

# CDM Case Study – Argichi Small Hydro, Armenia

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# The Project

## □ Small hydro power – 8.5 MW

- Purpose - generation of clean hydroelectric energy and contribution to climate change mitigation efforts
- Run-of-river project
- 4 horizontal Pelton turbines with 8.5 MW of nominal power
- electricity will be supplied to Lichk substation which is 7 km distance from the head unit
- Generation capacity – 8.56 MW      Average annual power generation– 30.5 million kWh .



# Contribution to Sustainable Development

## □ Social Well Being

- create jobs opportunities in the area with very high unemployment level for skilled and unskilled labour during the construction and operation
- additional sustainable generation capacity not dependant on the imported energy sources,
- development of experience and intellectual capacity among the local construction workers to become a skilled work force

## □ Economical Well Being

- The project will attract around \$5,000,000 USD investment.
- generate employment possibilities for the local population which lacks available workplaces in their region
- locally produced equipment will be used which will benefit the renewable energy technology an intellectual capacity development in Armenia.

# Contribution to Sustainable Development

## □ Environmental Well Being

- Fossil fuel offset by utilising hydro power
- Offsetting power generation by conventional fossil fuels

## □ Technological Well Being

- Technology transfer benefits
- Demonstration project with large replication potential in the country

# CDM Aspects

- ❑ CDM sectoral scope
  - Energy industries (renewable - / non-renewable sources)
- ❑ Scale of project
  - Small Scale
- ❑ Source of emission reductions
  - Fossil fuel offsetting through small hydro based electricity generation
- ❑ Baseline scenario
  - Using electricity generated by the national grid utilising fossil fuel resources
- ❑ Approved baseline methodology
  - Type I: Renewable Energy Projects
  - Category-D: Grid Connected Renewable electricity generation
- ❑ Estimated annual CERs
  - 13,331 tCO<sub>2</sub>e

**THANK YOU**