



DFCD Project Snapshot

Transforming cocoa waste into clean energy and resilient farming systems

October 2025

Name of client:	Société des Energies Nouvelles (SODEN)
Website:	
Region:	Africa
Country:	Côte d'Ivoire
Project duration:	30 years
Confirmed financing:	€500,000 grant from the DFCD Origination Facility
Anticipated finance leveraged:	€6 M (SODEN + CFM CI2 development fund); €325 M (expected)

Who is our (prospective) client?

Société des Énergies Nouvelles (SODEN) is a renewable energy company based in Côte d'Ivoire that develops, finances, and operates sustainable energy solutions across West Africa. Founded by industry experts with extensive experience in biomass power generation, SODEN aims to address the country's energy security challenges while advancing climate adaptation and inclusive economic development.

Together with Climate Fund Managers (CFM) through the **Climate Investor Two (CI2)** fund, SODEN is co-developing the **ECOR Divo Project—a 76 MW biomass-to-power plant** in the Lôh-Djiboua region that will convert cocoa husks, shells, wood residues, and other agricultural by-products into renewable baseload electricity. The plant will deliver around **550 GWh annually** under a 30-year power-purchase agreement with the Ivorian government, contributing directly to Côte d'Ivoire's goal of achieving **42% renewable energy by 2030**.

The project will directly engage **up to 36,000 smallholder cocoa farmers**, supporting them to adopt **climate-resilient practices** such as orchard renewal, agroforestry, integrated pest management, and soil and water fertility management. This approach ensures a reliable biomass supply while strengthening rural livelihoods and local economic development.

SODEN's team brings together seasoned engineers, operators, and logistics specialists who previously played leading roles in Côte d'Ivoire's 46 MW Biokala palm-waste power plant—expected to be connected to the national grid by the end of 2025. Building on this experience, SODEN is advancing a **pipeline of 13 additional biomass projects (over 760 MW)** that will utilise agricultural residues and end-of-life trees from cocoa, rubber, cashew, cotton, and rice production.

Unlike gas or hydropower, which are geographically concentrated, **biomass can be produced across the country**, reducing transmission losses, creating rural jobs, and offering farmers a new income stream from agricultural by-products. By purchasing old trees and crop residues for energy generation, SODEN helps farmers finance orchard renewal without upfront cost—linking renewable energy production with on-farm regeneration.

SODEN maintains strong governance, environmental, and social management systems to ensure that each project meets international sustainability standards. In addition to developing its own pipeline, the company also supports other investors interested in biomass energy across Côte d'Ivoire.

Why do we fund this project?

Côte d'Ivoire produces nearly 40% of the world's cocoa, yet faces two converging challenges: growing energy demand and mounting climate risks that threaten cocoa yields and farmer livelihoods. Millions of tons of cocoa waste currently rot on farms, generating methane emissions and spreading pests and diseases. At the same time, rural communities remain highly exposed to climatic shocks and economic volatility. The ECOR Divo project directly addresses these challenges by:

- **Generating renewable electricity** from cocoa residues and other agricultural by-products, helping diversify Côte d'Ivoire's energy mix.
- **Supporting smallholder adaptation**, introducing climate-smart practices that raise productivity and resilience.
- **Reducing GHG emissions** through efficient biomass use and improved waste management.
- **Creating green jobs**, improving rural incomes through biomass collection and logistics.

By linking farmers to a secure off taker (the biomass plant) and providing training and technical support, the project strengthens resilience, ensures a sustainable supply chain, and creates inclusive economic opportunities in rural areas.

What is the intended funding objective?

The Origination Facility support will de risk and strengthen the development phase of the SODEN–ECOR Divo Project, enabling SODEN to reach financial close on an expected EUR325 million investment. SNV's role under DFCD focuses on:

- Farmer engagement and climate resilient cocoa practices for ~36,000 smallholders.
- ESIA/ESMP studies for the plant and supply chain (including PLPs and associated facilities).
- ESG/GESI assessments and action planning.

The grant will be used for undertaking:

The EUR 500,000 Origination Facility grant will fund targeted de risking activities:

Milestone 1: Cocoa Orchard Renewal Demonstration, Farmer Training and Credit Access Facilitation

- Establish 7–8 demonstration orchards (2–4 hectares each) across the eight PLPs.
- Train farmers on orchard renewal, agroforestry, integrated pest management (IPM), and soil/water fertility management.
- Conduct an initial process to facilitate access to credit for farmers (mapping local providers and eligibility pathways).

Milestone 2: Environmental and Social Impact Assessment (ESIA) and Management Plan (ESMP) Update

- Conduct ESIA for 8 PLPs (and associated facilities as required).
- Update the ESIA for the biomass power plant.
- Develop the ESMP, Stakeholder Engagement Plan (SEP), and Gender Equality & Social Inclusion (GESI) Plan aligned with IFC Performance Standards.



What are the expected impacts?

Climate resilient practices adopted by **~36,000 smallholder** cocoa farmers, improving yields, incomes, and adaptive capacity.

Reduction of **~300,000 tonnes of CO₂** per year through renewable generation and improved residue management.

~3,900 new jobs in biomass collection, plant operations, logistics, and related services.

Reliable renewable electricity contributing to national targets (76 MW capacity; ~550 GWh/year generation).

Improved **waste management of cocoa** residues and reduced methane emissions.

Stronger resilience of smallholder farmers to climate variability and market risks.

Environmental and social rationale

- **Social inclusion:** The ESIA update will integrate gender and social inclusion considerations and ensure an accessible grievance redress mechanism (GRM) linked to biomass supply and land use decisions.
- **Environmental sustainability:** Best practices for biomass supply, agroforestry, soil and water management, and energy efficient plant operations will reduce the carbon footprint, improve resource stewardship, and strengthen long term resilience.
- **Risk management:** Key risks addressed include biomass supply chain disruption, environmental compliance, labour and community impacts (including SEA/SH and child labour risks in the cocoa value chain), and operational safety. Strong quality assurance and monitoring systems—including updated ESIA/ESMP, SEP, and contractor controls—will mitigate these risks.
- **Alignment with DFCD:** Classified as Rio Marker 1 (Adaptation), the project supports climate resilient rural livelihoods, clean energy production, and sustainable economic growth. It diversifies energy supply, reduces waste, and strengthens the adaptive capacity of smallholder farmers.

Contact us

For more information and if you want to share any confidential information you may have regarding the intended project or company, please contact: dfcd@snv.org

