



*foundatton* RURAL ENERGY SERVICES

# Foundation Rural Energy Services

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**25 November 2009**



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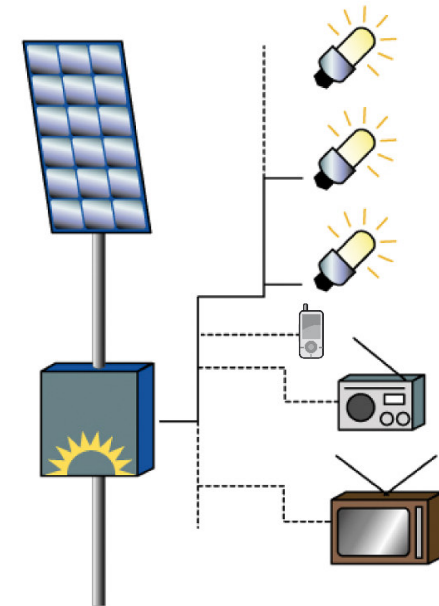
- **Created: 9 January 2004**
- **Mission:**
  - **Promotes rural electrification in developing countries preferably by the use of solar energy**
- **Vision:**
  - **FRES's proven fee-for-service business model involves a standardised commercial business model that can be easily adapted, replicated and rolled out. In this way FRES's vision is to set up a multi-national network of small scale electricity companies throughout the developing world**



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# Solar Home System

- Access to electricity in areas where no electricity grid exist
- Fast installation and dismantling if necessary
- Little maintenance
- System can be expanded in accordance with the customer's needs or budget
- Cheaper per Kwh than candles, batteries and/or paraffin
- No emission or harmful substances





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## Fee-for-service concept

- Customer pays the company a monthly service fee
- Fee depends on the chosen service level
- Main head office in regional centre
- Local energy shops close by customers
- Company ensures investment for SHS
- Company ensures installation and maintenance



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<b>Yeelen Kura (Mali)</b>	<b>NuRa (South Africa)</b>
2.450 clients	10.000 clients
16 energy shops in the project area (around Koutiala)	8 energy shops in the project area (North KwaZulu-Natal)
Price of service : € 4-9 per month	Price of Service: € 8-18 per month
45 employees	73 employees
SHS Solar plant (72 kW)	SHS LPG (9400 clients)



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# New Joint Venture

- **Burkina Faso (created 8 April 2008)**
  - Signature of contract EU: December 2007
  - 60 clients
  - EU tender for 1000 Solar Home Systems



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## Results and Goals

	<b>2009</b>	<b>2010</b>	<b>2015</b>
n clients	20.000	35.000	100.000
n companies	4 (+2bp)	5 (+2 bp)	10
Strategic partners FRES	9	12	20

# Conditions for successful implementation of RE



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- Requirement for this kind of electricity supply in rural areas
- Investment take place in regions where people are deprived of electricity and where no short terms plans to connect them to an electricity grid (> at least 5 y)
- The country has a policy that supports rural electrification (through renewable energy)
- Countries are prepared, before company starts, to make favorable arrangements (exemptions for import duties and VAT for end-users or subsidies to reduce the tariffs for end-users)
- The company must be able to acquire a concession or the necessary permits under practical conditions and within a reasonable time frame



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## Desk and field research

- Electricity sector (monopoly of electricity sector, tariffs in application, heavy subsidies on price per kWh...)
- Rural electrification: policy priority and coherent long term strategy with roll out plan (backed up by international community)
- Adequate legal and regulatory environment (on rural electrification, concession license for 20 years etc)
- Institutional framework: REA and ERA
- Potential for collaboration with the local authorities, industry and NGO's
- Income level of the population and current lighting expenditures
- Market perspectives: goal of company is to serve 10.000 clients in 8-10 years and long term goal is to serve 50.000 clients

# Other preconditions



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## **Government:**

- Political and economic climate supports private sector initiatives (clear code of investment, financial incentives..)
- Rural electrification fund (connection based subsidy or investment subsidy)
- Close cooperation between policymakers, private sector and rural communities is of utmost importance

## **FRES**

- Initial capital investment for local company is financed by subsidies and FRES equity
- Operational costs are recovered by operational income from the end-user, resulting in cash flow positive operation