

Environmental Assessment and Review Framework

Document Stage: Final
ADB Project Number: 42182
March 2009

**Viet Nam: Renewable Energy Development and Network
Expansion and Rehabilitation for Remote Communes
Sector Project**

Prepared by: Power Companies 1, 2, 3, Viet Nam Electricity

ENVIRONMENTAL ASSESSMENT AND REVIEW FRAMEWORK

A. Environmental Selection Criteria for the Future Subprojects

1. Considering the potential environmental impacts of the future subprojects, with specifics below in this Framework detailing the relevant Asian Development Bank (ADB) and Government of Viet Nam (GOV) requirements and regulations, the following criteria will be adopted for selection of the future subprojects to be included in the Renewable Energy for Remote Commune (RERC) Sector Project:

- (i) The subprojects shall only involve activities that follow all the government regulations.
- (ii) The subproject shall not involve activities located in the core zone or, as much as possible, in or near the buffer zone of designated special use forests consisting of national parks, protected landscapes and nature reserves (also known as nature conservation areas), and other protected areas where the proposed development is prohibited.
- (iii) The subproject shall, as much as possible, not involve activities located in or near ecologically sensitive and significant areas as recognized by the Government or any area that is internationally significant.
- (iv) The subproject shall, as much as possible, not involve activities located in or near any cultural heritage and historical sites designated by the Government or by international agencies such as UNESCO.

B. Overview of Type of Subprojects to be Assessed

2. The RERC sector project will be prepared in a manner consistent with the government's strategy for electrification of remote communes and islands through investments by provincial authorities under the supervision and coordination of the Ministry of Industry and Trade (MOIT). The executing agencies (EA) are Power Company No. 1 (PC1), Power Company No. 2 (PC2) and Power Company 3 No. (PC3) of Viet Nam Electricity. The proposed sector loan will focus on communes that are considered too remote to be connected to the national grid using renewable energy such as micro and mini hydropower (0.5 to 7.5 MW capacity). The sector loan will also finance grid extensions consisting of medium and low voltage transmission and distribution lines.

3. **Table 1** presents potential micro and mini hydro sites. During project implementation a final list will be presented, including projects from other provinces acceptable to ADB.

4. The construction of the micro and mini hydropower plants and grid extensions will entail vegetation loss. However, adverse impacts on biodiversity are expected to be minor since the area to be cleared is relatively small. Further, the subprojects shall not be located in ecologically protected areas as mentioned in paras. 1 and 6. Other potential impacts associated with micro and mini hydropower plants include siltation due to surface run-off, erosion of exposed areas, and elevated noise levels due to site works and equipment operation. Operation impacts may include change in stream hydrological regime that could influence the aquatic ecosystems in terms of water quality and population structure of aquatic organisms. Given the nature and magnitude of the proposed hydro power projects, however, such impacts are not expected to be significant and mitigation measures shall be implemented to minimize negative effects.

Table 1. Potential future subprojects (micro and mini hydropower)

No	Name of site	Name of river (stream)	Location (Commune - District)	Capacity (kW)	Distance to the national grid (km)
Dien Bien Province					
1	Na Say	Nam Sat	Na Say - Tuan Giao	1,000	7.0
2	Ta Con	Huoi Anh	Chieng Sinh - Tuan Giao	110	0.0
3	Na Son (Na Phat)	Su Lu	Na Phat - Dien Bien Dong	200+2000	0.0
4	De Bau	De Bau	Trung Thu - Tua Chua	3,000	1.0
5	Muong Luan	Na Ca - Ma	Muong Luan - Dien Bien Dong	1,000	1.0
6	Muong Mun	Na Chua	Muong Mun – Tuan Giao	840	1.5
7	Nam Ngam	Nam Ngam	Phu Nhi - Dien Bien Dong	3,200	0.8
8	Sinh Phing	Ta La Cao	Sinh Phing - Tua Chua	1200	0.5
9	Nam Huoi Khu	Ho Khau Hu	Thanh Nua - Dien Bien	3,000	1.0
Lai Chau Province					
1	Nam Nghe	Nam Nghe	Hua Bum-Muong Te	1,700	12.0
2	Nam Ha B	Nam Ha	Kan Ho – Muong Te	1,000	12.0
3	Nam Ma 1	Nam Ma	Mu Ca – Muong Te	2,250	60.0
4	Nam Han	Nam Han	Muong Te – Muong Te	2,830	30.0
5	Nam Ngoc	Nam Ngoc	Muong Te – Muong Te	1,800	40.0
6	Nam So	Nam So	Nam So – Than Uyen	2,000	20.0
7	Nam Lau	Nam Lau	Pha Mu – Than Uyen	1,640	10.0
8	Nam Tam 1	Nam Ma	Nam Tam – Sin Ho	1,000	10.0

C. Environmental Assessment Requirements

5. Any of the follow-up subproject will be screened, classified, and assessed based on ADB's Environmental Assessment Guidelines (2003) and GOV 2005 Law on Environmental Protection (LEP) and be reviewed and approved by ADB. Given the above criteria and considering that only small energy developments such micro to mini hydropower plants with capacities ranging from 0.5 MW to 5 MW as well as grid extensions consisting of low and medium voltage transmission and distribution lines are proposed, the Project is not anticipated to have environmental category A subprojects. Nonetheless, subprojects will be categorized environmentally depending on their potential impacts. Using ADB's Rapid Environmental Assessment form for power transmission (Annex 1) and hydropower (Annex 2) projects, these will be screened and categorized initially, and be confirmed by ADB internal review with consultation with concerned GOV environmental agency. Environmental assessment reports to be prepared will consist of initial environmental examination (IEE) for environmental category B subprojects. The IEEs shall be prepared in accordance with ADB's Environmental Policy (2002) and Environmental Assessment Guidelines (2003). For Category C subprojects, i.e., those that are unlikely to have adverse environmental impacts, no environmental assessment (EIA or IEE) is required, although environmental implications will still be reviewed.

6. Subprojects considered as environmental category A shall be excluded from the Project. A subproject is category A if:

- (i) the subproject could have significant adverse environmental impact (based on ADB's policy definition for Category A projects) and requires complex mitigation

measures, which need to be prepared through an in-depth assessment and detailed mitigation measures and monitoring program; and

- (ii) the subproject will have an impact on ecologically sensitive area(s) by passing through the core zone of any designated special use forests consisting of national parks, protected landscapes and nature reserves (also known as nature conservation areas); areas recognized by the Government or are of international significance (such as protected wetland designated by the Wetland Convention); cultural heritage and historical sites designated by the Government or UNESCO; and other protected areas where the proposed development is prohibited.,

D. GOV Environmental Assessment Process

7. According to GOV's No. 21/2008/ND-CP dated 28 February 2008 (Amending and supplementing a number of articles of the government's decree No. 80/2006/ND-CP dated August 9, 2006, detailing and guiding the implementation of a number of articles of the law on environmental protection) and Article 24 of the LEP, environmental impact assessment (EIA) reports are required for thermal power projects with a capacity of 30 MW and over, hydropower plants with reservoir areas of 300,000 m³, and high voltage transmission lines with a length of over 100 km. Power generation projects with lower capacities such as mini-hydropower plants as well as low and medium voltage transmission and distribution lines proposed to be implemented under the Project need only to submit written commitment on environmental protection (CEP). An EIA will be produced should any of the subprojects have a reservoir volume greater than 300,000 m³. Circular No. 08/2006/TT-BTNMT (2006) issued by the Ministry of Natural Resources and Environment entitled 'Guidelines in Strategic Environmental Assessment (SEA), Environmental Impact Assessment (EIA) and CEP' gives detailed guidelines for SEA, EIA and CEP report preparations, review and appraisal, monitoring, and confirmation of implementation of the mitigation measures.

8. As indicated in Article 26 of the LEP, the district PCs shall approve the CEPs. In certain cases, it may also authorize the commune PCs to undertake such task. Processing of written CEP approval shall not exceed five working days from receipt of the written CEP. The district's Section on Natural Resources and Environment (SONRE) is under the jurisdiction of the district or town's PC. SONRE is responsible for land, water, mineral resource and environmental management in the district/town territory. All written CEP of subprojects located in the territory of the district or town are reviewed by SONRE before submission to PC Chairman for approval. SONRE is also responsible for conducting environmental monitoring during project implementation. However, given the current limited capacity of district level SONREs to undertake evaluation of environmental assessment reports, MOIT shall coordinate with the Provincial People's Committees (PPC) to ensure that the respective SONREs are assisted by provincial DONREs during the review and approval of written CEPs. EIA reports shall be submitted to the district PCs for approval.

9. Circular 08/2006/TT-BTNMT requires the project proponent to submit 3 copies of CEP report, 1 copy of feasibility study report and a letter requesting the district's PC to approve the CEP.

E. Staffing Requirement and Budget for Environmental Assessment

10. A piggyback technical assistance (TA) project will be funded by ADB for the feasibility study, technical design and safeguards requirements of future subprojects. Environmental

consultants shall be recruited under the TA to prepare the environmental assessment reports for each subproject consistent with this EARF. The TA will have an estimated budget of USD 2.5 million and will be implemented from June 2009 to June 2013. The TA environmental consultants shall coordinate with the executing agencies during IEE preparation. The cost for preparation of each IEE will include among others remuneration for National Environmental Specialist; per-diem and transportation; data collection, field assistant, sample analysis; and report reproduction, communication, consultations.

F. Review and Assessment Responsibilities and Authorities

11. To prepare the follow-up subprojects and to comply with ADB's Environment Policy (2002) and the GOV Law on Environmental Protection (2005), the Ministry of Industry and Trade (MOIT), the EAs or executing agencies for the Project (PC1, PC2 and PC3), and ADB agreed on the following:

12. MOIT has assigned to EVN the following responsibilities that will be implemented by the Project's:

- (i) Coordinate with the environmental consultant(s) to be recruited under the piggyback TA (see para. 10) to undertake the following tasks in the preparation of subproject IEE:
 - Prepare an environmental screening checklist and classify the subprojects according to ADB requirements. Submit the environmental screening checklist to ADB for approval.
 - For each subproject, prepare an IEE that complies with the ADB Environmental Assessment Guidelines (2003). The IEEs shall be prepared in English and the environmental mitigation and monitoring tables as well as other sections that will be incorporated in the bidding documents and subproject CEPs shall be translated into Vietnamese.
- (ii) Undertake initial review of the IEEs.
- (iii) Submit the IEE to ADB for review as part of the approval of subproject.
- (iv) Coordinate with PPCs to ensure that district SONREs are assisted by provincial DONREs in the review and approval of CEPs.
- (v) Obtain Government environmental permits and clearances for each subproject.
- (vi) Ensure that all environmental regulatory clearances are obtained before starting civil works for the subproject.
- (vii) Submit to ADB all the required clearances/certificates obtained from the relevant Government authorities.
- (viii) Ensure that the required mitigation measures during construction are included in the bidding documents.
- (ix) Ensure that contractors have access to the IEE of the subproject.
- (x) Ensure that environmental mitigation measures and monitoring program for each subproject are properly implemented.
- (xi) Submit semi-annual reports on implementation of the environmental mitigation measures.
- (xii) Conduct consultations with groups affected by the proposed project and with local non-government organizations (NGOs) during preparation of the environmental assessment reports and document these in the IEE.

13. ADB will have the following responsibilities:
- (i) Through the piggyback TA, recruit environmental consultant(s) to prepare the IEE for each subproject
 - (ii) Review and approve the IEEs as a basis for the subproject's approval.
 - (iii) Publicly disclose the summary IEE (for category B-sensitive subprojects) via ADB website.
 - (iv) Monitor the implementation of environmental mitigation measures as part of overall project review mission.

G. Due Diligence to Ensure Compliance with the ADB Environment Policy

14. EAs shall ensure that ADB is given access to undertake environmental due diligence for all subprojects. However, MOIT has the main responsibility for undertaking environmental due diligence and monitoring of the implementation of environmental mitigation measures for all subprojects. The due diligence report as well as monitoring reports on implementation of the environmental mitigation measures shall be documented and shall be available to the public, if requested.

H. Public Disclosure

15. MOIT and ADB agree that in disclosing the environmental document to the public, (i) MOIT is responsible for ensuring that all environmental assessment documentation, including the environmental due diligence, public consultation and monitoring reports, are properly and systematically kept as part of project-specific record; (ii) all environmental documents are subject to public disclosure, and therefore, shall be made available to public; (iii) in case there are category B-sensitive subprojects, the summary IEE (SIEE) will be disclosed to the public through ADB's website 120 days before the subproject is approved. The SIEE shall be reviewed by ADB before it is disclosed to the public; and (iv) MOIT will ensure that public consultations, particularly with project affected persons, are undertaken adequately during the IEE preparation consistent with ADB requirements.