



STRATEGIC ACTION PLAN FOR BYDGOSZCZ-TORUŃ FUA

D.T4.1.3_Bydgoszcz-Toruń FUA

Draft

07 2019



FORMER STATE ENTERPRISE OF RAILWAY SLEEPERS
PRESERVATION IN SOLEC KUJAWSKI



Table of Contents

Introduction	4
<i>Scope and structure of the document</i>	4
<i>The context: the Functional Urban Area and related Pilot Site(s)</i>	5
<i>The implemented Pilot Activities</i>	5
<i>Consultation and participatory process</i>	5
<i>Methodological approach to select actions</i>	6
Part A. Short Summary of actions	7
Action 1.....	7
Action 2.....	7
Part B. Detailed description of concrete actions.....	9
Action 1 - Action short title	9
<i>Content of specific action</i>	9
<i>Short problem description</i>	9
<i>Objective of specific action</i>	9
<i>Partners involved and description of participation process</i>	9
<i>Planning of activities (timeline)</i>	10
<i>Financing</i>	10
<i>Progress of implementation</i>	10
Action 2 - Action short title	11
<i>Content of specific action</i>	11
<i>Short problem description</i>	11
<i>Objective of specific action</i>	11
<i>Partners involved and description of participation process</i>	11
<i>Planning of activities (timeline)</i>	12
<i>Financing</i>	12
<i>Progress of implementation</i>	12
References and annexes	15
<i>Project deliverables and material</i>	15
<i>External bibliography and links</i>	Błąd! Nie zdefiniowano zakładki.
<i>Web links</i>	15
<i>Annexes</i>	Błąd! Nie zdefiniowano zakładki.



Introduction

Scope and structure of the document

The document represents the deliverable D.T4.1.3 of the GreenerSites project, and describes the concrete action(s) that, according to project experience and approaches, can contribute to increase the effectiveness of management of identified brownfield sites in the territory of Bydgoszcz-Toruń Functional Urban Area. The document focuses mainly on two sites: former “Zachem” Chemical Plant in Bydgoszcz and former State Enterprise of Railway Sleepers Preservation in Solec Kujawski.

This strategic action plan (SAP) is arranged with the purpose of provide sustainability to the activities implemented within the project. It has been issued taking into account:

- the specific outcomes of the pilot actions developed during the project;
- the results of the stakeholders’ consultation and the participatory processes activated in the considered Functional Urban Area (FUA).

The document consist of four main chapters.

Introduction gives an overall presentation of the considered areas and of the carried out during the GreenerSites project activities (pilot actions). In addition, the process of involvement and consultation of local key stakeholders will be described, and the methodological approach adopted for selecting the relevant action(s) and drafting this Strategic Action Plan is presented.

In subsequent “Part A” a short summary of the concrete actions that have been identified for an effective management of brownfield sites in the considered area can be found. While in “Part B”, these actions are described in detail, starting from the analysis of the specific problems addressed, describing the objectives of the intervention, the actors, roles and timing of activities, and identifying also the financing sources and concrete implementation steps.

The final chapter contains references to other project deliverables and external documents, that can be useful in deepening the topics covered by this document.



The context: the Functional Urban Area and related Pilot Sites

The areas of former „Zachem” Chemical Plant in Bydgoszcz and State Enterprise of Railway Sleepers Preservation in Solec Kujawski are typical examples of brownfields in Poland. Despite the attractive location in the immediate vicinity of the urban areas in connection with a strong environmental pollution there is a lack of investors who undertake the remediation, including in particular the cleaning of soils, land and groundwater. This is due to the obvious fact that the high cost of this type of actions, which necessitates a more active role of local governments. A good example in this regard are all active actions carried out by the Commune Solec Kujawski. The municipality took over the contaminated area and using EU funding has made land reclamation and treatment of soils and land. At the same time in the next stages of the remediation of the former State Enterprise of Railway Sleepers Preservation is planned effective remediation of groundwater. Physicochemical properties of the contaminants present in the vicinity of this object rank them in the category of very mobile in the soil and water environment, where the main polluted components are soil and land, and where the potential migration of contaminants in groundwater flow takes place with low intensity. The area of contaminated groundwater in these conditions only slightly may extend beyond the area of the former Railway Sleeper Preservation where additional factor limiting the migration is a close proximity of Vistula river. These factors provide a real basis to take effective remediation actions until it is clean to an acceptable level.

The implemented Pilot Activities

In the framework of the GreenerSites project the City of Bydgoszcz and the Municipality of Solec Kujawski implemented two different pilot actions in the Bydgoszcz-Toruń Functional Urban Area. Innovative and sustainable environmental solutions were implemented.

These cases give unique opportunity to compare obtained results in almost the same conditions (the same regulations, authorities, institutions responsible for the environmental protection, very similar geological structure and climate). Different, however are causes of environmental pollution, land size and different goals of land re-use. Both partners aim at improving conditions of the region by making the brownfields more liveable places. The implementation of pilots emphasise that such activities are desirable in Poland at the local level.

Consultation and participatory process

During the project were organised two meetings at the local level. The meetings concerned the implementation of the GreenerSites project, Environmental Rehabilitation of post-industrial areas in Central Europe and was conducted by the project staff. In meetings was attend our expert on the remediation of groundwater pollution - Mr Wojciech Irmiński and the inhabitants of Solec Kujawski and representatives of stakeholder institutions interested of the project.

The main topics of the meetings were: show the results of activities undertaken as part of the implementation of the GreenerSites project, in particular information on pilot activities under this project and guidelines for Strategic Action Plans (SAP) and the planned actions after the project.



Methodological approach to select actions

The Strategic Action Plan for the pilot activities of the GreenerSites project was created as a result of the strategic planning process under which the following steps were carried out:

1. The pilot actions carried out under the GreenerSites project have been summarized so far
2. The actions that we want to take in the near future and the directions of actions in the long term that will ensure the durability of the project results and increase the efficiency of environmental management have been determined.
3. Stakeholders were identified who, due to their competences, were interested in using the effects of the project, and their role in the participation process was described.
4. Stakeholders were consulted to determine the final appearance of the Strategic Action Plan.

In order to collect the necessary input data to the Strategic Action Plan, a meeting was held on November 16, 2017 to consult SAP conducted by Staff Project.

SAP was written in order to summarize the activities undertaken so far as part of the GreenerSites project to determine further activities and development directions that will allow to optimally use the current results of the project.



Part A. Short Summary of actions

Action 1 - Implementation of the web GIS tool

The web GIS Tool was installed on the server of the Regional Directorate of Environmental Protection responsible for taking remediation decisions and all related contamination issues at regional level. The tool will allow data to be integrated both from the City of Bydgoszcz and the Municipality of Solec Kujawski. Both of the institutions will manage the tool, provide and enter essential data.

Action 2 - Environmental monitoring of brownfield soil and water quality

Regaining the area of the former wood preservation factory located close to the city centre, in the neighbourhood of the largest housing estate and sport facilities, is considered strategic for the Municipality.

During the implementation of the pilot project six monitoring campaigns for groundwater and two campaigns for soil were carried out with the aim at establishing an environmental monitoring system of brownfield soil and water. The measurements were carried out in order to monitor the effectiveness of the undertaken remediation techniques. Moreover, the samples analyses contributed to develop a method of neutralising pollutants below the groundwater level.



Action 3 - Development of land management study

Land management concept of the site will include three different investment variants which could be developed in the area, including economic and technical specifications. Once agreed with the contracting authority - Municipality of Solec Kujawski, contractor will develop a final version of the document with chosen variant.

According to the planning documents the site of the former wood preservation plant is located in the zone of so-called ecological system including the existing natural system of the city and areas destined for transformation. The main directions of the land use are focused on maintaining urban green recreational function through the protection of the existing forest habitats and development of sport and recreational base.



Part B. Detailed description of concrete actions

Action 1 - Implementation of the web GIS tool

<p>Content of specific action</p> <p>The geo-information system was developed in order to support brownfield regeneration by helping institutions to better use available data and manage environmental problems in a more effective way. In the case of Bydgoszcz-Toruń Functional Urban Area the Regional Directorate of Environmental Protection expressed its will to install the tool on its server. After receiving the installation package the tool was prepared to enter data from brownfields. The tool will be implemented with contribution of both partners the City of Bydgoszcz and the Municipality of Solec Kujawski.</p>
<p>Short problem description</p> <p>As data from two different sites will be entered to the geo-information system it is essential to unify the scope of the implemented information in order to keep the tool easy in use for the users. Lack of sufficient data from brownfields could be a possible risk.</p>
<p>Objective of specific action</p> <p>The aim of the action is to collect available data on brownfields in Bydgoszcz-Toruń Functional Urban Area in one place. As in Poland does not exist official catalogue of contaminated areas, including brownfield, such database will help institutions, as well as private investors and actors to obtain information about the area of interest. The tool will be constantly updated in order to provide up to date information about the brownfields.</p>
<p>Partners involved and description of participation process</p> <p>Involved partners: The City of Bydgoszcz Municipality of Solec Kujawski Regional Directorate of Environmental Protection in Bydgoszcz</p> <p>The City of Bydgoszcz and the Municipality of Solec Kujawski are responsible for providing and entering available data. Dariusz Górski representative from the Regional Directorate of Environmental Protection was responsible for the installation of the tool and will support partners with his knowledge and experience in managing the web GIS tool.</p>



Planning of activities (timeline)

The GreenerSites Web GIS Tool geoinformation tool installed on RDOŚ servers is a promising space for the exchange of information in the field of geospatial data. It will, if possible, be further developed and regularly supplemented by the Municipality of Solec Kujawski and other stakeholders.

In order to accelerate the exchange of documentation between institutions, the creation of a separate platform giving the possibility of highly flexible sharing of documentation is being considered. To this end, it will be necessary to conduct a meeting between stakeholders in order to develop the form and scope in which the platform would be operating, as well as the expected costs and determine the financing methods.

Educational activities in the pilot area should be preceded by determining the educational needs of the inhabitants of Solec Kujawski, identifying stakeholders who would like to participate in such activities, preparing a joint plan and scope of activities. After completing these steps, proceed to their implementation.

In addition, there will be ongoing consultations with residents and including them in ongoing activities to this end will be carried out:

- Informing residents about the environmental activities carried out in the pilot area using the brownfield tab on the Municipality website.
- Informing residents about the environmental activities in the local meetings,
- Analyzing suggestions of environmental activities sent by residents and two-way communication in this area in order to develop the most effective solutions.

Financing

The Regional Directorate of Environmental Protection will take care of the maintenance and back-up of the tool as the geo-information system is installed on its server. Therefore, the source of funding is regional.

Progress of implementation

The web GIS tool was presented during the workshop “Revitalisation process and methods of brownfield management in cities” which was organised parallel to the “Innovative Municipality” conference held in Warsaw on 12.06.2018 and during the local training organised in Bydgoszcz at the end of January.



Action 2 - Environmental monitoring of brownfield soil and water quality

<p>Content of specific action</p> <p>The site of 16 hectares is located close to the city centre In order to tackle the groundwater pollutants an innovative method of barrier was tested</p>
<p>Short problem description</p> <p>The main problem is the lack of funds crucial to implement the nano-carbon barrier adsorbing harmful organic compounds and creating in water-bearing stratum natural conditions for bioremediation of contamination.</p>
<p>Objective of specific action</p> <p>The objective of the action is not only to guarantee maintenance of quality and durability of the already undertaken remediation but also to develop the method of neutralising pollutants below the groundwater level. Higher environmental performance of the brownfield of the former wood preservation plant was reached, thus contributing to an improvement of working and living conditions of Solec Kujawski citizens. By doing so, the undertaken actions directly contribute to the project goal.</p>
<p>Partners involved and description of participation process</p> <p>Department of Environmental Protection and Agriculture of Municipality of Solec Kujawski Regional Directorate of Environmental Protection in Bydgoszcz Voivodeship Fund for Environmental Protection and Water Management Regional Authority The above stakeholders will be provided the results of the GreenerSites project, which they will use to improve the efficiency of planning their own activities in the pilot area.</p>



They will be informed about the possibility of using the piezometer network installed for the purposes of the GreenerSites project for their own research after obtaining permission from the Municipality of Solec Kujawski.

Municipality of Solec Kujawski is willing to cooperate in the case of future joint projects in the field of environmental protection in the pilot area, and will actively search for applications for EU funds for this purpose.

The employees of the GreenerSites project will be ready to share experience and knowledge in the field of information on the state of the environment in the pilot area with environmental protection institutions in order to increase the efficiency of environmental management in this area.

Planning of activities (timeline)

Some actions to disseminate the results of the GreenerSites project have already been undertaken.

Their extension consisting in extending the list of entities to which the results will be sent, is a matter of the nearest time horizon.

In the longer term, we hope to achieve the effects of our current efforts and proceed with the implementation, whether alone or in cooperation with other stakeholders, of new projects in the field of environmental protection that will lead to the improvement of the state of the environment in the pilot area. The search for new financing possibilities for environmental activities in the pilot area is also ongoing for implementation of nano-carbon barrier.

Financing

The Municipality of Solec Kujawski is the owner of the site, therefore the costs associated with the maintenance and security are borne by the Municipality. The search for new financing possibilities for environmental activities in the pilot area is also ongoing for implementation of nano-carbon barrier.

Progress of implementation

- An environmental monitoring system was extended,
- Preliminary soil and water analysis was conducted,
- Monitoring reports from water and soil analysis was carried out,
- The existing monitoring system is ready to use in case of semipermeable barriers,
- Long-term monitoring methods were tested,
- A geophysical research project was developed and later on carried out.



Action 3 - Development of land management study

<p>Content of specific action</p> <p>Due to the lack of offers the tender procedure for land management study had to be re-announced. The deadline for the submission of offers was set for January, therefore the deadline for completing the study is the end of March. The contract was signed with the company from Warsaw - Studium Sp. z o.o. Sp.k.</p>
<p>Short problem description</p> <p>The problem is not enough places for sport and recreation in the city. The implementation of the plan includes the development of degraded areas in urban areas.</p>
<p>Objective of specific action</p> <p>The aim of the action is to provide citizens with sports and recreational infrastructure. Creating sports and leisure base in the city centre will not only provide an area where families, teenagers, tourists could relax, do sports and spend their free time but will also improve the city's image.</p> <p>Urban green recreational function of the area will be maintained through the protection of the existing forest and planting new trees.</p>
<p>Partners involved and description of participation process</p> <p>Involved partners:</p> <p>Municipality of Solec Kujawski: Investments and planning department, Environmental protection and agriculture department, Municipal management department</p> <p>Studium Sp. Z o.o. Sp.k.</p> <p>Residents of Solec Kujawski</p> <p>Representatives from different Municipal departments participated in a meeting with the contractor - Studium Sp. Z o.o. Sp.k. company, which was held in Municipality's premises.</p>



Planning of activities (timeline)
<ul style="list-style-type: none">• Development of land management study,• end of project durability,• preparation of the project for every parts of land management study.
Financing
The Municipality of Solec Kujawski is the owner of the site, therefore the costs associated with the maintenance and security will be borne by the Municipality. Public funds: municipal or the search for new financing possibilities.
Progress of implementation
Land management study was carried out.



References and annexes

Project deliverables and material

Analysis of current situation of brownfields in Bydgoszcz-Toruń Functional Urban Area

Land Management Study

Web links

More information on the concerned area and/or on the proposed Action(s) can be found in the following web links:

<http://www.soleckujawski.pl/>

<https://www.interreg-central.eu/Content.Node/GreenerSites.html>

Legal report

Municipality of Solec Kujawski

Ul. 23 Stycznia 7

86-050 Solec Kujawski

