



MASTERPLAN FOR MINING LAND IN THE ZASAVJE REGION (SLOVENIA)

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PP9
Regional development centre





THE ZASAVJE REGION

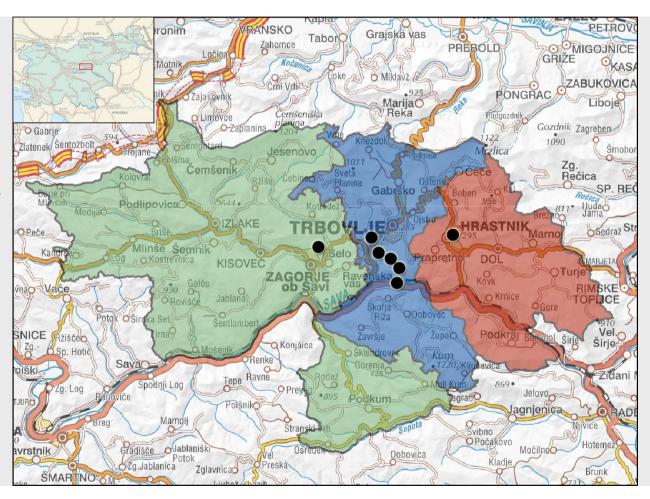
includes municipalities: Zagorje ob Savi, Trbovlje and Hrastnik

the smallest region in the country (264 km2)

third of gross value added is still created by mining, quarrying and manufacturing

unemployment rate is among the highest in the country

large share of the population commutes to work in other regions because of the lack of jobs











SHORT OVERVIEW OF THE SPATIAL DEVELOPMENT

Before mining era - the region was only scarcely populated

When the first coal was dug out in the first half of nineteenth century - spatial development rapidly advanced

After the construction of Vienna-Trieste railway - towns of Hrastnik, Trbovlje and Zagorje grew faster than development could have been managed

Urban growth encouraged the construction of housing for miners - miners' neighbourhoods

Beside of being one of the economically most prosperous Slovenian regions, the area **environmentally suffered** from the intensive industry that developed simultaneously with the mine

Mining company reached the **peak of employment in 1960s** with 8,000 employees

Collapse of socialism in early nineties resulted in the closure of formerly state-supported industries and companies, so beside the environmental damages of the area, region was also confronted with the significant job loss thus socio-economic problems

The closing work in Zagorje mine started in 1995 and in Trbovlje-Hrastnik mine one year later









MASTERPLAN FOR MINING LAND

Municipal land use plans are still in the preparation period

Masterplan focuses only on the areas which were directly influenced by mining (and are mostly owned by the mine company).

Altogether selected areas cover 850.160m²

Could serve as foundation for the adaptation of municipal spatial plans and as informative document for the potential investors









THE PROCESS OF MASTERPLAN PREPARATION

Based on extensive communication and cooperation with all important stakeholders in the region

All legal acts and programmes which directly influence the future land use of degraded areas were taken into consideration

Public participation was further enhanced through workshops organised within the **ReSource** project activities









THE MUNICIPALITY OF ZAGORJE OB SAVI

Mining area located mostly in the town centre

One part of it heads into the outskirts and is beeing turned into a recreation park











RECREATIONAL ZONE "EUROPARK"

Total area (m²): 308.722 Former mining stockpile

Future revitalization includes:

Horse riding polygon

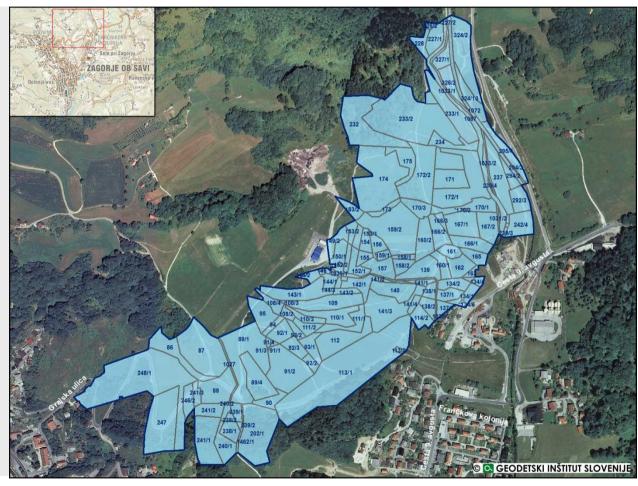
Safe driving polygon

Polygon skate

Adrenalin park

Additional jogging/walking paths that would interconnect the entire recreational zone

Additional parking places on the eastern and southern part of the area





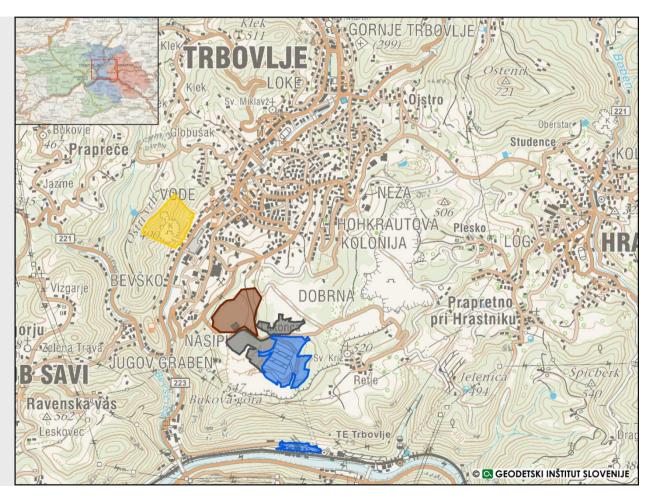






THE MUNICIPALITY OF TRBOVLJE

The mining area extends over the Eastern and Southern part of Trbovlje municipality











SOLAR POWER EXPLOITATION

Total area (m²): 118.133 **Abandoned quarry**

Approximate estimations:

Effective surface area of panels: 5.000 m²

Theoretical limiting efficiency of

solar panels: 25%

Solar radiation: 136,3 W/m2

Power output: 170 kW

Annual operational time: 1.500

working hours

Annual generated electricity: 255

MWh









BIOMASS PLANTATION AND RESEARCH CENTRE

Total area (m²): 117.737

Partly re-cultivated area with pilot plantation of salix on some 2 ha nearby

to be forested with plantation of salix, poplar, hybrid plants etc. in extensive density of 10.000 - 30.000 plants per ha

Alternative Energy Research/Promotion Centre











INDUSTRIAL ZONE

Total area (m²): 112.133

still to be leveled and is far from development land

no utilities are provided

electricity, water, sanitary sewer etc. should be provided as part of reutilization process









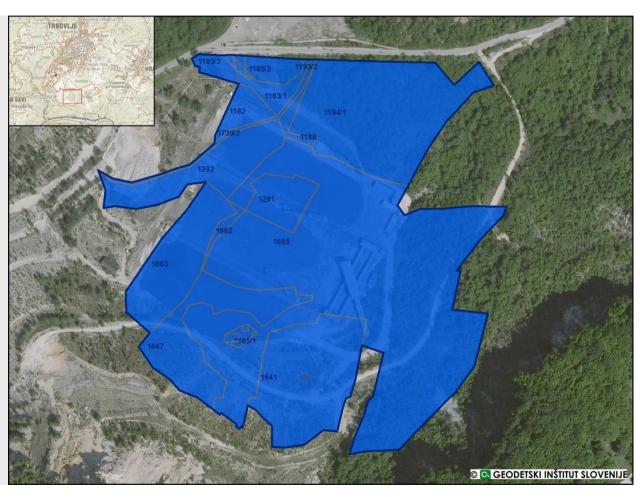


BIOMASS COLLECTION CENTRE AND PRODUCTION FACILITY

Total area (m²): 138.492 mining stockpile

Establishment of biomass collection centre and production facility (pellets, briquets)

initial phase assumes annual production between 20.000 to 40.000 tonnes of biomass











CARGO STATION FOR BIOMASS COLLECTION CENTRE AND PRODUCTION FACILITY

Total area (m²): 22.017

Construction of cargo station for wood that could be transported to biomass collection centre and production facility by train

existing transport line with transport capacity of 800 tonnes per hour (currently used for coal transportation) connected to the stockpile area





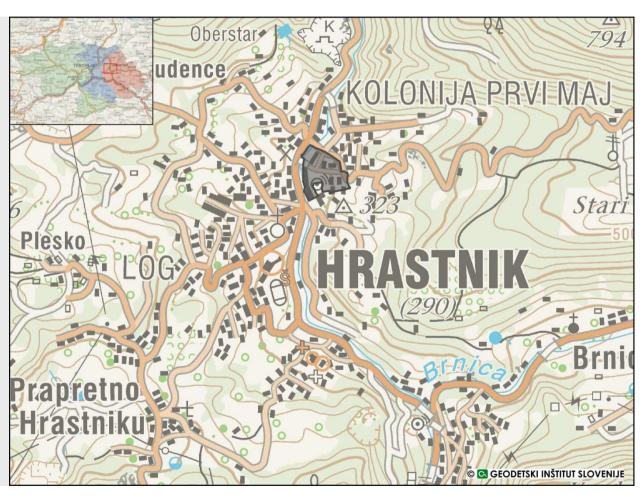






THE MUNICIPALITY OF HRASTNIK

Mining area located on west and the central part of Hrastnik











INDUSTRIAL ZONE

Total area (m²): 32.926

Located along existing mining infrastructure (mining elevator and supporting facilities)

Possibility of wasted mine groundwater from the Hrastnik pit area exploitation











CONCLUSION

Masterplan - first attempt to design comprehensive strategy of spatial development regarding post-mining areas in the Zasavje region

Masterplan can serve as a foundation for the adaptation of municipal spatial plans, and as an informative document for the potential investors

It is anticipated that projects will be implemented gradually depending on the cash inflow and the new ownership's structure of former mining areas













THANK YOU FOR YOUR ATTENTION

Regional development center Podvine 36 1410 Zagorje ob Savi Slovenia www.resource-ce.eu



