

# DELIVERABLE D.T2.2.4

## ACTION PLAN FOR INTEGRATED ENVIRONMENTAL MANAGEMENT FOR VOITSBERG FUA

Final version 04 2018

Authors:

Anton Schabl

Johannes Binder

Claudia Krobath







Table of contents

1. BACKGROUND	2
1.1. Introduction and Presentation of the Regional Framework	2
1.2. Strategic Development Plan	8
1.3. Management Strategy for the Implementation of (Existing/New) Strategic Development Plan	8
1.4. Scientific Input - Ecosystem Services and Threats for Land And Soil	10
2. ACTION PLAN	14
2.1. Vision/Mission Description	14
2.2. Objectives and Priorities	14
2.3. Definition of Areas	15
2.4. Actions	16
2.5. Financing Programs	18
3. PILOT PROJECT DESCRIPTION	19
4. LUMAT TOOLS	21
4.1. Use of tools to support action plan development and pilot project activities	21
5. CAPACITY BUILDING AND INSTITUTIONAL APPROACHES	22





## 1. BACKGROUND

## 1.1. Introduction and Presentation of the Regional Framework

## 1.1.1. The objective

The objective of the development of the Action plan for FUA Voitsberg in order to improve the quality of living in functional urban area through the identification of threats and provision of ecological services as part of the decision-making processes in order to make places in the Lipizzanerheimat more liveable.

The findings of the Action plan of the FUA Voitsberg cover identified threats, provisions of services as development potentials of underused areas together with identified tools and measures, in the mid and long term perspective directly usable in designing and implementing regional and local actions as a part of municipal spatial and development plans.

The Action Plan for integrated environmental management for the FUA Voitsberg will focus on the development of a master Plan activating under-used areas in the form of business locations focusing on the thematic field "garden" (flowers, vegetables, glasshouses, etc.) as part of the Functional Area Integrated Environmental Management Strategy. The Action plan has to be understood not as a formal instrument but as a kind of a steering instrument - an efficient tool used following the interest of all involved municipalities and interest of the whole scale of stakeholders in the area.

## 1.1.2. Regional background (relevant to LUMAT)

## Territory of interventions and relation to FUAs

Connection between Styrian central region (planning unit in Styria), district Voitsberg (political district, administrative boundaries) and the "Kernraumallianz Lipizzanerheimat" (5 central municipalities in the district of Voitsberg):

## Steirischen Zentralraum

Voitsberg FUA is situated in one of the 7 planning areas of Styria, the so called "Styria Central Region" (Steirischer Zentralraum) and lies west of the metropolitan area Graz, the regional capital and covers the district of Voitsberg with it's "heart" - the "Kernraumallianz Lipizzanerheimat".





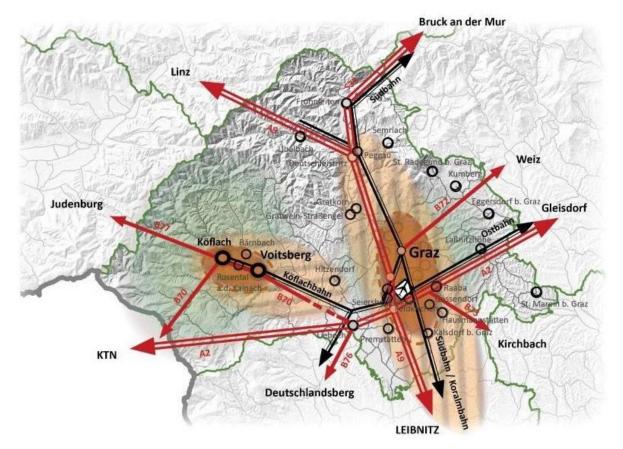


Figure 1: Structure of the "Styria Central Region"

## Functional Urban Area of Voitsberg - The district of Voitsberg - Lipizzanerheimat

The Austrian pilot-region is a union of five communities "Kernraumallianz Lipizzanerheimat" - Voitsberg, Köflach, Bänbach Rosental, Maria Lankowitz- and represents a typical shrinking region; i.e. decreasing number of inhabitants, break-down of former coal mining industry but with considerable land consumption at the same time.

The now abandoned lignite mines (underground and open cast mining) are located in the central region Voitsberg-Köflach-Bärnbach, one of the most populated areas in Styria. The tributary valleys of Kainach and the Styrian border mountains are sparsely populated. The expansion of the southern A2 motorway and the national B70 improved the accessibility of the region to the national transport network significantly. A private railway connects the railways of Voitsberg-Köflach-Bärnbach to the central region of Graz. The link to international air traffic is the airport of Graz-Thalerhof - 35 km southeast from Voitsberg.





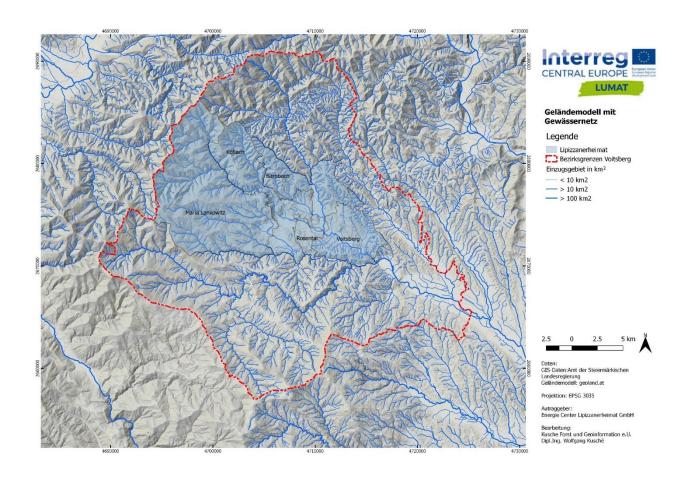


Figure 2: Lipizzanerheimat in the district of Voitsberg

Municipality	Inhabitants (1.1.2018)	Area km²
Stadtgemeinde Bärnbach	5.642	31,58
Stadtgemeinde Köflach	9.888	43,28
Marktgemeinde Maria Lankowitz	2.858	104,25
Gemeinde Rosental	1.678	6,54
Stadtgemeinde Voitsberg	9.403	28,62

Table 1: Kernraumallianz Lipizzanerheimat: Inhabitants and area

## Physical characteristics

Industry: The region of Voitsberg is a traditional former coal mining region and is now facing structural transition. Surface mining of lignite and a central coal-fired power plant were key employers of the region. Both were only recently closed down between 2004 and 2006. Besides mining, Voitsberg-Köflach-Bärnbach has a tradition of glass making which been in decline over recent years. Today only 3 glass factories are still operating. Today, service industries have a share with about 60% of the industrial strength of the region. SMEs have become a strong earning factor for the region. (e.g. REMUS, SEBRING, KRENHOF, STÖLZLE, HOLZHER, BINDER, EJOT, BAUER).





Agriculture: Around the 5 municipalities all other municipalities are focused on agrarian production, but there is an ongoing change of the structure (reduction of full-time farmers to part-time farmers by about 20% during the last 15 years). Agricultural fields have been reduced by 7% in the same time. 9,8% of the agricultural farms are organic farms (202).

Tourisms: this is an important focus of development. The stud farm Piber, a breeding centre for Lipizzaner horses, which later become world famous in the Spanish Riding School in Vienna, the parish church of Bärnbach, reconstructed in 1988 according to plans development by the artist Friedensreich Hundertwasser, the West-Styrian Wine - route and the spa "Therme Nova" (built 2006) in Köflach are tourist attractions in the region. In addition to skiing-areas, a regional cycling and roaming path network and outdoor swimming pools, the region now boasts another large leisure centre with a lake, a golf course and a shooting stand, which were built by the mining company as part of the recultivation and revitalization plans.

## Social context

Demography: Slightly shrinking population (1,5 % between 2001-2006), the proportion of older and nonworking people is growing, 25% of the population is older than 60 years and small households with 2.3 persons are dominating. Unfortunately, it is to be assumed that this trend will remain constant and that a downward spiral will be in effect for the region until 2050. Studies show that the age composition of the population in 2015 will differ greatly from that of the reference year 2010. For example: the proportion of the youth population will sink by 17, the proportion of the working population will also sink by 17% and the proportion of seniors will increase by 63%.

Employment: The district Voitsberg has experienced dramatic changes since the middle of the 1960s and the structural change in connection with glass-making and coal mining, two industries dominating the region for decades of years, is still going on. As brown coal mining declined and finally ended in 2004, the area lost its original attraction as an industrial conurbation and the structures of the buyers of the products of these industries crumbled. Now the service industries with SMEs have become a strong earning factor for the region. This can also be seen in the settlement of centers supporting new business with a focus on information technology, manufacturing engineering, renewable energy, trades and crafts business and automotive suppliers. Voitsberg, Köflach and Bärnbach are the most important job-creating centers with about 70% of all jobs in the region. However, there is still a lack of local jobs so over 7.600 people are forced to commute.

## Main problems of the area

In the last few years the municipalities in the region have developed several project ideas in the context of urban development, sustainable energy systems, brownfield regeneration The District of Voitsberg expects to intensify the regeneration through the LUMAT activities and the dialog with public and private stakeholders on new use concepts, interim use options and financial models for reengaging the initiative on the model sites:

- many plots of land and buildings which are unused or underused due to the decline of heavy industry
- the plots of land, which are grouped together under the term "brownfields" shall be brought back into use according to the regional framework for development.
- economic transformation and the reuse of brownfields ("more jobs")





## Criteria for FUAs identity - FUA Voitsberg

Based on the results of a LUMAT workshop within the partnership the following table shows the criteria for The FUA identity for the FUA Voitsberg:

Country: Austria FUA: Voitsberg – region	Common features	Common problems	Common potential
<b>1.Demographic:</b> population, density of the population, migration, demographic trends	Shrinking population	<ol> <li>1)Lack of workforce,</li> <li>2) Aging society,</li> <li>3)Negative birth rate,</li> <li>4) ageing population</li> </ol>	Migration is positive
<b>2.Functional:</b> functional relationships, type of common functions	<ol> <li>1) REV - Regional Development Association,</li> <li>2) EU Regional Management,</li> <li>3) WOF (economic offensive), chambers and social partners,</li> <li>agriculture, economic,</li> <li>trade</li> </ol>	Different political parties, information exchange doesn't always work	Working on common solutions without political influences', capacity building works
<b>3.Planning:</b> land use, type (state) of built– up areas, soil sealing, peri- urban relationships,	New requirements for the planning region "Steirischer Zentralraum", land use planning on municipal level	1) No common strategy for 5 municipalities, 2) no strategy for soil sealing, 3) peri- urban relationship with Graz is still in the development	1)Stronger planning partnership, 2)peri- urban relationaship partly via the Leader Programme, 3) planning for the "Steirischer Zentralraum" expects good ideas
<b>4.Economic:</b> number and character of firms (entities, SME), GDP, industry decline GDP lower as average in Styria	Industry (metallurgy, Electro parts –automotive industry), glass industry Trade, handicraft, public- administration, Tourism (Lipizzan stud Piber), health = > jobs	Lack of professionals in Metallurgy industry	Education (ABV)
<b>5.Infrastructural:</b> level of technical infrastructure/water/sewage system/roads/ railways/ Peripheral located; Traffic	Beside the main routes	Bad connection to motor way	Electrification of Railways and better connection to Styria Railway system (Graz)





<b>6.Social:</b> education, Professional structure & skills; Sleeping region (educated young people migrate to Graz or others)	Technician apprentice- ship with higher school certificate, Apprenticeship with A- level, commercial academy	Missing science technical college & Universities	High qualify. ABV, Education system through the leading companies
<b>7.Management:</b> politics will co-operate with neighbouring administrative units, common strategic vision, ability to solve conflicts	Regulation Central region Styria, Leader Region "Lipizzaner Heimat"	Weak cooperation among 5 municipalities, and weak cooperation with Graz	Better cooperation with Graz, realization by LUMAT
<b>8.Spatial Cohesion:</b> continuity of ecological systems, lack of "spatial island"	Low awareness raising for connected ecological systems	Reduction of agriculture areas (based by settlements), weak recultivated mining areas, fragmentation, conflicts of usage	realization of LUMAT

Table 2: FUA identity - FUA Voitsberg

## Conflicts for the region of Voitsberg according the FUA-Scheme

The identified conflicts in the region concern the following issues:

## a) Due to subject

Right of property:

- landowner in most of the cases is the mining company no commitment with the municipalities concerning the price for the land
- no common landuse policy of the municipalities (will be established)

## Opposite functions:

- Landuse ideas from mining company for more profit are not always supported by the municipalities
- Trans-municipal projects are very complicated

## Environmental aspects:

- "green" projects bring less profit; environmental aspects are partly neglected
- Environmental aspects have minor priority

## b) Due to range of impact

conflicts of vicinity:

• good idea of landuse increases price for land





• competition between the municipalities concerning local projects

conflicts of indirect impact:

- most areas within the municipalities are underused since 20 years
- new projects seldom implemented

It is important to have good cooperation in the region. This should be done by close cooperation of different planning and decision-making organizations (exact political coordination with the leaders!)

## 1.2. Strategic Development Plan

There are several regional and local planning programs for the region, which must be taken into account in the development of the strategic development plan or its goals and targets.

Planning programs to be considered:

- Regulation Central Region Styria, SZR (new planning strategy 2016-06)
- Regional development concept
- Leader Region "Lipizzanerheimat" (program 2014 2020)
- Guiding vision of the small region "Lipizzanerheimat"
- Guiding vision of the municipalities (if available)
- Zoning plans of the municipalities

New:

- Steiermärkisches Landes- und Regionalentwicklungsgesetz 2018 StLREG 2018
- Budget for SZR (starting 01.06.2018)

# 1.3. Management Strategy for the Implementation of (Existing/New) Strategic Development Plan

Identifying the existing key stakeholders for the management of land and soil - these are the key stakeholder of the regions:

• Regional Development Association (REV) - all 5 mayors of the core area (Kernraumallianz)

Cooperation of the 5 communities; prepare, decide and implement measures for the core area (5 mayors); all land management projects in the region are harmonized via the REV

• Regionalmanagement Steirischer Zentralraum (SZR)

with field office Voitsberg; good contacts with the administration of Styria (spatial planning, funding programs, coordination with measures of the SZR)

• LEADER Management Lipizzanerheimat





Manages LEADER program, direct cooperation with Regionalmanagement

• Economic offensive of the district Voitsberg

The Economic Offensive (WOF) is a regional development association founded in 1989 by the social partners and sees its role in the sustainable development of the region through integrated, cross-sectoral projects

• Stadtregionalen Flächenmanagement (SRFM) "(City-regional land management)

Collaboration and coordination with another ongoing project in the region "City-regional land management" (also seen as a continuation of the land management agency of CircUse)

- Chamber of Commerse Voitsberg
- Energie Center Lipzzanerheimat

The individual stakeholders each have their own programs (developed and decided in recent years) that they are trying to work through. These programs were largely developed on the basis of strengths / weaknesses profiles. The approach "analysis of threats" (according approach LUMAT) was not considered.

As a result, sustainable measures in the sense of an FUA are limited to a few individual measures. The FUA approach is therefore a new approach!

## Administrative structures

These are due to the small regionality essentially given by the cooperation of the stakeholders - the specific stakeholders decide on their projects (have their own programs) themselves, inform the other stakeholders.

With the new City-regional land management, which will start with the new budget funds for the SRZ, the necessary administrative structures for the FUA should use the existing structures (condition of the spatial planning department of the Styrian Administration: no new structures!). The necessary harmonization is in preparation.

## Process of cooperation

The key stakeholders are to be involved with periodic information events (for example, periodical information at the REV meetings, information to the mayors, close contact with the regional management).

When developing the implementation strategy, the objectives or requirements of the regional programs (SDR, Regional Development Program, Leader) should be taken into account:

- Close co-operation with the Regional Development Association Lipizzanerheimat (REV)
- Several stakeholder workshops (decision maker, mayors, land owner/mining company, etc.)
- Individual meetings with mayors/heads of administration (5 municipalities of the "Kernraumallianz")
- Close co-operation with actual running project "Stadtregionales Flächenmanagement (SRFM)" of the REV

A close contact to the planning department of the Styrian Administration is important.





As a first step in the development of an action plan, surveys of potential threats / threats in the region were foreseen. An update of the data of CircUse takes place.

In a second step, the definition and setup of monitoring activities takes place:

- Workshop (s) in the region
- Catalog of measures
- Needs of the companies
- Creation of proposal list
- Involvement of decision makers

In addition, the field of administration / governance is dealt with, with a focus on

- Impact on regional development (coordination with regional management)
- Pilot project(s) coordinate with the communities

One contact person per municipality has been defined:

- Community Bärnbach: Mayor Bernd Osprian
- Municipality of Rosental: Headmaster Josef Kriegl
- Community Köflach: Mayor Lienhart
- Municipality of Voitsberg: possibly municipal director Gernot Thürschweller
- Community Maria Lankowitz: Amtsleiterin Claudia Nöres-Neuherz

## 1.4. Scientific Input - Ecosystem Services and Threats for Land And Soil

An important goal of the LUMAT Action Plan for the Lipizzanerheimat is to communicate and integrate the experience of stakeholders and the current status of the evaluated threats to land and soil into an integrated environmental management strategy. A concept of ecosystem services is to be achieved through a process of experts and stakeholder involvement, which will aim for a more sustainable approach to land and soil in the region. There are currently 4 identified threats which will be displayed in a newly developed tool for the pilot areaLipizzanerheimat. The threats identified and their definitions in the LUMAT project include:

- Brownfields (mostly former mining areas) using the methodology developed in the CENTRAL EUROPE CircUse project
- Flooding hazard risks sites which are threatened to be under water given the data available for the HQ 100 flood (flooding event occurrence = ca. every one hundred years)
- uncompetitivnes of brownfield areas due no clear situation with the mining company as land owner
- urban sprawl (typically for the region spatial planning is not always harmonized).

To identify these threats in the territorial context the following available data on threats within the GIS Steiermark were evaluated:





- danger map torrent and avalanche control (red and yellow danger zones avalanches)
- planning areas (municipalities) with hazard zone plans
- torrent and avalanche control brown reference area other natural hazards e.g. rockfall
- flooding areas HQ100
- flooding areas HQ30
- forest Development Plan
- landslides
- fine dust redevelopment areas
- zoning plans
- soil map
- basic data: Geoland.at
- orthophoto
- terrain Model
- status groundwater body (average nitrate pollution in recent years)
- evaluation via representative measuring stations of the state / federal according to water status monitoring regulation GZÜV for the 5 municipalities

The following table shows a summarized list of the threats in the Lipizzanerheimat:

THREAT on Soil and Land	Specific FUA rele- vance	National / regional / local Source(s)	European Source(s)	Threat dimension? (minimum limits)
Soil erosion	No			
Soil salinization	No			
Soil Compaction	No			
Urban Sprawl, Sealing	YES	Regional development plan, spatial plan (per municipality); National: recommendation of the "Austrian Conference on Spatial Planning" (ÖROK); <u>http://www.oerok-atlas.at/</u> Environmential Agency Austria: recommendations for land consumption ( <u>http://www.umweltbundesa</u>	Soil sealing report 2012 DG Environment <u>http://ec.europa.eu/env</u> <u>ironment/archives/soil/p</u> <u>df/sealing/Soil%20Sealin</u> <u>g%20In-</u> <u>depth%20Report%20Mar</u> <u>ch%20version_final.pdf</u>	Relation always based on 1 municipalty (no summarized overview !)





		mt.at/umweltsituation/raum ordnung/rp_flaecheninanspr uchnahme/)		
Brownfield	YES	Regional: former mining areas (brown coal) and former glas production areas	CircUse Project	Ca. 700 ha
Desertificati on	NO			
Flood hazard	YES	Maps according EU flood directive 2007/60/EG, show areaas with potential significant risk (flooded areas, risk and HQ 300) National - local: eHORA - Natural Hazard Overview & Risk Assessement Austria: <u>www.hora.gv.a</u> t	EU Flood Risk Management Guideline (2007/60/EG, 23.10.2007) EU Water Framework <u>http://ec.europa.eu/enviro</u> <u>nment/water/water- framework/index_en.html</u>	Areas along the smal rivers (Kainach, Gradenbach, Teigitsch)
Loss of organic matter	No			
Contaminati on	YES	According the Act on the Remediation of Contaminated Sites (ALSAG, BGBl. Nr. 299/1989 i.d.g.F) the state governor has to inform the Ministry for Environment about the presumbly- contaminated sites.		Some plots of land in the municipalities (no actual occasion!)
Loss of soil Biodiversity	No			
Over- warming	No			
Over- fertilisation	No	Evaluation via representative measuring stations of the state / federal according to the water status monitoring regulation - GZÜV for the 5 municipalities		

Table 3: Threats in LUMAT - Region VOITSBERG (summarized list)

All the types of information will help stakeholders to understand the context as well as urgency to mitigate the threats which exist in the FUA community.





In accordance with the INSPIRE guideline, an attempt was made to develop an INSPIRE-compliant representation for all LUMAT pilot areas for the Lipizzanerheimat. In co-ordination with PP Sachsen, a mesh grid with a 100m x 100m grid (projection EPSG 3035) will be created, in which the threats will be standardized and outlined (this corresponds to an EU-wide process and presentation). A spatial query is made as to whether the grid cell overlaps the starting polygon - if so, the entire cell falls into the respective threat category.

However, the example of an area balance for flood-prone areas shows an overestimation of the areas depending on the size of the area and the form, that is, especially the flooding flood plains HQ 30 and the red and yellow zones of the WLV are massively overestimated.

Spatial expansion also occurs when superimposing adjacent categories, such as building land and HQ30 to the overestimation to the effect that in the raster display wide areas of the building land in the HQ30 flood area lying; in the polygonal representation, there is no overlap.



Figure 3: Comparison of raster display and polygon display HQ30, HQ100





## 2. ACTION PLAN

## 2.1. Vision/Mission Description

Vision: Creation of jobs by activating under-used areas in the form of business locations focusing on the thematic field "garden" (flowers, vegetables, glasshouses, etc.)

Requirements to be considered:

- Respecting the new planning strategy of the "Styrian Central Region" (2016-06)
- Modifying the regional development concept
- Respecting the specific characteristics of the 5 municipalities

Interaction with local stakeholders:

- Close co-operation with the Regional Development Association Lipizzanerheimat (REV)
- Several stakeholder workshops (decision maker, mayors, land owner/mining company, etc.)
- Individual meetings with mayors/heads of administration (5 municipalities of the "Kernraumallianz")
- Close co-operation with actual running project "Stadtregionales Flächenmanagement (SRFM)" of the REV

Ideally, each community contributes a "flagship project" to the broad topic of gardens. Connection of all "garden elements" in the 5 communities via cycling or hiking trails ("garden route").

## 2.2. Objectives and Priorities

How to set the objectives and priorities:

- Joint introductory workshop with the local stakeholders (including landowners)
- One-on-one interviews with the mayors and / or heads of office and / or construction manager
- Preparation of a project proposal per municipality
- Identification of funding opportunities for the implementation of the proposals
- Coordination with the region

Problems which must be solved:

- landowner in most of the cases is the mining company no commitment with the municipalities concerning the price for the land
- no common landuse policy of the municipalities (will be established)





Objectives:

- Improved use of under-used areas related to the theme of "gardening" (including job creation)
- Networking existing gardens and parks for better use ("recreation area")
- Coordination with current or planned projects (via RMSZR)

## Priorities:

- Project with job creation
- Each of the Kernraumallianz municipality should be integrated.

On the basis of workshops with stakeholders as well as one-to-one discussions with relevant institutions and the five core space alliance communities, proposals are developed, then discussed with the REV and priorities agreed.

## 2.3. Definition of Areas

The following graphic gives an overview of the area "Lipizzanerheimat"

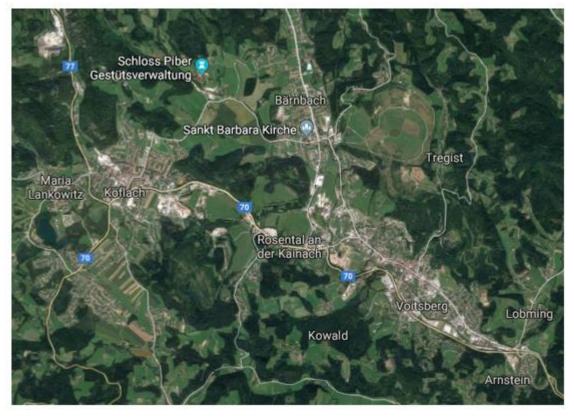


Figure 4: Overview Lipizzanerheimat

Ideally, each of the five communities of the Lipizzanerheimat should contribute one "lighthouse project" to the broad topic of gardening:





- Köflach: "vertical gardening" Cooling of buildings by plants (green roofs new approach!)
- Voitsberg: Development of a community garden, connection to existing parks (for example energy park) and gardens (Schloßberg)
- Bärnbach: Energy optimization of an office property with 1600 m2 usable area with a special greening
- Rosental: vegetable cultivation in glasshouses on a former ash deposit using mine water for heating
- Maria Lankowitz: new garden design at the basilica (topic wedding garden)
- Maria Lankowitz: Extension of vegetable cultivation at the prison (increase self-sufficiency, including training of inmates)
- "Garden route": creation of a connection of all garden and park elements over the cycle way network currently under development with regard to a recreational area for the region and Graz

Important requirements for the use of land as well as possible business settlements:

- Preparation of a mediation process region mining company because of the problems in the last years concerning the provision / sale of land owned by the mining company (high priority!)
- Concept of introducing land as "equity" to business settlements

## 2.4. Actions

## Action 1.1 Mine water use for heating of greenhouses

For Rosental, the use of mine water to be pumped to the surface of the day (approx.  $8-12^{\circ}$ ) is recommended, as is already partially the case during operation.

The former ash dump (owned by GKB) next to the pumping station would offer itself for a location of glasshouses with gardening (for example vegetable production). On the one hand, the mine waters can be used, on the other hand, the self-sufficiency of the region with vegetables (winter vegetables) can be built. The site itself is unsuitable for major construction (and therefore not much value).

For a possible investor or operator, the regional interested parties (own gardeners) should first be addressed on the basis of a potential analysis (mine water use for the heating of greenhouses), further the metropolitan area of Graz and beyond (contacts via EC Lipizzanerheimat exist).

## Action 1.2 Creation of an application (LE 2014 - 2020) for village renewal: Creation of garden areas for the new unique selling point "weddings" for the market town of Maria Lankowitz

Based on the zoning plan, the planned areas are determined. Priority is first the areas around the pilgrimage church (flower cross!),created gardens for weddings, the mortuary should get away, extended parking (new situation as this should be on old mining areas) and the way from the registry office (municipal office: wedding hall) to the church as connection.







Figure 5: Overview Maria Lankowitz

## Action 1.3: Expansion of garden design or vegetable cultivation by the prison

The prison in Maria Lankowitz employs inmates with garden design or vegetable cultivation and wants to accelerate or expand this. The discussions with the administration of justice are in progress.

## Action 1.4: Urban community garden

Preparation of a concept of a garden project on a club basis - urban community garden for Voitsberg

- Community gardens are gardens run by a group of people. Not only gardening plays a role here, but also joint work, the co-creation of the district, the possibility of participation within a community, the development of a common sense in common action and ultimately the communicative community in the garden.
- Inquiries about this are already available in the community.
- Possible area would be near the energy park (former mining area)

## Action 1.5: Conception eco-garden (non-profit)

In the organic garden socially disadvantaged people work and produce organic and high-quality vegetables and herbs from the seed to the finished product. Through social worker support and professional horticultural guidance, people are stabilized and prepared for reintegration into the labor market.

- Garden Type: Social employment, organic certified vegetable and herb production, specialty gardening
- Motto: promoting people cultivating plants
- Sponsorship: Association n.n.





## Action 1.6: "Garden route" - connection between all the garden and park elements

Creation of a connection (concept) between all the garden and park elements via the cycle path network that is currently being planned with regard to a recreational area for the region and Graz.

## Action 1.7: Mediation

Preparation of a mediation process region - mining company

## Action 1.8: Requirements for business settlements

Problem with land owner (e.g. mining company) - feasibility study regarding the introduction of land as "equity" to business settlements

## 2.5. Financing Programs

For the implementation of the planned actions/projects different funding possibilities can be claimed:

- The Lipizzanerheimat is also a LEADER region, the mayors can still submit applications under the approved LEADER program 2014-2020
- As part of the new Styrian Provincial and Regional Development Act 2018, applications can be submitted from the summer of 2018 onwards
- The Austrian Rural Development Program 2014 2020 offers specific subsidies for "village renewal" (see Action Plan for Maria Lankowitz).

The policital representatives and stakeholder of the region are members of the different boards and can influence the specific programms.

The following contact points are available for the subsidies listed above

- Regionalmanagement Steirischer Zentralraum EU-Regionalbüro Voitsberg
   <u>http://eurm.or.at/index.php/organisation/eu-regionalbuero</u>
- LAG Lipizzanerheimat

https://www.lipizzanerheimat.at/

- Wirtschaftsoffensive (WOF)
   <u>https://www.lipizzanerheimat.at/management/</u>
- Förderberatung des Landes Steiermark
   <a href="https://www.verwaltung.steiermark.at/">https://www.verwaltung.steiermark.at/</a>





## 3. PILOT PROJECT DESCRIPTION

## Maria Lankowitz: Preparation of a village renewal project

Creation of an application (LE 2014 - 2020) for village renewal: creation of garden areas for the new unique selling point "weddings" - 2-step procedure (planning and implementation); requirements for funding are clarified. Based on the zoning plan the planned areas are determined, a call for the planning (1st step) by the municipality takes place. Priority is first the areas around the pilgrimage church (flower cross!) Created gardens for weddings, the mortuary should get away, extended parking (new situation as this should be on old mining areas) and the way from the registry office (municipal office: wedding hall) to the church as connection.

#### Bärnbach: Energy optimization of an office property with 1600 m2 floor space with a special greening

In the course of optimizing the energy use of an office property with 1600 m2 floor space, the south-facing facade will be enriched with a special greening in terms of energy efficiency. The greening should on the one hand have an optical effect and on the other hand bring considerable savings in the cooling of the object. The facade is equipped with a glass porch where it is possible to optimally install the greening infrastructure. In the selection of the planting, it should be taken into account that, on the one hand, extensive shading of the glass surfaces can take place during the vegetation period and, on the other hand, that light can enter the premises in the transitional period and in winter. As enrichment and attraction in addition to the vertical greening new developments such horizontally growing plants are used.

## Financial model

In the region Lipizzanerheimat there are more than 700ha of mining reclamation areas in various locations with different dedications. A financial model is to be developed for the potential industrial areas in the core area, where young companies are offered the opportunity to obtain space in a cost-effective manner without making large capital investments. This involves the development of a venture capital-like fund that should be set up by the communities and possibly also by the property owners. This fund acquires the land and makes it available to the founders. The payment is made first free of installments later with a share of the profit, so that with good course a disproportionate return flow takes place. These surpluses should then also cover possible defaults and administrative tasks of the Fund. In general, the land remains the property of the Fund until the full repayment has been made. In the case of an operational dissolution, the property, including any buildings, is available to the Fund and thus to other new founders.

## Rosental: Mine water use for heating greenhouses

A potential analysis for the heating of greenhouses with mine water on a former mining area should provide clarity for the implementation and at the same time provide a comprehensible data basis for interested parties. In the municipality Rosental the groundwater level is kept artificially low. This is necessary so that the groundwater does not enter the former landfill. The mine water is pumped up and discharged unused into the Gradnerbach. Since the groundwater has a temperature level of about 12  $^{\circ}$  C even in winter, an energetic use is to be investigated. The idea is to heat a greenhouse with winter vegetables using the waste heat. Furthermore, enough space would be available on former mining sites for the construction of the greenhouses.





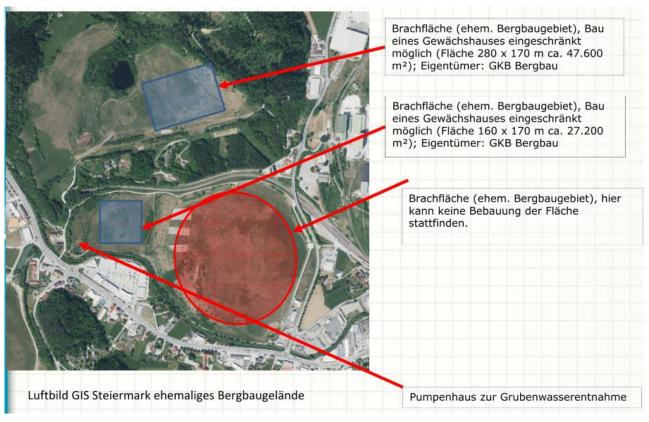


Figure 6: Overview pilot area

In a second step, the garden house is set up and the marketing measures for interested parties have started.





## 4. LUMAT TOOLS

# 4.1. Use of tools to support action plan development and pilot project activities

The management of soil and land in functional urban areas in the LUMAT regions is mostly based on GIS tools In Austria these tools and data are stored, managed and distributed via the GIS of the provinces. In this context it is necessary to develop further methods and tools through the collaborative efforts of the partner consortium. In the context of LUMAT, these include the following two tool types:

## • The InViTo Tool

Based on the training use on the open source web GIS based platform called InViTO parts of the action plan of the FUA Voitsberg (e.g. basis data, threats etc.) were supported by this tool. The Interactive Visualisation Tool (InViTO) is offering interactive visualisation of the territorial analysis, exploration and at the same time can be used as a communication tool among different actors.

• LUMATO 1.0

The actions in the LUMAT FUA region of Leipzig are gathered and evaluated by the LUMATO 1.0 tool, which was developed by the project partner Saxony. This tool supports the action plan and gives an overview and integration of the threatened areas to the stakeholders also for further evaluation. So the most useful areas can be identified, addressed by compensation measures and also direct their next future actions for site revitalization. An initial prioritization of measures to be carried out will be developed as a guide.

## Use of the tools in Voitsberg region

Because of the requirements and conditions of the GIS Steiermark as the working tool on municipal and provincial level these tools will have no great opportunities for implementation. Compatibility with the Landes-GIS is mandatory; all spatial data or data exchange must be coordinated with it.





## 5. CAPACITY BUILDING AND INSTITUTIONAL APPROACHES

#### Planning specifications of the province of Styria

EC is not allowed to create a new administrative structure for LUMAT (condition for the co-financing by the office of the Styrian Government), so EC has to find a "creative solution" on which EC is working intensively. For this solution a need the political acceptance by the region which is in the moment not so easy to get it.

As of June, there will be a budget decision of the Province of Styria for the SZR by the provincial government, which will for the first time make available regional budget resources for certain implementations (e.g. city-regional city location agency). On the basis of this allocation projects can be prepared in the following.

#### Citizen involvement

Information events have been organized with different target groups, such as with

- Political leaders
- Decision-makers
- Companies
- Property owners

Information of the mayors in the municipal council or the community newspapers.

The key stakeholders are to be involved with periodic information events (for example, periodical information at the REV meetings, information to the mayors, close contact with the regional management).

## Implementation of integrated environmental management

Collaboration and coordination with another ongoing project in the region "City-functional land management" (also seen as a continuation of the land management agency of CircUse) -requirement of the REV. These structures should be used as soon as they are implemented.

Until then, the information will be sent to the REV, which is the relevant decision maker in the region. Administrative structures in the respective communities can be used for activities (see contact person per municipality).