Hydropower Sustainability Assessment Protocol

Sustainable Hydropower and Regional Cooperation
Nay Pyi Taw

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Key messages:

• Sustainability no longer just ‘nice to have’

• Growing evidence that getting sustainability issues right up front deliver better projects, faster

• The Protocol is a cost-and time effective way to identify issues and put in place solutions

• The Protocol de-risks projects
A framework for assessing the sustainability of hydropower projects; a neutral platform for dialogue

Over 20 clearly-defined sustainability topics

Governed by a multi-stakeholder Council and Terms and Conditions

A consistent, globally-applicable methodology
Build those dams right

The Hydropower Sustainability Assessment Protocol

World Commission on Dams Final Report
IHA Sustainability Guidelines
Initial Sustainability Assessment Protocol
Official Protocol Launch


UNEP Dams and Development Project
Multi-stakeholder Forum refines the Protocol
Hydropower Sustainability Assessment Council Protocol Training and Assessments Sustainability Partnerships Hydro4Life NORAD

Slide credit: Joerg Hartmann joerg.hartmann.water@gmail.com
The Hydropower Sustainability Assessment Protocol

Background document:

Four methodology documents for four stages of development:

Early stage  Preparation  Implementation  Operation
### Sustainability topics covered

The Protocol encompasses all aspects of sustainability

<table>
<thead>
<tr>
<th>TECHNICAL</th>
<th>ENVIRONMENTAL</th>
<th>SOCIAL</th>
<th>ECONOMIC AND FINANCIAL</th>
<th>INTEGRATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Siting and design</td>
<td>Downstream flows</td>
<td>Project affected communities</td>
<td>Economic viability</td>
<td>Demonstrated need and strategic fit</td>
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<td></td>
<td></td>
<td>and livelihoods</td>
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<tr>
<td>Hydrological resource</td>
<td>Erosion and sedimentation</td>
<td>Resettlement</td>
<td>Financial viability</td>
<td>Communications and consultation</td>
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<tr>
<td>Reservoir planning, filling</td>
<td>Water quality</td>
<td>Indigenous peoples</td>
<td>Project benefits</td>
<td>Governance</td>
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<td>and management</td>
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<tr>
<td>Infrastructure safety</td>
<td>Biodiversity and invasive</td>
<td>Cultural heritage</td>
<td>Procurement</td>
<td>Integrated project management</td>
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<td>Asset reliability and</td>
<td>Waste, noise and air quality</td>
<td>Public health</td>
<td></td>
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<td>efficiency</td>
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Complemented with a number of cross cutting topics
Sustainability profile: Presentation of results
Each topic scoring statement provides a statement for up to six criteria:

- Assessment
- Management
- Stakeholder engagement
- Stakeholder support
- Conformance / compliance
- Outcomes

Assessment: Issues that may affect indigenous peoples identified through an assessment process utilising impacts and effectiveness of management measures. Implementation appropriate to the identified issues.

Management: Measures are in place to address issues in relation to indigenous peoples, and to meet commitments related to indigenous peoples are pushed forward.

Stakeholder Engagement: Ongoing and mutually beneficial peoples to raise issues and get feedback.

Stakeholder Support: Directly affected indigenous peoples to express opposition to the plans for issues that specifically affect them.

Conformance/Compliance: Processes and objectives have been met and any indigenous peoples related commitments have been fulfilled.

Outcomes: Plans provide for major negative impacts on their associated culture, knowledge, access to land and minimised, mitigated or compensated with no sign for positive impacts to be achieved.
Using the Protocol: Levels of understanding

P-1 Communications & Consultation
P-2 Governance
P-3 Demonstrated Need & Strategic Fit
P-4 Siting & Design
P-5 Environment & Social Impact Assessment & Mgmt
P-6 Integrated Project Management
P-7 Hydrological Resource
P-8 Infrastructure Safety
P-9 Financial Viability
P-10 Project Benefits
P-11 Economic Viability
P-12 Procurement
P-13 Project Affected Communities & Livelihoods
P-14 Resettlement
P-15 Indigenous Peoples
P-16 Labour & Working Conditions
P-17 Cultural Heritage
P-18 Public Health
P-19 Biodiversity & Invasive Species
P-20 Erosion & Sedimentation
P-21 Water Quality
P-22 Reservoir Planning
P-23 Downstream Flow Regime
## Using the Protocol: Topic analysis

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Level 3: Significant Gaps against Basic Good Practice</th>
<th>Level 5: Significant Gaps against Proven Best Practice</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>No significant gaps</td>
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</tr>
<tr>
<td>Management</td>
<td>P1: The absence of communications and consultation plans and processes developed for all project stages that set out communications and consultation needs and approaches for all stakeholder groups.</td>
<td>P5: EIA and ongoing assessment process does not take broad considerations, risks and opportunities into account.</td>
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<td>P10: Broad considerations not taken into account, No assessment to increase the development contribution.</td>
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<td>P11: Assessment process does not take broad considerations into account.</td>
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<td>P19: No assessment of invasive species and water-level impacts on Vårey Island.</td>
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<tr>
<td>Stakeholder Engagement</td>
<td>No significant gaps</td>
<td>P10: No process to anticipate and respond to emerging risks and opportunities regarding project benefits.</td>
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<tr>
<td></td>
<td></td>
<td>P13: No assessment of broader considerations and risks. No processes in place to anticipate and respond to emerging risks and opportunities.</td>
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<tr>
<td></td>
<td></td>
<td>P19: No reassessment of risks and opportunities since the EIA</td>
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<tr>
<td>Stakeholder Support</td>
<td>No significant gaps</td>
<td>P4: Engagement of local residents specifically in siting and design.</td>
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<td>P10: Inclusion of stakeholder groups in the assessment and planning of project benefits.</td>
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<td></td>
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<td>P23: No broad considerations in the downstream flow determination.</td>
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<tr>
<td>Conformance/Compliance</td>
<td>No significant gaps</td>
<td>No significant gaps</td>
</tr>
<tr>
<td>Outcomes</td>
<td>No significant gaps</td>
<td>P8: There are no plans for addressing infrastructure safety beyond those of the project itself.</td>
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<td>P23: Slow or no feedback on opinions / communication to/from stakeholders regarding the process leading to stakeholder dissatisfaction.</td>
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</table>
Management
Analysis against basic good practice

Scoring statement: Communications and consultation plans and processes, including an appropriate grievance mechanism, have been developed at an early stage applicable to project preparation, implementation and operation that outline communication and consultation needs and approaches for various stakeholder groups and topics.

A range of consultation processes have been undertaken from an early stage during project preparation (see ‘Stakeholder Engagement’ below). Direct links between landowners that will lose land and the contact details provided through newsletters and the lower Þjórsá website can be considered as a grievance mechanism for the preparation stage. The majority of stakeholders, interviewed during this assessment, though not all, felt able to contact Landsvirkjun directly to raise any concerns (via the website, letter or telephone). There are no procedures to track and respond to grievances raised, or plans for grievance mechanisms for the implementation or operation stages, but this is not considered to be a significant gap at this stage, as Landsvirkjun has enough time to develop such mechanisms in co-operation with other stakeholders.

Landsvirkjun developed a Communication and Stakeholder Engagement Plan for the preparation phase of the lower Þjórsá hydropower development in 2011, which sets out a process and tasks for communicating and engaging with local residents and elected representatives over a period of 6-11 weeks. The plan has been on hold waiting for the parliamentary decision on the National Master Plan.

However, no plans for communications or consultation have been developed that outline needs and approaches for the different stakeholder groups and topics, for the ongoing preparation stage, nor for the implementation and operation stages. It may be too early to develop these plans or processes for these later stages, but it is not clear how any corporate or other process would prompt their development or at what stage (contrast this with P-5 and the corporate processes that will prompt an environmental management plan). This absence of communications and consultation plans for the later project phases, combined with the absence of a process or procedure which would prompt the development of such plans, is a significant gap against basic good practice.
This map shows where Protocol assessments and training have taken place.
(blue: assessment, yellow: training).
The Hydropower Sustainability Assessment Protocol

- Hydropower Sustainability Assessment Council, governed by a Charter

- Terms and conditions for use of the Protocol defining official use

Accredited Assessors

- Only Accredited Assessors (AA) authorised to use the Protocol commercially

- Stringent qualifying criteria, training and systems ensure AA maintain highest quality of assessments, and uniformity of results
Implementation Stage Tool

Range of Protocol results observed to date
Watered Down? A review of social and environmental safeguards for large dam projects

IIED

• This review concludes that the most practical and effective tool currently available for measuring and communicating good practice, and the degree of respect for WCD guidelines and general good practice of individual projects, is the HSAP.

• It has the merit of being multi-stakeholder led and industry accepted, and gives a numerical and transparent output. Further, it has a group of certified assessors who can ensure some degree of quality control, and a structure that should allow the tool to be constantly updated and relevant.
THE HYDROPOWER SUSTAINABILITY ASSESSMENT PROTOCOL FOR USE BY WORLD BANK CLIENTS

• The Protocol is a useful tool for guiding the development of sustainable hydropower in developing countries. It emerged from a multi-stakeholder forum and is based on more than 100 years of lessons learned.

• It is suitable for the identification of areas of improvement in hydropower projects in a variety of localities and at various stages of project development. The experiences of developers having applied the Protocol to date indicate that assessments deliver value for money and that findings are conducive to management action.

• The Protocol has a range of other potential uses, including incremental improvement in project components and providing a transparent framework for stakeholder dialogue and conflict resolution.

• The application of the Protocol followed by a management plan to address identified gaps are likely the most powerful existing tools to improve the sustainability performance of hydropower schemes.
Key messages:

• Sustainability no longer just ‘nice to have’

• Growing evidence that getting sustainability issues right up front delivers better projects, faster

• The Protocol presents a cost-and time effective way to identify issues and put in place solutions

• The Protocol de-risks projects
  • Large and increasing international support
  • Multi-stakeholder driven
  • Independent third party verification
The Hydropower Sustainability Assessment Protocol is an enhanced sustainability assessment tool which is being used to measure and guide performance in the hydropower sector.

The Protocol assesses the four main stages of hydropower development: Early Stage, Preparation, Implementation and Operation. Assessments rely on objective evidence to create a sustainability profile against 22 criteria, ensuring that hydropower development is environmentally focused.
Thank you

Cameron Ironside
Sustainability Director

August 2014
Build those dams right