

Scaling up a business model for distributed energy in Peru



Dressing a wound under solar-powered lighting.

Background

Approximately 6 million Peruvians do not have access to electricity. As a result, they suffer health and economic hardship and are deprived of basic economic opportunities. PowerMundo is a company specialised in developing, distributing and selling clean energy products to people in emerging markets.

Over the past five years it has developed a network covering isolated regions of Peru. Here, its business model is to source best-in-class solar products in bulk for economies of scale, and distribute them via a growing network, using the country's extensive bus system for shipping the products.

Marketing support increases awareness of the solutions. The final element is financing to suit customers. PowerMundo will expand and pilot various financing programs such as pay as you go solar and recharging kiosks to increase access to cost saving clean technology through incremental payments. US State Department and GIZ funding have provided initial funding for the home solar products, but demand exceeds supply.

Project purpose

This project will enable PowerMundo to greatly increase the reach of home solar products in rural Peru, and demonstrate that that the business model can be scalable, replicable, and self-sustaining.



Main activities and outputs

- Broaden clean tech educational and marketing efforts in rural Peru
- Expand the PowerMundo distribution network
- Widen the uptake of new finance models involving credit and microfinance, recharging kiosks and pay-as-you-go solar hardware
- Pilot cloud-based tracking systems that enable distribution partners to understand customer usage patterns and integrate into marketing campaigns

Expected impacts

- 2,000 solar products sold, impacting over 8,000 people
- Increased customer savings: US \$ 30 upfront cost of a solar light which can easily last 3-5 years and eliminates approximately \$ 15/month fuel cost, for US \$ 1,740,000 savings in total
- Reduced number of diesel related household injuries
- Increased productivity, income and education with added evening hours of work and study
- Widened opportunities for green jobs through solar entrepreneurship
- Improved indoor air quality, fewer respiratory illnesses
- Decreased carbon emissions
- Widened access to financing
- Long term poverty reduction

Project Information

Location:

Peru

Duration:

2013–2014

Sector:

Renewable Energy

Thematic focus:

Business

Total project budget:

€ 311,268

REEEP grant:

€ 150,000

REEEP donor:

Switzerland

Co-funding:

€ 161,268 from US Department of State (ECPA) and German GIZ

Implementing partner:

PowerMundo