GreenerSites

GreenerSites is a transnational cooperation project that seeks to improve the environmental management of un- or underused industrial areas. The project aims to achieve this through the definition of strategies and tools that are based on a sustainable, integrated approach to make functional urban areas (FUAs) cleaner, healthier and more liveable places. 11 project partners are working together to bring about a shared and enhanced knowledge on integrated environmental management of brownfields.

They also reinforce capacities of the public sector to plan and carry out brownfield regeneration and produce well-defined sustainability measures and tools to ensure the effectiveness of environmental planning. Main outputs of the project are:

- A common tool for brownfield regeneration stemming from the preliminary analyses conducted in 9 central European FUAs;
- 9 strategic action plans defined in two steps (joint concept and full definition at FUA level after pilot phase);
- 11 pilot actions testing more sustainable and novel technical solutions
- in brownfields to improve their environmental performance;
- A full training package for public employees and stakeholders;
- A common transferability manual.

14 institutions are involved as Associated Partners in GreenerSites; they represent prominent networks operating at EU level on brownfield management & organisations (private and public) which are competent for the involved sites. Their cooperation provide different opportunities to exchange and reinforce know-how, learn from other's experiences and disseminate project results.













Study visits Short stories



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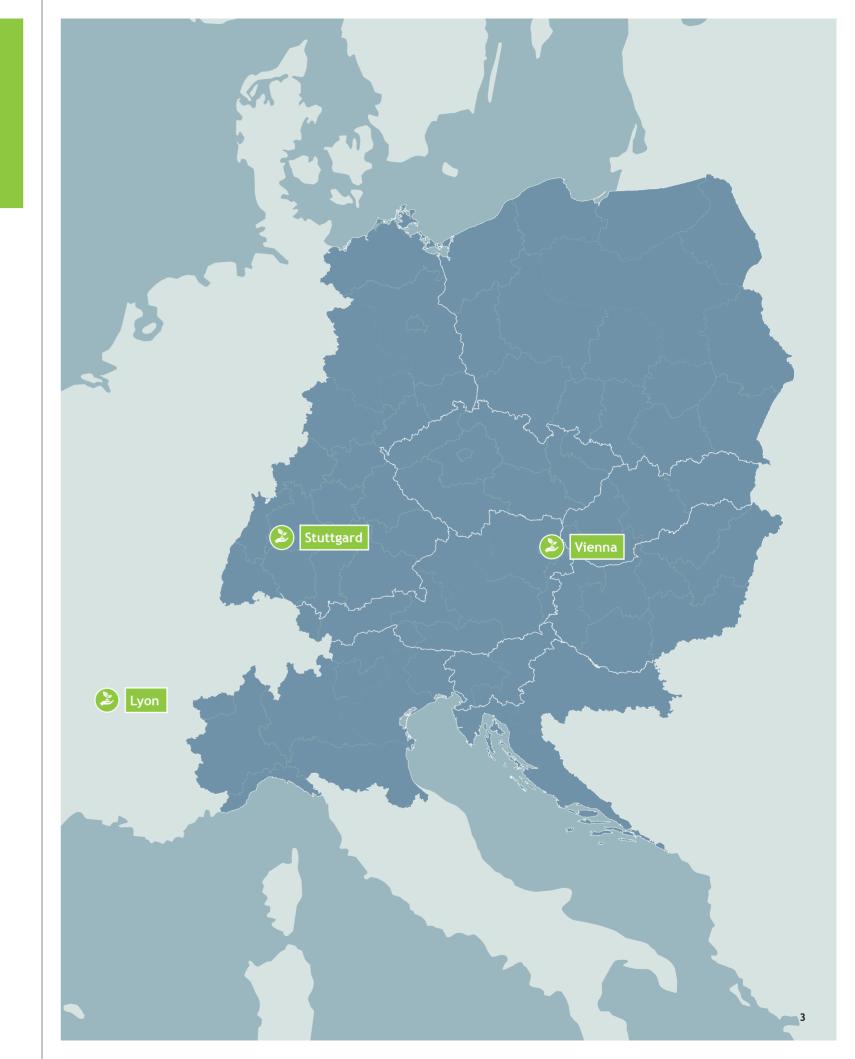
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Introduction

This booklet recounts the experience and lessons learnt by GreenerSites partners during their study visits to 3 selected European cities which have successfully implemented the environmental rehabilitation of brownfield sites: Stuttgart, Lyon, Vienna. It presents the conclusions and the outcomes of these visits and how the knowledge gained by the participants can be used to improve existing projects or start new ones in their local areas, thanks to cooperation and mutual learning.

We hope you will find these stories interesting and inspiring!



GreenerSites training scheme on the environmental management of brownfields



GreenerSites intends reinforcing the capacities of the public sector to plan and carry out brownfield regeneration in a sustainable way, providing public employees with new skills and know-how with regard to the environmental management of unused industrial sites.

Technicians and officers from partner institutions and their stakeholders benefited from a full training package which included cross-border seminars, local training initiatives and study visits. Specifically, this approach will facilitate the sustainability of GreenerSites' activities even after the project has ended.

According to a learning-by-doing approach, project partners identified and visited a number of remediated sites in Europe and were given the opportunity to become acquainted with the history of their implemented projects.









Study Visits

Study visits probably represent the most common method for peer-to-peer learning. They offer visitors the chance to obtain a first-hand idea of what institutions which are working on the same problems have managed to come up with in terms of new solutions and initiatives. They facilitate the exchange of experience and knowledge among participants in a dynamic and interactive way.

During a study visit, visitors are able to see how projects are implemented in reality, discuss encountered problems and find out how they are overcome. This way, they can obtain useful information and ideas for implementing their projects.













The Study visit to Stuttgart (Germany)





























Introduction

The visit to Stuttgart was staged on 17 and 18 May 2018 and was hosted by the City of Stuttgart. 8 technicians and experts on brownfield remediation from 3 project partners (City of Venice, Port of Venice and Municipality of Solec Kujawski) took part in the visit.

The visit

The participants visited three different brownfield sites, with various features and different challenges: the Schoch Site Feuerbach, the Bosch Site Block 1 Feuerbach, the Neckarpark bad Cannstatt.

All the case studies were thoroughly presented by the hosts and site managers, who answered technical questions.

The visit started with the presentation of the MAGPlan Project, an integral management plan for protecting groundwater from contamination in the sites engaged in thermal activities and which provides an important basis for the future protection of groundwater in Stuttgart.

During the site visits, information such as history, characterisation and remediation procedures were described in detail by the site managers. There was also enough time for questions and answers.







"I was impressed to find out that the collaborative and proactive attitude leads to more effective and sustainable results in environmental management of contaminated sites, also in view of legislation which in Germany is less cautious than in Italy."

Francesco Penzo, Remediation office, City of Venice





- The Schoch Site is an urban brownfield site heavily contaminated by a factory that wound down in 2008. The City developed a large scale groundwater and soil remediation procedure to transform the area into the new Wiener Platz Quarter. The City purchased the area and took care of its rehabilitation thanks to a public non-repayable grant for landfill remediation provided by the State, which funded up to 60% of the total cost. The other costs were covered thanks to strong public-private cooperation.
- The Bosch Site is a private site (owned by the Bosch company), with a high concentration of soil pollutants caused by the company itself. The Bosch company is cleaning up the soil using modern technologies. In this case too, the remediation process is characterized by strong and advantageous public-private cooperation.
- The Neckarpark site is an area near the railway, next to the Stadium and the Mercedes Museum, located within a socially complex urban context. Here a vast urban redevelopment process was managed with the aim of connecting old and new residents. Here again, as in the case of the Schoch site, the Municipality purchased the area to manage the remediation process and sold it for private investment.







"I really appreciate their capacity to work as a team, involving all the departments, so that they can approach a problem from different points of view and together solve all critical aspects."

Elisa Chiamenti, Remediation office, City of Venice

Lesson learnt and outcomes

Because it is not so usual for technicians to be given the chance to see, first-hand, how projects are implemented in different contexts and countries, all the participants considered the study visit as an extremely interesting opportunity to obtain new insights into the differences and the common points of brownfield management in different contexts, and to consider possible knowledge transfer.

An important aspect that everyone pointed out was **cooperation**: the methodological approach followed by the City of Stuttgart to deal with the problems at stake is based on the close collaboration between public institutions, private companies and the general public. Such approach permits addressing issues from all relevant points of view, in an **inter-disciplinary and problem-solving way**.

The fact that **members of the public are involved** (including in the case of high-impact projects) makes processes easier and faster.

In general, the participants agreed on the fact that this problem-solving approach is more easily adopted in Germany than in other countries due to external factors such as a **different environmental legislation** and greater availability of economic resources.

"We gained heaps of knowledge and saw different sustainability measures applied in sites. It was a great opportunity to learn from a different approach. To sum it up, the City of Stuttgart works in a well-thought-out, organised way with participation of stakeholders."

Justyna Jankowska, Department of Investment and Planning, Municipality of Solec Kujawski





The Study visit to Lyon (France)



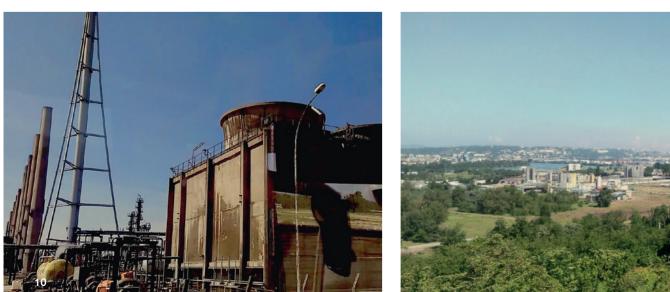












Introduction

The visit to Lyon was staged on 23 and 24 May 2018 and was hosted by the Metropolitan City of Lyon (Grand Lyon).

12 people took part in the visit including technicians and experts on brownfield remediation and economic development from the City of Venice, the Mazovia Development Agency, the City of Bydgoszcz, the City of Radom, Bydgoszcz Industrial and Technological Park and the Mazovia Science and Technology Park. Participants were welcomed by a number of officials from the Metropolitan City.

The visit

The visit lasted one and a half days. The participants visited the **Chemical Valley (La Vallée de la Chemie)**, a 373-hectare industrial area along the Rhone river where 18 international companies - with approximately 10,000 workers (among which 2000 researchers) - are currently established and operating.

















"Site visits and case studies are the most effective way to see how a theory is implemented in practice. The experience of this site visit will be beneficial as regards our future work in the Bydgoszcz Industrial and Technological Park and the City of Bydgoszcz"

Magdalena Thiede / Daniel Rabacha, Bydgoszcz Industrial and Technological Park

Lesson learnt and outcomes

The ambitious redevelopment scheme carried out by the Metropolitan City of Lyon in the Chemical Valley covers many of the issues faced by GreenerSites partners in their brownfields: soil cleanup, land renewal, green-oriented business redevelopment, economic and financial schemes, close partnership with public and private players. The project and the solutions found by the Metropolitan City of Lyon in terms of environmental and economic management are a **best practice providing useful knowledge**.

Participants had the opportunity to make a comparison between the Chemical Valley and their brownfield sites in spite of the differences.

Common problems, such as sites to be reclaimed or initiatives to make the site more attractive, have shown that the Chemistry Valley has **more flexible strategies, as regards both schedules and economic resources.** Public authorities support the development of companies, including with economic aid, and cooperate with the public authorities to solve problems resulting from old business activities that may be hazardous for the environment. Companies spend considerable economic and human resources on research.

In this area, the Metropolitan City of Lyon has been carrying out a huge redevelopment process since 2014: the process has involved extensive economic and land renewal including remediation, cleanup of land by means of phytoremediation and plans for the reuse of the site as an innovative business park.

During the first day of the visit, the City officials presented the territorial strategies which Lyon intends applying in the Chemical Valley and its adjacent municipalities: the Chemistry District Master Plan (the "Plan Guide 2030") and the brownfield remediation strategy. The second day was spent with a visit by bus to the Chemistry district (La vallée de la Chemie).he "Appel de 30!" scheme was presented. This is a call for projects addressed to manufacturers, public and private partners aimed at creating partnerships and fostering cooperation between actors interested in settling and investing in the Chemical Valley. The visit was interactive as there was plenty of time for discussion.



Brigida Pagani, Economic Development Sector, City of Venice





The Study visit to Vienna (Austria)



























Introduction

The visit to Vienna was staged on 7 and 8 June 2018 and was hosted by the GreenerSites Associated Partner EAA - Environment Agency Austria. 14 technicians and experts on brownfield remediation from 7 project partners (Institute for Structural Policy and Economic Development, City of Celje, Veneto Region, Port of Rijeka Authority, City of Bydgoszcz, City of Rijeka, Ministry of Regional Development and Transport Saxony Anhalt) took part in this visit, besides various other stakeholders.

The visit

The participants visited two different brownfield sites: the Simmering Gasworks and the Northern Railway Station, with varying features but similar environmental problems: groundwater and soil pollution.

The host organisation EAA introduced the visit by describing the environmental status and the legal framework concerning both the management and the remediation of contaminated sites in Austria.

A new method in the management of soil remediation was also applied: a conceptual site model approach and GIS mapping tools of hot spots and groundwater contamination of the concerned areas and target groups.

In the context of this introductory session, the two brownfield site case studies were presented with the support of slides and paper materials, to facilitate the understanding of the recovery activities and to foster the debate on practical issues.

Afterwards, the two site visits, guided by the EAA hosts and several local experts, took place.







nierreg 🖿 12°- 13° Delane Coffee 13°- 14°/14 Situation in Austria 15 - 17 GASDORKS SIMMERING





- The **Simmering Gasworks** is the largest municipal gasworks facility in Austria and one of the first historically contaminated sites (both by organic and inorganic substances) to be listed in the national remediation program in 1990. Here, emissions to soil and groundwater were further amplified by damage caused during the Second World War, when the gasworks site was the target of several air raids. After extensive investigations of the gasworks site's groundwater and soil, a contaminated site remediation project was launched in 2008 to permanently prevent any further infiltration of contaminants into the ground, to protect groundwater from effusion of contaminated soil areas by means of a pump and treatment system and to recover brownfield areas for reuse. At the same time, several projects focusing on the reuse of the gasworks site facilities were launched, the most prominent of which is the revitalization of the gasometer (Gasometer City): a perfect example of industrial heritage use, since gasometers are adapted as residential and service buildings¹.
- The former Northern Railway Station is a very big site with considerable impact as regards environmental aspects. It is an 85 hectare area inside the City, representing one of the most important inner-city development areas since 1994. The decontamination of the Northern Railway Station site started in 2007: 30 soil vapour and 21 groundwater monitoring stations were installed, without interfering with the construction activities under way at the same time. Approximately half of the area has already been built. The development plan is co-designed by the City of Vienna and the ÖBB-Austrian railway Company and includes social housing, residential space for the middle-class (4,000 homes for almost 10,000 residents were created), schools, geriatrics, cultural and office spaces, park and urban gardening. A characteristic feature of the plan is to keep the urban wilderness of the so-called "free centre" (Freie Mitte) as an open space.





"From the study visit to Vienna and meeting with experts from Environment Agency Austria we obtained important new knowledge on how existing problems affecting contaminated can be solved. There should be more study visits like this"

Bernarda Podlipnik, Mihael Nunčič, Ministry of Environment and Spatial Planning, Slovenia

Lesson learnt and outcomes

Participants stressed the chance given to them to learn from other brownfield management experiences and to witness, first hand, different approaches to brownfield contamination.

Europe as a whole is polluted with the remains of old industrial sites, but some countries are more successful in solving the problem of contaminated land. Visitors claimed that in Austria one of the keys to success is cooperation between all the involved parties in the context of an effective environmental remediation system.

The **common objective** and **shared vision** between the involved actors make the system highly efficient. Public participation and the involvement of the public in general in the planning process represent another crucial success factor, together with data availability thanks to the GIS mapping tool.

All the participants agreed on the importance of the systematic approach and of the strict preventive policy and legislation in force in Austria: the law on the cleanup of contaminated sites focuses in particular on historically contaminated areas (prior to 1989), establishing criteria for their identification (100% of them are systematically investigated), and funding on remediation (up to 95%; average 75%).

This study visit was an interesting opportunity to gain knowledge and learn from good practices, focusing on responsibility and funding. The most critical aspects highlighted by the participants during the comparison of the Austrian land management scheme and those implemented in their own countries were the relationship between public and private funds, the different authorization approaches and the methods of decontamination.

They also pointed out the central role of long-term political and financial commitment.

With regard to the organization of the visit, participants pointed out the importance of creating an open atmosphere to foster participation in discussions and to raise problems as well as balancing theoretical inputs and practical demonstrations.

"For local authorities the remediation effort is often heavy in terms of costs and complexity. However, this compilation of success stories clearly demonstrates that this challenge can be tackled. Good city authorities, users of the area is the key to finding the most effective solution"

Stefan Kačuba, Port of Rijeka Authority





¹ Text taken and partially redrafted from "Contaminated Site Success Stories" -EIONET NRC Soil 2015.