

Setting up an Innovative Financing Scheme for High Quality Technology Nam Tha 2 Hydro Power Plant

Project Objective

The objective of this project is to improve living standards of the population of Lao Cai province in Vietnam. This will be achieved by the implementation of renewable energy electricity generation which complies with stringent requirements for sustainability and environmental impacts. The project, a hydro power plant (HPP), will thereby be developed by integrating a solid financial structure and high quality technology standards equipment in order to guarantee its economical and technical durability.

Description

The project is the Nam Tha 2 HPP in Lao Cai province. Although the electrification rate in Vietnam reaches about 97%, it is the northern parts, the highlands, which are not yet fully covered. Potential for the development of hydro power in Vietnam being high, small scale HPP suits well this purpose in the context of local development, the environment and sustainability.

The participants of the project will analyze the situation of independent power producers (IPP) and review national and international incentives for the development of environmentally friendly projects. The participants will research current technology against sustainability and quality standards and integrate these specifications into the project development.

In the next step, the participants will estimate the potential reduction of GHG emissions of the project and determine the mechanism most suitable in order to obtain additional revenues necessary to the project's viability. The partners will then start negotiations for the sale of the carbon credits.

Project Highlights

Project ID	: 2-V-098
Country	: Vietnam
Lead Partner	: Carbonium (FR)
Partners	: Institute of Energy (IE), Phuc Khanh JSC (VN)
Total Project Cost	: € 133,000
EEP Financing	: € 56,000 (42.1%)
Technical Focus	: Hydroelectricity
Activity	: Capacity building/Pilot Project
Duration	: 14 months

All incentives and the carbon finance element will be integrated in the financial structure of the project. This structure will however be conservative in order to be truly reliable.

Throughout the project, the participants will record the experiences and report their activities for the compilation of a guidebook for other IPPs. This guidebook will then be presented at a seminar organized by the participants. This way, this pilot project will contribute to national targets in electrification and renewable energy development.



Progress meeting (December 2011)

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Relevance to Country's Energy and Environment Policies

According to Decree 1855/QĐ-TTg of December 27th, 2007, the share of renewable energy in total electricity generation in Vietnam should increase from about 2% in 2010 to 11% in 2050. In this context, the development of the Nam Tha 2 HPP under the EEP Mekong project will explore different scenarios in order to make small hydro power projects an attractive means to achieve this target.

Vietnam has a high potential for hydro power and the technology is mature in the country. However, the economic viability of small-scale projects is subject to feed-in tariffs which are based on subsidized consumer prices for electricity and to the overall good, yet irregular availability of necessary water flows. These two variables create financial and technological obstacles which in the case of many independent power producers (IPP) signify the end to their project. The EEP Mekong Nam Tha 2 hydro power pilot project will establish financial and technological conditions to allow the project to be viable and integrate high quality technology in order to guarantee a long life cycle of the equipment and make maximum use of water flows.

Furthermore, in order to contribute to the national target, the results and solutions will be made available to other IPPs and the pilot project will promote the replication by IPPs in other locations. The whole project will be carried out in line with sustainable development criteria.

Innovation and Knowledge Transfer

Hydro power proper is a mature technology in Vietnam and the major knowledge transfer lies within the economic structure of the project. The project will have a solid business model to withstand financial obstacles many Vietnamese IPPs give in to. The project will integrate high quality standards for the equipment to be implemented.



For more information:

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