



Funded by
the European Union

Technical Assistance: Strengthening Climate Mitigation and Adaptation through Off-Grid Solar Energy Systems for Agro-Industrial Installations

Location: Ouahigouya, Burkina Faso

Solution: Solar Power for Agro-Industrial Installations and Pay-as-You-Use Models

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Burkina Faso faces significant challenges in rural electrification and sustainable energy access, particularly in agro-industrial sectors where energy use is critical for processing operations. In many regions, access to affordable, reliable energy is limited, driving dependence on diesel-powered systems and traditional energy sources like firewood. This project introduces a community solar energy platform for agro-industrial cooperatives, aiming to improve access to sustainable energy, reduce greenhouse gas emissions, and enhance the resilience of the agricultural sector to climate impacts.



Objectives

The project seeks to address the energy access challenges faced by agro-industrial cooperatives in rural Burkina Faso by introducing solar-powered energy solutions. By improving access to affordable and reliable solar energy, the project aims to reduce the dependence on traditional energy sources like diesel generators and firewood. The solar energy platform will facilitate the electrification of essential agro-industrial equipment, enhancing productivity and reducing post-harvest losses.

- **Promotion of solar energy use:** Enable rural agro-industrial cooperatives to access affordable solar energy solutions.
- **Introduction of innovative payment models:** Implement a "pay-as-you-use" system for energy consumption.
- **Supporting climate resilience:** Reduce reliance on diesel and firewood, improving climate adaptation.



Climate Impact

- **Reduced greenhouse gas emissions:** Solar energy will replace diesel generators, significantly reducing CO2 emissions in the agro-industrial sector.
- **Improved energy efficiency:** The project supports the adoption of clean energy technologies, improving the efficiency of agro-industrial activities while reducing environmental impacts.



Security Benefits

- **Enhanced energy security:** The introduction of solar energy reduces dependence on costly diesel imports, stabilizing energy availability in rural areas.
- **Community stabilization:** Access to reliable energy supports agricultural production, reducing migration pressures and enhancing community stability.



Social Impact

- The project will directly benefit **agro-industrial cooperatives** in Ouahigouya, providing approximately 60 users with reliable access to clean energy.
- Women will be key beneficiaries, particularly in the agro-processing sector, reducing the time and labor spent on traditional energy-dependent tasks.
- The project will create jobs in solar system maintenance and expand economic opportunities for local communities.



Food Security

- **Improved agricultural productivity:** Reliable access to energy improves food processing and storage capabilities, reducing post-harvest losses and increasing food availability.
- **Sustainable livelihoods:** Solar energy enables rural cooperatives to maintain consistent agricultural activities, supporting long-term food security and economic resilience.



CS Climate Technology

- The project promotes solar-powered technologies tailored for use in grain processing and other agricultural applications, reducing energy costs and dependence on non-renewable resources.
- These solar systems are designed to be low-maintenance and adaptable to the specific needs of rural agro-industrial cooperatives, ensuring long-term sustainability.



Replication Potential

- This solar energy platform model can be replicated in other regions of Burkina Faso and neighboring countries with similar energy access challenges in agro-industrial sectors. The "pay-as-you-use" model ensures affordability and scalability for rural communities.

