



Sustainability action · Project Renewable Energy and Energy Efficiency

Nam Chim Hydropower, Vietnam

This hydro plant provides a rural region in Vietnam with clean energy. It generates no emissions or waste, and addition to producing clean energy, hydropower is used for irrigation and water distribution purposes.

Project

In recent years, Viet Nam has suffered a critical electricity shortage as a consequence of rapidly increasing demand and insufficient supply, thereby imposing negative impacts on economic growth as well as on the daily lives of people. This project activity contributed towards balancing the supply and demand gap. By exporting electricity directly to the national grid, it helps improve the quality of service and lessen the risks of power failure.

In this mountainous region, one can see the benefits of sustainable energy production: until recently, light and heat came from burning wood or from dirty and inefficient diesel generators. Now, the use of locally produced renewable energy allows for sustainable development without emissions harmful to people and planet.

The project activity involves a dam, intakes, tunnels, pressurized wells, penstocks, and powerhouse with 3 units, each unit has a turbine and a power generator, and discharge channels in order to convert potential energy from the water stream into clean electrical energy. The emission reductions result from the replacement of carbon intensive coal power – still common in Vietnam – with clean hydropower.

Checklist	Additionality and permanence	3 rd party verified	Transparency	Annual CO ₂ -reduction	Social and environmental benefits	Marketing material
Project 300 835	According to the rules of the UNFCCC and The Gold Standard	By KBS Certification Services Pvt. Ltd.	Provided by Markit Environmental Registry	35,664 tCO ₂ e	As documented in our database	Pictures available



Location

The project is located on the Nam Chim stream in Xim Vang commune, Bac Yen district, Son La province of Viet Nam. The project area has a complexity of terrains, sharply split by mountain ranges and river systems.

Project achievements

Socio-economic impact

- The new 110 kV line will reduce electricity losses and improve the electricity quality supplied in the region.
- 43 new jobs have been created in maintenance and operation, of which 24 are for locals.
- Project conducted measures to protect the environment according to the government law.
- The project owner built new roads and upgraded 35 kilometres of existing roads, improving the former low-quality infrastructure systems, and contributing to economic development.
- Modern telecommunication and water treatment facilities have been installed for the hydro plant and are shared with the local population.
- The project contribute to improve their living standard of local residents living in the project area which are mainly from the ethnic minorities like Thai, Mong and La Ha and fills gap in development between different ethnic groups in Vietnam.

Environmental impact

- The project maintains sufficient flow at the downstream section, which secures fish habitat and migration during construction and operation.
- An environmental protection plan secured minimum impact on the environment (dust avoidance, recreation of plant cover, etc.) during both construction and operation phases.
- The decrease of open fires for light and heating leads to less deforestation and soil erosion, while the decrease of diesel generator use improves local air quality and mitigates air pollutants such as sulphur dioxide and nitrogen oxide.

