Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 09/29/2022 | Report No: ESRSA02319
BASIC INFORMATION

A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Region</th>
<th>Project ID</th>
<th>Parent Project ID (if any)</th>
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<tr>
<td>South Africa</td>
<td>EASTERN AND SOUTHERN AFRICA</td>
<td>P177398</td>
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Project Name: Eskom Just Energy Transition Project

Practice Area (Lead): Energy & Extractives

Financing Instrument: Investment Project Financing

Estimated Appraisal Date: 9/26/2022

Estimated Board Date: 11/3/2022

Borrower(s): ESKOM

Implementing Agency(ies): Eskom

Proposed Development Objective

The PDO is to (i) decommission the Komati coal-fired power plant, (ii) repurpose the project area with renewables, and (iii) create opportunities for workers and communities during the transition process.

Financing (in USD Million)

<table>
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<th>Amount</th>
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<td>Total Project Cost</td>
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B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

South Africa (SA)’s Integrated Resource Plan (IRP) 2019 set out the decommissioning of about 12 GW of old and inefficient coal-fired power plants by 2030. SA’s coal-fired power generation consists of 15 power plants owned and operated by Eskom, representing a capacity of 39 GW, 74% of SA’s electricity and 48% of its GHG emissions. The implementation of the IRP is supported under the recently approved Country Partnership Framework (Report No. 154318-ZA) which includes the decommissioning of 3 GW coal-plant generating capacity as an outcome indicator. The Komati coal-fired power plant has been selected as a pilot project by the Government of the South Africa to demonstrate to the South African public that coal plants can be retired in a sustainable manner. In June 2021, the World Bank received a letter from National Treasury (NT) requesting financial support from the Bank to Eskom’s Just...
Energy Transition Strategy (i.e. coal plant decommissioning / repurposing program). Subsequently, the World Bank initiated the Eskom Just Energy Transition Project (EJETP) focusing on the decommissioning / repurposing of the 990 MW Komati power plant. The EJETP design includes four three project components: (i) Komati power plant decommissioning; (iii) Komati power plant repurposing; and (ii) creating opportunities for workers and communities.

D. Environmental and Social Overview
D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

The decommissioning (Component A) and repurposing (Component B) are expected to take place within the 687 ha Komati Power Station (KPS) complex owned by Eskom, while the project boundaries for Component C will be within the KPS and the Steve Tshwete Local municipality in the Mpumalanga province, South Africa. Middelburg and Witbank are the two major towns within close proximity of the KPS and has a population size of approximately 437,742 and 205,403 respectively. Komati village, with a total population of 1,207 comprising 640 households (2011 census), is directly adjacent to the KPS and used to accommodate Eskom employees though at present only 41 Komati workers reside there. The Koornfontein colliery and Goedehoop colliery are located to the immediate west of the KPS while the remainder of the site is surrounded by agricultural lands and an informal settlement (Big House) north-east of the KPS and the Ash Dam Facility (ADF), respectively. There are also a small number of people living in informal settlement at the site.

The majority of the people living in the area are Black Africans, followed by whites. Most of the persons in the area have ‘some level of schooling’ (50 percent) followed by those who have completed Matric (30.7 percent). About 7.2 percent of the population have higher education while a small proportion (4.1 percent) have had no schooling. The local economy of the Komati area is small and has been sustained through activities and linkages that have been established through the presence of the power station, mines and agricultural activities. Some of these include a supermarket, gas station, mechanic shop, guest houses, etc. In terms of employment, 57.8 percent of the working age population are employed, primarily in the mining, utility and agriculture sectors, though there is a dominance of low skills level. Notably, most women are neither employed nor have any particular skills. Communities in the area are serviced by both local municipalities and Eskom; seven in ten households have access to basic services (piped water, electricity, refuse removal and sanitation) with electricity and water primarily provided by Eskom, and refuse removal and sanitation services by the local municipality.

The KPS has a total of nine units with a total installed capacity of 1,000 MW. The first unit was commissioned in 1961 and the last in 1966. Komati units are small and have high operating and maintenance costs per megawatt generated compared to modern stations. In 1987, a decision was taken to withdraw Komati from service but not to let the plant deteriorate. The plant was conserved (“mothballed”) properly to return it to operations at a later stage. In the early 2000s, Komati was returned to service to meet the growing demand for electricity with relevant overhaul investments made in each unit and put online in 2011. By 2021, only Unit 9 was still producing power while Units 1 to 8 were put into cold reserve. At present, there are 661 total employees at the power station who will be directly affected by the plant closure—236 permanent Eskom employees, 292 contract workers and 133 work for ERI (a coal handling subsidiary). Two-thirds of employees are male, and one-third are female. The skills and education levels of the current work force are highest among permanent Eskom employees and lower among contract employees. In terms of the contribution of the KPS to the local economy, presently, there are 41 individuals from the Komati area that are employed by the power station (14.9% of the workforce) while most workers reside in the surrounding areas,
primarily the feeder towns of Emalahleni and Middleburg in the Mpumalanga province (78.9%). The power station currently does not procure goods or services directly from the Komati area; instead, 70% of the goods and services are sourced from other areas of Mpumalanga, mainly the feeder towns of Emalahleni, Middleburg, Ogies, Bethal, Clewer, Ermelo, etc., while the remaining 30% are procured from the rest of South Africa. The Komati area is however dependent on the power station for some basic services. Besides electricity, the KPS has a water purification facility (with purification capacity of 4.3 Mℓ/day for potable water and 5.7 Mℓ/day for demineralized water) and supplies water to the Komati village, Lakama Guesthouse and Koornfontein mine.

Activities under Component A includes the phased dismantling, salvaging, and decommissioning of selected buildings and infrastructure, and decontamination and rehabilitation of contaminated areas, such as the ADF, coal stock yard, hydrocarbons storage area, etc within the KPS footprint. Buildings such as the turbine hall and workshop areas will be retained for repurposing under Component B. While the technical designs for Component A will only be prepared during project implementation, activities under Component A is anticipated to generate large volumes of waste that will be screened, sorted and disposed on site in a Class C waste facility. Hazardous waste will be disposed at the Holfontein hazardous waste disposal site, which is situated approximately 120km for Komati, with a remaining lifespan of 10 years. The decommissioning is anticipated to take approximately 4 years to complete according to pre-feasibilities studies (hereafter, VPC report). The KPS reported a significant increase in CO2 and SO2 emissions in 2022 according to the draft Component A ESIA report. The shutdown of the remaining operational unit in September 2022 will therefore reduce emissions and avoid carbon emissions of 317ktCO2, in line with the emissions reduction strategy of the province. The draft ESIA for Component A also indicated that the decommissioning activities may temporarily impact immediate air quality of the neighboring informal settlements and Komati village. Geotechnical information on the suitability for installation of solar PV on the ash dam facility is not available at this stage. Ash beneficiation will be investigated in the final ESIA, however from Eskoms’ perspective, the quality of ash at Komati is not suitable for beneficiation. The ash dam facility has been also identified by the ESIA as a source of groundwater pollution with a pollution plume migrating towards the Koringspruit.

Component B supports the installation of 150MW solar PV, 150MW batteries energy storage and 70MW of wind energy. The repurposing will be implemented in two phases with Phase 1 entailing the installation of 100 MW solar PV, 50MW wind and 150MW Battery Energy Storage (BESS) in the largely modified outer 182 ha areas of the KPS complex, which includes the airfield, existing transmission servitude, the agricultural land and identified areas within the existing Komati power plant footprint. Phase 2 will entail the installation of an additional 50MW of solar PV, 20MW wind and two synchronous condensers at the inner 123 ha areas namely the retained turbine house and the ash dam facility. The draft ESIA for Component B currently does not make provision for the assessment of the installation of the 50MW on the ash dam facility or the installation of the 70MW wind due to limited available information at this stage and can therefore only be assessed during implementation. The Mpumalanga Biodiversity Sector Plan identifies, the vegetation within the KPS as heavily to moderately modified, with a potential critical biodiversity area (CBA) located in the western part of the property where the solar PV will be installed. There are no formally protected of important bird areas near the KPS according to the ESIA. Further, the KPS is situated in the Olifants Water Management Area and drains toward the Koring spruit, which is classified as largely modified. The draft ESIA studies for Components A and B have identified several aquifers and wetlands within the KPS footprint and along the Koring Spruit and ash dam facilities. However, the wetlands within the KPS are classified as modified and not considered ecologically sensitive. The Component A ESIA determined that contamination of surface and groundwater occurs due to various localized point sources and activities within the KPS. Both ESIA relied on groundwater monitoring information collected by Eskom; however, both the studies indicated that the level of
contamination could potentially present a health risk and that further in-depth studies will be needed to fully understand the level of risk and remediation interventions required. Due to the interface and overlap of activities under component A and B, activities will need to be carefully planned to avoid and minimize occupational and community health and safety risks.

Small scale innovative demonstration sub-projects such as the 500 kWp agrivoltatic PV plant, containerized microgrid assembly and fabrication facility and a training facility to support the outputs of Component C will form part of the onsite repurposing at the KPS. There is an existing agrivoltatic PV plant and a containerized microgrid located near the information center. The workshop areas retained under Component A have been earmarked for the microgrid assembly and manufacturing and similarly. Existing buildings will be utilized for the training center. Component C will further support local area development interventions such as alien vegetation removal and beneficiation, crop farming with mine affected water irrigation, winter wheat farming, training and upskilling of communities, and support to small, micro and medium-size enterprises within the Steve Tswhete Municipality. The location of the implementation of these interventions are currently not known and will only be fully understood during its implementation.

D. 2. Borrower’s Institutional Capacity

EJETP will be the first project of its nature to be undertaken in South Africa, specifically, the decommissioning of the first coal-fired power plant, repurposing the site with renewables and supporting workers and communities affected by the transition process. South Africa has in place a robust legislative framework for Environmental Social Health and Safety (ESHS) that are aligned with Bank’s ESF requirements. Likewise, Eskom also has a well-established occupational safety, health, environment, and quality (SHEQ) workplace policies and procedures in place that is in line with international standards (ISO 14001 and ISO 45001) and a good track record of managing ESHS risks during implementation of large scale and complex projects. It also has a well-established ESHS implementation unit operating at corporate, business and operational level. With regards to addressing socio-economic risks and impacts, Eskom has been managing stakeholder engagement and community development activities through its Communications and Stakeholder Management Unit and the Eskom Development Foundation, especially in partnerships with local/provincial governments and other relevant social departments. The recently established Just Energy Transition Office (JETO) under the office of Eskom CEO, with qualified staff, will aid Eskom to carry out the socio-economic activities planned under the project to address and mitigate social risks and impacts.

Eskom has experience with preparation and implementation of projects of similar scale as EJETP under other funding agencies, including the World Bank. For the World Bank supported Eskom Investment Support Project (EISP) (P116410), OP 4.00 Piloting Use of Country Systems, was adopted. The environmental and social performance during the implementation of the EISP was found to be satisfactory. However, at the closing of the project, environmental commitments which required the installation of air emission controls at the Medupi power plant, remain to be implemented. In addition, there have been serious incidents under the ESIP, including fatalities, that have been linked to supervision and controls of contractor management. Accordingly, additional contractor control and supervision measures will be included as part of the EHS Management system for Component A and B of the project.

The EJETP will be the first project that Eskom will prepare under the Environmental and Social Framework (ESF); however, it has a good understanding of the implementation requirements under each of the Environmental and Social Standards (ESSs). As mentioned above, it has an internal environmental, social and health and safety capacity within the organization to oversee the implementation of the environmental and social aspects of the project. For the purposes of the EJETP, the Clean Energy Unit (CEU) within Eskom for overseeing Component A and B will be
supported by an Owners Engineer. The Owners Engineer will be responsible for overseeing the preparation of the final ESIs and will be supporting Eskom to procure and manage contractors, including supervising health, safety and environmental performance during construction. The capacity and experience of the Owners Engineer are not yet known and can only be assessed once the owners engineer has been appointed. The terms of reference for the owners engineer will ensure that there are sufficient provisions for adequate and qualified resources (one environmental specialist, one social specialist and one occupational health and safety specialist) to oversee environmental and social aspects under their responsibility. The implementation of Component C will be overseen by the Just Energy Transition Officer (JETO) that will mobilize a competitively selected service provider that will implement the specific sub-component activities in partnership with relevant local government, provincial, private sector and other entities. A terms of reference for the service provider for Component C will be prepared and submitted to the Bank for clearance to ensure that sufficient provision for adequate and qualified resources (including at least one environmental specialist, one social specialist, one stakeholder engagement specialist, one business development specialist, one monitoring and evaluation specialist), have been included, to oversee environmental and social aspects under their responsibility.

The ESCP sets out the staffing requirements for the CEU and JETO, which will include at a minimum, one health and safety specialist, one environmental specialist, one social specialist and one stakeholder engagement specialist for each of the units. Eskom is regarded as a high-capacity client, however training and capacity development support is required for ECU, JETO and Supervision Engineer employees involved in project implementation as well as other contractors. Among others, topics to be included for capacity development include the World Bank Environmental and Social Framework, Project environmental, social, health and safety requirements and implementation, labour requirements, contractor management and supervision, stakeholder engagement and grievance redress mechanisms.

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Environmental Risk Rating High

The environmental risk is rated as high, primarily related to the nature and scale of anticipated direct, indirect, and cumulative risks and impacts resulting from decommissioning activities under Component A. The full scale and extent of the impacts and risks, of the project, will only be fully understood once the ESIs have been finalized after the project effective date. Component A impacts include i) generation of waste including hazardous waste of which the quantities are currently not known; ii) soil and groundwater contamination from the point sources, which poses an environmental and human health risks, if not properly remediated and hydrocarbon spills during construction and onsite treatment and disposal of waste on site; iii) air emissions such as dust from demolition, clearing of vegetation and the ADF; iv) community health and safety risks associated with ADF safety, noise, dust and vibrations from demolition and blasting and transportation of hazardous substances and waste; and v) occupational health and safety risks associated with the demolition activities. Component B impacts are expected to be short in duration, predictable, manageable and moderate in magnitude and will mostly occur during construction. These include (i) impact on air quality due to dust, noise and vibrations from clearance of vegetation and earth works, (ii) potential soil, ground and surface water pollution from the unknown ash landfill facility at the airstrip, iii) occupational and community health and safety risks due to the transportation of equipment due to the close proximity of the Komati village, (iii) surface water and wetland degradation due to positioning of the solar PV and BESS during the
finalization of the design and iv) impact on terrestrial and aquatic biodiversity degradation due to spreading of alien invasive species, impact on wetlands and surface water during construction. Operational impacts include i) generation of hazardous waste from PV panel, battery cells and wind blades at end of life; (ii) accidental fires and explosions depending on battery technology selected (Battery energy storage systems) and visual impact due to potential glare reflection from Solar PV panels, and flickering from wind turbines, iii) soil and groundwater pollution from washing of solar panels and iv) impact on birds and bat migration and roosting. Impacts associated with the installation of solar PV on the capped ash dump are likely to be moderate to substantial. Impacts include i) safety risks due to instability of the solar installation and reduced integrity of the ash dump capping leading to further groundwater pollution and a safety risk to the community within 100m from ADF, ii) surface water pollution due to poor storm water design, iii) release of airborne asbestos fibers if capping fails and visual impact. The installation of interventions under Component B will be implemented concurrently with the decommissioning activities under Component A, which may pose both an occupational and community health and safety risks, due to interface between contractors and overlapping of areas of responsibility, poor coordination which may lead to health and safety incidents. Impacts associated with Component C include (i) generation of waste, (ii) soil and surface water pollution for fertilizer, herbicide and pesticide use, (iii) dust from preparation of agricultural lands, (iv) occupational health and safety risks associated with small civil works and agricultural activities such as use of machinery and pesticides and (v) loss of natural habitats due to clearing of land to make provision for agricultural activities. The impacts associate with these activities are likely to be site specific, low in magnitude and manageable through the existing EHS management system and specific ESMPs. The impacts associated with the off-site investments will be further screened and managed as per the Environmental and Social Management Framework.

Social Risk Rating

Social risk classification for the project is ‘High’ due to: (i) direct impacts on employment & livelihood systems of those dependent on the power plant; (ii) displacement and out-migration from the area due to plant closure; (iii) decrease in land value and business growth/opportunities; (iv) impact on social identities of coal-dependent communities and heightened vulnerabilities of excluded groups (eg. women, unemployed youth, migrant workers, people with disabilities); (v) exclusion of communities & disadvantaged groups from decision-making; (vi) risks associated with temporary labor influx, labor and working conditions; (vii) potential risks associated with involuntary resettlement; (viii) risks of being associated with the negative impacts arising from broader transition initiatives underway in South Africa. The decommissioning and repurposing activities will be carried out within the existing land (687 ha) owned by Eskom while no land acquisition is expected for Component C. However, as indicated in the draft ESIA for Component A, depending on the technologies employed for the rehabilitation and repurposing of the ADF, there may be a need to acquire land and/or relocate a few households for safety reasons. As indicated in Eskom’s internal reporting, the dust bucket monitoring at Gelukplaas and the risk assessment of the failure of the ash dam, suggests that the potential involuntary resettlement risks, is however minimal. If land acquisition is required, it will be undertaken in accordance with ESS5; and if households need to be relocated, Eskom will prepare a Resettlement Action Plan (RAP) for the specific project activity which will be cleared the Bank prior to any displacement or relocation and disbursements for the concerned activity. The project is expected to engage direct, contracted and primary supply workers; accordingly, risks associated with temporary labor influx, labor and working conditions, occupational health, and safety, as well as Sexual Exploitation and Abuse (SEA)/ Sexual Harassment (SH) are present, albeit not at significant levels. Since Component B of the project will involve repurposing with solar PV and batteries, and Component C includes initiatives such as agrivoltaic and containerized microgrid assembly plants, addressing the forced labor risks associated with solar projects, will be important. Accordingly, prior to the commencement of the procurement process, Eskom will undertake market analysis to identify the possible sellers of solar panels to the
B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

The project was screened based on information from the draft environmental and social impact assessments (ESIA) for Component A and B and ESMF for Component C which was prepared and disclosed in-country and by the Bank on August 29, 2022. All three components of the project include activities which have particular relevance to the Environmental and Social standards (ESSs). These activities include decommissioning of existing infrastructure, remediation of contaminated land and closure of ash dam facilities within the KPS footprint and generation, transportation and offsite disposal of hazardous substances and waste and onsite treatment and disposal of inert waste (Component A), civil and demolition works and installation of a new energy generation technology (Component B), including recruitment of labor for Components A and B that are anticipated to result in adverse E&S risks and impacts that must be managed in accordance with the ESSs. Aspects of Component C with relevance to the ESSs, includes the operation and maintenance of the agrovoltaic demonstration plant, microgrid assembly and manufacturing and operation of the onsite training facility at KPS, with limited site-specific environmental impacts. Component C further support local SMMEs and community projects such as crop farming with mine affected water for irrigation, cultivation of winter wheats and alien invasive vegetation removal and beneficiation, of which the potential E&S impacts including cumulative impacts will be screened and assessed against the draft Environmental and Social Management Framework (ESMF). The ESMF was prepared consistent with the ESF and will be finalized prior to the project effective date. C-ESMP consistent with the ESSs will be developed for the agrovoltaic plant and submit for no-objection prior to construction and an Operational ESMP will be prepared by Eskom prior to commissioning. ESMPs consistent with ESF will be prepared for the idemonstration plants located in the KPS complex prior to project implementation.

The draft ESIA provide information on the initial environmental and social impacts and a term of reference for further detailed E&S studies including assessment of cumulative impacts as part of the final ESIA. These studies are anticipated to take approximately 18 months to complete. A condition for the ESIA to be finalized prior to commencement of any pre-construction or construction activities have been included in the ESCP and financial...
agreement. Two separate ESIs will be prepared for Component B, one for the solar PV and BESS and one for the wind energy generation. A land contamination assessment to determine the presence of land contamination and to identify potential exposure pathways was carried across the KPS Complex as part of the draft ESI for Component B, which informed the Component A ESIA. The assessment identified pollution of both the soil and shallow groundwater particularly near the ashing areas with some values exceeding limits by four times and therefore poses a health and environment risk. Groundwater sampling did not take into consideration the full scope of parameters, therefore there is still significant gaps in determining the levels of groundwater pollution at the KPS Complex. The ESI recommended further in-depth soil and groundwater assessments and the preparation of a remediation plan consistent with ESS 3 and the World Bank Environmental, Health and Safety Guidelines (WB ESHSG), of which the remediation plan will require approval from the environmental authorities. Component A will generate large volumes of waste. The ESI provided preliminary information on waste streams at KPS based on a 2019 study. The quantities, types of waste streams and onsite treatment and disposal locations could not be fully assessed due to the waste information and locations currently not being known. Hazardous waste will require site disposal at the Holfontein hazardous landfill. The final ESI will include a detailed waste management assessment and preparation of a waste management plan consistent with ESS3, a feasibility study of the Holfontein landfill to ensure sufficient airspace is available to cater for the project needs and a traffic management plan and risk assessment for the transportation of hazardous materials consistent with ESS3 and relevant national laws and GIIP. The draft ESI identified E&S impacts associated with the ADF and recommended that the ash dam facility with imbedded asbestos should be adequately capped and provision made for stormwater control. If further recommended the establishment wells downstream of the ADF for the abstraction and treatment of contaminated groundwater. A long-term groundwater monitoring protocol and ADF Rehabilitation Plan consistent with the ESSs will be included in the final ESI. Additional specialist studies as part of the final ESI Component A include an aquatic and terrestrial ecological assessment consistent with the requirements of ESS6, a noise and visual impact assessment and a heritage impact assessment and preparation of a change find procedure consistent with ESS8 as part of the ESMP. The draft ESI for Component B assessed the installation of the renewable interventions of Phase 1 only, due to the lack of information on the feasibility of installation of solar PV on the ADF and only assessed wind installation on a high level due to information on the final positioning of the wind turbines not being available and specialist studies not being able to be completed within the allowable preparation time. The impacts of Phase 2 and the wind installations will only be fully assessed during the preparation of the final ESIs. The draft ESI identifies the E&S impacts associated with Component B Phase 1 as medium to low risk. The ESI recommended further assessment of soil and groundwater contamination especially at the BESS installations and the Solar PV area at the airstrip where an ash landfill study has been identified as a potential source of pollution which requires further investigation. The land contamination study will be carried out consistent with the requirements of ESS3 and the WB EHS. Several modified wetland and drainage areas were identified of which the ecosystem services is rated as very low but may serve as a suitable habitat for grass owls. A detailed terrestrial and aquatic biodiversity assessment, and the preparation of a wetland rehabilitation and alien invasive eradication and management plan; consistent with the requirements of ESS6 will be prepared as part of the final ESI for Component B. The draft ESI for Component B, did not fully assess the types of waste (solar PV, Batteries and wind blades) anticipated to be generated under the operational phase nor provided information on the most suitable disposal options available. Disposal or recycling options for these types of waste are currently limited in South Africa and needs further investigation as part of the final ESI. Provisions have been made for the preparation of a waste management plan for Component B to meet the requirements of ESS3 in the ESCP. The visual impacts, flickering nuisance, and impacts associated with bird and bat migratory routes associated with the wind installation were only discussed on a high level as part of the draft ESI. The potential impacts of the installation of the wind
technology are therefore currently not fully known at this stage. The ESCP makes provision for the preparation of an ESIA and ESMP for wind installation once the technical information is available. The specialist studies to be completed during the final ESIA for Component B, largely align with those proposed for Component A and includes a 12-month bird and bat monitoring, terrestrial and aquatic biodiversity assessment, visual impact assessment, traffic assessment and land contamination study. The studies will be prepared to meet the requirements of the relevant ESSs. Civil and demolition works under Component A and B will take place concurrently, the ESIs considered the potential cumulative impacts specifically associated with occupational and community health and safety associated with this approach. There are no associated facilities for Component A or B. The ESIs made provision for assessing impacts such as dust, habitat destruction and impacts on soil and groundwater associated with ancillary infrastructure namely access roads, temporary laydown and batch plant areas and will be further assessed in the final ESIs. Daily operations of the activities under Component C poses an occupational health and safety risk and labor management requirements which has been addressed in the ESMF. Provisions have been made in the draft ESIs, ESMF and ESCP for health and safety aspects to be assessed and mitigation measures to be implemented consistent with the requirements of ESS2. The climate and disaster risk screening tool of the Bank rates the project as moderate, with aspects such as strong winds, rainfall and droughts which will be further assessed as part of the technical design studies.

To address project induced SEA/SH risks and impacts, a GBV/ SEA/SH and responsive GRM will be adopted as part of the ESMPs and ESMF prepared for the Project. Given the direct impacts of the plant closure on workers and communities, Component C of the project includes transition support to workers as well as measures for enhancing inclusion and targeted support to women, youth, people with disabilities, and other marginalized groups, through trainings, SMME support and capacity development. The project will further support a TA under Component B for future repurposing of coal power plants through a public-private partnership arrangements with the private sector. As part of the commitments in the ESCP, Eskom will prepare and submit the Terms of Reference for the TA to the Bank for non-objection. A draft Stakeholder Engagement plan was prepared and disclosed on August 29, 2022.

ESS10 Stakeholder Engagement and Information Disclosure

The objective of the stakeholder engagement is to incorporate views from all stakeholders through meaningful consultations and feedback, improve the environmental and social sustainability of the project, enhance its acceptance, and make a significant contribution to successful project design and implementation. The technical analysis commissioned for the preparation of the SEP for EJETP has grouped the stakeholders into three categories, namely national, provincial, and local. At the national level, the primary stakeholders include ESKOM, Department of Public Enterprises, National Treasury, Department of Mineral Resources and Energy (DMRE), National Energy Regulator of South Africa (NERSA), Department of Water and Sanitation (DWS), Department of Industry, Trade and Competition (DTIC), Department of Forestry, Fisheries and Environment (DFFE), contractors, etc. At the provincial level, the primary ones include Office of the Premier, Department of Economic Development and Tourism (DEDT), Mpumalanga Economic Growth Agency (MEGA), Department of Cooperative Governance and Traditional Affairs (CoGTA), ESKOM’s regional offices, etc. Finally, at the local level, the primary stakeholders identified at this stage are Nkangala District Municipality and Steve Tshwete Local Municipality; civil society organizations and NGOs; workers currently employed in the power stations and labor unions; residents of Khomati, Sizanane, Blinkpan and Komati Villages; Farm Belt; vulnerable and disadvantaged groups and their representatives; and community leaders and representatives. The project will require inputs from these different stakeholders, including Project Affected Parties
Public Disclosure (PAPs) who will be directly affected and Other Interested Parties (OIPs) who have an interest in the project interventions.

ESKOM has developed an inclusive and a draft SEP that was re-disclosed on September 28, 2022 (a draft SEP was disclosed on August 29, 2022) and will be implemented throughout the project period. The SEP outlines the characteristics and interests of the relevant stakeholder groups and timing and methods of engagement throughout the life of the project. The project will ensure that the needs and voices of vulnerable people (female-headed households, retrenched workers, elderly, youth, people with disabilities, or any other disadvantaged communities) are heard through inclusive consultation and participation to ensure that they can equally participate and benefit from the Project. The project will explore innovate ways to ensure consultations are fit for purpose, effective and meaningful in order to meet project and stakeholders’ needs and adhere to the restrictions put in place by the government of South Africa to contain the spread of COVID-19. Strategies to be employed include smaller meetings, small focus group discussions all taking full precautionary measures on staff and community safety. Where meetings are difficult, other channels of communication such as radio and public announcements will be implemented. Other strategies will include one-to-one interviews through phones and virtual communication platforms for community representatives, government officials, CSOs and other interest groups. As required under ESS10, consultations are being organized on an ongoing basis with these different stakeholders to discuss and agree on different options, scope and responsibilities of various stakeholders. A summary of these consultations have been included as part of the SEP. Further, building upon ESKOM’s current company-level complaint mechanism, a project-level Grievance Redress Mechanism (GRM) will be established to provide an avenue for complaints regarding with project activities. As specified in the SEP, the GRM will include mobile-phone based applications as well as in-person centers for complaint registration and resolution. The GRM will address each area of the feedback value chain: (i) uptake, (ii) sort and process, (iii) acknowledge and follow up, (iv) verify, investigate, and act, (v) monitor and evaluate, and (vi) provide feedback to the complainant as well as to ESKOM.

Given the social and environmental risks, ESIA or a comprehensive summary of the preliminary ESIA will also be disclosed and made available for public comments prior to project appraisal. Any feedback received on ESIA or any other ESF instruments and a summary of consultations will also be included as part of SEP. ESKOM will seek stakeholder feedback and opportunities for proposed future engagement, ensuring that all consultations are inclusive and accessible (both in format, language and location) and through channels that are suitable in the local context. The Project will also ensure that consultation activities fully comply with COVID-19 Protocol of South Africa and international best practices while enabling meaningful communication, consultation, and discussion.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

The project will directly affect 661 workers currently employed at the Komati power station and indirectly affect the livelihoods of those dependent on the coal value chain. Component C of the project will specifically address the impacts on employment and livelihood systems caused due to the decommissioning of Komati. In addition, it is expected that under the project, the impacts of coal power retirement (Component A) would be mitigated to the
extent possible by jobs and livelihood opportunities created by the alternate power generation facilities such as wind and solar (Component B); the net impacts accordingly are expected to be less.

For the decommissioning, repurposing of the KPS and socio-economic activities (especially community development projects) supported under Component C, the project will make use of direct and contracted workers including primary supply workers. While the total number of workers required under each category is not known at this stage, there may be potential influx of both local and migrant workers seeking employment opportunities wherein issues of labor standards and working conditions, will be pertinent. Accordingly, a draft Labor Management Procedures (LMP) in line with the requirements set out in ESS2 and the South African laws and guidelines relating to labor and occupational health and safety, has been prepared and disclosed on 27 September 2022.

The LMP will set out measures proportional to the labor risks and impacts and activities and impacts and provide detailed information on the work terms and conditions. In addition, the LMP will also include guidelines for developing workers codes of conduct, employment terms and conditions, principles regarding nondiscrimination and equal opportunity, the establishment of workers’ organizations, explicit provisions regarding prohibition of child and forced labor, mitigation measures against GBV/SEA/SH, as well as OHS. A labor-specific grievance redress mechanism accessible to all project workers, will be established and availed throughout the project life cycle. The sensitization of GRM for handling of GBV-related cases, as mentioned below under ESS4, will be proportionate to the risks which will be assessed further during preparation. The GRM will be designed to address concerns promptly, using an understandable and transparent process that provides timely feedback, and will operate in an independent and objective manner. The project-level GRM procedures and steps for its operationalization will be outlined in the SEP, whereas LMP will also contain a description of GRM for workers.

In general, child and forced labor are not anticipated to be significant risks in the construction or energy sectors in South Africa. However, since Component B of the project will involve repurposing with solar PV and batteries and Component C includes innovative projects like an innovative agrivoltaic demonstration plant and containerized microgrid assembly plants, addressing the forced labor risks associated with solar supply chains, will be important. Accordingly, prior to the commencement of the procurement process, Eskom will undertake market analysis to identify the possible sellers of solar panels to the project. The bidding documents will emphasize forced labor risks in solar panels and components and will require that sellers of solar panels to the project will not engage or employ any forced labor among their work force. Bidders will be required to provide two declarations: a Forced Labor Performance Declaration (which covers past performance), and a Forced Labor Declaration (which covers future commitments to prevent, monitor and report on any forced labor, cascading the requirements to their own subcontractors and suppliers). In addition, enhanced language on forced labor will be included in the procurement contracts. The Bank will carry out prior review of procurements of solar panels and components to ensure that enhanced provisions are used by Eskom.

The draft ESIA for Component A identified several occupational health and safety (OHS) hazards to project workers. These include (i) exposure to hazardous substances and dangerous goods including contaminated materials and hazardous waste; (ii) working at heights; (iii) exposure to dust, noise, heat and extreme weather; (iv) working near water and in confined spaces; (v) exposure to illnesses, communicable diseases, COVID-19; (vi) risk of fire and working on unstable slopes (vii) man-and-machine interaction, among others. The draft ESIA for Component B did not assess OHS hazards associated with the installation of the renewable technologies. The hazards are assumed to
be similar than those identified for Component A, but to a lesser scale due to the nature of the activities. A health and safety (HS) assessment will be undertaken as part of the final ESIA for Component A. The HS assessment will be informed by technical information in accordance with their respective duties under the Construction Regulations in terms of hazard and technical mitigations measures. An Occupational Health and Safety (OHS) Management Plan will be prepared consistent with the requirements of the ESS2 and the WB EHSGs, as part of the ESMP. Due to the complexity of the project, the ESCP sets out a requirement for the EPC contractors for both Component A and B; to develop and implement an OHS Management System, consistent with the ESS2, WB EHSG and informed by the HS assessment of the ESIAs, that will form part of the bidding documents to guide the preparation of the Contractors OHS Management systems, plans, Standard Operating Procedures and method statements during implementation of Component A and B. From previous project experience, Eskom has a well established existing Occupational Health and Safety Management System inline with International Standards (ISO14001 and ISO45001) and Human Resources Policies and Procedures which will form the basis for the preparation of the Environmental, Social, Health and Safety Management System for Component A and B including management procedures for labour and addressing GBV/SEA/SH which are inline with the ESSs.

The ESCP makes provision for OHS measures consistent with the ESS2 to be incorporated and implemented as part of the E&S assessments and instruments to be prepared for sub-projects, as relevant, which take place outside of the KPS Complex and supported under Component C. Component C may include possible small scale construction works and includes agricultural activities which may have OHS risks such as exposure to excessive dust, and harmful substances such as pesticides (agriculture) and may include the use of machinery and electrical hand tools which posses an OHS risk if not adequately managed. The ESMF makes provision for the assessment of risks and the preparation of the relevant instruments to mitigate residual OHS risks.

ESS3 Resource Efficiency and Pollution Prevention and Management

A Phase 1 site assessment was carried to assess the potential human and environmental risks associated with land contamination at the KPS Complex. The study assessed; 10 groundwater and 25 soil auger boreholes samples against a suite of contaminants of potential concern (CoPCs). CoPCs included arsenic, cadmium, chromium, iron, lead, mercury, nickel, selenium, manganese, and zinc from the ash and coal storage areas, PCB, PAH, BTEX and other petroleum hydrocarbons from oil storage and mechanical and electrical equipment; and copper, iron, nickel, chromium and zinc from metal cleaning and cooling tower blowdown wastewaters. Data from 27 existing monitoring boreholes were analyzed against a limited set of parameters, primarily metals. Initial findings include identification of various localized areas within the Komati site where contamination of soils, groundwater and building materials is suspected. Arsenic, lead, manganese and vanadium were detected in shallow soils earmarked of the installation of the BESS, while sulphates was detected at the coal stockyard and ash landfill at the airstrip and pyrene and benzo(a)pyrene at the fuel depot. Groundwater showed elevated values for Na and SO4 and downstream from the unlined ash dam facility which exceeded limits typically found at other power stations and therefore poses a health and environment risk. Na and SO4 exceedance were observed in surface water indicating pollution of surface water resources. Groundwater data was obtained from Eskom and monitoring was done against a limited set of parameters only. The study did not allow for analyzing a full spectrum of soil and groundwater pollution, and thus the full extent of pollution is currently not known. Failure to isolate pollution sources and to remediate contaminated land will result in localized and regional impacts on groundwater that will likely persist beyond the closure of the KPS according to the Component A draft ESIA. A detailed assessments including a full spectrum analysis of groundwater
will be undertaken as part of the final ESIA. A remediation plan and groundwater management plan, ground and surface water monitoring protocols and soil management and monitoring plan will be prepared as part of the final ESIA for Component A. The ESCP set out the commitment from Eskom to undertake a comprehensive land contamination study and to prepare and implement a detailed site remediation plan, consistent with ESS3 and the WB ESHG. As part of the Bank due diligence, the National Soil screening values were compared with those of Germany and the United States. Both the German Federal Soil protection and contaminated site and the US Environmental Protection Agency considered screening values of 1.0x10^-6, whereas South Africa only considers 1.0x10^-5. Therefore, soil sampling must consider risks values considered as Good International Industry Practices (GIIP). Final clean up levels will be developed, inline with GIIP and included in the remediation plan as part of the final ESIA. Remediation of the contaminated land is anticipated to improve general soil and groundwater quality within the immediate KPS vicinity. To mitigate land contamination risks, a provisional financial contingency has been built into the project to assist with environmental remediation under Component A. Several structures and infrastructure are earmarked for demolition under Component A. A waste assessment of 2019, determine possible disposal prohibitions under the National laws. Several substances were identified as hazardous, while Pulverized fuel was identified as a substance on the prohibited list for landfill disposal from August 2025. The remaining stored quantities of the Pulverized fuel at Komati is currently not known. Quantities, classification of waste and possible onsite treatment requirements for waste to be generated during the demolition are currently not known and will only be assert during the design and final ESIA for Component A. There are two privately owned hazardous landfill sites in South Africa. The closest hazardous landfill is therefore Holfontein which is located approximately 120 km from KPS. According to the Component A draft ESIA, Holfontein only has a lifespan of 10 years left. The feasibility of transporting hazardous waste and the availability of airspace at Holfontein will be assessed as part of the final ESIA, once the volume of hazardous waste is known. The Component A draft ESIA requires the project to adopt a waste management hierarchy approach by which waste from the demolition will be recovered and re-cycle or re-used to reduce waste sent to landfill. Onsite treatment and disposal of waste versus off-site disposal will be assessed as part of the final ESIA. The location of the waste treatment facilities and final Class C disposal site to be established within the KPS have not yet been identified and therefore the environmental impacts of these activities will only be assessed during the final ESIA. The Component A draft ESIA provide guidance on liner and legislative requirements for the installation of a new onsite landfill and recommended that the use of the lined new ADF be considered as a possible location for waste disposal. The country legislation enforces stringent requirements for the management of waste and establishment of landfill sites which the project will need to adhered to as set out in the Component A draft ESIA and VPC report. To further assess and address waste assessment issues, the Component A draft ESIA has recommended the preparation of a waste management assessment including risk assessment for the proposed onsite decontamination of waste, which will be informed by the characteristic of the waste and technical studies to determine detailed containment barrier requirements for onsite disposal as part of the final ESIA. A waste management plan consistent with ESS3 will be prepared as part of the ESMP in the final ESIA for Component A. Waste associated with the operational phase of the renewable energy resource, such as damage and broken solar PV panels, batteries, and wind turbine blades have not been fully assessed in the Component B draft ESIA. The address the gap, the ESCP requires the preparation and implementation of a Waste Management Plan consistent with ESS3 and national laws and regulation including extended produce responsibilities to ensure management provisions are made for the end-of-life battery, solar and turbine blade waste. The ash dam facility (ADF) with imbedded asbestos disposal facility will be closed and capped, and the area used for the installation of Solar PV under Component B. The main ADF is currently not lined, and there is a known pollution plume which stretches beyond the KPS property boundary according to the Component A draft ESIA. Seepage from the ADF may continue to contaminate offsite water resources. If the structural integrity of the
dam wall is not maintained, dam failure could have a detrimental impact on the informal community living approximately 100m from the ADF according to the Component A draft ESIA. The feasibility of installation of the solar PV on the ADF, could not be assessed and will only be known once detailed designs and studies to determine the slope and stability, settlement potential, cap characteristics, leachate, vegetation cover and storm water management system have been finalized. The Component draft A ESIA recommended a dedicated cover and rehabilitation of the asbestos disposal facility as per the approved closure plan and long-term ground and surface water, soil and air quality monitoring for decommission and post-closure for the ADF as part of the final ESIA for Component A. The draft ESIA report noted that air emissions such as PM10 and PM2.5 levels are generally high during winter, but generally still within the allowable ambient air quality limits. The shutting down of most units except for one has reduction in air emissions for KPS. The shutting down of the remaining unit 9 is anticipated to eliminate KPSs’ contribution to the Eskom fleet greenhouse gasses by 317 thousand tons of CO2e. Air emissions such as PM2.5 and PM10 are also expected to reduce within the immediate KPS area. An increase in dust and noise levels are expected during the demolition activities, which could impact near by communities in Komati village and Big House. The extent and magnitude of the impact is therefore not known and will be further assessed through a fugitive emission assessment and environmental acoustic impact assessment to be prepared as part of the Component A and B final ESIA, respectively. The closure of KPS will cease all atmospheric emissions directly associated with coal combustion, including of greenhouse gases. The renewable technologies under Component B, which will be enabled by the decommissioning of the power station, will generate energy from renewable resources and mitigate climate change. The climate and disaster risk screening tool of the Bank rates the project as moderate, at this stage, with aspects such as strong winds, rainfall and droughts which will be further assessed as part of the technical design studies. The KPS complex use approximately 3698.81 Megaliters of water per annum of which a portion is allocated to the Komati village for domestic use. Water will be utilized during the decommissioning activities itself but is anticipated to be much less than the current requirement for power generation, and is therefore not further assessed. The closure of the KPS and remediation of the land will benefit soil, surface and groundwater and terrestrial ecology. Agricultural activities under Component C is likely to use pesticides and fertilizers, which may pose an OHS risk; abstraction of water for irrigation and generate waste which may lead to soil and water pollution and ecosystem degradation; which must be considered and further assessed and mitigated as per the ESMF.

ESS4 Community Health and Safety

Activities under Component A and Component B are likely to (i) result in an increase in traffic within the immediate project area; (ii) impact on community health due to potential exposure to air borne hazardous substances, including those related to legacy impacts, (iii) deterioration of water quality; (iv) potential GBV/SEA/SH concerns related to potential labour influx, (v) impacts on security situation due to localized community tensions following the decommissioning, and (vi) transmission and exposure of non-communicable and communicable diseases including COVID-19. It is anticipated that the contractor workers will need to be accommodation in the near by town such as Komati village, Bethal or Middleburg. Due to the current unemployment rate (34%) it is anticipated that there will be an influx of a large number of casual labor into the project area. The influx in addition to the introduction of contractor workers may lead to constraints of health services, an increase in community exposure to communicable and noncommunicable diseases including COVID-19, GBV and SEA/SH, conflict that may have an impact on security situation in the area. In addition to a labor influx management plan; the project will prepare a GBV/SEA/SH prevention and response plan prior to project appraisal to manage potential GBV and SEA/SH issues that may arise during the project implementation. The sensitization of GRM for handling of GBV-related cases will also be
proportionate to the risks which will be assessed further during preparation. Activities under Component B are anticipated to have similar impacts as those identified for component A but to a lesser extent. These include potential GBV/SEA/SH concerns related to potential labour influx. The project will also undertake a security risk assessment prior to engaging security personnel to assess the risks and impacts of engagement of security personnel under the project, and implement measures to manage such risks and impacts in a manner satisfactory to the Bank, guided by the principles of proportionality and Good International Industry Practices (GIIP), and by applicable law, in relation to hiring, rules of conduct, training, equipping, and monitoring of such personnel.

Both draft ESIAs identified, that the overall project will improve traffic in the project area over a long term, as there will be no need for coal trucking, and the number of employees will be less than during the peak operation of the KPS. An increase in traffic will occur during the construction and demolition phase such as the transportation of abnormal loads, construction material and workers etc that may pose a risk to workers, community, road users and the environment according to the draft ESIAs. The risk related to traffic associated with the project is considered to be manageable through the implementation of suggested mitigation measures. A traffic assessment and preparation of a traffic Management Plan will be included in the final ESIA for both Component B. As activities under Component A and B will be implemented concurrently, the Occupational Health and Safety Management system, proposed in the ESCP will make provision for the preparation of an onsite contractors traffic management plan. Hazardous waste generated under Component A will require long-distance transportation to the Holfontein hazardous landfill site, situated approximately 120km from the KPS. The Component A draft ESIA did not fully assess potential impacts associated with the transportation of hazardous waste, as the characteristics and volumes of the waste are currently not known. The draft ESIA makes provision for the preparation of a waste management plan and traffic management plan as part of the ESMP in the final ESIA to mitigate community health and environmental risks from hazardous waste transportation. As part of the ESCP commitments, a specific traffic management plan and risk assessment for the transportation of hazardous materials and waste consistent with ESS3 and ESS4, national laws and GIIPs need to be prepared for Component A to assess and mitigate the potential community risk. An informal dwelling is located approximately 100m south-east of the ADF, with another community (Geluk 1) located within a zone of influence of the ADF. The health and safety of these communities may be negatively impacted from dust and asbestos fibers from the ADF if not adequately capped and closed as well as from failure of the ADF wall if factors such as the closure status, capping design, slope and stability and storm water control are not adequately assessed, prior to the installation of the renewable interventions. The slope stability and closure design information will only be available during implementation and therefore the risk will only be fully known during the finalization of the ESIAs. Due to the potential noise and vibration impact during demolition and construction activities, the Component A draft ESIA, proposed a noise impact assessment to identify sensitive receptors and identification of mitigation measures in the ESMP as part of the final ESIA. Risks associated with Component C will be identified and assess in accordance with the ESMF; once the specific activities under the component are defined. However, broader risks associated with noise pollution, impacts on water quality, SEA/SH concerns, use of pesticides are likely to be relevant, especially if there are community development activities that involve civil works.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

The decommission activities (Component A) and repurposing solutions (Component B) will be carried out within the existing land (687 ha) owned by Eskom while no land acquisition is expected for Component C. However, as indicated in the draft ESIA for Component A, depending on the technologies employed for the rehabilitation and repurposing of
the ADF, there may be a need to acquire land and/or relocate a few households south of the power station and approximately 100m to the south-east of the ash dam, for safety reasons. As indicated in Eskom’s internal reporting, the dust bucket monitoring at Gelukplaas and the risk assessment of the failure of the ash dam, suggests that the potential for land acquisition as well as relocation, is however minimal. If land acquisition is required, it will be undertaken in accordance with the requirements of ESS5 and in a manner acceptable to the Bank, using to the extent possible a ‘willing buyer, willing seller’ approach consistent with ESS5. Similarly, if it is determined that the small number of houses in the area need to be moved, Eskom will prepare a Resettlement Action Plan (RAP) for the specific project activity which will be cleared the Bank prior to disbursement of the relevant Component A and B of the Project, and that the corresponding RAP, including payment to the affected persons, will be implemented prior to any displacement or relocation, as reflected in the Environmental and Social Commitment Plan (ESCP) for the Project.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

The Mpumalanga Biodiversity Section Plan (MBSP) identified a critical biodiversity area (CBA) within the western parts of the KPS complex bordering the Goedehoop colliery that is earmarked for the installation of the solar PV during Phase 1 of Component B. Due to the area being heavily modified, the Component B draft ESIA report indicated that the CBA is unlikely to meet biodiversity targets for species and ecosystems processes. According to the ESIA there are no Protected areas, Important Bird Areas or Key Biodiversity Areas within or near the KPS Complex. Other natural but modified areas identified by the draft ESIA studies include the Geluk spruit and Komati Spruit. A biodiversity screening study prepared as part of the ESIA indicated that the vegetation within the KPS Complex are large indicators species of disturbance with the presence of weed species. An Alien invasive species monitoring, control and eradication plan is in place for KPS, which identifies priority areas of invasive species within the KPS. The study identified at nine species of conservation concern that may occur within the KPS, however the presence of these species could not be confirmed. Due to the presence of wetlands, there is a potential for Maquassie shrew/African March rats to occur on site, however these species are reliant of intact rivers and wetland ecosystems, which is not the case of wetlands within the KPS Complex or surrounding areas according to the Component B draft ESIA. The national screening tool identified the likelihood of three bird species, namely the African Grass Owl, Caspian tern and White-belly Bustard to occur within the KPS. The avifauna scoping site visit conducted as part of the preparation of the Component B draft ESIA identified potential habitats for the African Grass Owl that may be impacted by the project. The avifauna study did however not take into consideration bird migratory routes as required for the assessment of the potential impacts of the wind energy installations, therefore the possible impacts on both bird and bat are currently not known. The ECSP makes provision for a bird and bat impact assessment to be undertaken as part of the ESIA to be prepared for the wind energy installation under Component B. There are three types of wetlands which occurs on the KPS namely, channeled valley bottom (CVB), seepage wetlands and depression wetlands. One of the BESS interventions is situated adjacent to a CVB, and therefore construction and operational activities are likely to negatively impact on this area if the BESS is not repositioned. According to the Component B ESIA, the wetlands within the KPS are classified as modified, with low to moderate ecological importance. Other project activities which may impact on biodiversity and ecosystem function include, clearing of vegetation and spreading of alien invasive species on site, sedimentation of water courses and wetlands, noise and vibration, injury and poaching of fauna and fragmentation of habitats. Mitigations provided in the ESIA includes the maintenance of a buffer zone around the wetlands, search and rescue of plants with conservation value and slow-moving fauna prior to clearing, erosion control measures during construction, annual monitoring of wetland health, remediation of soil and groundwater pollution under Component A among others. Both draft ESIA recommended that further detailed
aquatic and terrestrial biodiversity impact assessments need to be undertaken. The Component B ESIA further recommended the preparation of a wetland rehabilitation plan, biodiversity management plan and alien invasive management plan with key performance indicators and monitoring protocols consistent with ESS6 as part of the ESMP. The commitments for preparing the wetland rehabilitation, alien invasive species eradication management plan and biodiversity management plan forms part of the ESCP. The implementation of these management plans in addition the soil and groundwater remediation interventions under Component A; are anticipated to have an overall positive impact on the biodiversity and ecosystems in and immediately surrounding the KPS Complex. Component C may require clearance of natural areas to make space for agricultural activities, furthermore the use of pesticides and herbicides (addressed in ESS3) during agriculture and alien invasive plant harvesting may further have an impact on biodiversity and water ecosystems if not adequately managed. The ESCP further makes provision of the assessment and screening of potential impacts of sub-project activities under Component C on biodiversity and natural resources and requires mitigation measures to be put in place consistent with the ESS6.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

In the context of South Africa, the indigenous groups are estimated to comprise approximately 1% of the total population. Collectively, this group known as Khoi-San, comprise the San and the Khoikhoi people. The main San groups include the !Khomani San who reside mainly in the Kalahari region, and the Khwe and !Xun who reside mainly in Platfontein, Kimberley while the Khoikhoi include the Nama who reside mainly in the Northern Cape Province; the Koranna mainly in Kimberley and the Free State province; the Griqua in the Western Cape, Eastern Cape, Northern Cape, Free State and KwaZulu-Natal provinces; and the Cape Khoekhoe in the Western Cape and Eastern Cape, with growing pockets in the Gauteng and Free State provinces. Accordingly, based on the available information, these groups do not reside in or have presence in the project area.

However, based on the findings of the social assessments carried out under the project, there are other groups such as women, people with disabilities, retired workers, unemployed youth, who do not meet the ESS7 criteria but are present in the project area, and due to cultural differences, need additional support to benefit from the mitigation measures and the decommissioning process. These risks and impacts will be covered under ESS1 and the Bank’s ‘Directive on Addressing Risks and Impacts to Vulnerable or Disadvantaged Groups or Individuals,’ will be applied to support such groups.

ESS8 Cultural Heritage

No areas or artifacts of cultural heritage have been identified as part of the draft ESIs. Due to the nature of the site the draft ESIs stipulates that it is unlikely that any areas of cultural heritage significance are present. However, due to the age of the KPS, structures older than 60 years that need to be decommissioned will require an application to be submitted to the Mpumalanga Heritage Resources Authority for approval. The presence and potential impacts on cultural heritage will only be assessed as part of the Heritage Impact Assessment carried out during the final ESIs. A Phase 1 paleontological field assessment was further proposed by the Component B draft ESIA. Assessments will take into account all areas and activities including ancillary works, such as access roads, temporary laydown areas etc. which may have a cultural heritage significance or impact on archeological artefacts and paleontological deposits. Mitigation measures such as the preparation of a chance finds procedure has been suggested by the draft ESIs and
will be included in addition to any other mitigations from the assessments into the ESMP of the final ESIA for Component B.

ESS9 Financial Intermediaries
This standard is regarded as not relevant as no Financial intermediaries will be involved in this project.

C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways
No
OP/BP 7.50 for Projects on International Waterways is not triggered because EJETP activities are not anticipated to involve the use or potential pollution of international waterways. The project is anticipated to reduce water use and contribute to improving surface and groundwater quality through the shutdown, demolition and environmental remediation at the site (Component A). An existing groundwater plume is expected to be contained through engineering controls. The installation of solar PV under repowering activities (Component B) and demonstration projects (Component C) is anticipated to use only a small quantity of water for periodic cleaning of the panels that can be obtained from onsite rain harvesting. The agrivoltaic demonstration project (Component C) will be done on a small scale and will not require any significant water inputs or is likely to release wastewater which may pose a pollution risk to international water resources. No wastewater associated with the project activities is expected to be released in a manner which may pose a risk of polluting an international waterway

OP 7.60 Projects in Disputed Areas
No

B.3. Reliance on Borrower’s policy, legal and institutional framework, relevant to the Project risks and impacts

Is this project being prepared for use of Borrower Framework?
No

Areas where “Use of Borrower Framework” is being considered:
Use of Borrower Framework is not being considered under the Project

IV. CONTACT POINTS

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VI. APPROVAL
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Safeguards Advisor ESSA Peter Leonard (SAESSA) Concurred on 29-Sept-2022 at 06:15:36 GMT-04:00