

Reclamation topics in the Czech Republic

Coal Regions in Transition



4th Working session
9 April



Two regions in the Czech Republic - Lignite and Hard coal mining

Hard coal

- **Deep** mining 500-1000 m
- Land **declination** up to 50 m
- Mining gas outflow
- Mining heaps, sludge lagoons
- Derelict and low quality areas
- Many individual sites
- Fragmented ownership

SURFACE IS STILL THERE

Lignite

- Surface mining 300 m
- Continuous area of opened mining pits
- Land slides
- Landscape vanished
- All settlement and infrastructure demolished
- areas of single ownership

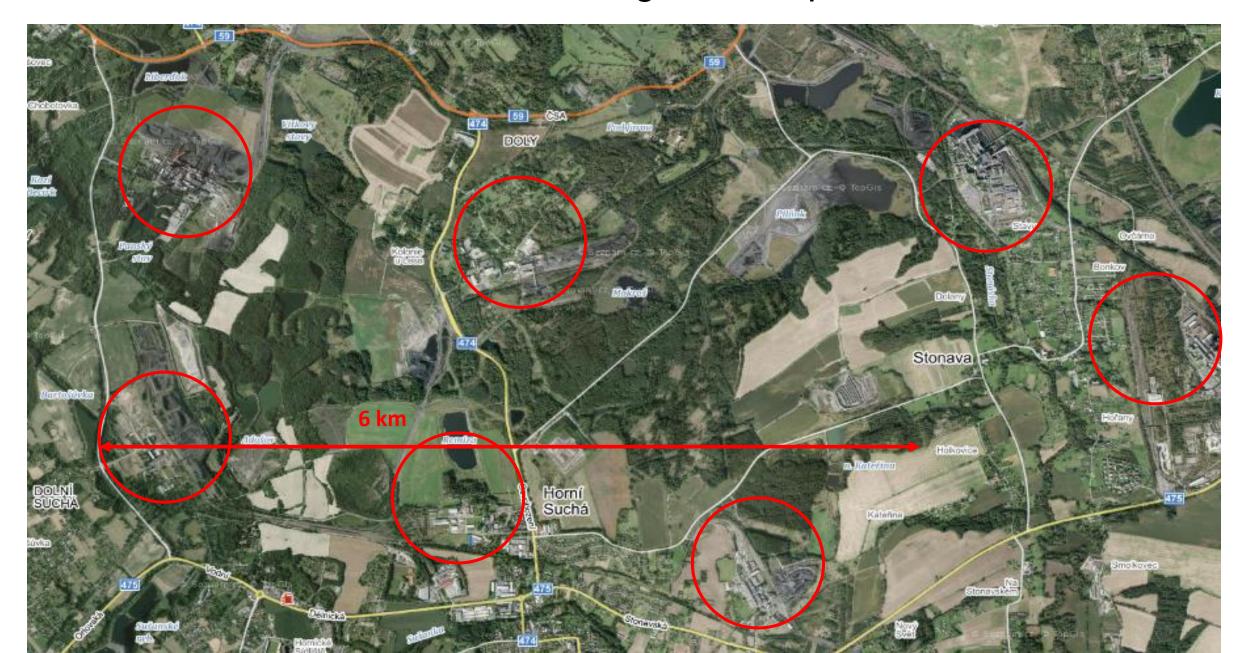
SURFACE HAS DISSAPEARED

Different approach to reclamation and resocialization Continuous project of landscape improvement is including after use project

Northern Bohemia - Lignite mining landscape



Moravia-Silesia: Hard coal mining landscape





Reclamation objectives

A - Environment

- Water management
- Agricultural and forestry
- Fauna, Flora



- Absence of "on-time" long term planning
- Disharmony of Legislation
- Absence of common municipal political interests
- Too complex and long term problem
- Lack of initial funding

B – Development – new uses to

- Support economy
- Improve social image
- Prevent negative behaviour (derelict land)



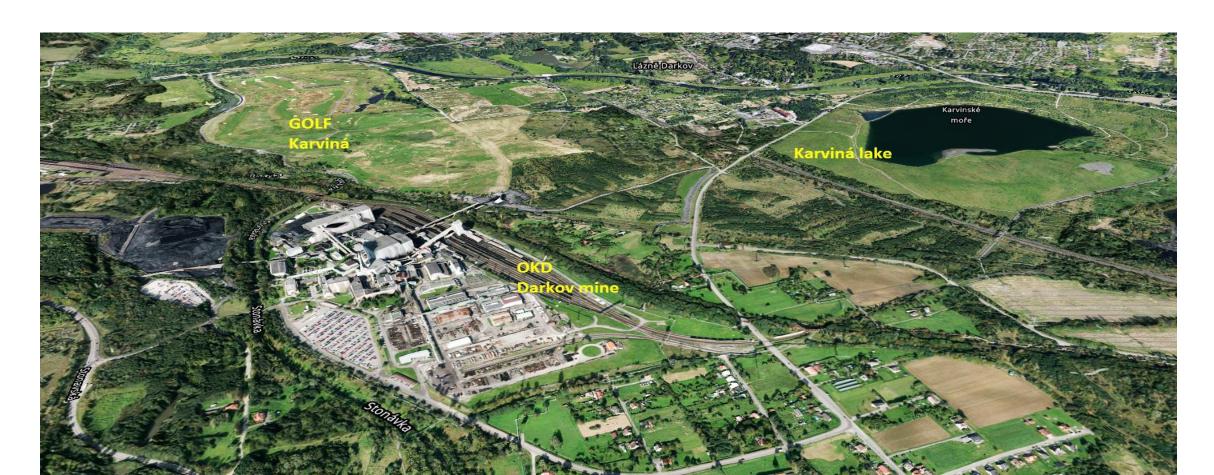


Area potential

Needs

- Environment, recreation
- Water retention
- New energy sources mine gas, hydroenergy, photovoltaic, geothermal
- Leisure, Sports, Industry

- Strategic masterplan
- New image
- Improving infrastructure
- Funding
- Awareness, Learning

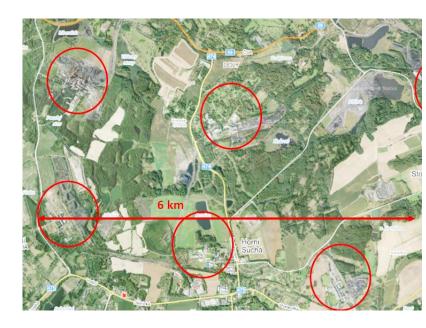


Development of new land uses – up to 10 projects Samples from Moravia – Silesia

- Area of interest approx. 8x4km, not populated (in-between towns)
- Fragmented landscape and ownership
- Projects islands of life (anchor projects) using
 - collieries
 - mining heaps
 - lakes
- Individual solutions
- Timing of projects from the intention to opening 3 -10 years











Common projects features 1/3

LEGISLATION AND PLANNING

- Reclamation process in all cases the original target was amended to suit new uses
- <u>Municipal Zoning plans</u> part of the process in all cases (absence of long term plans)
- Protected species issue present in all projects
- Ownership issues always part of the projects
 - State transfer to municipality,
 - Private land granted to municipality to cooperate on the development,
 - Private land leased out to municipality / operator



Dukla colliery before and after 2007 - 2014





Common projects features 2/3

LAND TECHNICAL ISSUES AND FUNDING

- Basic reclamation is performed by the <u>mining company</u> (according to mining Law)
- Land <u>contamination issues not present</u> in any project, problems with illegal waste tips
- Funding of "lucky projects" <u>Initial phases funded by the land owner (risk elimination)</u>
- <u>Technical issues related to mining activities</u> in all projects mine gas, declinations, land slides etc.
- <u>Infrastructure and land preparation phase</u> national funding for development of former mining sites (reclamation)
- <u>Development mostly private funding</u>, sometimes combined with EU (subject to eligibility and political will)



Karviná lake reclamation 1994-2016





Common projects features 3/3

IMPACT AND IMAGE

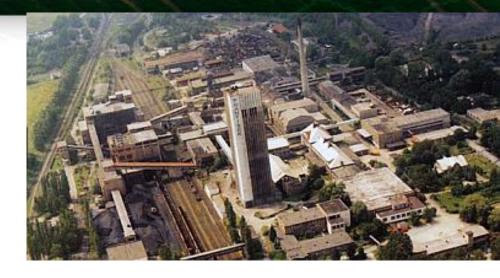
WE HAVE

- Minor issue of primary mining damages (covered by mining companies)
- Anchor projects to be followed up
- Some development commercial and recreation
- Existing and some new infrastructure

BUT

- Too large and complex topic for one election period
- Slow process of restructuring
- Lack of strategic steps to improve image
- Underestimated potential of the area by officials
- Sometimes too high expectations of private asset owners

RESTART and the Coal Platform help to form the strategy plus implement significant projects



Franisek colliery before and after 1998 - 2010





Projects for mining landscape resocialization

RE:START initiated program **RESOCIALIZATION** of post mining areas

- Prepared by Ministry of Regional Development
- Now in discussion type of funding: National or with involvement of EU funding
- Area eligible to funding was agreed in both regions
- Strategic projects in preparation in both regions
 - North-West Usti and Karlovy Vary Ready projects for resocialization of lakes
 - Energetic use of hydric power to replace closed coal energy sources
 - Leisure and recreation
 - Moravia-Silesia region Strategy for Mining pit and Colliery resocialization
 - Identifying main areas of intervention
 - Proposing Area masterplan
 - Discussions with stakeholders
 - Projects development



Recommendations for cooperation at the EU level

1 - Targeted definition of projects (synergy and eligibility)

- Support to create large project vehicles
- Public private partnership incl. ownership solutions

2 - Sharing of know how for

- the image improvement
- sustainable planning
- long term project management
- political communication

3 – EU Co-funding for

- initial project phases
- public awareness
- territorial strategy based on RE:START for integrated investments, to change the post-mining areas





Thank you

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