MYSOL BY ENGIE ENERGY ACCESS

With **9% of the world population still living without access to electricity**, the challenge of achieving affordable and clean energy, as outlined in SDG 7, still persists.

Today, in the voluntary carbon market, **only few decentralized solar home systems projects benefit from climate financing** due to inadequate validation and certification processes, unsustainable cost structures and lengthy approval times.

To address these limitations, **ENGIE Energy Access**, a leading off-grid solar solutions provider in Africa and **CarbonClear**, a prominent solar home system standard have joined forces to develop an **innovative and fully digitalized carbon issuance model**.

By integrating real-time data from the usage of solar kits with the issuance of carbon credits, this partnership ensures **strong integrity claims** while delivering **multiple co-benefits** through the project.

CERTIFICATION

Solar home system program — CarbonClear

Type	Household devices - Energy access
Category	Emissions avoidance
Status	Certified by CarbonClear
Methodology	CDM-AMS-I.L v3.0 amended to account for metered devices
Crediting period	2022 - 2026

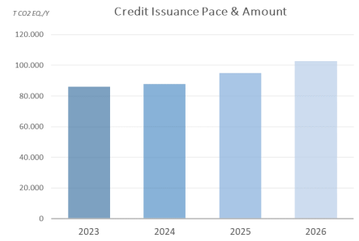
LOCATION

Benin, Ivory Coast, Kenya, Mozambique, Nigeria, Rwanda, Tanzania, Uganda, Zambia

ISSUANCE

The 1st issuance occured in **2023**.

The credits issued are expected to range between **80-100 kt per year** over the period, depending on the sales and usage rates.



IMPACT

The project generates several co-benefits with strong impacts **on 9 SDGs**

WHY THIS PROJECT ?

RELIABLE & CLEAN ENERGY ACCESS FOR FAMILIES, BUSINESSES & INSTITUTIONS

Access to electricity remains a global challenge, with **733 million people** still lacking access to clean, modern and reliable power in 2020. **Sub-Saharan Africa accounts for 77%** of the current electricity access gap.

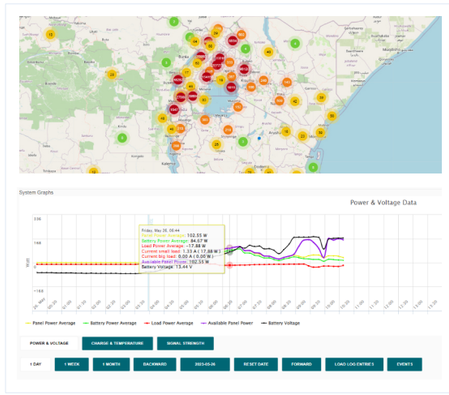
Off-grid solar is estimated to be the most cost-effective, feasible solution to electrify **55% of currently unconnected households** in the coming years.

These solutions not only provide access to electricity but also **contribute to climate change mitigation**, with the replacement of kerosene lanterns and diesel generators resulting in significant CO2 emissions reductions and **improved resilience** for climate-vulnerable populations.

ENGIE Energy Access is a leading clean energy solutions providers in Africa, **impacting more than 9 million lives** on the continent.

The MySol entry level kit contains a 10W solar panel, a 25Wh battery, 2 LED lights and a phone charger

AN INNOVATIVE DIGITALIZED VERIFICATION OF CREDITS FOR FULL TRANSPARENCY



Real-time monitoring of the Solar Home Systems with the ENGIE Energy Access Paygee software

Device usage and sensor telemetry data are collected from **GSM enabled** Solar Home Systems for the remote monitoring and maintenance.

The integration of the ENGIE Energy Access data platform to the CarbonClear certification programme enables to **automatize the monitoring, reporting, verification and issuance** of the emissions reductions.

Unlike traditional projects, where issuance occurs every 1 or 2 years based on an audit performed on a limited sample of users, this project allows for an efficient and continuous issuance and verification process with **real time overview and insights on the use of all devices**. Yearly audits by DNV GL ensures a regular and external verification of the process and the credits issued.

The CarbonClear registry is based on a Distributed Ledger Platform to ensure fast and reliable operations of a massive amounts of data at a low cost. Once retired, the credits provide access to a **proof of retirement going up to the geohash and the timestamp of the solar system** associated to the emissions' reductions.

A PAY-AS-YOU-GO MODEL AT SCALE FOR ENSURING SOLAR KITS' AFFORDABILITY

Of 733 million unconnected people, **only up to a fifth could afford to buy** a Tier 1 multi-light and charging system upfront. The Pay-as-you-go scheme is thus essential to address the affordability challenge.

The ENGIE Energy Access solar kits meet diverse customer needs (from basic lighting and phone charging to larger households and small business appliances) and are financed through **affordable mobile payments as low as $0.19 per day**.

Combining a **"Pay-as-you-go" model** with the **economies of scale** of a leading solar provider (manufacturing, distribution, installation, service support, maintenance and invoicing) enables to close the electricity access gap. **But not fast enough.** That's why **carbon credits** revenues are still crucial.