



## A Life after Lignite

Transformation experiences in Central European Mining Regions



Carsten Debes  
Project coordinator ReSource  
Athens (Greece)  
6/12/14



This project is implemented through the CENTRAL EUROPE Programme co-financed by the ERDF.

## Agenda

---

1. Generally about ReSource
2. Illustrating Examples
3. Conclusions



## Post-mining Problems! Post-mining Potentials?

Series of EU projects: READY > ReSource > SHIFT-X, since 2003

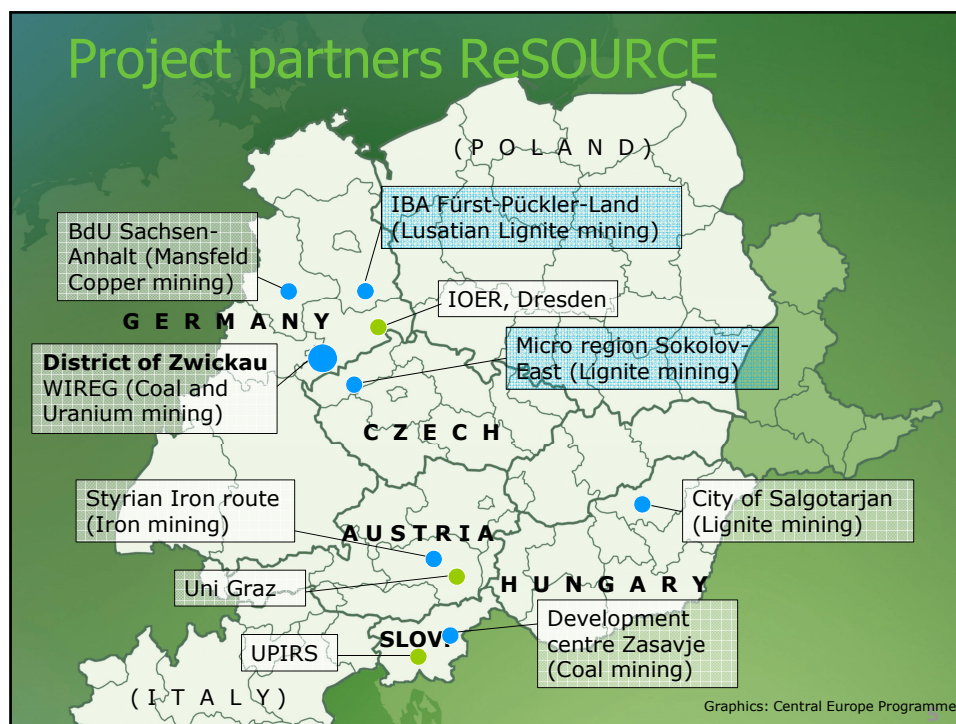
**ReSource – Utilisation of post-mining potentials for sustainable re-development in Central Europe mining cities and regions**



## Funding of ReSource

- ERDF objective 3 "Territorial Cooperation"
- Central Europe space
- Start: 01/01/09
- End: 31/07/12
- Budget: 3,2 Mio €





## Types of activities / Thematic clusters

- Pre-investment investigations and pilot investments
- Regional strategy building / facilitating innovation
- Knowledge transfer
- Communication and lobbying

**- Natural Potentials – Cultural Potentials –  
– Integrative Approaches –**

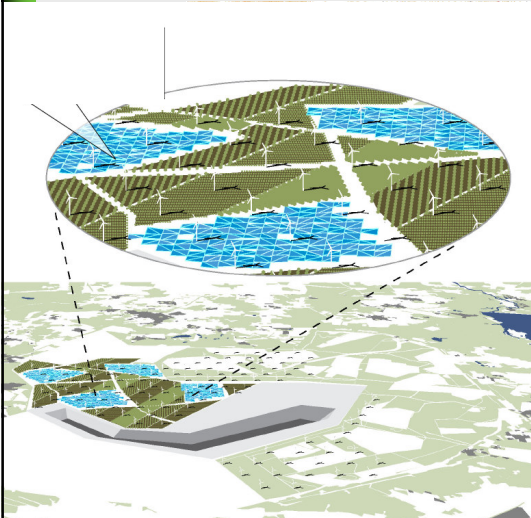




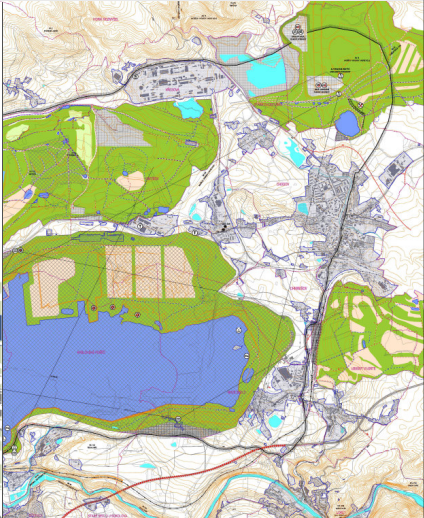




# Integrative Approaches Focus: Masterplanning, competitions



Graphic: IBA See, ReSource project



Graphic: Micro region Sokolov-East, ReSource project

**New Energy from  
Utilisation of I  
Post-mining Po**

Former mining regions as places of production - this is one of the most re-development. Not only for the econ provides also a strong emotional region's history and

Within ReSource feasibility is checked are done for geothermal energy extraction reservoirs as well as biomass plants

**New Sounds from  
Utilisation of Cul  
Post-mining Poter**

Post-mining regions can become tourist make this happen, cultural assets have strategically. These could be mining tra infrastructure architecture or other mi most cases it is as important to create image as well as to initiate self-concept of the local popo

ReSource supports alike efforts of its improve heritage utilisation strateg methods for public events, design routes of mining attractio

**New Growth from Old Mines  
Integrative Approaches for  
Post-mining Development**

Post-mining regions can be more than spoiled landscapes, unattractive urban spaces, environmental disasters. Visions are needed on which perspectives can be built.

The ReSource partners try out a variety of methods to develop post-mining land in an integrative way: Masterplans are elaborated, urban competitions run, re-cultivation principles drafted.

**We are cr  
sustainable**

**We are lookin  
unique selling**

**We are designing  
new landscapes**

## Endogenous Potentials - 1

### Key role of endogenous potentials:

- catalyst function (initiating development processes)
- identity function (emphasizing unique propositions)
- symbolic function (strengthening regional self-esteem)

> primarily soft effect, direct GDP effect limited



11

## Endogenous Potentials - 2

### Typical endogenous potentials of lignite mines:

- unusual spatial structures (> option for off-side utilisations)
- energy reference (> "from fossile to renewable energy")
- specific heritage artefacts / traditions (> industrial heritage tourism)
- work skills / attitudes (> industrial work force, solidarity)



12

## Agenda

1. Generally about ReSource
2. Illustrating Examples
3. Conclusions



13

## Illustrating example Bohemia (CZ)





## History of coal-mining in Bohemia (CZ)

- Brown coal found in 1642
- After 2nd world war, intensification of production through open pits
- Highest output 1983 with 23 mio to
- After system change 1989 one big state company, privatised in 2004
- only one mine operating
- Mining expected until 2030
- Rehabilitation of landfills ongoing according to law



Photo: Steiner, Hartenstein, READY project



## Current challenges in Bohemia (CZ)

- Private mine owner follows own ideas <> public consortium of mining towns tries to speak with one voice, but seems too dependent and weak to take serious influence
- Since mining is still present, it is difficult to raise awareness and willingness for alternative development
- Mine work force decreased from 12000 (1989) to 4000 (2008)
- High unemployment; low education
- Additional social challenges: Population not rooted in the region (Germans driven out after WW2), high share of Roma



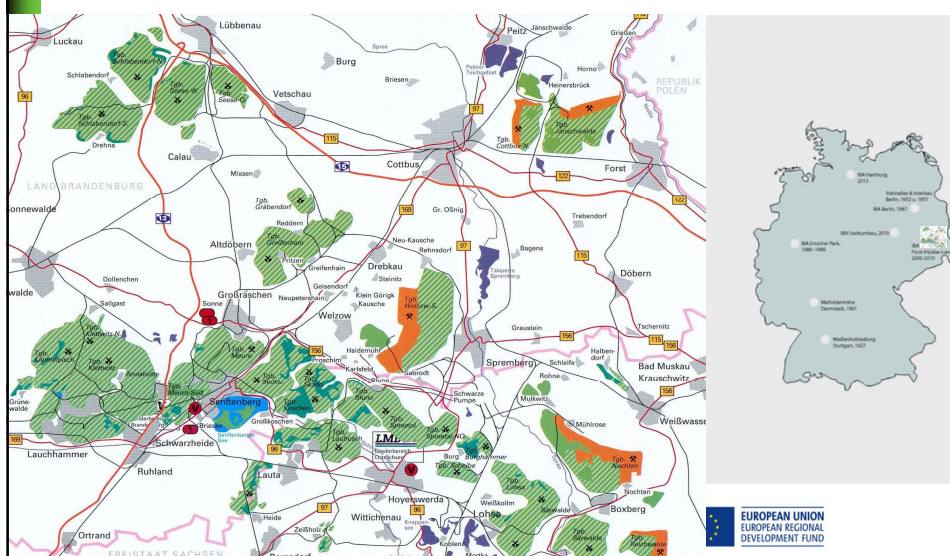
## Develop. attempts in Bohemia (CZ)

- Lake Medard under flooding supposed to become recreational area
- Establishment of new industrial zone
- Fostering handicraft
- Supporting industrial tourism as addition to spa tourism
- Image campaigning
- Masterplan
- Waste processing?



Photo: Lipovska, University of Brno, ReSource project

## Illustrating example Lusatia (DE)



## History of mining in Lusatia (DE)

- Lusatia was originally agrarian/forest landscape
- Industrialisation started with lignite mining
- Lusatian lignite was energy provider no. 1 in GDR (up to 200 mio to/a!)
- After 1989: 17 open cast pits closed within a few years
- from 80.000 jobs (1988) down to 8.500 (today)
- Increase in unemployment up to 25%, strong outmigration, today 10%
- 2009: 55 Mio to lignite extracted in 5 active mines
- Reclamation of GDR pits taken over by state-holding LMBV; still ongoing



19

## Specific approach IBA in Lusatia (DE)

- Regional development agency „International Buidling Exhibition“ Lusatia
- Run time 2000-2010 as a limited company
- Shareholders: 4 districts and federal state of Brandenburg
- 15 employees
- 1,5 mio € / a
- Tasks: spatial and regional development proposals, PR work, improving cooperation, adding social and cultural dimension to technical reclamation
- Bottom-up



20





**Results IBA  
in Lusatia (DE)**

**ReSource**

Identität bewahren

Zukunft gestalten

Zwischenlandschaft erleben

Visuals: IBA See, ReSource project







All visuals: IBA See, ReSource project

## Where to learn more about IBA: IBA study house / master course

- IBA offices turned into study house open for research and training  
> [www.iba-see.de](http://www.iba-see.de)
- IBA Master course just started on „Post-mining development“



All photos: IBA See, ReSource project

Detlef Attila Hecht

## Agenda

1. Generally about ReSource
2. Illustrating Examples
3. Conclusions

## (Self-regulation) Driving power 1: "MARKET / NATURE"

### Regions are left to „market“ self-regulation (= zero option):

Rise/growth/prosperity is „naturally“ followed by decline/shrinking since regions lack internal capacities for initiating alternative development paths.



Sustainable?

All photos: Debes, ReSource project

## (Intervention) Driving power 2: "STATE"

### State counteracts by:

- transferring subsidies
- bringing-in substitute industries, reshaping infrastructure, cleaning up, etc
- top-down planning



Sustainable?

Photo: WIREG, ReSource project

Photo: EPA, www.vosiznelas.com



## (Activism) Driving power 3: "PEOPLE"

**Grass-root initiatives re-organise region in a bottom-up approach.**  
Sometimes enhanced by the state through EMPOWERMENT measures.



## Resume

- **ANTICIPATE!**  
(Start as early as possible! Create joint post-mining **vision!**  
Build on it a **transparent** and broadly conceived **strategy!**)
- **COLLABORATE!**  
(Foster **grass-roots**, link them to key **state / economy** players!  
= bring together market+state+people powers)
- **INTEGRATE!**  
(Think and act **multi-dimensional**: economy, ecology, cohesion!  
Draw on external *and* internal resources from all levels!)
- **EXPERIMENT!**  
(Consider post-mining area as **test** zone, endogenous potentials!)



## Core Output Online database: [www.resource-ce.eu](http://www.resource-ce.eu)

The screenshot displays a map of Slovenia with a red circle highlighting the Idrija region. To the right, a detailed project entry is visible:

- Good practice project number:** GPP\_01
- Reference number in the result:** 1
- Title of the project:** Arhoniš shaft, Idrija mercury mine
- Project location:** Idrija, Gorizia, Slovenia
- Type of potential:** cultural potential
- Type of project:** tourist use (tourist routes)
- Project start / Project end:** 1993 / 1995
- Aims/objectives of the project:** preservation of the oldest part of the Idrija mine and mine entrance, preservation of the object of the Holy Trinity
- Main activities of the project:** investigation and elaboration of former mine premises and infrastructure for cultural use, monuments and artifacts conservation
- Approximate budget (range for project implementation):** 300,000 € less than 500,000 €
- Type of financing:** Private, Public funding
- EU funds:** National: 100%, Regional: , Local:
- The mine was ... an underground excavation**
- Type of mining that took place:** lead, mercury
- Site of the area:** Restoration of the pit entrance building, restoration of 1,200 metres of the pit
- Percentage of the former mining area:**
- Major environmental problems:** water drainage, ventilation, mercury pollution
- Measures envisaged in the project implementation, their nature and level of influence on the project implementation (if/under: size = 1, medium=2, high=3)**

Actor	Its role	Influence
Mercury mine of Idrija	outline concept of a set up and restoration, an elaboration of the project, work in the mine	3
City museum of Ljubljana and Historical Archives of Ljubljana	historical and archival data	2
Restoration Centre of Ljubljana	restoration work	2
Institute for the Protection of Cultural Heritage of the Republic of Slovenia	supervision of the work	2
Ministry of Culture	financing	2
University of Ljubljana	scientific support	2
Ziljard	contractor	2

**Other relevant legislation, policies, programmes which directly made the project implementation possible and their levels (i.e. local, regional, national, EU)**

- Mining legislation, National
- Directive of promotion of cultural and historical monuments and remarkable natural sights in the area of Idrija municipality, local
- Directive of promotion of cultural and historical monuments and remarkable natural sights in the area of Idrija municipality, national
- Directive of promotion of Arhoniš shaft as a natural valuableness of national importance, national

**Measures envisaged in the project implementation:**

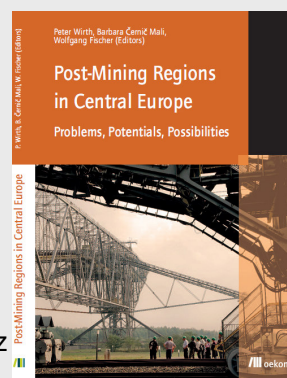
- Number of new jobs created as a result of the project: creating some working places in the mine company
- Means of communication with local people: newspapers, radio, TV, Internet.

## Core Output Scientific Reflection > downloadable!

- **Title:** Post-Mining Regions in Central Europe – Problems, Potentials, Development Strategies

- I. Overview
- II. Selected Cases
- III. State of the Art
- IV. Specific development aspects
- V. Perspectives and Possibilities

- **Publishing House:** Oekom, Germany
- **Editors:** IOER (DE), UPIRS (SI), Uni Graz



## Core Output

### Policy paper > downloadable



- **Objective:** Lobbying for post-mining regions in Central Europe and beyond
- **Requests:** appropriate legislation, funds, commitment for post-mining aspects
- **Target groups:** European and national policy makers
- **Languages:** EN, DE, CZ, SI



31

Thank you for your  
attention!

Photo: Debes, ReSource project

32

## You would like to know more?



Project results:  
**[www.resource-ce.eu](http://www.resource-ce.eu)**

Individual contact:

**Carsten Debes**

**office: +49 375 44022 5114**

**mobile: +49 173 54 74 386**

**e-mail: [carsten.debes@landkreis-zwickau.de](mailto:carsten.debes@landkreis-zwickau.de)**



33