

Terms of Reference

Indonesia Geothermal Resource Risk Mitigation (GREM) Project PT Sarana Multi Infrastruktur (Persero)

Environmental and Social Safeguard Consultant (FC10)

1. Background and Context

The World Bank is assisting the Government of Indonesia in establishing a Geothermal Resource Risk Mitigation (GREM) Facility (“**the Facility**”) to support exploration drilling by state-owned and private sector developers. The main objective is to scale up investment in geothermal energy development in Indonesia. This will be achieved through providing about US\$ 375 million for upstream resource development (i.e., exploration and delineation drilling) – the riskiest phase of geothermal development. Under the proposed Project, two windows are created: (i) a Public Sector Window and (ii) a Private Sector Window (sub-borrowers). The Facility will be managed by PT Sarana Multi Infrastruktur (Persero) (“**PT. SMI**”) as the financial intermediary.

PT. SMI through the Facility will provide geothermal developers with a debt package for exploration drilling, with the possibility of another package for delineation/extended exploration drilling. The financing support will confirm whether there is sufficient productive steam resource for power generation. After the resource is largely confirmed, the developer can use project finance for exploitation drilling and power plant development.

For the public sector window, there will be a loan forgiveness component using funding from the Government of Indonesia (GoI) in the event that the resources are not confirmed. For the private sector window, the debt package will be evenly split between a loan financed by the WB and a financial instrument funded by the Green Climate Fund (GCF) and/or the Clean Technology Fund (CTF). The financial instrument will be based on the market price of the Special Purpose Vehicle at the time the Sponsor chooses to buy back the financial instrument, thus creating a risk-sharing mechanism.

The all-indicative pipelines in the GREM Facility below are in the process of obtaining the working area and Geothermal Business License (Izin Pengusahaan Panas Bumi—IPB) by EBTKE. This process is anticipated to be completed in 2025. The developers who managed these pipelines, plan to submit proposals at the technical appraisal/pre-proposal stage after obtaining the IPB.

The three indicative pipelines are as follows :

- 1) 1st Sub Project: Geothermal prospect area of Klabat Wineru/Toka Tindung, managed by PT Ormat Geothermal Indonesia, has completed one slim hole drilling activity and developed several facilities including access road, wellpad, water intake station, lay down area, and basecamp area. They plan to add infrastructure development to further support exploration activities.
- 2) 2nd Sub Project: Geothermal prospect area of Wapsalit, managed by PT Ormat Geothermal Indonesia, has completed two big-hole drilling activities and developed infrastructures including access road, wellpad, water intake station, water booster station, lay down area, and basecamp area.

- 3) 3rd Sub Project: Geothermal prospect area of Hu'u Daha, managed by PT Sumbawa Timur Mining, has completed one slim hole drilling activity and developed several facilities including access road, wellpad, water intake station, lay down area, and basecamp area. They plan to add infrastructure development to further support exploration activities.

2. Consultancy Services

PT SMI is seeking to engage an Environmental and Social Safeguard Consultant (“ESSC”) to support PT SMI in undertaking environmental and social due diligence (“ESDD”) and providing advice to the potential borrowers for the implementation of the Indonesia Geothermal Resource Risk Mitigation project (“Project”) from the safeguard perspective in compliance with the GREM Environmental and Social Management Framework (“GREM ESMF”), Operational Manual (“OM”) and Developer Manual (“DM”).

The ESSC will work under the supervision of the Environmental Social & Technical Evaluation Division of PT SMI and in close coordination with other GREM Consultants hired by PT. SMI.

3. Scope of Work

The objective of the consultancy service is to support PT SMI in ensuring a successful implementation of complete transaction cycle of the debt packages under the GREM Facility that comply with the requirements, procedures and regulations related to environmental management in accordance with the applicable GOI regulations, the World Bank Safeguard Policies and PT SMI Environmental and Social Safeguard Standard and other provisions as stated in the GREM ESMF. The advice should also be based on international best practice adapted to the Indonesia context.

The scope of work is to support PT SMI in evaluation the safeguard instruments following the proposal submission, Environmental and Social Due Diligence, support in the monitoring, supervision and evaluation of safeguard implementation during project cycle including provide recommendations and the monitoring of CAP fulfillment/gaps filling with the due date as stated in Credit Agreement. The recommendation should clearly detail the rationale, risks and mitigation measures, and any key areas of focus during sub-loan monitoring.

The execution of work for each task will be based on the issuance of Instruction to Proceed by PT SMI to the Consultant. After the contract award, the ESSC shall present the detailed plan and schedule to deliver the scope of work.

The scope of work under this assignment has the following parts and tasks:

Part-A: Support PT SMI in conducting due diligence and monitoring the fulfillment of Corrective Action Plans (CAPs) before works commence

Task 1: Support PT SMI in conducting Environmental and Social Due Diligence (ESDD)

The ESSC will assist PT SMI safeguard team in carrying out screening, review and clearance of safeguard instruments including Environmental and Social Due Diligence (ESDD) and obtaining the commitment from the sub-borrower to close the gaps as required in the Corrective Action Plan (CAP). This task should include, but is not limited, to the following:

- 1) The ESSC shall perform a preliminary assessment to all available environmental and social safeguard related documents after contract award (Issuance of the Notice to Proceed) and prior to ESDD site visit as a desktop review that includes, but is not limited to:
 - a) Review and assess the documents of *Upaya Pengelolaan Lingkungan Hidup-Upaya Pemantauan Lingkungan Hidup/Analisis Mengenai Dampak Lingkungan* (Environmental Management Effort-Environmental Monitoring Effort/Environmental Impact Assessment or UKL-UPL/AMDAL) of the sub-project and the UKL-UPL/AMDAL of the previous/ongoing project activities (for the geothermal exploration of brownfield) including the implementation reports of the UKL-UPL/RKL-RPL (Environmental Management Plan and Environmental Monitoring Plan), safeguard instruments in accordance with the ESMF, RPF and Indigenous People Policy Framework (“IPPF”) covering Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plan (ESMP), Stakeholder Engagement Plan (SEP) and Grievance Redress Mechanism (GRM), Land Acquisition and Resettlement Plan (LARAP, if required) including the Livelihood Restoration Program (LRP), Indigenous Peoples Plan (IPP, if triggered), Gender Action Plan (GAP); and subsequent environmental management plans or sub-plans of the ESMP that have been prepared by the sub-borrower (such as Biodiversity Management Plan or BMP, Physical Cultural Heritage Resource Management Plan – Chance Find Procedure or PCHRMF-CFP, Labor Management Plan, Security Management Plan, Traffic Management Plan Community Development Program, procedures and other relevant documents if available);
 - b) Review and assess the adequacy of relevant permits and approvals as required by the sub-project as well as relevant permits and approvals of the previous/ongoing project activities including assessment on the compliance to the appropriate institutional and legal framework applied;
 - c) Identify and assess any legacy issues that may pose social and environmental risks from previously implemented project activities to ensure that there are no pending legal and social disputes or liabilities about environmental and social matters;
 - d) Review and assess the adequacy of the Environmental and Social Management System (ESMS) and Gender Action Plan (GAP), covering:
 - The Policies in managing and monitoring the environmental, social, and gender risk and impacts of the sub-project, including a strategy or roadmap for proposing gender equality in the design and implementation of the sub-project, which may cover Gender-Based Violence (GBV) and Violence Against Children (VAC) preventions;
 - Adequacy of procedures for the identification, assessment and management of the environmental, social, health, safety, security risks and impacts of a geothermal exploration project;
 - The Project organization structure includes the organizational capacity and competency of the Environmental, Social, Health, Safety and Security (ESHSS) and Gender team for implementing the ESMS and GAP and meeting environmental and social performance objectives per the National law and GREM ESMF and Gender Action Plan Manual requirements. The ESHSS and Gender team of the prospective sub-borrower should have the capability to prepare safeguard instruments, manage and supervise the ESHSS and

gender risks and implement the action plans as required in the safeguard instruments for the duration of the GREM Project;

- Mechanism for monitoring and reporting on the sub-project's environmental, social, and gender performance;
- Mechanism for external communications and stakeholder engagement including review the adequacy of the documentation.

- 2) The ESSC shall conduct a site visit which includes, but is not limited to:
 - a) The ESSC shall provide a detailed site visit plan (itinerary, data and information to be gathered, the method) and discuss with PT SMI prior to team mobilization;
 - b) Assist PT SMI in organizing visits to senior management and relevant key personnel of the sub-borrower associated with the sub-project, and organizing site visits to the sub-project site;
 - c) Assist PT SMI in meetings with relevant stakeholders, local government (Regent/Mayor, Head of Villages), relevant institutions, traditional leader, key informants, or potential affected people when necessary;
 - d) Verification of the data, information, assessment of the results of the desktop review and obtaining supplemental data and information to meet the requirements;
 - e) Identify sub-project related works that have started and/or have been in progress. Where works have already started, to carry out an environmental and social audit of the existing works and the implementation arrangements;
 - f) Review and assess the actual implementation of environmental and social impacts management according to the mitigation strategy in the UKL-UPL or RKL-RPL including the appropriateness and effectiveness of impacts/risks management (for works that have started and/or have been in progress);
 - g) Review and identify impacts and risks that has not been identified in the existing environmental safeguard instrument and assess how the potential sub-borrower will manage those impacts and risks.
- 3) Following the ESDD site visit, The ESSC shall perform a detailed review, assessment and evaluation to the available documents, data, and information to identify gaps, deficiencies or issues, including, but is not limited to:
 - a) Review and evaluation of the necessary safeguards instruments in accordance with GREM ESMF, RPF and IPPF prior to funding approval that should include, but not limited to:
 - Identification of The World Bank safeguard policies and PT SMI ESS elements triggered;
 - Conformance of the scope of the reports with generally accepted standards for such reports, including the World Bank requirements;
 - Compliance with national and international standards; Environmental Guidelines and regulations; requirements under Government of Indonesia (GoI) laws and regulations.
 - b) Screening and classifying the sub-project into one of three categories (A, B and C), depending on the sub-project's type, location, sensitivity, scale, the nature and magnitude of its potential environmental and social impacts. Detail of each risk category is explained in the GREM ESMF document. The early biodiversity screening, critical habitat assessments as well as environmental and social impact avoidance are the most important aspects of the screening as part of the funding application process;

- c) Review and evaluation of the completeness of the ESIA studies, and eventual data and/or analytical gaps or deficiencies including the ESHSS risks and impacts in the Project Area of Influence, assessment of associated facilities (if identified), cumulative impacts (if any), sensitive receptors, etc. for the sub-project on such issues as follows:
- Adequate scoping and definition of Area of Influence;
 - Identification of the associated facilities. Verify that the associated facilities (if any) are described accurately in the assessment;
 - Quality and scope of the baseline data including gender disaggregated data;
 - Adequacy of gender analysis in the context of the sub-project and the potentially affected community;
 - Summary of key environmental and social risks of the sub-project, quality of risk and impact identification and assessment for pre-construction, construction and operation phases identified by the sub-borrower;
 - Adequacy of impact assessment including impact assessment on biodiversity (terrestrial flora and fauna, aquatic biodiversity, birds) and natural/critical habitat including ecosystem services;
 - Robustness of evaluation of project alternatives, considering relevant technical, economic, financial, environmental and social issues, risks, and opportunities,
 - Adequacy of the cumulative impact assessments, including incremental impacts, on areas or resources used or directly impacted by the proposed geothermal exploration activities, from other existing, planned or reasonably defined developments;
 - Identification of the existence of Indigenous People and Physical Cultural Heritage using the World Bank's criteria;
 - Ensuring that sub-borrower prepare social impact assessment and social risks assessment (as part of ESIA) and mitigation strategy that encompasses Social assessment survey of the community groups impacted by the geothermal exploration: collecting relevant data on Indigenous Peoples and Physical Cultural Heritage (when applicable), income, livelihoods, access to services, customs and norms, and identifying social vulnerabilities, community's perception, and gender issues;
 - Assessment on the resource efficiency and pollution prevention including reduction of greenhouse;
 - Unusual circumstances or site-specific issues.
- d) Review the ESMP and GAP including the adequacy of budgeted amount in the capital budget for managing and monitoring impacts, and review any subsequent environmental management and gender action plans that have been prepared by the sub-borrower (such as Biodiversity Management Plan, Indigenous People Plan, Livelihood Restoration Plan, Physical Cultural Heritage Resource Management Plan – Chance Find Procedure, Labor Management Plan, Gender Action Plan, Security Management Plan, Traffic Management Plan, Community Development and Benefit Sharing Program, Emergency Preparedness and Response Plan, other procedures and relevant documents if available) to assess whether the plans adequately describe mitigation measures;
- e) Review and assess the stakeholder engagement program including aspects related to:
- Stakeholder mapping and analysis;
 - Disclosure of information and feedback;

- Meaningful consultation, including informed consultation and participation and Free, Prior, Informed Consent if applicable;
 - External communications;
 - Grievance mechanisms, and
 - Ongoing reporting to affected communities.
- f) Review the sub-borrower's ESHSS and Gender management capacity in compliance with the ESMF and GAP Manual as part of the eligibility assessment.
- 4) The ESSC shall assist PT SMI in coordinating meetings with the sub-borrower including the sub-borrower's clarification on their safeguard instruments, the status and progress of permits, and the adequacy of additional information. Coordination meetings can be done more than once in order to achieve the clarity needed for the ongoing ESDD process.
- 5) The ESSC shall assist PT SMI to identify any red flags and gaps that include, but are not limited to the following:
- a) List of required changes, updates, additional studies, gaps to be filled in existing instruments and details of any additional safeguards instruments;
 - b) Indicate requirements for any additional consultations and/or disclosure of information and instruments;
 - c) Note any issues such as timeframes or budgets that may affect geothermal project feasibility or the development plan;
 - d) Review of the capacity of the sub-borrower to implement the safeguards and GAP instruments as well as their safeguards and GAP responsibilities for the duration of the GREM project, and requirements for gap filling (staff, equipment, training, resources etc.).
 - e) With respect to the GREM ESMF and GAP Manual requirements, identify actions needed to implement mitigation measures.
- 6) The ESSC shall assist PT SMI to prepare and discuss Corrective Action Plans (CAPs). The CAPs will include the following:
- a) A list of gaps to be filled in the safeguards instruments to be cleared prior to financial appraisal;
 - b) A list of gaps (including relevant permits, additional safeguards instruments including related gender instruments, detailed ESMP sub-plans) that the sub-borrower must prepare before work commence.
- 7) The ESSC shall assist PT SMI in conducting a workshop to discuss the list of CAPs for the agreement of PT SMI, the World Bank and the sub-borrower.
- 8) The ESSC shall assist PT SMI in regard to review and approval process of safeguard and GAP instruments:
- a) Where no gap filling or amendments are required, PT SMI will forward the instruments to World Bank for review and clearance. Where a CAP is prepared, PT SMI will send it to the World Bank for review and clearance prior to issue to the sub-borrower. The sub-borrower will be required to complete the recommended activities and gap filling in the CAP and resubmit the safeguards instruments for final review and clearance by PT SMI and the World Bank;

- b) Accommodate inputs from the World Bank as result of Bank's review and clearance prior PT SMI clearance. After review, the Bank may request further gap filling prior to clearance. The ESSC will assist PT SMI in advising the sub-borrowers of the Bank's review and supervise any further work.

Task 2: Monitoring Safeguard Instrument Preparation and the CAPs Fulfilment

The ESSC shall provide technical advisory to sub-borrower on safeguard and GAP instruments preparation to comply with the World Bank safeguard policies and adhere to provisions in this GREM ESMF and Gender Manual, and assist in gaps fulfillment based on the Corrective Action Plan as agreed by all parties following ESDD. The tasks include, but are not limited to:

1. Assist PT SMI in providing technical advice to sub-borrower for filling gaps on safeguard and GAP instruments, based on ESDD results;
2. Assist PT SMI in monitoring the permitting process and ensure that the permits and approvals are secured prior to commencement of work on site;
3. Assist PT SMI in monitoring the process of leasing, purchasing land or implementing LARAP/ARAP and other entitlements and other support to the affected and displaced person based on LARAP/ARAP document or other related documents;
4. Assist PT SMI in reviewing the CAPs fulfillment with due date as stated in Credit Agreement and provide any inputs if needed;
5. Assist PT SMI in ensuring sub-borrower to prepare detailed implementation of ESMP that should be prepared by contractors (Contractor's ESMP or C-ESMP), and to include the Environmental, Social, Health, Safety and Security as well as gender related requirements in the bidding document for drilling and civil works contractors, including a summary matrix of requirements of all relevant management plans;
6. Assist PT SMI in ensuring contractors to prepare and set up gender related requirements as per GAP developed by sub-borrower;
7. Assist PT SMI in reviewing and clearance process of the safeguard instruments and the C-ESMP;
8. Assist PT SMI in providing recommendations of giving clearance to begin the work on site (including ancillary works such as access roads);
9. Assist PT SMI in ensuring land acquisition and resettlement have been completed to comply with National regulations and the provisions in the GREM-ESMF and Resettlement Policy Framework (RPF) with referring to the approved LARAP/ARAP instrument.

Part-B: Support PT SMI in loan execution and supervision (work will be executed if the sub project is eligible for GREM facility)

The ESSC shall assist PT SMI in monitoring and supervise the implementation of environmental and safeguard requirement, the Contractor's ESMP implementation and be responsible for implementing other aspects of the project ESMP, during civil works construction, drilling and well testing activities until decommissioning including necessary site visit, which estimated to be 3 - 4 times during the duration of loan execution and supervision. The general tasks include, but are not limited to:

1. Assist PT SMI in monitoring and evaluation the compliance with National laws, safeguards instruments and the GREM ESMF including compliance with applicable permits and approvals;
2. Assist PT SMI in monitoring and evaluation of the implementation of the Environmental and Social Management Plan (ESMP), Stakeholder Engagement Plan (SEP), Grievance Redress Mechanism (GRM), Livelihood Restoration Program (LRP), Indigenous Peoples Plan (IPP, if applicable), Gender Action Plan (GAP); and subsequent environmental management plans or sub-plans of the ESMP that are require for the sub-project (such as Biodiversity Management Plan or BMP, Physical Cultural Heritage Resource Management Plan – Chance Find Procedure or PCHRMP-CFP, Labor Management Plan, Security Management Plan, Traffic Management Plan Community Development Program, procedures and other relevant documents);
3. Assist PT SMI in monitoring and evaluation of the implementation of the C-ESMP and other aspects of the project ESMP including gender related requirements as per GAP developed by sub-borrower not under the Contractor's control including the implementation of actions required in all relevant safeguards instruments;
4. Review the implementation reports prepared and submitted by the sub-borrower and their contractors;
5. Assist PT SMI in preparing quarterly reports towards the World Bank and the Ministry of Finance (MoF).

Task 1: Support PT SMI in Implementation, Monitoring and Evaluation of the Environmental and Social Safeguard Requirement during Civil Works Construction

This task includes, but is not limited to:

1. Site visit for monitoring, supervision and evaluation of the safeguard implementation of the ESMP and Contractor's ESMP (C-ESMP) for civil works construction activity to review the effectiveness of environmental and social mitigation measures outline in those safeguard documents and to confirm that the application of the safeguard instruments as required in the GREM ESMF, RPF and IPPF is delivering the intended outcome;
2. Monitoring the implementation of Stakeholder Engagement Plan and communication strategy conducted by sub-borrower;
3. Monitoring GRM implementation conducted by sub-borrower;
4. Monitor the implementation of GAP developed by sub-borrower
5. Provide recommendation of giving clearance to begin the work on site in response to new risks, new activities and as a result of near misses or incidents;

6. Any identified “show-stoppers” found in the document and/or during monitoring and supervision;
7. Monitoring and evaluation of CAP fulfillment/gaps filling with due date as stated in Credit Agreement and providing any input if needed for each GREM sub-project;
8. Provide inputs to PT SMI in preparing reports towards the World Bank and MoF.

Task 2: Support PT SMI in Implementation, Monitoring and Evaluation of the Environmental and Social Safeguard Requirement during Drilling

This task includes, but is not limited to:

1. Site visit for monitoring, supervision and evaluation of the safeguard implementation of the ESMP and Contractor’s ESMP (C-ESMP) for drilling activities to review the effectiveness of environmental and social mitigation measures outline in those safeguard documents and to confirm that the application of the safeguard instruments as required in the GREM ESMF, RFP and IPPF is delivering the intended outcome;
2. Monitoring the implementation of Stakeholder Engagement Plan and communication strategy conducted by sub-borrower;
3. Monitoring GRM implementation conducted by sub-borrower;
4. Monitor the implementation of GAP developed by sub-borrower;
5. Provide recommendation of giving clearance to begin the work on site in response to new risks, new activities and as a result of near misses or incidents;
6. Any identified “show-stoppers” found in the document and/or during monitoring and supervision;
7. Monitoring and evaluation of CAP fulfillment/gaps filling with due date as stated in Credit Agreement and providing any input if needed for each GREM sub-project;
8. Provide inputs to PT SMI in preparing reports towards the World Bank and MoF.

Task 3: Support PT SMI in Implementation, Monitoring and Evaluation of the Environmental and Social Safeguard Requirement during Well Testing

This task includes, but is not limited to:

1. Site visit for monitoring, supervision and evaluation of the safeguard implementation of the ESMP and Contractor’s ESMP (C-ESMP) for well testing until decommissioning to review the effectiveness of environmental and social mitigation measures outline in those safeguard documents and to confirm that the application of the safeguard instruments as required in the GREM ESMF, RFP and IPPF is delivering the intended outcome;
2. Monitoring the implementation of Stakeholder Engagement Plan and communication strategy conducted by sub-borrower;
3. Monitoring GRM implementation conducted by sub-borrower;
4. Monitor the implementation of GAP developed by sub-borrower;
5. Provide recommendation of giving clearance to begin the work on site in response to new risks, new activities and as a result of near misses or incidents;
6. Any identified “show-stoppers” found in the document and/or during monitoring and supervision;
7. Monitoring and evaluation of CAP fulfillment/gaps filling with due date as stated in Credit Agreement and providing any input if needed for each GREM sub-project;
8. Provide inputs to PT SMI in preparing reports towards World Bank and MoF.

Part-C: Support in Capacity Building to Implement, Manage and Monitor the sub-project activities under the GREM Facility

The ESSC shall provide capacity building activities during the engagement of the Project which includes, but are not limited to the following:

1. Provide training to key personnel of PT SMI and sub-borrower to understand safeguard related aspects and to discuss on how to implement, manage, and monitor the GREM facility from the environmental safeguard, social safeguard and gender related point of view;
2. Provide specific trainings to the sub-borrower and the contractors as required to respond the CAPs;
3. Other trainings as required by PT SMI and the sub-borrower.

The specifications for the capacity building activities should include, but are not limited to, the following:

1. A maximum of 5 day-sessions during the engagement.
2. A maximum participation of 15 individuals per day session.
3. A total of 40 man-hours allocated for the 5-day session.
4. The distribution of man-hours for key experts assigned to the capacity building activities is as follows:
 - a. Environmental Safeguards Specialist/Team Leader: 10 man-hours
 - b. Social Safeguards Specialist: 10 man-hours
 - c. Indigenous Peoples Specialist: 5 man-hours
 - d. Gender Specialist: 5 man-hours
 - e. Biologist/Biodiversity Specialist: 5 man-hours
 - f. Climate Change Specialist: 5 man-hours

4. Deliverables

The Consultant is expected to support PT SMI in providing the following deliverables for each GREM sub-project (in English and Bahasa Indonesia) throughout the engagement. The reports should be in the Word format for the review process and Pdf format for the final ones:

The Consultant is expected to provide the following deliverables with expected timelines throughout the engagement. The mechanism for reviewing and accepting the deliverables by PT SMI and the World Bank is attached to this TOR.

For Part-A: Support PT SMI in conducting due diligence and monitoring the fulfillment of Corrective Action Plans (CAPs) before works commence

1. **Desktop Review and Site Visit Reports** (five working days after the site visit is completed) – The output refers to the scope of work Part A, Task 1 that includes but not limited to reviewing, assessing and evaluating all available environmental and social safeguard instruments (UKL-UPL, ESIA, ESMP, GAP at minimum requirements), policies, environmental safeguard permits, to conduct screening, and to assess the adequacy of the safeguard instruments and permits for the GREM financing application, key findings along with the site visit results and all relevant documentation;
2. **ESDD Draft Report** (fifteen working days after the site visit is completed) – The output refers to the scope of work Part A, Task 1 that includes but not limited to the Due Diligence outcomes, list of major risks/issues, identification of red flags, gaps, the list of Corrective Action Plans or CAPs, the final draft of ESIA, ESMP, GAP (main safeguard instruments at minimum requirements);
3. **ESDD Final Report** (ten working days after received the reviewed document of the ESDD Draft Report including the reviewed ESIA, ESMP, GAP and the reviewed CAPs list. The safeguard

instruments drafts reviews are expected to occur a maximum of three times until satisfactory results are achieved in accordance with the GREM ESMF requirements and are deemed disclosure-worthy) – The output refers to the scope of work Part A, Task 1 that includes but not limited to final ESDD, final ESIA and ESMP, the final list of CAPs after the workshop, and the due date to fill the gaps that are agreed upon by the sub-borrower, PT SMI and the World Bank;

4. **CAPs Fulfillment Report 1** (five working days after ESIA, ESMP and GAP document approved for clearance) – The output refers to the scope of work Part A, Task 2 that includes but not limited to monitoring report on the finalization and clearance of the main safeguard instruments (ESIA, ESMP and GAP at minimum requirements) including obtaining approval for disclosure of the final safeguard instruments prior to financing committee's appraisal;
5. **CAPs Fulfillment Report 2** (ten working days after all safeguard instruments fulfillment under CAPs are approved by PT SMI, prior to the commencement of site works) – The output refers to the scope of work Part A, Task 2 that includes but not limited to monitoring report of the completion of the gaps' fulfillment in safeguard instruments, including the completion of the land acquisition process and Contractor's ESMP before site works begin.

For Part-B: Support PT SMI in loan execution and supervision

1. Monitoring, Supervision and Evaluation Report of Safeguard Implementation during Infrastructure Construction including the site visit report – The output refers to the scope of work Part B Task 1(ten working days after site visit is completed);
2. Monitoring, Supervision and Evaluation Report of Safeguard Implementation during Drilling including site visit report - The output refers to the scope of work Part B Task 2 (ten working days after site visit is completed);
3. Monitoring, Supervision and Evaluation Report of Safeguard Implementation during Well Testing including site visit report - The output refers to the scope of work Part B Task 3 (ten working days after site visit is completed);
4. Final Report of the monitoring, supervision and evaluation report of environmental and social aspects (ten working days after all monitoring, supervision and evaluation reports of infrastructure construction, drilling and well testing activities are approved by PT SMI) – The output includes but not limited to the summary of gaps fulfilment and major risks to be considered in the next AMDAL document if the geothermal capacity is proven to further exploitation stage.

For Part-C: Support PT SMI in Capacity Building to Implement, Manage and Monitor of the sub-project activities under the GREM Facility

The ESSC shall provide a capacity building report for each day-session training which covers the training programs, training materials, duration, the trainer(s) and his/her qualification for conducting the training, and other related records such as participants' attendance sheet, documentation, training evaluation, etc.

5. Timeframe and Payment Milestones

The assignment is anticipated to span approximately 36 months across the three sub-projects. To account for potential timeline overlaps, the ESSC will designate one team for each sub-project, resulting in a total of three separate teams responsible for executing the scope of work throughout the engagement. Payment milestones for each sub-project will be based on the following deliverables:

For Part-A: Support PT SMI in conducting due diligence and monitoring the fulfillment of Corrective Action Plans (CAPs) before works commence

Payment for Part-A will be based on the following milestones:

1. Twenty percent (20%) of the total value of Part-A will be disbursed after the Desktop Review and Site Visit Report are reviewed and approved by PT SMI.
2. Twenty percent (20%) of the total value of Part-A will be disbursed after the ESDD Draft Report is reviewed and approved by PT SMI.
3. Twenty percent (20%) of the total value of Part-A will be disbursed after the ESDD Final Report, including ESIA, ESMP, GAP and the final list of the CAPs and the due date are reviewed and approved by PT SMI.
4. Twenty percent (20%) of the total value of Part-A will be disbursed after CAPs fulfilment Report 1 (finalization and clearance of the main safeguard instruments including final safeguard instruments disclosure prior to financing committee's appraisal) is reviewed and approved by PT SMI.
5. Twenty percent (20%) of the total value of Part-A will be disbursed after CAPs fulfilment Report 2 (CAPs fulfilment before site works commence) is reviewed and approved by PT SMI.

For Part-B: Support PT SMI in loan execution and supervisions

Payment for Part-B will be based on the following milestones:

1. Twenty-five percent (25%) of the total value of Part-B will be disbursed after Monitoring, Supervision and Evaluation Report of Safeguard Implementation during Infrastructure Construction including the site visit report are reviewed and approved by PT SMI.
2. Twenty-five percent (25%) of the total value of Part-B will be disbursed after Monitoring, Supervision and Evaluation Report of Safeguard Implementation during Drilling including site visit report are reviewed and approved by PT SMI.
3. Twenty-five percent (25%) of the total value of Part-B will be disbursed after Monitoring, Supervision and Evaluation Report of Safeguard Implementation during Well Testing including site visit report are reviewed and approved by PT SMI.
4. Twenty-five percent (25%) of the total value of Part-B will be disbursed after Final Report of the monitoring, supervision and evaluation report of environmental and social aspects – Summary of gaps fulfilment and major risks to be considered in the next AMDAL document if the geothermal capacity is proven to further exploitation stage are reviewed and approved by PT SMI.

For Part-C: Support PT SMI in Capacity Building to Implement, Manage and Monitor the sub-project activities under the GREM Facility

Payment will be based on the expenses incurred for each daily session. The total payment shall not exceed the overall value of Part-C. Disbursements will occur only after the Capacity Building Report for each daily session has been reviewed and approved by PT SMI. Invoices submitted to PT SMI must clearly specify the training program including the attachment of records/documentation, and the names of the key expert(s) assigned for the training.

6. Qualification Requirements, Staffing and Work Arrangements

The Consultant team is expected to have a proven track record in providing similar advice, with the Lead Consultant having at least ten years of relevant experience. The Consultant should also have experience in working with International Financing Institutions and in working with private and public sector companies. The firm's historical track record and relevant experience are essential for the consultant shortlisting. The

Consultant should provide a list of detailed project experience. The ESSC firm should meet the following qualification requirements:

- Completion of at least five (5) ESIA studies to UKL-UPL and AMDAL requirements, at least two of which should have been to international funding agency standards, during the past ten (10) years;
- Experience with environmental and social assessment, mitigation and management, and due diligence for geothermal and/or oil & gas projects.
- At least five (5) years' overall experience in Indonesia working on similar assignments including ESIA, AMDAL, UKL-UPL and LARAP preparation. Preferably experience in preparing IPP;
- The firm should be qualified and experienced in the planning and implementation of a range of social development programs, and significant experience in resettlement and land acquisition programs in Indonesia, including preparing at least 2 LARAP in the last ten (10) years to international funding agency standards.
- Familiarity with the World Bank Policies or other International Financing Institution Policies, and Indonesian regulations on environmental and social aspects of project development.

The Consultant should be aware that the coordination meeting, correspondence, and discussion with relevant stakeholders are expected to be done during the normal working hour in Jakarta (UTC+7). The Consultant is therefore encouraged to maximize the use of Indonesian-based personnel, experts, labs, etc.

If International expert required for the Project, the firm should arrange all requirements and/or necessities to do the work in Indonesia (e.g., visa, flights, accommodation, etc.) on their own. All software used in the assignment should be licensed and original.

The Consultant team should be familiar with Indonesia and the South-East Asian region. The Consultant team should have team members with qualification as follow and assign one of them as the Team Leader

Position	Skills and Qualification
Environmental Safeguards Specialist/Team Leader	<ul style="list-style-type: none"> • Master's Degree in Environmental Engineering, Environmental Science or equivalent • At least 10 (ten) years of experience in the field of environmental and social safeguards for mining, infrastructure, oil and gas, energy sectors, preferably has experience in the geothermal projects • Experience with the development of AMDAL (National Standard), ESIA (International Standard) and monitoring of environmental and social management plans, preferably in implementing ESMP • Preferably has experience in Environmental and Social Due Diligence • As a Team Leader he/she should has relevant experience in leadership roles, and possess strong managerial capabilities • Preferably has experience as a team leader of AMDAL(s) preparation (a licensed AMDAL team leader) • Familiar with occupational and community's health and safety plan and its implementation, preferably for mining and energy sectors. • Preferably experience in working with International Financial Institutions (IFIs) • Fluency in Bahasa Indonesia and English languages is required

Position	Skills and Qualification
Social Safeguards Specialist	<ul style="list-style-type: none"> • High-level written and oral presentation skills in English • Master's Degree in Sociology, Anthropology or equivalent • At least 10 (ten) years of experience in the field of environmental and social safeguards for infrastructure development projects, preferably in the geothermal projects • Experience with development and monitoring of environmental and social management plans, preferably in implementing ESMP • Experience in development and monitoring of social safeguard management, in particular on involuntary resettlement and indigenous peoples and security management • Preferably experience in working with IFIs • Fluency in Bahasa Indonesia and English languages is required • High-level written and oral presentation skills in English
Indigenous People Specialist	<ul style="list-style-type: none"> • Master's Degree in Sociology, Anthropology or equivalent • At least 10 (ten) years of experience in the field of environmental and social safeguards for infrastructure development projects, preferably in the geothermal projects • Experience in dealing with IP issues on infrastructure development project • Experience in development and monitoring of social safeguard management, in particular on indigenous people plan • Preferably experience in working with IFIs in particular on indigenous people • Fluency in Bahasa Indonesia and English languages is required • High-level written and oral presentation skills in English
Gender Specialist	<ul style="list-style-type: none"> • Master's Degree in Gender Studies, Women Studies, Sociology, Anthropology, Development Studies, International Development or equivalent • At least 7 (seven) years of experience in the field of gender equality and social inclusion for infrastructure development projects, preferably in the geothermal projects • Experience in dealing with gender issues on infrastructure development projects • Experience in development and monitoring of gender action plan • Preferably experience in working with IFIs • Fluency in Bahasa Indonesia and English languages is required • High-level written and oral presentation skills in English
Biologist/Biodiversity Specialist	<ul style="list-style-type: none"> • Master's Degree in Biology, Biology Conservation, Environmental Science (Environmental Biology) or equivalent • At least 10 (ten) years of experience in biodiversity and habitat impact assessment, preferably in terrestrial flora-fauna, aquatic, and birds impact assessment under the World Bank Safeguards Policies, Equator

Position	Skills and Qualification
	Principles, IFC Performance Standards or similar international requirements <ul style="list-style-type: none"> • Experience in development and monitoring of biodiversity management plans, and in managing critical ecosystem • Preferably experience in working with IFIs • Fluency in Bahasa Indonesia and English languages is required • High-level written and oral presentation skills in English
Climate Change Specialist	<ul style="list-style-type: none"> • Master’s Degree in Environmental Scientist or related scientific field • At least 5 (five) years of experience in the field of climate change, environmental and social safeguards for infrastructure, mining, energy sectors, preferably in the geothermal projects • Experience in undertaking GHG assessment in line with International guidelines and standards; • Experience in planning, managing and implementing climate change adaptation and resilience activities; • Preferably experience in working with IFIs in particular on climate change and sustainable development • Fluency in Bahasa Indonesia and English languages is required • High-level written and oral presentation skills in English

7. Conflict of Interest (COI) Provision

Consultants are reminded of the provisions related to Conflicts of Interest (COI) and competitive advantage in the Bank Procurement Regulations for IPF Borrowers, concerning their previous or potential participation in the sub-borrower’s geothermal project.

8. Unfair competitive advantage

Consultants are reminded of the provision related to unfair competitive advantage in which fairness and transparency in the selection process require that Consultants or their affiliates, competing for a Consulting assignment do not derive a competitive advantage from having provided Consulting Services related to it.

9. Other terms and conditions

It should be noted that the advisory process is “open” by nature and that is the responsibility of the Consultant to be proactive in identifying and executing any additional tasks that would be required in order to ensure the objectives detailed in Section 3 are met. The Consultant must therefore be able to respond positively to the need for complementary analysis that may be needed in order to complete its mandate. The Consultant will also be responsible for identifying the information necessary to successfully complete the work and providing a comprehensive analysis of the various issues and possible solutions.

Expected timeline for GREM proposal submission is an indicative information based on the latest discussion with the developers and may subject to change. PT SMI will issue an Instruction to Proceed for the selected consultant to commence the work for each project. In the case that during the contract period, the developers decide not to submit the proposals which results in there is no work for consultant to conduct, any consequences arise, either in terms of costs or commitments that the consultant has with third parties in connection with the assignment, become the consultant's responsibility.

10. Employer Responsibility

PT SMI will provide data and facility during the project to support consultant firm as follows:

- Facilitate the communication chain between the Consultant, PT GDE, and the Bank.
- Provide meeting rooms and working stations during the project implementation.
- Provide shared folders containing all the files and documents required during the project.
- PT SMI will review the work/reports and work together with the Consultant during the project implementation.
- Provide any other relevant documents which are available and reasonably requested.

11. Available Documentation and Resources

Documentation that can be accessed by the Consultant is as follows:

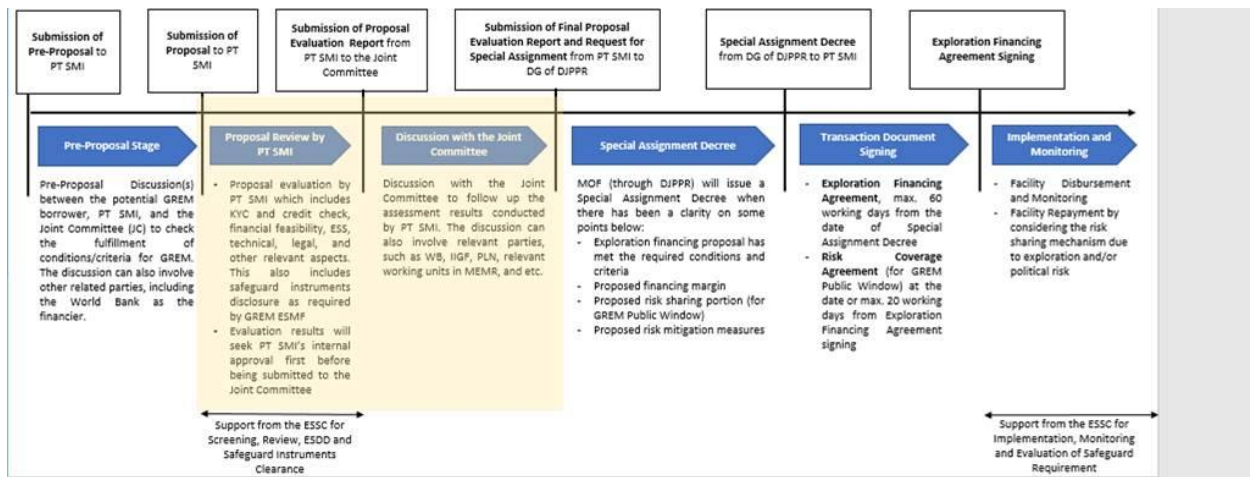
- PT SMI Indonesia Geothermal Resource Risk Mitigation Project (GREM) (P166071) – Environmental and Social Management Framework (May 2019);
- Operations Manual and Developer Manual prepared by PT SMI;
- Manual for Gender Action Plan Development, Gender-based Violence and Violence against Children Any other relevant documents which are reasonably requested and available.

12. Appendices

- a. Appendix 1 – Overview of GREM Transaction Cycle
- b. Appendix 2 – Mechanism for Reviewing and Accepting the Deliverables

Appendix 1 – Overview of GREM Transaction Cycle

The implementation of GREM Facility (both GREM Public and GREM Private Window) will follow the provisions stated in the Minister of Finance Regulation / *Peraturan Menteri Keuangan* (PMK) No. 80 Year 2022. Under this regulation, PT SMI will provide exploration financing facility to geothermal developers based on a Special Assignment Decree from the Minister of Finance (MOF) through the Directorate General of Budget Financing and Risk Management (DJPPR). Proposal evaluation process will involve discussion with the Joint Committee and other related stakeholders. The indicative process is presented below:



Appendix 2 – Mechanism for Reviewing and Accepting the Deliverables

