

WEBINAR SERIES

# Environmental rehabilitation and repurposing

Platform for coal regions in transition Secretariat 03 June 2020



#### **Agenda**

#### Opening remarks

Brieuc Posnic, Policy Officer for EU Coal Regions in transition, European Commission

# Environmental rehabilitation and repurposing

Timon Wehnert, Wuppertal Institute

#### Feature speaker

Dr. Wolfhart Pohl, Lead Specialist, Environmental and Social Sustainability at The World Bank

#### Q&A

#### **Facilitator**

Andrzej Błachowicz, Senior Advisor, Platform for coal regions in transition Secretariat, Managing Director, Climate Strategies



#### **Webinar structure**

Duration 1:00 hs

Participants are muted

Questions can be added to the *questions* panel, and will be answered at the end of the webinar

The webinar will be recorded and uploaded to DG Energy's YouTube channel



### **Opening remarks**

From 'environmental rehabilitation'

to

'environmental rehabilitation and repurposing'

- Going beyond environmental rehabilitation;
- Plan repurposing ahead to save time and costs.





### **Opening remarks**

#### **EU** policy context

Logic that fits within the new EU policy context:

- 'Polluter-pays' principle remains the starting point;
- EU instruments support environmental rehabilitation (e.g. LIFE);
- European Green Deal and Just Transition Mechanism (and Fund) put environmental rehabilitation and repurposing at the core of the EU approach to transition.

**Reminder:** Coal Regions Virtual Week, from 29 June to 3 July 2020 (save the date!)





#### Aims and scope

Provide guidance on **environmental rehabilitation and repurposing** with an emphasis on governance processes.

**Key sections** 

Secure financing for mine closure

Knowledge and tools

Institutions and governance





#### Key messages

Environmental rehabilitation aims to **protect citizens and the environment** by creating a safe and healthy environment.

Environmental rehabilitation and repurposing itself **attracts new businesses and creates new jobs**.

Mine closure can provide the opportunity to better integrate redevelopment and repurposing plans so that they are aligned with public, long-term spatial and economic development interests

**Financial risks of closure** could make public sector intervention inevitable.



Approaches to manage financial risk

# Pooling funds for environmental rehabilitation measures

Objective: guarantee availability of financial means to implement environmental rehabilitation measures.

#### Covering long-term costs in a run-off company

Objective: guarantee availability of financial means to implement perpetual obligations.



#### **Knowledge and Tools**

**Helpful guidelines** and powerful digital tools for mine closure planning and repurposing exist.

Standardising closure planning processes.

Providing information on the specific conditions of rehabilitated areas or sites

Matching available sites (rehabilitated and non-rehabilitated) with potential investors.

#### **Examples**

ICMM good practice guide / CLOSUREMATIC / Information platform for post-industrial and degraded areas in Silesia (OPI-TPP)



**FEATURED SPEAKER** 

## Dr. Wolfhart Pohl

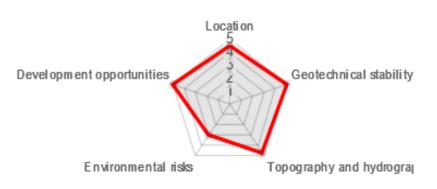
Lead Specialist, Environmental and Social Sustainability at The World Bank

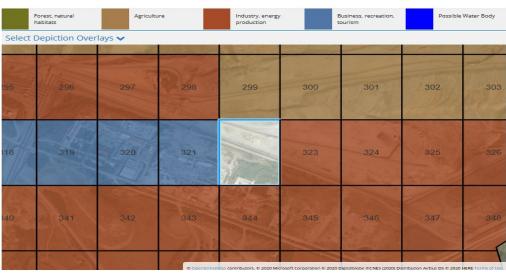


### Repurposing Land and Assets: Land Use Repurposing Application - LURA

LURA's functionality is based on an algorithm that characterizes land properties from five categories and compares them with the optimum value combinations for five potential post mining land use scenarios. The optimum scenario for selected increments (pixels) is depicted on a map with a color-code for the specific scenario.

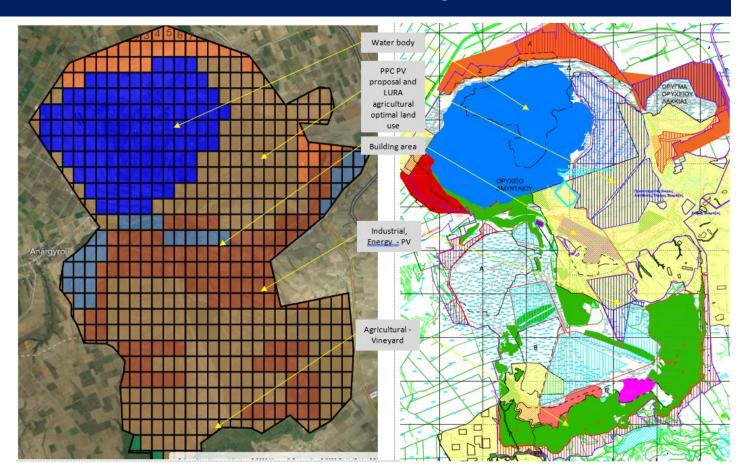
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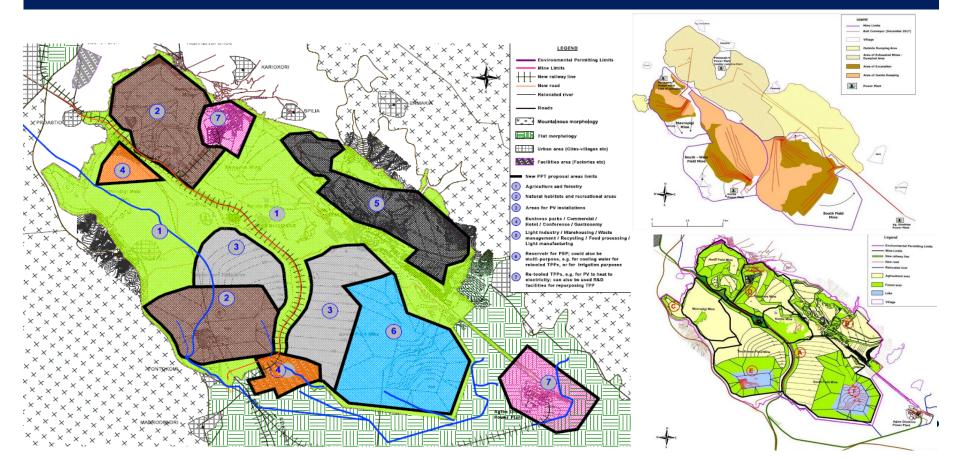


### Repurposing Land and Assets: Land Use Repurposing Application - LURA

Comparison of LURA test run results (left), with operator's current planning (right) for Amyntaio Lignite Mine, Western Macedonia. The comparison largely shows overlaps, but also discrepancies, e.g. PV installation planned by operator on lands with geotechnical instabilities, which LURA sees optimally fit for agriculture.



### Repurposing Land and Assets: Land Use Scenarios and Zoning



### Reducing Administrative Barriers – Zonal Environmental Permitting

Vision for Environmental Permitting Structu



# ZONE Permit (ESIA)

- ✓ Land use (incl. forestry & archeology)
- ✓ Biodiversity impacts
- Impacts on natural water receptors
- ✓ Socio-economic
- ✓ RE installations

# INDIVIDUAL Permit (ESMP)

- ✓ Waste production and emissions
- ✓ Water use and wastewater production
- ✓ Hazardous materials use / handling
- ✓ OHS, fire safety



# Repurposing Plan Permit (SEA)

- ✓ Alignment with spatial planning frameworks
- ✓ Environmental / social sustainability of zoning
- Allowable use typologies



### **Applying the Methodology: Option Comparison Matrix**





# Existing Approach

- ✓ Known approach to return lands to their pre-mining state
- ✓ Long-standing practice for PPC
- ✓ Staff well-versed in preparing necessary environmental permitting

- Compliance driven (which often results in leastcost options chosen for reclamation)
- Deters future investors who consider environmental liabilities unresolved
- Environmental permit locks in limited types of use, uncertainty of process
- × No relationship to regional development

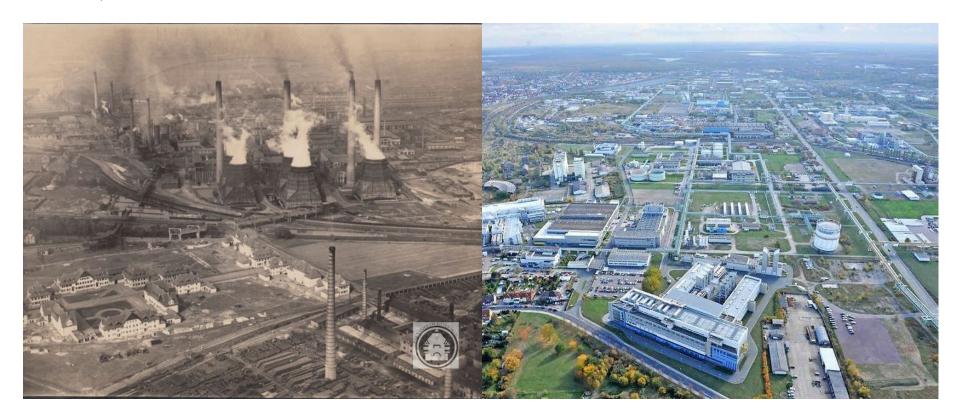
# **Proposed Approach**

- ✓ Evidence-based decision making tool
- ✓ Creates linkages to future spatial planning
- Maximize use of existing infrastructure and natural assets for future use
- ✓ Streamlines reclamation and repurposing (and therefore reduces reclamation costs)
- ✓ Long-term benefits for coordinating regional development

- New approach will require training and orientation with relevant actors
- Moves away from model of land use decisionmaking in the hands of PPC alone

### Repurposing Land and Assets: International Case Examples

The Chemiepark, Bitterfeld in Saxonia-Anhalt



### Q&A



# Thank you

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