



CONFERÊNCIA ALER

RENOVÁVEIS NA
ELECTRIFICAÇÃO
DE MOÇAMBIQUE

ALER CONFERENCE
RENEWABLES IN THE
ELECTRIFICATION OF MOZAMBIQUE

On-grid Renewable Energy Planning

Promotion of an Auction Scheme for
Renewable Energy Project (PROLER)



Adam Ayache – Project officer

Agência Francesa de Desenvolvimento

French Development Agency



PROLER in a nutshell

- **Amount:** 4 MEUR grant project, delegated by the EU-AITF to AFD and managed by EDM.
- **Objective:** to develop a competitive scheme (auction or other mechanism) for commercial-sized on-grid renewable energy (wind and solar) generation projects
- **Structure of the project**
 - Technical Assistance (4 years, permanent at the beginning): will coordinate the different components and give technical support to EDM/MIREME/ARENE
 - Studies:
 - **Technical:** (pre)feasibility, feasibility, Social & Environmental Impacts, etc.
 - **Legal:** in coordination with other DFIs, prepare a set of bankable and standardized documents that will be used for the tendering process;
 - **Financial:** investigate the opportunity of creating some guarantee mechanism (mitigation of off-take risk), mainly.
 - Capacity building: identify capacity building initiatives for EDM/MIREME/ARENE on topics related with the projects and in coordination with the donors.

ORGANIZAÇÃO:



APOIO:





PROLER rational

- **Today's situation:**

- First two solar projects developed on a direct agreement basis.
- Many developers are starting their own initiatives to develop renewable energy projects and contact EDM/MIREME in this regard.

- **The PROLER project aims at:**

- Capitalizing on the lessons learnt by EDM and MIREME through the Metoro and Mocuba projects
- Reversing initiative taking: MIREME, in cooperation with EDM, should plan the future development of additional production capacity, not the developers.
- Implementing a transparent and competitive selection process for future renewable energy production projects to maximize quality and reduce costs.
- Reinforcing Mozambican institutions in terms of planning capacity, procurement process and governance.

- **Projects targeted:**

- Size 30-50 MW per project;
- 3-4 projects to be developed (of which 2-3 solar and 1-2 wind)
- Possibly one pilot project by end of 2018

ORGANIZAÇÃO:

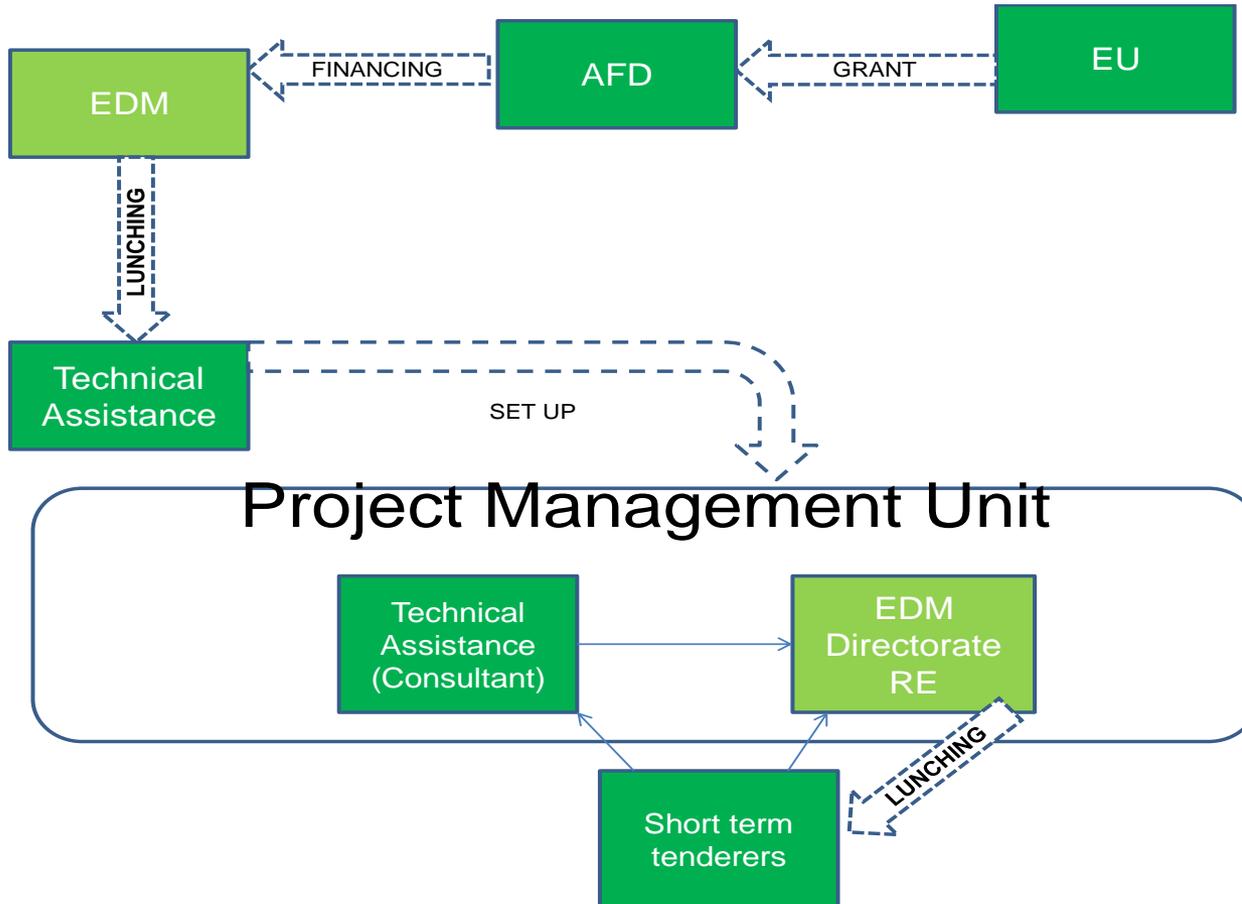


APOIO:





Project organization



ORGANIZAÇÃO:



APOIO:



Project components detailed

		Year 1	Year 2	Year 3	Year 4
1	Component 1 - Implementation of Wind and Solar Projects				
1,1	Review of existing information on Wind and Solar resource	■			
1,2	Selection of a list of potential sites	■			
1,3	Assessment of each site readiness for development (eg measurements, land rights)	■			
1,4	Assessment of the potential environmental and social-economic impacts	■			
1,5	Development of pre-feasibility or feasibility studies	■	■		
1,6	Connection of renewable energy into the Grid	■	■		
1,7	Drafting of tender documents for the selected sites and tender launching	■	■		
1,8	Tenders evaluation, evaluation report and approval			■	
1,9	Award of the contract, signature and publication			■	
1,10	Follow up of project construction and commissioning			■	■
2	Component 2 - Establishment of a Procurement Framework for Wind and Solar Projects				
2,1	Documents collection and revision (legal & reg framework and contractual documents)	■			
2,2	Analysis of the barriers & risks (technical, economic, institutional, regulatory)	■			
2,3	Analysis of the existing procurement framework	■	■		
2,4	Proposal of concrete measures for a fast and transparent procurement framework		■		
2,5	Approval of the procurement framework		■		
2,6	Suggestions for improving the legal, regulatory and procurment frameworks				■
3	Component 3 - Financial Set-Up and Risk Mitigation				
3,1	Analysis of existing financial and risk mitigation mechanisms used in SSA countries	■			
3,2	Assessment of the financial implications for EDM of developing IPP or PPP	■			
3,3	PPA agreement analysis, review and negotiation	■	■		
3,4	Proposal of financial schemes for the development of the proposed wind and solar projects/ guarantee mechanisms	■	■		
4	Component 4 - Capacity building actions / trainings				
4,1	Capacity building actions	■	■	■	■
4,2	Cooperation with other donors	■	■	■	■

ORGANIZAÇÃO:



APOIO:





Technical Assistance – Component 1

1. Review of existing information on wind and solar projects
2. Selection of a list of potential sites (2-4)
3. Assessment of each site readiness for development
4. Assessment of the potential ESIA (additional studies to be launched)
5. Development of the pre-feasibility or / and feasibility studies (additional studies to be launched)
6. Connection of RE into the grid (additional studies to be launched)
7. Drafting of tender documents for the selected sites and tenders lunch (additional studies to be launched)
8. Tenders evaluation, report and approval
9. Award of the contract/s, signature and publication
10. Follow up of the project construction and commissioning

ORGANIZAÇÃO:



APOIO:





Technical Assistance – Component 2

1. Documents collection and revision (legal & regulatory & contractual) (additional studies to be launched)
2. Analysis of the barriers & risks (technical, economic institutional regulatory)
3. Analysis of the existing procurement framework
4. Proposal of concrete measures for a fast and transparent procurement framework
5. Approval of the procurement framework
6. Suggestions for improving the legal, regulatory and procurement frameworks

ORGANIZAÇÃO:



APOIO:





Technical Assistance – Component 3 and 4

Component 3

1. Analysis of existing financial and risk mitigation mechanisms used in SSA countries (optional additional studies to be launched)
2. Assessment of the financial implications for EDM for developing IPP or PPP schemes
3. PPA Agreement analysis, review and negotiation (optional additional studies to be launched)
4. SPV analysis, review and creation (optional additional studies to be launched)
5. Proposal for financial schemes for the development of the proposed wind and solar projects/guarantee mechanisms

Component 4

Capacity building – to be identified at a later stage

ORGANIZAÇÃO:



APOIO:





Potential technical projects to be launched by EDM

- EISA and LARAP
- Pre-feasibility studies for wind and solar projects
- Feasibility studies for wind and solar projects
- Impact of new RE generation projects on the network
- Study on injection points
- Review of the specifications to connect solar and wind power plants on network
- Evaluation of the dispatching methods to control and supervise RE and secure the transmission and distribution network (including software)
- Preparation of the sets of the tender documents for wind and solar projects
- Feasibility and structuring of the guarantee mechanisms (optional)
- Analysis and structuring of the SPV (optional)
- Training sessions – to be launched together with the technical activities

ORGANIZAÇÃO:



APOIO:





Obrigado!

ORGANIZAÇÃO:



APOIO:

