

Project title : ELECTRICI - Recycling of cashew waste in the OLAM plant to produce electricity

Project place	Project cost	Role in the project	Technical and financial sponsors	Dates
Côte d'Ivoire	1 030 000 €	Coordination	AFD - French Development Agency, OLAM, Chigata, URJA NISHATI	September 2016 - June 2020

Project's goals and results

Main goals

4-year project in northern Ivory Coast, aiming to develop an innovative model in terms of operational and economic approach, in order to set up an energy and electricity production offer combined with a cashew nut processing activity

- Contribute significantly to Ivory Coast's electrification program through a valorization of the biomass resulting from agricultural raw material processing
- Contribute to limiting the environmental risk for the cashew processing sector by offering, through recycling, a solution for the ultimate elimination of shells

Specific objectives

- Acceleration of resources deployment for the electrification plan in the project area. The additional energy modifies the local grid's supply capacity
- Reduced environmental risk at the processing site. In qualitative terms, this avoids landfilling of shells on the industrial processing site

Beneficiaries

The first beneficiary is the manufacturer who accepts the installation of the electric power generator on their site, who will use self-generated electricity and valorize a cumbersome waste. The other beneficiaries are the isolated populations, who will quickly benefit from electrification and financial support for the creation of income-generating activities

Results

** R1. ** An operational pilot power generator that feeds power into the grid and consumes processing waste from cashew shells

** R2. ** An organizational scheme for energy and electricity production integrated into a transformation site that responds to the specific context of Ivory Coast and its needs in terms of electrification

Activities

** A1. ** Preparation of study's activities: preparatory tasks for the development of the pilot (choosing construction site, technology...)

** A2. ** Legal and financial arrangements: working jointly with national institutions (energy, industry, environment, electrification agencies, electricity companies) to obtain operating licenses and sell the energy produced. Provide business plan to ensure project balance and profitability. At the end of the activity, the ad hoc structures that will produce and distribute the energy (the private operator) will operational

** A3. ** Design studies: technical and economic studies leading to a pre-project that provides a business plan for the pilot's sustainability and durability

** A4. ** Pilot construction: rely as much as possible on local companies with strong involvement of the French-based technical team, supported by the locally-recruited engineer who will perform technical coordination tasks

** A5. ** Support the operator in starting the operation: 1- training of operators and administrative staff, 2- technical support to the operator, who will be monitored by an experienced electrical engineer, who will respond to any technical problem that may arise

** A6. ** Develop productive uses within the project scope: increase the electrical demand in the project area and allow the emergence of new economic activities for the beneficiary populations

** A7. ** Capitalization: includes the referencing of suppliers and local manufacturers in order to prepare the pilot's industrialization with a view to its replication. The aim is to transfer the manufacture to the local industry