

## The progress of cross-border cooperation made by effective usage of brownfield

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### Abstract

In Czech Republic the area of brownfields is as large as ten Lipno's dams. More than two milliard of Czech crowns are available for their revitalization. This is great challenge for developers and construction companies.

The topic of brownfield has appeared in political agenda of developed countries since year 1970. Nowadays it became the important issue of the sustainable growth theories. Active supporting policy of reusing the brownfield can cause the improvement of vitality and economical output of our society at all.

As municipalities and state policy promote the investor's activities by offering investments invitations (they even offer the construction of new infrastructure system and new roads), the greenfields are much more attractive than brownfields for the investors. Also, the greenfields are ready for construction and entrepreneurial matters as well. Brownfields require a lot of money at the first place.

The aim of this contribution is to demonstrate the possibilities of the brownfield and their economical potential, which can be used by EU and Czech Republic policy of subsidies towards solving the problematic development of these brownfields. Also, cross-border cooperation could contribute to this topic and could be evolved as well.

**Key words:** brownfields; cross-border cooperation; regions; state policy; investments invitation; public private partnership.

### 1 Introduction

In the state environmental policy for 2004 – 20010 the Czech Republic undertook to fulfill conclusions of The Sixth Environment Action Programme of the European Community 2002-2012. The conclusions were fully compatible with updated state policy and therefore nothing prevented their implementation. Priorities of the state policy are specified into following areas:

1. Protection of environment – nature, countryside and biological variety,
2. Sustainable usage of natural sources, protection of water and flood protection, optimalization of material flows and waste handling,

3. Decreasing pressure on environment resulting from human activities, improvement of environmental standards for the quality of human life,
4. Protection of Earth climatic system and eliminating long-distance transfer of air pollution,
5. Increasing public knowledge of environmental tasks,

In my contribution I decided to focus on priority no. 3, especially on the area of Moravskoslezský kraj (Moravian and Silesian area), and particularly possibilities of decreasing pressure on environment resulting from human activities from previous periods. These possibilities are opening in front of us thanks to European financial sources. Especially areas called brownfields are regarded.

## 2 Basic characteristics of brownfields

The notion "brownfields" is taken from English where it means „periphery of town with run-down buildings“. In our country it is used to describe landed estate or real properties inside urbanized area which have already lost their function and usage, they are desolated, quite often they mean ecological albatross which could not be handled so far either from economical or environmental point of view.

Brownfields can be divided according to different viewpoints. As it comes to their **origin**, it means where they are originated from – for example, desolated industrial, mining, agricultural or other premises, army premises, tumbledown buildings of industrial heritage value and so on. Another viewpoint of classification is **location** of brownfields. In this case we are talking about built-up urban area – in central parts or further from city centers, surrounding zones, environs of small towns or villages, eventually out of urban areas. Last viewpoint in classification, but crucial for future, is the viewpoint of **possibilities of new use of land**. Therefore we can take into account on the one hand landed estate for which is possible to find usage within the scopes of market mechanism and on the other hand landed estate for which new usage under assistance of public financial sources must be found (for example Public-Private Partnership) and last, but not least, landed estate for which usage is impossible to find and it must be reclaimed.

Brownfields are areas where the problem with repeated usage does not have to be apparent at the first sight. But the opposite is true. As the first the problem of ownership appears. Most of time there are more owners across the spectrum of estate types. Another problem can be seen in a fact that new investors rather build their activities on the greenfield – on areas which are not burdened by contaminated soil and by history. This is also connected with high costs of elimination of ecological burden due to lack of experience with solution of brownfield problems as such. In the Czech Republic we are not able to use PPP projects, which means cooperation of public and private sector, in full range. Of course, there are more difficulties of brownfields, but actually stated belong to the most thorny ones.

In case the brownfields were made alive, everybody would win. The whole area would be revived, not only ecologically, but also aesthetic defects would be removed in the built-up areas. Protection of health and environment would reach higher quality. In particular the pressure on usage of new, especially greenfields, would be eliminated. Higher income and expansion of economics would become an inseparable part of improved situation in regions with large extent of brownfields.

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## **Brownfields and updated state environmental policy**

State policy of the Czech Republic in the field of environment comes out of an assumption that it is inadmissible to conquest the land endlessly for new developmental activities. There is only one possibility how to save existing open landscape from unrestrained urbanization and ensure improvement of environment for inhabitants of settlement together with care of country and face of the landscape.

Brownfields reusage is in accordance with trends of constantly sustainable growth where the area is handled with as valuable resource. All these facts are fully compatible with European procedure in solution of the subject point at issue.

The Ministry of environment has fully in its commission recultivation of brownfields, first of all, for those that functional usage can not be found for, either of economical or technical viewpoints. The above stated areas are usually outside urbanized landscape, country and suburb areas. It also solves reuse of brownfields by creation of natural recreational areas and reconstruction of ecological burden. But it is possible to state a positive fact that nearly half of brownfields is not affected by ecological burden.

## **Possibilities to finance removal of old ecological burden**

The first possibility how to solve the problem of brownfields is presented within the scopes of State environmental policy through the aim 3.4 „Environmentally friendly usa of landscape“. The basis of this aim is to limit maximally conquest of free land and to give preference to renewal, eventually recultivation of already built-up areas.

Partial aims and measures regarding brownfields contain especially measure no. 3.4.1, where the objective is to restore functions of disrupted landscape and to remove ecological burden and also no. 3.4.2 regarding effort to reuse the disrupted lanscape by limiting conquest of free landscape for new activities and by increasing effectivity of use on built-up areas.

One of the new possibilitie to finance removal of old economical burden is the Operational program called Environment. The program is focused on improvement of environment quality and therefore improvement of human health. It contributes to improvement of air, water and soil conditions, it also solves problems of waste and industrial pollution. In the same time it supports landscape maintenance, usage of renewable energy resources and building infrastructure for environmental public education.

Operational program Environment is focused on Brownfield's within priority 4 in characteristic „Improvement of waste handling and removal of old ecological burden“. For priority axis 4 there are earmarked European union funds of 0,78 mld. €, which means 15,8% of all Operational program. Among the basic characteristics which can be financially treated, is recultivation of old disposal sites (waste dumps), sanation of seriously contaminated localities etc. The Initial point of view of the Ministry is to prefer reusage of urbanized areas to development on greenfields.

As another possibility to finance removal of brownfields can be used Regional Operational Program NUTS II Moravia – Silesia (further referred as to ROP MS). It is focused on improvement of transport accessibility and connection within the region together with modernization of public transport, support of infrastructure development and support of

tourism services. At the same time it is possible to finance preparation of smaller entrepreneurial areas and improvement of living conditions in villages and in the country especially due to better quality of education, social and healthcare infrastructure.

A special regard to brownfields is given within the priority axis 2, which means support to prosperity of the region. For this priority axis there were earmarked by European union funds of 194,8 mil. €, tj. 27,2 % ROP MS. It's possible to finance for example regeneration of brownfields especially for non-entrepreneurial purposes from this program.

### **Cross-border cooperation and possibilities of solution for brownfields**

Regarding the position of Moravia-Silesian region it is necessary to mention also possibility of cross-border cooperation in solution of brownfields. In this case the Operational program called Cross-border cooperation CZ-PL is concerned and it is generally assigned for Czech regions of Liberec, Hradec Králové, Pardubice, Olomouc and Moravia-Silesian, from the Polish side regions of Jelenia Góra-Wałbrzych, Opole, Rybnik-Jastrzębie and Bielsko-Biała are concerned.

OP of the Czech Republic – Poland has 4 priority axis which are further specified through so called areas of support which specialize which types of projects can be supported within the relevant priority axis.

Based on suggestions presented to European Commission, the Operational Programs which are focused primarily on strengthening accessibility of single localities, protection of environment and prevention of risks, will be financed with the highest probability. It will be possible to use financial resources to modernize and develop transport infrastructure of local and regional significance in border area, to solve problems of waste, but also for prevention of environmental and technological risks, support of activities connected with monitoring and solution of environmental risks and things like that.

As recently there are regions, especially those primarily focused on heavy industry, that slowly escape from their mining and industrial image, it can be assumed that the following priority of cross-border supporting program will be the development of entrepreneurial environment with special focus on tourism. The same way it will be possible to finance cooperation of chambers of commerce, entrepreneurial associations, cooperation in consulting for companies, support of cross-border business exchange, cooperation in research, development and transfer of know-how technologies for small and middle-size companies and many other forms of cooperation. Obviously support can be expected for cycling tracks, hippotracks (tracks for horses), tourist and ski tracks, improvement of facilities for free time activities, creating and activity of tourist information centers, formation of new products of tourism and promoting them etc.

So called Public Private Partnership (further as PPP) can also be used as relatively new form of cofinancing for the purposes of solution of cross-border problems. As it is clear from the Green Book of European Union Commission about partnership in public and private sector and the right of the Committee about public contracts and concessions from 30.4.2004, the notion of partnership of public and private sector fully characterizes forms of cooperation among the authorities of public administration and private sector to ensure financing, construction, renewal, management and maintenance of public infrastructure or provision of public services.

PPP projects can be the most often characterized in the following way:

- Longterm relation between under-public-law partner and private partner
- Financing of projects goes on entirely or partially by private sector together with utilization of public financial resources
- Significant role is fulfilled by the entrepreneurial subject taking part in different parts of the project (suggestion, preparation, implementation, financing)
- Under-public-law partner is focused particularly on stating the aims which should be gained from the viewpoint of public interest, quality of provided services and price policy and takes responsibility to control fulfillment of these aims
- Risks connected with projects are divided between under-public-law and private partner
- Particular risk division is determined in particular cases according to possibility of involved parties and their ability to evaluate these risks, keep them under control and handle them.

PPP projects are most often used to implement infrastructure projects, especially in sector of transport, healthcare, education and national security and also in branches of innovation, research and development. Recultivation, respective revitalization of ecologically disturbed localities and changing them in worthwhile area allowing recreational, turistic and free time usage is actual possibility how to use PPP projects.

### 3 Conclusion

Changes in usage of industrial agglomeration areas represent important possibilities for overall solution of landscape revitalization in place of sooner intensively used areas due to restructuralization of industry. However there is the danger that unsolved contrast between potential possibilities of development and economical reality can freeze the development of these unused areas and in its consequences lead to endeavours to ensure town functions and new development areas by different, especially extensive development. This development leads to suburb areas of towns and to surrounding country while devastation of degraded localities continues.

Whatever way will be used to solve problems connected with brownfields by different countries, it is necessary to state that any way is better than no way and it is not possible to characterize more or less suitable term of implementing it. Time is merciless in this case and the longer it will take to reuse ecologically devaluated sites the harder and more problematic it will be to bring about truce between man and nature in particular areas, not mentioning financial aspects.

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