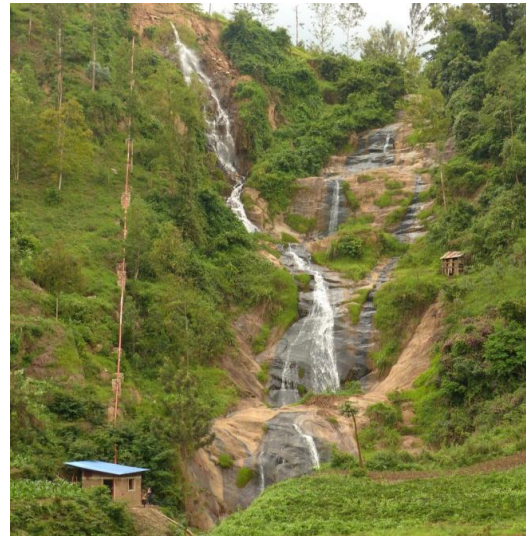




Energising Development (EnDev) Programme

ECOS hydro mini-grid project brief

Name	Nyakiramba hydro mini-grid
Company	Energy and Construction System Ltd. (ECOS)
Location	Southern Province – Muhanga District – Kibangu Sector – Jurwe Cell
GPS coordinates	-1.881264, 29.680907 1°52'52.5"S 29°40'51.3"E
Capacity	11-13kW
Investment	67,000 EUR
Connections	230 households 31 businesses 6 social institutions
Commissioning	December 2016



View of the penstock and powerhouse

The Entrepreneur

Philbert Ndagijimana, the entrepreneur behind ECOS, has a background in civil and electromechanical engineering and worked extensively in several construction projects for micro hydro, mini-grid and water infrastructure projects. With his company ECOS created in 2012, he was involved in the operation and maintenance of several district or cooperative-owned hydro mini-grids in Muhanga district. With the Nyakiramba project, ECOS became the first private company in Rwanda to construct and operate a commercial hydro mini-grid and one of the first with a distribution grid that follows the EARP Reticulation Guidelines. To develop this project, ECOS benefitted from technical and financial support from the Energising Development (EnDev) Results-Based Financing (RBF) programme.

Impacts

The mini-grid has successfully connected the targeted number of customers and ECOS is now working on increasing the demand, particularly productive uses of energy, through businesses development. Although the current generation capacity can satisfy the peak demand, the company observed that a part of the energy produced during off-peak periods was not used (particularly during the night and early mornings). In this objective, the company is looking for business opportunities which could utilise this electricity.

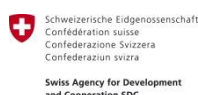
By obtaining pre-financing from a local bank and SME fund with the support of EnDev, ECOS has set a leading example for companies and became a figure in a sector which is generally seen as risky by most commercial banks. The company has since then fully repaid the loan to the SME fund and is on track to reimburse its outstanding loan.

EnDev will continue to advise the project through technical and business support, especially when it comes to improving the mini-grid's business model and its long-term sustainability.

Energising Development

Energising Development is an energy access partnership financed by six donor countries – the Netherlands, Germany, Norway, the United Kingdom, Switzerland and Sweden – and implemented by GIZ and RVO. In Rwanda, EnDev has, among other things, a mandate to facilitate and finance households' electricity access through village grids. Results-Based Financing (RBF) is an innovative financing approach introduced by the UK Department for International Development (DFID). The idea behind the approach is to reward companies for their previously-agreed and delivered results, i.e. operating mini-grids and active customer connections.

Funded by:



Implemented by:

