

"Luz en Casa" ("Light at Home") Project. Electrification of isolated rural areas in Peru

ACCIONA Microenergy Foundation (FUNDAME)



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Energy Access Practitioner Network Webinar on Energy Storage



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- 1. FUNDAME activities**
- 2. Acciona Microenergía Perú (AMP)**
 - 2.1. AMP Overview**
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- 3. Key issues in energy storage: our experience in rural electrification**

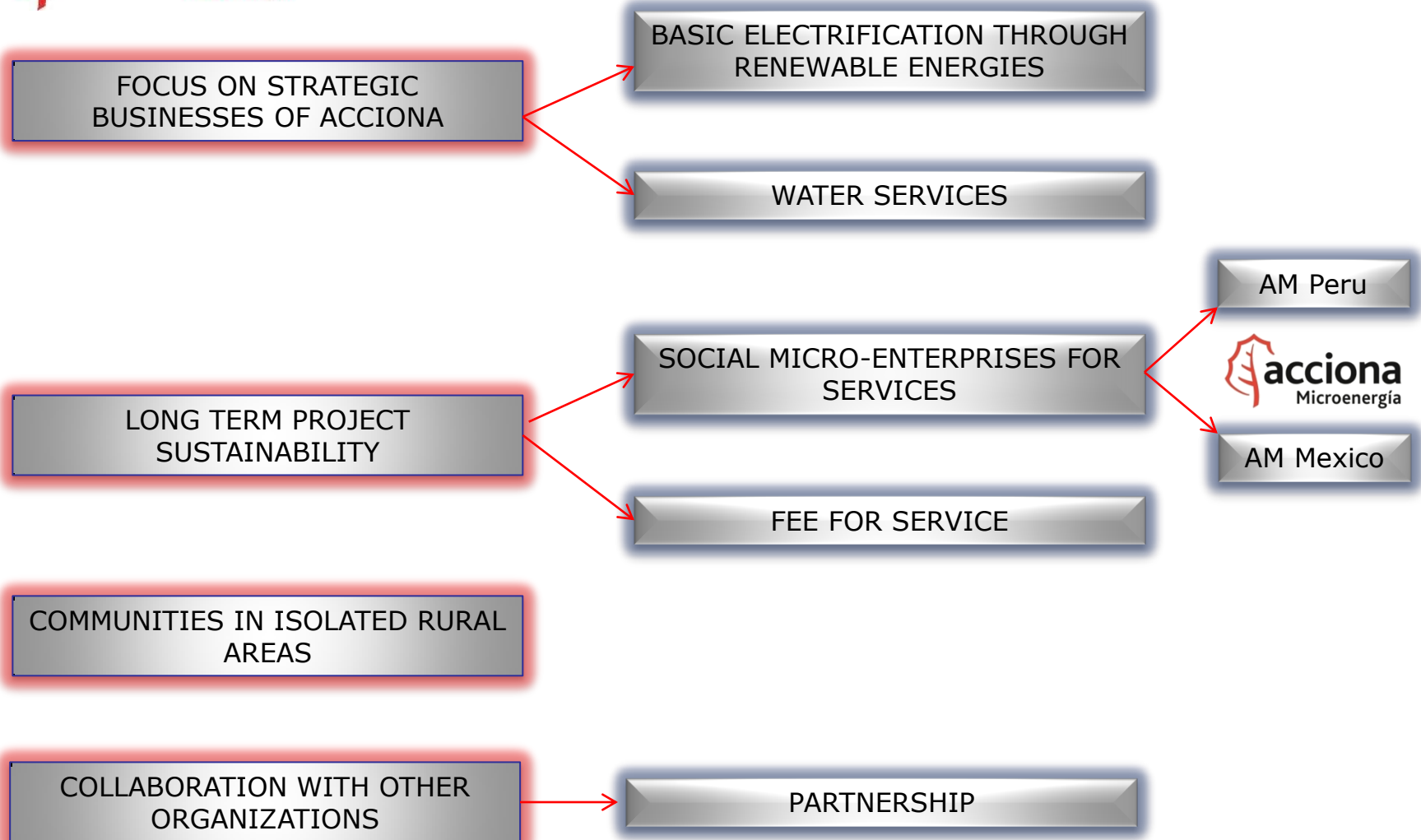


ACCIONA Microenergy Foundation



The ACCIONA Microenergy Foundation was created to focus the company's efforts of ACCIONA on social development.

Our goal is to meet the real demands and basic needs of people and communities in isolated rural areas in developing countries, providing access to electrification by renewable energy, drinking water, basic sewage services and ecoefficient construction.





Acciona Microenergía Perú (AMP) overview



- **ACCIONA Microenergía Perú (AMP) is a non-profit Peruvian association created in January 2009 by Acciona. Aims to be a sustainable energy service social micro-enterprise.**

“Light at Home” Program (Luz en Casa) in Peru:

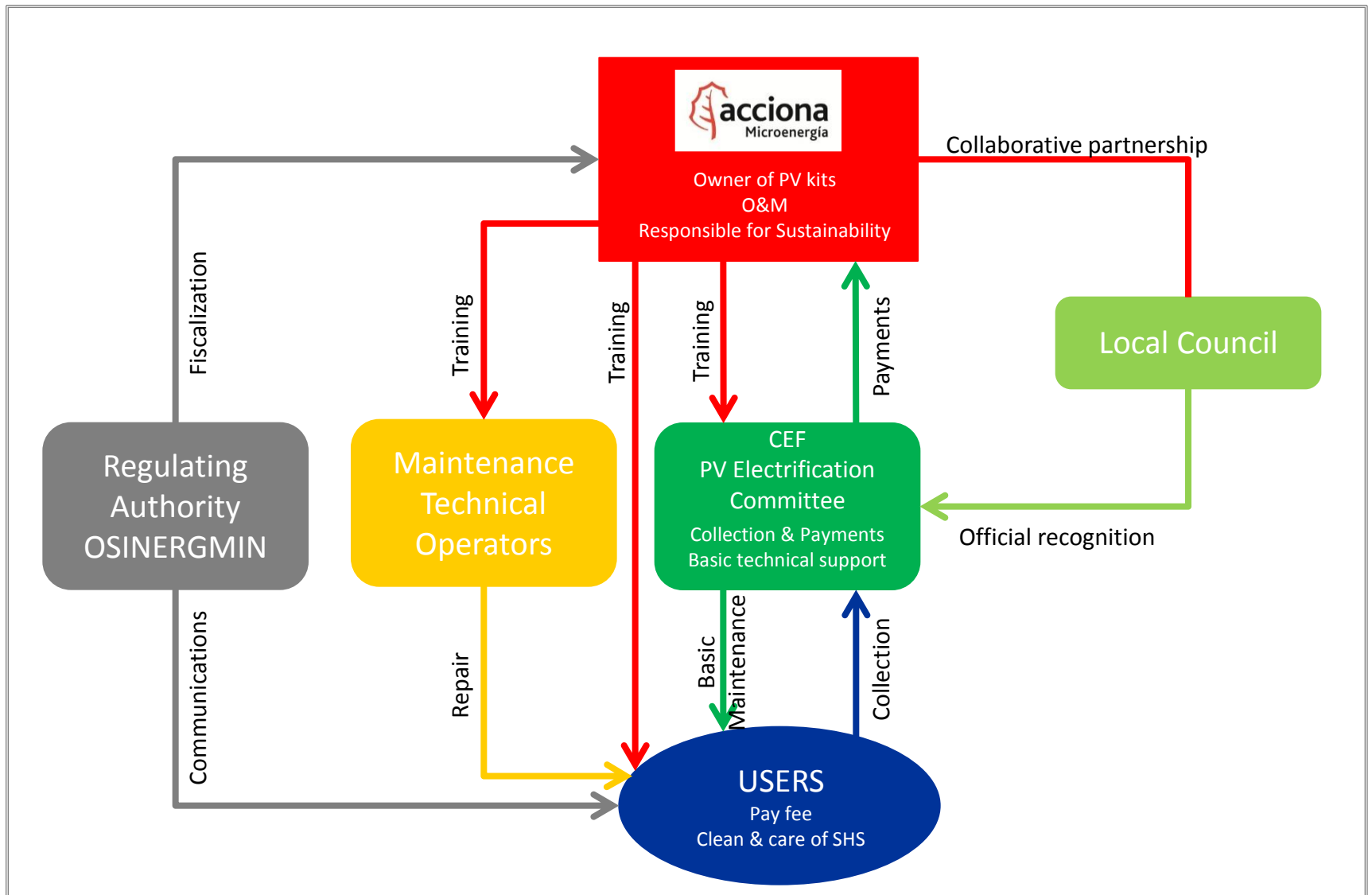
- **Project to benefit 3,000 underprivileged families (around 15,000 people) with Solar Home Systems (SHS, 80-85Wp, 3 CFL lamps, 100Ah batteries capacity) through a fee for service management model.**
- **Based in the new tariffs framework (2010) for SHS.**
- **The goal is to show the affordability for very low income people, and the sustainability of the program.**
- **More than 1.300 SHS in service.**
- **First Peruvian rural electrification company exclusively with solar power.**
- **0,9 MUSD loan from IADB for 1.700 SHS acquisition in 2013.**



**MAIN
RESULTS**



"Luz en casa" Project - Management model





**Key issues in energy storage: our experience
in rural electrification**

1. Usual focus in projects but not in service.
2. Importance of batteries quality in sustainable rural electrification.
3. Manufacturers: lack of technical data or lack of transparency.
 - Examples: DOD vs Lifetime Cycles and OCV vs DOD curves.
4. Charge controller and battery integration.
5. The future of energy storage in rural electrification:
 - Battery recycling (Lead batteries).
 - New technologies: Li-ion batteries.



THANKS

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