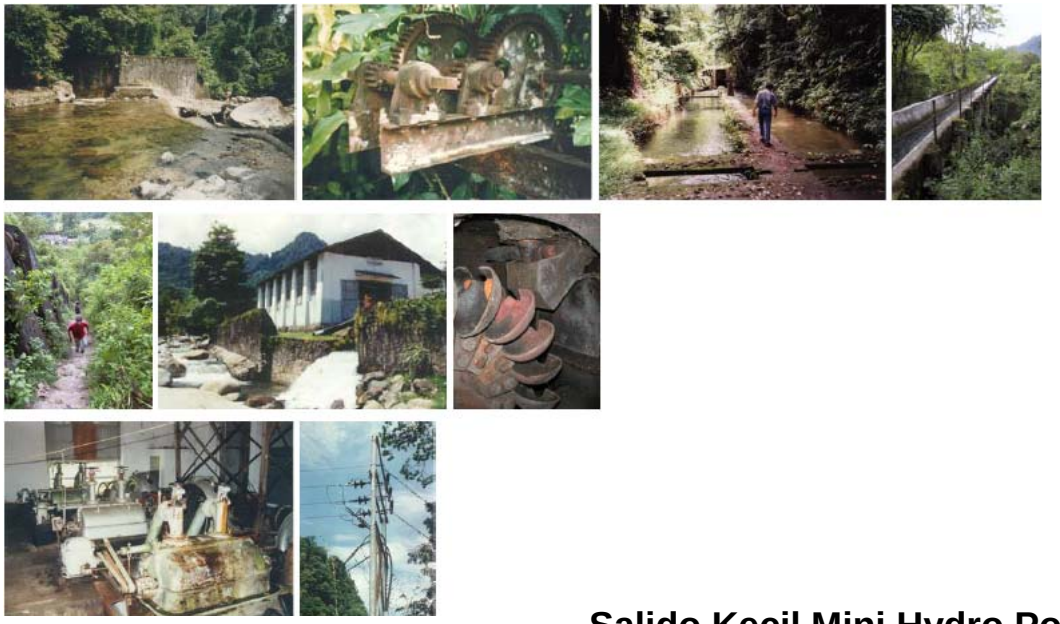

Salido Kecil Mini Hydro Power Plant

INITIAL STAKEHOLDER CONSULTATION REPORT

Conducted by

myclimate – The Climate Protection Partnership

In collaboration with

PT. Entec Indonesia

January 2007

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Purpose of the consultation

The objective of this stakeholder consultation is to get different views on the project activity, to take into account concerns and recommendations and to meet international guidelines in terms of conducting greenhouse gas reduction projects.

Two stakeholder consultations must be held during the project cycle in order to fulfill the criteria of the Gold Standard, which stands for environmental, economic and social sustainability of climate protection projects. Both an initial consultation in the early stages of documentation development and a main consultation on the final project documentation have to be carried out. If, in the course of baseline assessment, it becomes clear that the project shows micro-scale characteristics in terms of size and category the main stakeholder consultation is not obligatory.

At least the following stakeholders must be invited to participate in both consultation processes: Local policy makers, local people impacted by the project, (if applicable) local NGOs, local and national NGOs that have endorsed the Gold Standard and the Gold Standard itself.

Procedure

The Gold Standard initial stakeholder consultation consists of a public meeting and an email consultation addressing the stakeholders mentioned below.

1. Consultation meetings & mail consultation

1.a) Consultation meetings for local stakeholders

Date: September 4th, November 14th, November 23th 2006
Place: PT. AMS office (Salido Kecil), PT. Entec office (Bandung), Wali Nagari Office (Tambang)

Participants:

Participants	Organisation / Firm	Function
Komarudin	PT. Entec Indonesia	Project Manager
Oliver Froend	PT. Entec Indonesia	Director and Chief Designer
Dadang Sudardja	Indonesia Forum for Environment (WALHI)	Deputi Director (Advocation and Campaign)
Ibratama Munir	PT. Anggrek Mekar Sari	Director
Munir Kimin	PT. Anggrek Mekar Sari	Former Director of AMS
Mark Hayton	PT. Entec Indonesia	President Director and Project Manager
Mr. Suherman	PT. Entec Indonesia	Site Manager
Pak Kamus	Local resident of Salido Kecil	
Pak Khaidir	Local resident of Salido Kecil	
Pak Febri	Local resident of Salido Kecil	
Bolly Iskandar Z.	PT. Entec Indonesia	Project Advisor
Ancinis, BSc	Wali Nagari Tambang (local custom governance)	Chairman (director)
Darfan, ST	Wali Nagari Tambang (local custom governance)	Officer

Language: Meeting in Indonesian and Minang (local language), documentation in English

Meeting procedure:

- Opening (5 min)
- Purpose of the consultation (5 min)
- Description of the project (15 min)
- Answering of questions (10 min)
- Completing checklists (40 min)
- General feedback (15 min)

1.b) Email consultation

In addition to the meeting for local stakeholders, Gold Standard supporting NGOs in Indonesia have also been consulted by email. The email consultation started December 11th and closed December 22nd 2006. All mentioned NGOs received a project description, the checklist provided in the Gold Standard Manual (see page 9) and an invitation to assess the project.

NGOs that affirmed the receipt of the documents;

Contact person	Organisation
Harald Zindler	Greenpeace Indonesia
Eka Melisa	WWF Indonesia
Gustya Indriani	SouthSouthNorth
Moekti Soejachmoen	Yayasan Pelangi
Michael Schlup	The Gold Standard

NGOs where the contact failed;

Contact person	Organisation
----	ICAN ***

*** According to Moekti Soejachmoen (Yayasan Pelangi) ICAN, a coalition of NGOs including Yayasan Pelangi, is currently involved in a revitalization process and can be contacted as soon as it is done.

2. Results announcement

The results of both the local meeting and the email consultation will be made publicly available to stakeholders not later than 15 days after the initial consultation process has closed. They will be published on the myclimate website (http://www.myclimate.org/index.php?lang=en&m=projects&um=overview&uum=indonesien).

3. Information letter to the DNA

A letter has been send to the DNA of Indonesia to inform about the project. On December 26th myclimate got the acknowledgment of Masnellyarti Hilman (Chairman of National Comission on CDM) that the document has been noticed.

4. Stakeholder report

According to the results of the initial stakeholder consultation process, a stakeholder report will be compiled and attached to the project documentation (PDD).

Questions and comments in terms of the stakeholder consultation can be directed to the author of this report:

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Description of the project

Purpose of the project activity

The objective of the project is the rehabilitation and upgrade of an out-dated and largely disused hydro power station in Salido Kecil, Indonesia. By conducting the project activity, hydro-based electricity is produced and provided to the public electricity grid. Conventional fossil fuel based grid power is substituted and as a consequence positive impacts on the environmental, social and economical situation of the region and the country are achieved. The main purpose of the project activity is to generate power in a sustainable way, i.e. generating power without influencing negatively environment and climate. Arising consequences for the local population and animal life close to the plant have been considered and do not imply negative impacts. Besides, all civil structures of the plant are part of the baseline scenario as well as of the project scenario. This means that these civil structures exist today and would even exist without this project.

The Salido Kecil mini hydro plant was built at the beginning of the 20th century. In the 1980s PT. Anggrek Mekar Sari (PT.AMS) acquired the plant and carried out some necessary repairs and then supplied the electricity to the PLN grid in Painan. PT AMS owns and operates the power plant until today. Due to the connection of Painan to the West Sumatra grid (excess power of PLN) and the condition of the power plant, which had deteriorated to such an extent that it was no longer possible to maintain the service, in 1995 the arrangement was terminated. From then on Salido Kecil was no longer supplier of electricity to the district capital Painan and a new arrangement was negotiated for delivery of power to the surrounding villages. Currently, the plant supplies a few households nearby and a factory, which is also owned by PT.AMS and which produces ice blocks for the local fishing industry. The plant is currently operating well below its full potential. Just one of three turbines is in use, which has a constant load of only 75 kW approximately.

Since 1994 numerous visits by staff of PT. Entec to the Salido Kecil plant were conducted and a couple of assessments and studies were made. In this process the restoration of the civil structures and the power station parts were considered, and also measures were appraised and planned. PT.PLN and PT.AMS negotiated and signed a new supply agreement for connecting the plant to the West Sumatra PLN grid. Thus, the purchase of produced electricity is assured. But the lack of investment capital has prevented project participants from reinstalling the hydro power plant.

The project activity is structured into a three-phase process. Each phase is implemented and commissioned between 2007 and 2009 and contains:

- Rehabilitation of the civil structures, i.e. Rehabilitation of the water conveyance system. This includes stabilization of the weir, repair and replacement of sluice gates, stabilization and repairs at the fore bay and other miscellaneous repairs.
- The three existing turbines are overhauled and new generators are installed.
- Installation of new control and interconnection equipment including synchronization and protection equipment in accordance with international standards.
- A connection of the plant to the 20 kV medium voltage transmission line of PLN at the existing connection point. One of the two turbines that are not overhauled is still producing power for the factory and households.

- If necessary, an additional flow from the Kamumuan River (through an existing side channel) could increase the available flow.

In every single phase one turbine is commissioned and a design capacity of 330 kW is uploaded to the grid. By considering the efficiency of the turbine-generator-system and water flow studies a power duration curve can be conducted. An annual power generation and consumption of 2441 MWh is predicted.

The alternative scenario to project activity is to remain in the actual situation. Thus the baseline for the proposed project would be the public electricity supply by the PLN grid as it is by now. The PLN power generation in the region is mainly based on fossil energy resources and causing negative climate and environment impacts.

Contribution of the project activity to sustainable development

The project is a renewable energy project for power generation that enables the substitution of fossil fuel based electricity. The contribution of the project activity towards sustainable development in Indonesia is regarded as follows:

1. Social well-being

   - Power shortfalls due to insufficient capacity are very common in rural Indonesia. With the project activity local people could benefit from increased grid stability, which directly influences rural life quality.
   - Temporary jobs during rehabilitation and re-construction of civil structures and parts of the power station are generated. Furthermore local people benefit from long-term jobs and training opportunities.

2. Economic well-being

   - The project triggers new investment in the region, an economically disadvantaged part of Indonesia. And as all parts are constructed in the country, the project also leads to an extension of local value chain. It provides financial returns to local entities and strengthens their position against country centres.
   - The generation of jobs during the rehabilitation and project duration will lead to economic well-being as well as to social benefits.
   - Due to multiplication effects, investors and operators are encouraged to work on similar activities, leading to a more sustainable energy system in Indonesia.

3. Environmental well-being

   - Since the project will use renewable resources to generate electricity, it will reduce the demand of energy generated through fossil fuels such as diesel. The project leads to mitigation processes in terms of climate change. Greenhouse gas emissions are reduced.
   - The project reduces the burning of diesel and thereby improves air quality and environment in general. This has a direct and positive impact on people's health.
   - The project contributes to promote renewable energies in general and mini hydropower in particular throughout the country. Electricity demand in Indonesia is growing rapidly and renewable energies do have an enormous potential. This potential is not sufficiently developed yet.

4. Technical well-being

- The technology selected is more efficient than the old one. New generators, switchgear, interconnection equipment are leading to higher degree of efficiency and thereby to higher sustainability in a technical point of view.

Environmental impacts

As mentioned above, the project leads to an improved environmental situation in the region, the country and the world. Avoiding diesel-based electricity will enhance air and climate quality. Renewable technologies, hydropower based electricity and sustainable development in general will be presented and promoted.

Because the civil structures conveying the water to the plant have been in place since the beginning of the 20th century and would continue to exist even without the project, the project activity itself will not have any negative impacts on plants, animal life and biodiversity.

In Indonesia it is mandatory to assess projects and construction activities such as power plants, factories, mining projects and large buildings in terms of physicochemical aspects, ecology, socio-economy, socio-culture and public health. This environmental impact assessment is called AMDAL (Analisa Mengenai Dampak Lingkungan) or UKL/UPL (Upaya Pengelolaan Lingkungan Hidup (UKL) dan Upaya Pemantauan Lingkungan Hidup (UPL)). The UKL/UPL is used in case of projects with small impact and small impact management.

The project participant already realized a UKL/UPL and the resulting report (over 120 pages in Indonesian) was confirmed and approved by the local government.

Checklist

Stakeholder consultation participants have been requested to complete following checklist about environmental and social impacts of the project.

Environmental Impacts	**Yes / No /? Briefly describe.**	**Is this likely to result in a significant effect? Yes / No /? – Why?**
1. Will construction, operation or decommissioning of the Project use or affect natural resources or ecosystems such as land, water, forests, habitats and materials or, especially any resources which are non-renewable or in short supply?		
2. Will the Project involve use, storage, transport, handling, production or release of substances or materials (including solid waste) which could be harmful to the environment?		
3. Will the Project release pollutants or any hazardous, toxic or noxious substances to air?		
4. Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?		
5. Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, ground water, coastal waters or the sea?		
6. Are there any areas on or around the location which are protected under international or national or local legislation for their ecological value, which could be affected by the project?		
7. Are there any areas on or around the location, which are important or sensitive for reasons of their ecology, e.g. wetlands, watercourses or other water bodies, the coastal zone, mountains, forests or woodlands, which could be affected by the Project?		
8. Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting,		

overwintering, migration, which could be affected by the Project?		
9. Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the Project?		
10. Is the Project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse conditions e.g. temperature inversions, fogs, severe winds, which could cause the Project to present environmental problems?		
Socioeconomic and Health Impacts	**Yes / No /? Briefly describe.**	**Is this likely to result in a significant effect? Yes / No /? – Why?**
11. Will the Project involve use, storage, transport, handling, production or release of substances or materials (including solid waste) which could be harmful to human health or raise concerns about actual or perceived risks to human health?		
12. Will the Project release pollutants or any hazardous, toxic or noxious substances to air that could adversely affect human health?		
13. Will the Project release pollutants or any hazardous, toxic or noxious substances to air that could adversely affect human health?		
14.Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, ground water, coastal waters or the sea that could adversely affect human health?		
15. Will there be any risk of accidents during construction or operation of the project which could affect human health?		
16. Will the Project result in social changes, e.g. in demography, traditional lifestyles, employment?		

17 Are there any areas on or around the location which are protected under international or national or local legislation, which are important for their landscape, historic, cultural or other value, which could be affected by the Project?		
18. Are there any transport routes or facilities on or around the location which are used by the public for access to recreation or other facilities and/ or are susceptible to congestion, which could be affected by the Project?		
19. Is the Project in a location where it is likely to be highly visible to many people?		
20. Are there existing or planned land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation , public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the Project?		
21. Are there any areas on or around the location which are densely populated or built-up, or occupied by sensitive uses e.g. hospitals, schools, place of worship, community facilities which could be affected by the Project?		
22. Are there any areas on or around the location which contain important, high quality or scarce resources e.g. ground water, surface waters, forestry, agriculture, fisheries, tourism and minerals, which could be affected by the Project?		
23. Is the Project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse conditions e.g. temperature inversions, fogs, severe winds, which could cause the Project to present socioeconomic problems?		

Summary of comments

Summary of the meetings

Three consultation meetings were held during the early stages of the PDD (Project Design Document), i.e. at the beginning of the project submission cycle. myclimate and PT. Entec invited 13 local stakeholders to participate the meeting and the assessment process. The local situation and the guidelines outlined by the Gold Standard Manual have determined the choice of stakeholders. Local policy makers, local NGOs and local people affected by the project appeared to the hearings. Among all these peoples are the director of Wali Nagari Tambang, the local custom governance, a couple of PT. Entec employees who are representing technological and hydropower experts, the director of PT. AMS as buyer of the electricity in the nearby factory, a representative of the local NGO named Indonesian Forum for Environment and three local residents of Salido Kecil. The local residents were invited, although there are no villages near the factory. The next village is situated a couple of miles away.

Consultation meeting with locals.

All the hearings were held in a language all participants could understand: English, Indonesian or the locally spoken Minang. The project, the socio-economic and environmental aspects were described and discussed in the appropriate language. All participants have filled out the questionnaire shown on pages 9 to 11. The following is the summary of all comments received.

In summary all stakeholders agreed that no significant negative effects result by the project activity as far as they could assess this according to their knowledge. Results of the stakeholder consultation show that neither hydroelectric experts (as PT. Entec) nor NGOs in the region expect negative impacts on water quality and quantity, air quality and biodiversity. In contrary, they expect an improvement of the air quality through substitution of diesel generators and they wish even more local jobs, more investment and a better economic situation in this rural area. The local residents, PT. AMS and PT. Entec all assume that some

villagers will find a new job due to the presence of the project and a revision of the infrastructure in the region. A better access, especially roads and paths would simplify the transportation for the local residents. The local policy makers underline the job generation potential for some villagers and a potential decrease in illegal activities as timbering in the forest. Furthermore the infrastructure could be rehabilitated by the project activity or as a result of the project. A broken road bridge is to be repaired.

Though a positive position was predominant, some problems and critical aspects appeared and have been discussed in the meetings and in course of the resulting questionnaire. Local noise, vibration and heat due to the tuning machine could be present but remain insignificant as it only affects a radius of 6 meters and as so far the area of the powerhouse. While most of the stakeholders could not find any contamination risks, few experts are speaking of a temporary contamination due to implementation processes. Furthermore, all stakeholders expect that the fauna and flora around the location could be affected by (but only during) the civil rehabilitation. The ecological situation that is affected will be normalized during normal operation. The risk of accidents during construction or operation of the project is estimated only as insignificant.

The stakeholders from Wali Nagari Tambang (local custom governance) gave following comment:

“We hope that the presence of the project will contribute to our economic development especially employment of our local villagers, better supply of electricity, better infrastructure for the village. Based on our long experience with the presence of the project so far, we don’t find any significant negative effect and bad influence to our socio-economic and environment condition. Basically, we support the project activity as long as the owner complies with the local government regulation and local custom rule.”

Summary of the email consultation

The email consultation started on December 11th and closed on December 22nd 2006. All NGOs got an invitation to assess the project, a project description and the checklist provided by the Gold Standard Manual (see page 9). All NGOs with the exception of the contact person from ICAN (see explanation on page 5) have been contacted and have affirmed the receipt of the documents.

Two NGOs participated in the stakeholder consultation; The Indonesian Forum for Environment at the consultation meeting and Mr. Gustya Indriani from SouthSouthNorth by email consultation.

Similar to the comments during the meetings, Mr. Gustya Indriani does not expect any significant negative impact of the project. He presumed insignificant noise during the construction phase and possible positive effects on life quality in this region. He also mentioned that some questions could not be assessed precisely due to a lack of knowledge about the local situation.