

# SOLFIN

Affordable lease-to-own financing for solar systems



**SEED**

promoting entrepreneurship  
for sustainable development



## Background

Solar power has a huge potential to provide green and reliable off-grid energy in Ghana. There is a steadily growing number of small and medium enterprises (SMEs) which offer **off-grid solar solution tailored to the needs of local communities and enterprises**, especially to last-mile households which have not been connected to the grid. Yet, market penetration remains difficult due to the high upfront costs of solar products and there are no subsidies for the sector. In the absence of supportive financial products, off-grid solar energy remains more expensive than on-grid energy, making renewable energy options unattractive to potential local clients.

Common financial terms that have too high-interest rates and too short tenors for effective financing of solar energy. **A new approach to financing solar products is needed to fill this market gap.** A potential way to encourage local financial institutions (FIs) to support renewable energy enterprises is the provision of guarantees backing the high risk associated with early stage businesses and provide loans at concessional terms.

## Solution Overview

SOLFIN is a climate finance product that targets SMEs in the solar energy sector and supports them to provide affordable solar systems through enabling a lease-to-own financing model. Thereby, SOLFIN addresses the lack of high upfront investments for solar technologies by enabling solar technology providers to offer solar systems complemented by the necessary finance product. In this way, reasonable interest rates and longer tenors can be offered to SMEs, end-users and households.

## Key Features

SOLFIN brings together banks, venture capital funds, guarantee funds and solar energy enterprises to create a solar financing mechanism that enables households, public institutions and local SMEs to take up solar energy. Solar enterprises receive

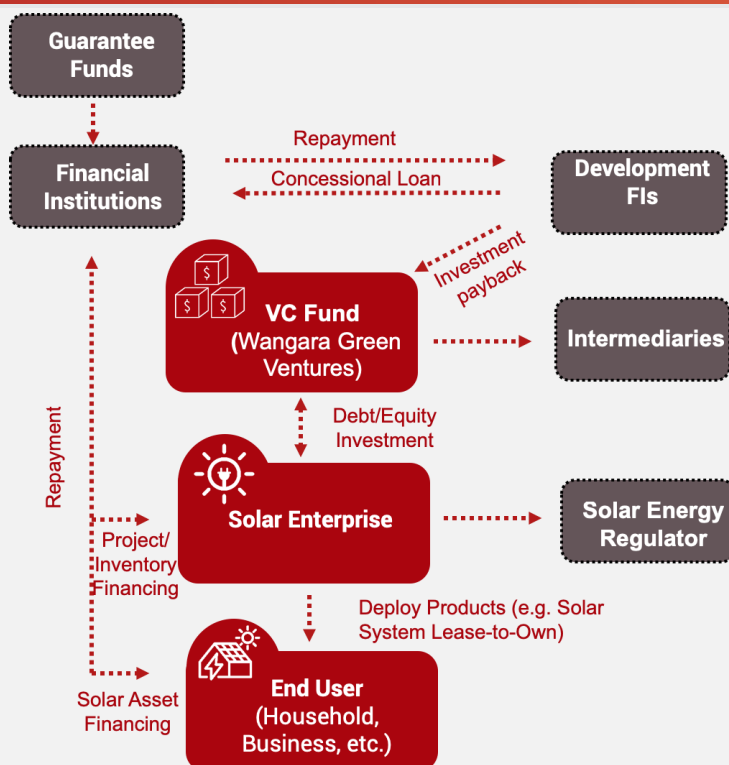
<b>Focus:</b>	Climate Change Mitigation
<b>Ecosystem Impact:</b>	Infrastructure & Technology, Access to Finance
<b>Lab Cycle:</b>	Climate Finance, Ghana 2019
<b>Challenge Hosted by:</b>	Wangara Green Ventures

financing from both the evergreen fund of Wangara Green Ventures as well as from financial institutions. Key for this product are the concessional loans at interest rates of 16 – 18 % p. a. (in Ghana Cedi terms) and tenors of 5-7 years. These loans are provided can be provided to solar enterprises, who then on-lend to end-consumers and thereby take over the repayment risk from financial institutions, allowing lower interest rates and enabling a lease-to-own financing which gradually transfers ownership to the end-consumer upon lease payments. This option leverages the close interaction between solar companies and end-consumers and enable lending for small-scale transactions. Another option is the direct asset-financing of FIs to end-consumers which would apply for rather larger solar installations by industrial purchasers for example which are associated with lower risks.

SOLFIN capitalizes on the interaction of banks, green funds, guarantee funds and solar technology providers. Through bringing together different fields, SOLFIN bridges the missing gap of effective financing solar systems.

## Innovative Characteristics

- **Guaranteeing banks to back risks of innovative technologies**
- **Embedding customer financing through a lease-to-own model**
- **Connecting banks, green funds, guarantee funds and solar technology providers**



## Target Market

The participating solar enterprises will be part of the venture capital fund of Wangara Green Ventures and will therefore be screened by Wangara and undergo a detailed due diligence process to analyze their bankability. This allows to reduce risks for all stakeholders involved. The product will be targeted at residential customers and companies with low energy requirements in rural and urban Ghana. In the long-term, the target market should also include public institutions such as schools, hospitals, churches municipal and agencies.

## Impact Potential

- **Social:** Providing access to electricity by propelling off-the-grid sustainable electrification and Improving conditions and affordability for local households
- **Environmental:** The transition to a low carbon economy will be facilitated by replacing conventional energy sources such as the burning of charcoal and kerosene with solar energy
- **Economic:** Increasing solar technology market penetration through addressing the missing middle financing gap in the energy sector

## Solution Developer



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**SEED Practitioner Labs Climate Finance** empower participants during the hands-on and collaborative Labs process to turn major financing challenges into robust prototypes. SEED Practitioner Labs Climate Finance are part of the implementation of "Financing and capacity building for micro and small climate-smart enterprises: Filling the gap of the missing middle", a project supported by the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety.