Manifold after-use requirements
in rehabilitation of post-mining Landscapes
in Eastern Germany

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Structure of the presentation

1. Who is LMBV
2. What duties we have
3. Rehabilitation of the water household
4. Examples of after-use in post-mining areas
5. Examples of renewable energy production on dump sites
6. Conclusions
Rehabilitation Areas of LMBV

LMBV: Project steerer of the Rehabilitation of former GDR-Mining industry (except Uranium)
**Supervisory Board**
- Supervising of Company / Business

**Federal Ministry of Finance**
- Associate
- Grant
- Budget
- Grant
- Spatial Planning

**Federal Countries (BB, S, S-A, Th)**
- Approval of Projects
- Controlling

**Steering Board (State and Countries)**
- Participation in Rehab.- Planning and Utilisation of the areas

**Reha. Advisory Board (State, Countries and Municipalities)**
- Supervising of Rehabilitation

**LMBV mbH**

**Mining Authorities**
- Supervising
- Licensing of Management Plan
- Approving and Plan- Approval- Procedure

**Environmental-/ Water-/Planning Authorities**
- Allocation of Unemployed
- Construction after Tendering

**Job Center**
- Interfaces
- Contracts

**Contractors**

**Vattenfall MIBRAG ROMONTA**

**Partners of LMBV mbH**
Duty of Rehabilitation in accordance of Federal Mining Law §§ 4, 53

„Rehabilitation is the proper creation of the surface considering the public interest, taken up by the mining industry“

Significance for LMBV mbH

The goal of the LMBV mbH is the after-use-oriented rehabilitation on the basis of newest research results considering local possibilities and financial basic conditions

Principles of rehabilitation inside LMBV mbH
32 Open-cast mining areas with 224 future end-lakes
46 Refinement- and 42 Thermal power plants with 120 abandoned areas
1.195 km open slopes
1.234 Contaminated sites
13 billion m³ Deficit of groundwater with a cone of depression of 200,000 ha
97,000 ha Real estate
Former open-pit mine
Until 1998 LMBV had active mining – nowadays rehabilitation work
Teere und Säureharze

Tailings with tars and acid components from coal refinement industry
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Groundwater lowering in the Lausitz

630 km² responsibility Vattenfall
1300 km² responsibility LMBV

xx m lowering depth in open pit mine

630 km² responsibility Vattenfall
1300 km² responsibility LMBV

xx m lowering depth in open pit mine
GRMSTEU Steering model of Flooding headquarter
Flooding concept of the LMBV (Lausitz)
Construction site Channel 10 from Lake Koschen – to Lake Sedlitz „Sornoer Kanal“

Rehabilitation water household
Barbara-Kanal (Barbara Channel)
Navigable Connection between Lake Geierswalde and Lake Partwitz
Construction of a lock
After-use in post-mining landscapes in the Central German Mining District and in the Lausitz
Preparation of a dump for after-use

Dumping of an area with mass deficit with fertile Pleistocene masses in 2004
An example
Lausitz Lake Area
East shore Markkleeberg Lake with building site
Construction of Harbour Zwenkau Lake
Example Espenhain

Construction of channel
Markkleeberg Lake – Störmthal Lake
Example Open Pit Mine Cospuden

Cospuden Pier 1 and Harbour
Renewable:
Planting fast growing plants
Here: Robinia pseudoacacia on the dump site Welzow
Size: 140 ha
Solar modules on former mining site in the Leipzig area

Renewable Energy on former mining sites
Biomass power plant on former lignite thermal power plant site

Renewable Energy on former mining sites
Wind-park on dump site Klettwitz

Renewable Energy on former mining sites
Industrial site Schwarze Pumpe in background new thermal power plant

New thermal power plant on old lignite refining sites
Summary

- LMBV is a state owned company with the duty of the rehabilitation of former lignite mining areas.
- LMBV has great experiences in securing slopes, all kinds of re-cultivation, landscaping, the treatment of hazardous sites, flooding and water treatment, the utilization and the project-steering.
- LMBV works closely together with scientific institutes.
- LMBV has with its subsidiary LMBV international experiences with projects in foreign countries.
- Especially in Serbia and the whole Balkan region LMBV international have with ECE a strong and reliable partner. It is our wish to work together in any kind of coal-mining projects.
Хвала вам на пажњи

Vielen Dank für ihre Aufmerksamkeit!
Thank you for your kind attention!
Merci beaucoup pour votre attention!
Спасибо за внимание!
Hvala vam na pozornosti