PROJECT IDEA NOTE

A. Project description, type, location and schedule

Name of Project: Muni Hydro Power Project

Technical summary of the project Date submitted: August, 2007

Objective of the project	*It aims to utilize the hydropower for generating electricity which will be sold into the China Central Power Grid.*
Project description and proposed activities	*The project proposed to install 50MW of new hydro power capacity in the Li County of Aba Tibetan Autonomous Area of Sicuan Province in Central China. It is designated as a diversion type hydropower station with 2×25MWhydro turbines for operation. The annual electricity output is about 206,000MWh. The power station will be connected to the Provincial Grid and in turn to the Central China Power Grid.* *The Project clearly fits into the development priority of China. The Project will not only supply renewable electricity to grid, but also contribute to sustainable development of the local community, the host country and the world by means of:* *_ reducing greenhouse gas emissions compared to a business-as-usual scenario;* *_ helping to stimulate the growth of the hydropower industry in China;* *_ reducing the emission of other pollutants resulting from the power generation industry in China, compared to a business-as-usual scenario;* *_ strengthen local grid stability and promote local agricultural and economic development.*
Technology to be employed	*Describe in less than 5 lines.* Please note that support can only be provided to projects that employ commercially available technology. It would be useful to provide a few examples of where the proposed technology has been employed. *The project is a diversion type hydropower station. The project involves construction of head structures, a tunnel and a power plant. The water will be channeled through a newly constructed tunnel to bring the water to the power station. Water diversion discharge of 18.44m^3/s and water head of 312m is designed.* *The total installed capacity will be 50MW with a firm output of 6.032MW.The average gross annual power generation will be 206,000MWh. the plant is expected to run for 4123 hours per year. The proposed turbines are two rotator wheel turbines which could be sourced in China.*

Project developer	
Name of the project developer	Sicuan River Hydropower Company Ltd.
Organizational category	a. Government b. Government agency c. Municipality d. Private company e. Non Governmental Organization
Other function(s) of the project developer in the project	a. Sponsor b. Operational Entity under the CDM c. Intermediary d. Technical advisor
Summary of the relevant experience of the project developer	Describe in less than 5 lines The main business of Sicuan he Hydropower Company is to develop hydropower project, including works construction and project operating management. The company is not only the developer of Muni hydropower project, it is also the developer of Laojungou hydropower project(32MW), Zaidazhai hydropower project(36MW) and Laoyazai hydropower project(7MW), which are all located in the River.
Address	Address, PO Box, City, Country
Contact person	Name of the Project Development Manager
Telephone / fax	
E-mail and web address, if any	
Project sponsors	
(List and provide the following information for all project sponsors)	
Name of the project sponsor	
Organizational category	a.Government b.Government agency c. Municipality d. Private company f. Non Governmental Organization
Address (include web address, if any)	Address, PO Box, City, Country
Main activities	*Not more than 5 lines*
Summary of the financials	*Summarize the financials (total assets, revenues, profit, etc.) in not more than 5 lines.*
Type of the project	
Greenhouse gases targeted	CO_2 / CH_4 / N_2O / HFCs / PCFs / SF_6 *(mention what is applicable)* CO_2
Type of activities	Abatement / CO_2 Sequestration Abatement
Field of activities	
a. Energy supply	Renewable energy, excluding biomass / biomass / cogeneration / improving energy efficiency by replacing existing equipment / minimization of transport and distribution / fuel switch (e.g., switch coal to biomass) *(mention what is applicable)* Renewable energy, excluding biomass

b. Energy demand	Replacement of existing "household equipment" / improvement of energy efficiency of existing production equipment *(mention what is applicable)*
c. Transport	More efficient engines for transport / modal shift / fuel switch (e.g. public transport buses fuelled by natural gas) *(mention what is applicable)*
d. Waste management	Capture of landfill methane emissions / utilization of waste and wastewater emissions *(mention what is applicable)*
e. Land Use Change and Forestry	Afforestation/ reforestation/ forest management/ wetlands management/ watershed management/ improved agriculture / land degradation prevention *(mention what is applicable) -> Additional information to be provided in Annex I*
Location of the project	
Region	East Asia & Pacific / South Asia / Central Asia / Middle East / North Africa / Subsaharan Africa / Southern Africa / Central America & the Caribbean / South America/Central & Eastern Europe *(mention what is applicable)* East Asia & Pacific
Country	China
City	Li County of Aba Tibetan Autonomous Area of Sicuan Province
Brief description of the location of the project	*No more than 3 - 5 lines* The project is located in Sicuan Province, in the Central of China. The power plant is on River in the Xuecheng town of Li County of Aba Tibetan Autonomous Area, in the northwest of Sicuan Province. The dam is located in Shangmeng town and it is 9.8km from the dam to plant house. There is 62km from the plant to Li County, 57km from the plant to Wencuan county, 27km from the plant to Xuecheng town.
Expected schedule	
Earliest project start date	
Estimate of time required before becoming operational after approval of the PIN	Time required for financial commitments: xx months Time required for legal matters: xx months Time required for negotiations: xx months Time required for construction: xx months
Expected first year of verified Emission Reduction or CER / ERU delivery	Year 2009
Project lifetime	30 years(Engineering time is 33 years, including 3 years for construction and 30 years of project operational lifetime)
Current status or phase of the project	Identification and pre-selection phase / opportunity study finished / pre-feasibility study finished / feasibility study finished / negotiations phase / contracting phase / etc. *(mention what is applicable and indicate the documentation [e.g., the feasibility study] available)* feasibility study finished and avaible, environmental impact assessment also finished

Current status of the acceptance of the Host Country	Letter of No Objection is available / Letter of Endorsement is under discussion or available / Letter of Approval is under discussion or available / Host Country Agreement is under discussion or signed / Memorandum of Understanding is under discussion or available / etc. *(mention what is applicable)* Application Preparing for the Letter of No Objection
The position of the Host Country with regard to the Kyoto Protocol	The Host Country a. signed or acceded to the Kyoto Protocol or b. signed and has demonstrated a clear interest in becoming a party in due time (e.g., countries which have already started or are on the verge of starting the national ratification, acceptance or approval process) or c. signed the Kyoto Protocol, d. .is a Party to the UNFCCC. *(mention what is applicable)*

B. Expected environmental and social benefits

Estimate of Greenhouse Gases abated / CO_2 Sequestered (in metric tons of CO_2-equivalent)	Annual:194,557t Up to and including 2012: 778,227 tCO_2-equivalent Up to a period of 10 years: 1,945,567 tCO_2-equivalent Up to a period of 7 years: 1,361,897 tCO_2-equivalent Up to a period of 14 years: 2,723,794 tCO_2-equivalent
Baseline scenario	CDM/JI projects must result in GHG emissions being lower than "business-as-usual" in the Host Country. At the PIN stage questions to be answered are at least: • Which emissions is the proposed Clean Development Mechanism (CDM)/Joint Implementation (JI) project displacing? • What would the future look like without the proposed CDM/JI project? • What would the estimated total greenhouse gas (GHG) reduction be? *(About ¼ - ½ page)* • *the proposed CDM project will displace the emissions from the equivalent amount of annual power output by the grid into which the proposed CDM project is connected.* • *without the proposed CDM project the installed capacity of the China Central Power Grid for both the existing power plants and the power plants to be built in a foreseeable future satisfies China's regulations, which is also economically feasible.* • *The annual GHG emission reduction of the proposed CDM project will be 194,557 tCO2e*
For sequestration projects only: Existing vegetation and land use	*(What is the current land cover and land use? Is the tree cover more or less than 30%?)*

Specific global & local environmental benefits	*(In total about ¼ page)*
Which guidelines will be applied?	
Local benefits	*_ reduce greenhouse gas emissions compared to a business-as-usual scenario.* *_ reducing the emission of other pollutants resulting from the power generation industry in China, compared to a business-as-usual scenario;*
Global benefits	*China's power production is primarily reliant on coal power which generated significant emission with local (air quality),regional (acid rain) and global (climate change)environmental impacts. So the project will displace coal fired power generation from the regional power grid and reduce greenhouse gas emissions compared to a business-as-usual scenario.*
Socio-economic aspects What social and economic effects can be attributed to the project and which would not have occurred in a comparable situation without that project? Indicate the communities and the number of people that will benefit from this project.	*(In total about ¼ page)* *The new installed capcacit will directly benefit the local area by creating jobs and investment, stimulating economic development, raising the quality of the local power supply and contributing to local government tax revenues. At the same time the project will bring online much needed additional power capacity and source this power from a renewable energy resource. The project will reduce the pressure on the local forests by shifting energy consumption from wood to clean electricity.*
Which guidelines will be applied?	Name and, if possible, the website location
What are the possible direct effects (e.g., employment creation, capital required, foreign exchange effects)?	*The new installed capcacit will directly benefit the local area by creating jobs and investment, stimulating economic development, raising the quality of the local power supply and contributing to local government tax revenues. At the same time the project will bring online much needed additional power capacity and source this power from a renewable energy resource. The project will reduce the pressure on the local forests by shifting energy consumption from wood to clean electricity.*
What are the possible other effects? For example: •	*training/education associated with the introduction of new processes, technologies and products and/or the effects of a project on other industries* *_ helping to stimulate the growth of the hydropower industry in China;* *_ strengthen local grid stability and promote local agricultural and economic development.*
Environmental strategy/ priorities of the Host Country	A brief description of the relationship of the consistency of the project with environmental strategy and priorities of the Host Country *The Project use clean renewable energy to generate electricity whose environmental impact comply with relevant national laws and regulations. Environmental impacts are considered not significant.*

C. Finance

Total project cost estimate	
Development costs	24.41 US$ million (184,332,100RMB)
Installed costs	10.98 US$ million (82,914,000RMB)
Other costs	5.24 US$million(39,597,600RMB)
Total project costs	47.42 US$million (358,042,700RMB,including 21,862,200RMB of loan interest)
Sources of finance to be sought or already identified	
Equity	Name of the organizations and finance (in xx US$million)
Debt – Long-term	Name of the organizations and finance (in xx US$million)
Debt - Short term	Name of the organizations and finance (in xx US$million)
Not identified	xx US$million
Carbon finance contribution sought	xx US$million
Carbon finance contribution in advance payments. (The quantum of upfront payment will depend on the assessed risk of the project by the World Bank.)	xx US$million and a brief clarification (*not more than 5 lines*)
Sources of carbon finance	Name of carbon financiers other than PCF that your are contacting (if any)
Indicative CER/ERU or vER Price (subject to negotiation)	10 US$/ tCO_2e
Total Emission Reduction Purchase Agreement (ERPA) Value	
A period until 2012 (end of the first budget period)	7.782 US$ million
A period of 10 years	19.456 US$ million
A period of 7 years	13.619 US$ million
A period of 14 years (2 * 7 years)	27.238 US$ million
If financial analysis is available for the proposed CDM activity, provide the forecast financial internal rate of return for the project with and without the CER revenues. Provide the financial rate of return at the expected CER price above and US$3/ tCO_2e. DO NOT assume any up-front payment from the PCF in the financial analysis that includes PCF revenue stream. Please provide a spreadsheet to support these calculations.	