The Lusatian Lakeland - Transformation with Structure, from a Mining Region to a Lake Landscape

Award Scheme: Guangzhou Award
Sustainable Development Goals: Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable

Summary
Surrounded by numerous abandoned lignite mines, the town of Senftenberg has been affected by a massive landscape and structural transformation. The objective of the project entitled "Lusatian Lakeland" is to make this structural change ecologically and economically sustainable.

Background and Objective
The idea behind the Lusatian Lakeland is based on the flooding of the opencast mining holes to create Europe’s largest artificial lakeland with around 30 lakes and approx. 14,000 hectares of water. In the heart of the Lusatian Lakeland, a network of lakes with a contiguous usable water area of approx. 7,000 hectares is being formed through the linking up of 10 lakes by means of navigable channels. In order to bring this new lakeland to life and to provide it with an economically viable concept, stimulating urban development measures and structurally sustainable projects have been and are being implemented. Such projects are, for example, the town harbour of Senftenberg, the Koschener Canal, the first navigable connection, and the planned commercial area of "Nordufer Selditzer See". With the construction of the town harbour, the town of Senftenberg was given a point of reference to the water, a link between the town and its recreational landscape. It displays a high level of building culture. The Koschener Canal, 1,050 metres long, connects Lake Senftenberg and Lake Geierswalde. An industrial park for water-related production and tourist services with direct access to the water is to be constructed on the northern shore of Lake Selditz. A central harbour offers optimal conditions for economic development. BACKGROUND INFORMATION With regard to the lignite surface mines, the Federal Republic of Germany and the federal states concerned have, on basis of administrative agreements, taken on the task of rehabilitating the area affected by mining and of re-using it. In Lusatia the towns and municipalities have united to form special purpose associations to solve the task of re-using the mining landscape and reorienting the region through close cooperation. This has resulted in the special purpose association of the Lausitzer Seenland Brandenburg. ORIGINS Since the end of the 19th century, Lusatia has been characterised by the mining of lignite and its use. With the massive withdrawal from lignite mining since the 1990s and the loss of tens of thousands of jobs, the region faces the challenge of creating new jobs, healing the scarred landscapes, reducing the enormous loss in population and providing economic alternatives and reorientation. In order to be able to master these tasks, started in 1999 the “Internationale Bauausstellung” (IBA) Fürst-Pückler-Land, a broad-based future programme of restructuring for the mining region in Southern Brandenburg. From 2000 to 2010, the IBA provided numerous economic, ecological and design ideas to handle the enormous landscape and structural transformations. With the creation of the Lusatian Lakeland as a tourist and business location, new perspectives on the job market are being created. Water-related industry and services along with the development of innovative technologies in automation(checking a test track for autonomous driving at the Lausitzring) as well as energy generation and storage are to be permanently anchored – such as Germany’s largest solar thermal system. The recultivation of the scarred landscape to offer a high degree of attractiveness for people's leisure and recreation must go hand in hand with the creation of valuable and sustainable habitats for fauna and flora. The development of the Lusatian Lakeland is being driven forward primarily inpartnership with the state-owned company Lausitzer und Mitteldeutsche Bergbau - Verwaltungsgesellschaft mbH (LMBV), the special purpose associations of the Lausitzer Seenland Brandenburg (a subsidiary of the town of Senftenberg) as well as the individual municipalities. The projects are being supported by the federal state of Brandenburg and private companies. The initiative for individual projects emanates from the towns and municipalities. The LMBV is are liable partner when it comes to implementing the projects. The Federal Republic of Germany and the federal states of Brandenburg, Saxony-Anhalt, Saxony and Thuringia have been jointly responsible for the rehabilitation of the lignite mines. They finance for a great part the necessary safety and rehabilitation measures. The towns and municipalities will bear 20% of the costs for measures of re-use concepts.

Outcomes and Impacts
The touristic infrastructure combined with the unique water landscape attracts more and more national and increasingly international guests. Interest in Senftenberg as a business location is growing and is to be further expanded with ideal investment opportunities with a unique selling point, as in the future Nordufer Selditzer See industrial estate. The constantly growing demand for high-quality housing near the water is being met with new urban developments. Exclusive residential areas are to counter the ongoing population loss due to demographic change with an influx of inhabitants. In such a large development area as the Lusatian Lakeland, cooperation between the municipalities and towns concerned and private investors is vital. The
of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Support positive economic, social and environmental links between urban, peri-urban and rural areas

Goal 15: Protect, restore and promote sustainable use

Participatory, integrated and sustainable human settlement planning and management

Target 3: Ensure peaceful and inclusive societies for sustainable development, provide access to justice for all and strengthen capacity for effective, accountable and inclusive institutions at all levels

Innovative Initiative

The recultivation of a former mining landscape and its transformation into a unique lake district is revolutionary. The size and variety of the navigable usable water surface gives the network of lakes its special character thanks to the 13 canals that are planned. The former mining landscape will be rebranded as a tourism region, coupled with a high share of innovative businesses. Senftenberg now proudly bears the title of “state-approved leisure resort”. Of an evolutionary character are the strategic objectives of the Lusatian Lakeland for flood protection (retention) to reinforce and ensure the quality of water in all lakes in the lake network. The overall project of the navigable lake network is so far unique in Germany and has pioneering character. The timeline extends to the year 2025. Use cannot be made of experience gained in comparable projects of this complexity. The concept is absolutely untested. The creation of the Lusatian Lakeland serves the development of the area as a tourism region, the strengthening of the labour market, the urban development of new residential locations and the protection of nature conservation issues. During the course of recultivation, state-of-the-art remediation techniques and strategies are being developed. This results in new action areas, along with start-ups and the cooperation of companies that are usually competitors. The Lusatian region, the town of Senftenberg and the federal state of Brandenburg have motivated the Federal Republic to take up the vision of the Lusatian Lakeland and to financially support this structural transformation. Sceptics and critics who questioned the vision of the Lusatian Lakeland on account of its huge dimension have been won over by the project's very good results relating to these goals. The cooperation of associations, specialist departments, authorities and private companies works very well. With regard to implementation, the hurdles lay and lie mainly in the nature conservation areas and in the slow-moving approval process. Moreover, there are technical factors such as landslides or settlement flow. Also, it will be necessary to treat the lakes with limestone for decades to ensure the neutrality of the water and to maintain the pH value.

Conclusion

The core ideas of the initiative are the reinterpretation and redesign of an opencast mining landscape into a lake landscape with the aim of making the region economically sustainable and developing a new identity. The Lusatian Lakeland is a best practice example for old industrialised areas to develop new ideas and new strategies as well as to set new economic, ecological and design impulses. The development of the Lusatian Lakeland provides other initiatives with a framework for initiating and steering this 25-year-process. The overall framework was set out by an international building exhibition. The town Senftenberg is the driving force and control centre of the vitalisation process at regional level. One of its core tasks is to raise targeted public funds directly or through its subsidiary LSB for the lead projects. The town Senftenberg is interested in sharing knowledge and experience with other initiatives. Senftenberg strives to enter into project and city partnerships with other initiatives and to invite them as hosts to an international conference. Workshops will focus on topics such as “organisation and management”, “landscape redevelopment”, “economy and value creation”. Participation in a digital network of initiatives is a matter of course. RELEVANCE TO SUSTAINABLE DEVELOPMENT GOALS Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable Goal 13: Ensure sustainable consumption and production patterns Goal 14: Conserve and sustainably use the ocean, its resources and marine ecosystems Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Target 4: Safeguard cultural and natural heritage

Target 7: Ensure access to affordable, safe and inclusive water and sanitation for all

Target 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Target 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Target 11: Make cities and human settlements inclusive, safe, resilient and sustainable

Target 13: Ensure sustainable consumption and production patterns

Target 14: Conserve and sustainably use the oceans, marine ecosystems and their resources

Target 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss