

## SECTION A. Description of project activity

### A.1. Purpose and general description of project activity

The Yunnan Lincang Zhenai Hydropower Project (hereafter referred to as the "Project") developed by Lincang Xinrui Power Generation Co., Ltd (hereafter referred to as the "Project Developer") is a run-of-river small-scale hydropower project in Yunnan Province, in the People's Republic of China (hereafter referred to as the "Host Country"). Total installed capacity of the Project is 9.6 MW, consisting of three 3.2 MW turbines, with a predicted electricity supply to the grid of 50,169 MWh per annum.

The project utilizes the hydrological resources of the Nanting river in a run-of-river diversion type hydro power facility that will generate low emissions electricity for the South China Power Grid (hereafter referred to as the "Grid" or "SCPG"). The electricity currently generated by the grid is relatively carbon intensive, with an operating margin emission factor of 0.9183 tCO<sub>2</sub>/MWh and a build margin emission factor of 0.4367 tCO<sub>2</sub>/MWh. The project is therefore expected to reduce emissions of greenhouse gases by an estimated 27,949 t CO<sub>2</sub>e per year during the second crediting period.

The project is contributing to sustainable development of the Host Country. Specifically, the project:

- ✧ Achieves greenhouse gas (GHG) emission reductions by avoiding CO<sub>2</sub> emissions from the business-as-usual scenario electricity generation of those fossil fuel-fired power plants connected to the SCPG which dominated by fossil fuel fired electricity;
- ✧ Increases employment opportunities in the area where the project is located (35 people will be permanently employed for the project operation and in addition the construction of the project secures jobs in the construction sector) and thereby contributes to poverty alleviation;
- ✧ Enhances the local investment environment and therefore improves the local economy;
- ✧ Makes greater use of renewable hydroelectric resources.