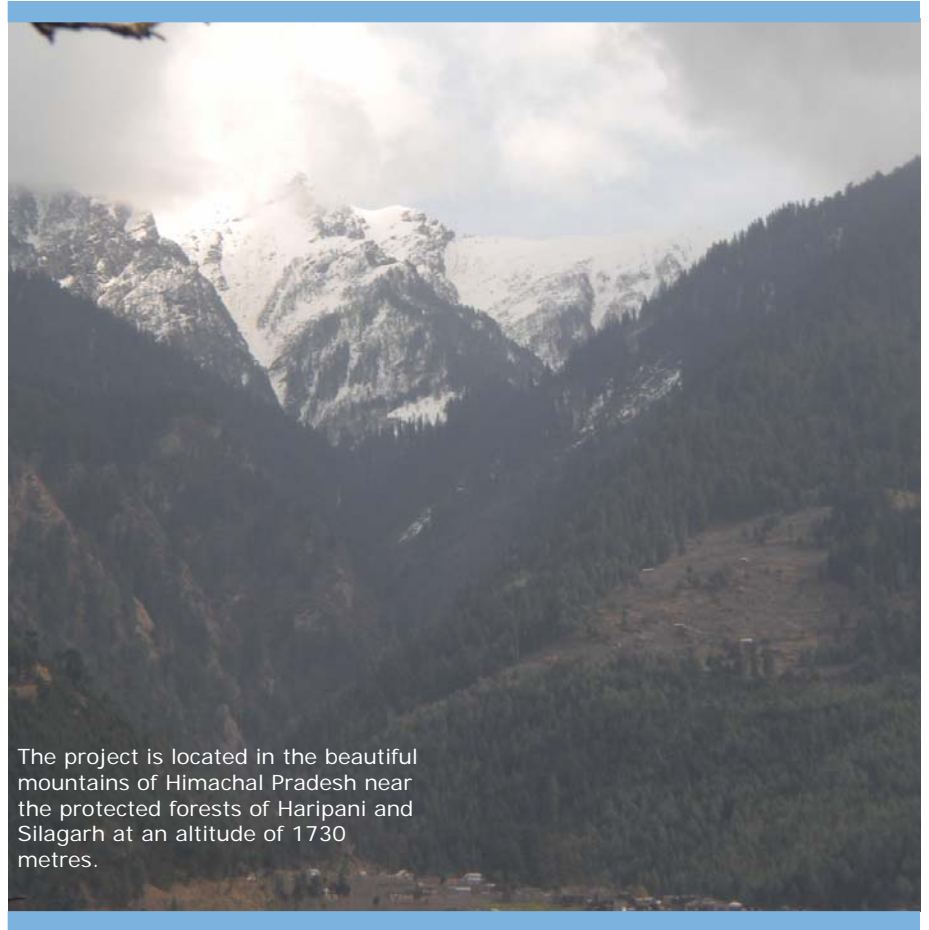


Carbon Offset

Project Update



The project is located in the beautiful mountains of Himachal Pradesh near the protected forests of Haripani and Silagarh at an altitude of 1730 metres.

Mini Hydro Power, India

Run-of-river renewable energy projects for the villages of Kullu District, Himachal Pradesh, India.

The 3.0MW plus 1.9 MW upgrade (4.9 MW capacity) hydro project is located on a tributary of the Beas River near the village of Patlikuhl in Kullu District, Himachal Pradesh Province of India.

Since the project utilises run-of-river technology, power is produced from the natural flow of the river. No water is stored thereby ensuring minimal impact on the surrounding environment.

Previous to the project being implemented, nearby rural villages were relying on forest wood burning which resulted in damaging greenhouse gases being released.

As a result of the project, clean and reliable power is now available to villages and new, non-rural jobs have been created.

Creating non-rural employment and generating renewable energy are key priorities of Government of India under the 10th 5 year plan.

Besides providing a source of renewable energy for the grid the mini hydro project has also helped set-up small scale/cottage industries in adjoining villages and has improved the quality of local roads fostering the development of local entrepreneurship and trade.

Project Objectives:

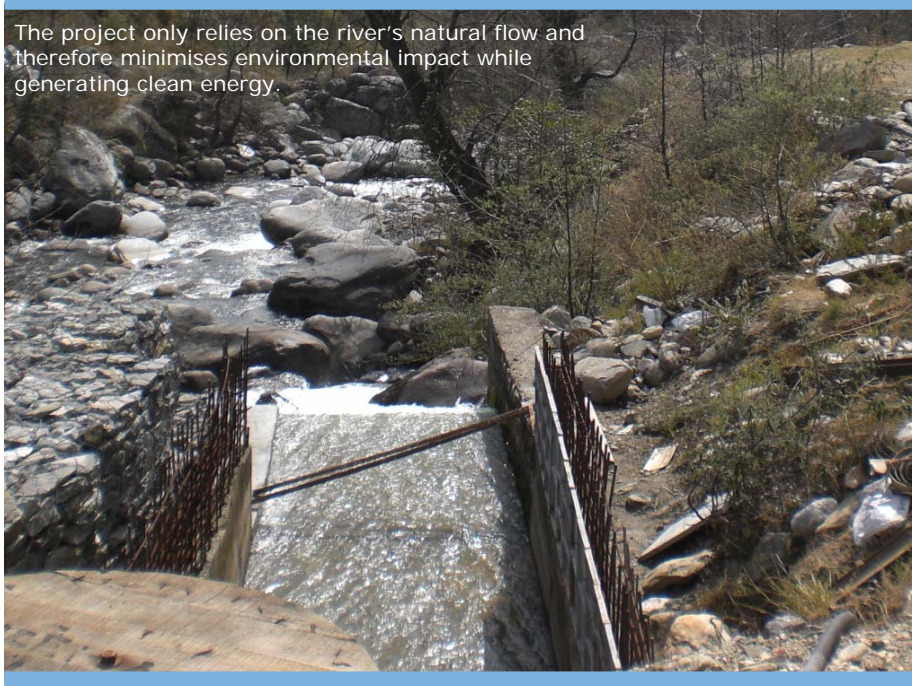
- Design, engineering, procurement, construction, operation and maintenance of 4.9MW of renewable run-of-river hydro electric power
- Support local community through new job creation and establishing small scale/cottage industries
- Increase renewable energy generation capacity
- Increase energy availability



Intrepid working with Cleaner Climate

Cleaner Climate is an international carbon solutions provider focused on the delivery of pioneering climate change strategies for many of the world's leading companies and brands, including Intrepid! We work closely with Cleaner Climate to select appropriate offset projects in which to invest through our Carbon Offset Trip initiative. www.cleanerclimate.com

The project only relies on the river's natural flow and therefore minimises environmental impact while generating clean energy.



Technical Information

Installed Capacity: 3.0MW+1.9MW

Total Capacity: 4.9 MW

Elevation: 1750 metres

Gross Head: 173.8 metres

Discharge: 2.7m³/sec

Total Catchment: 58km²

Technology type: Horizontal Francis

Turbines with directly coupled generator

Cleaner Climate's small scale hydro project, generates electricity based on the natural flow of the river and does not require any storage reservoir. Such run-of-river techniques do not lead to any inundation of surrounding areas or displace any human populations.

Furthermore, the generation of electricity capacity in rural areas and the creation of new non-rural jobs are in line with the economic development goals of for Government of India.

The Bargaran run-of-river mini hydro plant is owned and operated by KKK Hydro Power Limited.

The powerhouse for the plant is located on the right bank of the Snajoin Nala near the confluence with the Beas River.

Due to their efficiency at higher load conditions and discharge availability, Francis Turbines are ideally suited for such a project.

2 Horizontal Francis turbines each of 1500 kW capacity are in operation with a third 1900 kW turbine following.

These Francis turbines were locally sourced providing valuable assistance for the Indian renewable energy sector.

At 4.9MW capacity the project activity will generate approximately 27,000 MW hours of renewable electricity to the Himachal Pradesh State Electricity Board through a long term Power Purchase Agreement.

Electricity is generated at 6.6KV and stepped up to 33KV by generator transformers for distribution to the grid.

Cleaner Climate's mini hydro power plant has been developed as a Clean Development Mechanism project and supports the renewable energy development goals of the Ministry of New and Renewable Energy, Government of India.

Requirements of additionality are met due to the financial and operational risk barriers attributed to developing small scale hydro projects in difficult mountainous terrain.

Features/Results:

1. Emission reductions.

The project activity reduces over 124,617 tonnes of CO₂e during its lifetime

2. Develop rural economy.

By generating additional electrical capacity in rural areas, local villages' quality of life is improved as the quality of surrounding roads and reliability of the local grid are improved

3. Improve environment.

Renewable energy generation such as biomass displaces the use of coal, gas and other fossil fuels and results in less pollution released into the atmosphere

4. Generate employment.

The project installed locally sourced turbines and employs locals for ongoing operations, monitoring and maintenance

5. Minimise Impact.

Run-of-river style mini hydro plants do not require any water reservoirs to generate power and therefore do not displace human populations or impact local flora and fauna species

The total estimated reductions over the project life are 124,617 tonnes of CO₂e.

In addition, private sector financing of small scale hydro projects in the Himachal Pradesh province is not the prevailing practice with less than 10% of identified capacity projects built.