

OFF-GRID SOLAR FROM INDIA TO KENYA

COMPANY

Orb Energy Ltd.

SECTOR

Renewable Energy

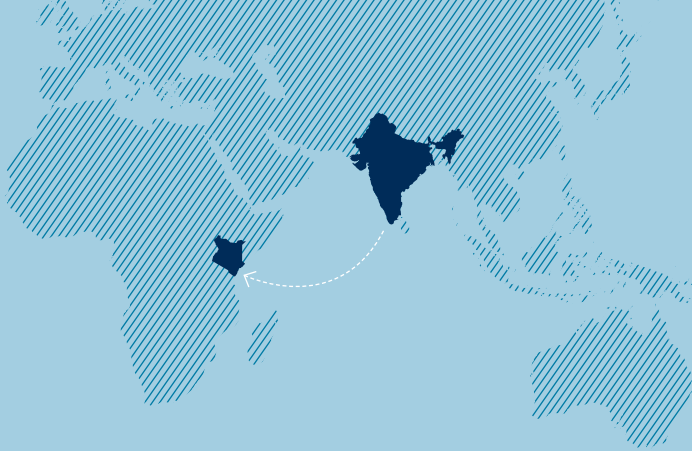
TOTAL PROJECT SIZE

US\$ 4.4 mln

MAKING OFF-GRID SOLAR ENERGY SYSTEMS MORE ACCESSIBLE TO ALL

Since 2007, Orb Energy (Orb) is a leading designer, manufacturer, and retailer of off-grid solar energy systems in India. With a US\$ 2 mln common equity investment from the Access to Energy Fund Orb has established and expanded its off-grid solar business in Kenya, a country where 80% of the population does not have access to electricity. The Access to Energy Fund is managed by FMO on behalf of the Dutch government.





CLIENT INFORMATION

SPECIFIC TYPE OF BUSINESS

Design, manufacturing, and retailing of off-grid solar power systems and water heaters

COUNTRIES OF OPERATIONS

India, Kenya

TOTAL ASSETS

US\$ 5.86 mln

INVESTMENT INFORMATION

TOTAL PROJECT SIZE

US\$ 4.4 mln

FMO'S INVESTMENT

US\$ 2.0 mln

FINANCIAL PRODUCT(S) USED

Equity

IMPACT AND PERFORMANCE



596 JOBS SUPPORTED
(direct employees & franchise staff)



35.000 METRIC TONS OF CO₂
AVOIDED PER ANNUM



85.000 SYSTEMS SOLD TO DATE
Number of people reached (energy)



8.982 MWH OF POWER
PRODUCED (ENERGY)

AN INVESTMENT FOR 'UNELECTRIFIED' AND 'UNDER-ELECTRIFIED' HOUSEHOLDS

Lack of access to electricity is an urgent problem in both countries where Orb is active: India and Kenya. India, despite having a relatively industrialized economy, has among the lowest per capita usage rates of electricity in the world: 750 kWh on an annual basis. Access to electricity is often irregular and 300 mln people have no power access at all. Founded by former executives of Shell's solar business unit following the decision of Shell to discontinue its investments in solar energy, Orb offers a unique approach to the country's solar market. The company reaches out to the poorest areas, as well as to the wealthier regions where power is inconsistent and/or very expensive.

In sub-Saharan Africa, and Kenya in particular, access to electricity is even more limited. With the FMO investment, Orb is now replicating its approach in Kenya, by adding 50 branches over the next 2 years. FMO's investment will finance 50% of the company's costs on the initial rollout in Kenya and provides sufficient funding to establish a central warehouse and distribution center as well as to support the operating expenses incurred.

AFRICA'S POPULATION GROWS MUCH FASTER THAN ITS (RENEWABLE) GRID EXPANSION

The World Bank Group estimated that the African market for off-grid lighting would experience exceptional movement, mainly due to the continent's rapid population growth. Orb's outreach to Kenya will contribute to increased renewable

energy supply to the population and businesses. The company offers a full range of solar lighting systems - from providing affordable lanterns for households unconnected to the grid to installing larger fittings for urban and commercial users in need of more reliable access to power.

OVERCOMING THE PROBLEM OF HIGH COSTS FOR OFF-GRID SOLAR

Beyond offering a renewable energy solution, the initiative also overcomes a common issue that comes with off-grid solar systems: high up-front costs that the poor cannot afford. Orb has developed a sales system in partnership with microfinance institutions that directly provides consumer finance loans. In this way, the company makes the use and benefit of off-grid solar devices more accessible to a wider public.

Orb finds it highly important that solar products are available to many and that clients are treated fairly. In order to support this, FMO has made a grant funding available for a board member specialised in banking and microfinance in sub-Saharan Africa.

FMO is the Dutch development bank. FMO has invested in the private sector in developing countries and emerging markets for more than 45 years. Our mission is to empower entrepreneurs to build a better world. We invest in sectors where we believe our contribution can have the highest long-term impact:

financial institutions, energy and agribusiness. Alongside partners, we invest in the infrastructure, manufacturing and services sectors. With an investment portfolio of EUR 8 billion spanning over 85 countries, FMO is one of the larger bilateral private sector development banks globally. www.fmo.nl