

## The Local Action Plan

The most important results of the LUMASEC project include:

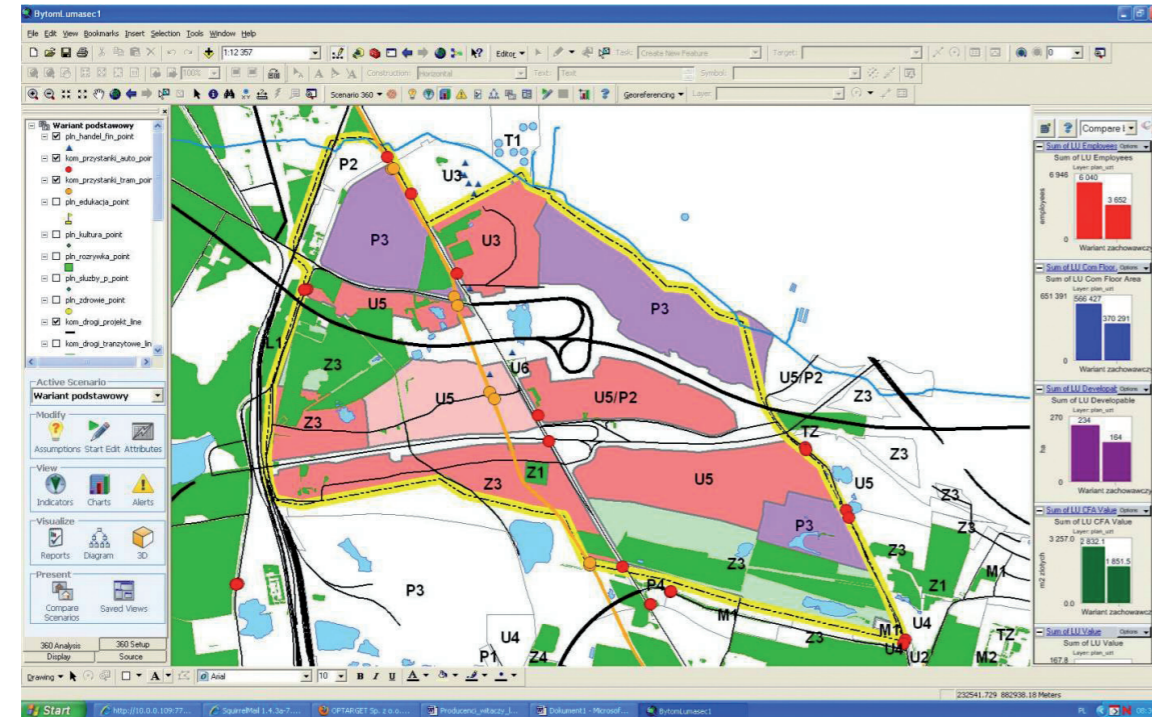
Broad view on land use management process in case of Bytom. During Local Support Group meetings, there were a lot of discussion on different approaches to land use planning. In case of LUMASEC area we tried to choose between:

- Rational planning which focuses on computation choice and procedure;
- Transactive planning which focuses on compromise choice and negotiation;
- Interactive planning which focuses on defining problems and complex evaluation;

- Incremental planning which focuses on judgment search and very adaptive, short-term planning.

- Choice of Communityviz as a tool to build creative and active scenarios of land use development and study the impact of decisions on spatial planning;
- Develop a framework of organizational support in land use management, especially better communication between planning documents, improvement of decision-making procedure;
- Investment promotion of the zone.

Difficulties: unsolved problem of bad effects of mining, change in ownership structure.



Process of the Local Action Plan

**LUMASEC** is a European network dealing with strategic land use management as one of the most important topics to address, to ensure competitiveness, attractiveness and sustainability of our European city-regions. It focuses on both the strategic level (planning methods, observation tools...) and the operational level (action plans, case-studies), and aims at producing methods and practical recommendations.

The LUMASEC partners are: Epures (public city-planning agency, Saint-Étienne, France), Certu (France), the cities of Bytom (Poland), Baia Mare (Romania), Kavala (Greece), Bristol (Great Britain) and the Universities of Karlsruhe (Germany) and Ljubljana (Slovenia). The University of Karlsruhe is the lead-partner of LUMASEC. More information on <http://urbact.eu/lumasec>

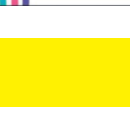


European Union  
European Regional Development Fund



# Land use management for sustainable European cities

epures



## Planning and Implementing a Brown-field Regeneration Strategy: the Case of Bytom (Poland)

LUMASEC (Land Use Management for Sustainable European Cities) is a European project which aims to identify the scope of strategic and operational action for European cities in land use planning. Each of the five partner-cities of the project has developed a local action plan (LAP) with decision-makers in order to build up a strategic approach to land use management.

This leaflet presents the local action plan of the city of Bytom (Poland), which wishes to transform an old peripheral coal-mining area into an industrial and technological park. This local plan is based on the use of GIS and planning tools to support a collaborative decision-making process about land use strategies and development scenarios, altogether with local government, investors, property owners and inhabitants of the city.

## The City of Bytom

Bytom is located in the south of Poland. The city is a part of the Upper Silesian Metropolitan Region, that consists of 14 cities and more than 2 million inhabitants. Bytom is situated about 15 kilometers from Katowice and about 20 kilometers from International Airport.

Bytom is the fifth largest city in the Upper Silesian Metropolitan Region (after Katowice, Sosnowiec, Gliwice and Zabrze), but the population in the city has been steadily decreasing. Since 1990 number of people in Bytom has been decreasing: from 231,2 thousands inhabitants in 1990 to 184,7 thousands in 2007. Bytom is also the city that faces severe population aging.



Aerial view of Bytom (in red: the LUMASEC area)

Ressources, territoires, habitats et logement  
Énergie et climat Développement durable  
Prévention des risques Infrastructures, transports et mer

Présent pour l'avenir

Area of the city is 69,44 km<sup>2</sup>. The city is composed of twelve districts. There are historic downtown, working-class districts developed near coal-mines and steel works, and residential districts consists of large housing estate. Because of coal mine and steel industries in Bytom there are also large amount of brown-field sites and contaminated lands. In the historic city centre, buildings suffer from mining damage (mining earthquakes and reduction of land). Significant part of Bytom is located within the mining area (30% of city area), which causes many legal and technical obstacles for the potential investors.



The LUMASEC area: Stroszek – Dabrowa Miejska

Among the Upper Silesian cities, Bytom has encountered most difficulties involved with development and collapse of heavy industry. The following problems defined in “Strategy of Bytom development” are based on heavy industry ‘negative’ heritage :

- Deterioration and disintegration of road and railway systems;
- Deterioration of residential areas and public spaces;
- Environmental risks;
- Unfinished economic transformation.

Bytom is one of the oldest Silesian cities. Historic city centre and a lot of monuments are on heritage protection list. Among them are buildings and squares in the old town, historic parks, churches and cemeteries. There are also a lot of industrial heritage sites. The most important are mining shafts (for example Krystyna shaft which is a landmark on Bytom skyline). Bytom is also a place of where a lot of cultural institutions are located. The most famous are Silesian Opera, Silesian Dance Theater, Bytom Cultural Centre, Kronika Art Gallery.

## ▶ The Stroszek – Dabrowa Miejska Area

In the LUMASEC area chosen in the case of Bytom, all problems of post-industrial city are accumulated. The LUMASEC area is located in the districts of Stroszek - Dabrowa Miejska. It is between city downtown and residential areas. Area of 388 hectares and only 150 inhabitants are mostly post-industrial sites. LUMASEC area has the following ownership structure:

- Municipality of Bytom: 20%
- State ownership: 5%
- Land which city Bytom is lease holder: 3%
- Private ownership: 10%
- Firm ownership: 62%

Future development of LUMASEC area has important regional context:

- Planning construction of A1 motorway, with three nodes;
- Planning city beltway and removal of the regional transit traffic to the north part of Bytom, outside the downtown area of the city;
- Planning intensive land use management area near motorway junction, acting as „the Northern Gate” of the the Upper Silesian Metropolitan Region. In that area should be created unique functions such as center-technological complexes. Industrial parks and areas of production and logistics of national and regional impact, requiring direct access to the basic layout of roads and transit do not require strong spatial and functional links with downtown and the central part of the town (area interchanges SPF—W1 / Dabrowka-Nowy Manor).

The most important challenges of land use management on that area are:

- Lack of spatial development plan for LUMASEC area, situated in very important part of Bytom, around nodes of highway A1 and regional beltway;
- Devastated area caused by coal-mine industry;
- Very few investors interested only in narrow zones along main roads;
- Lack of involvement of the local population in revitalization of the designated area.



Typical house of Panagouda

## ▶ The Local Action Plan

The main objective of the Local Action Plan is to develop path of the decision-making in land use management, which could be implemented within whole area of Bytom. In the case of Bytom the Local Action Plan is:

- Tool for analysis of conditions and challenges in case of chosen area;
- Tool for planning objectives and projects recommended by all stakeholders;
- Tool of implementation, evaluation and monitoring outcomes of operations;
- Tool of communication between local government, business partners and social (citizen) partners.

The Local Action Plan consists of six parts. The first part introduces the city of Bytom and explains why particular area of city had been chosen as a LUMASEC case study. The second part presents critical overview of legal, organizational and technical aspects of land use planning and management in Poland, Upper Silesia region and city of Bytom. Then there is a short description of tools and technical systems available and used to deal with land use planning process in Bytom. The last part of the second chapter presents set of challenges of land use management in Bytom. The third chapter is analytical and firstly briefly presents data about the LUMASEC area, secondly discusses detailed strengths, weaknesses, opportunities and treats of the LUMASEC area, finally strategy of land use development are indicated. The main objective of the fourth chapter is showing

the possible scenarios of land use development of LUMASEC area. Using Communityviz software helps to present analysis for LUMASEC area stakeholders: local government, investors, property owners and inhabitants of city. The last part of the chapter is attempt to measure effectiveness and risk to the land use development process. The fifth chapter presents step by step the land use management details. Attention is especially focused on cooperation between stakeholders of LUMASEC area, financial aspects and promotion support. The sixth and last chapter consists of recommendations for local, national and European levels. The main conclusion is that faster and less predictable changes in the milieu, and furthermore increasing complexity of factors determining urban development enforce the need for more flexible approach to land use planning and management. The scenarios approach will make the planning process more effective. It also allow to conduct the continuous evaluation and monitoring of development projects in terms of spatial decisions.

The most important part of the Local Action Plan is practical use of GIS tool. Bytom belongs to the leading municipalities concerning LIS/ GIS, because of early (1999/2000) implementation the newest informatics solutions. Bytom's Spatial Data Infrastructure (BIDP) is the main special kind of geo-warehouse which is integrating different and independent databases. Based on existing BIDP databases, Bytom has started to implement tools useful in active and creative land use management. Communityviz is a tool which was used during LUMASEC project. Several different scenarios has been prepared, showing future effects of land-use management strategies, which could be implemented in LUMASEC area in Bytom.

The Local Support Group (LSG) consists of experts, real property owners, investors and other local stakeholders. Local Support Group has a crucial role for Local Action Plan success because their members were engaged in preparing elements of chapters 3, 4 and 5 of the document.

