



ALER Associação
Lusófona
de Energias
Renováveis

Research opportunities in renewable energies in African
lusophone countries

MIT-Portugal Seminar, 4 May 2017



WHAT IS ALER FOR





WHY WAS ALER CREATED

1.

RENEWABLE ENERGIES

A VERY DISPERSE GLOBAL SCENARIO

- Strong growth of the global RES market, with investments shifting from OECD to developing countries
- Energy access asymmetries to be tackled, being RES the most competitive alternative in remote areas
- Technology cost reductions make RES a competitive solution

2.

RENEWABLE ENERGIES

IN PORTUGUESE SPEAKING COUNTRIES

- Portuguese speaking countries are a good example of the global RES situation, offering win-win synergies opportunities
- Vast RES resources in these countries
- Traditional cooperation between Portuguese speaking countries is in place, but not organized for the RES sector

3.

THE ROLE OF ASSOCIATIONS

IN PROMOTING RENEWABLE ENERGIES

- RES Association have proved to be crucial to create a favourable regulatory environment, to develop the market and to increase business opportunities
- Currently there are no RES association in Portuguese speaking countries, but Portugal and Brazil



WHERE IS ALER ACTIVE



PLACE LUSOPHONE COUNTRIES ON THE RENEWABLE ENERGIES' MAP



PRIORITY COUNTRIES

ANGOLA**, **CAPE VERDE***, **GUINEA BISSAU**,
EQUATORIAL GUINEA, **MOZAMBIQUE***, **SAO
TOME AND PRINCIPE*** & **EAST TIMOR****

Stimulate less developed renewable energy markets, by enabling public and private entities, attracting foreign investment and promoting the creation of National Renewable Energy Associations

* PRIORITY COUNTRIES FOR 2015

** PRIORITY COUNTRIES FOR 2016

SUPPORTING COUNTRIES

BRAZIL & PORTUGAL

Enhance existing specialized knowledge and experience, by working with National Renewable Energy Associations and supporting the internationalization of companies to the remaining Portuguese-speaking countries

OTHER COUNTRIES

**all other countries
worldwide**

Support to internationalization and investment in the renewable energy sector in Portuguese-speaking countries



WHAT DOES ALER DO



KNOWLEDGE SHARING

Publish national reports with technical, economic and regulatory information, including industry recommendations

Provide an online database of renewable energy publications available for free



Organize an online database with the list of all entities working in the renewable energy sector



CAPACITY BUILDING

Create and/or strengthen National Renewable Energy Associations

Organize B2B meetings and trade missions to promote and support to the private sector

Promote high-level meetings and contacts for capacity building at government level



REPRESENTATION

Participate in national and international meetings and events, as speakers or delegates

Act as confederation of companies and Renewable Energy National Associations, coordinating interests and information

Cooperate with international organizations, to become partners of ALER



COMMUNICATION

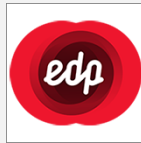
- Manage media
- Send regular Newsletters
- Disclose legislation, news and funding and investment opportunities monitoring services
- Organize national and international events
- Provide exclusive networking opportunities



ALER 's MEMBERS



PREMIUM MEMBERS



CATEGORY A



CATEGORY B



ASSOCIATE MEMBERS

CATEGORY C



NON PROFIT ASSOCIATE MEMBERS

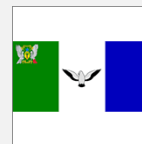
RENEWABLE ENERGY ASSOCIATIONS



OTHERS



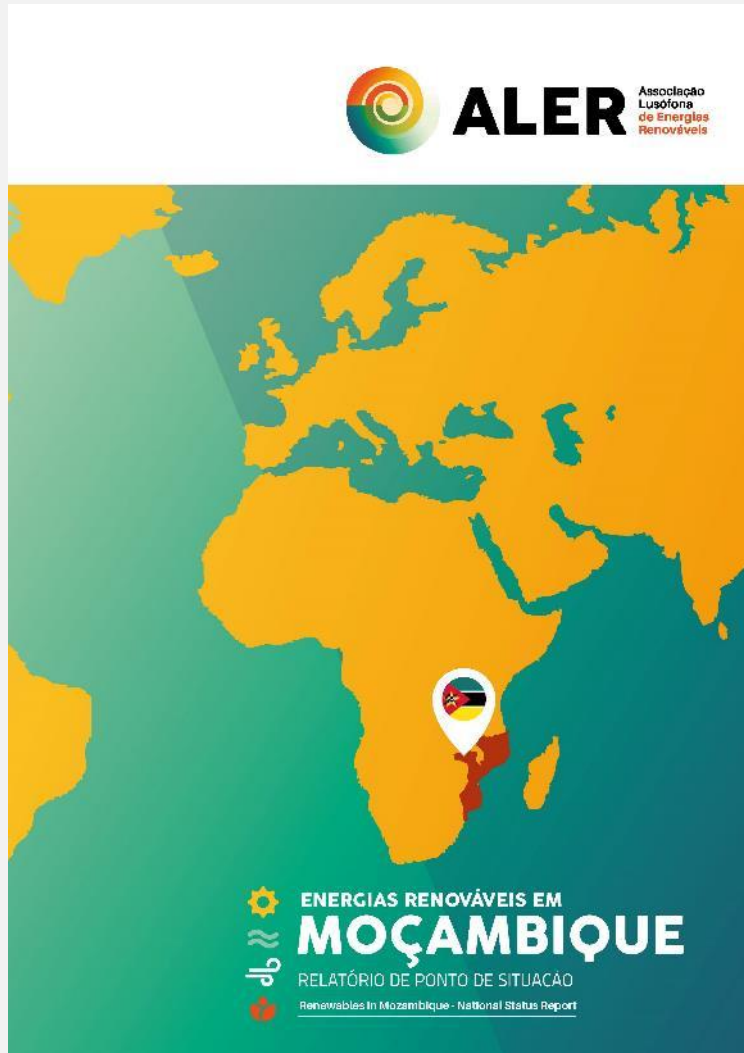
HONORARY MEMBERS



Isabel C. Abreu



ALER S MOZAMBIQUE STATUS REPORT



The most comprehensive and updated report on the status of renewables in Mozambique

An overview of sector current and future developments

Broad reach, both nationally and internationally, benefiting from the fact that is translated into English

A reference document for all potential investors in the renewable energy sector in Mozambique

Now Available for Order

More information available [here](#)



2016 - 2017

Support to the promotion of renewable energy markets in Portuguese speaking countries

ALER and RECP - Africa-EU Renewable Energy Cooperation Programme have signed a cooperation agreement to support the promotion of renewable energy markets in Portuguese-speaking countries.

Under the agreement, the parties will cooperate to contribute to broad and sustained market development for Renewable Energy (RE) in Africa. The specific objective is the mobilisation of European and African RE companies for joint business development in Portuguese-speaking African RE markets.

Foreseen activities include:

- the translation of relevant documents into Portuguese, namely the [Mini Grid Policy Toolkit](#);
- the active collection and dissemination of information regarding African Portuguese-speaking RE markets and international support services and instruments; and
- the organization of information and matchmaking events.

The initial project duration is 16 months, running until December 2017.



ALER CONTACTS' DIRECTORY

DIRECTÓRIO DE CONTACTOS ALER

- [ALER Contacts' Directory](#) gathers in a single online platform an exhaustive list of all entities, public or private, who are active in the renewable energy sector in Portuguese-speaking countries.
- It will be not only a useful platform for contacts dissemination, but also an important promotion tool of any Entity.
- There are 4 subscriptions available according to users' information access and marketing needs



LERenováveis. THE DATABASE OF ALER



[LERenováveis](#) (in English READ Renewables) is an online database of simple, universal and free access, that gathers renewable energy publications about Portuguese-speaking countries and regions where they belong.

Through LERenováveis, ALER aims to provide a public service of disseminating information and improving knowledge about the renewable energy sector in the countries where it operates.

For more information, visit www.aler-renovaveis.org/lerenovaveis

SIMPLIFY access to disperse publications

Give more VISIBILITY to less known documents

Improve the QUALITY of new publications

Support ACADEMIC INSTITUTIONS

Function following a logic of COLLABORATIVE PARTICIPATION

HOW TO SUPPORT: If you are interested in becoming a patron of LERenováveis or in contributing with the submission of publications in the previous phase of documentation collection, please contact us via geral@aler-renovaveis.org



KEY MILESTONES OF ALER



DEC
2014

- Constitution of ALER with 15 Founding Members



JAN - DEC
2015

- Field trip to Mozambique, São Tomé and Príncipe, and Cape Verde
- Organisation and participation in the I Conference Energy for the Development of CPLP
- SE4ALL decade in CPLP launched and ALER appointed focal point
- Launch of LERenováveis and ALER's Contacts Directory
- ALER National events in Cape Verde and Mozambique



JAN - DEC
2016

- Participation in the Annual Workshop on Advancing SE4All Country Action in Africa
- Field trip to Angola
- 1st Edition of ALER Open Day
- Signed a cooperation agreement with RECP
- Participation in 1st CPLP Energy meeting
- Launch and Publication of ALER's Mozambique national report



JAN - DEC
2017

- Supporting the creation of AMER - Associação Moçambicana de Energias Renováveis (Mozambican Renewable Energy Association)
- Drafting of ALER's São Tomé and Príncipe national report
- International events in Mozambique and in Angola
- *Mini Grid Policy Toolkit's* site, report and case studies translation and the drafting and translation of lusophone case studies
- Participation in national and international events



RENEWABLES IN AFRICAN LUSOPHONE COUNTRIES

ANGOLA



CABO VERDE



GUINÉ BISSAU



MOÇAMBIQUE



SÃO TOMÉ E PRÍNCIPE



ELECTRIFICATION RATE

30%

94%

21%

39%/25%

59%

PEOPLE WITHOUT ACCESS TO ELECTRICITY

15

0,2

1

16

0,1

M

PEOPLE RELYING ON TRADITIONAL BIOMASS

54%

31%

98%

96%

71%

RE INSTALLED CAPACITY

900

35

0,4

2.300

2,3

MW

RE ATLAS



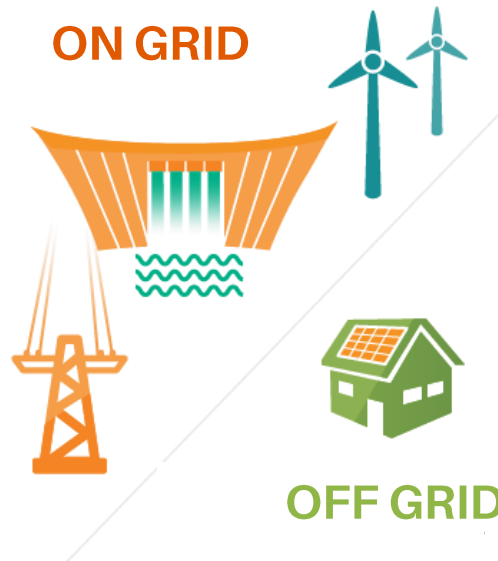
RE STRATEGY AND TARGETS





TYPE OF PROJECTS

- IPPs
- PPPs
- Large scale/small scale
- Hydro conventional projects
- *Alternative energies*
- Co-generation
- Biofuels



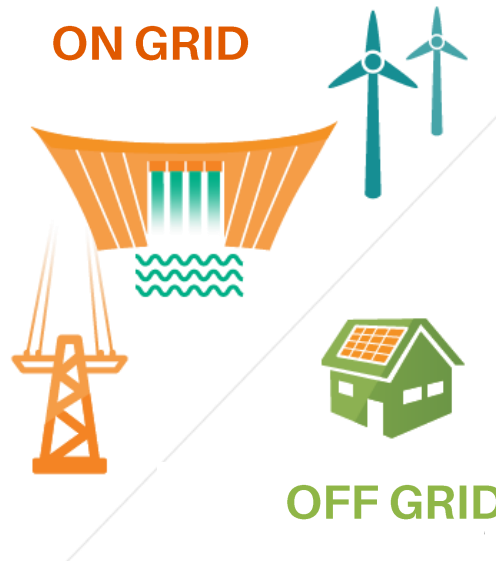
- Pico solar systems (solar torches and batteries)
- Solar Home Systems (SHS)
- Solar Water Heating Systems
- Water pumping systems (wind or solar)
- Mini-grids (hybrid or renewables only)
- Efficient charcoal and improved cookstoves
- Biogas
- Waste
- Biofuels



KEY TOPICS

- Energy planning
- Energy statistics
- Institutional capacity and coordination
- Education and training
- Financing
- Licensing, concession and tax regime
- Private sector participation
- Logistics
- Certification
- Energy Efficiency
- Awareness raising

- Unbundling
- Tariffs
- Infrastructure
- Losses and theft
- Payment
- Power allocation procedures
- PPAs
- Feed-in tariffs
- Grid management



- Productive energy uses
- Willingness to pay
- Tariffs
- Payment schemes
- O&M
- Operator models
- Work with communities
- Future grid connection



PLATFORM TO PROMOTE INVESTMENT, EXPERIENCE, TECHNOLOGY AND RENEWABLE ENERGIES' POTENTIAL, PUTTING ALL STAKEHOLDERS IN CONTACT AND ENSURING A FAVORABLE REGULATORY FRAMEWORK



CONTACT

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NATIONAL HIGHLIGHTS

SÃO TOMÉ
E PRÍNCIPE



CABO
VERDE



GUINE
BISSAU



MOÇAMBIQUE



ANGOLA



DL 26/2014



Banco Mundial



DL 1/2011



PNAER



Banco Mundial



ECOWAS CENTRE FOR RENEWABLE ENERGY
AND ENERGY EFFICIENCY



Bambadinca
sta **claro**
PROGRAMA COMUNITÁRIO
PARA ACESSO A
ENERGIAS RENOVÁVEIS



Revisão REFIT



POWER
AFRICA



ALER

Associação
Lusófona
de Energias
Renováveis



SACREER

Estratégia e Plano de Acção



Concurso PCH

ANGOLA ENERGIA 2025
Atlas das Energias Renováveis e Visão para o Sector Eléctrico



SUSTAINABLE ENERGY
FOR ALL



Revisão da lei da
electricidade e do
investimento privado