

Interreg
CENTRAL EUROPE



LUMAT

European Union
European Regional
Development Fund

IMPLEMENTATION OF SUSTAINABLE LAND USE IN INTEGRATED ENVIRONMENTAL MANAGEMENT OF FUNCTIONAL URBAN AREAS

LUMAT NEWSLETTER #5

YEAR 3 | OCTOBER 2018



MAY 2016 - APRIL 2019

www.interreg-central.eu/LUMAT.html

Cooperation in land management for more livable places



LUMAT PROJECT YEAR 3 WHAT'S GOING ON

The 5th period of the project is over. The partners have developed tools supporting the creation of the action plans concerning strengthening environmental management of land resources in functional urban areas.

The tools were helpful in trainings (see p.10) and in public involvement during discussions on the solutions proposed in the action plans. In order to enable using the tools by other subjects, manuals explaining how to use them have been elaborated. They are already available on the project website.

In 5th period the partners met in two project meetings in Ljubljana. The last meeting in September was connected with the project international conference "Future Challenges of Integrated Land Management" organized by

the Slovenian partners in Brdo pri Kranju. A rich panel of experts intervened, involving a large and attentive audience (read more at p. 5). All the presentations are available on the Lumat website.

Land management, especially in urban areas, is emerging as a significant problem also in the light of climate change and the need for climate change adaptation in urban areas. It was widely discussed at the 54 Congress of ISOCARP (International Society of Architects and Regional Planners) in Bodo, Norway, where LUMAT was presented as a contribution to this subject.

Anna Starzewska-Sikorska
Project Coordinator

Institute for Ecology of Industrial Areas (IETU)

NUMBERS AND FACTS



INDEX

6 TH AND 7 TH PROJECT PARTNERS MEETING	3
NEWS FROM THE PROJECT.....	5
International Conference "Future Challenge of Integrated Land Management".....	5
LUMAT Photocontest: it's time to shoot!.....	8
NEWS FROM THE PARTNERS	10
Let's train!.....	10
First Letter of commitment signed in Katowice.....	12
PILOT ACTIONS.....	13
Chieri (IT).....	13
Leipzig (DE).....	17
CONTACTS.....	21



6TH AND 7TH

PROJECT PARTNERS MEETING

REPORT FROM LJUBLJANA

24-25|05|18

25-26|09|18

SLOVENIA

The Urban Planning Institute of the Republic of Slovenia (PP11) hosted two LUMAT project meetings in Ljubljana in Slovenia, one in spring and the other one in autumn with more than 35 attendees on each meeting.

MAY 2018

The first meeting started with a study tour to the Škocjanski zatok Nature Reserve, located in the City of Koper where Bojana Lipej, from the DOPPS - Birdlife Slovenia, presented benefits of the nature reserve as an ecosystem service for a wider area.

In the afternoon, project partners continued with the Project Steering Committee meeting followed by the regular project meeting.

On the Project Steering Committee meeting there were discussions about reporting issues and deadlines of deliverables which need to be prepared in each reporting period till the end of the project.

In the regular part of the project meeting, the representative of the leader of the thematic work package 1 (T1) “Methodology, trainings and common understanding of land use in integrated environmental management”, Dagmar Petrikova from the STUBA, SPECTRA Centre of Excellence from Bratislava, Slovakia (PP7), opened the discussion about the timeframe of training sessions for professionals of environmental management and land use planning where project partners reported when and how they will organize training events in their countries. Within the session devoted to the thematic work package 2 (T2) “Urban/ Peri-urban Action Plans, Strategies and Tools” all project partners shortly reported about results on local public events where Action Plans of the Functional Urban Areas were presented.

The second day of the project meeting was devoted to presentations of pilot project activities as part of the thematic work package 3 (T3) “Application of integrated environmental





Continued from previous page

24-25|05|18

25-26|09|18

SLOVENIA

land management in functional urban areas”.

The City Hall of Ruda Šlajska (PP2) and the City of Trnava (PP8), reported about the status of the work at the investment areas Ruda Šlajska and Štrky. The project meeting was closed with the organisational and content issues related to the LUMAT conference organized on the 25th of September 2018 in Brdo pri Kranju and communication issues of the LUMAT project.

SEPTEMBER 2018

The second project meeting was hosted in the premises of the Urban Planning Institute of the Republic of Slovenia in Ljubljana.

The meeting started with the Project Steering Committee meeting: the discussion was about possibilities of prolongation of the LUMAT project due to administrative problems affecting the investment in the Štrky area. Then the work package leader of the T1, STUBA from Bratislava (PP7), invited all project partners to present results of training workshops for professionals of environmental management and land use planning.

The work package leader of the T2 presented the status of deliverables related to Action Plans which need to be finalized till the end of the project and invited project partners to prepare reports about:

- use of interactive tools;
- adaptation plans of decision support systems in the project Functional Urban Areas;
- present activities leading to signing letters of commitment with the stakeholders

responsible for implementation of Action plans in involved FUAs.

In the afternoon, the study tour to the City of Kranj as a LUMAT pilot area took place and some successful urban regeneration projects were presented.

The second day, project partners presented pilot project activities and dissemination activities of the LUMAT project results. SiTI (PP4) from Torino as a project partner responsible for communication and dissemination issues invited other project partners to use the LUMAT forum where they have the possibility to discuss different issues.

They also launched the photo contest which will last from the 26th of September till the 21th of December 2018 with the purpose to get photographic images related to topics of the brownfield redevelopment, functional urban areas, cooperation and land management for more liveable places, integrated environmental management and urban/peri-urban relationships. The winner will be announced during the final project meeting in Katowice in April 2019.

One of results of the LUMAT project is also a promotional video where all project partners need to contribute their part. The project meeting was closed with the announcement of the final conference and the final project meeting organized by the lead partner, IETU (LP).

UIRS - PP11



NEWS FROM THE PROJECT

INTERNATIONAL CONFERENCE "FUTURE CHALLENGE OF INTEGRATED LAND MANAGEMENT"

25|09|18

SLOVENIA

On Tuesday, September 25th, 2018 in Brdo pri Kranju, the conference “Future Challenges of Integrated Land Management” was organized by The Ministry of the Environment and Spatial Planning (Slovenia), in cooperation with LUMAT project partners.

The conference was focused on the role of integrated spatial planning and the importance of urban regeneration for the prevention of urban sprawl and reduction of land take. The expansion of built-up areas and the resulting land take has been highlighted as one of the key development problems in the recent period and the objectives of land reduction and targets are set to reach zero land take by 2050

(goals at both EU and Member State level). To achieve the land take targets for 2050, planning solutions must include compensation measures and environmental management tools already introduced in various European regions.

The participants were first welcomed by the mayor of the city of Kranj. He emphasized the importance of a professional and long-term approach to spatial management and an active approach of the municipality in the revitalization of degraded areas. The representative of the Ministry of the Environment and Spatial Planning, mag. Lenča Humerca Šolar highlighted the potential of a new spatial instrument in Slovenia - the





Continued from previous page

25|09|18

SLOVENIA

regional level of spatial planning, which could provide a longer term reflection on spatial development, and also on space management including degraded areas.

Dr. Anna Starzewska-Sikorska, LUMAT project manager from Poland, emphasized the importance of the action taken inside functional urban areas and the strengthening of the regional level of spatial planning, which is proven practice in many countries, and in some cases this level is being enforced.

Experts from partner organizations from Poland, Germany, Italy, Slovakia, Finland and Slovenia talked more specifically about measures that can ensure more balanced management and how to divert the development from quality land into degraded areas. According to some estimates, there are 3 million brownfields sites in more than 1 million hectares in Europe. Practical examples of urban renewal and land management in various European industrial and urbanized environments were presented to more than 100 Slovenian and foreign participants from municipalities, ministries, public services and development companies.

Pietro Elisei spoke about development and economic potential of degraded areas. It's activation requires an integrated approach, a professionally managed process, a clear business strategy and a spatial implementation plan.

Professor Maros Finka from Slovakia has highlighted the role of ecosystem services in land management, while Lučka Ažman from

the University of Ljubljana presented the concept of the Industrial symbiosis approach and its role in preserving natural resources and reducing the pressure on the environment.

Uwe Ferber from Leipzig spoke on the introduction of compensatory measures for the complete management of space in functional areas Irma Karjalainen presented strategic regional planning for the sustainable future of the functional area of Helsinki. All presentations are available online, on the web address (Events section): www.interreg-central.eu/Content.Node/LUMAT.html#Events

In two round tables, the participants were able to actively participate in the discussion. As they noted, there are already many examples of renovations in major brownfields, but some of them remain unused. Often, those are the most vulnerable, since for various reasons (location, complex ownership, past environmental burdens) they are less attractive for investors.

The conference was not exclusively focused on the achievements of the LUMAT project, but was also open to address the problem in cooperation with other experts in order to address problematics with the space to promote faster and, in particular, timely renovation / recovery of already built up areas.



- Bostjan Tritar | City of Kranj, Mayor
- Lenca Humerca Solar | Ministry of the Environment and Spatial Planning, Spatial Planning Directorate
- Christophe Ebermann | Interreg Centrai Europe, Joint secretariat
- Anna Starzewska-Sikorska | IETU, Poland, LUMAT Lead Partner
- Bostjan Cotic | Urban Planning Institute, Slovenia
- Pietro Elisei | Urbasofia, Italy
- Maros Finka | Spectra, Slovakia
- Tomas Gunis | City of Trnava, Slovakia
- Anna Grzybowska, Marta Pogrzeba | City of Ruda Slaska, Poland
- Asa Rogelj | Ministry of the Environment and Spatial Planning, Slovenia
- Janez Zihrel | City of Kranj
- Lucka Azman | University of Ljubljana
- Uwe Ferber | Stadtland GmbH, Germany
- Irma Karjalainen | Helsinki Regional Environmental Services Authority HSY, Finland
- Luka Ivanic | Ministry of the Environment and Spatial Planning, Slovenia
- Jelka Hudoklin | ACER, Slovenia
- Matej Gojcic | Regional Development Agency Ljubljana urban Area, Slovenia



A. STARZEWSKA-SIKORSKA



U. FERBER



T. GUNIS



I. KARJALAINEN



B. COTIC



LUMAT PHOTOCONTEST: IT'S TIME TO SHOOT!

FROM 26|09|18
TO 21|12|18

During the 7th partners meeting in Ljubljana, SiTI as Communication Lead Partner presented the LUMAT Photo contest. It is a competition dedicated to all the photo enthusiasts, from 18 to 110 years old.



The aim of the contest is quite ambitious:

PHOTOGRAPHERS MUST FIND A POETIC WAY TO REPRESENT THE LUMAT KEYWORDS

SUSTAINABLE LAND USE

URBAN-PERIURBAN RELATIONSHIP

BROWNFIELD REDEVELOPMENT

COOPERATION IN LAND MANAGEMENT
FOR MORE LIVEABLE PLACES

INTEGRATED ENVIRONMENTAL
MANAGEMENT

FUNCTIONAL URBAN AREAS (FUAS)

FUAs' environmental management is aimed at developing processes in the FUAs to improve human wellbeing. "Development" is not necessary quantitative growth, but a concept mainly connected with the improvement of the quality of life in the FUAs. Cooperation is intended at all levels, among partners as well as among local context stakeholders.

The LUMAT Project focuses on the concept of sustainable environment management with the stress on cohesion of environmental, social and economic aspects.

Functional territorial units defined on natural ties of interdependences and/or horizontal cooperation between core city and municipalities in the peri-urban area, with practical implementation of multilevel governance principle in the decision making (e.g. division of responsibilities based on efficiency and optimisation of problem solving level).



Continued from previous page

FROM 26|09|18
TO 21|12|18

The LUMAT Photo Contest will end on **December 21th, 2018**. Winners will be announced during the final meeting in Katowice, in April 2019.

Entries (up to 10 per author) must be submitted electronically in a .jpeg, .jpg, or .png format (min resolution required 1200 px - long side) to:

- e-mail address: info@lumatproject.eu
- Object: **LUMAT photo-contest**.

All photographs must be submitted by the sole owner of the copyright and taken in one of the **countries within the Central Europe Area** (dark blue in the map).

Photos taken outside the Area will be disqualified as the ones not submitted by the author.

Beside of the author's name, address, email, telephone number, the photo must be presented with indication of:

- Photo Title
- Place where photo was taken
- Caption that describes photo in the LUMAT frame work

Photos will be judged on originality, technical excellence, composition, overall impact, artistic merit and subject matter relevance. A panel of LUMAT Communication Team will evaluate all valid entries and assign the following prizes: 1st, 2nd, 3rd and n.2 honourable mentions.

The awarded images will be published in the final LUMAT booklet and official LUMAT website. The publication will be diffused among the 7 partner countries in Central Europe. All the

images entered could be displayed on the LUMAT Website and used for LUMAT publications and dissemination materials. The winners will also be gifted with gadget packs for green experience.

Participation is free. Take up the challenge!

FIND A POETIC WAY TO REPRESENT THE LUMAT KEYWORDS

ONLY PHOTOS TAKEN IN THE CENTRAL EUROPE AREA

WRITE A GOOD CAPTION TO DESCRIBE PHOTOS IN LUMAT FRAMEWORK

ENTRY VIA E-MAIL by 21th DEC 2018

BE PUBLISHED IN 7 COUNTRIES



THE CENTRAL EUROPE AREA

Detail and official rules here: <https://www.interreg-central.eu/Content.Node/photocontest.pdf>



NEWS FROM THE PARTNERS

LET'S TRAIN!

During the semester, all the partners organized 4 trainings each, involving the stakeholders, professionals, administrators. People have been involved in seminars, organized according a given framework, on 4 subject:

- Functional Urban Area Identity
- Ecosystem services,
- Conflict management
- Citizens Involvement.

During the workshops, the tools developed during the project were presented and used. Here follows the Ostrava experience as an example of the partner's activities. [Let's train!](#)

The 17th-18th July, a two-days seminar was organized by the Czech partners MSID and IURS in the Hotel Beltine, Ostravice.

The aim of the seminar was to introduce participants to the issues of [FUA Identity](#), [Land Use Conflicts](#), [Ecosystem services](#), and the [InViTo tool](#) as an aid for planning in the area. As part of the seminar several practical workshops on the above topics were included.

During the first day of the seminar, a series of lectures accompanied by a workshop to identify

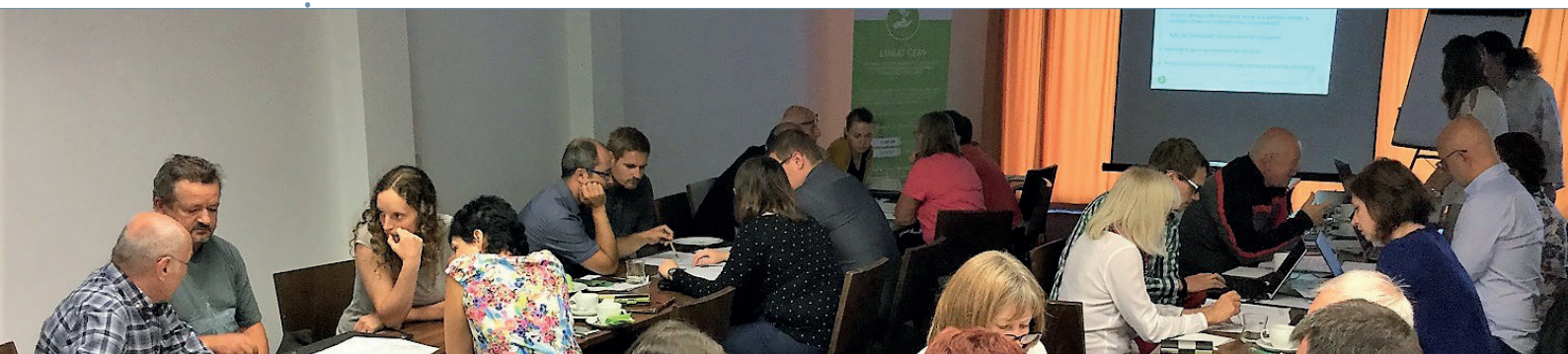
the areas of Land Use Conflicts in FUA Ostrava was completed and the training day was ended with outdoor workshop on ecosystem services in practice.

The second day was dedicated to the presentation of two IT Tools: Czech tool - interactive website for citizen involvement www.brf-msk.cz and InViTo tool. In the first part, the web [brf-msk.cz](http://www.brf-msk.cz) was introduced as a tool for involving the general public in brownfields topic - participants were invited to try to insert a new brownfield through the entry form. The discussion followed. In the next section, the InViTo tool was presented as a planning tool in the territory. Then practical training took place, where participants tried to work with this tool in the selected territory with ready-made data layers.

The training seminar was attended by a total of [30 people](#) from various institutions, such as the Local Public Authority, the Regional Public Authority, the Sectoral Agency, Higher Education and Research, the SME, the General Public, and representatives of the LUMAT partner organizations. We have got very positive feedback on the whole seminar.

17-18|07|18

CZECH
REPUBLIC



TRAINING IN OSTRAVA, 17TH JULY



Continued from previous page

1ST DAY

- A** Introduction of project LUMAT
- B** FUA Identity
- C** Land-Use Conflicts, workshop
- D** Golf - example of land-use, effects, benefits
- E** Temperature islands - tool for planning in the territory
- F** Eko-systém services in practice, outdoor workshop
- G** Networking

2ND DAY

- H** Introduction of czech tool www.brf-msk.cz
- I** InViTo - introduction of tool for planning in territory
- J** InViTo - workshop

OUTPUTS

- ▶ The goals have been achieved. Selected representatives of the target groups were introduced to and involved in the topics: FUA Identity, Land-Use Conflicts, Ecosystem services) and tried to work with LUMAT tools. We have received positive feedback on this training from participants.

PROGRESS

- ▶ Raise awareness of LUMAT topics: FUA, Ecosystem Services, Land-Use Conflict. Raise awareness of the existence of different tools to assist planning and finding solutions. Dissemination of information on brownfields and new websites to involve the public in this topic, with support from the LUMAT project. Good opportunity to bring together different stakeholders to talk about the LUMAT topics.

LINKS

- ▶ <http://www.msic.cz/novinky/setkani-odborniku-v-ostrovici-191>

MSID - PP10





FIRST LETTER OF COMMITMENT SIGNED IN KATOWICE

12|06|18

POLAND

Implementation of the action plans elaborated in the project cannot be guaranteed without a subject responsible for it in the future after the project is finished.

It is important particularly in case of functional urban areas since they usually are not defined as formal administration structures. They usually are formed due to real connections resulting from various common activities of the inhabitants (e.g. commuting to work).

Therefore, in order to assure the future responsibility for implementation of the action plans the idea was to establish management structures which would take care of the next

stages of the action plans' lives.

In the case of the Polish FUA the mayors of three cities:

- Chorzów,
- Ruda Śląska
- Świętochłowice

signed the letter of intent on the 12th of June 2018, in which they made a commitment to undertake activities aiming at implementation of the Action Plan.

IETU - LP
CITY OF RUDA ŚLĄSKA - PP2





PILOT ACTIONS

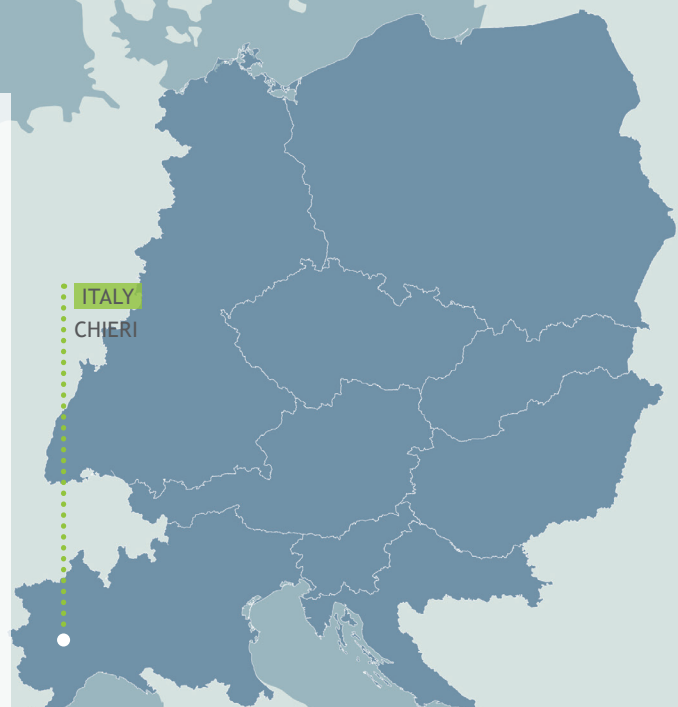
CHIERI (IT)

The Italian pilot area is the Chierese-Carmagnolese Homogeneous Zone, composed by 22 municipalities. It represents a typical situation in which it is possible to find a mixture of different land uses: residential areas, areas for industrial production (often underused or abandoned), areas for agricultural production, areas of valuable landscape (above all it seems to hilly and area fluvial), compromised natural areas (for man-made uses or for alluvial and landslides).

CHIERESE-CARMAGNOLESE ZONE

Problems and Threats

- Urban expansion along the main transport way and sprawl in the hill and valley areas
- Brownfield sites (underutilized industrial sites or disused industrial areas)
- Compromised readability of the settlement system;
- Landscape deterioration
- High values of environmental insularisation because of infrastructure and industrial presence
- Soil consumption on the south slope of the hill
- Loss of biodiversity and environmental
- Risk of loss of traditional cereal crop
- Progressive loss of productive land and farms sectoral specialization
- Spread of exotic species due to problems in the management of forest environments
- Involution towards a set of simplified agro-ecosystems and industrialized



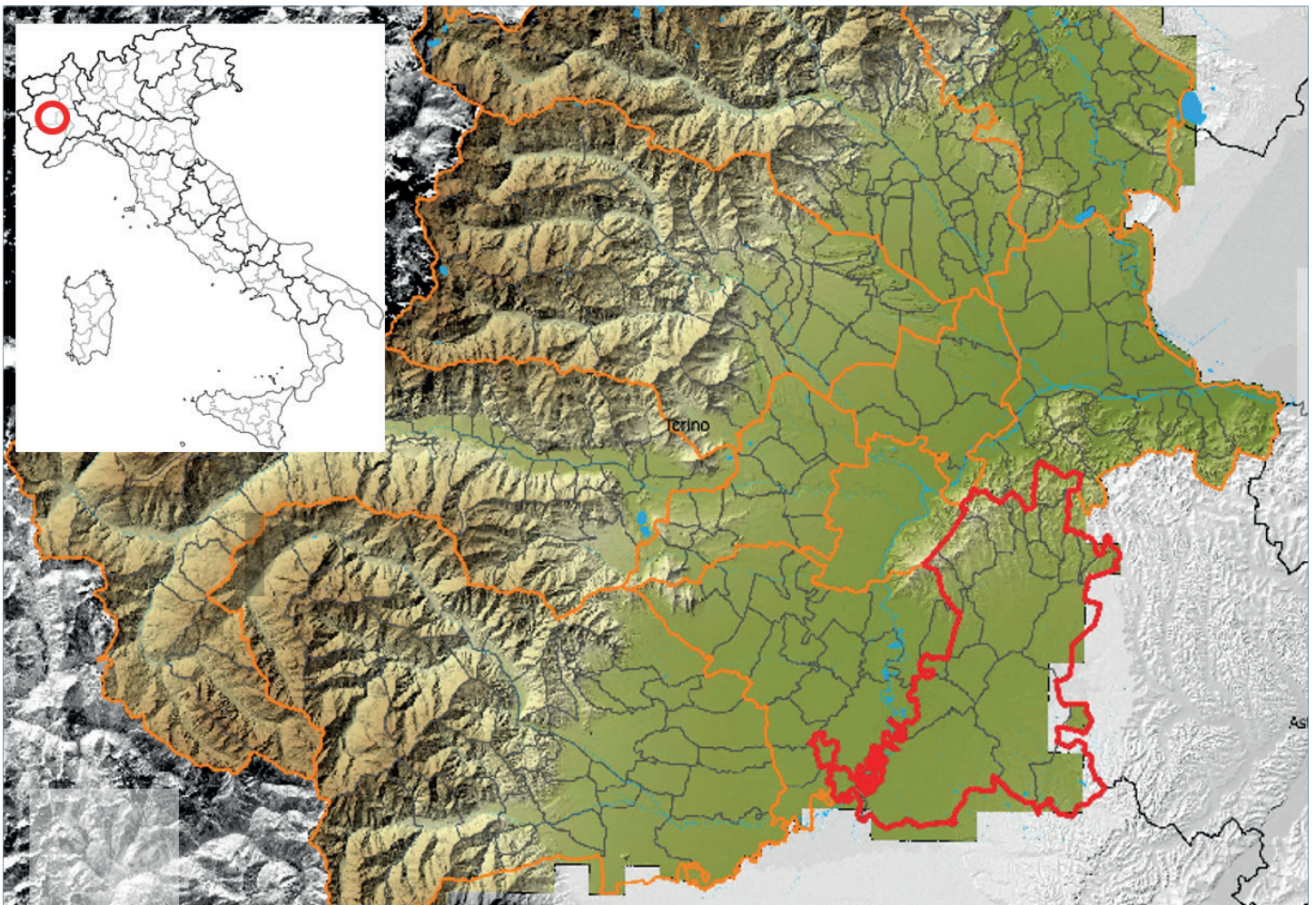


CONTEXT

The Metropolitan City of Turin is characterized by an extensive territorial dimension and a large administrative fragmentation (316 municipalities). In order to better plan and manage the urban polycentrism, the sprawl of residential settlements and of the productive locations, the complex economic and cultural system, and of the environmental system, the Metropolitan City is structured in 11 Homogeneous Zones.

The Pilot Action develops in one of the 11 CMT0 HZs (Chierese-Carmagnolese) that is composed of 22 municipalities inhabited by approximately 130.000 inhabitants on an area of 462 sq. km. The area is located in the southeastern part of the metropolitan City territory, within the borders of the Piedmont Region.

The territory is predominantly hilly in the northern part, which is closest to the capital city and has elements of high environmental and landscape value, while the southern part has morphological and socio-economic features typical of the plain agricultural areas. It is an area in which different situations coexist such as a high naturalistic potential (green areas), hydrogeological problems (overflowing areas and landslides), brownfields and underused productive areas following the recent economic and financial crisis, and widespread situations of residential sprawl. Since several years, the HZ Chierese-Carmagnolese is working to strengthen its territorial identity and to refine tools and cooperation methods at supra-municipal level, with particular interest on environmental issues.



METROPOLITAN CITY OF TURIN AND PILOT AREA "HOMOGENEOUS ZONE N. 11 - CHIERESE-CARMAGNOLESE" (IN RED)

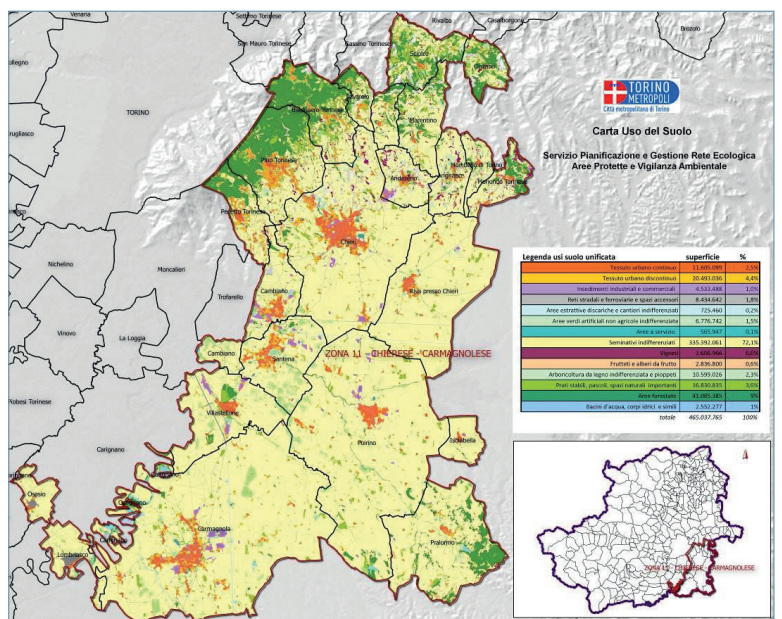


PHYSICAL CHARACTERISTICS

The morphological profile of the area is equally divided between 11 hilly Municipalities (104 sqKm) and 11 plain Municipalities (358sqkm). The territory is 77,4% flat and 22.6% hilly. It has an extension about 46.500 ha, of which over 33.500 for agriculture (72,1%), 41.085 ha are characterized by forested (9%) and about 16.830 ha by permanent meadows, pastures and important natural area (3,6%). The 9.7% of the total area is occupied by urbanization and transport infrastructure. The south portion of the Homogeneous Zone (HZ) is characterized by the presence of forest cover of high conservation interest, in particular the forest Ternavasso which is an important relic of the vegetation in lowland oak-hornbeam with oak highland of Poirino Municipality, almost disappeared as a result of past extensive deforestation to leave space for the agriculture. On the slopes of the Poirino's terrace, in particular the border with the hilly area of Monferrato, there are interesting remains of lowland forests in Quercu-hornbeam, alneti and mixed oak woods with various beeches (Cellarengo Municipality). Even in the portion of the Po River hills (between the City of Turin and the Chierese-Carmagnolese area), there are areas of natural interest, as the Lake of Arignano in recovering and the large portion covered by wood between Moncucco Torinese and Marentino Municipalities. The Chierese-Carmagnolese's HZ is also characterized by the presence of many protected natural areas. On the Turin hill is identified the Site of Community Importance (SCI) named Superga Hill. The ponds of the highland of Poirino, fishponds of Pralormo, of importance for wet environments and plant populations and related animals, including the main population of *Pelobates fuscus insubricus*, classified "species priority" by Directive 92/43 / EEC. "Habitat". In addition in the 2016 the Turin's hill area (in the north of the HZ) and the Po river protected area have been recognized as "CollinaPo Man and Biosphere Reserve" as first recognition of Urban MAB in Italy. It is an area of 171,233.85 hectares which includes over 80 municipalities and sectors characterized by both natural and human causes, (core area: 3853.05 ha, buffer: 21,161.45 ha Transition: 146,219.46 ha). The HZ Chierese-Carmagnolese is fully inserted into the Mab Unesco Reserve.

MAIN PROBLEMS

It is an area in which different situations coexist such as a high naturalistic potential (green areas), hydrogeological problems (overflowing areas and landslides), brownfields and underused productive areas following the recent economic and financial crisis, and widespread situations of residential sprawl. Moreover it is characterized by an extensive territorial dimension and a large administrative fragmentation. It is also characterized by polycentrism characteristics of the sociodemographic settlements, of productive locations, of environmental system and economic and cultural relations. This basic conditions favours local spatial uncoordinated previsions causing for example underutilized industrial sites or disused industrial areas (brownfield sites), landscape deterioration, environmental fragmentation, urban sprawl.





WHAT LUMAT WILL DO

The LUMAT project offers the opportunity to trace the path to build an inter-municipal structure for an integrated management of territorial and environmental problems in the large area (FUA), providing useful methods and tools for the integrated management of the environmental problems of an area of interest.

Starting from the transnational strategy developed jointly by the LUMAT partners, the LUMAT project foresees, through a Pilot Project, the practical experimentation of the management model, which accompanies the FUA n. 11 in the definition of an integrated environmental territorial program (PTAI) of actions of supra-municipal interest, and proposing a working method and an instrument (InViTo), useful for local actors and the involvement of citizens in the choices of administrations.

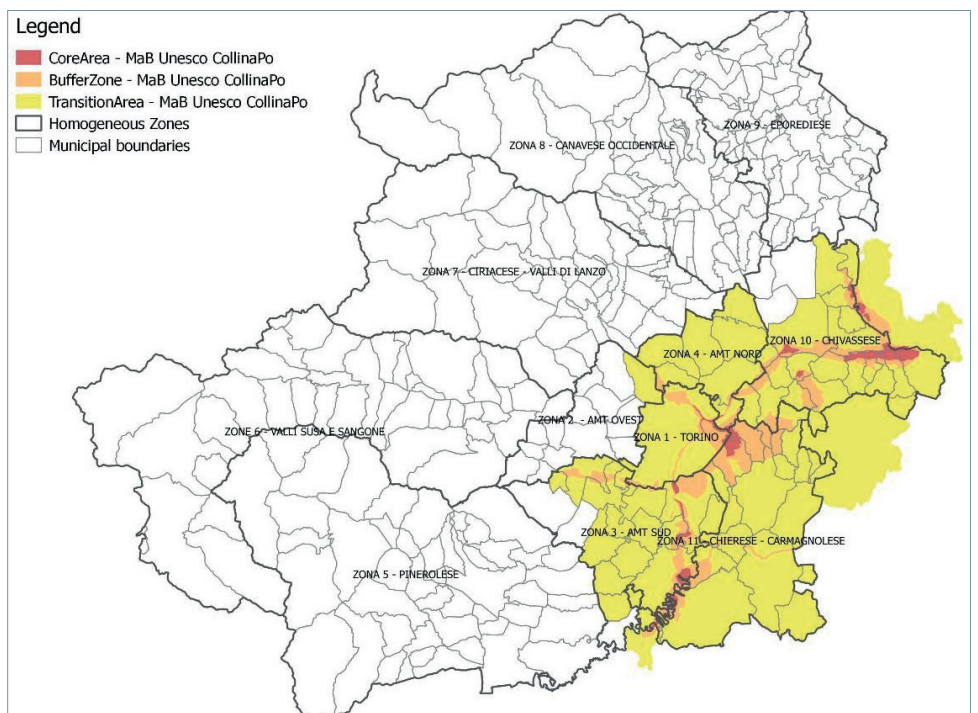
With the FUA action plan, the new management structure is accompanied by the implementation of one of the projects envisaged by the PTAI ("Fontaneto" project) in line with the general objectives of CMT0, which are:

1. define an integrated environmental management model of the territory, replicable in all the CMT0 FUAs able to deal with various types of problems related to conflicts deriving from different land uses;
2. test the model within the FUA "Chierese-Carmagolese". The action plan aims to test the functioning of the management model and at the same time solve some specific environmental problems of the FUA;
3. define ways to resolve / mitigate conflicts between the different land use needs.

STAKEHOLDERS

The LUMAT Project offers the possibility to realize the Identity Pact idea and assist the 22 municipalities to define the inter-municipality government structure aimed to territorial integrated environmental management and provide essential tools for its operating. The proposed model provides the definition of an Integrated Environmental Management structure that, through the application of a specific work methodology and a GIS-based tool (InViTo) for the involvement of territorial actors in management decisions, will be able to build an integrated territorial and environmental program of wide area.

"This will contribute to resolving situations of brownfield degradation, combating conflicts between different land uses, and environmental protection objectives at national, regional and local levels. This structure will be able to operate for the implementation of the individual redevelopment interventions included in the integrated territorial program.

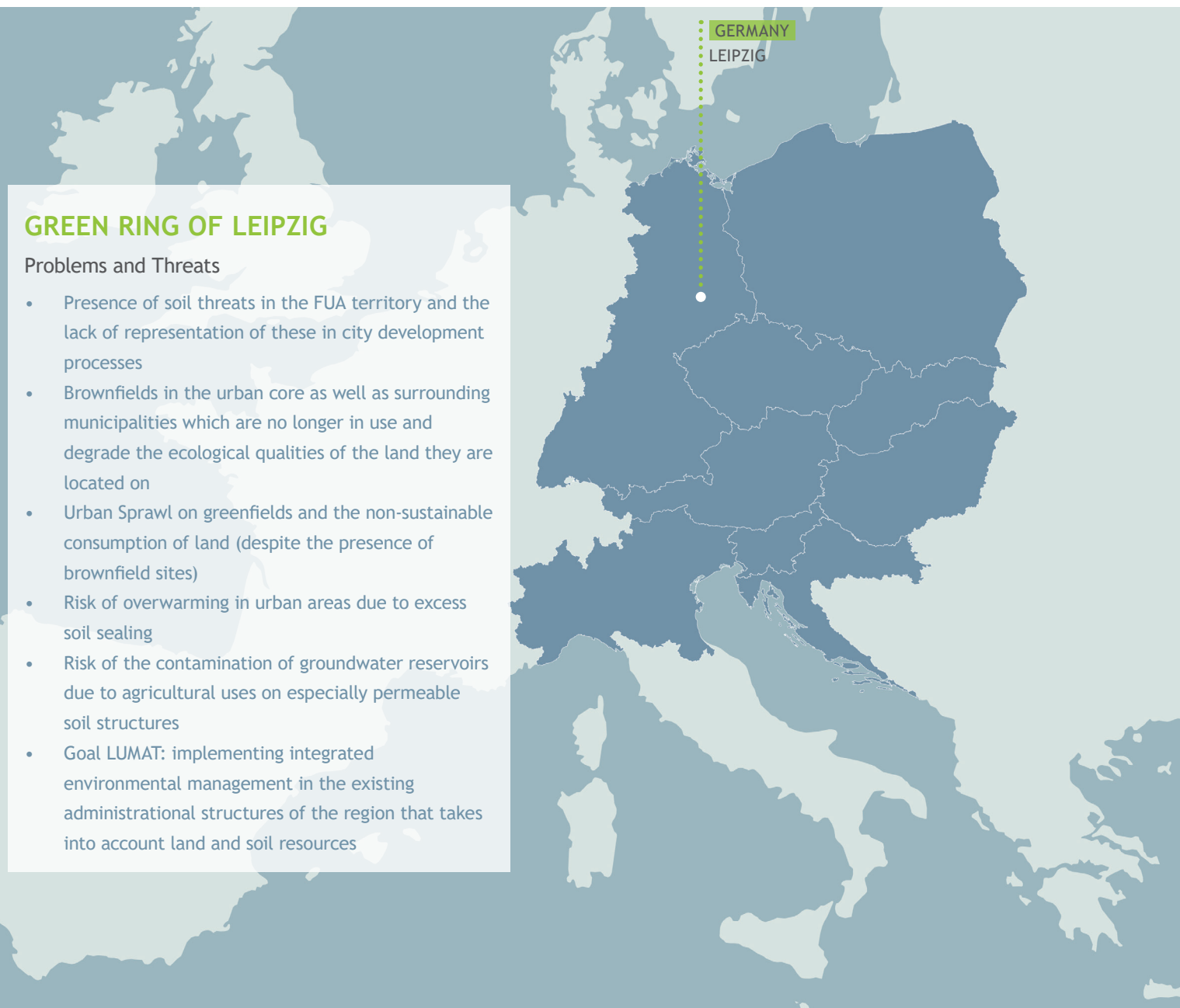




PILOT ACTIONS

LEIPZIG (DE)

The Action Plan for the FUA Green Ring Leipzig will look into the linking of compensation measures as required by German law as well as actions on threatened land to the revitalisation of brownfield sites through the development and implementation of a tool that supports the inter-municipal cooperation activities. For this, a wide range of stakeholders have been collectively managed in terms of their needs and interest in integrated environmental management.



GREEN RING OF LEIPZIG

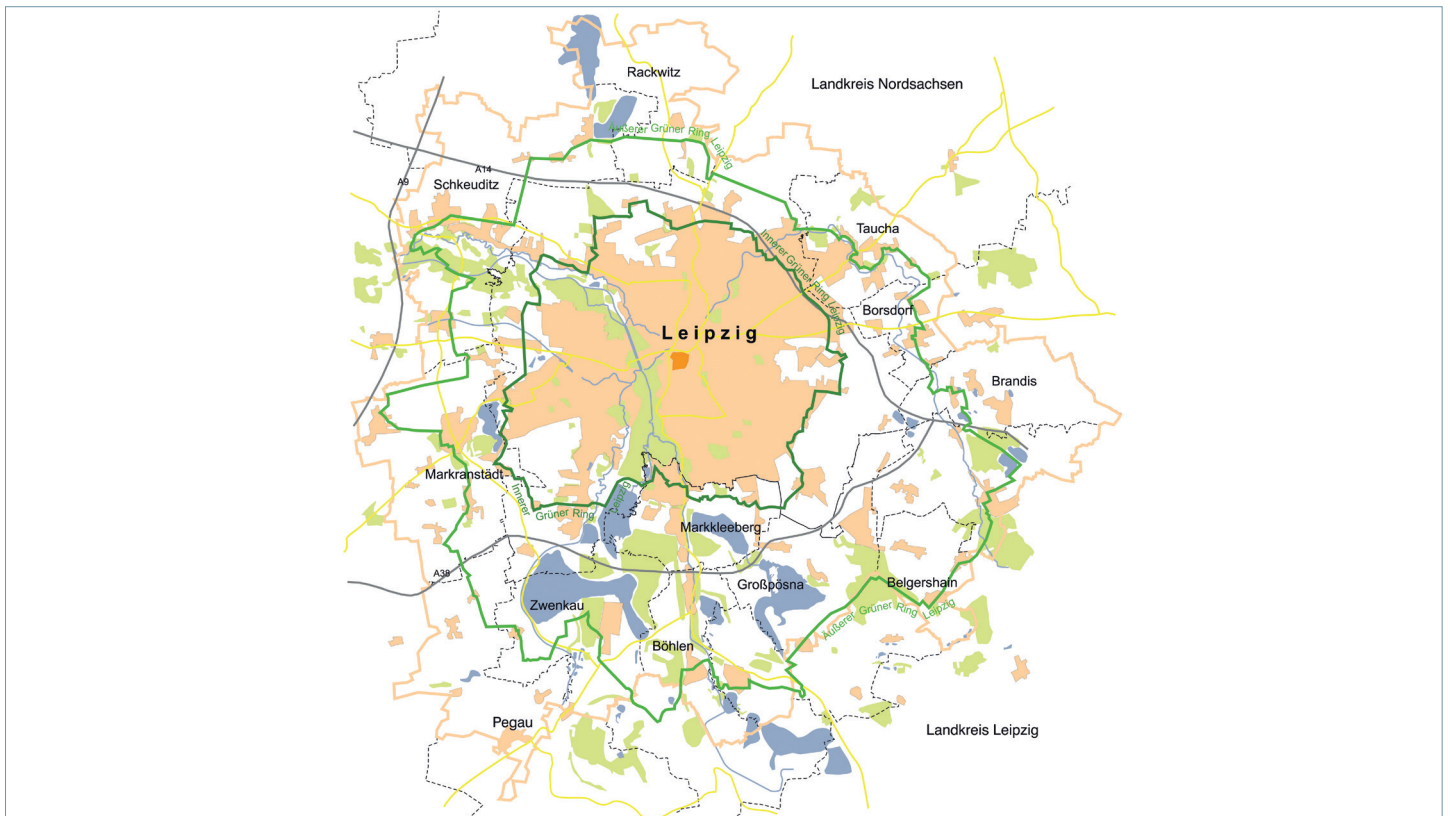
Problems and Threats

- Presence of soil threats in the FUA territory and the lack of representation of these in city development processes
- Brownfields in the urban core as well as surrounding municipalities which are no longer in use and degrade the ecological qualities of the land they are located on
- Urban Sprawl on greenfields and the non-sustainable consumption of land (despite the presence of brownfield sites)
- Risk of overwarming in urban areas due to excess soil sealing
- Risk of the contamination of groundwater reservoirs due to agricultural uses on especially permeable soil structures
- Goal LUMAT: implementing integrated environmental management in the existing administrative structures of the region that takes into account land and soil resources



CONTEXT

The City of Leipzig and its suburban area is currently growing; prognoses state that the city expects a total of 720,000 residents by the year 2030, an increase from the current estimate of roughly 570,000. This puts development pressure on the nonrenewable land and soil resources of the region. At the same time that soil consumption is taking place for new settlement structures, there exist also abandoned brownfield sites in need of revitalization. Development and the related compensation measures are to be guided towards these unused, previously built areas to reduce the unsustainable consumption of land. This aims to increase the ecosystem services provided by soils through the resulting de-sealing of unused sites, and to make the places more livable. Stakeholders have recognized that sustainable land management has an important role for ensuring the Leipzig region remains livable and desirable for residents in the future. LUMAT in Germany will strategically support this goal.



THE GREEN RING OF LEIPZIG AND MEMBER MUNICIPALITIES. (IMAGE SOURCE: GRL 2018)

PHYSICAL CHARACTERISTICS

The Green Ring of Leipzig consists of 13 municipalities which all cooperate in economic growth and inter-municipal land management. The goal of the sustainable use of land is registered in the organization's statutes. The physical characteristics of development and growth mirror those found in other Central European areas. Dynamic growth has resulted in the consumption of non-renewable land resources. Brownfields and other changed land uses in core and hinterland areas, abandoned from their former use, persist in the functional urban area. The surrounding landscape of the region is characterized by intensive agricultural land uses. Riparian landscapes cross through the area. The city core is characterized by a high level of soil sealing.



MAIN PROBLEMS

Soil threats exist in the region and the information on these are not fully integrated into the city development processes of stakeholders. For example, the exact location and extent of the brownfield situation in the area was not updated. Instead of using brownfield sites for the compensation measures (for example de-sealing), the compensation for new soil sealing has taken place on agricultural land, which in turn decreases the amount of agricultural used area. The high level of soil sealing in the city cores leads to the risk of extremely hot days in the summertime. This is unhealthy for the population. The function of land in rural areas commonly includes water retention. Retention function protects against flooding and is responsible for refreshing of the air. The permeability and water retention function of soils varies greatly from site to site and depends often on the greenery. The ecosystem services provided by soils must be taken into account. The awareness of sustainability in dealing with the area must be improved.

WHAT LUMAT WILL DO

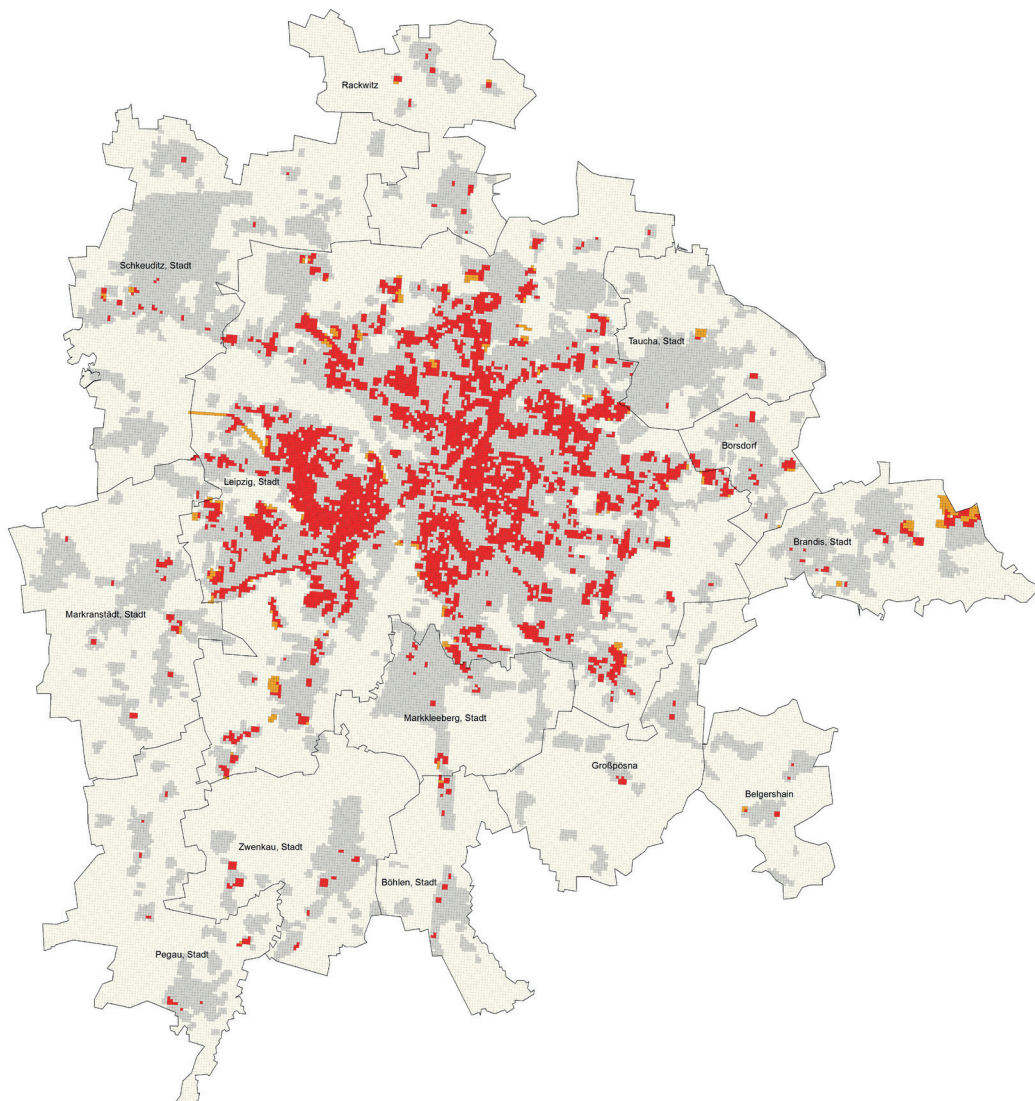
Integrated environmental management on land and soil will take place with the LUMAT Tool “LUMATO”. The tool is based upon stakeholder advice and on successful pilot projects for sustainable brownfield revitalization in the Green Ring of Leipzig. Based upon these previous revitalization successes in the LUMAT project, evaluations will be generated for all brownfield sites in the area. Five Decision Support Services (DSS) to support stakeholders make sustainable land management decisions in the Green Ring of Leipzig will be created with LUMATO: to increase water retention of soil, improve the cooling function of land in urban areas, and more. New potentials for sustainable compensation measures on brownfield sites for improving ecosystem services will be shown. After the LUMAT project, newly identified soil threats in the region will be discussed by decision-makers, and recommendations for their alleviation and mitigation can build upon the results of LUMAT for the needs of the administrations and stakeholders. The ecosystem services of soil are to be improved to make the places more livable for residents and visitors to the city. Brownfields are to be revitalized where possible to improve the ecosystem services in urban as well as rural areas. The special role played by soils for the regulation and securing of life will be recognized in the planning decisions of the administration. Planned soil sealing measures in the region will have a sustainable compensation example given by LUAMT which the local authorities are welcomed to follow.



STAKEHOLDERS

Green Ring of Leipzig and the 13 associated municipalities, including the city of Leipzig
Saxon Central Agency for Land Management
Saxon State Office for Environment, Agriculture and Geology

- Urban area
- Brownfields in**
- Settlement Areas
- Hinterland Areas



BROWNFIELDS IN THE GREEN RING OF LEIPZIG, ACCORDING TO THEIR LOCATION EITHER IN THE SETTLEMENT AREA OR HINTERLAND AREA. THE LUMATO CELLS THAT ARE TOUCHED BY THE PRESENCE OF A BROWNFIELD ARE DISPLAYED AS FULL CELLS IN THE MAP. (IMAGE SOURCE: LFULG 2018)

CONTACT US

Coordinator
Dr. Anna Starzewska-Sikorska



+48 32 2546 031 ext. 258

Lead Partner
IETU - Institute for Ecology
of Industrial Areas



info@lumatproject.eu



www.interreg-central.eu/LUMAT



Lumat Project



Lumat.Interreg



@Lumat_Project

PARTNERS

IETU - Institute for Ecology
of Industrial Areas



EC Energy Center
Lipizzanerheimat LTD



Urban Planning Institute of
the Republic of Slovenia



The City Hall of Ruda Śląska



Slovak University
of Technology
in Bratislava



Ministry of the Environment
and Spatial Planning



Saxon State Office for
Environment, Agriculture
and Geology



City of Trnava



City of Kranj



Higher Institute on
Territorial Systems
for Innovation



Institute for Sustainable
Development of
Settlements



Interreg
CENTRAL EUROPE



Metropolitan City
of Turin



Moravian-Silesian
Investment and
Development, a.s.



LUMAT

European Union
European Regional
Development Fund

This newsletter is edited by SITI. For more information, please contact:

MATTEO TABASSO

SITI - HIGHER INSTITUTE ON TERRITORIAL SYSTEMS FOR INNOVATION

WP Communication Responsible Partner

P. 039 011.1975.1548

info@lumatproject.eu