

Luxembourg, 17/06/2021

### **Public**

# **Environmental and Social Data Sheet**

## **Overview**

Project Name: EAST AFRICAN RIFT GEOTHERMAL

Project Number: 2021-0194

Country: Regional - East Africa

Project Description: The operation is an envelope for financing individual private

sector investments into geothermal power generation projects in different countries<sup>1</sup> in the East African Rift region. Sub-operations under the envelope will undergo individual project appraisals and be separately approved for Bank financing.

EIA required: to be assessed on a project by

project basis

Project included in Carbon Footprint Exercise<sup>2</sup>: to be assessed on a project by

project basis

#### **Environmental and Social Assessment**

#### **Environmental Assessment**

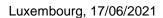
The proposed envelope covers different sub-operations that will be carried out in order to support the expansion of geothermal power generation capacity in the Sub-Saharan Africa region, notably the East African Rift Region.

If located in the EU, geothermal drilling and power generation would fall under Annex II of the EIA Directive 2014/52/EU amending the Directive 2011/92/EU, unless the thermal capacity exceeds 300 MW in which case they would fall under Annex I. Typically, geothermal projects are screened in for full ESIA procedures, given the inherent environmental and social impacts.

For each sub-operation under this envelope, a full environmental and social appraisal will thus be undertaken at time of allocation, taking into account the corresponding national environmental law and the relevant ESIA process together with the potential application of industrial accident prevention legislation as well as the sub-operation's risk to climate change.

<sup>&</sup>lt;sup>1</sup> Kenya, Ethiopia, Djibouti, Tanzania, Uganda, Zambia, Rwanda, DRC and Eritrea

<sup>&</sup>lt;sup>2</sup> Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20 000 tonnes CO<sub>2</sub>e/year absolute (gross) or 20 000 tonnes CO<sub>2</sub>e/year relative (net) – both increases and savings.





The overall environmental impact and the residual environmental risks of the operation are unknown at this stage and will be assessed at the appraisal of the individual sub-operations.

Typical environment risks and impacts that can be expected from these projects include noise, vibration and modifications to landscape, which will need to be appropriately mitigated. Potential impacts on biodiversity will be assessed.

Water management for construction and operations, in particular for drilling activities, will be reviewed at appraisal. It is expected that the geothermal brine will be re-injected to sustain the underground resource and limit water disposal at surface. Potential natural or induced seismicity risks will also be assessed at appraisal.

The envelope is expected to fully contribute to climate action mitigation, but also to the energy systems' resilience to climate change risks, in particular droughts, by diversifying clean baseload power supply from the predominant source of renewable energy in the region, hydropower.

As an envelope, this operation is not included in the Bank's carbon footprint exercise, as this will be measured for each individual sub-operation. The main gases expected to be emitted from geothermal systems in the region mostly consist of CO<sub>2</sub> and hydrogen suphide (H2S), at generally acceptable levels<sup>3</sup>, based on existing operations in Kenya and surface sampling in other countries. This will be further assessed at appraisal to ensure that emissions comply with the Bank's energy eligibility threshold.

#### Social Assessment, where applicable

Access to energy and climate change mitigation are essential for economic growth and development. If successful, the operation is expected to lead to important societal benefits, addressing inequalities with regards to access to energy, primarily by diversifying baseload clean power supply, reducing imports of fossil fuels.

The overall social impact and the residual social risks of the operation are unknown at this stage and will be assessed during the appraisal of the individual sub-operations.

Potential social risks and impacts for these types of projects include: (i) involuntary resettlement; (ii) impacts on indigenous and vulnerable groups; (iii) community health, safety and security issues due to construction activities; (iv) influx of non-local workforce and opportunistic moves; (v) competition over water and access to basic social services between project and local communities; (vi) labour rights and working conditions, including in worker camps; (vii) impacts on cultural and natural heritage sites; as well as (viii) impacts on landscape and ecosystem services for local communities.

For each sub-operation under this envelope, the promoter's strategy and plans for meaningful engagement with project stakeholders (including the project workforce) will be assessed. Implementation of an accessible and culturally appropriate grievance redress mechanism for affected communities and construction workforce alike, will also be part of this assessment. Gender equality issues and/or women's economic empowerment will also be assessed where relevant.

<sup>&</sup>lt;sup>3</sup> Below WHO limits and national thresholds



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#### **Conclusions and Recommendations**

The envelope will contribute to renewable power generation in the East African rift region, at levels below the Bank's emissions performance standards thresholds, and is therefore considered Paris-aligned. This will be further confirmed for each individual sub-operations.

During the appraisal of sub-operations, the environmental & social risks and impacts, as well as the environmental and social management system and underlying environmental and social management plans of individual beneficiaries will be assessed.

The Bank will also require promoters to ensure that implementation of the sub-projects and associated facilities will be done in accordance with the Bank's environmental and social policy and standards.

Furthermore, the Bank will require promoters to oversee and monitor the E&S performance of their contractors – e.g. EPC and subcontractors in compliance with the Bank's E&S standards.

Finally, cumulative impacts and the possible need for an overall Strategic Environmental Assessment in a particular region or country will be further assessed.

Under these conditions, the operation is considered acceptable for EIB financing in E&S terms.