





**CASE STUDY** 

Harnessing solar power for underserved regions: Enabling energy security in remote areas



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## Harnessing solar power for underserved regions: Enabling energy security in remote areas

#### CONTEXT

The three pillars of the energy trilemma are energy security, sustainability and affordability. For some remote areas of developing countries to achieve any of those elements can appear out of reach due to the enhanced challenges of funding, building, and transporting energy to isolated locations.

That can lead underserved communities to find energy sources where they can, often leading to the burning of carbon-intensive materials for cooking, light or heat, like wood, animal dung, and coal, which also contribute to poor air quality.

While some solutions, such as solar power, could swiftly change the situation for people living in villages found in sun-blessed regions such as Sub-Saharan Africa, technology and cost can prove a barrier to accessibility.

SunFunder is a debt-financing provider for distributed solar for regions including Africa, where 602 million people could be without access to electricity by 2030¹. It collaborates with various organisations to give access to energy and long-term climate investments, some of which can help farmers cope with the effects of climate change.

## INTERNATIONAL COLLABORATION BRINGS SOLAR RESOURCES TO CLIMATE-VULNERABLE AREAS

United Nations Framework Climate Change Convention (UNFCCC) described SunFunder as "pioneering climate investments in Africa". It was created because off-grid solar companies in Africa were struggling to get loans to grow their businesses and impact.

570mn

The number of people lacking access to electricity in Africa<sup>1</sup>

US\$165mn

The amount in loans granted by SunFunder to 58 solar companies<sup>4</sup>

 $750\,\mathrm{Mt}$ 

Annual CO2 emissions mitigation resulting from investments by SunFunder<sup>2</sup>

US\$500mn

Gigaton Empowerment Fund announced by SunFunder and Mirova<sup>4</sup>

### Organisations involved

- SunFunder
- UNFCCC
- Mirova
- SunCulture

#### Industry

Renewable energy

#### Location

Sub-Saharan Africa

Investment US\$165mn

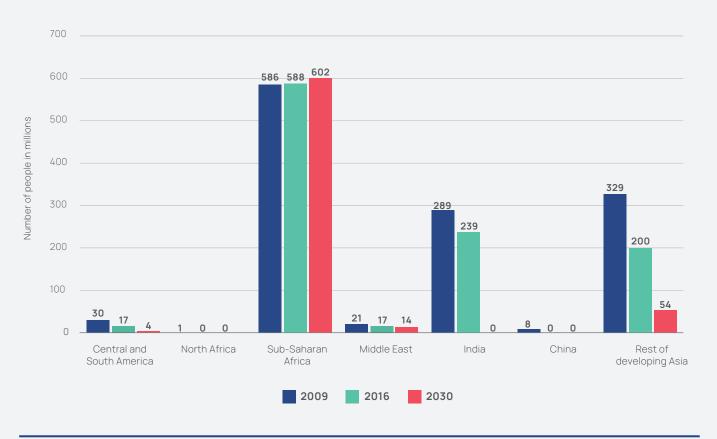






#### Vast numbers of people across the world are without electricity access

As developed countries transition to green energy, many Sub-Saharan Africans are still missing out on clean power



Source: Statista 2024

In its first 11 years, SunFunder closed more than US\$165 million in blended finance investment for 58 solar companies working in off-grid solar, mini-grids, agri-solar and other commercial and industrial scale (C&I) solar projects<sup>4</sup>. These investments mitigate carbon emissions by replacing fossil fuels with clean energy and help communities adapt to climate change by increasing resilience in local economies and food systems.

Among the successful projects SunFunder has helped fund is a collaboration with Kenyan solar irrigation company SunCulture, an Alliance for Rural Electrification member, to help farmers replace diesel pumps with solar-powered versions.

A first disbursement from a US\$11 million syndicated debt facility arranged by SunFunder in 2021 enabled SunCulture to scale renewable energy installations

at smallholder farms and households. Estimated to mitigate 20,000-plus tonnes of CO2 annually³, this also facilitated income growth and job opportunities in rural communities.

SunCulture has pioneered a "Pay-As-You-Grow" business model to make solar-powered irrigation affordable, combining end-user finance, value-added services, modern climate technology, and access to improved productivity. Dalberg Research said irrigation systems and solar-powered water pumps can increase farm production two-to-four times, and incomes two-to-six times.

Solar systems installed by SunFunder collaborators provide households with light and enable the use of electronic appliances, relinquishing reliance on kerosene. Solar irrigation pumps can also boost farm resilience to climate risks while businesses benefit

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through reduced costs and emissions while improved energy supply reliability through C&I solar brings wider benefits for local economies.

SunFunder investments have resulted in at least 750 Million tonnes (Mt) of annual CO2 emissions mitigation² and 10 million people gaining improved energy access, predominantly in rural Sub-Saharan Africa, as well as in India and other developing countries⁴. Impact investors such as Calvert Impact Capital, development finance institutions DFC and Swedfund, private investors including Bank of America, catalytic investors like IKEA Foundation, plus high net worth individuals, have committed funds to the programme.

The company says it has been filling the gap in originating and closing an investable pipeline in emerging markets. It has built an experienced investment team with sectoral knowledge, structuring expertise and local presence, helping overcome the obstacle of solar innovations in emerging markets being perceived as too early-stage and/or risky.

SunFunder revealed its vision was to mitigate at least 1 gigatonne (Gt) of CO2e emissions by catalysing climate smart solutions that reduce inequality, ultimately giving 100 million people access to affordable, clean energy<sup>2</sup>.

In June 2022, SunFunder was acquired by Mirova, a global asset management company dedicated to sustainable investment and an affiliate of Natixis Investment Managers. The combined organisation's first objective was to launch the Gigaton Empowerment Fund, with an investment capacity of US\$500 million, to accelerate clean energy transition in emerging countries in Africa and Asia Pacific predominantly, as well as Latin America and the Middle East<sup>4</sup>.

As of March 2023, it had raised US\$171 million and expects to deploy US\$1.2 billion of private debt throughout its life, primarily to small and medium-sized enterprises<sup>5</sup>.

"We've heard a lot of talk about ESG investment, but there are very few companies like Mirova and SunFunder leading the pack with 100% truly sustainable investments," says Ryan Levinson, Co-founder of SunFunder. "Together we become the leading clean energy and climate investor in emerging markets, through bold new investments with real impact."



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**Ryan Levinson**Co-founder of SunFunder.

#### REFERENCES

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