**Integrated Safeguards Data Sheet (ISDS)**

**Section I – Basic Information**

Date ISDS Prepared/Updated: November 10, 2004

### A. Basic Project Data

| Country: Yemen | Project ID: P091113 |
| Project: Rural Electrification and Renewable Energy Development | TTL: Somin Mukherji |
| Total project cost (by component): US$1.8 million |

| Appraisal Date: N/A | IBRD Amount ($m): |
| Board Date: N/A | IDA Amount ($m): |
| | GEF Amount ($m): 0.998 |
| | PCF Amount ($m): |
| | Miscellaneous Funds GTZ – US$0.250m, GOY-US$0.200m, JICA- US$0.350m (under discussion) |

| Managing Unit: MNSIF | Sector: Electricity |
| Lending Instruments: GEF Medium Sized Grant |

**Is this project processed under OP 8.50 (Emergency recovery)?** No

**Environmental Category**: B

### A.2. Project Objectives

The main objective of the Project is to overcome policy and institutional barriers to rural electrification and renewable energy development.

### A.3. Project Description

The Project comprises two main components: (a) Rural Electrification and Renewable Energy Policy Support Component – Under this component strategies for rural electrification and renewable energy will be developed along with implementation of an appropriate institutional and legal framework; and (b) Renewable Energy Market Assessment and Awareness Component – Under this component, wind and solar resource assessments will be undertaken and business demonstration projects will be implemented in order to create an enabling environment for renewable energy development.

### A.4. Project Location and salient physical characteristics relevant to the safeguard analysis:

The Project mainly comprises Technical Assistance activities such as studies and capacity building/training. Pilot implementation of environmentally friendly technologies such as solar and wind will be carried out. It is likely that household solar home systems (SHS) will be the technology of choice. Approximately, 150 of such systems are likely to be installed in three different areas yet to be identified. At the household level (typically 40W system), there are virtually no adverse environmental impacts of the SHS. However, disposal of batteries used in conjunction with SHS poses a potential environmental hazard that will be addressed through an Environmental Management Plan that included in the Terms-of-reference of the Solar Market Development activity. Similarly, two small wind turbines will be installed for demonstration purposes. Given the small size 100-400 kW each, it is unlikely that there would be any significant adverse environmental impact. These demonstration wind schemes will be installed on Government owned land which will be within 160 square feet.

### B. Check Environmental Category

Comments: The project mainly consists of technical assistance and planning for pilot, renewable energy activities (solar and wind). A brief Environmental Management Plan will be prepared to address the small issues that might arise from technology installations being undertaken on a pilot basis. It should be noted that all of these installations are environmentally friendly, renewable energy technologies.

### C. Safeguard Policies Triggered

| Environmental Assessment (OP/BP 4.01) | [X] | [ ] |
| Natural Habitats (OP/BP 4.04) | [ ] | [X] |
| Pest Management (OP 4.09) | [ ] | [X] |
| Cultural Property (draft OP 4.11 - OPN 11.03 -) | [ ] | [X] |
| Involuntary Resettlement (OP/BP 4.12) | [ ] | [X] |
| Indigenous Peoples (OD 4.20) | [ ] | [X] |
Section II – Key Safeguard Issues and Their Management

D. Summary of Key Safeguard Issues

D.1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts.

The pilot projects to be implemented will be utilizing environmentally friendly renewable energy resources. The key safeguard issues will be disposal of batteries in case of SHS and possible environmental impacts of wind turbine installation could include clearing of vegetation, interference with bird migratory paths etc. These will be addressed through a short Environmental Management Plan (EMP) to be prepared as part of project preparation. There will not be any large scale and/or irreversible environmental impacts. There will be no land acquisition necessary for installation of the demonstration wind schemes as they will be placed on Government land.

D.2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area.

None

D.3. Describe the treatment of alternatives (if relevant)

For SHS battery disposal, a recycling plan including a buy back incentive will be prepared during prior to the implementation of the related pilot activities. In this regard World Bank experience from Bangladesh and Sri Lanka will be useful. Both these countries have on-going Bank/GEF funded SHS programs. For wind turbines, the feasibility studies will include environmental and social assessment and mitigation plans.

D.4. Describe measures taken by the borrower to address safeguard issues. Provide an assessment of borrower capacity to plan and implement the measures described.

Country experience indicates Borrower willingness and ability to carry out necessary mitigative measures.

D.5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

Key stakeholders include communities participating in the SHS program, local authorities, Ministry of Electricity, the environmental Protection Authority (as the GEF Focal Point), solar equipment dealers, and Public Electricity Corporation. Essential stakeholder consultations are planned during implementation and with the help of project co-financer GTZ.

F. Disclosure Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Date</th>
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<tbody>
<tr>
<td>Environmental Management Plan:</td>
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<tr>
<td>Date of receipt by the Bank</td>
<td>11/21/04</td>
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<tr>
<td>Date of “in-country” disclosure</td>
<td>11/21/04</td>
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<tr>
<td>Date of submission to InfoShop</td>
<td>11/21/04</td>
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<tr>
<td>For category A projects, date of distributing the Executive Summary of the EA to the Executive Director</td>
<td>Not Applicable</td>
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<td>Resettlement Action Plan/Framework/Policy Process:</td>
<td>Not applicable</td>
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<tr>
<td>Date of receipt by the Bank</td>
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<tr>
<td>Indigenous Peoples Development Plan/Framework:</td>
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* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties’ claims on the disputed areas
**Pest Management Plan:**
- Date of receipt by the Bank: Not Applicable
- Date of “in-country” disclosure: Not Applicable
- Date of submission to InfoShop: Not Applicable

**Dam Safety Management Plan:**
- Date of receipt by the Bank: Not Applicable
- Date of “in-country” disclosure: Not Applicable
- Date of submission to InfoShop: Not Applicable

If in-country disclosure of any of the above documents is not expected, please explain why.

### Section III [w12] – Compliance Monitoring Indicators at the Corporate Level

**OP/BP 4.01 - Environment Assessment:**
- Does the project require a stand-alone EA (including EMP) report? No
- If yes, then did the Regional Environment Unit review and approve the EA report? No
- Are the cost and the accountabilities for the EMP incorporated in the credit/loan? No

**OP/BP 4.04 - Natural Habitats:**
- Would the project result in any significant conversion or degradation of critical natural habitats? No
- If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank? No

**OP 4.09 - Pest Management:**
- Does the EA adequately address the pest management issues? No
- Is a separate PMP required? No
- If yes, are PMP requirements included in project design? No

**Draft OP 4.11 (OPN 11.03) - Cultural Property:**
- Does the EA include adequate measures? No
- Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on physical cultural resources? No

**OD 4.20 - Indigenous Peoples:**
- Has a separate indigenous people development plan been prepared in consultation with the Indigenous People? No
- If yes, then did the Regional Social Development Unit review and approve the plan? No
- If the whole project is designed to benefit IP, has the design been reviewed and approved by the Regional Social Development Unit? No

**OP/BP 4.12 - Involuntary Resettlement:**
- Has a resettlement action plan, policy framework or policy process been prepared? No
- If yes, then did the Regional Social Development Unit review and approve the plan / policy framework / policy process? N/A

**OP/BP 4.36 - Forests:**
- Has the sector-wide analysis of policy and institutional issues and constraints been carried out? No
- Does the project design include satisfactory measures to overcome these constraints? No
- Does the project finance commercial harvesting, and if so, does it include provisions for certification system? No

**OP/BP 4.37 - Safety of Dams:**
- Have dam safety plans been prepared? No
- Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank? No
- Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training? No

**OP 7.50 - Projects on International Waterways:**
- Have the other riparians been notified of the project? No
- If the project falls under one of the exceptions to the notification requirement, then has this been cleared with the Legal Department, and the memo to the RVP prepared and sent? No
- What are the reasons for the exception? Please explain: .........................
- Has the RVP approved such an exception? No
**OP 7.60 - Projects in Disputed Areas:**
Has the memo conveying all pertinent information on the international aspects of the project, including the procedures to be followed, and the recommendations for dealing with the issue, been prepared, cleared with the Legal Department and sent to the RVP?  No
Does the PAD/MOP include the standard disclaimer referred to in the OP?  No

**BP 17.50 - Public Disclosure:**
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?  Yes
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?  Yes

**All Safeguard Policies:**
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of the safeguard measures?  Yes
Have safeguard measures costs been included in project cost?  Yes
Will the safeguard measures costs be funded as part of project implementation?  Yes
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures?  Yes
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?  Yes

<table>
<thead>
<tr>
<th>Signed and submitted by:</th>
<th>Somin Mukherji</th>
<th>Date Nov 12, 2004</th>
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<tbody>
<tr>
<td>Task Team Leader:</td>
<td>John Bryant Collier</td>
<td>Date: Nov 12, 2004</td>
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<tr>
<td>Project Safeguards Specialist 1:</td>
<td>Meskerem Bhrane</td>
<td>Date: Nov 12, 2004</td>
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<tr>
<td>Project Safeguards Specialist 2:</td>
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<td>Project Safeguards Specialist 3:</td>
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<tr>
<th>Approved by:</th>
<th>Sherif Kamel F. Arif</th>
<th>Date 17 Nov, 2004</th>
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<tbody>
<tr>
<td>Regional Safeguards Coordinator</td>
<td>Tjaarda P. Storm Van Leeuwen</td>
<td>Date 17 Nov, 2004</td>
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<tr>
<td>Comments</td>
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<td>Sector Manager</td>
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Somin Mukherji
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Guidance for achieving compliance with Bank’s ten safeguard policies is provided in Sourcebooks and Guidebooks accessible through the “safeguards” Intranet site. Task teams are invited to use these regularly updated resources.

The present version of the ISDS is filled out at the PAD preparation stage. It expands from the ISDS prepared at PCN stage and is updated as needed while the project concept evolves.

- The ISDS is a report within the new Project Portal System (PP); some of its content extracts from the relevant sections of the PAD, and enables the user to edit and review specific sections.
- The ISDS is filled out by the Task Team. The ISDS should be completed in close collaboration with the project team environmental and social specialists.
- Prior to authorization to appraise the Task Team is responsible for submitting the updated/completed ISDS to the InfoShop with all required signatures.
- The ISDS includes relevant disclosure dates for specific safeguard documents that are updated during the project cycle.
- In those sections where comments can be provided, please provide sufficient detail. At the PAD stage, there should logically be very little uncertainty about the project design, and the “TBD” (to be determined) response, which assumes the section will be completed at a later date, should best be avoided altogether.

Project statistics (A.1), Project Objectives (A.2) and Project Description (A.3) can be downloaded automatically from the PAD. Any changes in section A.1. Project Statistics must be made directly through SAP.

As required by OP/BP 4.01 on Environmental Assessment

Include geographical information related to the project components. Describe key environmental and social characteristics of the area of project influence and populations likely to be affected. Identify protected areas/sites, critical natural habitats, and culturally or socially sensitive areas/sites.

The EA category (as required by OP/BP 4.01) is imported from the SAP. If there are subsequent changes to the EA category, they must be made directly through SAP. See guidance on EA categorization in OP/BP 4.01 and in the EA Sourcebook Updates – accessible at the “safeguards” Intranet site – as well as with regional safeguards colleagues.

This section is imported from the PAD. Each policy designation of yes, no for the ISDS can only be modified by going back to the specific PAD and revising the policy table. For a brief summary of policy objectives, triggers and requirements click on the policy name to be directed to the Safeguards Matrix. For full text of each policy, click on the policy reference number to be directed to the Operational Manual.

Please fill in all relevant questions.

Potential project impacts associated with each of the triggered polices are explained in this section. Please follow the order of each safeguard triggered as it appears in the Policy Table in section C, above.

Include a summary of analysis (or the procedures to be undertaken for arriving at this analysis) for major environmental impacts and social issues.

Include baseline or background environmental and/or social conditions when possible. Discuss both direct and indirect impacts that cover large areas, have a high degree of severity, are considered to last for a long period and are irreversible.

Identify proposed mitigation measures that will reduce or eliminate all major impacts to acceptable levels.

Alternative analysis in EA is designed to bring environmental and social considerations into the upstream stages of project development, as part of project identification and earlier if possible as an integral part of the planning process. For critical impacts, identify the procedure for addressing an analysis of
alternatives focusing on issues such as cost-effectiveness, engineering design, technologies, operational alternatives and/or environmental benefits. Refer to Environmental Assessment Sourcebook Update No. 17 [click here] for detailed guidance.

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[w10] Provide summary information on what safeguard documentation will be produced within the discussion of appropriate safeguards. If information is not available, describe steps to be taken to obtain necessary data.

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[w11] If needed, check the Bank’s disclosure policy in BP 17.50. The column for date represents an actual date when generated from the PAD.

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[w12] Section III to be filled out only for the safeguard policies triggered.