INTEGRATED SAFEGUARDS DATA SHEET
CONCEPT STAGE

Report No.: ISDSC563

Date ISDS Prepared/Updated: 21-Mar-2012

I. BASIC INFORMATION

A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Indonesia</th>
<th>Project ID:</th>
<th>P128568</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Name</td>
<td>ID-Renewable Energy for Electrification Project (P128568)</td>
<td></td>
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<tr>
<td>Task Team Leader</td>
<td>Dhruva Sahai</td>
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<tr>
<td>Estimated Appraisal Date</td>
<td>01-Oct-2012</td>
<td>Estimated Board Date</td>
<td>20-Dec-2012</td>
</tr>
<tr>
<td>Managing Unit</td>
<td>EASIS</td>
<td>Lending Instrument</td>
<td>Specific Investment Loan</td>
</tr>
<tr>
<td>Sector</td>
<td>Other Renewable Energy (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theme</td>
<td>Climate change (34%), Pollution management and environmental health (33%), Rural services and infrastructure (33%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Financing (In USD Million)**

<table>
<thead>
<tr>
<th>Financing Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrower</td>
<td>50.00</td>
</tr>
<tr>
<td>International Bank for Reconstruction and Development</td>
<td>105.00</td>
</tr>
<tr>
<td>GERMANY KREDITANSTALT FUR WIEDERAUFBAU (KFW)</td>
<td>100.00</td>
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<tr>
<td>Total</td>
<td>255.00</td>
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</table>

Environmental Category: B - Partial Assessment
Is this a Repeater project? No

B. Project Objectives

The development objective of the proposed project is to improve electricity access in Indonesia’s islands using cost-effective renewable energy generation sources.

C. Project Description

The proposed project will fund the conversion of existing diesel based generation in Indonesia’s islands to renewable-diesel hybrid systems, invest in greenfield solar PV and potentially in mini-hydro systems, and fund network expansion to improve electricity access.

The main components of the proposed project are as follows:

Component 1 – Renewable energy generation (US$ 200 million) with specific subcomponents: (i) investment in cost effective solar PV generation in grid connected mode at PLN’s isolated diesel-based generation plants and in the main regional network systems; and (ii) investment in standalone solar PV and potentially in mini-hydro generation for electrification at numerous new locations.

Component 2 – PLN network extension (US$ 50 million) comprising of 300 km of medium voltage (MV) and low-voltage (LV) distribution lines for increasing access coverage through island grids to be serviced by renewable diesel hybrid systems, and at new solar PV, and mini-hydro locations where component 1 investments are being mobilized - including MV line extensions, LV network strengthening, and new customer connections (to be funded by PLN).

Component 3 – Technical assistance (US$ 5 million) to support PLN during the initial investment phase to immediately take advantage of both Indonesian experience and expertise, as well as international best practice and experience in the design and engineering of solar PV systems, PV diesel hybrids, and mini-hydro plants - to build internal capacities over a wide range of technical areas that are critical for the long term sustainability of these types of investments. In order to handle the rapid scale-up of renewable energy technology in its operations under the project, PLN would also require staffing skills with the requisite core competencies that would need to be acquired, mobilized, and strengthened rapidly to address the scale of this activity.

A separate grant in the amount of US$ 700,000 is being sourced from AusAID and ASTAE for technical assistance (TA) to PLN in least-cost electrification planning. The output of the TA will be a spatial least cost sector-wide investment program and technology mapping. It will also include outputs related to relevant technical aspects, institutional development, and post-operational sustainability. This TA will create a delivery platform for all stakeholders interested in the sector to assist PLN in scaling up electricity access by using renewable energy technology. This leveraging of World Bank support would be an important result of this operation.

The total estimated project cost is US$ 255 million for which an IBRD sector investment loan (SIL) of US$ 105 million is proposed, in addition to which US$ 100 million is proposed to be funded by a KfW loan, with the remaining US$ 50 million to be financed by PLN for network rollout. The proposed project is expected to be prepared during calendar year 2012. Subject to the successful implementation of the first Renewable Energy
for Electrification Project (REEP) SIL, and subject to Government approval, the Bank and KfW plan to follow-up with a series of SILs during calendar 2013, and 2014. The relative size of each SIL will be based on the strength of the proposed investment program that PLN will have prepared for implementation for each year of the loan in accordance with the agreed criteria and processes.

Based on PLN’s initial estimates, under the REEP program comprising of the proposed series of SILs of which the current loan is the first proposed lending activity, PLN has thus far identified 402 solar PV plants with an installed capacity of 60,564 kWP. PLN has also requested that mini-hydro plants be considered for funding under the SILs. The Team will explore the potential for integrating mini-hydro sub-projects into the current and future loans under the REEP program.

D. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The number of locations for the current loan in the series of SILs will be based on the strength of the proposed investment program (US$ 255 million) that is currently being prepared by PLN. To speed up planning and implementation of the loan, PLN is selecting those sub-projects that would have a relatively minor impact from both an environmental and social standpoint.

E. Borrowers Institutional Capacity for Safeguard Policies

PLN’s Environmental and Social unit within the Directorate of Corporate Planning has experience in dealing with World Bank safeguards policies. PLN has implemented Bank projects in the past and its staff have received training over time on the Bank’s environmental and social safeguards policies and their implementation. For this project, environment and social safeguards related issues will be covered by various units within PLN based on the status of project activities e.g. during project preparation, the responsibility for environmental and social safeguards matters will be under the Environmental and Social unit which will be supported by PLN’s branch offices, and by the regional Development Center Units (UIPs) for the preparation of safeguards documents. During project construction, the environmental and social safeguards matters will be the responsibility of the Head of the Division for Construction with ongoing monitoring by the Environmental and Social unit. During operations, the environmental and social issues (in particular those relating to monitoring and evaluation) will become the responsibility of the Head of Division, Regional Operations with reporting requirements to the Environmental and Social unit.

F. Environmental and Social Safeguards Specialists on the Team

Thomas E. Walton (AFTEN)
Juan Martinez (EASIS)
Sulistiowati Ms. (EASPR)
Warren Waters (AFTTR)
Andrew Daniel Sembel (EASIS)

II. SAFEGUARD POLICIES THAT MIGHT APPLY

<table>
<thead>
<tr>
<th>Safeguard Policies</th>
<th>Triggered?</th>
<th>Explanation (Optional)</th>
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<tbody>
<tr>
<td>Environmental Assessment OP/BP 4.01</td>
<td>Yes</td>
<td>The following impacts are identified during construction of solar PVs at existing diesel-based power stations, and of stand alone solar PVs including their ancillary facilities: (i) increased level of dust and noise from the use and movement of machinery; (ii) non toxic solid waste during construction; (iii) oil spill or leakage from machinery or transformers; and (iv) worker health and safety from existing EMF. Impact during operation includes (i) fire and emergency preparedness; (ii) solid waste and (iii) worker health and safety. For new subprojects and distribution lines (both medium and low voltage), in addition to the above impact, other issues could include the management of vegetation clearance and sediment and erosion control. PLN have however indicated that the solar PV plants will be of relatively small size, i.e. upto 150 kWp, require small land parcels of upto 5,000 m2, and be placed in the proximity of the isolated dwellings (about 150 households each) to minimize right of way issues for distribution lines.</td>
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<tr>
<td>Natural Habitats OP/BP 4.04</td>
<td>TBD</td>
<td>PLN have indicated that no sub projects will be located in protected areas (as defined in the Indonesian Law on Forests i.e. protected forests, nature reserves, etc). The absence of impact on natural habitats will however be confirmed when subproject locations are finalized. If mini-hy whole are included in the current loan, some sites including their ancillary facilities may be located in areas where natural habitats exist.</td>
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<tr>
<td>Forests OP/BP 4.36</td>
<td>No</td>
<td>The project does not support or influence forest management.</td>
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<tr>
<td>Pest Management OP 4.09</td>
<td>No</td>
<td>There will be no use of chemical control for clearing of land, and pesticides will not be used.</td>
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<tr>
<td>Physical Cultural Resources OP/BP 4.11</td>
<td>TBD</td>
<td>Whether PCR is affected directly or indirectly will be determined when subproject locations are known. The proposed project will to the extent feasible, not involve any sites with archeological, paleontological, historical, religious, or of unique natural value as defined under the policy. However, chance finds procedures would be included as part of the EMP and ESMF.</td>
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Indigenous Peoples OP/BP 4.10
Yes
Site visits are yet to be undertaken and no site will be excluded purely due to the presence of IPs in the area. In subprojects where indigenous people communities are present, the important elements of an IPP will be integrated within the overall subproject design.

Involuntary Resettlement OP/BP 4.12
Yes
According to PLN, most of the sites for solar PV subprojects are either already owned by PLN or by the district in which the projects are being developed. According to PLN the relevant districts have agreed to contribute land for the subprojects either in the form of land grants to PLN, or PLN has been given the right of land use. However, during preparation the task team will review all land parcels, along with the status of PLN’s agreements with each district. The task team will confirm the evidence of formal land ownership by the district, and determine if the land was acquired more than two years prior to project preparation.

A tracer study will be required if the land was acquired within the prior 2 years. In addition, any land that is acquired during project implementation will require an Abbreviated or Full LARAP. For these subprojects, a Land Acquisition and Resettlement Policy Framework (LARPF) will be prepared by PLN.

Safety of Dams OP/BP 4.37
TBD
In the event mini-hydros are to be included in the current loan, none of these projects will include large dams and therefore no dam safety panel will be required. The preparation process for any mini-hydros will be undertaken on the basis of the ESMF that is to be prepared by appraisal.

Projects on International Waterways OP/BP 7.50
No
While the sub-project locations are yet to be confirmed, the sites will be selected in a manner that none of the sub-projects are located in the watershed of any international waterway.

Projects in Disputed Areas OP/BP 7.60
No
None of the potential sub-projects will be located in a disputed area.

III. SAFEGUARD PREPARATION PLAN

A. Tentative target date for preparing the PAD Stage ISDS: 31-Oct-2012

B. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the PAD-stage ISDS:

1. Environmental and Social Management Framework (ESMF), which will provide guidance for the preparation of EMPs i.e. a single EMP for all Solar PVs, and a single EMP for small mini-hydros (if included) in the first loan; stand-alone individual EMPs for the remaining solar PV and mini-hydro locations with safeguards issues; roles and responsibilities of the institutions, and timing of the subprojects.

2. Land Acquisition and Resettlement Policy Framework (LARAF) which will provide guidance for preparation of LARAPs (if needed), roles and responsibilities of the institutions and timing of the subprojects.

3. Indigenous Peoples Planning Framework (IPPF) which will provide guidance for the preparation of the Indigenous Peoples Plan (if needed), roles and responsibilities of the institutions and timing of the subprojects.

4. LARAPs for all subprojects in the first loan that involve land acquisition will be prepared and appraised during project preparation.

5. Due diligence will be carried out for subprojects for which land has already been acquired by PLN either directly or from local governments. The due diligence will identify the timing and procedures according to which PLN or local governments had acquired the land.

6. An Indigenous Peoples Plan (IPP) for those subprojects that trigger the Indigenous Peoples Policy in the first loan will be prepared and appraised during project implementation in accordance with the IPPF.

All three frameworks (ESMF, LARAF and IPPF), the EMPs and LARAPs will be prepared and submitted to the Bank by end-September 2012.

IV. APPROVALS

Task Team Leader: Name: Dhruva Sahai

Approved By:

Regional Safeguards Coordinator: Name: Panneer Selvam Lakshminarayanan (RSA) Date: 03-Apr-2012

Sector Manager: Name: Franz R. Drees-Gross (SM) Date: 25-Mar-2012

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1 Reminder: The Bank’s Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.