COMPLAINT: PARAVANI HPP
REQUEST NUMBER: 2012/01
Executive Summary

The PCM received a complaint, on December 22\textsuperscript{nd} 2011 from Green Alternative, Georgia relating to the EBRD investment in the Paravani Hydropower Plant, Georgia. EBRD formally responded to the complaint according to the PCM Rules of Procedure on 17\textsuperscript{th} January 2012. The PCM commissioned an eligibility assessment of the complaint and based on the eligibility criteria in the rules of procedure the assessor declared the complaint eligible for a compliance review. In October 2012, Glen Armstrong was appointed as the PCM compliance expert. The PCM review has included a review of public domain project information and EBRD internal documents. A partial translation of the Georgian ESIA was also undertaken. Meetings were held with EBRD environmental and social and investment staff. Meetings were also held with the complainant and the project sponsor and their consultants in Tbilisi and a comprehensive site visit was undertaken.

The project includes the funding of an 87MW run of river hydropower plant on the Paravani River, upstream of its confluence with the Mktvari River in South East Georgia plus a 35km transmission line connecting to the national grid via a converter sub-station at Akhalsikhe. A majority of the power generated will be exported to Turkey. The HPP will divert water from the Paravani River through a 14.2 km tunnel to a powerhouse on the Mktvari River, with the water released 1.5km upstream of the Mktvari/Paravani confluence, some 700m upstream of the village of Khertvisi.

The first and second elements of the complaint allege that the project fails to comply with the EBRD Environmental and Social Policy, in that biodiversity impacts were inadequately addressed in the ESIA. Firstly this relates to potential impacts on the Paravani River ecosystem downstream of the weir due to the alleged selection of an inappropriate flow regime in the absence of validated baseline data. Secondly it alleges that potential impacts of the transmission line on migratory birds of conservation importance have been inadequately addressed. On both counts the PCM expert finds that despite the fact that the issues were to be addressed as part of the Environmental and Social Action Plan, EBRD should have ensured that appropriate studies and analysis had been done in advance of the decision in principle to invest and that EBRD was therefore non-compliant with the ESP.

The third element of the complaint relates to whether the potential for flooding in Khertvisi Village had been adequately addressed as part of the ESIA process. With the water from the Paravani River being discharged 1.5km upstream of the natural confluence it is clear that River levels would be raised. Concerns were raised by local residents during consultation on the ESIA and subsequently flooding studies have been undertaken and the results subjected to public consultation. Some pastures and Islands may be more susceptible to flooding during high water events and appropriate flood defenses in mitigation will be designed. Whilst it would have been better if the issue had been fully resolved earlier in the project design, the matter has been resolved through an appropriate process of analysis and consultation, and was unlikely to be so significant to influence the decision in principle to invest. The PCM expert therefore finds EBRD compliant with their ESP on this issue.

The fourth element of the complaint alleges that the local population was unreasonably denied access to pastures during project construction. Whilst it is apparent that some disruption to access would have been almost inevitable during major rehabilitation of local infrastructure, EBRD has monitored payment of compensation for loss of access to assets. The project sponsor advised that there are no outstanding grievances from local communities and the complainant was unable to provide the names of locally affected people with whom PCM could confidentially communicate. During the PCM site visit to the area no restrictions were in place as far as could be ascertained, though this was after the
road rehabilitation work had been completed. PCM is not therefore able to support a complaint of non-compliance with the ESP.

The fifth element of the complaint relates to whether alternative renewable energy options should have been more extensively assessed. The ESP places a requirement upon EBRD to ensure that appropriate technically and financially viable alternatives are assessed within the ESIA and also that under exceptional circumstances a strategic or regional assessment is undertaken. A strategic assessment of power sector options for Georgia was undertaken by the World Bank in 2007, which in turn informed the EBRD Georgia strategy and the selection of the Paravani HPP project. PCM has determined that these analyses fulfill the requirement for alternatives assessment and provided the strategic rationale for the project. PCM does not therefore support a complaint of non-compliance. It does however conclude that the rationale could have been better represented in the project documentation and that the circumstances under which a strategic assessment should be undertaken and the scope of alternatives analysis required within the ESIA should be more explicit in the ESP.

The sixth element of the complaint relates to whether the project ESIA documentation should have been disclosed in English as well as in Georgian. PCM concludes that to fulfill the stakeholder engagement requirements set out in the ESP that the ESIA should have been made available to relevant stakeholders in an internationally accessible language and not just Georgian. PCM therefore finds EBRD non-compliant with the ESP on this issue. As a separate issue, EBRD was not able to review the ESIA in Georgian, so this would also have facilitated EBRD’s review of the documentation.

PCM has therefore found EBRD non-compliant with its Environmental and Social Policy on three of the six elements of the complaint. Two of these elements relate to the issue of biodiversity. PCM has therefore found EBRD non-compliant with Performance Requirements 1, 6 and 10 with respect to the Paravani project. PCM has made recommendations relating to policy and procedural clarifications and improvements that could be made to address underlying weaknesses which have resulted in these specific non-compliances.
# Table of Contents

1. **Background**  
2. **The Complaint**  
3. **The Compliance Review**  
4. **Complaint elements 1 and 2: Whether Biodiversity Impacts on the Paravani River and on Migratory Birds had been adequately addressed**  
   1. The Complaint  
   2. EBRD Policy and Procedural Requirements  
   3. EBRD Responses  
   4. The Project Documentation  
   5. EBRD Documentation  
   6. Observations and Conclusions  
   7. Finding  
5. **Complaint element 3: Whether the potential for flooding in Khertvisi Village had been adequately addressed**  
   1. The Complaint  
   2. EBRD Policy and Procedural Requirements  
   3. EBRD Responses  
   4. The Project Documentation  
   5. EBRD Documentation  
   6. Observations and Conclusions  
   7. Finding  
6. **Complaint element 4: Whether local population access to pastures had been closed during project construction**  
   1. The Complaint  
   2. EBRD Policy and Procedural Requirements  
   3. EBRD Responses  
   4. The Project Documentation  
   5. EBRD Documentation  
   6. Observations and Conclusions  
   7. Finding  
7. **Complaint element 5: Whether alternative renewable energy options were adequately addressed**  
   1. The Complaint  
   2. EBRD Policy and Procedural Requirements  
   3. EBRD Responses  
   4. The Project Documentation  
   5. EBRD Documentation  
   6. Observations and Conclusions  


7. Finding

8. Complaint element 6: Whether the project ESIA documentation should have been made available in English not just in Georgian
   1. The Complaint
   2. EBRD Policy and Procedural Requirements
   3. EBRD Responses
   4. The Project Documentation
   5. Observations and Conclusions
   6. Finding

9. Recommendations

Annexe 1: Abbreviations
1. Background

On June 14th 2011 the European Bank for Reconstruction and Development (EBRD) approved financing of the Paravani Hydropower project (HPP), providing up to US$44 million in senior loan plus up to 10% US$5 million as an equity investment, against estimated project costs of US$156.5 million.  

The project includes an 87 megawatt (MW) run of river hydropower plant on the Paravani River in southeast Georgia close to the Turkish border and a 35 km transmission line connecting to the National grid at Akhalsikhe and principally exporting power to Turkey. The River originates at Lake Paravani (2080 metres above sea level) and is 74 km long. After Lake Sagamo the River abruptly falls into a steep canyon turning west and north-west before joining the Mktvari River from the east. The total hydraulic head is some 960 m averaging 13 m per km over its entire length and there are other hydropower plants on its upper reaches at Gandza and Akhalkhalaki. The project is being developed by Georgia Urban Energy (GUE). The run of river HPP will divert water from the Paravani River, upstream of its confluence with the Mktvari River, through a 14.2 km conveyance tunnel to a powerhouse on the Mktvari River, with the water released back into the Mktvari 1.5 km upstream of the Mktvari/Paravani confluence and 700 m upstream of the village of Khertvisi. On December 22nd 2011 Green Alternative, Georgia registered a complaint relating to the project with the EBRD Project Complaint Mechanism (PCM). EBRD formally responded to the complaint on 17th January 2012. The PCM eligibility assessor determined that based on an analysis of the relevant documentation that the complaint was eligible for a compliance review and terms of reference for that review were included in the report. An independent ad-hoc compliance specialist was appointed to undertake the review. This the resulting report. Further EBRD responses to specific issues were forthcoming during the review and a full response to the draft findings of the report was requested and received.

---

1 Project 38940 Paravani HPP and Project 42249 Paravani HPP Equity
2 **Run-of-river hydropower** is hydropower generation which involves little or no water storage. The requirement for storage (pondage) will depend upon whether the plant is required for peaking power supply or baseload. Where baseload power is required pondage is necessary to enable the regulation of water flow.
3 Complaint; Paravani HPP, Request Number; 2012/01: Green Alternative, Tbilisi
5 Paravani HPP, Request Number 2012/01 PCM Eligibility Assessment Report
6 EBRD (ESD) comments on Paravani HPP draft report, 21st May 2013.
2. The Complaint

The complainant requested a compliance review of the project to verify: a) whether the project Environmental and Social Impact Assessment (ESIA) correctly assessed the Environmental and Social Risks and b) whether the proposed mitigation measures effectively prevent possible environmental and social damage by the project. The specific issues raised are:

1. Whether impacts on the Paravani River ecosystems were adequately assessed
2. Whether the impact of the transmission lines on migratory birds had been adequately addressed
3. Whether the potential for flooding in Khertvisi village had been adequately addressed
4. Whether the local populations access to pastures had been closed during project construction resulting in economic displacement
5. Whether alternative renewable energy options were adequately addressed
6. Whether the project ESIA documentation should have been made available in English and not just in Georgian.

---

The elements of the complaint have been paraphrased by the PCM expert to focus on the underlying issue, to assist readers.

The complaint focuses on the availability of the project ESIA in English; the PCM expert has considered the broader issue of the language of disclosure and its accessibility to stakeholders.
3. The Compliance Review

The key activities identified and undertaken by the compliance advisor and the timeline for the review are as follows:

b. Meeting with key EBRD staff to discuss the complaint, request project documentation and discuss procedural issues. 25th October 2012. London.
e. Meeting with Georgia Urban Energy and SRF Gamma (project environmental and social consultants) to discuss the project and the complaint. Including presentation of current status of environmental/social studies by SRF Gamma, Tbilisi 28th November 2012.
f. Site visit with Georgia Urban Energy and SRF Gamma including access to intake location, powerhouse location, Rivers Paravani and Mktvari gorges, Khertvisi village and residents, villages affected by construction of the conveyance tunnel and temporary access points on the Javakheti plateau (including Ptena and Chunchka), cement plant, construction camps and all associated infrastructure. Ninotsminda District, 29th November 2012.
g. Partial translation of project ESIA’s (for the dam and for the transmission line, which were produced separately) into English and Review. December 2012.
i. Draft report provided to EBRD Management. April 2013.
j. Meeting to discuss EBRD Management comments and receipt of written comments 16-21st May 2013.

Some of the components of the complaint have overlapping issues – particularly around the quality and completeness of analysis in the ESIA. They are each considered on their own merits and are individually reviewed, however complaint elements 1 and 2 both relate to EBRD commitments under the ESP on Biodiversity conservation and are therefore reviewed in the same section. In each case the issue is addressed from the following perspectives:

1. The Complaint
2. EBRD Policy and Procedural Requirements
3. EBRD responses
4. The Project Documentation (Documentation produced by GUE or its consultants)
5. EBRD Documentation (Documentation produced by EBRD or its co-financiers)
6. Observations and conclusions
7. Finding

Where a particular issue or piece of documentation has already been discussed or analysed on one element of the complaint, only key parts are re-presented for subsequent elements of the complaint, to avoid repetition.

The ESIA was only partially translated, based on a review of the table of contents by the PCM expert, to try and ensure that there was not undue delay in the PCM review and to incur reasonable costs only. The translation into English was undertaken locally in Georgia and whilst imperfect, in the view of the PCM expert provides an adequate representation of the quality and breadth of the report. It is possible that relevant comments are also contained in parts of the report which have not been translated. In the opinion of the PCM expert this would not change the PCM review conclusions as the content of the ESIA is only one element of the review.
The review of internal EBRD documentation has been an important part of this PCM analysis. PCM is bound by the EBRD Public Information Policy\textsuperscript{10}. This policy states \textit{inter alia} that documents intended for internal purposes only are confidential. Under the PCM rules of procedure\textsuperscript{11} the objective of a compliance review ‘will be to establish if (and if so, how and why), any EBRD action or failure to act in respect of an approved project has resulted in non-compliance……’ It is also required that the ‘Compliance Review expert will examine key documents…………will set out his/her findings ………and if non-compliant address findings at the level of EBRD systems or procedures……’

PCM has to fully respect both of these requirements. It is therefore noted within the body of the report where key internal EBRD documents have been reviewed, such that the source of information is clear and can be cross checked efficiently as required by EBRD staff. The fact that the document is confidential is also noted so that it is clear to all readers including complainant(s) that the documents are not available for public review. Information from those documents is noted in a general review only with no direct quotations. No individual assignation of conclusions or comments within any document is made.

\begin{flushleft}
\textsuperscript{10} Document of the European Bank for Reconstruction and Development: Public Information Policy: Approved by the Board of Directors 26/27\textsuperscript{th} July 2011.
\textsuperscript{11} \url{http://www.ebrd.com/downloads/integrity/pcmrules.pdf}
\end{flushleft}
4. Complaint Elements 1 and 2 relating to Biodiversity: (i) Whether impacts on the Paravani River ecosystems were adequately assessed; (ii) Whether the impact of the transmission lines on migratory birds had been adequately addressed

4.1 The Complaint

Element 1: The complaint observes that 10% of the annual average flow (AAF) will be left in the Paravani River downstream of the HPP intake, to preserve a minimum sanitary flow. Subsequent to the release of the project ESIA, it was established that this flow had been based on the ‘Tennant’ method widely used in the USA and in other jurisdictions, and accepted by the Georgian Authorities for the purposes of this (and potentially other) HPP developments. This methodology enables a minimum % of the AAF to be set without onsite data collection. The complaint also observes that Tennant states that flows of 30% AAF are required to generally maintain width, depth and velocity in streams and that the 10% AAF is described as ‘fair or degrading’ within the methodology. Through further analysis and reference to other research, the complaint concludes that the methodology should not have been applied without due consideration of local conditions of flow variation, river morphology and habitats. The complaint alleges that this is inconsistent with the requirements of the EBRD Environmental and Social Policy and associated EU Environmental Requirements.

Element 2: The complaint also observes that the project transmission lines are located on the African-Eurasian migratory water-bird flyway. It asserts that the species concerned, which migrate from their nesting sites to wintering areas across Georgian territory are sensitive to accidents on linear structures, and further alleges that promised evaluation reports on this issue have not been disclosed to the public, but that construction work has commenced. It claims that this is in violation of the EBRD Performance Requirements under the Environmental and Social Policy.

4.2 EBRD Policy and Procedural Requirements

The EBRD ESP addresses these issues in a number of ways, through more general policy commitments and through specific technical requirements within its performance requirements, particularly Performance Requirement 6: Biodiversity Conservation and Sustainable Management of Living Resources.

Paragraph 2 of PR6 sets out the relevance of EU legislation: ‘The Bank is guided by and supports the implementation of applicable international law and conventions and relevant EU directives’.

Paragraph 6 specifies the nature of the biodiversity assessment to be undertaken: ‘Through the environmental and appraisal process, the client will identify and characterise the potential impacts on

---

13 The complaint references a number of studies including: Evaluation study of the Tennant method for higher gradient streams in the national forest system lands in the western US. http://www.warnerenr.colostate.edu/~srf/students/thesis/CSU_MS_thesis_s2006-jennifer_mann.pdf et al
15 The applicability of EU Directives is addressed comprehensively later in the report.
biodiversity likely to be caused by the project. The extent of due diligence should be sufficient to fully characterise the risks and impacts, consistent with a precautionary approach and reflecting the concerns of relevant stakeholders. In planning and implementing impact assessments where biodiversity issues are a key focus, clients should refer to best practice guidelines on integrating biodiversity into impact assessments’.

Paragraph 8 specifies the measures which EBRD clients will be required to undertake: ‘The client will need to identify measures to avoid, minimise or mitigate potentially adverse impacts and, where appropriate and as a last resort, propose compensatory measures, such as biodiversity offsets, to achieve no net loss or a net gain of the affected biodiversity’.

Certain elements of the over-arching EBRD Environmental and Social Policy are also of particular relevance (both to this and other elements of the complaint): Section B, Paragraph 8 establishes the precautionary principle with respect to biodiversity conservation: ‘The EBRD supports a precautionary approach to the conservation, management and sustainable use of natural biodiversity resources (such as wildlife, fisheries and forest products) and will seek to ensure that its operations include measures to safeguard critical habitats and, where feasible, enhance natural habitats and the biodiversity they support’.

Section C, Paragraph 14 establishes the principle that environmental or social issues are relevant to the decision whether an activity should be financed: ‘All EBRD projects undergo environmental and social appraisal both to help the EBRD decide if an activity should be financed and, if so, the way in which environmental and social issues should be addressed in planning, financing and implementation.’

This principle and its interpretation is extremely important. In the opinion of the PCM expert, the EBRD board decision to approve an investment is pivotal in determining whether an ‘activity should be financed’. It is the point at which ‘permission’ in principle is given by the Directors and it is a crucial milestone event which defines the timing of project information disclosure, which itself underpins the consultation process. Whilst conditions precedent to disbursement can assert environmental and social management requirements and the ESIA ‘process’ continues through the project life, the board decision is the moment at which the decision ‘in principle’ that the activity under appraisal is suitable for investment, is made. This implies that environmental and social issues must be adequately understood at that moment, to ensure that the decision can be made, in full confidence, that the Institutions policies will be complied with.

Other performance requirements provide further context. Performance Requirement 1: Environmental and Social Appraisal and Management\(^{17}\): Paragraph 5 establishes the importance and quality of the environmental and social baseline: “The appraisal process will be based on recent information, including an accurate description and delineation of the client’s business or the project, and social and environmental baseline data at an appropriate level of detail.”

Performance Requirement 3: Pollution Prevention and Abatement\(^{18}\) whilst not broadly relevant to the technical substance of the complaint, does establish the relevance of EU legislative requirements, which are particularly raised by the complainant. Certain components are therefore addressed for

\(^{17}\) Environmental and Social Policy, European Bank for Reconstruction and Development, May 2008 P15-21; Performance Requirement 1: Environmental and Social Appraisal and Management

\(^{18}\) Environmental and Social Policy, European Bank for Reconstruction and Development, May 2008 P26-29; Performance Requirement 3: Pollution Prevention and Abatement
Paragraph 3 provides substance on the precautionary principle ‘…..the EBRD is committed to supporting, through the activities if finances, the precautionary principle, the prevention principle, the principle that environmental damage should as a priority be rectified at source, and that the polluter pays principle’

Paragraphs 5 and 8 underline the relevance of EU and national law: Paragraph 5 states: ‘Subject to Paragraph 6 (the ability to take into account cost and local conditions to meet the requirement to apply best available techniques under EU law) projects will be designed to comply with relevant EU requirements as well as applicable national law, and will be operated in accordance with these laws and requirements’. Paragraph 8 clarifies the relative hierarchy of requirements: ‘When host country regulations differ from the levels and measures presented in EU environmental requirements or requirements agreed pursuant to paragraph 7, projects will be expected to meet whichever is more stringent’.

Performance Requirement 10: Information Disclosure and Stakeholder Engagement\textsuperscript{19} sets out the basis for disclosure and consultation on projects: specifically paragraph 17: ‘Projects classified as Category A could result in potentially significant and diverse adverse future environmental and/or social impacts that cannot be readily identified, assessed and mitigated and therefore require a formalised and participatory assessment process. Disclosure and consultation requirements are built into each stage of this process. Clients shall ensure meaningful dialogue with affected parties and facilitate their informed participation in the decision-making process, in accordance with paragraphs 12 to 16 above. Informed participation involves organised and iterative consultation, leading to the client’s incorporating into their decision-making process the views of the affected parties on matters that affect them directly such as proposed mitigation measures, the sharing of development benefits and opportunities, and implementation issues”.

**EU Directives**

The complaint alleges that EBRD did not meet its commitments under EU environmental requirements and specifically mentions the Water Framework Directive\textsuperscript{20} (WFD) and the Convention on Biological Diversity\textsuperscript{21} (CBD), it is therefore important to examine those commitments in the context of the Paravani project. Overall paragraph 3 of the ESP can be understood to provide that any relevant requirement contained in an instrument of EU environmental law will inform a corresponding requirement under the 2008 ESP.

The Water Framework Directive is not directly referenced in the EBRD 2008 Environmental and Social Policies, but the general commitment contained therein that ‘…the Bank is committed to promoting European Union (EU) environmental standards’ would suffice to make it relevant. The WFD, however, does not prescribe very clear obligations or standards but creates a fairly loose and incremental regulatory framework (See Articles 1 and 4 of the WFD). Nevertheless, the obligation on Member States under Article 4(a) (1) to ‘implement the necessary measures to prevent deterioration of the status of all bodies of surface water’ (subject to some broad exceptions) may be understood to create a corresponding obligation on the Bank.

\textsuperscript{19} Environmental and Social Policy, European Bank for Reconstruction and Development, May 2008 P68-73; Performance Requirement 10: Information Disclosure and Stakeholder Engagement
\textsuperscript{21} UN Convention on Biological Diversity, The EU became a signatory 1992-06-13
The Convention on Biological Diversity (CBD) is expressly included as a source of guidance under PR 6.2, it sets down a range of measures to be taken by State parties regarding the conservation of biological diversity, including obligations to co-operate, to develop national strategies for the conservation and sustainable use of biological diversity, to engage in research and training and public education and awareness raising, and to adopt incentives for conservation and sustainable use of components of biological diversity. Article 14 requires States, \textit{inter alia}, to: ‘Introduce appropriate procedures requiring environmental impact assessment of its proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimizing such effects and, where appropriate, allow for public participation in such procedures’. In addition it applies to in situ conservation by means of the establishment of protected areas and the adoption of appropriate legislative frameworks.

The commitment to EU law is drawn broadly within the ESP and other key instruments of EU environmental law are the EIA Directive\textsuperscript{22} (and to a lesser extent the SEA Directive\textsuperscript{23}) the Habitats Directive\textsuperscript{24}(HD) and the Birds Directive\textsuperscript{25}(BD). The Habitats Directive would be the most relevant with respect to broader biodiversity impacts, with Articles 12 and 13 relating to the protection of species of fauna and flora listed under the Directive (regardless of whether these species are located in a protected area). Where a protected area (Natura 2000\textsuperscript{26} sites or sites containing specific species of Flora of Fauna listed under the Directive) is affected by a project then it would follow that the biodiversity assessment required under PR 6.6 ought to correspond closely to the “appropriate assessment” required under Article 6(3) of the Habitats Directive in terms of its thoroughness, conclusiveness and its significance for the board decision whether to invest. The Birds directive would also provide support for the need for a more detailed assessment through the underlying requirement for areas which may contain annexe 1 species, be wetlands of international significance (such as Ramsar\textsuperscript{27} sites) or if used by migratory species, to be protected.

To conclude, these EU commitments were written for implementation by member states and provide few explicit obligations which can be readily applied to the EBRD except where there is a potential impact upon a protected area or species of flora or fauna. Under other circumstances the spirit and intent of the directives should inform the application of PR6 of the ESP. In the case of Paravani, whilst there are biodiversity sensitivities (see section 4.6), there would not be direct impacts on a currently protected area and therefore the PCM is not suggesting that article 6 of the Habitats Directive would apply. PCM has therefore considered this aspect of the complaint within the terms of the ESP and the requirement for “…the protection and conservation of biodiversity in the context of projects in which it (EBRD) invests ‘and establishing the precautionary principle’ and has not applied any higher or different expectation based on the EU biodiversity requirements.

\textsuperscript{22} European Union Directive 85/337/EEC 1985 Environmental Impact Assessment
\textsuperscript{23} European Union Directive 2001/42/EC Strategic Environmental Assessment
\textsuperscript{24} European Union Directive 92/43/EEC Conservation of natural habitats and of wild fauna and flora
\textsuperscript{26} The Natura 2000 network is the EU contribution to the “Emerald network” of Areas of Special Conservation Interest (ASCIs) set up under the \textit{Bern Convention on the conservation of European wildlife and natural habitats}. It includes \textit{Special Protection Areas} (SPAs) established under the Birds Directive or \textit{Special Areas of Conservation} (SACs) established under the Habitats Directive,
\textsuperscript{27} Ramsar Convention: The Convention on Wetlands of International Importance, especially as Waterfowl Habitat, 1971
A further linkage to EU requirements in the ESP is made in the requirements for Disclosure and Consultation on category A projects. PR10: Paragraph 18 requires that information disclosed must include a full ESIA report in accordance with the Banks requirements – which require consistency with the EIA Directive.

4.3 EBRD Responses

With respect to the issue of Biodiversity in the River Paravani, EBRD contend that the Tennant method has been utilised in more than 25 Countries and is a widely accepted methodology. It also observes that the flow regime at Paravani will actually result in 15-25% of AAF for more than 80% of the year. It also contends that they accept the need for local validation of the model parameters and that this is integrated into the ‘Environmental and Social Action Plan’ (ESAP) and into the project legal agreements ensuring that the project is structured to ensure that such validation occurs through the on-going monitoring and assessment of flow, habitat and aquatic biodiversity. The ESAP also requires that should there be a decline in downstream fish populations, then GUE must adapt its operations to mitigate or offset the losses - the process of ‘adaptive management’. EBRD acknowledges that there was uncertainty over these issues in the ESIA.

With respect to the issue of Bird Migration EBRD responds that in its opinion the issue of transmission lines on birds was adequately addressed in the ESIA and the Non-technical Summary, concluding that impacts would be minor and localised and giving details on why that conclusion was reached. It also sets out further monitoring which will be undertaken by GUE in advance of transmission line construction and that the results will be disclosed, though no formal consultation is planned.

4.4 The Project Documentation

Paravani River

The Project documents produced in advance of project approval by EBRD do not address the issue in a comprehensive way due to the scarcity of baseline information. The ESIA Inception Report dated September 2009 provides a comprehensive overview of the existing understanding of the environmental and social baseline, including the key habitat types of the region. It acknowledges that available information is relatively general in nature and does not been specifically applied to the area of influence of the project.

The Environmental and Social Impact Assessment (ESIA) which is only available in Georgian, was disclosed in 2009. It seems to provide limited detail on the subject simply stating that ‘the sanitary discharge amount (10% of AAF) will be enough for fauna dependent on the River Paravani and that the ‘sanitary discharge left in the river will be enough for fish farm working’.

---

31 Paravani Hydropower Plant: Environmental and Social Impact Assessment GUE/SRF 2009
The ESIA Non-Technical Summary\textsuperscript{33} which is was disclosed in English after the ESIA itself (the document is dated/prepared February 2011) provides some detail on anticipated flow rates (natural, extracted, sanitary) in the Paravani River, however it provides little or no analysis of the longer term potential impact on downstream fish populations based on reduced flows. It does not indicate any likelihood of protected species within the River though other documents\textsuperscript{34} do suggest the possibility of the presence in the River of \textit{inter-alia} the Brown Trout (Salmo Trutta) which is a vulnerable/near threatened species according to IUCN and is on the Georgian red list. This would not in itself infer any degree of enhanced ‘protection’ to the area. EBRD acknowledges in its response to the complaint that uncertainties in flow rates and key mitigation measures were not adequately addressed in the ESIA and in the non-technical summary.

The Paravani Hydropower Project – Environmental and Social Impact Assessment – Environmental and Social Action Plan, dated September 2009 by SRF Gamma, does not mention any requirement for downstream biodiversity monitoring linked to a minimum ‘sanitary flow’ and indeed observes that ‘no mitigation measures are envisaged’ with respect to the Hydrological regime. EBRD advise that this document was not part of the loan agreement, but it does provide an indication of the level of understanding at the time of its production. These issues were however addressed in some detail in the form of the annual monitoring report prepared for the common terms agreement – see below.

A Gap Analysis\textsuperscript{35} undertaken by consultants SRF Gamma, dated September 2009 to address any shortfalls in the ESIA relating to the requirements of EBRD, notes that ‘environmental baselines will be developed primarily from existing literature sources……existing data will be supplemented by site specific observations where appropriate’

The first aquatic survey report - Paravani HPP Fish Baseline Survey Report\textsuperscript{36} was issued in July 2012. This provides the first more detailed analysis of the ecological status of the River.

The purpose of that survey is identified in the report as:

‘………… to expand the understanding of the fish community within a segment of the river to provide a baseline information for subsequent monitoring of aquatic life after commissioning of the HPP. The main tasks under the assignment were:

- Identification/verification of availability of the main fish species in the project impact area;
- Identification/verification of the presence of any rare and protected species in the project impact zone;
- Identification of any sensitive habitats (such as spawning sites, fry and juvenile fish growth sites) within the section of interest- downstream the intake to the Mikvari-Paravani confluence;
- Identification of availability of ecologically sensitive habitats in the direct impact zone of the main project facilities;
- Identification of potential impact of the scheme on aquatic fauna.’

\textsuperscript{33} Paravani Hydropower Project : Environmental and Social Impact Assessment Report: Non-Technical Summary GUE/SRF February 2011
\textsuperscript{34} An early draft version of the (extended) ESIA Non-Technical Summary dated December 2010 was provided by EBRD to PCM. It contains reference to the Brown Trout being one of the main species available in the River. This reference is not present in the later disclosed version.
\textsuperscript{35} Paravani Hydropower Project; Environmental and Social Impact Assessment; Gap Analysis: GUE/SRF Gamma: September 2009.
\textsuperscript{36} Paravani Hydropower Project; Fish Baseline Survey Report; GUE/SRF Gamma; July 2012
The objectives of this survey are entirely consistent with the management approach adopted by GUE and the consultants (and required by EBRD) to establish the ecological baseline of the river as part of the environmental management plan, however it also indicates the limited understanding that existed at the time of the release of the ESIA.

The report confirms that the River ecology has been modified and degraded through upstream fish farming activity in the lakes of Javakheti and particularly the introduction of alien fish species such as Crucian Carp. It has also been affected by discharges from Towns and Villages located upstream. The fish index of biological integrity (FIBI)\(^{37}\) is rated at moderate to severe impairment at various points on the river. Field work to date has not found evidence of protected species within the lower reaches of the Paravani, though this is the first of the seasonal studies. It is important to note that habitats which have been modified by human activity and/or the introduction of alien species could still be regarded as ‘critical habitat’ where there is a concentration of a vulnerable species.

EBRD have stated that the by the time of Board decision their opinion based on creel\(^ {38}\) surveys and discussions with experts was that there would be no significant impacts on the biodiversity of the River Paravani and that this expert opinion was borne out by the subsequent surveys undertaken. None of this analysis appears in internal documents provided to PCM or in the project documentation disclosed in advance of the board decision.

**Bird Migration**

The Transmission line Environmental and Social Impact Assessment recognises the potential impact on migratory birds. It identifies the lakes of South Javakheti (including Lake Paravani) as important wetlands for migratory birds and mentions their potential as future Ramsar sites with associated future possibilities for a Ninotsminda National Park. PCM has noted that these are potential future developments and has not treated the area as currently protected for the purposes of this analysis.

The risk of mechanical collision or electric shock for migrating birds is evaluated as a ‘small negative impact’. The ESIA further states that a ‘small’ impact may have an up to 20% impact on the regional baseline. It is assumed that this means that a 20% mortality rate amongst migrating birds would be regarded as small.

Translated\(^ {39}\) sections of the ESIA state:

‘The risk of birds’ collision with power transmission lines and / or electrical shock is to be mentioned during operation.

**Birds Eurasia – Africa migration corridor** passes through the region, where Javakheti lakes, in spring and autumn, provide temporary shelter and habitat not only for nesting birds, but also for flocks on distant travel.

---

\(^{37}\) An Index of Biological Integrity (IBI), also called an Index of Biotic Integrity, is a scientific tool used to identify and classify water pollution problems. An IBI associates anthropogenic influences on a water body with biological activity in the water body, and is formulated using data developed from biosurveys. First formulated by Dr. James Karr in 1981. Karr, James R. 1981. ”Assessment of biotic integrity using fish communities.” *Fisheries* 6:21–27

\(^{38}\) Catch assessment surveys undertaken to estimate the catches made by small scale or recreational fishermen, usually through a sampling program involving interviews and inspection of individual catches in the identified fishing and landing places.

\(^{39}\) The wording of the translation has been left ‘as translated’ by the local translators, the English has not been corrected.
As the PTL construction route corridor is in deep depression, it is much lower than the height assimilated by birds thus PTL impact on migrating birds and interference with their movement is excluded.

As for the birds inhabiting the lower area of the region, it is not excluded that the high voltage transmission line can become an obstacle for them. Collision with the wire is not excluded as well. However, the probability of collision is much decreased by the acoustic frequency issued by the high voltage transmission lines, which can be regarded as a warning signal for the birds. In the opinion of ornithologists (Prof. R. Zhordania, Special and applied ornithology, 2002) – “As in each of the natural areas, each of biotopes, there is the own sound environment, which affects the signal system of its inhabitants. This environment poses a certain obstacle to the signal issue-spread-perception; additionally loads the signal with the new information, which details various data variability (the nature of the vegetation, running water proximity, terrain of the area, the existence of counter-resistance) and other important ecological characteristics in the situation. In case of ‘sounding’ these factors have an impact on the sonic environment of the landscape and through this the bird’s warning for overcoming the obstacles”. Therefore, we consider that transmission line impact during bird migration will be minimal.’

The inference is that the acoustic emissions from the transmission line itself warn away birds. It goes on to say that ornithologists should be consulted in the event of high levels of bird injury.

The ESIA Non-Technical Summary states that the ‘transmission line could potentially affect birds, which cold collide with towers or wires and could be killed or injured. Any impacts are expected to be minor and very local. The proposed line is located within a bird migration corridor, but the height of the transmission line will be significantly lower than the height of the migrant birds flight, so there should be limited or no impact. There should be no risk of electrocution for large birds because lines will be spaced far enough apart that birds cannot contact 2 lines. Walk overs and drive by inspections will be conducted several times during at least the first two years, including during migration seasons. If dead birds are detected along the line, the use of devices to drive them away (spinners etc.) will be considered’

4.5 EBRD Documentation

EBRD Documents have been used to track the timeline, focus and veracity of the due diligence and decision making process for each element of the complaint, key documents and decision points only are mentioned here.

The ‘Environmental and Social Summary – Concept Review’ dated 15th October 2009 identifies the need for an Initial Environmental and Social Examination (IESE), due to a number of environmental and social issues including inter-alia, potential impacts to biodiversity and proximity to the Khertvisi-Vardia historic area which is included on the UNESCO tentative list of World Heritage Sites. It also notes that after initial engagement with the Company in 2008 EBRD provided terms of reference for the preparation of an ESIA in accordance with EBRD requirements. The document specifically identifies the need for minimum biological flows and the need for assessment of ecological sensitivities in the Paravani River. Whilst mentioning potential impacts to biodiversity generically the document does not specifically mention impacts on migratory birds.

40 http://whc.unesco.org/tentativelists/5236 Vardzia-Khertvisi; A large territory in the upper Mtkvari River basin stretching 18km from Khertvisi Medieval Residence to the 13th Century rock cut monastery at Vardzia.
A site visit was undertaken by EBRD staff in March 2010. They were accompanied by staff from the International Finance Corporation (IFC) who are co-financiers. As well as a visit to the project location and environs, meetings were held with relevant officials relating to the important potential cultural heritage impacts of the project (which do not form part of this complaint). At this stage it is understood that EBRD undertook its categorisation and risk rating for the project. It is also understood (ref: e-mail communication from EBRD officers) that the output from the visit was a joint Environmental and Social Review Document with IFC. No independent EBRD document was produced. The document provides the rationale for an ‘A’ categorisation based on the project’s location within a proposed UNESCO World Heritage site subject to the views of the Georgian Cultural Heritage Agency. In the absence of concerns about cultural heritage, the project would be categorised ‘B’. With respect to the Paravani River, the document mentions as a subsidiary issue that additional work is required to update the ESIA non-technical summary to reflect basic flow requirement calculations to ensure that sufficient water remains in the River.

The document also notes that a generic description of transmission line impacts will be required for the non-technical summary, but nothing more specific relating to migratory birds.

Following a site visit an internal report December 2010 (EBRD Internal Confidential Document) was issued. The report has been reviewed and its precise contents are confidential. For the purposes of this analysis it is important to note that it reflects concerns regarding the lack of consistency between EBRD and Georgian requirements following the submission of a TOR for the ESIA (for the transmission line – the HPP ESIA having being completed in 2009) which might result in the ESIA which would be disclosed being incomplete from the perspective of EBRD requirements.

More precisely it concludes that the additional requirements of the IFI’s in areas such as stakeholder engagement and livelihoods restoration would not be prepared in advance of disclosure of the ESIA under Georgian law and would not therefore have been reviewed by the funders. Specific concerns were also raised about the transmission line ESIA with significant information not available until after the disclosure of the document.

EBRD advise that substantial further work was undertaken after this to address the concerns prior to ESIA disclosure.

The ‘Environmental and Social Summary – Final Review’ dated 17th March 2011 (EBRD Confidential Internal Document) confirms (the previous) categorisation of the project as ‘A’ in 2008, though this categorisation is not mentioned in the earlier concept review document. EBRD have further confirmed to PCM that the HPP project in isolation would have been categorised ‘B’ but the addition of the Transmission line component was material in the ‘A’ categorisation. This may be the case – but the overall project was categorised as ‘A’ which defines the EBRD requirements under the ESP and sets the standard by which the appraisal is assessed. By the time of the final review, the ESIA for the Transmission Lines had also been disclosed and the gap analysis to address shortfalls in the ESIA, prepared to Georgian National requirements, against the requirements of the International Financial Institutions (IFI’s), involved - EBRD and IFC, had been completed. From a biodiversity perspective the document notes that monitoring will be undertaken downstream to assess ecosystem

---

42 PCM would not have made reference to an EBRD co-financer or to their project documentation, except that this document is identified by EBRD as a joint document forming part of its own due diligence process.
impacts as part of the ESAP and confirms that the transmission line will be monitored periodically for bird mortality, with measures required to divert birds if excess mortality is experienced.

The Environmental and Social Performance Annual Monitoring Report for Georgia Urban Enerji Ltd (EBRD Internal Confidential Document - undated) prepared for insertion in the environmental covenants of the common terms agreement requires the preparation and implementation of a multi-taxa aquatic monitoring programme to measure changes in Fish, other aquatic life and water quality in the Paravani River prior to plant commissioning with appropriate reporting and the development of a recovery plan in the event of population decline or decrease in ecosystem health. It also requires the monitoring of bird mortality along the transmission line corridor for the first 2 years of operation during the spring and fall migration seasons. In the case of excessive mortality (it is not specified what would constitute excessive mortality) there is a requirement to develop and implement a bird protection plan.

The Project Summary Document for Paravani Hydro Power Plant disclosed by EBRD on 23rd December 2010 notes that the primary potential impacts of the HPP include reduced stream flow in the Paravani River between the intake and the confluence with the Mktvari River (with up to 90% reduction of annual average flows) and associated effects on aquatic habitat and biodiversity. It comments that these flows will be re-evaluated during operations.

4.6 Observations and Conclusions

In the context of the Paravani HPP project and its impact on biodiversity, the analysis of whether EBRD met its own policy framework (particularly the requirements of PR6), there a number of key issues. Firstly did the approach adopted by the EBRD and its client constitute a ‘precautionary approach to the conservation……of natural biodiversity resources’ ……more specifically was ‘due diligence’ ……sufficient to fully characterise the risks and impacts, consistent with a precautionary approach’ and was ‘best practice’ adopted in ‘integrating biodiversity into impact assessments’.

Secondly, was the appraisal process which underpinned that approach ‘…..based on recent information, including an accurate description and delineation of the …….environmental baseline data at an appropriate level of detail.’? And …..

‘appropriate to the nature and scale of the project, and commensurate with the level of its (potential) environmental and social risks and impacts’.

Finally was the timing of the biodiversity assessment such that …..‘disclosure and consultation requirements are built into each stage of this process……’ and ‘……meaningful dialogue with affected parties’…..which can…’ facilitate their informed participation in the decision-making process’ is possible. Additionally was the timing appropriate relative to the establishment of project design parameters and the EBRD investment decision?

43 Paravani HPP and Paravani HPP Equity, Project Summary Documents: EBRD Project Numbers 38940 and 42249 First Disclosed 23rd December 2010 as amended.
The analysis of these issues is based on in-country discussions with GUE and SRF Gamma, discussions and responses of EBRD staff and analysis of the documentation.

Biodiversity in the Paravani River

Substantive studies on river flow, water quality, etc. have continued since the release of the ESIA and non-technical summary, such that issues identified within those documents and the ESAP can be addressed. Full year flow monitoring has now been completed and the results were provided to PCM. The work being undertaken is of a high quality and the intention of the Company and its consultants to address the issues raised (in this and other elements of the complaint) satisfactorily is not doubted. That does not however relieve EBRD of the responsibility to meet its own policy requirements and it is clear from the internal documentation referenced above that there were significant concerns voiced by EBRD staff that the Georgian ESIA was incomplete from EBRD’s perspective and that significant additional information would be required for the disclosure of the Non-Technical Summary, the result being that this information would not be part of the consultation process in advance of the decision ‘in-principle’ to invest. EBRD staff advise that by the time of disclosure they believe that the Non-Technical Summary was substantially improved.

The discussion of the Tennant methodology is prominent within the complaint. GUE/SRF Gamma advised that there is no specific standard within Georgia (though the Tennant methodology is accepted and is being utilised) and that the development of a ‘sanitary flow rate’ acceptable to the relevant Government authorities was important. Based on their research they advise that a rate set at 10% of AAF is normal for HPP operations. Alternative models such as Lancer (10% Austria) or Jager (15% Austria) or Cemagraph (2.5-10% France) it is argued use consistent levels of % AAF to the Tennant (Montana) model. It would be easy to spend a great deal of time addressing the technicalities of the relative models, however it is not the view of the PCM expert that it is the role of this compliance review to assess in detail the relative merits of a range of such numerical models. The use of a basic flow model in ascertaining the approximate volume of water available, such that the viability of the project can be determined is essential and therefore entirely legitimate. The question is – was the Tennant methodology appropriate to use at Paravani and was it professionally applied to the circumstances of the project such that EBRD could approve their investment, at the time it was approved, with an appropriate degree of confidence that its policies had been met? Indeed the complaint does not per-se specifically contest the use of the model but asserts that it was not adapted to local circumstances and that an inappropriate flow regime (fair or degrading) was selected.

The assessment of the ecological status of the Paravani River through an appropriate field baseline monitoring programme was not undertaken as part of the ESIA at the time of its disclosure, it was included in the ESAP to be completed after financial approval. However it is clear that the significant seasonal variations in flow at Paravani allied to the morphology of the River would require a substantive localised assessment. This is acknowledged in the ESAP and in the subsequent Fish Baseline Survey Report commissioned by GUE. The absence of an appropriate biodiversity baseline assessment for the river would likely have been apparent from review of early drafts of the ESIA which based on the timeline, would have been available in 2009, but these were only produced in Georgian and EBRD was not able to review the ESIA document.

In discussions with GUE consultants and with EBRD the point was made that a baseline field monitoring programme for the ESIA was not a requirement under Georgian law and that the timeline

---

44 Paravani HPP Project: Fish Baseline Survey Report: July 2012 GUE/SRF Gamma
for the ESIA production for permitting purposes prevented it being undertaken as part of the original ESIA. It follows therefore that the Tennant methodology and assumptions were adopted for plant design purposes without any detailed understanding of the ecology of the Paravani River and the likely impacts upon it, and such analysis was postponed until after investment decisions were made. The need for a more detailed understanding of the River ecology is not contested by EBRD, GUE or SRF Gamma or the complainant. The issue therefore entirely relates to the timing of that assessment.

It is acknowledged that Environmental and Social Due diligence and the resulting E&S management of a project transcends the project planning, development and implementation stages. The ESIA is essentially a process which includes the disclosed document, plus underlying studies and associated documents such as the Environmental and Social Action Plan and the Stakeholder Engagement Plan. To be adequately integrated into the management of the project Environmental and Social issues must be addressed across the lifetime of the project. When viewed from this perspective it is clear that EBRD and GUE have identified the issue of biodiversity within the Paravani River and have integrated its assessment and management into the development of the project. The issue is generally identified in EBRD environmental and social documentation - though it is not given prominence in the Environmental and Social summary prepared by IFC and EBRD after the IESE site visit in March 2010. The issue does gain prominence in EBRD’s own disclosure documentation on the project. The final ESAP provides for a comprehensive monitoring programme and ‘adaptive management’ within the project in the event of deterioration in biodiversity values. Adaptive management as a concept and approach which involves a ‘learning process’ which is rooted in the project environmental and social management system is entirely legitimate, however this type of approach pre-disposes a ‘risk averse approach’ which explicitly accommodates uncertainty. Adaptive management does not therefore provide a license to assume that any impact can be managed after the event and it imposes an additional responsibility to ensure that any irreversible impacts are understood in advance and addressed on a risk-averse basis. It is difficult to see how the selection of a pre-determined %AAF without any substantiated ecological baseline is consistent with those parameters.

Bird Migration

Georgia is identified as a significant location for migratory waterfowl and as an endemic bird area by Birdlife International. 11 Globally threatened species (1 critically endangered, 4 endangered and 6 vulnerable) have been identified in Georgia along with a further 14 near threatened species. The Africa-Eurasia flyway is acknowledged as crossing the project area and the lakes of South Javakheti are increasingly acknowledged as an important resource for waterfowl (Ramsar Site) providing an important intermediate zone between the humid Kolkheti region of western Georgia and the dry mountain ranges of Anatolia. This region includes the Mkhtvari and Paravani gorges. The western portion of the Paravani River and parts of the transmission line route north lie within the eastern boundary of the Meskheti Important Bird Area (IBA) identified by Birdlife International as of great significance for Raptors and as a migration bottleneck for species which may stage in the area as well as migrating through the region. IBA’s are identified as areas where there should be targets for action and possible legal protection which guarantees the integrity of such sites which are decisive in maintaining and conserving such birds. In addition at Zikilia the transmission line is less that 20km

---

45 IFC Guidance Note 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
http://www1.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/IFC+Sustainability/Sustainability+Framework/Sustainability+Framework+2012/Performance+Standards+and+Guidance+Notes+2012/


47 http://www.birdlife.org/GG008/meskheti
away from the Borjomi-Kharagauli National Park. Whilst not formally protected currently, the area is clearly one of some sensitivity and this should have been reflected in the EBRD requirements for biodiversity assessment.

Whilst the ESIA acknowledges the potential impact of the transmission lines on migratory birds, the level of analysis of the importance of the potentially affected species and their regional/global significance is cursory. More detailed baseline monitoring of species present and their reliance on the resources could have been undertaken in advance of the EBRD Board decision and reference made to previous investigations and approaches (such as the Black Sea Transmission Project ESIA). Initial field observations could have been undertaken across a single migration season to draw some conclusions with respect to the significance of the precise project area, however in the absence of such work the ESIA and associated documentation do not provide enough information for EBRD to determine if the requirements of PR6 were being met. EBRD staff advise that their due diligence was based on other sources such as personal e-mails and conversations with specialists. The consolidated output from these other sources is not however present within the documentation provided to PCM or is it represented in the disclosed documentation.

Analysis by GUE and its consultants is on-going and it is anticipated that the results of this analysis will be disclosed. Monitoring will be undertaken during the first 2 years of operation – and additional mitigation measures may be required as a result.

Relevant Approaches

It is acknowledged that the field baseline monitoring was not a requirement under Georgian law; however EBRD is not only required to act within the terms of host country requirements. Project documentation (ESS Concept Review) suggests that environmental and social inputs were being made to the project proponents as early as 2008, when a proposed ESIA TOR was provided. Appropriate design of the ESIA at that point would have provided time to undertake field baseline assessments in advance of preparation of the ESIA, or the Georgian ESIA could have been updated to integrate that information. It would certainly have been available well in advance of the ESIA Non-Technical summary which formed the basis for international disclosure and was not released until the end of 2010. Any assertion that there was insufficient time available to undertake the baseline ecological survey as part of the ESIA on the basis of the project critical path is therefore not credible. More likely and understandably in the current economic climate, there may have been reticence to incur the costs of such a study until financing from EBRD and IFC had been agreed, however it was EBRD’s responsibility to ensure that the assessment undertaken met its own policy requirements. In addition, the fact that EBRD were unable to review the Georgian ESIA may have compounded the underlying problem: that the ESIA did not include an adequate assessment of the potential biodiversity impacts under EBRD requirements even though it met Georgian law.

Whether this is consistent with EBRD policy and procedure and with good practice becomes the overriding question. How much information should be available at the time of making an investment decision to meet the ES Policy requirement to ‘…….undergo environmental and social appraisal …to help the EBRD decide if an activity should be financed….’ (ESP Section C, Paragraph 14)? This policy commitment clearly infers a requirement to understand the environmental and social issues in advance of a decision to proceed.

Whilst PCM has concluded that article 6 of the EU habitats directive should not be applied in this case, the absence of such a rationale within the EBRD documents is surprising as the project is clearly
located in an area of some sensitivity albeit that it is not directly in a currently protected area. It was important that EBRD make a considered judgement about the issue in determining the approach to be taken.

From the ‘desk based’ baseline information available, the possibility of protected species within the River (such as Brown Trout) was not entirely clear, though in isolation it is not suggested that this would anyway have triggered an immediate enhanced requirement for physical baseline investigation. With respect to birds, even a cursory analysis of available information points to the significance of the area (particularly the transmission line element of the project) with respect to bird species of importance and the potential for future legal protection. The presence of globally endangered species and the intersection of the site with an IBA should at the very least have alerted EBRD to consider the need for an adequate baseline assessment in advance of the decision in principle to invest.

The timing and adequacy of this assessment remains a matter of professional judgement. A number of factors will invariably be part of that judgement and constitute logical ‘tests’ which EBRD should apply:

How significant is the issue within the overall environmental and social impact of the project – is it one of the key issues which constitutes a substantive environmental or social risk (i.e. it may be irreversible or have diverse effects which are difficult to assess or mitigate etc. - and may have driven the ‘A’ categorisation of the project) and therefore is it an issue on which EBRD should be clear in advance of the in-principle decision to invest?

In the case of biodiversity - does the due diligence undertaken represent a ‘precautionary’ approach to biodiversity impacts?

Or is it the case that the issue one which the ESIA process has identified can be mitigated and where the precise nature of that mitigation can be designed during the on-going development of the project and which does not influence the ‘in-principle’ decision to invest.

Such a test is entirely consistent with the commitment in PR1: Para 8 - ‘The nature of due diligence studies undertaken will be commensurate with the risks and issues involved……..it will be adequate, accurate and objective evaluation and presentation of the issues….’ From the EBRD perspective the ‘purpose’ envisaged by the requirement in PR1: Para 8 must include enabling EBRD to make a decision over its financing of the project.

In the case of Paravani HPP, the issue of impacts on the River downstream of the dam was acknowledged (by EBRD) as secondary only to possible impacts on Critical Cultural Heritage in importance. Once that issue had been resolved (through relocation of the transmission lines) it became the primary issue and was acknowledged as such by EBRD in its internal documents. It is also an issue which is always present within any dam development of any size or type, because there is always an impact on downstream flow volumes and characteristics. The baseline assessment of downstream biodiversity and the impact of the project should therefore be one of the first considerations in any ESIA TOR and flagged early in the process as one of the key risks.

It is also important that the outputs from such an analysis are fed back into the project design assumptions relating to flow diversion and power generation. Whilst EBRD correctly makes the point that for most of the year the downstream flow will be in the region of 15-25% AAF, it still does not know what the impact of that is likely to be on downstream fish populations. Also it is clear that at
certain times of year, any requirement to significantly increase downstream flows above 10% could have impacts on power generation.

To take this analysis to its logical conclusion: If after completion of the baseline ecological assessment of the River it is determined that the flow rates required to achieve a ‘no net loss’ outcome are significantly higher than 10% of AAF then there may be a conflict between the maintenance of biodiversity in the River and optimum operation of the power plant. Under these circumstances EBRD could fall back upon the investment agreement conditionality requiring an increase in flow rates, but this could result in a sub-optimal project economically. This remains a possible outcome in which there would be no winners.\(^{48}\)

With respect to the issue of Bird Migration it is clear that EBRD could not know from the documentation provided whether there would be major impacts on important bird species, nor was it clear what the precise relationship between important bird areas and the project site was.

So – to return to the key questions set out at the start of this section:

i. Was the overall approach ‘precautionary’ with respect to the conservation of biodiversity resources?
   It is accepted that further studies were planned and are underway which will (and have) provide the required level of understanding of the biodiversity impact of the project, but this analysis was not available at the time of the EBRD decision in principle to invest.

ii. Was the appraisal based on ‘recent information’ including an accurate delineation of the baseline conditions? No. It is accepted by PCM that EBRD staff, in consultation with project specialists, held a professional opinion that the impacts would be capable of mitigation. It is also accepted by PCM that EBRD sought to achieve mitigation of any biodiversity impacts through a process of adaptive management in the ESAP and conditions precedent in the investment agreement.

iii. Was the EBRD appraisal appropriate to the scale of the project? Viewed across the overall project implementation timeline the answer has to be yes. In relative terms the Paravani project is not a large hydropower project and the final outcome in terms of quality of due diligence and technical assessment by the client will be good. However, the issue of timing is key.

In the case of both the downstream biodiversity impacts upon the Paravani River and the case of the Migration and presence of important bird species within the project area, in the opinion of the PCM expert this did not constitute a precautionary approach in advance of the EBRD Board decision based upon recent and accurate baseline information.

4.7 Finding

PCM finds that:

1. In the case of the Paravani River, the selection of a flow regime model such as the ‘Tennant’ methodology was not in itself flawed, but that the %AAF to be adopted should have been validated through calibration against local conditions established through an appropriate

---

\(^{48}\) The issue has been raised whether this falls within the terms of the compliance assessment. EBRD expresses the view that as part of the ESAP the client has agreed to adapt flow rates based on monitoring results irrespective of the impact on electricity generation. However, EBRD also asserts that its Environmental and Social appraisal is integrated into its overall project appraisal (ESP: Paragraph 14) PCM believes that this is central to the argument that the %AAF adopted must be based on an appropriate baseline biodiversity assessment and is therefore material to the compliance review.
baseline assessment of the River ecology, morphology and flow rates in advance of the EBRD investment decision, at least to the point where EBRD could be confident that the plant could operate at sanitary flow rates which would not irreversibly damage the river ecosystem.

2. Impacts on migratory waterfowl of regional and global significance are possible as a result of the project. The ESIA and Non-technical summary documentation should have been more explicit about this and provided a deeper analysis of the potential significance. International guidance on the use of cable spacing, bird scarers etc. should have been more explicitly set out and adopted during construction. EBRD should have recognised at an earlier stage that the issue had not been dealt with to the required level of detail in the ESIA and that it had sufficient information available in advance of the investment decision to determine whether the project would adversely affect protected species or sites.

3. That there was adequate opportunity for field baseline assessment studies to have been undertaken prior to EBRD project approval, if the requirement had been communicated at an early stage.

4. That it was not appropriate for the major work on the key issue of biodiversity to be assessed after the decision to invest. Even though the requirement for this information is a conditionality of disbursement – it dislocates the analysis from the core investment decision and from the crucial disclosure and consultation requirements which underpin that decision.

5. That the important information gathered could and should have been iteratively utilised to influence the design parameters of the project. Design and (early) construction of the project had commenced in advance of EBRD involvement. However EBRD was able to influence design parameters and ongoing monitoring. The investment appraisal process applied however did not include an accurate description and delineation of the environmental baseline data and potential impacts at an appropriate level of detail at the time that EBRD made its investment decision.

6. That despite these shortfalls it is likely that the impact on River biodiversity can be mitigated, but EBRD did not know that at the time it made the investment decision, nor was it therefore effectively addressed in the public consultation and disclosure which preceded that decision. In fact EBRD knew that the ESIA disclosed in Georgian was incomplete and whilst the decision was made to proceed based on professional opinion, it was not based upon appropriate baseline information..

7. That as a result the approach adopted did not constitute a ‘precautionary approach to the conservation of natural biodiversity resources’ and that the risks and impacts, were not addressed in a way that was consistent with a precautionary approach in that they were postponed until after the investment decision. This opinion is reached on the basis of the requirements set out in the ESP and the opinion set out in section 4.2 above..

8. PCM does not believe it would have been appropriate to invoke the enhanced requirements of article 6 of the Habitats Directive, but concludes that the absence of clarity over the precise applicability of EU requirements on biodiversity in member states to EBRD is not helpful to the Bank or complainants in interpreting its policy commitments.
9. That although PCM recognizes GUE’s intent to undertake further consultation activities when the baseline assessment results are available, the timing of the biodiversity assessment in relation to the project ESIA and the EBRD investment decision process means that meaningful dialogue with affected parties which could facilitate their informed participation in the decision-making process was not possible.

10. That EBRD is therefore in breach of Performance Requirement 6.6 with respect to the potential impact on biodiversity in that it did not fully characterise the risks and impacts, consistent with a precautionary approach and reflecting the concerns of relevant stakeholders in advance of the EBRD board decision to invest. It is also in breach of Performance Requirement 1.5 in that at the time of board decision the appraisal was not based on an accurate delineation and description of the environmental baseline data at an appropriate level of detail.
5 Complaint Element 3: Whether the potential for flooding in Khertvisi village had been adequately addressed

5.1 The Complaint

The complainant alleges that one of the major social impacts of the project is the risk of flooding within the village of Khertvisi due to the diversion of significant water flow from the Paravani River into the Mtkvari River some 1.5km upstream of the village and that this potential impact is inadequately addressed.

5.2 EBRD Policy and Procedural Requirements

There are a number of areas of EBRD requirements which would address the issue of flooding within the context of the project. Performance Requirement 1: Environmental and Social Appraisal and Management, Paragraph 5 requires that “The appraisal process will be based on recent information, including an accurate description and delineation of the client’s business or the project, and social and environmental baseline data at an appropriate level of detail.”

Performance Requirement 4: Community Health, Safety and Security, Paragraph 7 would address the health and safety elements of the potential flooding issue - ‘The client will identify and evaluate any potential impacts to the health of the affected community during the construction, operation and decommissioning of the project and will establish preventive measures and plans to address them in a manner commensurate with the identified impacts. These measures will favour prevention or avoidance of risks over minimisation and reduction’

Under Performance Requirement 5: Land acquisition, Involuntary Resettlement and Economic Displacement: Paragraphs 1 and 6 would apply if residents of Khertvisi were to be ‘physically displaced’ or ‘lose access to assets’ (agricultural land) as a result of flooding, The objectives of the PR include ‘minimising any involuntary resettlement ……through alternative project design’ and ‘at a minimum the restoration of livelihoods’ for anyone displaced.

Last but not least Performance Requirement 10: Information Disclosure and Stakeholder Engagement Paragraph 17 would require that the flooding issue would be subject to disclosure and consultation: ‘……….. for…Category A projects……..Disclosure and consultation requirements are built into each stage of this process. Clients shall ensure meaningful dialogue with affected parties and facilitate their informed participation in the decision making process……….on matters that affect them directly such as proposed mitigation measures…….’

5.3 EBRD Responses

EBRD observes that the ESIA and the Non-technical summary specify that GUE would observe water levels and develop appropriate methods of impact avoidance in the case of negative impacts. It goes on to specify that additional monitoring and modelling will be undertaken and the results disclosed to the local community with mitigation measures to be developed and agreed.

5.4 The Project Documentation (Documentation produced by GUE or its consultants)

In the Environmental and Social Impact Assessment (ESIA) the issue of flooding at Khertvisi is not identified as a major impact. It is assessed and addressed through the following statement:
‘According to the information received from local residents, the land portions at the confluence of the rivers Paravani and Mtkvari are periodically flooded. The level of flooding will be determined during the preparation of the HPP technical design. If the risk of damage to these areas is revealed, it will be necessary to determine the proper protective measures in the design and implement them’

The ESIA generally positions the socio-economic effects of the project as positive and does not anticipate any significant physical or economic displacement as a result of the HPP projects construction or operation (some displacement will be required for the transmission lines).

The ESIA – Non technical summary dated February 2011 advises that:

‘Some local stakeholders have been concerned that the discharge of water from the tailrace at the powerhouse into the Mtkvari River will influence the flow in the river at the Mtkvari/Paravani confluence (i.e. near Khertvisi village) and cause increased risk of flooding at the orchards/cultivated plots located nearby. This is not believed to be a significant risk but flows in the Mtkvari will be observed to verify this. If negative impacts are observed, GUE will work with authorities and affected people to develop the most appropriate measures of impact avoidance’.

The issue of flooding was clearly elevated in terms of its significance as a result of consultations with locally affected residents, it is not addressed within the Environmental and Social Action Plan – nor it is addressed within the Environmental and Social Performance Annual monitoring Report which contains the final action plan and is covenanted within the common terms agreement between EBRD and GUE. It is understood that the issue has been addressed in a ‘side agreement' between EBRD and GUE.

Consistent with the commitments made, GUE and SRF Gamma have undertaken substantive further studies. Hydrological studies were commenced during 2012 and an initial report based on the first two seasons monitoring was prepared and disclosed to local residents at a meeting on 28th June 2012. The work constituted two principle elements – a study of profiles in sections of the river considered as sensitive and measurement of flow/water volume in both the Paravani and Mtkvari rivers. The monitoring work (which updates baseline data not previously measured since the Soviet era) has continued throughout 2012 and will be presented in its finality to the residents once available. The modelling work has addressed flow conditions ranging from low water to those associated with historic catastrophic flooding. This analysis will enable the identification of areas potentially sensitive to flooding and the development of appropriate mitigation such as flood defences. It is the PCM’s view that the issue is now being addressed in a manner which is consistent with EBRD requirements and that in many respects the public consultation process can be seen to have worked in that this issue was raised in significance through that process. The question remains whether that is consistent with EBRD Policy and Procedural requirements.

5.5 EBRD Documentation (Documentation produced by EBRD or its co-financiers)

The Environmental and Social Review Document (March 2010) does not identify flooding as an issue per-se, but notes the need for more precise information on resettlement or economic displacement.

The Project Summary Document for Paravani Hydro Power Plant first disclosed by EBRD on 23rd December 2010 (but updated) notes the residents’ concerns regarding flooding and that further modelling studies are being undertaken with intent to share the results with residents in the summer of 2012.
The ‘Environmental and Social Summary – Concept Review’ dated 15th October 2009 mentions the need for flood management strategies under performance requirement 3 but these seem to be more in the context of the dam component itself rather than the river diversion. It also identifies the need to review potential resettlement/economic displacement due to project construction and operation requirements.

The ‘Environmental and Social Summary – Final Review’ dated 17th March 2011 does not mention the issue of flooding at Khertvisi and confirms that no resettlement is anticipated.

The Environmental and Social Performance Annual Monitoring Report for Georgia Urban Enerji Ltd (undated) prepared for insertion in the common terms agreement, does not include provisions relating to monitoring, modelling of flood levels or flood prevention.

Representations to EBRD by affected parties including NGO’s caused further internal discussion of this issue, including at Board level due to the concerns raised about flood risks increasing in Khertvisi village, and whether this had been discussed with the affected community.

EBRD concluded that the maximum volume of water diverted from the Paravani River into the Mtkvari River would raise the high water level around 10 cm in an average year, which should not result in flooding. It also observed that given the level of community concern, GUEN had agreed to commission an additional evaluation of flooding risks and that the outcome of this study – including the technical details of any mitigation requirement(s) - would be discussed with the potentially affected community as soon as it was available’.

5.6 Observations and Conclusions

The issue of potential flooding at Khertvisi was identified in the initial ESIA in 2009 meeting the preliminary requirement of performance requirement 4; however no specific monitoring or mitigation requirements were specified in the ESAP or in the common terms agreement between EBRD and GUE. Initial analysis indicated very small increases in River levels in an average year (10 cm rise). The significance of the issue however was elevated following concerns raised in public consultation. Monitoring and modelling and disclosure requirements were then specified through a side agreement between EBRD and GUE. This to some degree gives credibility to the consultation process which clearly worked in identifying community concerns.

Monitoring is now complete, disclosure of information has taken place and mitigation discussions have commenced with the affected communities. The monitoring and modelling indicates that potential impacts on river levels are not significant though a number of locations in and adjacent to the River (islands, some lower lying pasture areas, access road) will become more susceptible to flooding. Mitigation measures in terms of flood protection are likely to be required.

The issue is being processed within the overall environmental and social management framework for the project – so the issue again becomes one of severity and timing. In that respect, the ‘test’ identified in complaint element 1 above becomes relevant, i.e:

How significant is the issue within the overall environmental and social impact of the project – is it one of the key issues which constitutes a substantive environmental or social risk (i.e. it may be irreversible or have diverse effects which are difficult to assess or mitigate etc. - and may have driven the ‘A’ categorisation of the project) and therefore is it an issue on which EBRD should be clear in advance of the in-principle decision to invest?
Or - is the issue one which the ESIA process has identified can be mitigated and where the precise nature of that mitigation can be developed over the development of the project and which does not influence the ‘in-principle’ decision to invest?

The possibility of economic (or indeed physical) displacement as a result of flooding is a potentially serious one and it is clear that the extent of such possible displacement was not clear at the time of the release of the ESIA or the ESAP and only became a matter of detailed assessment as a result of inputs from the local population. The work undertaken by GUE since appears to be of a high quality and combined with good quality consultation and the design of appropriate mitigation measures should lead to a satisfactory outcome for local residents (and in fact lead to a reduced flooding risk). It is also clear that the issue was not included at the stage of preparation of the ESAP. This is of some concern, because it might have been a major issue for the relatively small number of people living and gaining access to resources (agricultural land etc.) between the powerhouse tail race and the confluence of the Paravani and Mtkvari Rivers. EBRD contend that the issue was not deemed to be of enough significance to be included in the ESAP and that this was a deliberate decision rather than any oversight on their part.

It seems likely that on balance, irrespective of these shortcomings, the issue was not a major risk and could reasonably be mitigated during the projects development, design and implementation once detailed modelling of impacts up-stream of the river confluence could be undertaken. It was also the subject of substantive discussion with local residents during public consultation activities and GUE responded to those inputs in an appropriate manner. Subject to the continuing disclosure of the modelling studies and the design of appropriate flood defence measures, the issue should be successfully resolved.

5.7 Finding

1. That having identified flooding as a potential issue in the ESIA, EBRD should have ensured that the issue was followed through and included in the ESAP and related legal agreement between EBRD and GUE. The issue was not included in the ESAP but included at a later point in a side agreement between EBRD and GUE following concerns raised during public consultation. The monitoring and modelling plan should have been set out in the ESAP and been subject to public consultation at that time.

2. GUE has effectively dealt with the issue through a process of monitoring and modelling and effective public consultation is now taking place.

3. That, despite the shortcomings set out above, the analysis, management and mitigation of the flooding issue has been adequately addressed as part of the on-going environmental and social management of the project and as a result EBRD is not in breach of its policy or performance requirements.
6 Complaint Element 4: Whether the local populations access to pastures had been closed during project construction

6.1 The Complaint

The complaint alleges that ‘the ESIA fails to describe…problems regarding the access to pastures and subsequent mitigation measures. According to the local population, since construction works started, they have not been allowed to graze their cattle in their pastures (Kvarska) as the path to the pastures has been closed by the project sponsor’

The specifics of the complaint were discussed in more detail and construction activities around the villages of Ptena and Chunchka particularly identified as problematic. The complainant was asked by the PCM to identify individuals or families who had outstanding grievances relating to loss of access to assets, so that these could be discussed during a site visit, but the complainant did not feel able to do that.

6.2 EBRD Policy and Procedural Requirements

EBRD Performance Requirement 4 Community Health and Safety\(^\text{49}\) would require that any potential health and safety impacts on the affected communities are identified during all stages of the development.

EBRD Performance Requirement 5: Land Acquisition, Involuntary Resettlement and Economic Displacement\(^\text{50}\) applies to situations of temporary economic displacement which would include where there is a restriction on access to natural resources – such as any decrease in agricultural yield due to a project related disturbance.

The possibility of such impacts should therefore have been considered within the ESIA analysis.

6.3 EBRD Responses

EBRD notes in its response that some restrictions may have occurred due to safety concerns. GUE is also being required to provide replacement or replacement value for any economic dislocation occurring.

6.4 The Project Documentation (Documentation produced by GUE or its consultants)

The ESIA – Non technical summary dated February 2011 which would have formed the principle basis for consultation does not mention the potential for temporary lack of access to pastures within its analysis of nuisance impacts, land use or community health and safety.

6.5 EBRD Documentation (Documentation produced by EBRD or its co-financiers)

The Environmental and Social Summary – Concept Review (October 2009) notes the potential need for a Resettlement Framework if any resettlement needs are identified (including due to construction activity). The potential for economic displacement through construction impacts on agricultural land is

\(^{49}\) Environmental and Social Policy, European Bank for Reconstruction and Development, May 2008
Performance Requirement 4: Community Health, Safety and Security P 30-33

\(^{50}\) Environmental and Social Policy, European Bank for Reconstruction and Development, May 2008
Performance Requirement 5 : Land Acquisition, Involuntary Resettlement and Economic Displacement P34-43
noted within the Environmental and Social Review Document produced by IFC/EBRD in March 2010.

An internal back to office report prepared by EBRD staff dated 7th December 2010 (relating to a visit made 22-24th November) noted that GUE has made major improvements to the road from the main highway to the camp site and from the camp to the top of the mountain and across the plateau (passing the explosives magazine and the cement mixing area) to the nearest village, Chunchka. The road had reportedly been in extremely bad condition before being reconstructed. It mentions that the villagers were extremely pleased the road had been improved.

The report also notes that a new section of road was under construction on the plateau along a flat route from Chunchka to the plateau’s edge above the HPP site at the time of the visit. It notes that the road crossed agricultural fields and grazing land and was being constructed by bulldozing away the topsoil to an apparent depth of something less than 0.5 meters and then filling the roadbed with fines and gravel. Contrary to the ESAP, topsoil was not being salvaged but was left where it was been pushed to the side of the road, on the edge of the fields. It was not determined if farmers and grazers had been compensated. Recommendations were made to GUE relating to improved practices. It is therefore clear that EBRD did visit during the construction activities which may have resulted in the complaint and engaged with GUE on the issue.

The Environmental and Social Summary – Final Review (March 2011) advises that the Company is being required to develop and implement a Land Acquisition and Compensation Plan. This requirement is followed through in the Environmental and Social Action Plan where GUE is required to:

‘Complete, disclose and implement the land acquisition and compensation plan agreed with the lenders’ although this clearly relates primarily to the transmission line construction. GUE is also required to ‘implement an agreed stakeholder engagement plan including feedback to local stakeholders on agreed environmental and social mitigation measures that could affect them….and to keep records of any grievances raised and associated responses provided’.

6.6 Observations and Conclusions

The potential for some disruption to agricultural access during construction activities was identified from the earliest stages of EBRD’s analysis of the project and there is a clear requirement to assess such impacts and compensate for them under the ESP Performance Requirements. This was not identified in the ESIA non-technical summary. Site visits by EBRD found some evidence for such disruption taking place and as a result the Company was asked to take remedial action.

During the PCM site visit, the full length of the access Road into and around the villages of Ptena and Chunchka was driven. Animals were observed in the pastures adjacent to the villages and no constraints on access were noted, however by the time of the PCM visit the road construction/rehabilitation was complete.

GUE reported that they have a grievance mechanism in place and that there were no outstanding grievances. In the absence of any specific complainants who could provide specific examples of uncompensated disruption it is difficult for the PCM to pursue this further.

6.7 Finding
PCM Finds:

1. It is not doubted that some disruption to use of pastures may have taken place; such disruption was not visible during the PCM visit. EBRD has reacted in a way which is consistent with its policy requirements and will continue to monitor that compensation is paid where any economic displacement takes place consistent with a land acquisition and compensation plan. EBRD is therefore in compliance with its Environmental and Social Policy and Performance Requirements.
Complaint Element 5: Whether alternative renewable energy options were adequately addressed

7.1 The Complaint

The complainant alleges that the project ESIA describes technical and technological alternatives to the project, but does not provide an appropriate level of analysis and costing of alternative renewable energy options such as solar, wind, geothermal and bio-energy, giving only background descriptions.

7.2 EBRD Policy and Procedural Requirements

EBRD Performance Requirement 1: Environmental and Social Appraisal and Management requires within Paragraph 9 that for category a projects a comprehensive environmental and/or social impact assessment and that *inter alia* the ‘assessment will include an examination of technically and financially feasible alternatives to the source of such impacts and documentation of the rationale for selecting the particular course of action proposed’. It also requires that ‘in exceptional circumstances a regional, sectoral or strategic assessment may be required’

7.3 EBRD Responses

EBRD notes that the Georgia Ministry of Energy, with input from the World Bank Group and other Agencies had prioritised the development of hydropower resources. It notes that the December 2007 Georgia: Strategic Assessment of Power Sector Development commissioned by the IBRD included least cost analysis of power sector options and concluded that the Paravani project was the most cost effective Hydropower project and should be developed first. The Paravani project was regarded as having the least environmental and social impacts compared to other HPP options.

EBRD also asserts that this does not contradict the requirement to ‘include an examination of technically and financially feasible alternatives…..’ and that the ESIA is seeking to demonstrate that the project is not being developed in a vacuum and was not seeking to provide a full scale evaluation of those options.

7.4 The Project Documentation (Documentation produced by GUE or its consultants)

The Environmental and Social Impact Assessment (ESIA) provides a review of the potential for other renewable forms of energy production within the region and their relative merits and deficiencies. It also provides a status report on current analysis of those options. A brief comparison of the relative Carbon Dioxide production profile of renewable versus non-renewable resources is also provided.

7.5 EBRD Documentation (Documentation produced by EBRD or its co-financiers)

EBRD support for the Paravani HPP project is solidly founded within its Strategy for Georgia, approved 9th February 2010 which clearly states that ‘The Bank will support investment in the rehabilitation of existing hydropower plants and the construction of new green field facilities promoting the implementation of best international practices in terms of environment, social responsibility and procurement.

---

The December 2012 Georgia: Strategic Assessment of Power Sector Development, commissioned by the World Bank (IBRD) provides a comprehensive assessment of Georgian Power requirements and the potential options available to the Country. Options specifically reviewed were:

- Gas-fired combined cycle units of 150 MW capacity
- Large hydro plants (HPP Khudoni, HPP Paravani and Namakhvani cascade)
- Imported and domestic coal-fired plants with 300 MW units
- Nuclear power plants of different size
- Renewable sources encompassing small hydro power plants with capacity less than 50 MW, wind farms, geothermal and biomass power plants
- Electricity Import during winter period and export of the excess of the generation from HPPs during summer period

The report applies a multi-criteria ranking, which integrates environmental and social components. The options developed are then also assessed against various weighting co-efficients depending upon the issue of most interest, for example energy security or financial return or CO2 emissions. Whilst it is not the role of this assessment to review the credibility of this study in detail – it provides a robust basis against which strategic decisions could be assessed.

All of the favoured alternatives developed included the construction of HPP plants with Paravani identified as the preferred option to be developed first due to its relatively benign environmental and social impacts.

Further work has also been undertaken on the assessment of cumulative impacts from multiple HPP plants on the upper reaches of the Paravani River, and the relevance to projects which have been announced since the completion of the original ESIA on Paravani HPP is being updated.

7.6 Observations and Conclusions

The requirement for EBRD to undertake ‘an examination of technically and financially feasible alternatives…….’ must be considered in the context of the project to be financed and the extent of studies undertaken relevant to its development and implementation. As reflected upon elsewhere in this report the Paravani HPP project is of some significance. It is a ‘trans-boundary project – in that some of the power generated will be sold to Turkey, it is also the first greenfield HPP project in Georgia for some 20 years and is likely to be followed by further HPP investments on the same river system with associated cumulative effects. Based upon this significance it would be legitimate to expect that a strategic assessment would be undertaken and alternative options should be included within the project ESIA on the basis of these exceptional circumstances. The ESIA does consider a range of design options for various aspects of the projects design, but these do not constitute a rigorous analysis of alternative options.

However, in the case of Paravani HPP, the decision in principle to invest in the hydropower sector in Georgia was clearly set out in the EBRD Georgia strategy (2010). This followed a strategic analysis

---

53 PCM has seen a draft Annexe relating to cumulative impacts on the Paravani River which builds upon the Mktvari study.
54 http://www.ebrd.com/pages/country/georgia.shtml
of Power Sector Development Options undertaken in 2007 which clearly identified HPP as high potential for Georgia and identified the Paravani project as high priority. The strategic basis for decision making on the project for Georgia and EBRD is clear and had substantively addressed the relevant options and had been subject to public scrutiny and consultation. It would however have been helpful if this background had been more clearly set out in the publicly disclosed documentation on the Paravani project.

7.7 Finding

PCM Finds:

1. The alternative renewables analysis within the ESIA is, as described by the complainant, only ‘background’ in nature and could more usefully have described for stakeholders the process by which the Paravani project was identified as high priority in the 2007 Energy Sector Study.

2. The 2007 study provides a suitable analysis of power supply options which meets the EBRD policy requirement for an: ‘examination of technically and financially feasible alternatives to the source of such impacts and documentation of the rationale for selecting the particular course of action proposed’. Because of this depth of analysis, in the view of PCM, whilst the Paravani project did present ‘exceptional circumstances’ in terms of PRI, the required level of analysis had already been undertaken. EBRD was not therefore in breach of its Environmental and Social Policy and Performance Requirements.

3. In future reviews of its Environmental and Social Policy and Procedural requirements, EBRD should provide further guidance the circumstances under which strategic or regional assessments are required and on how the need to assess feasible project alternatives should be addressed within project specific ESIA’s under the requirements of the ESP.
8 Complaint Element 6: Whether the project ESIA documentation should have been made available in English and not just in Georgian.

8.1 The Complaint

The complainant notes that the project ESIA document was not available in English and thereby questions the ability of EBRD to adequately assess it. It also alleges that this is in conflict with PR10 which commits to ‘identify people or communities that are or could be affected by the project, as well as other interested parties’ and that review by International experts was therefore precluded. It questions whether by acknowledging the credentials of the client’s consultants (SRF Gamma) EBRD abrogated its own responsibility to review the ESIA. These issues are dealt with collectively in the analysis but have individual findings.

8.2 EBRD Policy and Procedural Requirements

The ESP requirements are explicit that disclosure of relevant project information should be undertaken in the local language(s) (PR10: Paragraph 13), but this requirement is supplemented by the broader policy and performance requirements. For example: It is further required that for category A projects the ‘information disclosed must include a full EIA/SIA report in accordance with the Banks requirements’ (PR10: Paragraph 18). The stakeholder identification requirements (which would be particularly important in a category A project where a full ESIA must be produced and where it is acknowledged that impacts may be significant and diverse) require identification of ‘individuals and groups who are (i)…………affected parties or (ii) may have an interest in the project’ (PR10: Paragraph 8). The client must then engage in a ‘scoping process with identified stakeholders to ensure identification of all key issues to be investigated as part of the ESIA process’ (PR10: Paragraph 10). As well as being disclosed in a local language the ESP requires that the project information disclosure is ‘accessible’ and ‘culturally appropriate’ to the stakeholder (PR10: Paragraph 13). The ESP requires the EBRD client to extend ‘consultation to any groups or individuals who have been identified as interested parties’ and to ‘tailor consultation….to the language preferences of the affected parties’. This would therefore require information to be in a language that an interested party could understand, such that in a category A project – such as this one – there was ‘meaningful dialogue’ and ‘informed participation’ (PR10: Paragraph 17).

An additional consideration is that within its Environmental and Social Policy EBRD takes upon itself a commitment to ensure that the projects it finances inter-alia ‘are socially and environmentally sustainable’……and are designed and operated in compliance with applicable regulatory requirements and good international practice’. To achieve this, the Banks role is to …..’(i) Review the clients assessment’ ………et al. (ESP: Paragraph 3).

EBRD requires that the client undertakes stakeholder engagement which is ‘free of manipulation, interference, coercion and intimidation, and is conducted on the basis of timely, relevant, understandable and accessible information, in a culturally appropriate format’ (PR10: Paragraph 6). The project area of influence is ethnically complex. Alongside the Georgian population is a significant population of Armenian origin (some of whom do not speak Georgian).
8.3 EBRD Responses

EBRD notes that the 2008 ESP requires that ESIA documentation be available in the relevant language for the purposes of public consultation. They also note that the non-technical summary of the ESIA, the stakeholder engagement plan and the Environmental and Social Action Plan were disclosed in English. EBRD acknowledge that they did not review the Georgian language ESIA but contend that the overall quality of due diligence was not impeded due to the overall scale and quality of interaction with the client, Government authorities etc. and because selective information was provided in English. The fact that the original ESIA was only produced in Georgian is not contested by any of the parties.

EBRD further states that International NGOs are always considered a potentially relevant stakeholder group in its projects and are notified directly of Category A disclosures. As a result their review of the documentation was not in any way precluded. EBRD expresses the opinion that in the absence of any expressed interest by international NGOs, the claim by a Georgian NGO that the full ESIA reports need to be made available in English to those NGOs is not compelling. In addition it asserts that the NTS, SEP, and ESAP were all available in English, and the project was raised during the EBRD Annual Meeting, and there was still no request from the international NGO community for additional documentation in English.

Bankwatch Network and Green Alternative submitted a formal request to EBRD for a formal translation of the ESIA on 25th April 2011. The EBRD response to Bankwatch notes that it is an EBRD policy requirement to ‘make documentation available in the official local language’ and that it was ‘not reasonable to request their client to translate the (ESIA) documentation for the purposes of one foreign organisation’.

8.4 Project Documentation (Documentation produced by GUE or its consultants)

The Stakeholder Engagement Plan sets out the basis for consultation on the project which is consistent with Georgian and EBRD/IFC requirements and with relevant international conventions. Key stakeholders relevant to various stages of project disclosure are identified which include communities, authorities, local and regional groups and organisations (including business groups, women’s groups, NGOs, unions, farmers, etc. Prior stakeholder engagement activities are listed and details of the GUE grievance procedure is provided.

Summary documentation (including the non-technical summary) was provided to locally affected communities for the purposes of consultation was in several languages to reflect the ethnic diversity of the project area, including Russian which is the common denominator language. The ESIA non-technical summary, the Stakeholder Engagement Plan and the Environmental and Social Action Plan were all produced and disclosed in both Georgian and English.

8.5 Observations and Conclusions

http://bankwatch.org/ ‘CEE Bankwatch Network works across the central and eastern European region to monitor the activities of international financial institutions and propose constructive environmental and social alternatives to the policies and projects they support’.

EBRD response to Bankwatch 04/05/2011. It is assumed that this is not a confidential internal document as it was sent to an external stakeholder.

A number of important issues arise. Firstly are ‘International NGO’s’ (the terminology used in the complaint) a relevant stakeholder group and if so should the project information have been ‘accessible’ to them (i.e. in a language they could understand). In the view of the PCM expert this judgement must be related to the significance of the project. There are a number of factors which should be considered. First of all the project categorisation: category A: acknowledges that the impacts may be ‘significant and diverse’. The project is also regionally significant involving the trans-boundary (Georgia-Turkey) movement of renewably generated energy and was identified as an important ‘lead’ project in developing HPP in Georgia in key strategy documents. It is understood to be the first greenfield HPP project in Georgia for more than 20 years. It therefore, to a significant degree, develops precedents in the way that such projects are evaluated in Georgia and in the way that they are assessed by International Financial Institutions such as EBRD. Indeed this is a legitimate and important part of the EBRD role in developing such projects which is recognised within its ESP…..’EBRD’s mandate to foster transition to market-based economies and promote private entrepreneurship, and its commitment to sustainable development are inextricably linked’ (ESP: Paragraph 1). So, even though the Paravani project is not ‘large’ in physical or power generation terms it has certain characteristics which make it ‘significant’. This analysis is effectively accepted by EBRD through its ‘A’ categorisation and automatic notification of disclosure to International NGO groups.

In the context of such a project it is the PCM experts view that it would be inappropriate to tightly define the relevant stakeholders as those directly affected by the project (though these stakeholders are of primary importance) and it is a reasonable expectation of EBRD to ensure that such projects are accessible to the broader analysis that national and International NGO (and other) groups can bring. This effectively happens through two routes. Firstly through the clients stakeholder engagement activities and secondly through direct notification from EBRD. In the case of Paravani, EBRD advises that the international NGOs were notified directly by the Bank about the project via an automatic notification email when the Category A project information was posted on its website— but that International NGO’s did not contact the Bank or the client to make any requests. Therefore no requests for the ESIA documentation in English or other International language was received.

It is notable that in 2011 (the last year for which formally published information is available) of 26 Category A projects processed by EBRD, 3 were in local language only, 3 had selective documents only in English. Disclosure on Paravani is identified as having taken place in Georgian and Russian. All the rest were disclosed in local language and English58. Formal data for 2012 has not yet been published.

It is assumed that if EBRD believed that it would be unreasonable (for cost or other reasons) to require the client to prepare the project ESIA in English or another more internationally accessible language (such as Russian) it could have legitimately supported that activity as part of its broader role in …’considering whether projects can be expected to contribute to the development of the host country’ and projects which ‘….have the potential to realise additional environmental and social benefits’ (ESP: Paragraph 5). This would also be consistent with the aspiration to ‘……….enhance the assessment of transition impact of proposed projects to more explicitly reflect the systemic sustainable development dimension of transition and the benefits of a strategic approach in this area.’(ESP: Paragraph 4). EBRD also commits to an over-arching commitment to ‘the principles of corporate transparency, accountability and stakeholder engagement’ (ESP: Paragraph 7).

EBRD however advises that it would not normally request a client to translate large volumes of ESIA materials without a specific need for those materials in the additional language was demonstrated or unless the project showed potential transboundary impacts or other international dimension. An English ESIA would not have been accessible to any other ethnic groups in the area, and the amount of information in Russian and announcements in Turkish and other media were deemed sufficient. EBRD state that no requests were made for additional translation.

The second important issue arising from the complaint is whether it was acceptable for EBRD not to require a translation of the ESIA documents for the purposes of its own review or to commission a review of the documentation by a Georgian speaking consultant. A corollary being the extent to which the availability of the ESIA in Georgian (only) prejudiced or otherwise EBRD’s due diligence on the project. That EBRD actively engaged on the project with the client is not contested and the PCM expert is convinced that the overall quality of the long term environmental and social management of the project will benefit as a result. However as noted above the Banks role is to …..'(i) Review the clients assessment’ ………et al. (ESP: Paragraph 3). It has been noted in section 4 of this report that in the opinion of the PCM expert that the ESIA disclosed in Georgian in 2009 did not meet EBRD performance requirements (with respect to biodiversity and other issues) despite EBRD having provided an outline TOR in 2008. EBRD has indicated that its specialist staff working on the project were unable to read that document in Georgian and that it was not translated (though other information that EBRD deemed relevant was translated). It is important to consider whether this was a material consideration in the quality and timing issues which caused the biodiversity impact assessment on the Paravani River and on bird migration to be undertaken after the decision in principle to invest. By December 2010 (see section 4) it was clear to EBRD that significant additional information was required, beyond that contained within the Georgian ESIA to meet the requirements of its Environmental and Social Policy. This is strongly contested by EBRD who assert that they had multiple lines of information available to them through direct contacts with the client and Gamma SRF experts and were not reliant on the ESIA. They also assert that the decision to allow baseline studies to take place after Board approval of the project was not because of any delayed recognition of impacts but based on professional judgement that the final results would not have overturned a decision to invest.

The third issue is whether the availability of the ESIA in Georgian actually met the requirement to disclose in local language(s) and be ‘accessible’ to affected people and in particular ‘vulnerable people (for example minority ethnic groups)’. It is not the role of this assessment to opine on the ‘vulnerability’ of minority ethnic groups who might be affected by the project, but it is certainly the case that particularly Armenian (and possibly other) ethnic groups are affected by the project as well as the Georgian community, and that these groups do not all speak Georgian. This issue was addressed by GUE/SRF Gamma through the provision of summary information (including the Non-Technical ESIA summary) in multiple languages, multi-lingual consultation meetings etc. It should be clearly stated that it is not the assertion of the PCM expert that the interests of these ethnic groups were prejudiced as a result and no evidence to that effect has been brought to its attention. In fact, to the contrary, interactions on site indicated that relations between the Company and local communities were good and constructive. PCM concludes that as far as can be ascertained, the provision of information locally was consistent with the requirements of the ESP.

However, EBRD believes that under the ESP it was only required to ensure disclosure of the ESIA document in local language (Georgian) and that other interested parties were assisted in their understanding of the project through disclosure of specific documents in English. PCM analysis concludes that this interpretation of the ESP is incorrect.
International NGO’s such as CEE Bankwatch and local NGO groups such as Green Alternative are legitimate stakeholders in the Paravani Project under the ESP. They requested a copy of the ESIA document in English, once it had been disclosed. If EBRD believed that this would place an unacceptable burden on their client, they could have provided it themselves. Green Alternative wanted to undertake a detailed technical assessment of the underlying assumptions made in the ESIA and to assess its adequacy. CEE Bankwatch said that they wished to assess whether the ESIA proposes appropriate mitigation measures. They are organisations who seek to engage EBRD on the technical detail of its proposed investments. To provide access only to certain documents in English (including summary ESIA documents) did not enable this legitimate aspiration.

8.6 Finding

PCM finds that:

1. The Paravani HPP (and transmission line) project is of local, national and some regional significance and EBRD should have ensured that the project ESIA – the core environmental and social document which sets out the projects impacts and was used for permitting purposes in Georgia and in securing International Financial backing, was available and accessible for review by all legitimate stakeholders. This would include making it available in an internationally accessible language if reasonably requested to NGO groups. Such reasonable requests were received and rejected. EBRD correctly decided that this might have imposed a further burden upon its client and should have itself translated and disclosed the documents.

2. The availability of the ESIA in Georgian (only) meant that EBRD environmental and social specialists were unable to review it. EBRD relied upon a range of sources and communications to undertake their due diligence. However this situation could have affected the timeliness of the EBRD due diligence such that key deficiencies in the ESIA were not identified early enough in the project development process to enable them to be addressed in advance of the investment decision. PCM is prepared to accept EBRD staff assurances that this was not the case, but it cannot be independently substantiated based on any documentation publicly disclosed. Partial translation reveals that the ESIA disclosed by itself would not have satisfied EBRD requirements and significant additional analysis was required in advance of the investment decision. This position is borne out by internal EBRD documents. None of the additional analysis undertaken by EBRD was made available through disclosure, except in summary form in the ESIA non-technical summary and the Environmental and Social Action Plan. The only disclosed document upon which any external technical review could be based in advance of the EBRD decision to invest was therefore incomplete and had not been reviewed by EBRD.

3. That EBRD is therefore in breach of Performance Requirements 10.12 and 10.13: failure to disclose information in an accessible manner to relevant stakeholders and 10.18: failure to ensure that disclosure and consultation is carried out in accordance with requirements relating to ‘Information disclosure’ and ‘meaningful consultation’.
9 Recommendations

The issues of non-compliance identified by PCM relate to the either the timing of the undertaking of appropriate studies or the appropriate disclosure of project information. There is not therefore any specific recommendation relating to bringing the project ‘into compliance’. The recommendations relate to actions which would address the underlying reasons why the non-compliances may have occurred and in ensuring that future disclosure of information on the project is effectively undertaken.

PCM would like to make it clear that its findings of non-compliance do not, and are not intended to infer criticism of EBRD staff. PCM believes that the non-compliances are largely rooted in underlying weaknesses in the Policy and due diligence framework. Recommendations are therefore based upon highlighting those weaknesses and whilst drawing upon specific findings of this report also address their wider implications.

1. Whilst the ESIA on any project must adequately address all the relevant Environmental or Social impacts arising, it is always the case that a relatively small number of key issues will be of paramount importance. EBRD, like any financial institution is under pressure to process funding proposals as quickly and efficiently as possible and there will be pressure to agree to an investment in principle whilst managing E&S impacts ‘adaptively’ through a management process based on an agreed Environmental and Social Action Plan. However, it is important that those key issues which might influence the decision to invest in principle are identified as early as possible in the project review process and the required depth and timing of analysis is conveyed to the project sponsor. Without appropriate clarity and cohesion in this approach PCM believes that the robustness of ESIA and due diligence processes is substantively undermined and the whole concept of ‘adaptive management’ devalued as an excuse to delay the required analysis and progress investments in the absence of proper analysis. This issue has been of particular relevance in the PCM review of the Paravani project with respect to the biodiversity assessment, with in the opinion of PCM inadequate information being available in advance of the EBRD Board decision. It is recommended that EBRD issue specific guidance to its specialist E&S staff and to investment staff on the requirements of the Initial Environmental and Social Examination (IESE). This examination must (i) Identify the key E&S issues which must be fully investigated (through appropriate baseline and predictive studies) as part of the ESIA in advance of the board decision to invest in principle, and (ii) Adequately convey these requirements to the project sponsors such that they can be integrated into the project timeline, stakeholders engagement planning and reporting.

2. Based on the ESP, EBRD holds itself accountable to three sets of E&S standards. Firstly host country requirements, secondly the EBRD performance standards embedded within the ESP and last but not least, relevant EU Directives and standards. This is unnecessarily complex and particularly in the case of EU requirements, holds EBRD open to the interpretation of a multitude of EU legislation which is written for application by member states, but implies through the ESP a duty on EBRD. In the context of Paravani, this particularly emerges with respect to biodiversity and this may be the area where it is of most relevance. PCM recommends that EBRD issue legally derived advice (potentially integrated into the next version of the ESP) on how the relevant EU directives are interpreted for the purposes of undertaking biodiversity assessments under performance requirement 6 of the ESP. Whilst EU legislation of course changes, most of the relevant directives have been in place for many years and the underlying principles have not changed. In any case the ESP has a finite life (say 5 years).
years) and the advice within it could be applicable for that period and then revised according to any changes in EU requirements.

3. One element of the complaint relates to the consideration of project alternatives and the extent to which these were considered in the ESIA. The ESP also provides for strategic or regional assessments under ‘exceptional circumstances’. In the context of Paravani the PCM expert has not found EBRD ‘non-compliant’ on this issue due to the strategic studies undertaken by the Georgian Authorities and the World Bank in developing the energy strategy. This work was not however well set out and represented in the project documentation, nor was the significance of the Paravani project well communicated. The PCM expert came to the conclusion that although the Paravani project is not ‘large’ in power generation terms or physical footprint, due to a combination of factors (international trans-boundary transfer of renewable energy, first HPP plant on a river which it is known will be subject to a ‘cascade’ of HPP projects, first greenfield HPP project in 20 years setting precedents on adoption on minimum sanitary flows etc.) that it would have triggered the ‘exceptional circumstances’ requirement for a strategic study in the absence of the World Bank analysis. PCM recommends that EBRD review this issue and prepare guidance on how the strategic context of the project should be assessed at the IESE stage and under what circumstances the ‘exceptional’ requirement for additional strategic studies would be triggered. EBRD should also advise on how existing strategic analysis should be integrated into documents disclosed as part of the project preparation process. Guidance should also be provided on the scope of analysis required within ESIA documentation on the analysis of project alternatives.

4. The Paravani project is located in an ethnically complex area, which has caused the project sponsor to undertake public consultation activities in multiple languages. The significance of the project has also already been established. EBRD has however continued to maintain that the ESP only required disclosure of the project ESIA in Georgian, and acknowledged in its formal response to the complaint that it did not therefore review the Georgian language ESIA. It is unrealistic to expect that the EBRD specialists are able to review technical documentation in all the languages of the region. PCM accepts that EBRD staff were able to undertake their due diligence through a range of interactions with the client, however viewed from an external perspective it is of some concern to note that EBRD ‘reviewed the clients assessment’ (a core EBRD commitment within the ESP) without being able to read the ESIA. What the Paravani project demonstrates more than anything is that an E&S specialist with appropriate expertise should review the project at the earliest possible stage. PCM also concludes that for a project such as Paravani, that International stakeholders as well as local stakeholders should be able to ‘access’ the public domain documentation as they would have a ‘legitimate interest in the project’. For category A projects and any other projects which may have significant environmental or social impacts it is important that project ESIA’s are available in an internationally accessible language. PCM recommends that in its review of the ESP EBRD integrate a requirement to this effect and consider whether when it believes that such a requirement would be too great a financial burden to place on the project sponsor that it undertakes the translation itself and discloses it as part of its transition role. This would also enable consideration of the documents by EBRD staff not speaking Georgian. Where ESIA documents are prepared in a language which cannot be reviewed by the relevant EBRD staff PCM recommends that EBRD commission an independent consultant to review the documents against EBRD requirements and that EBRD disclose this report.

5. The EBRD approach to the Paravani project has resulted in many of the key E&S issues being assessed after the decision to invest and after disclosure and consultation has taken place. A number
of these issues are crucial to the project’s success – for example, establishment of the biodiversity baseline of the River Paravani and likely impacts upon it and maintenance of minimum sanitary flows, establishment of the bird migration characteristics and monitoring of the impacts of the transmission lines, implementation of flood defences around Khertvisi etc. Significant elements of the EBRD due diligence were undertaken after disclosure of the ESIA to ensure compliance of the project with EBRD requirements, however this work is not disclosed in publicly available documents except in summary form such as the ESIA non-technical summary. GUE have committed to further public consultation and disclosure on these issues but there remains the potential for their analysis to become fragmented. PCM recommends that in addition to effectively monitoring implementation of the Environmental and Social Action Plan EBRD should work with GUE to prepare and disclose a comprehensive annual report which updates the ESIA/ESAP on which consultation can take place and which can inform future HPP developments within Georgia. At a generic level, EBRD should also consider as part of its policy review, how important elements of the environmental and social appraisal which are undertaken after disclosure of the ESIA are made available publicly as they form an important element of third party review of EBRD projects.
Annexe 1: Abbreviations

AAF  Average Annual Flow
BD  Birds Directive
BTO  Back to Office Report
CBD  Convention on Biological Diversity
EBRD  European Bank for Reconstruction and Development
EIA  Environmental Impact Assessment
ESAP  Environmental and Social Action Plan
ESIA  Environmental and Social Impact Assessment
ESIA NTS  Environmental and Social Impact Assessment Non-Technical Summary
ESP  Environmental and Social Policy
EU  European Union
FIBI  Fish Index of Biological Integrity
GUE  Georgia Urban Energy
HD  Habitats Directive
HPP  Hydro Power Plant
IBA  Important Bird Area
IBRD  International Bank for Reconstruction and Development
IESE  Initial Environmental and Social Examination
IFC  International Finance Corporation
NGO  Non-Governmental Organisation
PCM  Project Compliance Mechanism
PR  Performance Requirement
PTL  Paravani Transmission Line
SEA  Strategic Environmental Assessment
SRF  Scientific Research Firm
TOR  Terms of Reference
WBG  World Bank Group
WFD  Water Framework Directive