# Project title: H2MALI - Equip a unit with a cashew shell pyrolyser and energy applications adapted to the shelling process

Project place	Project cost	Role in the project	Technical and financial sponsors	Dates
Mali	23 000 €	Energy expertise	Emile Noël, Agro-plateforme	January 2016 - June 2016

## **Project's goals and results**

## Main goals

Equip a cashew shelling unit with a cashew shell pyrolyser and energy applications suitable for the shelling process. This action is part of the AGROVALOR program, led by RONGEAD, to promote the emergence of an equipment sector specialized in energy recovery solution for agro-industrial waste in West Africa

## **Specific objectives**

- On site preliminary study for machine design and sizing
- Machines installation and setup
- Training of unit operators

### **Beneficiaries**

Agroplateforme

#### Results

\*\* R1. \*\* At the end of RONGEAD's intervention, Agroplateforme will be equipped with a boiler, allowing to carry out the various stages of cooking the nuts, as well as drying and steam shocking almonds

#### **Activities**

- \*\* A1. \*\* Preliminary study (on-site measurements) for machine design and sizing
- \*\* A2. \*\* Design, sizing and manufacture of a H2CP cashew shell pyrolyser (approximately 400 kg of shells per day)
- \*\* A3. \*\* Design, sizing and manufacture of a boiler (about 800 I) certified by an independent organization
- \*\* A4. \*\* Design, sizing and manufacture of steam dryers with ventilated central exchanger (drying capacity of 800 kg on a drying rack)
- \*\* A5. \*\* Design, sizing and manufacture of a thermal shock chamber (400 kg-capacity rack)
- \*\* A6. \*\* Design, sizing and manufacture of an autoclave (400 kg of nuts per batch)
- \*\* A7. \*\* Installation of machines in the unit (Agroplateforme will take care of all masonry work)
- \*\* A8. \*\* Build the steam system
- \*\* A9. \*\* Adjustments
- \*\* A10. \*\* Training unit workers