

**COMPLIANCE REPORT ASSESSING APPLICATION OF ARTICLE 11 b (6) OF EMISSIONS TRADING DIRECTIVE  
TO HYDROELECTRIC PROJECT ACTIVITIES EXCEEDING 20 MW**

*(Final Version of 17 November 2008)*

**Section 1: Description of the project**

1: Summary description of the CDM project activity	Please complete
Name of the project	
Project ID Number	
Location	
Name of the watercourse	
Date of completion of the Compliance Report	
<b>1.1. Project area</b>	
1. Description of the watershed: <ul style="list-style-type: none"> <li>- Political and administrative boundaries</li> <li>- Communities located along</li> <li>- Principal land use patterns</li> <li>- Existing and planned river flow modifications</li> <li>- Average annual runoff (m<sup>3</sup>)</li> </ul>	
2. Average annual river flow (m <sup>3</sup> /s)	

3. Average annual river runoff before and after project's implementation (m <sup>3</sup> )	
4. State briefly what impacts other hydrological projects have had on the river basin within 50 km (untouched, affected, significantly affected by other activities).	
5. Ecological description of the surroundings (forest, cultivated land, wasteland, cultural heritage sites etc.) conservation value	
<b>1.2. Project-related activities</b>	
1. Type of water infrastructure (i.e. storage reservoir, run-of-river, other)	
2. Related infrastructure being built as part of the project (i.e. roads, transmission lines, bridges)	
3. Installed generation capacity (MW)	
4. Load factor	
5. Average annual energy production (MWh)	
6. What role does the project play in the national/regional electricity supply (base load, peak load, load balancing)	

services for the grid, support for intermittent renewables, etc.)?	
7. Estimated annual emission reduction potential (tCO <sub>2</sub> e)	
8. At what stage is the project's construction at the time of this application?	
9. What other direct purposes does the project serve (irrigation, flood control, water storage for drought protection, water-based transport, leisure facilities, aquaculture, industrial and municipal water supply, etc)?	
<b>1.3. Project components</b> <b>Water-flow: structures and changes</b>	
1. Production capacity-submerged area (W/m <sup>2</sup> )	
2. Retention structure/retarding structure (if present)	
3. Type of water diversion	
4. Length of diversion	
5. Type of water inlet	
6. Reservoir (if present)	

7. Dam height (from the foundation)	
8. Crest length	
9. Reservoir area at average water level	
10. Total reservoir capacity (m <sup>3</sup> )	
11. Backwater length	
12. Submerged area in total	
13. Submerged residential area	
14. Submerged farmland/grassland	
15. Number of displaced inhabitants	
16. Production capacity/submerged area(W/m <sup>2</sup> )	

## Section 2: Assessment of compliance with the WCD criteria

Please complete this form with full explanations for all items. If a criterion is not relevant to the project, please explain why.

CRITERIA			
1. Gaining Public Acceptance	Description	Sources <sup>1</sup>	Validator's Assessment
<b>1.1. Stakeholder consultation</b> <ol style="list-style-type: none"> <li>1. Describe how the relevant stakeholders were identified.</li> <li>2. Are any of these people minority groups, especially indigenous people and if so, what special efforts were taken to identify and meet their needs?</li> <li>3. How many people have to be resettled due to the project?</li> <li>4. Resettled people/annual energy production (number/GWh).</li> <li>5. How many people were otherwise affected by the project (e.g. through loss of land, reduced productivity of fishing or hunting, etc.)?</li> <li>6. Describe how the affected local people and other relevant stakeholders have been informed and involved in the</li> </ol>			

<sup>1</sup> Such as process documentation, stakeholders and issues identification, consultation strategies, resources planning, compensation plans, timetables, information sharing, written agreements with stakeholders, records of interviews, results of surveys/polls, minutes of meetings of the Stakeholders Forum, project documentation, Environmental Impact Assessments, documents related to local spatial planning, government and local authorities permits and agreements, description of methodologies used, decommissioning plans (where appropriate), other related environmental impact and social impact studies, etc.

<p>decision-making process of building the power plant.</p> <p>7. Describe how the affected local people and relevant stakeholders have been informed about the impacts of the project on their quality of life.</p> <p>8. How have the affected local and indigenous communities participated in the decision-making process?</p> <p>9. How will the economic and social impacts of the project on the affected local communities, indigenous people and/or other relevant stakeholders be addressed?</p> <p>10. How do compensation and benefit agreements correspond with the identified needs and rights of the stakeholders negatively affected <u>upstream and downstream</u> due to the project?</p> <p>11. Was a Stakeholders Forum held with a broad local community participation (based on a customary and national law)? Describe the process and its outcome, and the response of project developer, local and national authorities?</p>			
<p><b>1.2. Transparency.</b></p> <p>1. Was key project documentation (e.g., social and environmental impact assessments) made publicly available</p>			

<p>before a decision to start construction was made?</p> <p>2. In what form was project documentation made available to stakeholders? Was it the original EIA etc. or was it in another form e.g. , a summary of positive and negative effects of the hydrological construction.</p> <p>3. How many of the total number of stakeholders have had access to the key documentation and have been actively involved?</p> <p>4. Is there a negotiated agreement between the stakeholders and project owner(s)? If so, is it publicly available?</p>			
<b>Validator's Conclusions concerning Priority 1:</b>			
<b>2. Comprehensive Options Assessment</b>			
<p><b>2.1 Needs</b></p> <p>1. What priority is given to hydropower in <b>national development or energy planning</b> (e.g. relevant government decisions)?</p> <p>2. What are the needs for hydropower at regional and local level?</p> <p>3. What are the regional/national supply needs of the electric system</p>			

<p>(renewable base load, peak load or load balancing of the grid, support of intermittent renewables)?</p> <p>4. Describe safeguards for equitable access to water resources. How do hydropower projects contribute to efficient water resources management?</p> <p>5. Does this hydropower project provide financial incentives to develop a multi-purpose project?</p>			
<p><b>2.2. Alternatives</b></p> <p>1. Describe the examination of alternatives to the project that have been considered (include details of feasibility studies and do-nothing options analysis that have been conducted).</p> <p>2. Have stakeholders been involved in the identification of the options? Describe process and outcome of that involvement.</p> <p>3. What are the main reasons behind the project choice and site selection (social, environmental, economic, and technical)?</p> <p>4. What are the consequences of non-action for the local and global environment?</p> <p>5. On the project assessment level,</p>			



describe project variants and types of technology considered in comparison with the selected option.			
<b>Validator's Conclusions concerning Priority 2:</b>			
<b>3. Addressing Existing Dams/hydroelectric projects</b>			
<ol style="list-style-type: none"> <li>1. For hydroelectric projects with dams, please describe the national requirements and routines for monitoring and reporting regarding: <ul style="list-style-type: none"> <li>- emergency warning,</li> <li>- sediment management,</li> <li>- safety system,</li> <li>- maintenance system,</li> <li>- environmental impact,</li> <li>- social impact,</li> <li>- implementation of compensation agreements.</li> </ul> </li> <li>2. For non-dam projects, describe details of the continuous monitoring of the project (environmental and quality assurance).</li> <li>3. How have relevant outstanding social and environmental issues from existing dams/hydroelectric projects in the river basin been addressed?</li> <li>4. Have national regulations been enforced for existing dams and what can be concluded with regard to</li> </ol>			

compliance? 5. Will the implementation of safety measures and evacuation plans be independently audited?			
6. Provisions for maintenance and decommissioning  - What provisions have been made for maintenance and refurbishment (eg. a maintenance and refurbishment fund)?			
- What arrangements are made for decommissioning at the end of the plant lifetime, if any (e.g. decommissioning set aside fund)?			
- Describe provisions for emergency drawdown and decommissioning.  - Are they sufficiently flexible to accommodate changing future needs and values, including ecosystem needs and ecosystem restoration (Guideline 12)?			
- Does the licence for project development define the responsibility and mechanisms for financing decommissioning costs?			
- Describe economic, environmental,			

social and political factors that may point against future decommissioning, if this has been recognised as the best solution.			
<b>Validator's Conclusions concerning Priority 3:</b>			
<b>4. Sustaining Rivers and Livelihoods</b>			
<b>4.1. Water use ratio<sup>2</sup></b>			
<p>Water use ratio (ratio of natural flow, agricultural water, industrial water, domestic water...) including:</p> <ol style="list-style-type: none"> <li>1. population of the river basin area (<math>10^6</math> inhabitants);</li> <li>2. natural mean flow (<math>\text{km}^3/\text{year}</math>);</li> <li>3. demand (<math>\text{km}^3/\text{year}</math>);</li> <li>4. water use ratio (%);</li> <li>5. comparison of water demand with natural mean flow;</li> <li>6. storage capacity (<math>\text{km}^3</math>);</li> <li>7. annual water consumption by type of users (<math>\text{hm}^3/\text{year}</math>): agricultural and farming, domestic use, industrial use</li> </ol>			
<b>4.2 Impact Assessment</b> ( <i>Note: both positive and negative impacts should be included here</i> )			

<sup>2</sup> Water Use Ratio - an environmental indicator which refers to the withdrawal of water for irrigation, industry, household use... A ratio of 25% or higher is generally an indicator of water stress. Important water demanding activities affect seriously its quantity and in consequence the availability of water resources. Some of these driving forces are urbanization, industry and agricultural production. The increase in impervious surface has the effect of reducing water infiltration and aquifer recharge

<p>What Impact Assessments have been carried out and on which regulations were they based on? – Describe the major impacts in each of the following categories and the mitigation measures for negative impacts:</p>			
<p><b>4.2.1. Environmental Impacts</b></p> <p>Describe environmental impacts of the project (including impact on water quality (temperature, oxygen, etc.), soil, air quality, GHG emissions, <b>biodiversity</b>, habitats, risk of erosion caused by inundation etc.)</p>			
<p><b>4.2.2. Environmental Flow Assessment</b></p> <ol style="list-style-type: none"> <li>1. Describe how the environmentally safe minimum flow has been determined.</li> <li>2. Describe the measures taken to minimise the impact of reduced flow in the affected river.</li> <li>3. Describe the measures taken to maintain ecosystems, productive fisheries and other aqua-cultures downstream and upstream.</li> </ol>			
<ol style="list-style-type: none"> <li>4. Describe the activities the project developer will undertake before flooding the land (e.g. clearing of vegetation or other preparations).</li> </ol>			
<ol style="list-style-type: none"> <li>5. Describe any other compensatory measures addressing environmental impacts of the project</li> </ol>			

<p><b>4.2.3. Social Impact Assessment</b></p> <p>1. Describe social impacts of the project (including resettlement, impacts on other land or river use e.g. fishing, agriculture, hunting and use of other types of natural resources and including benefits to individuals and communities)</p>			
<p>2. Describe any identified health impacts due to the project.</p>			
<p>3. Describe impacts on religious and cultural heritage.</p>			
<p>4. Describe the liability provisions safeguarding the implementation of the planned measures.</p>			
<p>5. Is the project planned in a responsible way in order to sustain livelihoods and the environment?</p>			
<p><b>4.3 Cumulative Impacts</b></p>			
<p>Describe the cumulative impacts of all hydrological structures existing in the river basin using variables such as:</p> <p>1. flow regime,</p>			

<ol style="list-style-type: none"> <li>2. water quantity,</li> <li>3. productivity,</li> <li>4. water quality species composition of different rivers in the same river basin</li> </ol>			
<b>Validator's Conclusions concerning Priority 4:</b>			
<b>5. Recognising Entitlements and Sharing Benefits</b>			
<p>Are Mitigation, Resettlement and Development Action Plans (where applicable - including <b>commensurate</b> compensation packages) in place? Provide details:</p> <ol style="list-style-type: none"> <li>1. Demonstrate that the construction of the plant did not lead to worsening of the living conditions of the local residents and resettled families</li> <li>2. Were compensation and benefit agreements planned in consultation with affected groups?</li> <li>3. What standards were the measures based on? (e. g. national standards or other)</li> <li>4. Were the affected people satisfied with the compensation packages?</li> <li>5. <b>Benefits</b> for the affected people (individuals and communities): In what</li> </ol>			

<p>way will the affected local and indigenous population's livelihoods be improved due to the project?</p>			
<p><b>Validator's Conclusions concerning Priority 5:</b></p>			
<p><b>6. Ensuring Compliance</b></p>			
<p><b>6.1. Compliance measures:</b></p> <ol style="list-style-type: none"> <li>1. What will be done to ensure that relevant laws, regulations, agreements (including resettlement and compensation agreements) and recommendations are followed?</li> <li>2. Are the compensation agreements legally binding – through treaties, administrative acts or other safeguards?</li> <li>3. Is the cost of the compensation package included in the financial plan?</li> </ol>			
<ol style="list-style-type: none"> <li>4. Does the project developer already operate other hydroelectric power stations? If so, have there been any conflicts between the project developer and stakeholders related to the development, operation and compensatory measures related to these projects? If so, describe the cause of the conflict and how it was resolved.</li> </ol>			

<p><b>6.2. Monitoring and evaluation during crediting period:</b></p> <ol style="list-style-type: none"> <li>1. Describe conditions in place for monitoring and evaluation of environmental and socio-economic impacts of the project.</li> <li>2. What provisions have been made to ensure that all measures not yet implemented at the time of validation will be put in place as appropriate, and monitored (for example through an independent auditing panel or auditor, or through self-auditing etc.)?</li> </ol>			
<p><b>Validator's Conclusions concerning Priority 6:</b></p>			
<p><b>7. Sharing rivers for peace, development and security.</b></p>			
<p>Does the project have trans-boundary impacts? - If so, give details of agreement(s) between affected countries, considering international recommendations for trans-boundary water projects and describe how this affects the project.</p>			
<p><b>Validator's Conclusions concerning Priority 7:</b></p>			
<p><b>Validator's assessment as to how the project respects the seven strategic priorities outlined in the World Commission on Dams November</b></p>			



**2000 Report “Dams and Development – A New Framework for Decision-Making”**

Name:

Function:

Contact details:

Company/validating entity:

Date of validation of the Compliance Report: