

## **“Small Hydropower Programme of Activities (PoA) in Vietnam” non technical description.**

A “Programme of Activities” (PoA) is an umbrella under which several similar CDM-Project Activities (CPA) can be undertaken.

The proposed PoA is a voluntary and coordinated action managed by Vietnam PoA Carbon Management Joint Stock Company, which will coordinate small hydropower plants owned by public/private entities across Vietnam to encourage renewable energy electricity generation in the country.

The “Sustainable Small Hydropower Programme of Activities (PoA) in Vietnam”, will consist of CPAs that each represent one or more small-scale hydropower plants (capped to 30 MW as per Decision of Ministry of Industry - No 3454/QĐ-BCN dated 18 October 2005) built in Vietnam

To reach this goal Vietnam PoA Carbon Management Joint Stock Company will provide the following services:

- raise awareness among local stakeholders of climate change and hydropower. To ensure maximum stakeholder involvement CPAs will be developed according to the Gold Standard requirements and will include significant public education and consultation components
- raise awareness among Indonesian hydropower developers of opportunities for generating CDM revenues. To this end the coordinating entity will conduct capacity building sessions across the country that explain the CDM and support entrepreneurs in integrating CDM into their hydropower projects in order to improve the financial viability of such projects.
- provide standardized and streamlined access to CDM services for the hydropower projects in Indonesia, including the smallest ones that otherwise would not be able to generate into CDM revenues. To this end Vietnam PoA Carbon Management Joint Stock Company will coordinate the inclusion of the CPA in the PoA; conduct the registration of the CPA as a Gold Standard activity (if applicable); provide monitoring and verification services to all CPAs; and support the effective commercialization of CERs. Over time additional services will be added to support the effective development of the hydropower sector across Vietnam.

### **Contribution to sustainable development**

#### Environmental sustainability

- The PoA encourages hydropower utilization to generate electricity, which otherwise would have been generated through alternate fuels (most likely fossil fuels) based power plants, contributing to reduction in specific emissions (emissions of pollutant/unit of energy generated) including GHG emissions.
- As a hydropower project activity, each CPA produces no end products in the form of solid waste (ash, etc.), it addresses the problem of solid waste disposal encountered by most other sources of power.
- Being a renewable energy source, hydro energy used to generate electricity contributes to resource conservation and reduces reliance on exhaustible fossil fuel based power sources as well as the need to import fuels for the purpose of power generation.
- Thus, the PoA causes no negative impact on the surrounding environment; in the end it contributes to environmental well being across Vietnam.

### Economic sustainability

In recent years, Vietnam has suffered a critical electricity shortage as a consequence from rapidly increasing demand and insufficient supply, thereby imposing negative impacts on economic growth as well as on daily lives of people. This PoA will support CPAs that contribute directly towards balancing the supply and demand gap. By exporting electricity directly to the national grid, the CPAs included in this PoA will help to reduce electricity losses across the national grid and to lessen the risks of cascading national grid collapse due to overload.

Moreover, the PoA

- Increases employment opportunities in the area where the CPA is located, which will give an increase in local community's income in general;
- Will facilitate the industrialisation process through the provision of stable power and enhance the local investment environment and thereby improve the local economy;
- Diversifies the sources of electricity generation, important for meeting growing energy demands and the transition away from diesel and coal-supplied electricity generation;
- Contributes to poverty alleviation through income and employment generation: the CPA will employ people throughout project operation.
- Through its CPAs will contribute towards the tax revenues of the provinces in Vietnam.

### Social sustainability

- The CPA would lead to the development of the region.
- During civil work, the CPA is expected to generate considerable employment opportunities for the local population.
- Other than these, there are various kinds of mechanical work, which would generate employment on regular and permanent basis.

### Technology sustainability

- Modern and highly efficient turbines and generators will be used under this PoA, which in turn will accelerate the deployment of renewable energy technologies in Vietnam.
- The PoA supports technological and know-how transfer from other regions or even other countries through trainings and practical works.
- The PoA encourages in promoting local products developed in the region when spare parts replacement is needed to support renewable technology development especially for hydropower technology.

In conclusion the PoA will contribute positively towards sustainable development and be consistent with the energy policies set by the Government of Vietnam. Therefore, it satisfies the sustainable development criteria for CDM projects set by the DNA of Vietnam.