# **Environmental and Social Data Sheet**

Overview	
Project Name: Project Number:	BRAUNKOHLESANIERUNG LAUSITZ 2010-0308 GERMANY
Project Description:	The project concerns rehabilitation, stabilisation and remediation o the former lignite mining sites in the Federal State of Brandenburg during 2013-2017 and their return to economic use including as recreational lakeland.
EIA required:	no
Project included in Ca	oon Footprint Exercise <sup>1</sup> : no

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

# Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The operation covers the rehabilitation of former open-cast lignite mine areas in the German Federal State of Brandenburg which were taken out of production upon German Reunification. The project comprises three main activities: (a) basic rehabilitation and stabilization; (b) flooding of former pits and works related to groundwater level management; and (c) reclamation and additional development to return areas to economic use and productivity. Works are implemented by the 'Lausitzer und Mitteldeutsche Bergbau-Verwaltungsgesellschaft (LMBV)', the State-owned agency responsible for handling the phasing out, restructuring and rehabilitation of lignite mining areas in 4 of the East German Federal States. The operation covers LMBV's 5-year programming period 2013-2017. Activities will take place all over the Federal State of Brandenburg.

The operation supports what is one of the German government's biggest environmental projects. It is expected to deliver multiple environmental and social benefits including physical stabilisation and decontamination; addressing long-term hydrological impacts of mining, and rehabilitation for agriculture, forestry, nature conservation and amenity value. The programme is therefore expected to contribute to EU environmental policy objectives in the fields of water protection, biodiversity, soil management and resource efficiency.

Activities under Paragraph 2 (basic rehabilitation) and 3 (hydrology-related works) do not require EIA, as they do not entail a change of use and are subject to German mining law. In addition all activities must be consistent with the applicable Urban Development Plan of the site in question; and are planned and implemented in line with the Territorial Development Strategy of the district, which is subject to SEA. No Natura 2000 sites are negatively impacted by the operation.

However, some specific activities undertaken under Paragraph 4 (additional reclamation for future use) may fall under Annex II of the EIA Directive. To account for this possibility, two Undertakings have been added as follows:

 No EIB funds shall be committed against any scheme without receiving consent from the competent authority regarding the Habitats directive and submitting the relevant forms to the Bank prior to the commitment of EIB funds. For schemes

<sup>&</sup>lt;sup>1</sup> Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO2e/year absolute (gross) or 20,000 tons CO2e/year relative (net) – both increases and savings.

that require an EIA according to EU and national law, prior to commitment, the Intermediary (ILB) should submit the EIA and the non-technical summary of the EIA to the Bank.

• The Intermediary (ILB) shall verify the compliance of the Final Beneficiary (LMBV) with the relevant and applicable rules of EU legislation, in particular in the fields of environment and public procurement.

In conclusion, the project is acceptable for EIB financing.

## **Environmental and Social Assessment**

#### **Environmental Assessment**

The project will support the rehabilitation, recovery and reclamation of Germany's former lignite mines and it is expected to deliver multiple environmental benefits. Stabilisation of sites and prevention of pollution risks – public and environmental safety – are the top priorities in the on-going programme of works. For many of the holes left behind after mining, flooding is the only feasible solution for long-term safe stabilisation. 30,000 ha of such holes exist across the mining region. Some sites require the large-scale removal of tar oil solids, which can be used as fuel for the energy and cement industries.

Evaluations of the impacts and effectiveness of works during the last programming period identified the need for additional investments, in particular with regard to site stabilisation and impacts of rising groundwater levels. The present operation will include support to these works in order to more effectively stabilise potentially dangerous sites and to secure slopes which currently pose landslide risks; and to apply the latest good practice to the raising of the groundwater level to a new post-mining equilibrium, managing the many challenges that this entails for existing infrastructure.

Having stabilised sites, bringing the areas back into economic use includes the setting aside of some 18% of the areas for conservation purposes.

Certain activities included in the overall project (under 'Paragraph 4') may require an EIA subject to judgment of competent authority, in accordance with Annex II of EIA Directive (2011-92/EU). Where an action may affect a Natura 2000 site (designated according to Habitats Directive 92/43/EEC / Birds Directive 79/409/EEC), the Bank requires the promoter to follow the directives' procedures as transposed into national law.

#### Public Consultation and Stakeholder Engagement, where required

Decisions on projects are taken in a process which aims to be inclusive and transparent. There are 4 regional Advisory Committees which are responsible for the final decision on projects up to EUR 2.5 million. Decisions on larger projects are taken by the StuBA. In addition, the Lignite Committee, comprising municipal representatives and NGOs, develops decisions which are provided to the regional Advisory Committees and the StuBA. Where decisions are taken at local level, public meetings are held.

#### **Climate Action**

The project contributes to the opening of new areas for water retention capacity, reducing the risk of flooding downstream. This delivers a climate adaptation benefit, because increasing flood risk is related to the impacts of climate change in the region. During high risk periods, floodwater can be directed towards the mine lakes, using their water retention capacity to avert flood damage downstream, as was demonstrated during May 2013.

### **Other Environmental and Social Aspects**

One of the legacies of lignite mining is extensive resettlement of people to make way for the large-scale mines that were opened up between 1920 and 1990. Data show that a total of 79,271 people were resettled during this period. In the Lausitz area, 139 entire villages were relocated. Considering this history, resettlement to accommodate current works is considered a measure of last resort.

#### Additional information: hydrological impacts and carbon sequestration

Extensive lignite mining has had large-scale impacts on the hydrology: the groundwater level has dropped by 80 meters in some areas. Towards long-term restoration of water resources, it is necessary to recharge affected aquifers and mining lakes with approximately 12.7 billion m<sup>3</sup> of water. To date, just over half of the aquifers and open mining lakes have been successfully 'rebalanced' and their final water level has been reached. Of the 46 largest open mining lakes, 28 are still being flooded; the present project will support the ongoing work on this critical natural resource management challenge.

The operation contributes to greenhouse gas mitigation by enabling the establishment of new forest plantations, which naturally fix carbon both in their timber and in the soil as they grow. It contributes to climate adaptation by securing the groundwater supply in the face of increasing frequency of both droughts and floods; and by reducing vulnerability to landslides in the sites concerned, a risk which is exacerbated by the increased frequency of intense precipitation events which are a feature of climate change.