# Project title : CARDOIL - Feasibility study of local sales of CNSL for fuel to boost competitiveness of cashew processors

Project place	Project cost	Role in the project	Technical and financial sponsors	Dates
Côte d'Ivoire	69 000 €	Value chain and combustion techniques expertise	Centre for the Promotion of Imports - CBI, Fúnteni Facilities and Consulting	November 2020 - October 2023

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

#### Main goals

In the implementation stage of the "CBI Cashew programme Côte d'Ivoire", meso (sector) level interventions with stakeholders in the cashew sector are focused on enhancing competitiveness of cashew processing with the aim of increasing the % of processing in Cote D'Ivoire (and Benin).Due to the decreasing CNSL price on the international market from 2016, cashew processing factories in Cote D'Ivoire are not exporting, nor extracting CNSL anymore. A study was done by ACA on by-products in 2019 and a recommendation was to focus on CNSL fuel as an alternative energy solution for local markets. This is a new product-market combination and both the product as well as the market are still to be developed. The Cardoil project intends to conduct applied research in order to assess and harness the potential of this alternative product-market combination for enhancing the competitiveness of cashew processors.

#### **Specific objectives**

- SO1. Assess the potential of an alternative product-market combination consisting of local sales of CNSL fuel blend for enhancing the competitiveness of cashew processors
- SO2. Assess the opportunity for pilot experiences in CNSL fuel, either in controlled conditions or in industrial setting

SO3. Identify the technical requirements for appropriate combustion technologies for CNSL

- SO4. Support two cashew processors in strengthening their skills to understand the local CNSL market and analysis procedures
- **SO5.** Develop the market strategy and the upscaling plan for these factories

#### Beneficiaries

- 2 cashew processing factories who will benefit from technical assistance to better understand the CNSL fuel market and adapt their CNSL extraction and treatment process to this specific case
- CBI's Cashew programme Côte d'Ivoire

### Results

- R1. Assessment of feasibility of local sales: mapping of potential / demand for CNSL fuel, client conditions and preferences on CNSL supply are determined
- R2. Assessment of feasibility to find necessary adapted materials for the pilot
- R3. Burner requirements are identified, tested and the blend CNSL-Crude oil is optimised
- R4. Two cashew processors are trained on CNSL lab analysis
- **R5.** Marketing strategy and upscaling plan are developed

#### Activities

- A1. Assessment of feasibility of local sales: mapping of potential / demand for CNSL fuel
- A2. Identification of key CNSL quality parameters and research of available CNSL treatment solutions
- A3. Assessment of the needs of ivoirian industries on liquid fuel, and their readiness and interest to host pilot experiences
- **A4.** Identification of appropriate combsution technologies for CNSL
- A5. Pilot experiences on CNSL combustion in industrial burners
- A6. Support to two cashew processors on local CNSL market knowledge and quality analysis
- A7. Development of market strategy of CNSL fuel and upscaling plan