



ACCIONA Microenergía Peru



NOVEMBER 2014

1. WHO WE ARE

2. LUZ EN CASA PROGRAMME

1. The Luz en Casa Programme

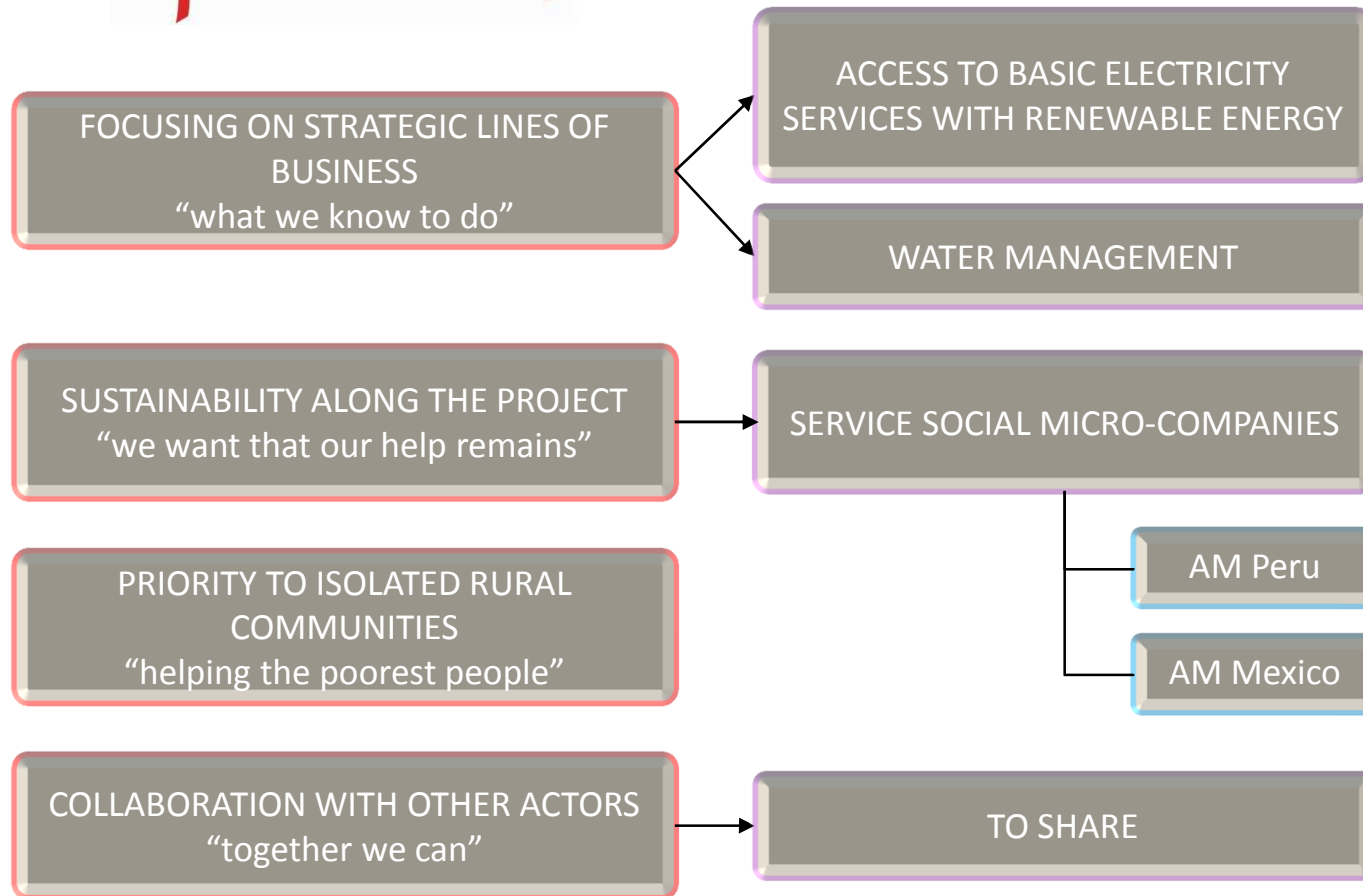
2. Delivery model

3. Methodology

4. Impact Evaluation



Who we are



Member of:





Luz en Casa Programme



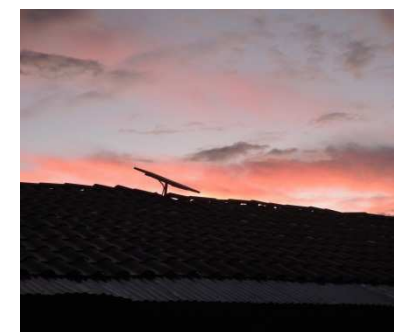
Luz en Casa Programme

The **LUZ EN CASA Programme** has proved that rural electrification with **Solar Home Systems (SHS)** can be economically **sustainable** and **affordable** to the very poor people.



The facts

- AMP, as a public provider of electricity, supplies a **basic electricity service to almost 4,000 households** in poverty and extreme poverty, by means of solar home systems, with a fee-for-service model.
- By the end of 2013, **the breakeven point was reached.**
- The benefited families pay S/.10 (around USD 3.5) monthly. Previously they were spending S/.15 (50% more) to buy candles, kerosene, charge the mobile,...
- The default on payment is lower than 1%. **Almost all pay.**
- Unique private initiative of rural electrification with SHS in Peru. More than 6 year-experienced and operating in a sustainable and affordable way.

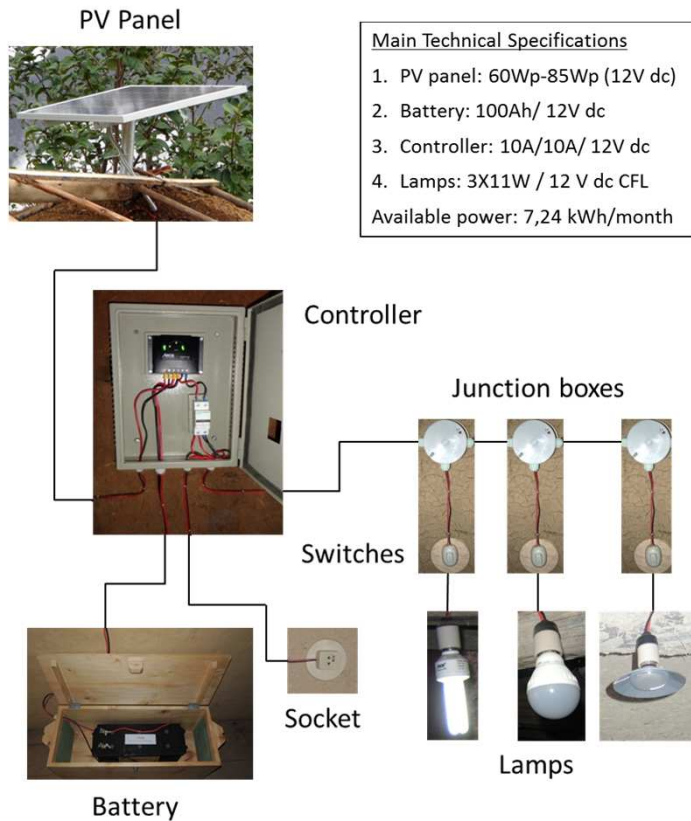


Luz en Casa Programme

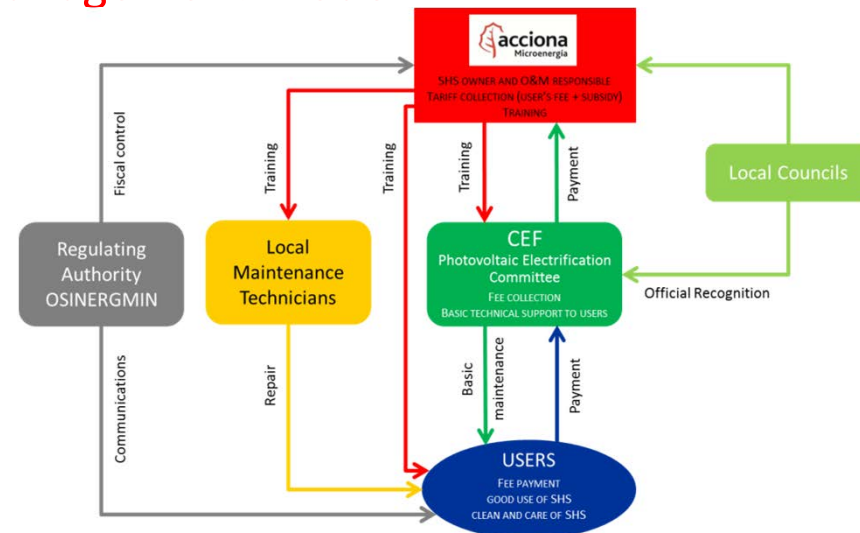


Delivery Model

Technological Model



Management Model

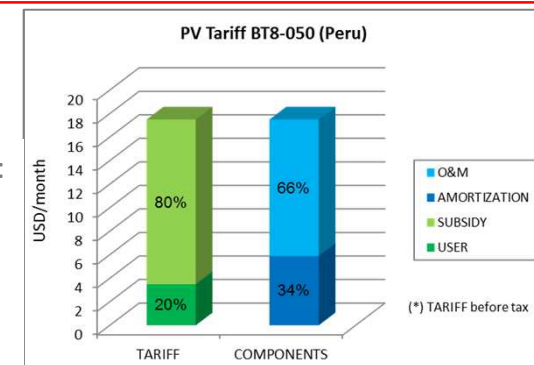


Economic Model

OPERATION:

TOTAL INVESTMENT: 3,1 M€

- FUNDAME 1,7 M€
- AMP 1,2M€
- FOMIN 0,2M€



Sensitization assemblies



Municipalities agreement



Demo installations



Users and Photovoltaic Electrification Committees training



Instalation



Exploitation





FROM CANDLES TO LIGHT: THE CONSEQUENTIAL OUTCOMES OF RURAL ELECTRIFICATION



Families save in candles, batteries, and firewood (there is no differences in expenditures of charcoal, cooking gas, or fuel). These savings account for about S/.23.8 (US\$8.5) per month while the monthly charge for the panel is S/.10 (US\$3.6) per month.

Savings cover the monthly cost of the solar panels

ARE THERE ANY OTHER BENEFITS TO USING THE PANELS?

Fuente : Fomin/BID

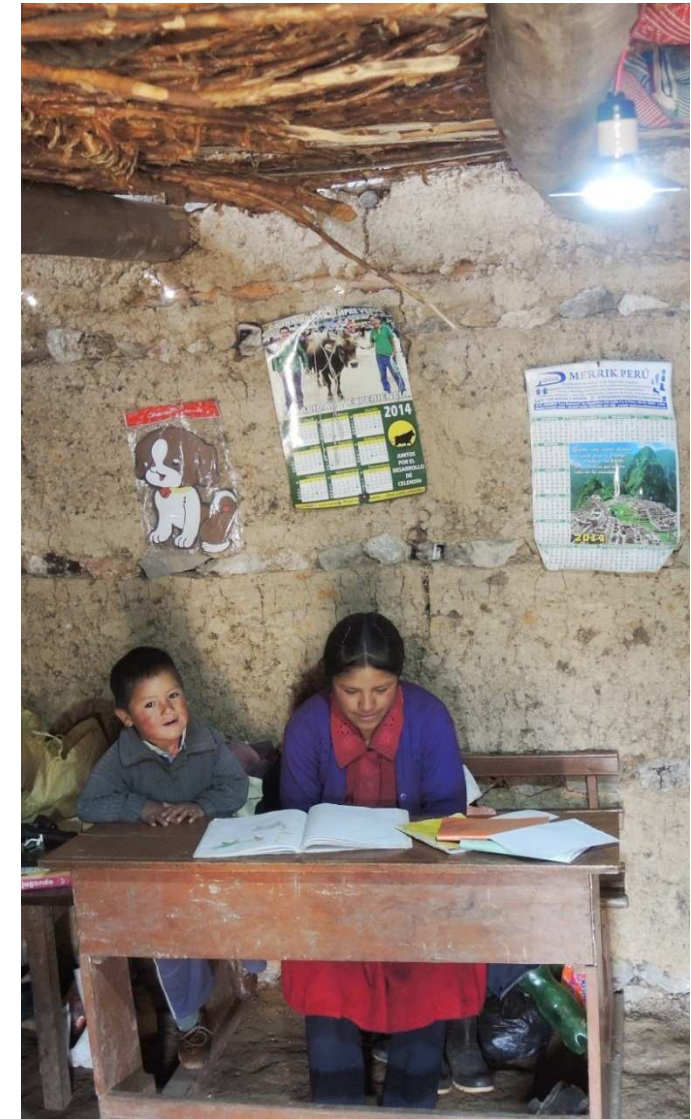
- About 80.8% of the beneficiaries of the project are poor and live in rural areas in the Departamento de Cajamarca.
- 98.3% of the beneficiaries could be considered as vulnerable to poverty.
- Households use their solar panel mainly for lighting
 - Only a fraction of households use the system to charge their cellphones (19%), watch TV (5%) and connect their radios (4%).
 - The power of the panel is not large enough to support large appliances.
- More women weave and spend more time weaving for their families.
- More men read, but the time they spend reading is not statistically different.
- The proportion of men (97%) and women (95%) who engage in productive activities is the same; but women with solar panels engage less time in agricultural activities and animal care (-1h 39min), and engage in a larger proportion (+2.9 %) businesses in their home

Fuente : Fomin/BID

These changes have impacted children, too:

- Children in households with solar panels spent more time doing homework and this has translated in more years of schooling for children going to elementary school.
- More homework has also translated in higher enrollment rates for children going to high school.

Fuente : Fomin/BID



Conclusion





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THANK YOU!

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