south-eastern Serbia, in the district of Pcinja. The total surface of the municipal area of Vladicin Han is 366 km² with total population of 21.000. The town itself has population of 8.300 (Census in 2011).

The wider location of the project area is shown in Figure 2.1.

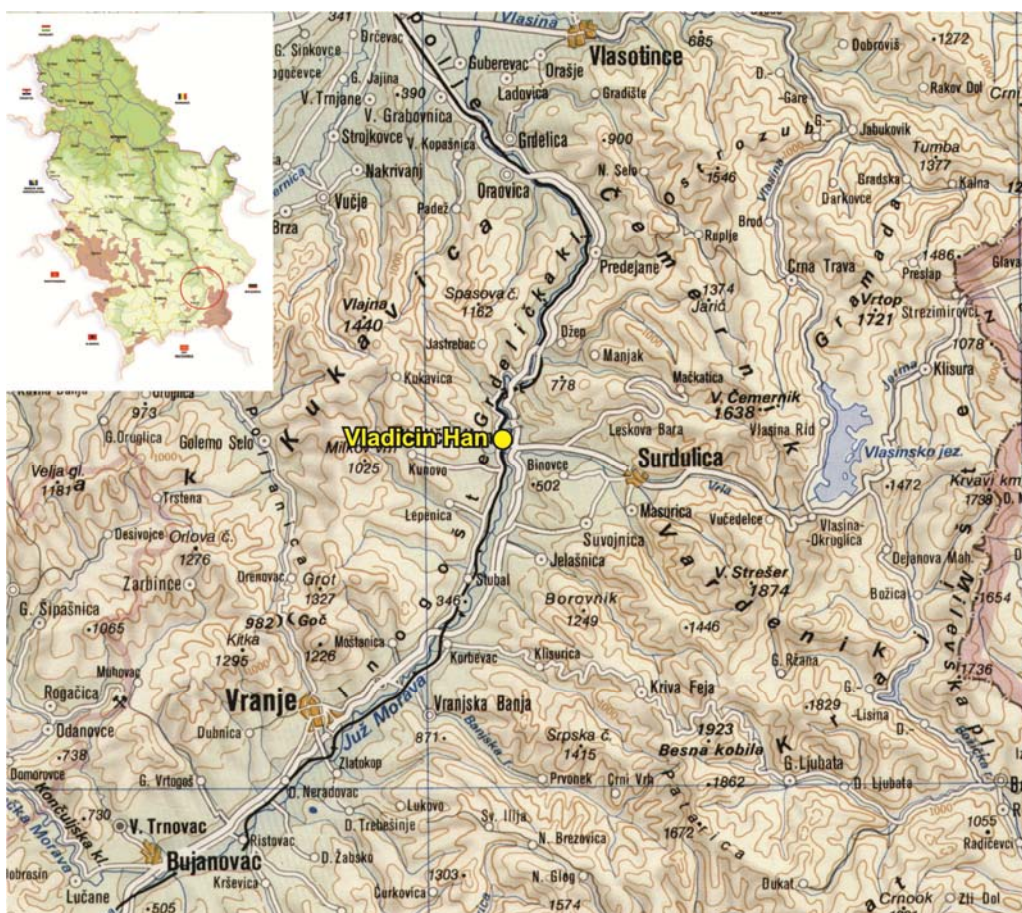


Figure 2.1 Wider project area

The project area presents the existing industrial zone in the outskirts of the town of Vladicin Han, about 4 km south of the town. It belongs to the municipality of Vladicin Han, which is among the poorest municipalities in the country. According to the *Law on regional development (Off. Journal of RS, No. 51/09)*, the municipality of Vladicin Han belongs to the





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group of devastated municipalities (having the level of development more than 50% lower of the country average).

Historically, the industry in Vladicin Han started to develop during the 1950s and was operational until the 1990s when it was heavily impacted by the economic crisis in the country. After the 1990s, the companies have been heavily struggling the low effectiveness due to the obsolete technology, surplus of employees and lack of customers. The existing industrial zone comprised 12 facilities whose operations have been reduced over the years and currently only few of them are still operational. The number of employees has reduced from 6,000 (before 1990) to today's 400. Following the reduction of industrial activity, the socio-economic conditions in the municipality have worsened, resulting in impoverishing effects of the unemployment increase.

Redevelopment of the existing industrial zone is regarded as an important prerequisite for economic recovery of the municipality by creating the favourable conditions for increase of industrial activity. The location of the industrial zone is considered particularly beneficial in respect to connection to important transport corridors (the E-75 highway - corridor X, the railroad from the city Nis to Macedonia and the airport of Nis).

The project is focused on the redevelopment of the existing industrial zone "Suva Morava" by its enlargement and acquisition of vacant greenfield areas to the existing brownfields. Demand analysis shows that there is a need for about 50 hectares of land to satisfy the projected creation of about 5,000 new jobs by 2020 and a need for an extra 50 hectares to ensure flexible development and extension. The existing regulation plan which covers about 139 hectares of brownfield and greenfield development shows that for greenfield development about 47 hectares net is available for industrial plots. An additional 47 ha of brownfield factories can also be available but the uptake will depend on investor's assessment.

Besides the enlargement, the industrial zone is proposed to be improved in respect to the following infrastructure: (1) road network, (2) water supplying network, (3) wastewater infrastructure, (4) electricity and telecommunications network.

On one hand, the redevelopment is expected to provide positive economic conditions for the municipal development. On the other hand, the location of the proposed development is related to certain environmental concerns which are necessary to be assessed and mitigated in order to prevent any negative environmental impacts or long-term effects.

29, December, 2011

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2.2 Project options

The “Do Nothing” scenario for this project would result in the socio-economic status-quo in this economically devastated municipality. New employment opportunities would not be created, the average income would remain on the current level. The active workforce of Vladicin Han population would have quite limited choice in respect to earning for living. The rate of migration to largest towns and cities would remain high which would further decrease population in the municipality.

Therefore, this scenario can't be accepted. Three concepts have been developed to satisfy the potential demand for 2020 and beyond as follows:

Concept 1 – Industrial zone developed at one location (A-Suva Morava)

Concept 2 – Industrial zone developed at two locations (A - Suva Morava and B – Stubal)

Concept 3 – Industrial zone developed at three locations (A - Suva Morava, B - Stubal and C – Priboj)

These project options (concepts) are further referred in the ESIA report as Concept 1, Concept 2 and Concept 3 and described in the chapters below.

2.2.1 Concept 1

According to the concept I, industrial development is planned in one location A - Suva Morava, on the both banks of the river South Morava.

At present, brownfield occupies 47 ha on the left bank of the South Morava River. On the left bank there is 34 ha the land owned by Republic of Serbia containing water source Suva Morava and flood protection dikes. According to this concept - greenfield could be developed on 64 ha on the left bank of the river South Morava and 127 ha on the right bank of the South Morava river. Land for the industrial development in the phase 1 is bounded by the railway corridor and regional road and rivers Lepenica and South Morava. Land to be developed in the phase 2 is located between river South Morava and Corridor X.

Project should result in infrastructure improvement and construction works planned in two phases. Access from the industrial zone to the Corridor X is the same for the both phases and has to be constructed into phase 1. Other infrastructure, such as water supply, wastewater collection and treatment, electro power supply and telecommunication has to be constructed in two phases.

Development of Concept 1 is graphically presented at the Figure 2.2:



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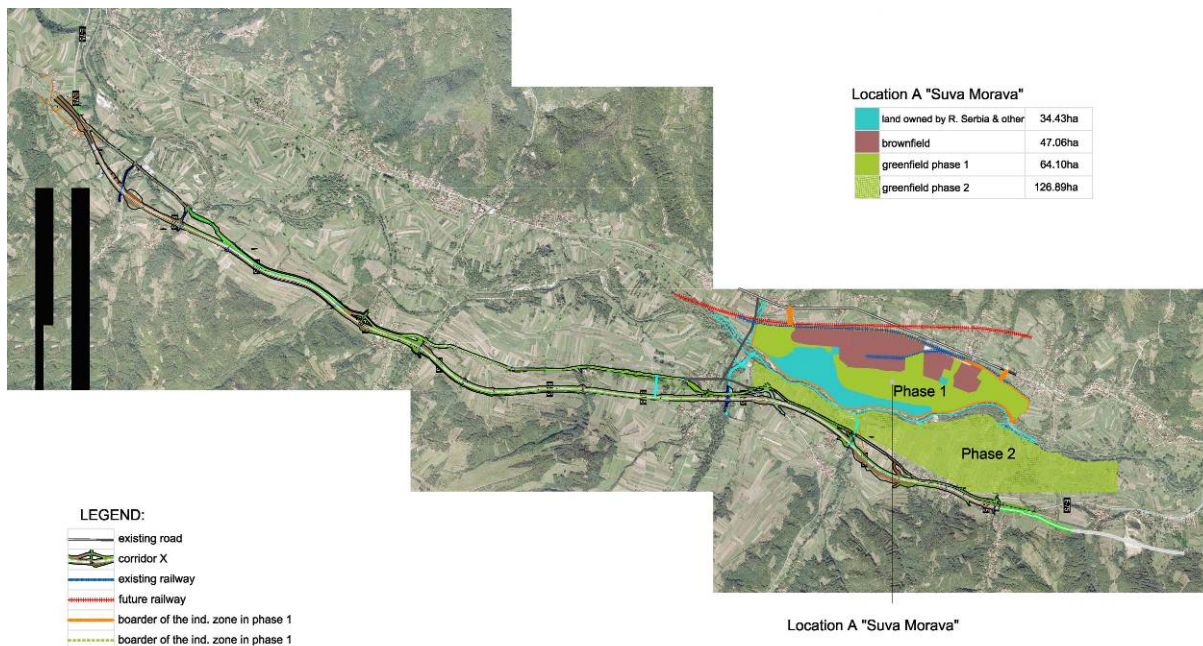


Figure 2.2: Concept 1 – Industrial zone developed in two phases at one location

2.2.2 Concept 2

Concept 2 proposes industrial development in two locations - Suva Morava and Stubal, on the left bank of the river South Morava.

At present, brownfield occupies 47 ha at the location A - Suva Morava and the 34 ha of land owned by Republic of Serbia. Greenfield could be developed in location A - Suva Morava on 64 ha on the left bank and 47 ha on the right bank of the river South Morava and 106 ha in location B - Stubal.

Development of Concept 2 is graphically presented at the Figure 2.3:



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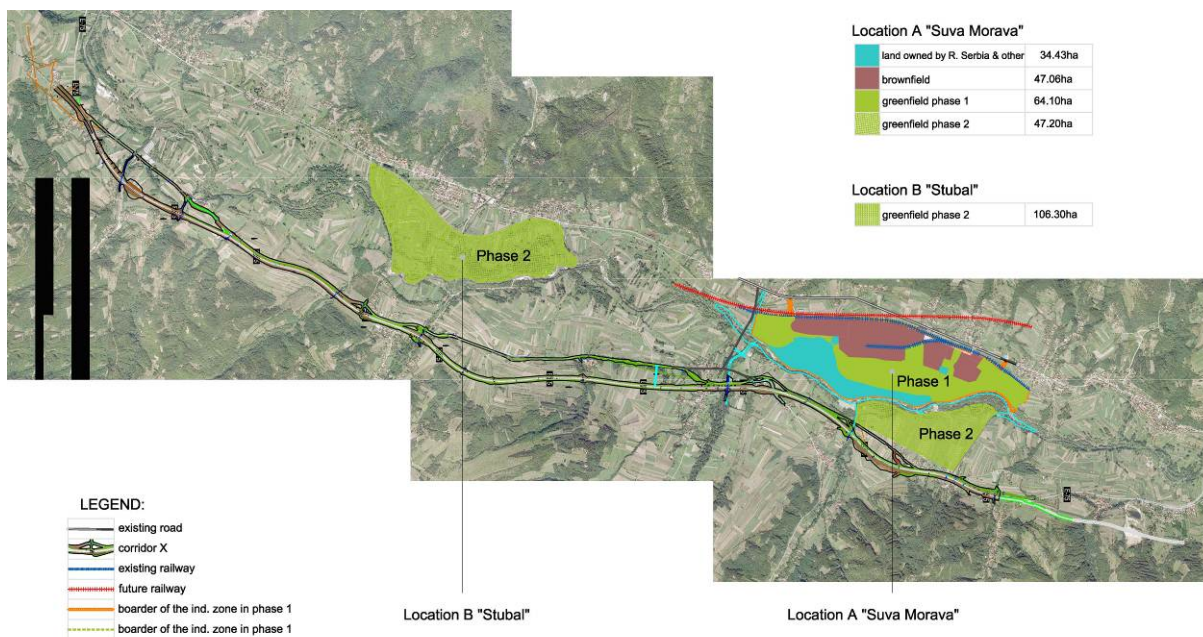


Figure 2.3: Concept 2 – Industrial zone developed in two phases at two locations

2.2.3 Concept 3

Concept III proposes industrial development in three locations - Suva Morava, Stubal and Priboj, on the left bank of the river South Morava.

At present, brownfield occupies 47 ha at the location A - Suva Morava and the 34 ha of land owned by Republic of Serbia. Greenfield could be developed on 64 ha in location A - Suva Morava, 106 ha in location B - Stubal and 108 ha in location C - Priboj

Concept 3 is graphically presented at the Figure 2.4:



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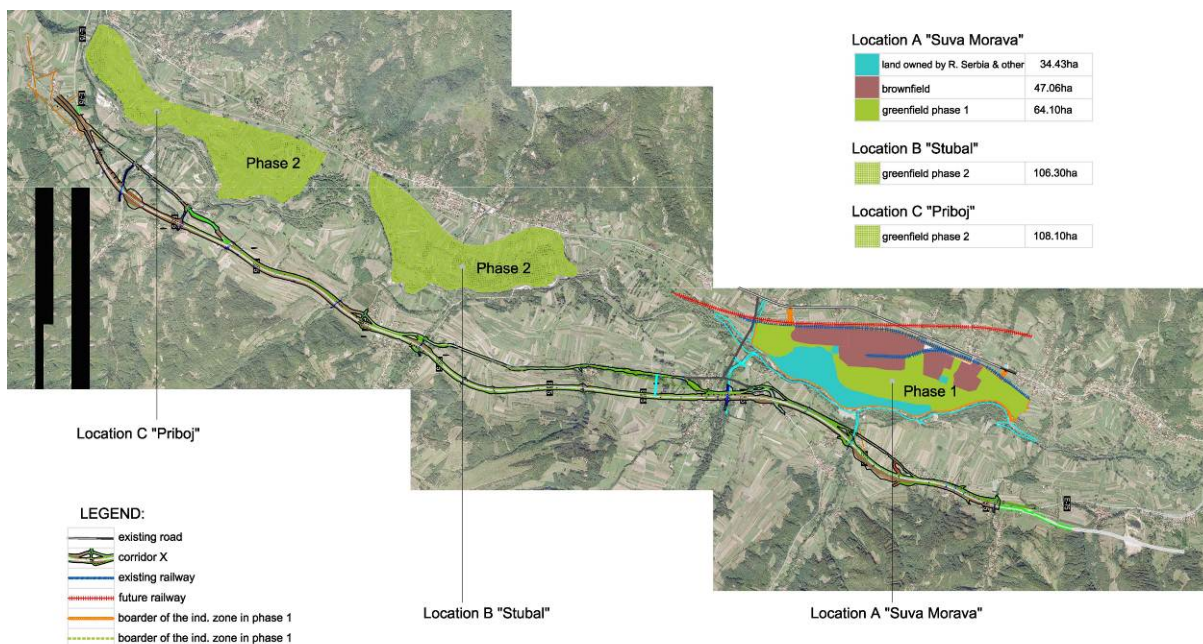


Figure 2.4: Concept 3 – Industrial zone developed in two phases at three locations

2.3 ESIA Scope

The proposed project development concepts do not differ significantly in respect to environmental sensitivity and vulnerability. All three proposed concepts envisage the development of industrial zones at the South Morava River bank, having similar environmental settings (hydrological, topographical, etc.). Dislocated from highly sensitive receptors, all the three proposed sites could be assessed as sites of a similar environmental sensitivity (low-medium).

Given that this Feasibility Study indicates the Concept No. 1 as the most feasible for initial development, this ESIA Study has been focused to analyze this concept developed at the Suva Morava site.



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3 ENVIRONMENTAL AND SOCIAL SETTINGS

Baseline assessment of the project area has been performed in the initial stage of the project and included analyses of the **environmental** (local topography, climate, geology, hydrogeology, hydrography and hydrology, flora, fauna, natural values, landscape) and **social conditions** (demography, infrastructure, economy, health, tourism and cultural heritage). The main findings of the project area analysis are presented in this chapter.

3.1 Description of the Environment

3.1.1 Topography

Vladicin Han is located in the South Morava river valley, between the Grdelica gorge (on the north) and the Vranje valley (on the south). The town area is situated at altitudes between 315 and 450 m a.s.l, with the central part of the settlement being at about 340 m a.s.l. Wider area of the town has hilly to mountainous relief, surrounded by the Kukavica mountain (1442 m a.s.l) on the west and the Cemernik (1638 m a.s.l) on the east. The town itself is situated on the both South Morava river banks, in a flat terrain.

The topography of the wider area is shown in Figure 3.1.



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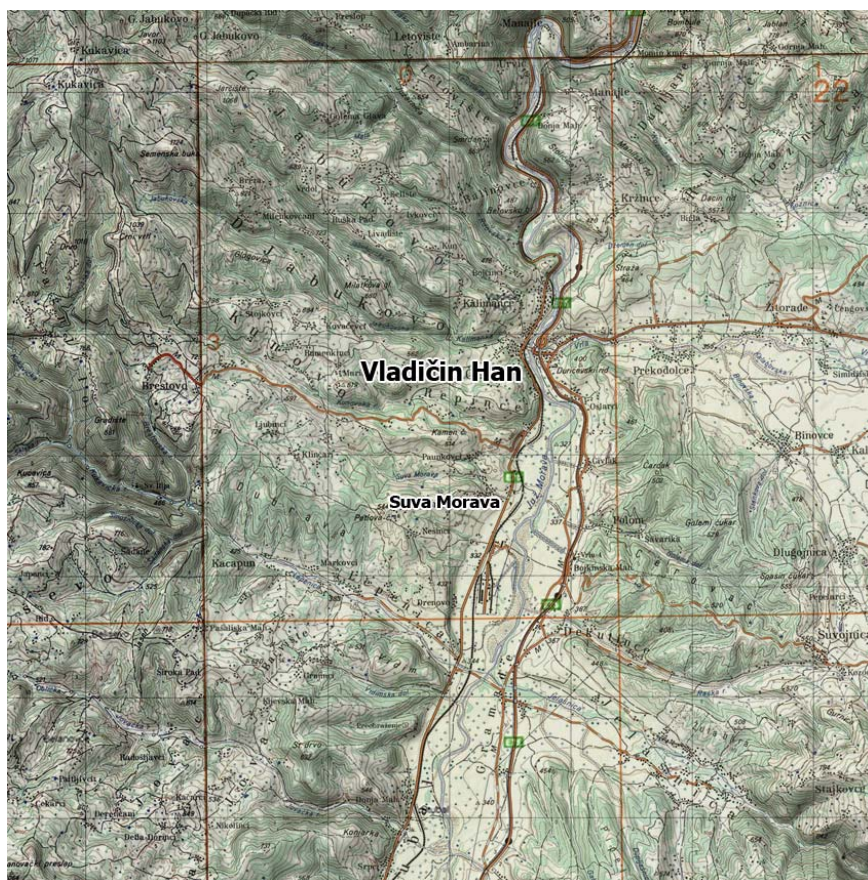


Figure 3.1 Topography of the wider project area

3.1.2 Climate

The climate of the Vladicin Han municipality is a semi-continental with minor variations depending on the altitude. Generally, the summers are warm, the autumn is colder than the spring, the winters are moderately cold. The town of Vladicin Han is situated in the valley of the South Morava river, therefore its climate settings differ than the closest mountainous areas of the Kukavica and Cemernik.

The project area is morphologically “protected” by the gorge of Grdelica which reduces the impact of cold air streams in the winter and results in a relatively mild winters. The average annual temperature in the town of Vladicin Han is 11.1° C, the warmest month is August (average temperature is 21.5° C), the coldest is January (average temperature is 0.1° C). Average rainfall in Vladicin Han is 715 mm/m² (November is the highest precipitation month, 92 mm/m², July is the lowest, 35.5 mm/m²). Mean duration of snow cover in Vladicin Han is 38 days.



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Given the town of Vladicin Han is situated in the river valley of the South Morava, the area is exposed to permanent wind, during all seasons and in all directions. The prevailing wind directions are north-east and north. Period of silence is the most frequent in the winter.

Period of frost starts between the mid-October and beginning of November and lasts until mid-April. Mean annual humidity is about 70%, particularly in the winter period. Morning haze and fog is frequent in the South Morava river valley.

3.1.3 Air Quality

Given the low level of industrial activity, no significant air pollution sources are present in the project area. During the winter season, the air quality is impacted in the town area of Vladicin Han by the emissions of particulate matter, SO₂ and NO_x from individual sources for combustion of fossil fuels, for heating purpose. Another air pollution source is traffic along the regional road R-214. However, the overall air quality is good and the assimilative capacity is sufficient for the potential air emissions from the industrial zone.

3.1.4 Hydrography and Hydrology

Hydrographic network of the project area is moderately dense with moderate average discharge. Surface flows in the project area belong to catchment area of the River West Morava (the Black Sea basin). The largest river in the area is the South Morava.

Vladici Han town lies in a valley formed by few rivers: the South Morava river, the Vrla and the Kalimanka. The rivers in the area are characterized by their torrent flow with significant variations depending on the season. In the summer period flow rates are usually low and this has an additional impact on water quality degradation.

The South Morava river is the main recipient of surface waters in the area. The river runs in south-north direction, bending and forming meanders. The South Morava tributaries are mountain rivers with torrential flow causing the significant load of sediment in the river and erosion of the banks. Mean annual flow rate of the South Morava is 19.6 m³/s and mean water level is about 100 cm. Given that the South Morava flow rate is heavily impacted by the hydrological regime of its tributaries, the highest flow rates (30-40 m³/s) usually occur in the spring. The lowest recorded flow rate of the South Morava was 0.4 m³/s. The difference between the highest and the lowest flow rate indicates the torrential character of the South Morava.

The largest tributary of the South Morava, in the project area, is the Vrla river. The river originates in the mountain of Vardenik (at 1,604 m a.s.l) and joins the South Morava near the town of Vladicin Han (at 323 m a.s.l). Passing the length of about 15 km, the Vrla river rapidly descends for about 885 m and therefore is a rather important for hydropower generation since four hydropower plants (Vrla I, II, III and IV) were installed on the river.



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Flooding occurs during the high rainfall periods in the area of Vladicin Han town. The catchment area is relatively rich in natural springs, especially in mountains areas. There is also a large number of small mountain creeks with torrent flow.

The hydrographic network of the project area is presented in the Figure 3.2.

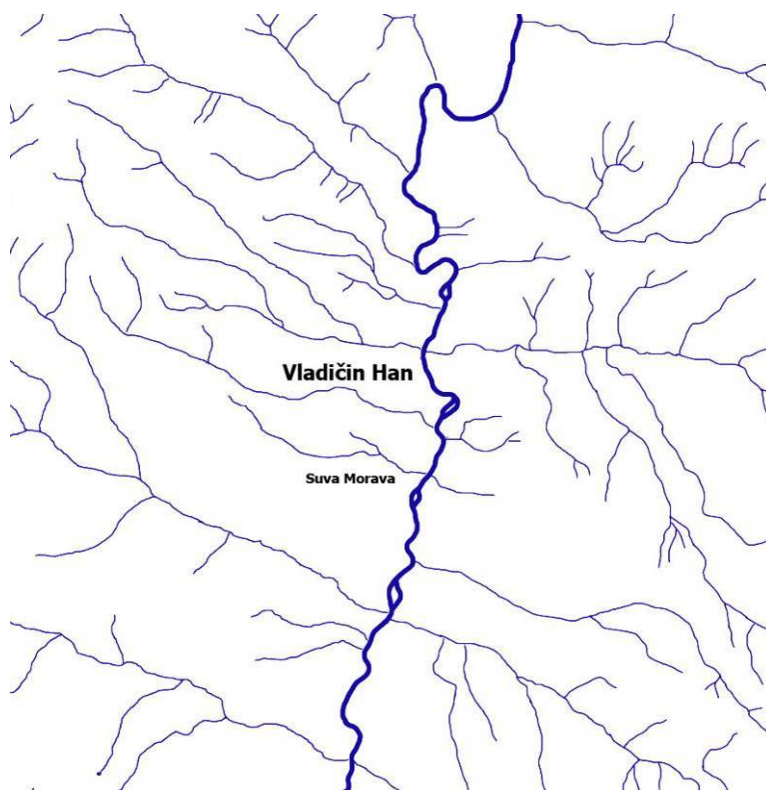


Figure 3.2 Hydrographic network of the project area

3.1.5 Surface Water Quality

The main legislative document in Serbia related to the surface water quality is the *Law on water (Off. Journal of RS, No. 30/10)*. Currently, the process of full implementation of the Law has been ongoing through enforcement of recently published by-laws.

Therefore, the requested quality of watercourses is still defined by the *Decree on categorization of watercourses (Off. Jour. of SRS, No. 5/68)*. The 1968' Decree classifies surface water into four quality classes. Being outdated, this practice has been abandoned in the EU and improved by requirements of effluent quality and/or minimal removal efficiency for certain parameters.

“Class one” water quality is defined by the Decree as a water that may be used for drinking in its natural condition. “Class two” defines water that may be used for purpose of recreation but



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can be used for drinking only after the water treatment. “Class three” defines water that can be used for irrigation or in industry (except food industry) only after the usage of (common) treatment techniques. “Class four” defines significantly polluted water requiring adequate treatment in order to be used for any purpose.

Surface water quality in the project area is in a rather poor condition and not in compliance with regulation. The main source of surface water pollution in the project area is discharge of untreated sanitary and industrial wastewaters into the recipients. Another source of pollution are domestic waste dump sites situated along the streams. The South Morava river is the final recipient of wastewater discharged from the municipal area, receiving polluted water from its tributaries, as well (particularly the Vrla River). The river pollution issue is particularly significant during the dry season when the river flow rate is low.

The existing industrial zone “Suva Morava” presented one of the significant pollution sources of the South Morava given the operation of variety of facilities (paper and wood manufacturing, fruit production, metal processing). Today’s level of industrial activity in the zone is rather low and the wastewater generation has been minimized. However, the current state of wastewater infrastructure is not in compliance with legal requirements and needs significant improvement.

The Municipality of Vladicin Han issued the *Regulation on sanitary-technological conditions for wastewater discharge into the public sewage* defining the maximum allowed concentrations of discharged substances.

Public water management company “Vodovod” is in charge for wastewater quality monitoring in the municipality. Wastewater quality samples have been taken from few discharge points from both the South Morava and the Vrla rivers. According to the *Report on wastewater quality for the period 2001-2006* (published by PWMC “Vodovod”), all wastewater samples taken from 2001 to 2004 were not in compliance with the defined MACs. During the 2005, one sample (of 8) was in compliance. During the 2006, four samples (of 22) were in compliance but it was noted they were taken upstream of the discharge point.

The South Morava River quality in 2009, monitored by the Republic Hydro-meteorological Institute at Vladicin Han monitoring station, was in “out of class” category. Concentration of the phenol index in the River was periodically increased.

3.1.6 Geology

Area predicted for development of the industrial zone is located on the left bank of the South Morava River. In terms of geology, the site is located on the alluvial deposits of South Morava River. Alluvial complex is about 5-10 m thick consisting mostly of gravel and coarse sand.

The geology of the wider area is shown in Figure 3.3.

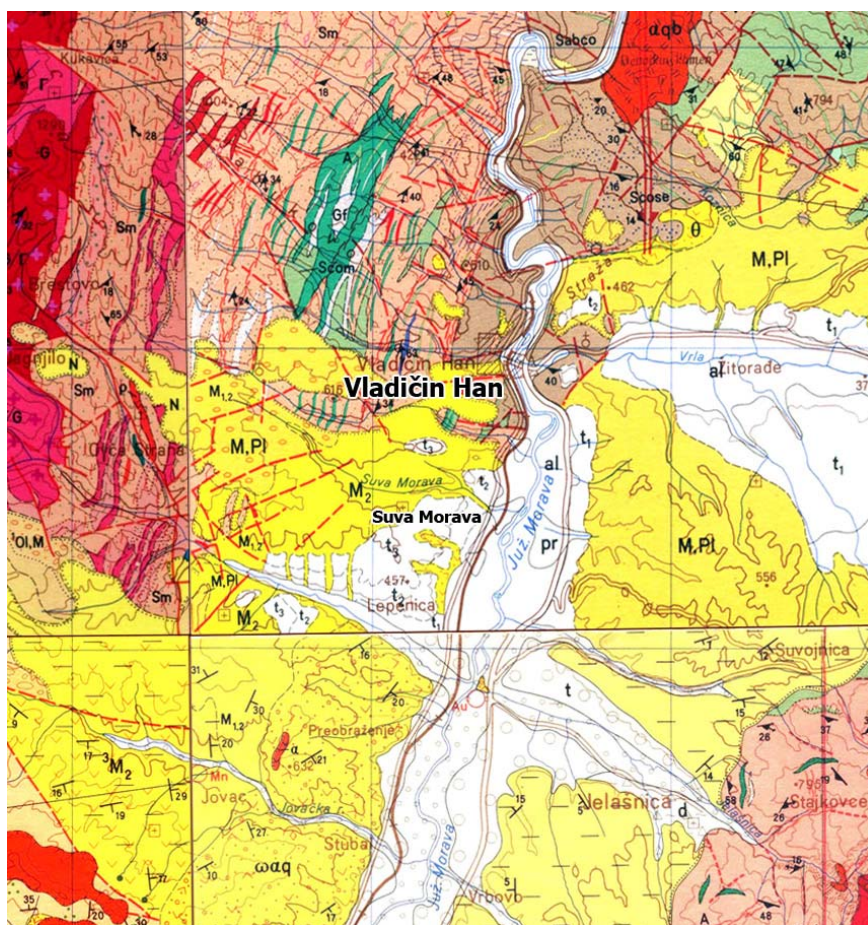


Figure 3.3 Geologic map of the wider project area

3.1.7 Hydrogeology

Groundwater aquifer is formed within the alluvial complex. It is in hydraulic connection with South Morava River. Groundwater level (GWL) is fluctuating following river flow regime about 2-3 m below ground level. Groundwater direction is generally follows the South Morava River flow, having direction S-N in the area of the project site.

Schematic hydrogeological cross-section of the alluvial aquifer at “Suva Morava” industrial zone is provided in Figure 3.4.

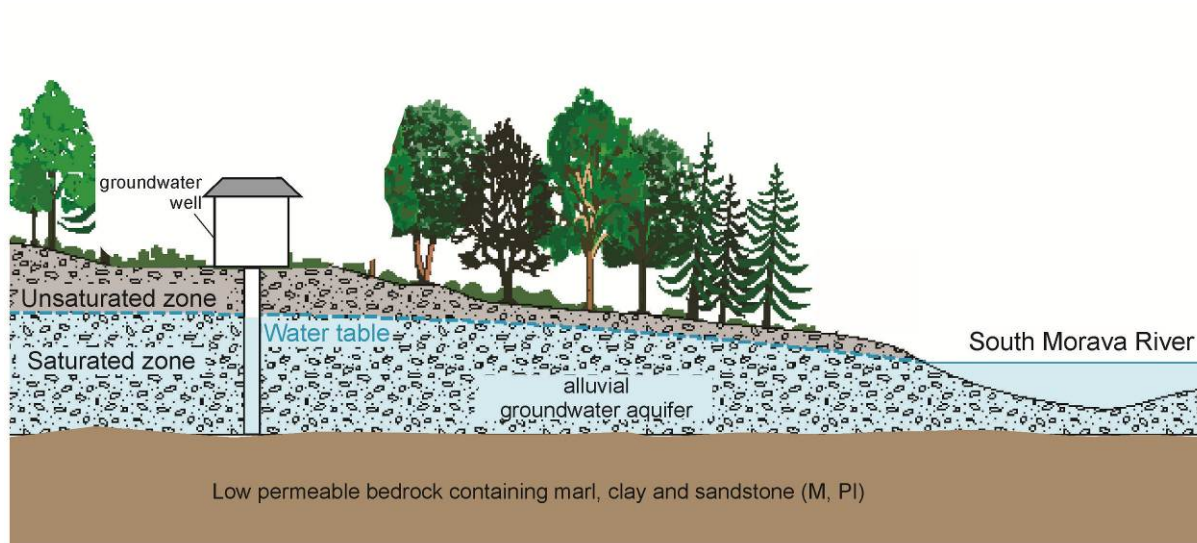


Figure 3.4 Schematic hydrogeological cross-section of the alluvial aquifer at Suva Morava

Groundwater vulnerability can be assessed as high due to presence of the highly permeable alluvial deposits, shallow groundwater level and relatively short pathway between the potential contamination sources and the receptor (South Morava River). Groundwater sensitivity can be assessed as high, especially in the southern part of the industrial zone in the surrounding of the “Lepenica” groundwater well field.

3.1.8 Water supplying source of “Lepenica”

In the southeastern part of the industrial zone there is a groundwater source “Lepenica” containing 6 wells (3 drilled and 3 large diameter dug wells). This source is used as a back-up solution for water supply of Vladicin Han and existing industrial zones operating only 1-2 months during regular yearly repair of the main water source – Vlasinske hydropower plant

In 2006, The Ministry of Health has issued the Act on protection of the groundwater source “Lepenica” (No.530-01-803/05-04 of 20.3. 2006.) determining two zones of sanitary protection: (1) narrow protection zone and the (2) wider protection zone of water sources.

Narrow protection zone covers the area immediately around the groundwater wells (10 m radius). Wider protection zone covers the area bounded by Lepenica River on the south, railway embankment to the west, South Morava River at the east and the fence of the Paper factory (FOPA) to the north.

Sanitary protection zone of the existing groundwater source “Lepenica” according to the Consent issued by the Ministry of Health in 2006 is provided in the Figure 3.5. The same figure shows the zone planned as a future groundwater source.

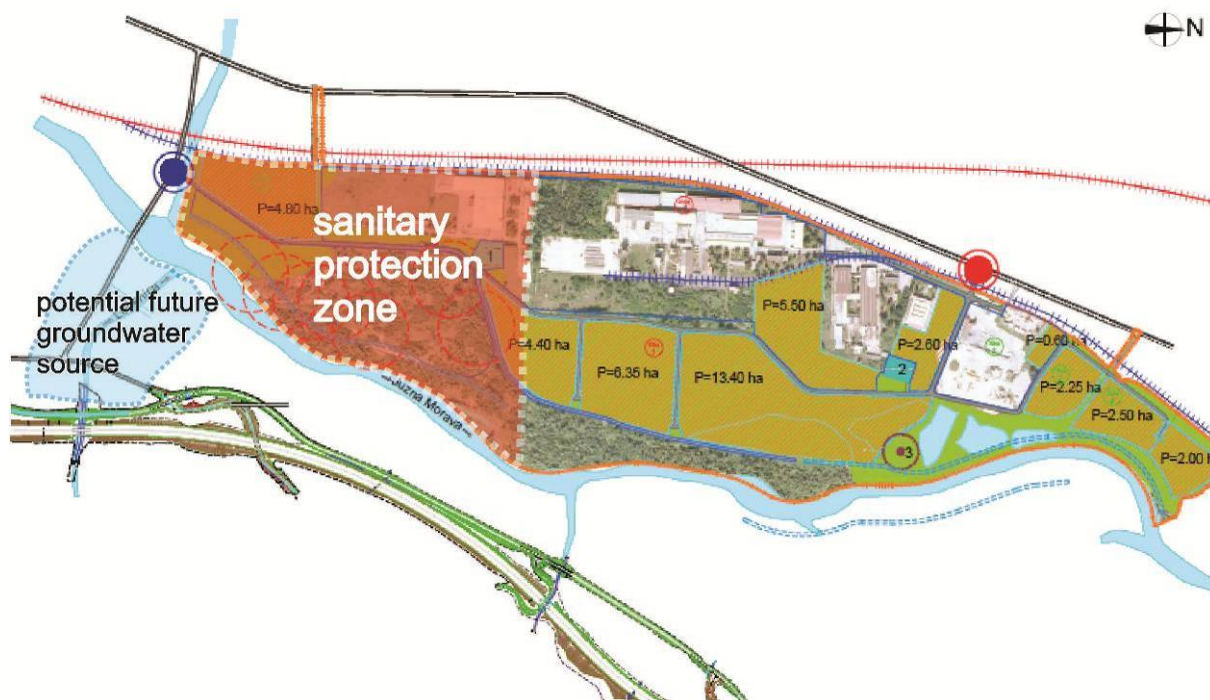


Figure 3.5 Sanitary protection zone and the zone planned as a future groundwater source

Although the source of narrow zone is surrounded by a wire fence, within this area there are numerous waste piles.

The spatial plan of the municipality said the preservation of the existing source is not sustainable and that is necessary to find new locations for the alternative groundwater source. Some recent hydrogeological investigations were focused in the area of the alluvial sediments of Lepenica River.

3.1.9 Seismic Activity

According to the *Atlas of seismic hazard of Serbia (M. Petrovic)*, for the return period of 200 – 500 years, the project area is characterized by the earthquake intensity of 8-9°MCS (Mercalli-Cancan-Seieberg scale). For the shorter return periods – the intensity is lower, 7-8°MCS.

The wider project area belongs to the Vranje valley which is the part of Rhodopean seismic zone where earthquakes were rather frequent between 1900 and 1936 when 125 strong earthquakes were recorded, among which 6 were hazardous. The wider project area is under impact of the epicenter Trn in Bulgaria, characterized by earthquakes of a high seismic intensity.



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3.1.10 Flora, Fauna and Ecosystems

Semi-continental climate of the project area, providing sufficient humidity and precipitation during the vegetation period, provides favourable conditions for development of diverse flora species. Along the South Morava and Vrla river banks, a deciduous vegetation is present (willow, poplar), particularly on periodically flooded alluvial soil. Fauna species are diverse, especially in the nearby mountainous area. The most spread game is roe deer, rabbit and wild boar. The common bird species are partridge and pheasant.

3.1.11 Natural Heritage

The nature conservation in Serbia including the protection regime and designation of the protected areas is defined by the *Law on nature conservation (Off. Journal of RS, No. 36/09, 88/2010)* and by-laws related to the protection of specific natural values. The Republic Institute for Nature Protection is the authority in charge for designation and categorization of natural heritage.

Categories of natural heritage, defined by the Law on nature conservation are the following: (1) National park, (2) Nature park, (3) Landscape of outstanding features, (4) Nature reserve, (5) Special nature reserve, (6) Natural monument, (7) Natural rarities (wild plant and animal species).

No areas designated as protected natural heritage or sites of international importance (Natura 2000, Ramsar sites, IBA) are identified in the wider area of the industrial zone “Suva Morava”.

However, the South Morava riverbed and its ecosystem should be regarded as the main natural value of the area and therefore should be protected in order to cease the further pollution of the river and degradation of its habitats.

3.1.12 Landscape

Wider project area presents a rural landscape in a flat, low-dynamic terrain. Landscape is dominated by the industrial element of “Suva Morava” zone surrounded by cultivated agricultural areas and scattered rural structures. Landscape quality can be assessed as low. As the predominant cultivated-agricultural landscape is much less attractive compared to the natural landscape, the landscape fragility can be assessed as low.

3.2 Description of the Social Conditions

The basic impact area associated with predicting impacts on the socio-economic environment is usually called “region of influence” (ROI). This represents the geographical



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area, or region, wherein the induced changes will occur to the socioeconomic environment. For the purpose of socioeconomic evaluation of proposed options, the region of interest will be delimited by the administrative boundaries of Vladicin Han municipality.

3.2.1 Demography

Municipality of Vladicin Han comprises the settlement of Vladicin Han and 50 villages with total population of 24.000 inhabitants (Census in 2002). The administrative centre is the settlement of Vladicin Han with about 8.300 inhabitants.

Similar to the majority of Serbian municipalities, Vladicin Han has a negative population growth rate (-3.4‰) and regressive population structure. Total number of households in the town is 2.643, with 3.2 members in average.

The ethnic structure is rather homogenous, the dominant ethnic majority are Serbs (94%) while the ethnic minorities mainly comprise Roma population (4.3%).

Apart from one urban centre (Vladicin Han) other settlements are mostly rural villages. The average village population is low, between 200 and 500 people, presenting the areas of emigration to towns.

3.2.2 Economic Conditions

Municipality of Vladicin Han is among the poorest municipalities in the country. According to the *Law on regional development (Off. Journal of RS, No. 51/09)*, the municipality of Vladicin Han it belongs to the group of devastated municipalities (having the level of development more than 50% lower of the country average).

The average net income in 2010 in the Municipality was 16.332 rsd (about 160 eur) which is 52% less than the Serbian average (34.142). Unemployment rate is more than 30%.

Agriculture is the dominant economic activity of village population, particularly crop farming (corn and wheat), fruit growing (apple, plume, sour cherry) and cattle farming.

Industrial activity has been significantly decreased during the last 20 years, and currently does not present a significant economic factor in the municipality. Predominant industrial activities have been food processing, wood and paper processing and construction materials production.

3.2.3 Infrastructure

The project area has a relatively developed road infrastructure, comprising the magisterial roads no. 1 and no. 1.13, regional road no. 214 and several municipal roads. The area of



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Vladicin Han belongs to the Corridor X project so the proposed route of the E-75 road (Nis – Skopje – Athens) will pass relatively close to the project area.

Magisterial single track railroad, Belgrade-Nis-Presevo-border of FYRM Macedonia passes through the project area. The railroad is planned to be improved with the route still passing through the territory of the municipality.

3.2.4 Cultural Heritage

The Law on cultural heritage (Off. Journal of RS, no. 71/94) defines the cultural heritage and determines its categories depending on the cultural significance. A number of special decrees and regulations have further outlined rules on how to conduct inventories, to valorize and categorize cultural heritage and protect them.

Cultural heritage can be a cultural monument, a historical or cultural entity, an archeological site or a historically significant site. According to the Law, the following categories of cultural heritage are determined: (1) cultural heritage, (2) cultural heritage of an outstanding value and (3) cultural heritage of a great value.

In the wider area of the industrial zone no cultural heritage has been identified or designated.



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4 ENVIRONMENTAL AND SOCIAL IMPACTS

For the purpose of detailed assessment of possible environmental and social impacts, the type of facilities planned to develop in the industrial zone has been considered. The redeveloped industrial zone is proposed to incorporate the following types of facilities: (1) food processing, (2) textile production, (3) metal processing, (4) individual chemical processing facilities, (5) construction materials production and storage, (6) warehouses, (7) fuel storage terminals and (8) shopping malls.

It is not planned to develop any large industrial plants such as basic chemical industry, oil refineries, petrochemical facilities or large pharmaceutical manufacturing.

4.1 Identification of the Main Environmental Impacts

Identification of the major environmental impacts was carried out using a matrix methodology. The results are presented in table 4.1 indicating the potential environmental impacts caused by the different project activities.

The tables display the following:

- in the left column: **major project elements**
- in the middle column: **impact characterization** including potentially affected environmental and social variables (media) and impact character (low/medium/high)

The cell at the intersection of the project operation and the environmental variable is marked with different colour as follows:

	Major negative
	Moderate negative
	Minor negative
	Neutral
	Minor positive
	Moderate positive
	Major positive

- in the left column: **impact description**



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4.2 Environmental Impacts of the Project

Table 4.1 Identification and assessment of main environmental impacts of the project

Project element	Impact characterization		Impact description - environmental effects
	Character	Environmental media affected	
Emissions of air pollutants from facilities	Minor negative	air quality	<p>Facilities proposed to operate in the industrial zone don't present significant air pollution sources. Potential air pollutants may involve particulate matter, dust, oil mists. The existing boiler houses which operate on solid and liquid fuels are planned to be modified for natural gas use supplied from the regional gas network.</p> <p>Potential air emissions are expected to be limited and will not involve products of fossil fuels (coal, heavy fuel oil) combustion. This impact is considered minor.</p>



Project element	Impact characterization		Impact description - environmental effects
	Character	Environmental media affected	
Discharge of industrial wastewater from facilities	Major negative	surface water, groundwater aquifer	Depending on the facility type, effluent streams may have (1) high biochemical and chemical oxygen demand (BOD and COD) resulting from organic wastes in food processing, (2) high loads of BOD and COD, suspended solids and grease in textile production, (3) solvents, metals, degreasing agents from metal processing, (4) suspended solids from construction materials storage, (5) organic and inorganic pollutants from chemical processing, (6) hydrocarbons from fuel storage terminals. Potential wastewater from the industrial zone' facilities could significantly degrade the South Morava river quality (as the final recipient) and groundwater aquifer, as well. Given the potential effluent type and quantity and the sensitivity of the recipient, this impact is considered major.
Discharge of sanitary wastewater and stormwater from buildings and facilities	Moderate negative	surface water, groundwater aquifer	Sanitary wastewater from industrial facilities may include effluents from domestic sewage, food service or laundry facilities serving employees. It has high organic and nutrient content and BOD load. Typically stormwater runoff contains suspended sediments, metals, petroleum hydrocarbons, Polycyclic Aromatic Hydrocarbons (PAHs), coliforms which can degrade the quality of the recipient. If discharged without prior treatment, sanitary wastewater and stormwater could negatively impact the South Morava river quality (as the final recipient) and groundwater aquifer, as well. Given the potential effluent type and quantity and the sensitivity of the recipient, this impact is considered moderate.



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Project element	Impact characterization		Impact description - environmental effects
	Character	Environmental media affected	
Hazardous materials storage and use	Minor negative	surface water, soil and groundwater	Given the type of facilities proposed to operate in the industrial zone, it is not expected that significant loads of hazardous materials will be stored at the project site. The only exception may be a potential fuel storage terminal which may involve storages of hydrocarbon fuels. With adequate engineering and management controls implemented this impact is considered minor.
Generation of hazardous waste in facilities	Moderate negative	surface water, soil and groundwater	Depending on the industrial process, potential hazardous waste streams may include: (1) pigments, printing pastes, spent dyes from textile processing, (2) spent solvents, degreasing agents from metal processing, (3) laboratory waste from chemical processing, (4) waste oil, (5) waste packagings. If inadequately managed, non-hazardous waste could present a risk of soil and groundwater and surface water contamination. The potential impact is assessed as moderate.
Generation of non-hazardous waste in facilities	Minor negative	surface water, soil and groundwater	Depending on the facility type, non-hazardous waste streams may include (1) organic solid waste from food processing, (2) trimmings, cuttings of fabrics and yarns from textile processing, (3) secondary materials (paper, glass, wood). With adequate waste management implemented, this impact is considered minor.



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Project element	Impact characterization		Impact description - environmental effects
	Character	Environmental media affected	
Emission of noise from facilities and traffic operation	Minor negative	environmental noise	Given the type of proposed facilities no significant generation of environmental noise may be expected outside the production facilities generation may be expected in the industrial zone, therefore this impact is considered minor.



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4.3 Identification of the Main Social Impacts

It is certain that redevelopment of the industrial zone is primarily oriented towards the economic aspect of the Vladicin Han development. It is likely, as well, that once the economic activity in the industrial zone is started, the social changes that may be expected are rather positive.

Potential new facilities will have a need for workforce so certain increase of employment may be expected. Some facility operations might request specific working skills having the need for additional knowledge improvement. Employment could result in increase of local incomes, as a direct effect. Indirectly, this could impact development of commercial facilities, increased value of properties, development of retail properties, etc.

The final benefit of the renewed economic activity would be to decrease the people migration (especially young) from Vladicin Han to larger cities.





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5 PROPOSED MITIGATION MEASURES

The ESIA Study provides the list of mitigation (protective) measures as necessary actions that should be undertaken in the further stages of the project. Measures should be clearly presented to the all project stakeholders (Municipality of Vladicin Han, future and the existing occupants of the industrial zone, local public utility companies, republic ministries and directorates) as their obligation and responsibility.

Mitigation measures can be grouped in three categories, depending on the stage of the project and the responsible party:

(1) Spatial planning measures have been implemented in the earliest project stages by selection of location, planning of necessary infrastructure and types of facilities for the industrial zone. Strategic environmental impact assessments of the spatial planning documents proposed variety of mitigation measures that should be implemented during the project implementation. The responsible parties for this type of measures are local authorities and organizations.

(2) Legal measures involve variety of obligations which have been enforced by environmental legislation of Republic of Serbia and the municipality of Vladicin Han. Implementation of this type of measures will be controlled by environmental and water management inspectors. The responsible parties for this type of measures will be both facility operators and local authorities.

One of the most significant legal measures is the environmental impact assessment (according to the *Law on environmental impact assessment, Off. Journal of RS, No. 135/04, 36/09*) which will have to be carried out for each facility (depending on its size and type of operation). The EIA is a preventive tool which mainly sets the technical and technological mitigation measures at the stage of a preliminary design. Implementation of measures proposed by the EIA is a prerequisite for obtaining the operation permit.

(3) Technical and technological measures are a result of facility design and comprise specific technical solutions and abatement technologies in order to comply with emission limit values and maximum allowed concentrations set by the legislation. The responsible party for this type of measures will be a facility operator.



Table 5.1 Proposed mitigation measures during operation

Type of Environmental measure	Identified Environmental Impact	Recommended mitigation measure	Responsibility
<p>Investigation and remediation of potential historical contamination</p>	<p>Long-term industrial operations in the brownfield area of the industrial zone could have resulted in historical contamination of soil and groundwater and presence of inadequately disposed waste and hazardous substances.</p>	<ul style="list-style-type: none"> - As a part of project development, a detailed environmental assessment of the brownfield area of "Suva Morava" industrial zone should be carried out, including the surrounding areas close to the riverbed and wastewater lagoons. Environmental assessment should include intrusive soil and groundwater investigation and environmental media sampling, and sampling of disposed waste or hazardous substances, as well. - Environmental assessment should be carried out by a local or international environmental consulting company with references in the Phase 1&2 environmental assessments. Laboratory analysis of environmental media (soil, water, waste, hazardous substances, etc) should be carried out by an accredited laboratory.. - The results should be evaluated according to the recently adopted Serbian <i>Decree on systematic monitoring of soil, indicators of assessment of the soil degradation risk and methodology for remediation programs (Off. Journal of RS, No. 88/2010)</i> stipulating the limit values for soil and groundwater which, if exceeded, require a remedial action. The Decree's requirements are based on the internationally widely used standard of the the Ministry of Environment of Holland for pollutant remediation and clean-up, recognized as "Dutch List" - In case the contaminated areas are identified, a proper remedial action should be implemented. 	<ul style="list-style-type: none"> - Ministry of Environment, Spatial Planning and Mining in cooperation with the Municipality of Vladicin Han



Type of Mitigation Measure	Identified Environmental Impact	Recommended mitigation measure	Responsibility
<p>Sanitary protection of “Lepenica” groundwater source</p>	<p>Location of the groundwater source Lepenica is in collision with development of the industrial zone. Future industrial activities could increase the risk of contamination of the shallow alluvial aquifer (presently used as the alternative source for water-supply)</p>	<ul style="list-style-type: none"> – Elaborate of Sanitary Protection Zones should be updated and amended in accordance with <i>Regulation on identification and maintenance of sanitary protection zones and belts for drinking water supply sources (Official Journal of RS, No. 92/2008)</i>. The existing Act on sanitary protection of the “Lepenica” groundwater source is based on the obsolete Regulation from 1978. Existing sanitary protection zones were not defined based on a contaminant transport model, which is now a legally required methodology (the 2nd zone of sanitary protection is now defined as the radius area around the well where water transport toward the well lasts for 50 days). Development of hydrogeological model and redefining of the sanitary protection zones should lead to better spatial organization in the upstream area, setting the protective measures, defining the pumping regime at the groundwater well field, etc. 	<ul style="list-style-type: none"> – Republic water directorate (Ministry of agriculture, forestry and water management)
		<ul style="list-style-type: none"> – Asphalt roads in the area of groundwater source should be equipped with run-off collectors and should be connected to the sewage system in order to avoid polluted run-off water to reach soil and groundwater 	<ul style="list-style-type: none"> – Municipality of Vladicin Han
		<ul style="list-style-type: none"> – Activities prohibited in the area of groundwater source include all activities which are likely to impact the quality of water at the water source, including permanent (aboveground or underground) storage of hazardous substances, manufacturing, transport or handling of hazardous substances – water contaminants, commercial storage of oil and oil products, discharge of wastewater or cooling wastewater 	<ul style="list-style-type: none"> – Public water management company Vladicin Han
		<ul style="list-style-type: none"> – Alternative groundwater source in the alluvial sediments of Lepenica River should be further investigated in order to replace the existing one 	



Type of Mitigation measure	Identified Environmental Impact	Recommended mitigation measure	Responsibility
<p>Wastewater management and protection of the South Morava River</p>	<p>Assimilative capacity of South Morava River as the main receptor of the wastewater from the industrial zone is low. Discharge of untreated industrial and sanitary wastewater from facilities could significantly degrade the South Morava river quality (as the final recipient), as well as shallow alluvial groundwater aquifer</p>	<ul style="list-style-type: none"> - Sewer infrastructure shall be constructed in the zone area, separately for industrial, sanitary wastewater and storm water. - The industrial zone shall be equipped with a central plant for final wastewater treatment. Wastewater from individual facilities shall be collected and transferred to the central WWTP prior to final discharge into the recipient. One or more treatment technologies may be used to achieve the desired discharge quality and to maintain consistent compliance with regulatory requirements (the Law on water and recently adopted Regulation on the emission limit values for discharges into water and deadlines for compliance) 	<ul style="list-style-type: none"> - Facility operator - Municipality of Vladicin Han - PUC Vladicin Han
		<ul style="list-style-type: none"> - Pretreatment of wastewater from some of the industrial facilities with higher pollution load will be necessary if the centralized wastewater treatment system receiving wastewater from the industrial zone does not have adequate capacity or technology to maintain regulatory compliance. 	
		<ul style="list-style-type: none"> - Residuals from industrial wastewater treatment operations should be disposed in compliance with a local regulatory requirements (the <i>Law on Waste Off. Journal RS, Nos. 36/09 and 88/2010</i>). Disposal has to be consistent with protection of public health and safety, and conservation and long term sustainability of water and land resources. 	
		<ul style="list-style-type: none"> - Storm water from paved areas shall be collected by drainage canals and pre-treated in oil separator units prior to discharge into the sewer. 	
		<ul style="list-style-type: none"> - Technological processes in facilities should be designed to apply recirculation of water, when possible. 	
		<ul style="list-style-type: none"> - Given the hydraulic connection between the South Morava River and the groundwater source, wastewater discharge into the ground shall be strictly forbidden. 	



Type of Environmental measure	Identified Environmental Impact	Recommended mitigation measure	Responsibility
Waste management	If inadequately managed, non-hazardous waste could present a risk of soil and groundwater and surface water contamination.	<ul style="list-style-type: none"> – Waste management shall be a responsibility of each individual facility operator according to the <i>Law on waste (Off. Journal RS, Nos. 36/09 and 88/2010)</i>. Industrial operators should characterize their waste according to composition, source, types of wastes produced, generation rates, etc, according to the Law. – Hazardous waste shall be managed by each individual facility operator according to the <i>Regulation on hazardous waste storage, packaging and labeling (Off. Journal of RS, No. 92/2010)</i>. – Special waste types shall be managed according to the respective by-law documents. It shall be strictly forbidden to mix waste or to deliver waste to unauthorized operators. – The industrial zone area shall be equipped with containers for waste disposal (recommended capacity is 1 m³) and appropriate recycling yard. – On-site waste disposal areas shall provide protection of waste containers from weather conditions and prevent any risk of soil and groundwater contamination (due to leakage, spillage, etc). – Given that the closest regional waste landfills are in Vranje and Leskovac, the local public utility company from Vladicin Han shall make an agreement on waste disposal with one of the operators. 	<ul style="list-style-type: none"> – Facility operator – Municipality of Vladicin Han – PUC Vladicin Han



Type of Mitigation measure	Identified Environmental Impact	Recommended mitigation measure	Responsibility
Management of hazardous substances	Lack of adequate management of hazardous substances may increase the risk of environmental contamination, due to spillages, leaking or fire.	<ul style="list-style-type: none"> – Hazardous substances management shall be a responsibility of each individual facility operator according to the <i>Law on chemicals (Off. Journal of RS, No 36/09)</i>. – Storage of hazardous substances shall be constructed and equipped to minimize the risk of potential contamination. – Secondary containment equipment shall be provided in storage areas in order to response to potential accidental spillages. – Transport of hazardous materials including loading and unloading shall be carried out according to the <i>Law on transport of hazardous materials (Off. Journal of RS, No. 68/2002)</i>. 	<ul style="list-style-type: none"> – Facility operator – Municipality of Vladicin Han
Prevention of air pollution	Once in operation, the industrial zone could impact the ambient air quality by emission of air pollutants from the facilities.	– The industrial zone should be connected to the regional gas supplying network in order to avoid combustion of solid and liquid fuels for heating.	<ul style="list-style-type: none"> – Facility operator – Municipality of Vladicin Han
		– Once supplying of the gas is provided, the existing boiler rooms in the industrial zone should be reconstructed to operate on gas.	
		– Air emission management shall be a responsibility of each individual facility operator according to the <i>Law on air protection (Off. Journal of RS, No 36/09)</i> .	
		– Road network in the area of industrial zone, including the local access road, shall be rehabilitated in order to reduce the emission of dust	



<p>Reduction of noise emission</p>	<p>Operation of the industrial zone could result in increase of environmental noise</p>	<ul style="list-style-type: none"> - Building in the industrial zone shall be designed with respect to sound insulation and usage of sound absorbing materials. - Management of noise generated in individual facilities shall be a responsibility of each operator, according to the <i>Law on noise (Off. Journal of RS, No. 68/2002)</i>. - Each facility operator shall apply adequate technical and technological measures in order to comply with defined noise emission limits. 	<ul style="list-style-type: none"> - Facility operator - Municipality of Vladicin Han
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Table 5.2: Proposed mitigation measures during construction

Type of Mitigation measure	Identified Environmental Impact	Recommended mitigation measure	Responsibility
<p>Mitigation during construction works</p>	<p>Construction works on the industrial zone development could impact community health and safety and pose the contamination risk of the environmental media</p>	<p>During the construction period, standard set of mitigation measures should be implemented in order to prevent, minimize and control the community health and safety impacts that may occur during construction works. Protective mitigation measures shall be applied to control the noise and vibration level, avoid and manage soil erosion, air quality, solid waste generation, hazardous materials, wastewater discharges, cultural and archaeological heritage, and manage the issue of contaminated land that could be encountered.</p> <p>All the mitigation measures need to be implemented by the Contractor responsible for the construction works. Protective/mitigation measures should be precisely defined through Environmental and Health and Safety Management Plan prepared by the contractor and adopted by local municipal authorities.</p>	<ul style="list-style-type: none"> - Building contractor



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6 ENVIRONMENTAL MANAGEMENT PLAN AND MONITORING

A comprehensive environmental management program including the environmental monitoring program should be established at the municipality level as a part of the project of the industrial zone development. The EMP should be implemented as an integral part of the project implementation during the construction period and during operation of the industrial zone. Municipal department responsible for environmental issues should manage and monitor overall environmental performance in the industrial zone.

The objective of environmental management is to ensure full and cost-effective compliance with the relevant environmental laws and regulations stipulated by the Republic of Serbia and municipal authorities as well as the project financiers. Impact monitoring involves the measurements of environmental variables during design period, project construction and operation to determine the changes which may have occurred as a result of the project.

Development of every new industrial facility will be analyzed through the site and technology specific EIA process, analyzing the potential impacts of the proposed projects including site-specific monitoring measures.

A comprehensive (targeted-oriented) post-EIA environmental monitoring program should be implemented during operational period, as a part of the industrial zone life-cycle. The resulting information should be used in environmentally responsible management and decision making. Comprehensive environmental management refers to the set of activities which provide chemical, physical, biological, and other social, or health data required by the environmental authorities.

There are several environmental authorities in Serbia in charge for environmental monitoring. Based on their responsibilities, environmental monitoring should be established during the operational period.

Proposed environmental monitoring during operational period is presented in Table 6.1. It includes some generally expected monitoring activities and should be improved at the later stages of the project development by some more specific activities.

Table 6.1 Environmental Monitoring during operation of the industrial zone

Media to be monitored	Monitoring Standard/ Regime	Responsibility
Drinking water quality	Domestic drinking water standards are in compliance with the World Health Organization guidelines and the EU Drinking Water Directive. The control is conducted in compliance with the <i>Regulation on hygienic regularity of quality of drinking water (OG FRY No. 42/1998)</i> .	Institute for Public Health Vranje - responsibility for hygienic control of the drinking water quality in charge for the region of Pcinja.
Hydrological regime of the	Hydrological stations relevant for the	Republic Hydro-meteorological



Media to be monitored	Monitoring Standard/ Regime	Responsibility
main river flows	project area are: – Vranjski priboj at South Morava (about 6 km downstream from Vranje) – Vladicin Han at South Morava	Institute of Serbia is the environmental authority in charge of systematic monitoring of hydrological regime of surface water through its network of hydrological stations
Water quality in Rivers of Juzna Morava	Water quality monitoring stations relevant for the project area are: (1) Ristovac at South Morava (about 6 km downstream from Bujanovac) and (2) Vladicin Han at South Morava	Republic Hydro-meteorological Institute of Serbia is the environmental authority in charge of systematic monitoring and quality analysis of surface water. Monitoring is based on an annual program adopted by the Government through the existing network of the hydrological stations. The quality of surface water monitored regularly, with a sampling frequency of 12–24 times a year and analysis of 36–63 water quality parameters
Effluent quality before discharging into South Morava River	The parameters selected for monitoring should be indicative of the pollutants of concern from the process, and should include parameters that are regulated under <i>Decree on limit values of polluting substances discharge into water and deadlines to comply (Off. Journal RS 67/2011)</i>	Wastewater management company (PUC Vladicin Han)
Groundwater quality	According to <i>Regulation on hygienic regularity of quality of drinking water (Off. Journal RS No. 42/1998)</i> groundwater should be regularly monitored from all groundwater wells used in water supply system	Waterworks company (PUC Vladicin Han)
Sanitary-hygienic monitoring in the water supplying system facilities	Based on sanitary-hygienic standards	Institute of Public Health Vranje
Pollution control in the	Based on the <i>Regulation on</i>	Waterworks company jointly



Media to be monitored	Monitoring Standard/ Regime	Responsibility
zones of sanitary protection	<p><i>implementation and maintenance of sanitary protection zones (Off. Journal of Serbia no 92/2008).</i></p> <ul style="list-style-type: none"> – Design the zones and belts of sanitary protection and implement it in the spatial planning documents – Establish polluter databases – Ensure full responsibility for water pollution – Enforce measures for the protection of sanitary protection zones at water intakes 	with municipal urban planning and environmental authorities
Ambient Noise level	<p>During the operation of the industrial zone, monitoring of the noise levels should be carried out in case of a third party complaint to ensure compliance with the <i>The Law on Environmental Noise (Off. Journal of RS, No. 36/2009, 88/2010)</i>. The permitted noise levels are defined by the by-law document - the <i>Decree on environmental noise indicators, limits values, assessment methods of the noise indicators, the nuisance and the harmful effects (Off. Journal Of RS No. 75/2010)</i>.</p> <p>Noise level at the boundary of this zone shall not exceed the limit value defined for the zone it borders (residential, commercial etc)</p>	Industrial operator should hire an accredited laboratory for noise level measurements, in case of third party complaint.
Ambient Air Quality	In Serbia, ambient air quality monitoring is carried out through the network of about 40 monitoring stations located in selected towns. So far, the town of Vladicin Han has not been included in the network (the closest stations are located in Vranje and Leskovac). Once the industrial zone is operated (depending on the type of industrial facilities), the Municipality of Vladicin Han should decide whether to apply to the Ministry of Environment in order to establish	Ministry of Environment, Spatial Planning and Mining in cooperation with the Municipality of Vladicin Han





Media to be monitored	Monitoring Standard/ Regime	Responsibility
	the air quality monitoring in the town area.	
Air Emissions from industrial facilities (operators)	Industrial operators should regularly monitor the air emissions from their sources in accordance with Serbian <i>Law on Air protection (Off. Journal Of RS No. 36/09), Decree on emission limit values of air pollutants (Off. Journal Of RS No. 71/10), Decree on monitoring conditions and ambient air quality requirements (Off. Journal Of RS No.11/2010 and No. 75/2010)</i>	Industrial facility Operator

During the construction period, various impact mitigation measures should be adopted for implementation by contractors. It would be necessary that the contractor periodically performs certain monitoring activities that will include the following (but not limited to), provided in Table 6.2:

Table 6.2 Environmental Monitoring during construction works

Media to be monitored	Monitoring Regime	Responsibility
Noise control and noise level	In working areas where excessive noise is continually generated, noise level (dB(A)) should be periodically checked and use of ear protection equipment should be enforced. When construction activities with excessive noise will be carried out, noise level should be controlled close to the nearest settlement area.	Contractor
Water pollution control (South Morava River)	(Suspended solids, dissolved oxygen, chemical oxygen demand, oil and grease) should be checked periodically (on a weekly basis) in a stage of river dredging and construction works close to the South Morava river bed.	Contractor
Soil erosion	It should be routinely inspected at all construction sites and soil disposal sites especially during rainy season	Contractor



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Media to be monitored	Monitoring Regime	Responsibility
	and after the rainfall.	
Construction waste management	At the construction site and waste disposal site, it should be routinely performed including daily recording of the waste amount collected and transported.	Contractor
Sanitation and hygiene	At worker camps and construction site, it should be routinely monitored on a daily basis.	Contractor





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7 CONCLUSIONS AND RECOMMENDATIONS

Redevelopment of the existing industrial zone is undoubtedly an important prerequisite for the potential economic recovery of the municipality. Although the environmental sensitivity of the project site can be assessed as moderate to low (given that it is located out of settlements and sensitive receptors), it is still related to certain environmental concerns. They are related to the groundwater supplying source of “Lepenica” and water quality and ecosystems of the South Morava River. Therefore the variety of mitigation measures is proposed to prevent the potential further degradation as a result of the future industrial zone operation.

Once the economic activity in the industrial zone is started, diverse positive social changes are likely to be expected. But equally important benefit of the redevelopment project is that it will result in improvement of environmental conditions in the area. In order to develop a competitive industrial zone which might attract the potential investors, the existing infrastructure will have to be improved. This will result in improvement of the sanitation of the area: (1) sanitary protection of water supply source will be improved, (2) uncontrolled discharge of untreated domestic and industrial wastewater into the South Morava will be ceased, (3) waste management will be improved, (4) hazardous substances management will be improved, (5) potential historical contamination in the “Suva Morava” area will be identified and removed.





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Annex 5 Cost benefit analysis



		►►► Projection ►►►												
(A) Macroeconomic scenario	Unit	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2020	2026	2036
Inflation in Serbia (annual change)	(%)	6,6%	10,3%	7,9%	3,7%	3,9%	4,4%	4,2%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%
Inflation in Euro-Zone	(%)	0,3%	1,6%	3,0%	3,0%	2,5%	2,2%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
Exchange rate RSD / EURO	Factor	93,95	103,04	101,90	101,98	103,17	104,77	105,99	106,49	106,59	106,17	105,55	104,31	108,39
Increase of energy costs in real	(RSD)	n/a	n/a	-3,5%	-3,5%	-3,5%	-3,5%	-3,5%	-3,5%	-3,5%	-3,5%	-3,5%	-3,5%	-3,5%
Increase of material costs in real	(RSD)	n/a	n/a	-1,8%	-1,8%	-1,8%	-1,8%	-1,8%	-1,8%	-1,8%	-1,8%	-1,8%	-1,8%	-1,8%
Increase of staff costs in real terms	(RSD)	n/a	n/a	4,5%	-3,5%	-3,5%	-3,5%	-3,5%	-3,5%	-3,5%	-3,5%	-3,5%	-3,5%	-3,5%
Increase of energy costs - real	(EUR)	n/a	n/a	-2,4%	-3,6%	-4,6%	-5,0%	-4,6%	-4,0%	-3,6%	-3,1%	-3,2%	-3,3%	-4,2%
Increase of material / maintenance costs - real	(EUR)	n/a	n/a	-0,7%	-1,8%	-2,9%	-3,3%	-2,9%	-2,2%	-1,8%	-1,4%	-1,5%	-1,6%	-2,5%
Increase of personnel costs - real	(EUR)	n/a	n/a	5,7%	-3,6%	-4,6%	-5,0%	-4,6%	-4,0%	-3,6%	-3,1%	-3,2%	-3,3%	-4,2%
Base scenario	B													
Inflation rate, Serbia	%	3,70%	3,90%	4,40%	4,20%	4,00%	4,00%	4,00%	4,00%	4,00%	4,00%	3,70%	3,90%	4,40%
Inflation rate, EURO zone	%	3,00%	2,50%	2,20%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	3,00%	2,50%	2,20%
Nominal Exchange Rate RSD/EUR	RSD	101,98	103,17	104,77	105,99	106,49	106,59	106,17	105,55	104,31	108,39	101,98	103,17	104,77
Depreciation RSD vs EUR	%	0,08%	1,17%	1,55%	1,16%	0,48%	0,09%	-0,39%	-0,29%	-0,20%	0,77%	0,08%	1,17%	1,55%
Real GDP growth, Serbia	%	1,00%	1,50%	2,0%	2,50%	3,00%	3,50%	4,00%	4,00%	4,00%	3,0%	1,00%	1,50%	2,0%
Serbia Real Wages Increase	%	1,0%	2,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	1,0%	2,0%	3,0%
Real GDP growth, EURO zone	%	0,4%	1,3%	1,4%	1,5%	1,5%	1,6%	1,6%	1,7%	1,8%	1,8%	0,4%	1,3%	1,4%
Optimistic scenario	O													
Inflation rate, Serbia	%	3,70%	3,90%	4,00%	3,50%	3,50%	3,50%	3,50%	3,50%	3,00%	2,60%	3,70%	3,90%	4,00%
Inflation rate, EURO zone	%	1,30%	1,50%	1,60%	1,60%	1,60%	1,60%	1,60%	1,60%	1,60%	1,60%	1,30%	1,50%	1,60%
Nominal Exchange Rate RSD/EUR	RSD	103,18	104,90	105,71	105,10	103,60	101,25	99,06	94,81	85,09	73,80	103,18	104,90	105,71
Depreciation RSD vs EUR	%	1,26%	1,66%	0,77%	-0,58%	-1,43%	-2,26%	-2,17%	-2,17%	-1,71%	-1,15%	1,26%	1,66%	0,77%
Real GDP growth, Serbia	%	1,5%	2,00%	3,0%	4,00%	5,0%	6,0%	6,0%	6,0%	5,0%	4,0%	1,5%	2,00%	3,0%
Serbia Real Wages Increase	%	1,0%	2,0%	3,0%	4,0%	5,0%	5,0%	5,0%	5,0%	5,0%	5,0%	1,0%	2,0%	3,0%
Real GDP growth, EURO zone	%	0,4%	1,3%	1,4%	1,5%	1,6%	1,7%	1,8%	1,8%	1,8%	1,8%	0,4%	1,3%	1,4%
Pesimistic scenario	P													
Inflation rate, Serbia	%	7,90%	7,90%	7,60%	7,30%	7,00%	7,00%	7,00%	7,00%	7,00%	7,00%	7,90%	7,90%	7,60%
Inflation rate, EURO zone	%	3,00%	2,90%	2,80%	2,70%	2,60%	2,50%	2,40%	2,20%	2,00%	2,00%	3,00%	2,90%	2,80%
Nominal Exchange Rate RSD/EUR	RSD	106,11	111,60	116,58	121,56	125,91	129,89	133,49	141,39	172,85	243,17	106,11	111,60	116,58
Depreciation RSD vs EUR	%	4,13%	5,17%	4,46%	4,27%	3,57%	3,17%	2,77%	2,97%	3,47%	3,47%	4,13%	5,17%	4,46%
Real GDP growth, Serbia	%	1,00%	1,00%	1,50%	1,50%	2,00%	2,50%	3,00%	3,00%	2,70%	2,70%	1,00%	1,00%	1,50%
Serbia Real Wages Increase	%	1,0%	2,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	1,0%	2,0%	3,0%
Real GDP growth, EURO zone	%	0,4%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	0,4%	1,3%	1,3%

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Annexe 2.1: Total Investment Costs

No	Cost category	Total	2012	2013	2014	2015	2016	2017	2018	2019	2020	2026	2036
		M EUR	M EUR	M EUR	M EUR	M EUR	M EUR	M EUR	M EUR	M EUR	M EUR	M EUR	M EUR
A	Total Investment Costs												
1	Land	1,964	0,982	0,982	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
2	Planning / design	0,360	0,180	0,180	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
3	Site preparation	0,065	0,000	0,065	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
4	Main works	8,347	0,000	4,174	4,174	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
5	Plant & machinery & commissioning	0,646	0,000	0,323	0,323	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
6	TA & Training	0,450	0,000	0,225	0,225	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
7	Supervision	0,630	0,000	0,315	0,315	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
8	Public Relation	0,045	0,000	0,022	0,022	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
9	Contingencies (10% on 2 to 8)	1,054	0,018	0,530	0,506	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
10	Tax/public levies	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
	Total Investment Costs	13,561	1,180	6,816	5,565	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000

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Annexe 2.2: Total OM Costs

No	Cost category	Total	2012	2013	2014	2015	2016	2017	2018	2019	2020	2026	2036
		M EUR	M EUR	M EUR	M EUR	M EUR	M EUR	M EUR	M EUR	M EUR	M EUR	M EUR	M EUR
B	Total O&M Costs												
	Fixed cost	6,866	0,000	0,000	0,206	0,330	0,330	0,330	0,330	0,330	0,330	0,299	0,273
	Personnel cost	0,690	0,000	0,000	0,030	0,030	0,030	0,030	0,030	0,030	0,030	0,030	0,030
	Maintenance cost	0,517	0,000	0,000	0,022	0,022	0,022	0,022	0,022	0,022	0,022	0,022	0,022
	Depreciation	5,659	0,000	0,000	0,153	0,278	0,278	0,278	0,278	0,278	0,278	0,246	0,221
	Other fixed cost (administration,fees)	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
	Variable cost	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
	Material costs	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
	Electricity and Petrol cost	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
	Other non-material costs	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
	Total O&M Costs	6,866	0,000	0,000	0,206	0,330	0,330	0,330	0,330	0,330	0,330	0,299	0,273

Annexe 3: Calculation of Factors for Economic Costs and Benefit Analysis

Shadow Price of Labour		Employer	Employee		
Contribution to Social Security		11,00%	11,00%		
Contribution to Health Fund		6,15%	6,15%		
Unemployment fund		0,75%	0,75%		
Other contributions		0,00%	0,00%		
Tax on salaries		0,00%	12,00%		
Total		17,90%	29,90%		
Shadow Price of Labour = SI		25,5%			
Shadow Price of Foreign Exchange = Sf			1,000		
Standard Conversion Factor					
Market value			1,000		
- Net indirect taxes			0,000		
+ Subsidies			0,000		
Standard Conversion Factor = Scf			1,000		
Economic value of costs is Ev x Financial value, where:					
Ev = F x Sf + L x SI + O x Scf					
F =	part in foreign currency	Sf =	shadow price of foreign exchange		
L =	part in labour	SI =	shadow price of labour		
O =	part of other local costs excluding	Scf =	standard conversion factor		
Investment Costs (EUR in real terms)					
		Local (%)	Foreign (%)		
Total	-	-	-		
		69,9%	28,0%		
Investment Costs			Operating Costs		
F		27,99%	F	0,00%	
L+O		69,90%	L+O	100,00%	
L	30%	20,97%	L	48%	48,00%
O	70%	48,93%	O	52%	52,00%
		97,89%			100,00%
Evinv	83,2%		Evop	64,3%	

	Zone (BLEE)											
	Indirect Economic Effects of Industrial Zone (as Indirect Income) (IET)	€/year	0,30	-	-	-	-	-	178.200	712.800	1.603.800	1.603.800
	Backward Linkages Economic Effects of Industrial Zone (BLEE)	€/year		-	-	-	-	-	178.200	712.800	1.603.800	1.603.800
3	Private capital mobilized in Industrial Zone											
	Private capital mobilized in Industrial Zone per employee	€/job	1.017,02									
	Private capital mobilized in Industrial Zone Total			-	-	-	-	-	559.359	559.359	-	-
	Private capital mobilized in Industrial Zone	€/year		-	-	-	-	-	559.359	559.359	-	-

Economic analysis for the project

1	Project cost											
	Resulting overall economic capital costs	€/year	71,7%	(941.105)	(5.438.125)	(4.439.581)	-	-	-	-	-	-
	Incremental economic operation cost	€/year	28,3%	-	-	(184.321)	(308.492)	(308.492)	(308.492)	(308.492)	(277.036)	(251.573)
	Overall economic project cost	€/year	100,0%	(941.105)	(5.438.125)	(4.623.902)	(308.492)	(308.492)	(308.492)	(308.492)	(277.036)	(251.573)
2	Project Benefits											
	Indirect Economic effects	€/year	72,7%	-	-	-	-	-	594.000	2.376.000	5.346.000	5.346.000
	Total Multiplier effects benefits	€/year	21,8%	-	-	-	-	-	178.200	712.800	1.603.800	1.603.800
	Total Induced effects benefits	€/year	5,4%	-	-	-	-	-	559.359	559.359	-	-
	Total benefits	€/year	100,0%	-	-	-	-	-	1.331.559	3.648.159	6.949.800	6.949.800
3	Net benefits	€/year		(941.105)	(5.438.125)	(4.623.902)	(308.492)	(308.492)	1.023.066	3.339.666	6.672.764	6.698.227
	ENPV		51.400.699									
	ERR		19,9%									
	B/C RATIO		4,56									



Municipal Infrastructure Support Programme

An EU funded project



Building together for the future

Annex 6

Endorsement letters from the municipality Vladicin Han



Municipal Infrastructure Support Programme
Koste Glavinica 2/3, 11000 Belgrade, Serbia

Number: РЕПУБЛИКА СРБИЈА
ОПШТИНА ВЛАДИЧИН ХАН

Date: Број СА / 2012
20 FEB 2012 год
ВЛАДИЧИН ХАН

Endorsement of the Feasibility Study

Feasibility Study “Industrial zone Jug in Vladicin Han”

MISP Project reference number P2011-2

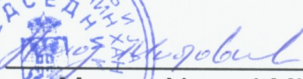
Further to the Feasibility Study “Industrial zone Jug in Vladicin Han”, we the undersigned, on behalf of the Beneficiary of the Project, hereby fully endorse the Feasibility Study. We fully agree with and support the proposed design parameters and criteria, sizing and phasing of the facilities. The Feasibility Study has been prepared by the Municipal Infrastructure Programme Serbia with full understanding and in cooperation with the representatives of Municipality Vladicin Han.

The Beneficiary is committed by this letter to take all the necessary measures within his area of competence required for the further smooth implementation of this project.

On behalf of the Beneficiary

Municipality Vladicin Han





Mayor, Nenad Mitrovic

Municipal Infrastructure Support Programme
Koste Glavinica 2/3, 11000 Belgrade, Serbia

Broj:

Dana:

РЕПУБЛИКА СРБИЈА
ОПШТИНА ВЛАДИЧИН ХАН
Број СИ/2012
20. FEB. 2012 год
ВЛАДИЧИН ХАН

Saglasnost na Studiju Izvodljivosti

Studija izvodljivosti „Industrijska zona Jug u Vladičinom Hanu“

MISP Projekat referentni broj P2011-2

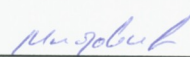
Mi dole potpisani, u ime Korisnika Projekta, u potpunosti smo saglasni sa Studijom izvodljivosti za Projekat „Industrijska zona Jug u Vladičinom Hanu“. U potpunosti se slažemo sa podrškom i predloženim projektnim parametrima i kriterijumima, dimenzionisanjem i faznosti izgradnje objekata. Studija izvodljivosti je pripremljena od strane MISP (Program podrške razvoju infratrukture lokalne samouprave) tima sa punim razumevanjem i u saradnji sa predstavnicima opštine Vladičin Han.

Ovim pismom Korisnik se obavezuje da preduzme sve neophodne mere u okviru svojih nadležnosti za dalje neometano sprovođenje ovog projekta.

U ime Korisnika

Opština Vladičin Han




Predsednik opštine, Nenad Mitrović