



Small run-of-river hydro, Vietnam

Hydropower is a form of energy that is generated by the conversion of free-falling water into electricity. It generates no emissions or waste. In addition to producing clean energy, hydropower is often used for irrigation and water distribution purposes.

Location



The hydropower project is located in Kon Plong, a rural district of Kon Tum province in a mountainous region close to the borders of Laos and Cambodia. The sparsely populated region's economy is mostly based on agriculture.

Project



In Vietnam, the power source of choice remains fossil fuel (mostly coal). To overcome financial and regulatory hurdles, renewable energy projects need the extra funding that carbon trading provides.

The CDM project encompasses two hydropower plants, one on the Dak Pone River, with an installed capacity of 14MW, and the other on the Dak Ne River, with an installed capacity of 1.6MW. The estimated annual gross power generation is 69,100 MWh.

By providing this rural region with reliable and sustainable energy, the project activity displaces diesel generators and wood-fired heating and lighting, which leads to better indoor/outdoor air quality and reduces respiratory and eye diseases.



To support sustainable development in the region impacted by the project, the project owner has funded the construction of irrigation canals, bridges and roads. The regional economy has benefited from these investments in infrastructure. The project owner has also funded the construction of a local school, which is providing benefits to local schoolchildren.

Achievements



Socio-economic impact:

- The project has generated hydropower plant operation/maintenance jobs for local people.
- 24 operational staff have benefited from six months of capacity building in the form of technical training.
- The construction of a new transmission line is reducing electricity loss and increasing the electricity supply in the region.
- The project owner has improved the former low-quality infrastructure systems in the region, e.g. by upgrading roads, and by building bridges and irrigation canals.
- The project owner's desire to improve the lives of those impacted by the project led to the funding and construction of a local school.
- The project has introduced new farming techniques to local farmers.

Environmental impact:

- The project has provided local farmers with support to broaden their agricultural activities to make them more sustainable (e.g. by implementing aquaculture, which reduces the need for logging for farmland).
- The project has reduced the need for firewood for heating, cooking, and lighting, thus allowing the forest to regenerate and improving soil conditions, hydrology and biodiversity.
- The project has improved regional air quality by reducing the need for diesel generators and wood fires.

Checklist Project 300 653



✓ Additionality and permanence:	according to the rules of the CDM and VCS (pre-CDM VERs)
✓ 3 rd party verified::	by TÜV Nord
✓ Transparency:	provided by Markit Registry
✓ Annual CO ₂ -reduction:	34,000 tCO ₂ e
✓ Social and environmental benefits:	as documented in our database
✓ Marketing material:	high resolution pictures available

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