

Project title : PROCAE - Promoting productive use of cashew shells and energy efficiency

Project place	Project cost	Role in the project	Technical and financial sponsors	Dates
Mozambique	229 283 €	Coordination and implementation	BDA-ENABEL - Belgian Development Agency	September 2025 - August 2027

Project's goals and results

Main goals

Improve access to renewable energy by valorizing cashew by-products for clean energy production in order to reduce deforestation and support local economic opportunities to enhance sustainable development in Mozambique

Specific objectives

- SO1.** Adoption of cashew by-products as renewable energy solutions: pilot systems utilizing cashew shells and cashew nutshell liquid (CNSL) as alternative energy sources are installed in companies and public institutions, replacing firewood and fossil fuels
- SO2.** Enhanced energy efficiency in public institutions: at least five institutions in Nampula province benefit from advanced biomass technologies, leading to measurable improvements in energy efficiency and reduced operational costs
- SO3.** Support the local renewable energy network through strengthened technical capacities in biomass valorization: two companies and one technical school are provided with enhanced technical and operational skills

Beneficiaries

- [BDA-ENABEL - Belgian Development Agency](#)
- Stakeholders from the productive sector in Mozambique: energy services businesses, manufacturing industry, restaurants and catering trade, institutional cooking, bakery, etc

Results

- R1.** Installation and operationalization of two cashew shell combustion systems in productive settings, replacing traditional biomass and reducing environmental impacts
- R2.** Deployment of a CNSL-based energy system in one SME, demonstrating its potential as a scalable renewable energy solution
- R3.** Conducting energy audits and installing biomass valorisation technologies in at least five public institutions to improve energy efficiency
- R4.** Delivery of comprehensive training programs targeting SMEs, public institutions, and technical schools, promoting local expertise in biomass energy systems
- R5.** Creation of a local database of cashew by-product suppliers and bioenergy solution providers to strengthen supply chain linkages and facilitate future scaling of bioenergy solutions

Activities

- A1.** Installation of pilot combustion systems using solid cashew by-products
- A2.** Installation of pilot combustion systems using liquid cashew by-products (CNSL)
- A3.** Promoting clean cooking through provision for improved/efficient solutions
- A4.** Capacity building and training for technical schools and local beneficiaries
- A5.** Creating an economic network for cashew shell by-product valorization