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**BROWNFIELDS MANAGEMENT PLAN -
ACTION PLAN FOR INTEGRATED
ENVIRONMENTAL MANAGEMENT FOR
OSTRAVA FUA)**

Version 1
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Authors: IURS - Institut pro udržitelný rozvoj sídel z.s, Moravskoslezské Investice a Development, a.s.
(Agentura pro regionální rozvoj, a.s.)





Table of contents

1. BACKGROUND	3
1.1. Introduction and Presentation of the Regional Framework	3
1.2. Strategic Development Plans	4
1.3. Management Strategy for the Implementation of (Existing/New) Strategic Development Plans in region	6
1.4. Scientific Input - Ecosystem Services and Threats for Land And Soil	6
1.4.1. Identification of ecosystem services and threats in the regional context	6
1.4.2. Carbon footprint as one of the secondary indicators	7
1.4.3. Funding opportunities for brownfields and brownfields regeneration	8
1.4.3.1. Operational Program Enterprise and Innovation for Competitiveness (OP PIK) - Support program "Real Estate"	8
1.4.3.2. Grant Program Regeneration and entrepreneurial use of brownfields	8
2. ACTION PLAN	9
Actions for fulfillment of Action 2	12
Actions for fulfillment of Action 3	13
Actions for fulfillment of Action 4	14
Actions for fulfillment of Action 5	15
3. Priority Map pilot	15
4. LUMAT TOOLS	16
5. CAPACITY BUILDING AND INSTITUTIONAL APPROACHES	17





1. BACKGROUND

1.1. Introduction and Presentation of the Regional Framework

Moravian-Silesian Region is a very specific area, in relation to land use. From the west largely agricultural areas, where problems associated with the collapse of agricultural production in the nineties led through unemployment problems for the construction of several productions on greenfields.

The eastern part of the region is contrary consists of areas with underground mining with all its consequences such as large elevation changes in the field by, existence dumps and tailings ponds.

The heart of region is Ostrava. Ostrava and its surroundings has transformation from an industrial city

The region is located in the north-eastern part of Czech Republic. Once a highly industrialized region, it was called the "Steel Heart of the Country" in the communist era.

Population is about 1.2 mil inhabitants.

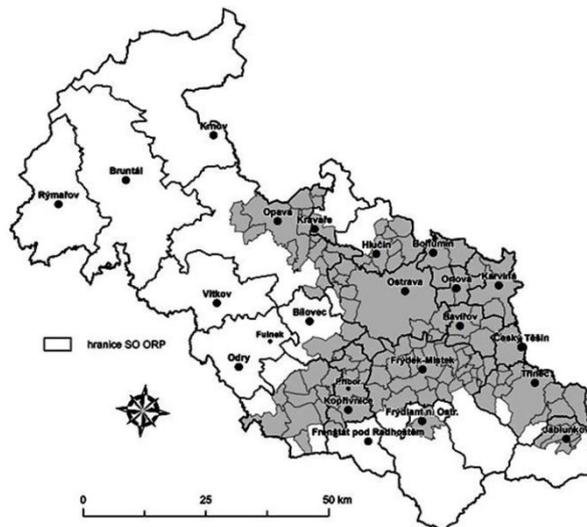
In the Czech Republic, with regard to the definition of FUA, their concepts have stabilized as the territory with 25% of the commuters. The application of these spatial arrangements can be found in Integrated Territorial Investment (ITI), which is an investment planning tool for a heavily urbanized territories. In the Czech Republic, seven large metropolitan areas and agglomerations can use this tool.

The definition of the territory is not always uniform and respects the specifics of individual agglomerations.

One of the ITI's is the agglomeration of Ostrava in the Moravian-Silesian region. This agglomeration represents a compact territory with very high daily mutual interaction between the municipalities in the hinterland and the core of the agglomeration, moreover, this territory is intrinsically relatively closed. It also represents the area with the highest growth potential in the region, as illustrated by the analysis of selected quality indicators and it complies with strategic development documents of the Moravian-Silesian region.

FUA Ostrava - Ostrava agglomeration - as it is defined - consists of 119 municipalities and has population of 965 338 inhabitants. It concentrates 86 % of the population of Larger Urban Zone Ostrava (Eurostat) and 79 % of the population of Moravian-Silesian region (on 35 % of its territory). The population density of the region is 225 inhabitants per km², while the population density of the agglomeration reaches to 509 inhabitants per km² (by 31st of December 2014). Such defined territory also includes Functional Urban Areas CZ003 Ostrava (Metropolitan zone) and CZ017 Karvina (small urban area) as defined by the OECD.

Figure 1: FUA Ostrava



1.2. Strategic Development Plans

The objective of the LUMAT project is to implement sustainable land use and integrated environmental management. Implementation is based on agreed Action plan

Topics addressed in the region (FUA) include, **successful brownfield redevelopment** and sustainable land use on contaminated land. The need for these objectives is primarily embedded in conceptual and sectoral documents at the level of the Czech Republic. At the state level the documents are prepared by Czech ministries and they are approved by the Czech government.

Here are only those that combine the need for brownfield regeneration with the issue of protecting agricultural land against the maintenance of its ecosystem services. The key document in urban planning is **Spatial Development Policy of the Czech Republic 2008**, which declares binding limits for spatial planning on regional and local level. In relation to brownfields problematics it sets out the national priorities of urban planning (Article 19, p. 17): "To create conditions for multifunctional use of abandoned sites and areas (brownfields of industrial, agricultural, military and other origin)." According to this document one of the priorities is "To use built-up area efficiently (support for reconstruction, revitalization and rehabilitation of territories), to ensure the protection of undeveloped land (mainly agricultural and forest land) and to protect public green spaces, including minimizing its fragmentation. The aim is to reduce the negative consequences of suburbanization for sustainable development of the territory." Brownfields are in this document mentioned as opportunities and tools for prevention of landscape. (Ministry for Regional Development of the Czech Republic. *Spatial Development Policy of the Czech Republic, update 1.* 2015).

Following documents are from various sectors (environment, regional development) but they represent part of the strategic planning. Only those parts which are relevant to brownfields are mentioned in the article.



Government Council for Sustainable Development in collaboration with the Ministry of Environment prepared the **Strategic Framework for Sustainable Development in the Czech Republic document**. The role of this document is to provide a widely recognized framework for processing of other strategies, programs or other materials of conceptual nature. The analytical part of the document mentions among other things that often large abandoned areas ("Brownfields") today hamper the development of many town districts, especially because of the costs and complexity of their reconstruction and renewal. (*Strategic Framework for Sustainable Development in the Czech Republic, 2010*). Despite these negatives the brownfields are seen as places having the development potential. Apart from brownfields stemming from former industrial activities there are also addressed brownfields with original utilization for housing or for military purposes. For benefits of new brownfield reuse is considered, besides the revitalization of the entire area, also the environmental restoration in the residential landscape in case of the industrial and possibly also military brownfields. This can reduce the risk of negative effects on human health. It also creates land available for use, therefore reducing the pressure on greenfields use.

The State Environmental Policy of the Czech Republic 2012 - 2020 among the most important and urgent problems indicates *Reducing the permanent appropriation of farmland and basement rocks* (Ministry of Environment The State Environmental Policy of the Czech Republic 2012 - 2020). The policy noted that in recent years the annual losses of agricultural land totalled approximately 5000 hectares, which means 14 hectares per day. At present, according to (ISSAR, 2014) built-up areas in the Czech Republic occupy about 10.6% of the entire country area. Calculation made by (Prokop, 2011) specified the daily loss of agricultural land in the Czech Republic even to 16 hectares per day. The difference in results can be explained by the slowdown and partial halt of the construction in the context of the economic crisis, which began in 2008. An important measure to reduce the loss of farmland is again a pressure on brownfields reuse. Brownfields are, due to their location in the city structure, identified as places where the green areas such as parks can be suitably placed and supported. Responsibility is assigned to the Ministry of the Environment with the support of the Ministry for Regional Development and the Ministry of Industry and Trade.

Regional Development Strategy of the Czech Republic for the period 2014-2020 is a key document and also a tool for implementation of regional policies and for coordination of actions of other public policies towards regional development. For example it defines also competencies of the ministries for individual priorities and measures defined in this strategy. Brownfields are addressed by Priority Area 3 - Environmental Sustainability and by Priority area 6: Protection and sustainable use of resources in regions, Action 6.1 Removal of old environmental burdens, revitalization of brownfields and territories with former mining use. (Regional Development Strategy of the Czech Republic for the period 2014-2020.) For this action the strategy names as competent authorities, i.e. those which have addressing of this area among their competencies and sectoral plans, these ministries: Ministry of Environment, Ministry of Regional Development, Ministry of Industry and Trade and the Ministry of Agriculture.

Strategy of Adaptation to Climate Change in the Czech Republic has been prepared by the Ministry of Environment in cooperation with other ministries and with use of climatological findings and recommendations of the Czech Hydrometeorological Institute. The strategy is a national adaptation strategy of the Czech Republic. It assesses the likely impacts of climate changes and contains also proposals for specific adaptation measures. This document has direct links to the documents in the urban planning area. It mainly refers to Spatial Development Policy, but also refers to urban plans. At the municipal level, municipalities should ensure in the preparation and approval of spatial plans, that during



denomination of land available for new development they will favour increasing of density of already built up areas to the use of greenfields areas and extending of built up land. Municipalities should especially support the reuse of brownfields. (*Strategy of Adaptation to Climate Change in the Czech Republic, 2016*)

From these documents can be easily concluded that brownfields brownfields are in general terms perceived a potential source of contamination which needs to be mitigated. On the other hand they also provide space, in which new building projects can be conducted without negative impacts associated with diminishing of agricultural land.

1.3. Management Strategy for the Implementation of (Existing/New) Strategic Development Plans in region

The Spatial Development Principles of the Moravian-Silesian Region, even in its update from year 2015, generally describe brownfields as areas whose use should serve to protect agricultural land. From the point of view of the Moravian-Silesian Development Zone, the document deals only with the industrial zone RPZ-1 Nad Barborou (92.3ha) in order to establish a strategic industrial zone, in relation only a part identified as RPZ-3 Barbora - Area for the location of "Regional Integrated Center for Utilization of Municipal waste" is mentioned with an energy source directly linked to the Nad Barborou zone.

Other brownfields from the Moravian-Silesian Development Zone are not mentioned in the Spatial Development Principles.

In the area of strategic planning at the regional level, the Development Strategy of the Moravian-Silesian Region for the years 2009 - 2020 update from year 2012 deals with brownfields in general. Specifically, it mentions only one brownfield in the territory of Ostrava, namely the Hrušov site.

1.4. Scientific Input - Ecosystem Services and Threats for Land And Soil

1.4.1. Identification of ecosystem services and threats in the regional context

Area differences and increase of buildings between 2006 and 2016 have been calculated using the GIS analysis performed by the author with use of CÚZK data (© ZABAGED) - specifically the layer "Building, block of buildings". The result of the calculation is the fact that, during this period, in the more precise delimitation of the Ostrava agglomeration (124 municipalities) there was an increase of buildings with total area of approximately 202.8 ha, which, for better notion, is the size of about 290 football pitches.

In FUA Ostrava, a total of 238 locations have been identified to have brownfield features. The information comes from the Moravian-Silesian Investment and Development (formerly Regional Development Agency) internal database. These are formerly used or underused areas which for their future development need an intervention for their future development, they need intervention. These are, therefore, seemingly easily accessible and usable sites. A number of regenerations of brownfields took place in FUA Ostrava in the last decade, and yet, as mentioned in the previous chapter, more than 200 ha of agricultural land were consumed. Brownfields within FUA Ostrava represent 665 hectares of land (information recalculated from the Moravian-Silesian Investment and Development internal database). The analysis conducted, focused on assessing how many areas are actually available for construction. This means that they do not have any property that would make their use impossible in the short term.



Because brownfields do not form a homogeneous group, the analysis was made according to the following groups:

- previous function was housing, administration or civic amenities
- heaps and dumps
- industrial brownfields
- transport related brownfields
- military brownfields
- other

1.4.2. Carbon footprint as one of the secondary indicators

In scope of the preparation of the Action Plan, a "Carbon Footprint Evaluation for Selected Locations - formerly used areas in FUA Ostrava (FUA = Functional Urban Area) and the proposed type of use - temporary use" was elaborated.

The following conclusions and recommendations were prepared for future activities

The carbon footprint can be used as one of the indicators of the success of brownfields redevelopment. The carbon footprint can be reduced by measures (see below). Remaining emissions can be offset in other projects.

The total emissions of the revitalized brownfield will also depend on the operating energy consumptions leading to the so-called operational carbon footprint. Operating consumption can be reduced by, for example, achieving a low-energy building standard, installing renewable energy sources (e.g. solar panels) and by other measures.

The smaller the built-up area is and the less demanding materials are chosen (ie. wood, recycled materials, materials taken from original building, recyclable materials), the lower is the carbon footprint of the project.

It is important that buildings and paved areas are built - if possible - where there is no forest or trees in general.

Constructions made of concrete have the highest carbon footprint. During their production, about 2 times more emissions are produced per unit of material than if wood was used. Certified wood can according to some sources even store CO₂ and thus reduce the carbon footprint of the entire construction.

Reducing the size of paved areas (pavements, parking areas, etc.) and size of buildings means more soil that is a carbon storage and can also sequester - and thus reduce the carbon footprint.

The carbon footprint of paved areas can be reduced by using materials with low energy inputs in production and construction (e.g. gravel, milling) or using grass pavers where part of soil and vegetation are retained.

All types of land use with vegetation, with the exception of water areas where carbon accumulation is minimal, retain more or less carbon amount depending on the amount of biomass in the aboveground and underground parts.

Large areas of tall growing, long-living tree species are the most suitable common land use type that allows for storing of large amounts of carbon for a long time. Forest planting is the best compensation of



the building activities that does not require special procedures. A forest does not necessarily have to be planted in the brownfield area - offsetting of the carbon footprint is possible also in another location.

For similar reason, it is important not to cut existing forests and other woody areas that store carbon and provide other ecosystem services such as air purification from airborne dust and other harmful substances. For locations where the felling is planned, their carbon footprint can be reduced by preserving the forest that is already in the habitat.

Permanent grassland, shrubs and other types of land use can also accumulate carbon over the course of years, and its quantity is mainly influenced by the management of the vegetation.

Wetlands can store varying amounts of carbon depending on their biomass and soil type.

Not built up land is a large CO₂ storage.

1.4.3. Funding opportunities for brownfields and brownfields regeneration

This document mentions only two main existing options for the state's support.

1.4.3.1. Operational Program Enterprise and Innovation for Competitiveness (OP PIK) - Support program "Real Estate"

Modernization of production facilities and reconstruction of existing outdated infrastructure and reconstruction of brownfield objects (excluding costs for the removal of ecological burdens) and their conversion to modern business premises or the emergence of new business premises are supported.

Beneficiaries of the support are: an SME enterprise, which is also the owner and the user of the property and whose sectoral definition of the activity is supported by the program (specifically defined in the call).

Beneficiaries of the aid are: an SME enterprise, which is also the owner and the user of the property and whose sectoral definition of the activity is supported by the program (specifically defined in the call) Support ratio: small enterprise 45% ZV, medium enterprise 35% ZV

One can obtain support for the following:

modernization of production facilities and reconstruction of existing obsolete infrastructure and reconstruction of brownfield objects and their transformation into modern business buildings, investment in building modifications including demolition of original buildings and construction of new buildings.

1.4.3.2. Grant Program Regeneration and entrepreneurial use of brownfields

The subsidy provider is the state through the Ministry of Industry and Trade - the agency CzechInvest is in charge.

Beneficiaries of the subsidy are municipalities and regions whose cadastral territory lies in the territory of structurally affected regions (Moravskoslezský, Ústecký and Karlovarský region) and economically problematic areas.

The aim of the Program is to revitalize and revive obsolete and unused industrial or agricultural sites, to prepare industrial areas and business premises with size up to 10 hectares.

Supported activities are:

regeneration and reconstruction of brownfields (excluding costs for the elimination of ecological burdens) and their transformation into modern business buildings and creation of newly renovated business areas with size up to 10 hectares.



construction and technical measures leading to the regeneration of technically unsuitable business (agricultural) brownfields

Support is provided up to a maximum of 85% of eligible project expenditure (by municipality size)

2. ACTION PLAN

The aim of the Action Plan is to move forward brownfields solution in the Moravian-Silesian Region (FUA Ostrava is its part)

The aim of the Action Plan is also to help set up the implementation structure in order to ensure a stable approach to the issues of current and future brownfields

ACTIONS FOR THE IMPLEMENTATION OF THE ACTION PLAN

Action 1 - Use of the legislative initiative to create a legislative environment for brownfield regeneration support

Action 2 - A dedicated fund for brownfields regeneration support

Action 3 - Mapping brownfield sites and managing their database, mapping sites with assumed contamination, and defining priorities for solution.

Action 4 - Initiation and activation of owners and promotion of brownfields problematic for the public.

Action 5 - Promoting human capital in brownfield regeneration

Action 5 - Supporting human capital in brownfield regeneration problematic

Action to Fulfill Action 1

Actions for fulfillment of Action 1

Actions aim to create a legislative environment for support of the brownfields regeneration and at the same time to create such a legislative environment to encourage owners of brownfields to regenerate them.

Action 1 is divided into:



Sub-action 1.1 - anchoring the brownfield definition in legislation.

Sub-action 1.2 - modifying and supplementing current legislation so that current or future owners are stimulated to take actions leading to improve the status of sites having brownfield attributes.

Sub-action 1.3 - modifying and supplementing current legislation so as to create a stimulus for priority using of previously used areas for the construction, before building up of agricultural land.

Sub-action 1.4 - modifying and supplementing current legislation so that an instrument is created at the regional level to support activities related to processes leading to the improvement of brownfields' state.

Sub-action 1.1

Anchoring the Brownfield Definition in Legislation.

At present, the proposal of the Ministry for Regional Development was approved to amend [Decree No. 500/2006 Coll.](#) on spatial analytical documents, land-use planning documentation and the way of recording of land-use planning activities. The phenomenon 4a - brownfields is mentioned in the contents of the Spatial Analytical Documents. The definition of what is a brownfield is missing.

Task: Initiate an amendment of the decree by the brownfield definition.

[Act 248/2000 Coll.](#) on support for regional development, as amended. §6 - Content of the Regional Development Strategy to add point j) analyzes the state of the territory in terms of the existence of brownfield sites.

Task: Initiate an amendment to the act.

Sub-action 1.2

[Act No. 338/1992 Coll.](#) Property Tax Act, as amended. § 4 Exemption from tax to add statement y) for a period of not more than 5 years for plots, where the brownfield regeneration was done, the owner may apply for exemption from the property tax.

Objective: To promote regeneration to construction on greenfields.

[Act No. 565/1990 Coll.](#) Local Fees Act - this proposal does not have as precondition implementation of the previous steps and aims to initiate the owner to action.

Amendment: Fee for not using and degradation of land and space.

§ The municipality may charge a land and property degradation fee to a natural or juristic person who has not been seeking permanent or temporary use of the land or property it owns and which is or has been built-up in the past and is now abandoned and unused.



Objective: To encourage owners to take steps leading to improvement of the status of the brownfield.

Act No. 586/1992 Coll. Income Tax Act - The costs of remediation and regeneration do not form part of land valuation and depreciation, but are the costs of the year in which they were incurred.

Objective: The costs associated with the land redevelopment process can be classified as the cost of the year in which they were incurred, thereby reducing the tax base of the taxpayer.

Sub-action 1.3

Statutory Provision of Senate 40/2013 Coll. - on tax on the acquisition of immovable property through the amendment of **Decree No. 419/2013 Coll.** of the Ministry of Finance, which regulates the setting of the indicative value of the urbanized land so as to create an advantage when buying land for construction in the built-up area compared to the area just allowed to be built-up.

Objective: To support purchase of previously used land or land in a built-up area, in preference to purchasing and then building up of "greenfields".

Act No. 338/1992 Coll. Property Tax Act, as amended. Increase the property tax rate if it is a buildable land. This amendment would also require the amendment of **Act No. 256/2013 Coll.** Act on the Cadastre (Cadastral Act).

Objective: Efficient definition of buildable land and thereby promoting the re-use of previously used areas.

The amendment to the **Act No. 183/2006 Coll.** on Spatial Planning and the Building Code (Building Act), as amended, and other related acts, amend §55 (4) to the text prepared by the Ministry for Regional Development.

(4) Further buildable sites can be defined by amendment of the master plan only on the basis of proving of the impossibility to use already defined buildable area.

Objective: Efficient definition of buildable land and thereby promoting the re-use of previously used areas.

Sub-action 1.4

Amendments to **Decree No. 500/2006 Coll.** on spatial analytical documents, land-use planning documentation and the way of recording of land-use planning activities.

- by the obligation to use the regional databases and to report possible deficiencies to the regional database administrators (especially changes of state).
- by the obligation to use information on brownfields from the regional database for phenomenon 4a in the preparation of spatial analytical documents.

Objective: To streamline working with brownfields.



Amendment to Act No. 243/2000 Coll. on budgetary determination of revenues of certain taxes to territorial self-governing units and some state funds (Law on Budgetary Designation of Taxes). As part of the budget allocation of taxes for the region, allocate defined percentage to the dedicated fund. For the Moravian-Silesian Region, the fund should fulfill the function described in Action 2.

Objective: Implementation of Action 2.

Actions for fulfillment of Action 2

Action 2 is to create a dedicated fund that would be managed by the regional administration and used in connection with the existence of brownfields.

The fund should cover the costs associated with solving the existence of brownfields in order to fill the gaps in the state level grant scheme.

- The Fund will support projects and other activities that can not be funded from other grant sources and the use of public funds is not in contradiction with the European Commission's regulation.
- The funds will compensate the expenses of the municipalities in events when in case of inactivity of the owner according to §129, paragraph 1 of the Building Act, the Regulation for the removal of the building, landscaping and equipment, the Building Authority orders the removal of the building, but the owner did not do so and the municipality carried out demolition at its expenses in the public interest.

An analysis of the need for a subsidy from the dedicated fund will be prepared by the Working group on the basis of suggestions from its members and suggestions from the Consultative Group.

Possible sources of the fund

The proposed fund works on the principle of subsidiarity, where responsibility for the management of finances for the activities contributing to the development of the whole territory is taken over by the region administration. Therefore funding should be provided by the state.

In paragraph 3 of the Act No. 243/2000 Coll., on budgetary determination of revenues of certain taxes to territorial self-governing units and some state funds (Law on Budgetary Designation of Taxes), the percentage attributable to the regions should be increased. These increased funds would not enter the budget of the regions but would be tied to a separate dedicated fund.

Another source would be the funds recovered from the owners in the event of their inaction when the building removal order was issued.



Assess the possibility of using the JESSICA funds that are currently managed by the Moravian-Silesian Region.

Fund Objective: To support activities related to the existence of brownfields, with additional costs incurred to municipalities, even though they are not their owners.

Actions for fulfillment of Action 3

Action 3 focuses on preparing and managing data related to the existence of brownfields or the existence of contamination of the rock and soil environment as a result of past use.

Due to the separate systems of brownfield recording and old environmental burdens at the state level, this state is respected at the regional level and remains a separate record of environmental burdens and brownfields. Therefore, two sub-actions are also proposed, with assumption that specific locations may or may not be recorded in both data structures.

Sub-action 3.1 - Brownfield Database.

Sub-action 3.2 - Mapping previously used sites with potential contamination risk.

Sub-action 3.1

At present, the Moravian-Silesian Investment and Development (hereinafter referred to as MSID) manages the brownfield database of the Moravian-Silesian Region. The database is currently fully operational and the MSID has enough experience to perform other proposed activities to maintain quality and its usability in the future.

For the proper and efficient operation of the database, it is necessary:

- Regular updates - at least once per year for the areas already listed in the database.
- Continuous adding the newly identified brownfields into the database
- Linking the entire database to the regional information system.
- Verification of the submitted information by the Department of Regional Planning of the Regional Authority.
- Regular evaluation of brownfield changes in the territory and subsequent proposal of possible actions.
- Involving the public in brownfield search through a modern tool (web sites, mobile applications, etc.).
- Inserting the public part of the database into the System of Land Use Limits (administered by Ministry of Agriculture).



- Continue updating data about brownfields kept in the CzechInvest database.

Objective: Maintain long-term continuity of data provision for both investor and strategic planning purposes within the region and effective targeting of Action 2 (dedicated fund).

Sub-action 3.2

The sub-action exploits an existing database of contaminated sites (hereinafter referred to as SEKM) which is provided by the Ministry of the Environment. This database does not contain a comprehensive overview of all locations. In order to determine the needs and priorities within the region it is necessary to extend the database.

Objective: To extend the register of sites in SEKM by other sites with anticipated contamination, prioritization of their solutions, further work with these sites.

Actions for fulfillment of Action 4

Action 4 sets as a main objective a long-term and stable support, initiation, promotion and education in the field of solving issues connected with brownfields.

- Active creation of networks between owners and investors, moderation or facilitation of meetings.
- Assistance to the public sector in negotiations with investors, support for project preparation.
- Joint discussion meetings of owners of similar types of brownfields (agricultural, industrial, military, schools, apartment buildings, chateaus and historical buildings), exchange of experience, presentation of subsidy possibilities, include among the invited both the owners - municipalities and the private owners (possibility of property market event, in case that the subsidies are currently only for municipalities, for example) or to connect with an active offer of areas to investors.
- Encourage the creation of clubs of owners of a similar type of brownfields.
- Promotion in the form of holding construction investment fairs - possibly as part of existing trade fairs.
- Promote examples of successfully regenerated brownfields.
- Mapping of the absorption capacity of the project plans for use of funds for the regeneration of brownfields and subsequent proposals for modifications of the existing grant titles.
- Organize seminars, educational events, lectures for schools, the public and professionals.



- Initiate "Region as a flagship" activity - Investment activities based on the needs of the region should be, if technically possible, realized on the areas previously used.

Competence: The Moravian-Silesian Investment and Development (MSID) should be the guarantor of the individual activities.

Actions for fulfillment of Action 5

Action 5 is divided into two sub-actions:

Sub-action 5.1 - Support and development of the "Brownfield Manager" training programme.

Sub-action 5.2 - Extension of authorization for the "Urban Engineering" field of study.

Sub-action 5.1

The role of a "brownfield manager", ie. a complexly educated graduate with knowledge of building, environmental and economic problematic, would be a significant benefit and acceleration of the regeneration process.

Competence: The Consultative group should evaluate existing fields of study or even propose a new field of study.

Sub-action 5.2

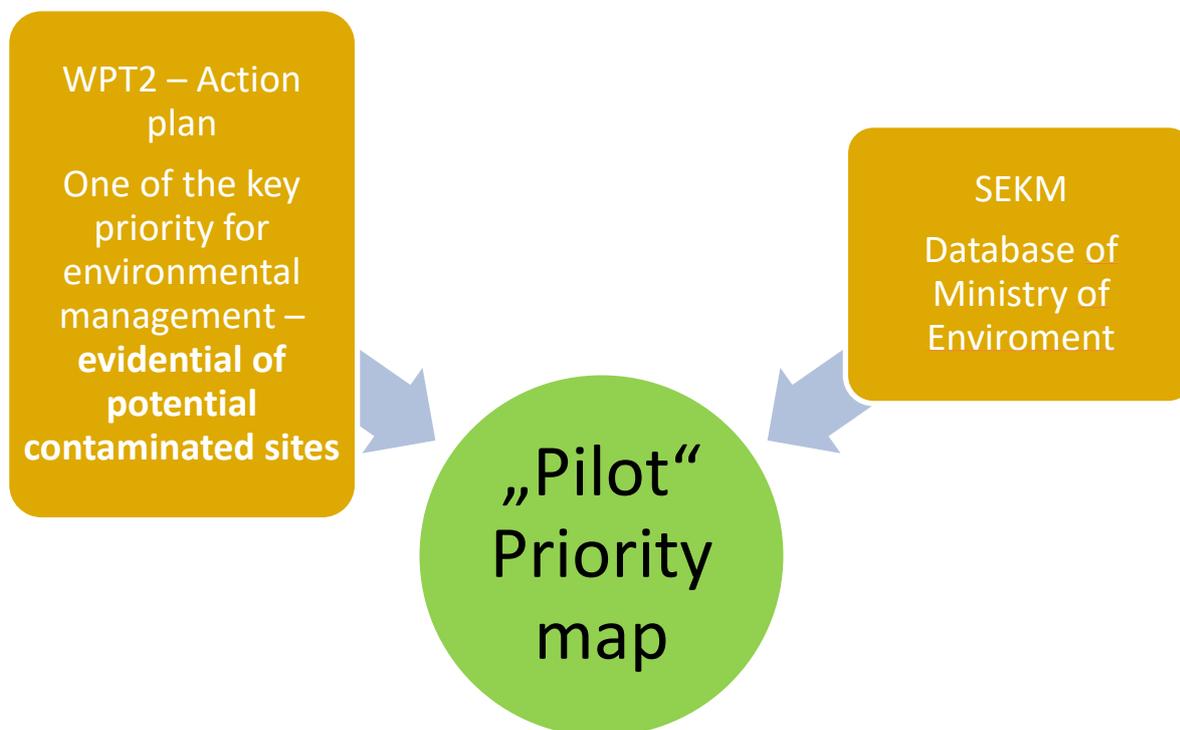
In order to solve and support regeneration of brownfields there should exist a person who would be able to distinguish brownfields, beyond all doubt, in the field investigation. Appropriate appears and it is the most related in its field, the authorization of ČKAIT - urban engineer. Because it is a long-term working accreditation, and the field and content is in accordance, it would be appropriate to start negotiations on the possible extension or specialization of this authorization.

3. Priority Map pilot

The pilot "Priority Map" of areas for enhancing regional environmental management is based on Action 3.

Priority map for areas underused, abandoned and formerly affected by use will include estimation of the potential risk of selected areas. It will be implemented to regional integrated Environmental management system.

SEKM (*system of registration of contaminated sites*) database - The service displays data from the SEKM (system of registration of contaminated sites) database. It is an open system of environmental pressures records, respectively. contaminated sites in general. The recording system consists of contaminated sites graphical mapping part and attribute (text, item). **but not including all localities**



Pilot Priority Map of for areas underused, abandoned and formerly affected by use shows location of 20 selected sites and includes an assessment of the potential risks according to the methodology of the Ministry of the Environment. When implementing the action plan, this map should be further developed.

4. LUMAT TOOLS

A web-site has been prepared directly for the needs of FUA Ostrava with overlap to the Moravian-Silesian Region.

This is an interactive environment with the possibility of public access.

Visitors may

- 1) Read the Action Plan and comment it (discuss about it)
- 2) Input new brownfields including photos and related information
- 3) Input examples of successful brownfield revitalizations including photos

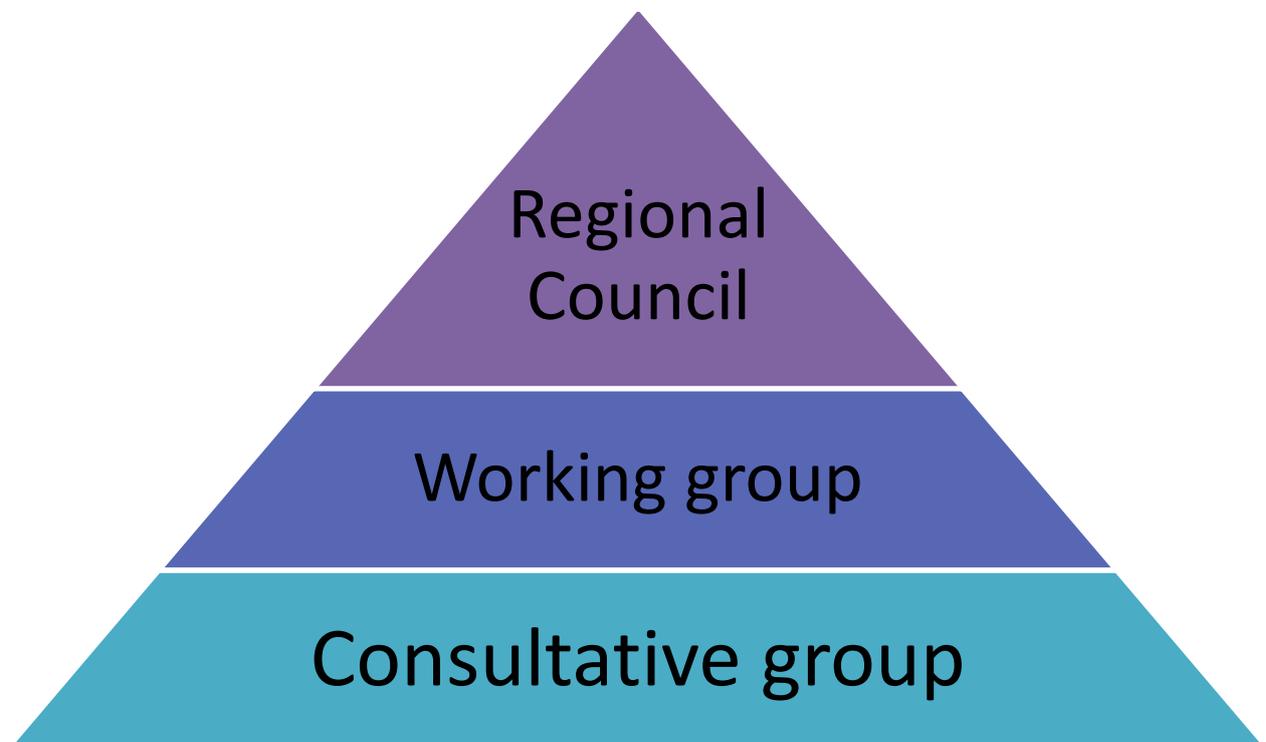


- 4) Suggest future use for individual brownfields
- 5) Add comments to the individual brownfields
- 6) Lookup brownfields
- 7) Input project intention for brownfield regenerations
- 8) Communicate with MSID agency – send questions, comments, students can send internship inquiries, diploma works, etc.

The goal is to strengthen public involvement in the brownfield regeneration process

5. CAPACITY BUILDING AND INSTITUTIONAL APPROACHES

- Implementation structure of the Action Plan
- This Action Plan is proposed for the territory of the Moravian-Silesian Region (FUA Ostrava is a part of it), so the implementation group is designed with respect to the structure of the Regional Authority and of the Moravian-Silesian Region.
- Implementation group has three levels:
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-
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- **Regional Council** - executive body of the region in the area of independent competence. The Council is preparing proposals and documents for meetings of the Regional Assembly, therefore it is most suitable for implementation itself.
- **Working group** - executive group preparing background documents for the Council. The Working group is proposed with respect to the current organizational structure of the Region, with the rule that in case of change the agenda is transferred to the successor department. The Working group will be composed of representatives of the Department of Land-use Planning and Building Regulations (Land-use planning section), Department of Regional Development and Tourism (Regional Development Section), Department of Environment and Agriculture and Moravian-Silesian Investment and Development agency. The task of the Working group will be to specify measures and activities to be decided by the Council. At the same time, it will fulfill its tasks as a result of the Council's decision. It will monitor the results of implementation of already implemented activities and measures. This information they will hand out to the Council of the Region. The Working group will also be in contact with the Consultative group.
- **Consultative group** - prepares suggestions for the Working group. It will consist of citizens, non-profit organizations, private business sphere, experts and public administrations (municipalities, associations of municipalities, region). The main task of the Consultative group is to monitor the impacts of the actions already undertaken and to propose modifications and amendments to the Action Plan in reaction to the current situation.
- Responsibility for implementation
- This Action Plan is prepared for the needs of the Moravian-Silesian Region. The Regional Council is responsible for its implementation, with the assumption that the materials will be prepared by the Working group on the basis of its knowledge and experience, and on the basis of suggestions from the Consultative group.