COSEER
Energie Renouvelable & Environnement

ELECTRIFICATION RURALE A INITIATIVE LOCALE (ERIL)

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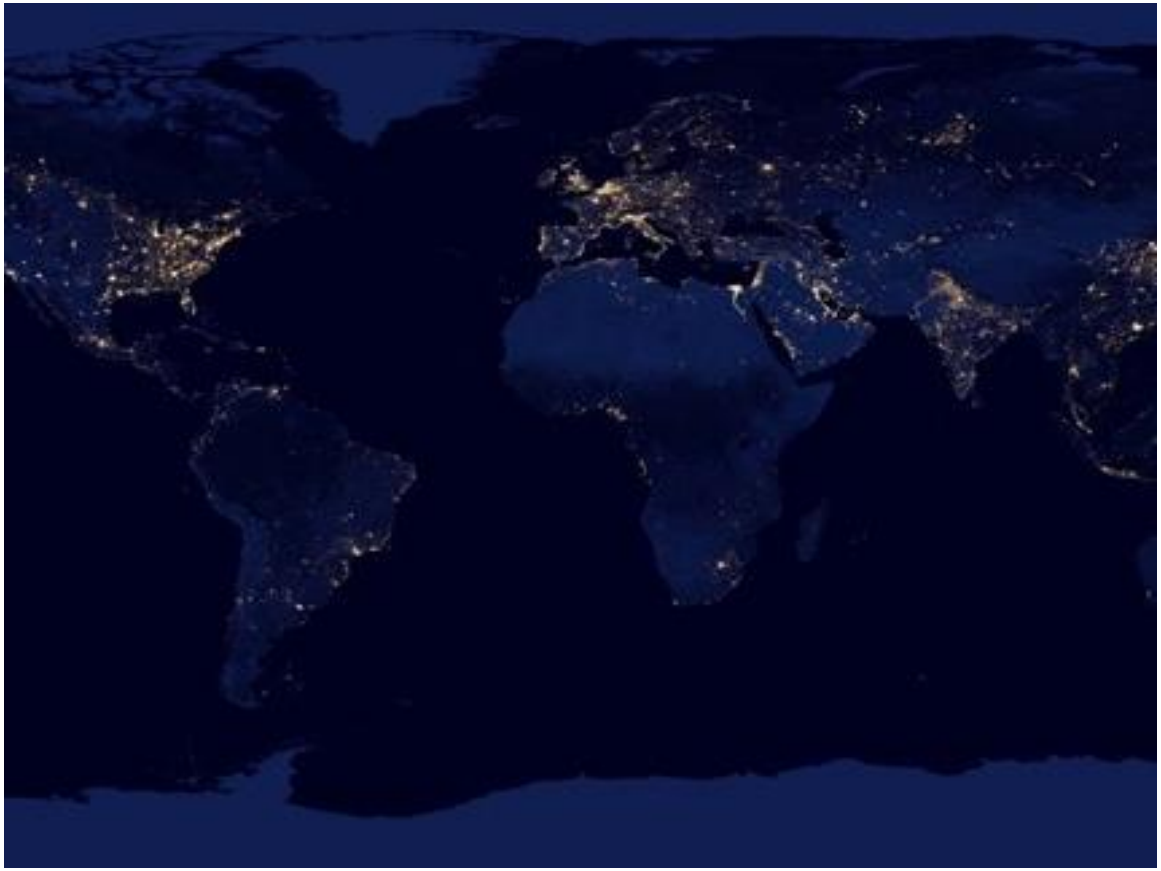

Mistery of Africa: Huge energy ressources with the least access to energy

Our local contribution to solving this equation:

Regulatory and Political Framework

- In Senegal, since the implementation of energy reforms, rural electrification has become a government priority.
- Within this framework, many measures have been implemented to increase electricity penetration in rural areas characterized by low income households and sparsely populated areas. Given the urgent requirement to provide electricity everywhere and to everyone, the Senegalese authorities have set a goal to achieve 50% electrification of rural areas by 2017.
- The electricity coverage has substantially improved in Senegal, increasing from 8% to 24% between 2002 and 2012 in rural areas.

Rural Electrification Strategy in Senegal

The new strategy is based on:

1. Concession: a public-private partnership and a diversification of financing sources.

- ✓ Dividing the territory into 10 concessions. Each of these concessions is supported by development partners such as the World Bank, African Development Bank, the European Union, etc.
- ✓ International bidding process to select the private operator for each concession.

2. Local Initiatives for Rural Electrification (ERIL): the promotion of locally initiated rural electrification projects «ERIL» in partnership with communities, NGOs, private and local organizations, etc.

COSEER‘s Contributions

- A) ***Solutions for big cities***
  - Solutions with zero batteries and zero feed-in or “Floating system for national electric grid“
- B) ***Rural Electrification/Isolated Areas:***
  - UPS -hybrid (biogas) AC 30-100 kW connected to local electrical distribution network
- C) ***Solar hot water/New Generation***

Systèmes « Flotteur au Réseau Electrique national »

- Auto consumption solar system, regulates according to electrical loads and consumption.
- This type of device, offered with a ten year guarantee, allows large energy consumers to save between 70% and 85% of their electricity bill during sunlight hours.
- Given the current going electricity rates and the amortization duration of the device, users can expect a return on investment in less then ten years.

Systèmes « Flotteur au Réseau Electrique national »

Potential Customers: Large consumers during sunlight hours, including office buildings, bank branches, private clinics, higher education institutes, SMEs, Libraries, super markets and malls.

Product spectrum:

Sunzet XTR10/13: 10 kW/13kW

Sunzet XTR15/20 : 15kW/20 kW

Rural Electrification/Isolated sites

- In one of the ERIL concessions, COSEER has successfully installed 4 hybrid inverters to the local distribution networks in Matam.

Advantages:

- Robust and resistant to temperature and wind
- Easy to install
- Good price/quality ratio

Achievements

COSEER has undertaken several projects under the ERIL OUWENS initiatives in Matam (720 km north of Dakar). These project have involved low tension distribution networks powered by small solar systems and diesel generators.

Achievements in Numbers

Name of Village	Installed solar power (kW)	Puissance GE (KVA)	Réseau BT réalisé (Km)	Nbre de lanternes EP	Nbre de clients raccordés
Hombo I &Hombo II	38.07	30	2.86	25	28
Belly Naaybe I & Belly Naaybe II	16.92	30	3.1	25	32
Gababe Pêcheur &Gababe Peulh	16.92	30	1.8	25	17
Dial Pêcheur & Dial Peulh	38..07	30	2.62	25	32
Total	**109.98**	**120**	**10.38**	**100**	**109**

Panorama-ERIL MATAM/SENEGAL

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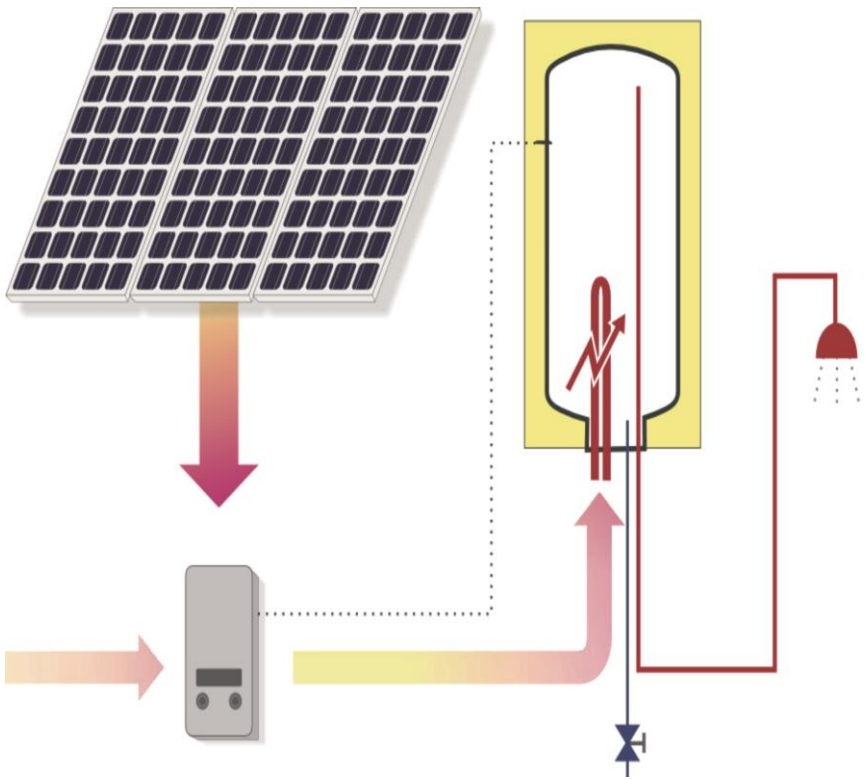
Panorama-ERIL MATAM/SENEGAL

Solar Hot Water – New Look

- This new type of solar collector heats Water using a solar module through a special type of regulator.
- This type of solar hot water system can produce 50-160 litres of hot water per day (enough for 2-5 people)



Thank you for your attention